

Validation documentation
*APIs & excipients, liquid/semi-solid (with analysis
certificate)*

HiperScan GmbH

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Introduction

The unequivocal proof of the identity of pharmaceutical raw materials based on a monograph or traditional alternative methods is work-intensive, time-intensive and economically often no longer makes sense. Near-infrared spectroscopy (NIR) provides a new means here. It enables relatively easy, fast and nonetheless safe identity testing via the preparation and evaluation of spectra.

The analysis system *Apo-Ident* was developed specially for pharmacy use. Pharmacists have the duty to check the identity of all raw materials for extemporaneous products in their pharmacies. This normally takes place based on the monographs for the respective substances in the European Pharmacopoeia. But also NIR spectroscopy is described in the European Pharmacopoeia as an identification method which, as opposed to the methods incorporated in the respective monographs, is approved for testing [1] (quotation translated)

with the prerequisite that the same results (“namely the determination of the identity” [2]), (quotation translated) are achieved as with the described methods and instruments.

The *Apo-Ident* analysis system serves to identify raw materials for prescriptions in the defined manner according to *ApBetrO* [Pharmacies Rules and Regulations] §§ 6 and 11 at pharmacies (NIR spectroscopy as an alternative testing method). *Apo-Ident* consists of three components:

- An *NIR spectrometer*, which records the spectra of non-preprocessed raw materials in a measuring glass in diffuse reflection or transfection.
- The *QuickStep* spectroscopy software controls the instrument and records the spectra and user inputs via a pharmacy-specific software plug-in. It also generates the test protocol for documentation of the testing and storage of the printout to be signed in the pharmacy.
- The software module *IdentModule* incorporates *reference databases*. The spectra from the *QuickStep* software are presented to it for evaluation.

NIR spectroscopy is a very powerful analytical method. It is also able to establish the identity of several chemical compounds and mixes in as far as an appropriate database (technically correct: a [chemometric model](#)) was created. Identity testing with *Apo-Ident* is a very safe, very fast and easy to operate analytical method for testing a large number of raw materials.

Context of this document

The suitability of the instrument, method and database is proven as follows:

- *NIR spectroscopy as a method for identity testing*: The *Ph. Eur.* [3] describes NIR spectroscopy in *Section 2.2.40* as an analytical method which is also suitable for the identification of raw materials. Therefore, validation of the method as such is not necessary.
- *Performance of the instrument*: The *Ph. Eur.* [3] furthermore describes the apparatus and the testing of its performance in *Section 2.2.40*. The document *Erfüllung von 2.2.40 Ph. Eur. durch Apo-Ident* [4] compares the implementation by *Apo-Ident* with this monograph in order to prove that *Apo-Ident* meets the specifications of the Pharmacopoeia. Each individual instrument delivered to a pharmacy is qualified in accordance with the tests described in “*Control of Instrument Performance*”. In this test, the unit consisting of analysis instrument hardware and the *QuickStep* spectroscopy software is assessed. The result is documented in a test protocol which is kept at the pharmacy.
- *Validation of the database* is documented separately for each substance class. The report at hand documents the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*.

The *Arbeitsgemeinschaft der Pharmazieräte Deutschlands (APD)* [Working Group of German Pharmacy Inspectors] has clarified the following in its resolution dated October 16, 2013 ([5], quotation translated):

NIR is a testing method incorporated in the Pharmacopoeia. The testing quality depends on the quality of the database stored. The APD views the use of NIR instruments in case of ensured validation of the databases used in conjunction with it as one of several options for identity testing.

The APD defined more precisely ([6], quotation translated) on October 1, 2014:

The use of near-infrared is a recognised testing method according to Ph. Eur. 8. For the use of NIR instruments in pharmacies for testing the identity of raw materials, sufficient and verifiable validation of the instrument used is required. The quality of the database stored by the instrument manufacturer is decisive for quality. Batch-specific differences with the same original substances must be taken into account if present.

So NIR is basically suitable. The validity of the reference database is proven with the existing validation documentation.

Criteria for the inclusion of substances

This validation documentation describes the results of the validation of the reference database for the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Validation documentation is created for each published version of the reference database for all substance classes incorporated.

The reference database is incorporated in the software module *IdentModule*. During identification testing with *Apo-Ident*, spectra which are used for evaluation purposes are presented to it by the *QuickStep* software. In the same manner, the *IdentModule* is presented all validation spectra successively during the validation runs for evaluation purposes. The *IdentModule* responds respectively (without taking the initial assumption into account) with the identified substance or rejects it as unknown. The correctness of this response is checked for each possible initial assumption and counted.

The results are summarised for each substance and reproduced in this document. The core statement of this validation report is that the following criteria must be fulfilled for each database entry, so that *Apo-Ident* offers verification of identity by means of NIR for the relevant substance/substance group:

- The database is exclusively generated from spectra which have been recorded by *HiperScan GmbH* on traceable samples in pharmaceutical quality.
 - The samples are procured via typical pharmacy sources (*DAC III.2.: Bezugsquellennachweis für Rezepturbestandteile [reference source for prescription components]* [7]).
 - A valid manufacturer's certificate exists (content, purity and identity of the batch).
 - The identity was confirmed by a certified test laboratory or *HiperScan GmbH*.
- Each version of the reference database (every update) is validated in-full.
 - Calibration spectra (*Type A*), other spectra recorded under the control of *HiperScan GmbH* (*Type B*), and spectra from the field (*Type C*) are presented to the *IdentModule* for evaluation in three separately evaluated validation runs.
 - Here, no single *false positive* result may arise.
 - Here, the various substance classes are also tested for reciprocal rejection, where this is objectively justified (see *Summary* section).
- In the validation with spectra recorded under the control of *HiperScan GmbH*, spectra of at least one independent sample must be considered, i.e. spectra from a batch whose spectra have not been used for the generation of the database. In addition, the set of *Type A* and *Type B* spectra must originate from at least three different batches.
- Spectra of additional substances may be used for the generation of the database even though they will not be offered for identification by this database. The purpose is the reliable distinction from these substances.

- Any positive result of *Apo-Ident* confirms the identity of the substance/substance group and distinguishes it from all other substances of the database. In the case of substance groups, the result is ambiguous: Distinction from all substances not belonging to the group is proven. The substance is identified as a member of this group. However, within the substance group, it is not possible to reliably classify which substance has been tested.
- The criteria for clear identifiability are a [specificity](#) of 100 % ([true negative rate](#)) and a minimum distance in the distance matrix. See 2. d) under [Model creation procedure and validation runs](#).

Validation concept

[Chemometrics](#) is a statistical technique for the extraction of relevant chemical information from spectra. In mathematics, this method is described as *multivariate data analysis*. Chemometrics proceeds here as follows:

1. Collection of spectra for the *calibration sample*. The results (identities) of the calibration sample must be known. The calibration samples must be representative for the samples which are to be evaluated later. Therefore, they must take the various possible (physical) compositions into account. (Therefore, sourcing calibration samples for NIR from the specialist trade is superior to the use of CRS reference substances.)
2. The first mathematical step is *calibration*. Here, the [chemometric model](#) is calculated from the *calibration sample spectra* ([reference spectra](#)) and limits as well as some parameters are stipulated. The chemometric model is used later to calculate the analysis result (*prediction*).
3. Collection of further spectra for the *validation sample* which should be independent of the *calibration sample*. The results (identities) of the *validation sample* must also be known. The textbook suggests a random sample with a normal scope of 25 % to 50 % of the *calibration sample* [8].
4. The second technical data step is *validation*. Here, the [chemometric model](#) created is evaluated based on the spectra of the *validation samples*. As validation parameters for the identification, the *Ph. Eur. Section 2.2.40* [3] specifies the [specificity](#) and [robustness](#).

The validation step according to the textbook has the target of estimating the performance capability of the model created based on a random sample. In order to achieve the best possible precision, attention is paid to the calibration sample. In the field of pharmaceuticals, the safety of the method has priority. In order to be able to [validate](#) the model within the regulatory scope, the validation step must include probative force. For this purpose, the validation sample must be *representative and complete* in order to enable the testing of all cases.

A *sufficient number of batches* must be secured for validation because validation finally proves whether the number of batches in calibration suffices.

Each substance is validated individually. The validation results are documented per substance in this document. Moreover, the documents show how many and which batches have been used for creating the model or model validation.

At least one certificate is taken in for each substance from an accredited test laboratory for the independent testing of identity of the sample. The identification number of the corresponding test certificate is listed in the report, enabling traceability of a substance tested according to the monographs in the Pharmacopoeia.

Model creation procedure and validation runs

The safety of the [chemometric models](#) is guaranteed by several measures during model creation, of which the validation step is the final one. Normally, the procedure is as follows. It is in particular valid for the active pharmaceutical ingredients (APIs) *solid API excipients, liquid/semi-solid API excipients (with a test certificate), narcotics - solid medicinal substances and drugs*. If, for individual substance classes, variations are required, they are depicted in the section [Particularities of individual substance classes](#).

1. Collecting the reference spectra (calibration sample)

- a) Procurement of the samples from the same sources from which pharmacies source their raw material for compounding (Caelo, Fagron, Euro-OTC, ..., see also *DAC III.2. Bezugsquellen-nachweis für Rezepturbestandteile* [Sources of supply for compounding] [7]).
- b) Testing the suitability according to *ApBetrO* [Pharmacies Rules and Regulations] §§ 6, 11, that is to say the availability of a valid manufacturer certificates via identity, purity and contents of the batch.
- c) Recording standard 40 spectra of the sample in different positions, as a standard on four instruments. Here, handling and presentation of the samples as later in the pharmacy.
- d) Visual checking for anomalies in the spectra. In case of indications of measurement errors, measurement must be repeated. If a signature is missing in the spectrum, the substance may be excluded from the start as not promising (the spectra are nonetheless entered in the database validation as independent *Type B* spectra).
- e) Testing identity. For each substance, a certificate of correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the respective following substance page of this validation documentation the *Mahalanobis distance* to this reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance. Such samples underline the statistical spread of the original reference substance, but cannot add any new characteristics of the substance.

HiperScan GmbH cooperates with some suppliers as follows: the raw materials supplier takes a sufficiently large sample in his incoming goods area so that part of it can be used for recording the NIR spectra. The remainder of the sample goes to analytics for market approval. The manufacturer's batch certificate emerges from these identity, contents and purity tests, which consequently also prove the correct identity of the NIR reference sample. Therefore, the NIR spectra are suitable for structuring the database (*Type A*) and can also optionally be used for validation (*Type B*). The samples which this applies to are marked in the validation report with a footnote.

- f) If the identity of the new sample is proven, it is declared as a reference sample and the spectra are approved for structuring the database.

2. Generating the chemometric models (calibration)

- a) Determination of the transformation matrix from the reference spectra using variance maximisation [8, 9]. (All reference spectra are always included, even if only a few spectra are added for an update.) All reference spectra receive the same data pre-treatment, which is also later applied to all measurement spectra in the field (in the pharmacies).
- b) Checking that the number of principal components used is still sufficient.
- c) Calculating the limits for each substance from the spread of the reference spectra. The calculation regulation is identical for each substance in a substance class.
- d) Überprüfen der Abstände zwischen den Grenzen der trennbaren Substanzen: Die Distanzmatrix enthält die *Mahalanobis-Abstände* von jeder Substanz zu jeder anderen. Die Werte hin und zurück sind jeweils unterschiedlich, weil die Streuung der Ausgangssubstanz eingeht. Ist eine Distanz kleiner als der Mindestabstand, so gelten die Substanzen als nicht sicher trennbar. Der Mindestabstand ist auf 9 festgelegt. Der Entwickler des Modells darf einen größeren Mindestabstand festlegen (ein Wert für das gesamte *chemometrische Modell*), um die Trennschärfe zu erhöhen.
- e) Überprüfung des Modells anhand der Referenzspektren. Es sind keine *falsch-positiven* Ergebnisse erlaubt.

f) Wird eines der Kriterien verletzt (d) *Unterschnittener Mindestabstand zwischen zwei Substanzen* oder (e) *Eine Substanz wird als eine andere identifiziert*, entscheidet der Entwickler der Datenbank, welche der folgenden Optionen er anwendet:

- Er nimmt beide Substanzen aus der Datenbank. (Die Spektren bleiben in der Validierung und dürfen auch in den Aufbau eingehen. Sie werden aber nicht zur Prüfung angeboten.)
- Er bildet eine Substanzgruppe mehrerer nicht sicher trennbarer Substanzen. Dann ist das Ergebnis mehrdeutig: Das chemometrische Modell stellt fest, dass es sich bei der Probe um eine der Substanzen aus der Gruppe handelt und dass es sich um keine andere Substanz handelt. Es kann aber nicht sagen, um welche der Substanzen es sich handelt. Um die eindeutige Identität festzustellen, muss der Anwender eine geeignete ergänzende Prüfung durchführen.
- Er erstellt ein weiteres *chemometrisches Modell* mit geringerem Umfang, in das mindestens alle Substanzen der nicht sicher trennbaren Substanzgruppe eingehen (Zweite-Stufe-Modell). Zweite-Stufe-Modelle werden nur aufgerufen, wenn die erste Stufe festgestellt hat, dass es sich nur um eine der Substanzen handeln kann, die in den Aufbau der Zweiten Stufe eingegangen ist. Die Zweite-Stufe-Modelle sind im Anhang *Zusatz zu den Modellen der zweiten Stufe* dokumentiert.

3. Set of validation spectra (validation samples)

The following is provided for validation:

- a) *Type A*: The reference spectra = calibration spectra from which the database was generated. These also include spectra from substances which the *chemometric model* should not identify, but were also recorded during generation in order to increase selectivity. (As a result, the model “learns” to differentiate from other substances which are actually unknown to it.)
- b) *Type B*: Spectra recorded under the control of *HiperScan GmbH* and not used for the generation of the database. These also include reference spectra of other substance classes, and spectra that are not used as reference spectra. Samples are considered to be independent, if they originate from a batch, of which no spectra have been used for the generation of the database. (Up to *IdentModule 2018-01*, samples were still considered independent if the sampling was done independently, i.e. if they originate from another sales container.)
- c) *Type C*: Spectra from the field, which have not been recorded under the control of *HiperScan GmbH* and have not been used for the generation of the database. The spectra include not only substances of the substance class to be tested, but also substances from other classes.

All manufacturers’ batches from which spectra are used for the validation are listed by substance in this document: for substances included in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)* in the respective validation reports; otherwise in attachments *A*, *B* and *C*.

Furthermore remains valid: validation spectra may only be removed if a error in the spectrum can be proven. Here, the spectra are not deleted, but instead placed on a *blacklist* incorporating the reason, date and initials in the commentary.

The section *Particularities of individual substance classes* treats the other substance classes from which *Type B* and *Type C* spectra are cited for validation purposes.

4. Validation runs and approval

- a) Validation spectra are transferred holistically to the *IdentModule* for evaluation in the same way as the spectroscopy software *QuickStep* transfers measured spectra.
- b) Following the provision of each spectrum, the *IdentModule* responds as to whether it has recognised a substance and which substance was recognised.
- c) The correctness of this response is checked for each possible initial assumption (each measurable substance with the substance class) and counted according to *true negative*, *false negative*, *true positive* and *false positive*. These figures are provided for each substance and additionally in the section *Summary*, separated according to types *A*, *B* and *C*.

- d) No *false positive* results whatsoever are permissible.
- e) If the criterion is also met for all substance classes, the *IdentModule* is approved.

Particularities of individual substance classes

Basically, *HiperScan GmbH* procures and tests the manufacturer's certificate for the batch, commissions external testing of the identity of the sample or carries it out independently and stores the certificates. As described, this process is established for the Pharmacopoeia substances, that is to say for substance classes **APIs & excipients, solid**, **APIs & excipients, liquid/semi-solid (with analysis certificate)**, **Narcotic substances, liquid/semi-solid** and **Drugs**. Therefore, *HiperScan GmbH* is able to furnish proof of the identity of the reference samples. In case of manufacturer-specific substance classes and others, individual steps are organised differently in-part:

The substance class **APIs & excipients, liquid/semi-solid (other)** (often described as cosmetics) incorporates substances for which no specification of the requirements of the pharmaceutical quality is determined, neither in a Pharmacopoeia monograph, a DAC/NRF monograph nor via a manufacturer's specification. Consequently, neither the identity nor contents can be tested independently. No certificates whatsoever exist for the reference samples. So here, merely the matching of the sample with former samples of this product is established and confusion with the other substances is ruled-out. (If the manufacturer of such a substance prepares a specification, determines testing methods and provides manufacturer's certificates in accordance with *ApBetrO* [Pharmacies Rules and Regulations] §§ 6, 11, *HiperScan GmbH* can assign the substance to the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)* again in the future).

Substance class **HCK – nutritional supplements (Hepart)** contains the HCK micro-nutrients from the Swiss company *Hepart AG*. *HiperScan GmbH* receives the reference samples directly from the manufacturer. For each reference sample, *HiperScan GmbH* also receives manufacturer's certificates and keeps these. New checking of the identity of the reference sample is not carried out by *HiperScan GmbH*. The identity of the reference samples is therefore documented by *Hepart AG*. The spectra of all batches provided by *Hepart AG* are recorded by *HiperScan GmbH* and entered in the database.

All the manufacturer's batches are used for the generation and validation of the substance class **HCK**. The expected variation is also represented in the generation and validation if there are less than three batches.

Also, for the substance class **PhytoComm** (TCM-Granulated herbal extracts of the manufacturer *PhytoComm*) spectra for all useable batches are recorded by *HiperScan GmbH* and entered in the database. The supplier organises the respective tests themselves and keeps the test certificates.

A new evaluation option was created for the class *PhytoComm* with the update 2016-01. As the risks are considerably fewer than those from chemical agents, the pharmacist can specify a reasonable criterion for the *specificity* in accordance with internal risk estimation. The database for this is created without taking safety distances into account and no criterion is determined in advance for the *specificity*. Instead, the *specificity* for testing the identity with this concrete substance is calculated in the validation for each substance and provided with the measurement result. The pharmacist then judges himself whether this safety is reasonable with regard to the risk of the substance.

Additionally, a statistical forecast is provided for the *specificity* which is determined according to the *Rule of Three* [10, 11]. For this forecast, it is assumed that there would have been three wrong results more and is provided with a lower limit for *specificity*. This value has a special meaning if a *specificity* of 100 % is achieved for a substance during validation. In this case, the lower limit allows conclusions regarding the scale of existing safety for which with an endless number of validation spectra a value of less than 100 % is to be assumed.

If, for example 14 000 spectra not belonging to the substance are presented and no *false positive* classification is made, a hypothetical number of three *false positive* results is assumed (*Rule of Three* [10, 11]) and the *specificity* is defined with 100.0000 % (> 99.9786 %). Here, it applies that the higher the number of validation spectra which form the statistical basis, the better the *specificity* calculated via the lower *specificity* limit will be approximated.

The positive result of the identity test using *Apo-Ident* establishes that the sample spectrum is in accordance with a batch of the specified granulate from the supplier *PhytoComm*, whereby all useable batches from the supplier are known.

The *PhytoComm* class can only confirm the identity of batches that have been used for the generation of the database. As a consequence there cannot be any validation spectra of other batches. Therefore, the criterion reads that two samples (from different sales containers) from each batch must exist, one for the structure of the database (*Type A*) and one for the validation (*Type B*).

Significance of testing with *Apo-Ident*

The analysis result is determined using sophisticated statistical methods according to state-of-the-art science and technology. Chemical and pharmaceutical knowledge is applied for the selection of the samples from which the calibration spectra and validation spectra are recorded. Otherwise it does not influence the further steps of model creation.

Verbally, the statement of the analysis result can be expressed as follows. Here “*the spectra match*” means that the criteria *Mahalanobis distance*, *outlier analysis* and *correlation* are met as shown in *Erfüllung von 2.2.40 Ph. Eur. durch Apo-Ident* [4]. “The spectra do not match”, on the other hand, means that at least the criterion *Mahalanobis distance* is not met.

The positive analysis result “*was identified as ...*” is very meaningful because both the quantity of substances to be taken into account and the number of underlying samples is very comprehensive.

1. The spectrum of the sample measured matches spectra of the defined substance.
2. The spectrum of the sample measured does not match any spectrum of any other substance in this substance class. Therefore, all other substances can be clearly ruled-out.
3. As the spectra from other substance classes were used for validation, it is proven that no spectrum of one of these other substances matches the defined substance. (All substance classes with which a spectrum comparison is possible and makes sense are used for validation. This is documented for each substance class in the section *Summary*.)
4. If the defined substance belongs to a *substance group* which in itself is not clearly separable with *Apo-Ident*, matching with the spectra of one or several substances in this group is confirmed. Which of these substances it actually is cannot be determined clearly. All other substances are excluded analogous to 2 and 3.

On the other hand, a negative analysis result “*was not identified as ...*” means:

1. The substance offered could not be recognised based on the spectrum of this sample.
2. The identity of this sample is not confirmed.
3. Testing must be repeated in accordance with the specifications of the Pharmacopoeia.

Conclusion

NIR spectroscopy is a testing method incorporated in the Pharmacopoeia. In case of successful database validation, it is a possible method for identity testing [5]. *Apo-Ident* meets the criteria of the *European Pharmacopoeia* as a near-infrared spectrometer and proves the validity of the reference database with the existing validation documentation. This means that *Apo-Ident* can be used as an alternative testing method for testing raw materials at pharmacies.

Explanation of terminology

The following section serves to explain or define specialist terminology which is required in order to understand this document. If necessary, definitions for the analysis system *Apo-Ident* are defined more precisely.

The term database is used in this document exactly as in the *Ph. Eur. Section 2.2.40* [3] synonymous with [chemometric model](#). In order to differentiate the databases which are relatively independent of each other, *HiperScan GmbH* frequently also uses the term [substance class](#) (primarily in the plural). On the other hand, the spectra used to structure the database are termed spectrum collection and not database.

Substance classes are units of the organisational structure of the *IdentModule*. The substance classes are substance [databases](#) which are also broadly independently subscribable. On the one hand, the liquid and semi-solid substances are separated from the solid powders because they are measured against different references and therefore the spectra cannot be compared. On the other hand, for example the Pharmacopoeia substances are kept separated from the manufacturer-specific database *PhytoComm* for TCM (traditional Chinese medicine) raw materials.

The individual substance classes need only be limited against each other in-part. Often, no risk of confusion exists because they can only be procured from different sources. On the other hand, in several cases we handle substances which need not be distinguished. For example, em Huang Qi granulate from the company *PhytoComm* neither needs to be delimited from *Huang Qi* granulate from the company *HerbaSinica* nor is matching required. Respectively one single [chemometric model](#) is behind a substance class. (Even if several reciprocally secured chemometric models would be permissible.) The terms *substance class*, *chemometric model* and *databases* are mostly used here as synonyms.

A substance group respectively summarises all the substances within a [substance class](#) which cannot safely be distinguished from one another based on their NIR spectra. However, all the other substances in the database can be excluded.

The formation of subgroups is mentioned in the *Ph. Eur. Section 2.2.40* [3]. In this manner, technical restrictions in case of extensive databases can be avoided and it is possible to prepare individual subgroups with different spectrum pre-treatment. Validation of the subgroups against each other is required. *HiperScan GmbH* has solved these technical restrictions and doesn't use any subgroups within a substance class any longer.

Principal component analysis (PCA) [8, 9] is a multivariate statistics process or multivariate data analysis. It serves to structure, simplify and illustrate comprehensive data records by describing a large number of statistical variables by describing a lower number of linear combinations (the *principal components*) which are as significant as possible. In the *Apo-Ident IdentModule*, PCA is used to evaluate the recorded spectrum data (corresponding with *Ph. Eur. 2.2.40* [3]).

The term validation is defined in both relevant contexts here with different (even if related) meanings.

Within the sense of the expert discipline of *chemometrics*, validation is a process step when creating a [chemometric model](#): after a transformation matrix, limits and various parameters have been calculated or determined from a set of reference spectra during the course of the calibration step [8, 9], the validation step determines the performance capability of the model (selectivity, precision, ...) based on the validation spectra. Normally, random sampling is planned here. In order for the validation to gain strength of proof, the validation spectrum set must be selected with an appropriately wide scope (*representative* and *complete*). The terms *validation run* and *validation step* always actually mean the process step in this sense.

In the regulatory sense (of pharmaceutical production), validation is the documented proof that a process or system meets the previously specified requirements reproducibly when applied practi-

cally. In this sense, the *Apo-Ident* databases only become validated databases with the validation documentation, which this document is part of.

The *European Pharmacopeia* uses the term validation in *Section 2.2.40* within the sense of the specialist discipline of *chemometrics* [3].

The robustness of a process is the property of only being influenced by environmental fluctuations (e.g. temperature or humidity) a little. A method is robust if the environmental conditions do not or hardly falsify the final result.

The specificity of a classification (of a [chemometric model](#)) is the [true negative rate](#).

The recognition rate (also sensitivity) is the [true positive rate](#). It defines in how many percent of cases a correctly set up substance is actually confirmed.

The true negative rate describes the share of spectra correctly classified as non-identity during validation. This is equivalent to correct classification. It means that a substance *A* within identity checking as substance *B* is judged as “*not identified*”. The *true negative rate* is equivalent to the conditional frequency

$$h(\text{rejected}|\text{genuinely no identity}) = \frac{r_n}{r_n + f_p}$$

with r_n as the total number of *true negative* classifications and f_p as the total number of *false positive* classifications. For successful validation of an *IdentModule*, all spectra presented belonging to this category must be classified as *not in accordance*.

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of this number. The weight of each spectrum of a substance/substance group *i* therefore results as

$$w_i = \frac{1}{n_i}$$

with n_i number of spectra in this substance/substance group. This weighting ensures that the overall result cannot be enhanced by adding especially large numbers of spectra from easily separable substances.

The true positive rate describes the share of spectra correctly classified as identity during validation. This is equivalent to correct classification. It means that a substance *A* within identity checking as substance *A* is judged as “*identified*”. The *true positive rate* is equivalent to the conditional frequency

$$h(\text{identified}|\text{genuine identity}) = \frac{r_p}{r_p + f_n}$$

with r_p as the total number of *true positive* classifications and f_n as the total number of *false negative* classifications. The *true positive rate* is a measure for the recognition rate of the validated *Apo-Ident IdentModule*.

In order to ensure that each substance is received with the same weight, the spectra are weighted as described for the [true negative rate](#).

The true negative result describes a spectrum correctly classified as non-identity during validation. It is equivalent to correct classification. It means that a substance *A* within identity checking as substance *B* is judged as “*not identified*”.

The false positive result describes a spectrum falsely classified as non-identity during validation. This is the most critical type of possible false classification. It means that a substance *A* within identity checking as substance *B* is judged as “*identified*”. For successful validation of an *IdentModule*, a number of false positive events of zero are demanded for all spectra entering the validation. The exception to this restriction is the class of TCM granulates from the company *PhytoComm* as described under [Particularities of individual substance classes](#).

The true positive result describes a spectrum correctly classified as identity during validation. It is equivalent to correct classification. It means that a substance *A* within identity checking as substance *A* is judged as “*identified*”.

The false negative result describes a spectrum falsely classified as non-identity during validation. It is equivalent to false classification. It means that a substance *A* within identity checking as substance *A* is judged as “*not identified*”.

The ‘Rule of Three’ says that with a probability of 95 % the next random sample of the same size no more than three false results are to be expected if no false result existed in the existing random sample [10, 11].

The *specificity* and *recognition rate* are determined both globally and from the validation runs for all substances. The information is supplemented with the hypothetical value if there had been three false results more. The percent information is provided in parentheses with the “greater than” symbol ‘>’, e.g. *specificity* 100.000 % (>99.983 %) if 17 567 false spectra have been presented without one single *false positive* result. The larger the statistical basis, the lower the influence of the hypothetical false results.

The Mahalanobis distance is a distance measure between two points in *n*-dimensional vector space. Here, the respective direction component of the distance to *standard deviation* [12] of an *n*-dimensional distribution is standardised. In case of the *principal component analysis* [8, 9] this standardisation relates to the distribution of the respective calibration data set for a classification (substance/substance group) in the *principal component space* [8]. The *Mahalanobis distance* of a point (mapping of a spectrum) $\vec{y}$ in the *n*-dimensional principal component space to the expected value of an *n*-dimensional distribution $\mathbf{X}$ then results as

$$d(\mathbf{X}, \vec{y}) = \sqrt{(\bar{\mathbf{X}} - \vec{y})^T \mathbf{S}^{-1} (\bar{\mathbf{X}} - \vec{y})} \quad \text{with} \quad \mathbf{X} \in \mathbb{R}^{m \times n}, \vec{y} \in \mathbb{R}^m$$

[13]. Here, *m* is equivalent to the number of principal components used (dimension of the principal component space) and *n* the number of measurements existing in the calibration data set (spectra). $\bar{\mathbf{X}}$ is the expected value of the resulting distribution for the calibration data set (the average value of *n* measurements received). $\mathbf{S}^{-1}$ is the inverse covariance matrix [12] for distribution $\mathbf{X}$.

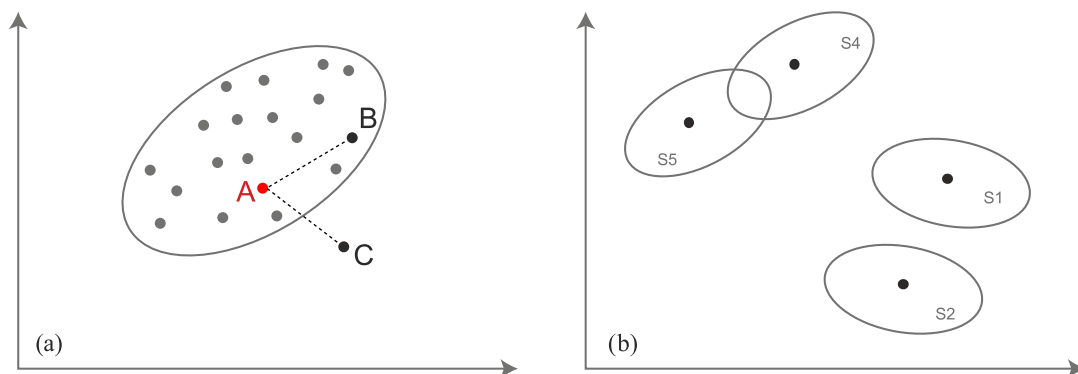


Figure 1: (a) The *Mahalanobis distance* from *A* to *B* is less than from *A* to *C*. However, the Euclidean distances are identical. (b) The *Mahalanobis distance* between the two measurement series *S4* and *S5* is smaller than between *S1* and *S2*. However, the Euclidean distances are identical.

The *Mahalanobis distance* offers advantages compared to the *Euclidean distance*: For the calculation of the distance it takes the statistical properties of a data point distribution (measurement series), i.e. average value, variance and covariance of the data points [14] into account. The *Mahalanobis distance* is applied while creating the reference database for evaluating the spectra from different samples of a substance.

A chemometric model is a classifier based on statistical methods [8, 9]. Through the respective algorithm used (e.g. *Principal Component Analysis*, *Cluster Analysis*), a maximum of chemical information is extracted from measurement data. Here, systematical or physical disturbances are eliminated using appropriate data pre-processing [15, 16].

At several places in this document, in order to simplify understanding, the term **database** is used instead of *chemometric model* – in the same manner as in the *Ph. Eur. Section 2.2.40* [3].

A sample (with its own sample ID) refers to substance in a sales container. Repeated sampling from the same sales container is listed under the same sample ID. (The suffix “SI” is not part of the sample ID.) Several samples may originate from the same batch. Samples are called “independent”, if they originate from a batch, of which no spectra have been used for the generation of the database. (Up to *IdentModule 2018-01*, samples from different sales packages were considered to be independent.) The information above the list of validation spectra now includes also the number of batches that deliver independent samples for the validation (for both *Type B* and *Type C*).

In case a supplier takes a sample for testing from its incoming goods and splits it to multiple laboratory containers, the substance in all laboratory containers will still be ascribed to the same sample. *HiperScan GmbH* only uses one of the subsamples.

Reference samples are used to structure the database. The *reference spectra* originate from these samples. In chemometric technical jargon you would normally say: For *calibration*, a **chemometric model** is generated from the *calibration spectra* recorded from the *calibration samples*, whose quality is subsequently assessed in **validation**.

Reference samples are procured via typical pharmacy sources. Their identity is tested. The *reference spectra* are recorded by *HiperScan GmbH*. The documentation also includes the manufacturer’s name and batch number.

Reference samples are clearly identified by a sample ID. Samples without sample ID may not be used as *reference samples*.

Summary

A total of 264 186 spectra from 38 217 different batches for a total of 419 substances were used to validate the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*.

Validation samples

The validation samples can be categorised as follows:

Typ A Calibration spectra. These are the spectra used to generate the chemometric model. They were recorded by *HiperScan GmbH*. Detailed information regarding the batches or samples can be found in the following validation reports under *calibration samples* and under *Type A*. Further information is listed in [Appendix A](#).

Substance class	Substances	Batches	Spectra
APIs & excipients, liquid/semi-solid (with analysis certificate)	219	1116	56 359

From category *A* a total of 56 359 spectra from 1116 batches for a total of 219 substances were taken into account for validation.

Typ B Spectra from independent samples which are not included in database generation. These spectra were recorded by *HiperScan GmbH*. Detailed information regarding the batches or samples can be found in the following validation reports in the section *Type B* or in [Appendix B](#).

Substance class	Substances	Batches	Spectra
APIs & excipients, liquid/semi-solid (with analysis certificate)	361	1503	69 474

From category *B* a total of 69 474 spectra from 1503 batches for a total of 361 substances were taken into account for validation.

Typ C Spectra from independent samples which are not included in database generation. *Apo-Ident* customers carried out the measurements. Detailed information regarding the batches or samples can be found in the following validation reports in the section *Type C* or in [Appendix C](#).

Substance class	Substances	Batches	Spectra
APIs & excipients, liquid/semi-solid (with analysis certificate)	340	36 231	138 353

From category *C* a total of 138 353 spectra from 36 231 batches for a total of 340 substances were taken into account for validation.

Validation results

The validation runs checked whether all substances/substance groups in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, the matching of all relevant spectra of various substances with the substances/substance groups in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)* was checked and the correctness of the results was evaluated. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	56 272	7	7 326 750
Type B	0	60 440	399	9 038 177
Type C	0	123 693	2522	17 989 048

All substances/substance groups in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)* can be clearly distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Typ A	100.000 00 % (> 99.999 83 %)	99.989 22 % (> 99.978 92 %)
Typ B	100.000 00 % (> 99.999 74 %)	98.778 78 % (> 98.755 94 %)
Typ C	100.000 00 % (> 99.997 30 %)	96.778 04 % (> 96.647 78 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group (s)-Lactic acid
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30021-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

(s)-Lactic acid; Acidum (s)-lacticum

Special notes

When selecting the (s)-Lactic acid substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
(s)-Lactic acid	4	2	129

Second-stage model

For differentiation of the substance/substance group (s)-Lactic acid the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group (s)-Lactic acid:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	(s)-Lactic acid	12142108	30734	39	AR-14-FG-012230-01
Caelo	(s)-Lactic acid	13317311	31436	60	20131011
Caelo	(s)-Lactic acid	16144212	33271	40	20160527
Caelo	(s)-Lactic acid	190447	34456	40	20190416*
Caelo	(s)-Lactic acid	190447	34739	40	20190416*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 219 spectra of 5 reference samples from the substance/substance group (s)-Lactic acid. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56140 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group (s)-Lactic acid.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	(s)-Lactic acid	90646219	30021	40
Caelo	(s)-Lactic acid	172176	33694	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 817 spectra from 424 *Apo-Ident* customers from 132 batches from the substance/substance group *(s)-Lactic acid*.
- Among them are spectra of independent samples from 129 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
A.H.D.	(s)-Lactic acid	15150402	1
AHD	(s)-Lactic acid	18034005	1
Euro OTC	(s)-Lactic acid	16144210	1
AHD, 25.11.13	(s)-Lactic acid	1302011	1
AHD; 20.7.15; 5.84EUR	(s)-Lactic acid	15150402	1
Anzag	(s)-Lactic acid	16144210	1
Bombastus	(s)-Lactic acid	10323202	1
Bombastus	(s)-Lactic acid	12142108	2
Caelo	(s)-Lactic acid	133173082x	1
Caelo	(s)-Lactic acid	11179207	2
Caelo	(s)-Lactic acid	11179217	6
Caelo	(s)-Lactic acid	11179209	1
Caelo	(s)-Lactic acid	2101202	1
Caelo	(s)-Lactic acid	1309211034	1
Caelo	(s)-Lactic acid	2710Q-01034	1
Caelo	(s)-Lactic acid	11179214	1
Caelo	(s)-Lactic acid	9321404	1
Caelo	(s)-Lactic acid	20221110-4	1
Caelo	(s)-Lactic acid	9321408	2
Caelo	(s)-Lactic acid	11179201	2
Caelo	(s)-Lactic acid	13020201	20
Caelo	(s)-Lactic acid	11111644	1
Caelo	(s)-Lactic acid	A-310513-1	1
Caelo	(s)-Lactic acid	A-220413-3	1
Caelo	(s)-Lactic acid	1302021	1
Caelo	(s)-Lactic acid	13020208	7
Caelo	(s)-Lactic acid	13020211	18
Caelo	(s)-Lactic acid	10323202	1
Caelo	(s)-Lactic acid	1062014C	1
Caelo	(s)-Lactic acid	81302029	1
Caelo	(s)-Lactic acid	5031301	1
Caelo	(s)-Lactic acid	13030201	1
Caelo	(s)-Lactic acid	2182	1
Caelo	(s)-Lactic acid	14112107	12
Caelo	(s)-Lactic acid	133117308	1
Caelo	(s)-Lactic acid	14112017	1

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Supplier	Substance	Batch	Spectra
Caelo	(s)-Lactic acid	14112112	6
Caelo	(s)-Lactic acid	14112115	10
Caelo	(s)-Lactic acid	12142162	1
Caelo	(s)-Lactic acid	17031502	1
Caelo	(s)-Lactic acid	14112116	4
Caelo	(s)-Lactic acid	15150402	17
Caelo	(s)-Lactic acid	15150413	6
Caelo	(s)-Lactic acid	15150421	18
Caelo	(s)-Lactic acid	133173	1
Caelo	(s)-Lactic acid	1530860102263531	1
Caelo	(s)-Lactic acid	15308609	1
Caelo	(s)-Lactic acid	16144201	23
Caelo	(s)-Lactic acid	62186516	1
Caelo	(s)-Lactic acid	16144214	7
Caelo	(s)-Lactic acid	16/44219	1
Caelo	(s)-Lactic acid	161442	1
Caelo	(s)-Lactic acid	16144216	15
Caelo	(s)-Lactic acid	128711-658	1
Caelo	(s)-Lactic acid	1644219	1
Caelo	(s)-Lactic acid	1644218	1
Caelo	(s)-Lactic acid	171217601	1
Caelo	(s)-Lactic acid	180344005	1
Caelo	(s)-Lactic acid	16144218	33
Caelo	(s)-Lactic acid	17217601	42
Caelo	(s)-Lactic acid	14112119	17
Caelo	(s)-Lactic acid	180340004	1
Caelo	(s)-Lactic acid	18064004	1
Caelo	(s)-Lactic acid	13317303	3
Caelo	(s)-Lactic acid	15308601	17
Caelo	(s)-Lactic acid	15150418	3
Caelo	(s)-Lactic acid	15150401	7
Caelo	(s)-Lactic acid	1510402	1
Caelo	(s)-Lactic acid	16144219	1
Caelo	(s)-Lactic acid	90646369	1
Caelo	(s)-Lactic acid	13317308	9
Caelo	(s)-Lactic acid	12142109	2
Caelo	(s)-Lactic acid	141121	1
Caelo	(s)-Lactic acid	16144212-20170704Ma1	1
Caelo	(s)-Lactic acid	1644201	1
Caelo	(s)-Lactic acid	15150405	2
Caelo	(s)-Lactic acid	15308602	3
Caelo	(s)-Lactic acid	13317313	6
Caelo	(s)-Lactic acid	18034013	8
Caelo	(s)-Lactic acid	13317393	1
Caelo	(s)-Lactic acid	180340055756	1
Caelo	(s)-Lactic acid	1510421	1
Caelo	(s)-Lactic acid	16144210	31
Caelo	(s)-Lactic acid	15308608	31
Caelo	(s)-Lactic acid	2014U-01034	1
Caelo	(s)-Lactic acid	5(17217601)	1
Caelo	(s)-Lactic acid	18034005	42
Caelo	(s)-Lactic acid	130360	1
Caelo	(s)-Lactic acid	15306613	1
Caelo	(s)-Lactic acid	12142102	6
Caelo	(s)-Lactic acid	913Q-01034	1
Caelo	(s)-Lactic acid	13317301	32
Caelo	(s)-Lactic acid	18034010	1
Caelo	(s)-Lactic acid	12142101	9
Caelo	(s)-Lactic acid	19044701	7
Caelo	(s)-Lactic acid	13020212	1

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Supplier	Substance	Batch	Spectra
Caelo	(s)-Lactic acid	13317307	12
Caelo	(s)-Lactic acid	16144206	2
Caelo	(s)-Lactic acid	18034002	2
Caelo	(s)-Lactic acid	180808187	1
Caelo	(s)-Lactic acid	13020203	7
Caelo	(s)-Lactic acid	13317315	4
Caelo	(s)-Lactic acid	14112114	3
Caelo	(s)-Lactic acid	1644212	1
Caelo	(s)-Lactic acid	17217811	1
Caelo	(s)-Lactic acid	408Q-01034	1
Caelo	(s)-Lactic acid	13317304	1
Caelo	(s)-Lactic acid	13317309	2
Caelo	(s)-Lactic acid	18034004	27
Caelo	(s)-Lactic acid	1803404004	1
Caelo	(s)-Lactic acid	13020808	1
Caelo	(s)-Lactic acid	15150410	17
Caelo	(s)-Lactic acid	2263531	1
Caelo	(s)-Lactic acid	9064607	1
Caelo	(s)-Lactic acid	16121-01034	1
Caelo	(s)-Lactic acid	18034006	3
Caolo/Noweda	(s)-Lactic acid	15150410	1
Caesar & Loretz GmbH	(s)-Lactic acid	13317308	1
Caesar & Loretz GmbH	(s)-Lactic acid	14112107	1
Caesar & Loretz GmbH	(s)-Lactic acid	18034005	3
Caesar & Loretz GmbH	(s)-Lactic acid	19044701	1
Caesar & Loretz GmbH Hi...	(s)-Lactic acid	14112112	1
Caesar&Loretz GmbH	(s)-Lactic acid	15308601	1
Caesar&Loretz GmbH,22.0...	(s)-Lactic acid	16144212	1
Caesar&Loretz GmbH/Anzag	(s)-Lactic acid	13020211	1
Caesar&loretz,AHC	(s)-Lactic acid	13317309	1
Caesar&Loretz/Noweda	(s)-Lactic acid	15150402	1
Caesar/Lorenz	(s)-Lactic acid	13020201	1
Caolo- Noweda	(s)-Lactic acid	13020211	1
Cealo/Kehr	(s)-Lactic acid	13317312	1
Cealo/Sanacorp	(s)-Lactic acid	18034005	1
Euro OTC	(s)-Lactic acid	1503086-03	1
Euro OTC	(s)-Lactic acid	14112112	1
Euro OTC	(s)-Lactic acid	18034005	1
Euro OTC	(s)-Lactic acid	15150410	1
Fagron	(s)-Lactic acid	14112112	2
Fagron	(s)-Lactic acid	16144216	1
Fagron	(s)-Lactic acid	18034005	1
Fiebig	(s)-Lactic acid	18034005	1
Gatt-Koller	(s)-Lactic acid	1802081	1
Gehe	(s)-Lactic acid	11179217	1
Gehe	(s)-Lactic acid	13020208	1
Gehe	(s)-Lactic acid	14112119	1
Gehe	(s)-Lactic acid	15150402	1
Gehe	(s)-Lactic acid	16144201	1
GEHE	(s)-Lactic acid	21021180/2	1
GEHE	(s)-Lactic acid	16144201	1
GEHE	(s)-Lactic acid	17217601	1
GEHE	(s)-Lactic acid	18034004	1
GEHE	(s)-Lactic acid	18034005	1
GEHE	(s)-Lactic acid	19044701	1
Caelo	(s)-Lactic acid	16141212	1
Caelo	(s)-Lactic acid	16141218	1
Gutenberg-Apotheke	(s)-Lactic acid	13317303	1
Kehr	(s)-Lactic acid	17217601	1
Kögl	(s)-Lactic acid	261708164816	1

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Supplier	Substance	Batch	Spectra
Kögl	(s)-Lactic acid	261708161217	1
Kögl	(s)-Lactic acid	1700073	2
L12	(s)-Lactic acid	16144201	1
Noweda	(s)-Lactic acid	81302139	1
Noweda	(s)-Lactic acid	13020208	1
Noweda	(s)-Lactic acid	15150410	2
Noweda	(s)-Lactic acid	16144212	1
Caelo	(s)-Lactic acid	12142112	11
Noweda 18.05.2015	(s)-Lactic acid	141121119	1
Caelo	(s)-Lactic acid	12142104	2
Caelo	(s)-Lactic acid	1412112	1
Caelo	(s)-Lactic acid	14112106	3
Caelo	(s)-Lactic acid	15308613	19
Phoenix	(s)-Lactic acid	15308613	1
Phoenix	(s)-Lactic acid	15308608	1
Phoenix	(s)-Lactic acid	18034004	1
Phoenix Goettin	(s)-Lactic acid	14112115	1
Phönix	(s)-Lactic acid	13020211	1
Phönix	(s)-Lactic acid	16144216	1
Phönix, 21.03.2013	(s)-Lactic acid	13020201	1
Purren Apotheke	(s)-Lactic acid	12069	1
Rondell Apotheke	(s)-Lactic acid	15150402	1
Rondell Apotheke	(s)-Lactic acid	15308613	1
Sanacorp	(s)-Lactic acid	13020201	1
Sanacorp	(s)-Lactic acid	13317307	1
Sanacorp	(s)-Lactic acid	13317311	1
Sanacorp	(s)-Lactic acid	16144201	1
Sanacorp	(s)-Lactic acid	16144218	1
Sanacorp	(s)-Lactic acid	18034005	1
Caelo	(s)-Lactic acid	10/AKD1	1
Taoasis	(s)-Lactic acid	17217601	1
Unisan	(s)-Lactic acid	13020208	2
WEPA Apothekenbedarf Gm...	(s)-Lactic acid	L0TAP0074	1
Caelo	(s)-Lactic acid	13317311	17
Caelo	(s)-Lactic acid	16144212	49
Caelo	(s)-Lactic acid	12142108	5
Caelo	(s)-Lactic acid	71449138	2

- 137 536 spectra from 703 *Apo-Ident* customers from a total of 35 164 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *(s)-Lactic acid* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *(s)-Lactic acid* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	219	0	56 140
Type B	0	80	0	69 394
Type C	0	802	15	137 536

The substance/substance group (S)-*Lactic acid* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2603 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	98.1640 % (> 97.7968 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group (S)-*Lactic acid* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Pine tar	101.65	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group (S)-*Lactic acid* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30734	30734	0.00	156.63
31436	34456	0.48	152.48
33271	30734	4.90	156.04
34456	34456	0.00	152.75
34739	34739	0.00	153.10

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances,

thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **1,3-butanediol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30851-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

1,3-butanediol; 1,3-Butandiolium

Special notes

When selecting the *1,3-butanediol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
1,3-butanediol	2	2	4

Second-stage model

For differentiation of the substance/substance group *1,3-butanediol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *1,3-butanediol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	1,3-butanediol	12J02-N07	30851	40	1402682
Fagron	1,3-butanediol	14G16-B01-296698	31594	60	20140804

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 100 spectra of 2 reference samples from the substance/substance group *1,3-butanediol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 259 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *1,3-butanediol*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	1,3-butanediol	15E15-B02-332109	33788	40
Fagron	1,3-butanediol	17E22-B02-343289	34480	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 4 spectra from 4 *Apo-Ident* customers from 4 batches from the substance/substance group *1,3-butanediol*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	1,3-butanediol	13L19-B03-291208	1
Fagron	1,3-butanediol	13A17-N03	1
Fagron	1,3-butanediol	S6526964	1
PHÖNIX	1,3-butanediol	15E15-B02	1

- 138 349 spectra from 703 *Apo-Ident* customers from a total of 35 291 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *1,3-butanediol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *1,3-butanediol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	100	0	56 259
Type B	0	75	5	69 394
Type C	0	4	0	138 349

The substance/substance group *1,3-butanediol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 94.0000 %)
Type B	100.0000 % (> 99.9653 %)	93.7500 % (> 90.0000 %)
Type C	100.0000 % (> 99.6474 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to

exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *1,3-butanediol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol	30.59	–
Dexpanthenol concentrate 50%	80.37	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *1,3-butanediol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30851	30851	0.00	50.06
31594	30851	6.37	50.24

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50% greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **2-ethylhexyl laurate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30849-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

2-ethylhexyl laurate; 2-Ethylhexylis lauras

Special notes

When selecting the *2-ethylhexyl laurate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
2-ethylhexyl laurate	5	2	67

Second-stage model

For differentiation of the substance/substance group *2-ethylhexyl laurate* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *2-ethylhexyl laurate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	2-ethylhexyl lau...	14129303	31373	40	20140429
Caelo	2-ethylhexyl lau...	14129304	31507	60	20140429
Caelo	2-ethylhexyl lau...	153825	31878	60	20151113*
Caelo	2-ethylhexyl lau...	163157	33086	40	20161124*
Caelo	2-ethylhexyl lau...	163482	33087	40	20170106*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 5 reference samples from the substance/substance group *2-ethylhexyl laurate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 119 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *2-ethylhexyl laurate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	2-ethylhexyl laurate	17065201	33786	40
Caelo	2-ethylhexyl laurate	180194	33885	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 370 spectra from 179 *Apo-Ident* customers from 69 batches from the substance/substance group *2-ethylhexyl laurate*.
- Among them are spectra of independent samples from 67 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD / Pharmachem Pößneck	2-ethylhexyl laurate	50414	2
Caelo	2-ethylhexyl laurate	1482802	1
AHD/Pharmachem	2-ethylhexyl laurate	10616	5
AHD/Pharmachem.	2-ethylhexyl laurate	10515	8
Allianc. Health. / Phar...	2-ethylhexyl laurate	10515	1
Allianz	2-ethylhexyl laurate	18121804	1
Allinace	2-ethylhexyl laurate	17065201	1
apomix	2-ethylhexyl laurate	8325111111	1
apomix	2-ethylhexyl laurate	8014260413	2
apomix	2-ethylhexyl laurate	8015050414	2
apomix	2-ethylhexyl laurate	148-8014010815	1
apomix	2-ethylhexyl laurate	148-8013010616	4
apomix	2-ethylhexyl laurate	1488013010616	1
apomix	2-ethylhexyl laurate	2140817	1
apomix	2-ethylhexyl laurate	148-8014010517	3
apomix	2-ethylhexyl laurate	148-8013010218	4
Apomix	2-ethylhexyl laurate	8014210112	1
Apomix	2-ethylhexyl laurate	8015050414	1
Apomix	2-ethylhexyl laurate	8015010115	5
Apomix	2-ethylhexyl laurate	8015010515	1
Apomix	2-ethylhexyl laurate	148-80130106ZA182/16	1
Apomix	2-ethylhexyl laurate	148-8013010616	10
Apomix	2-ethylhexyl laurate	ZA182/16	1
Apomix	2-ethylhexyl laurate	148-8013011116	6
Apomix	2-ethylhexyl laurate	148-8014010517	2
Apomix	2-ethylhexyl laurate	148-8013010218	5
Apomix	2-ethylhexyl laurate	148-8014010618	1
Apomix	2-ethylhexyl laurate	148-80140618	1
Apomix / Anzag	2-ethylhexyl laurate	148-8013011116	1
Apomix / Gehe	2-ethylhexyl laurate	148-8014010517	1
apomix / Noweda	2-ethylhexyl laurate	148-8013010616	1
apomix / Noweda	2-ethylhexyl laurate	148-8014010618	1
Apomix / Phönix	2-ethylhexyl laurate	40514	1
Apomix / Phönix	2-ethylhexyl laurate	148-8014010517	1
Apomix / Sanacorp	2-ethylhexyl laurate	148-8013011116	1
Apomix GEHE	2-ethylhexyl laurate	148-8014010517	1

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Supplier	Substance	Batch	Spectra
Apomix GEHE	2-ethylhexyl laurate	148-8014010618	1
apomix/ Phoenix	2-ethylhexyl laurate	8015050414	1
Apomix/Alliance	2-ethylhexyl laurate	1488013010218	1
Apomix/Anzag	2-ethylhexyl laurate	813M-03324	1
Apomix/Anzag	2-ethylhexyl laurate	3114U-03641	1
Apomix/Anzag	2-ethylhexyl laurate	148-8013010616	1
Apomix/Gehe	2-ethylhexyl laurate	148-8014010517	1
apomix/gehe 26.06.19	2-ethylhexyl laurate	148_8014010618	1
Apomix/Noveda	2-ethylhexyl laurate	148-8013010218	1
apomix/Noveda	2-ethylhexyl laurate	148-8013011116	1
Apomix/Noveda	2-ethylhexyl laurate	8014260413	2
Apomix/Noveda	2-ethylhexyl laurate	8015050414ZA96/14	1
Apomix/Noveda	2-ethylhexyl laurate	148-8013010616	2
Apomix/Noveda	2-ethylhexyl laurate	148-8013011116	1
Apomix/Noveda	2-ethylhexyl laurate	148-8013010218	2
apomix/P	2-ethylhexyl laurate	148-8013011116	1
Apomix/phönix	2-ethylhexyl laurate	148-8013010616	1
Apomix/Phönix	2-ethylhexyl laurate	148-8013010616	1
apomix/Sanacorp	2-ethylhexyl laurate	8015050414	1
apomix/Sanacorp	2-ethylhexyl laurate	148-8014010517	1
Apomix/Sanacorp	2-ethylhexyl laurate	8015010115ZA48/15	1
Apomix/Spangro	2-ethylhexyl laurate	148-8014010517	1
Bombastus	2-ethylhexyl laurate	221010	1
Bombastus	2-ethylhexyl laurate	148-8013010616	1
Bombastus	2-ethylhexyl laurate	304559	1
Caelo	2-ethylhexyl laurate	21091303	1
Caelo	2-ethylhexyl laurate	14182802	1
Caelo	2-ethylhexyl laurate	16348202	6
Caelo	2-ethylhexyl laurate	10515	1
Caelo	2-ethylhexyl laurate	148-8013010616	3
Caelo	2-ethylhexyl laurate	16143803	4
Caelo	2-ethylhexyl laurate	16143804	2
Caelo	2-ethylhexyl laurate	16143801	1
Caelo	2-ethylhexyl laurate	16245001	7
Caelo	2-ethylhexyl laurate	1488013010616	1
Caelo	2-ethylhexyl laurate	16245004	1
Caelo	2-ethylhexyl laurate	16348201	11
Caelo	2-ethylhexyl laurate	17065201	3
Caelo	2-ethylhexyl laurate	1488014010517	1
Caelo	2-ethylhexyl laurate	170665201	1
Caelo	2-ethylhexyl laurate	18121802	10
Caelo	2-ethylhexyl laurate	16315701	4
Caelo	2-ethylhexyl laurate	18019403	3
Caelo	2-ethylhexyl laurate	181211802	1
Caelo	2-ethylhexyl laurate	148-8013010218	1
Caelo	2-ethylhexyl laurate	130312	1
Caelo	2-ethylhexyl laurate	148-8014010815	2
Caelo	2-ethylhexyl laurate	16315703	2
Caelo	2-ethylhexyl laurate	148-8014010517	1
Caelo	2-ethylhexyl laurate	13252003	1
Caelo	2-ethylhexyl laurate	50414	8
Caelo	2-ethylhexyl laurate	17065202	2
Caelo	2-ethylhexyl laurate	19124101	1
Caelo	2-ethylhexyl laurate	18121804	3
Caelo	2-ethylhexyl laurate	18225901	9
Caelo	2-ethylhexyl laurate	15382601	1
Caelo	2-ethylhexyl laurate	16245003	2
Caelo	2-ethylhexyl laurate	13018601	1
Caeolo / ahd	2-ethylhexyl laurate	17065201	1
Caesar & Loretz GmbH	2-ethylhexyl laurate	17065201	1

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Supplier	Substance	Batch	Spectra
DHW/AHD	2-ethylhexyl laurate	148-8013010218	1
E Plus	2-ethylhexyl laurate	16348202	1
EuRho/Noweda	2-ethylhexyl laurate	18019403	1
Fagron	2-ethylhexyl laurate	148-8013010616	1
Fagron	2-ethylhexyl laurate	50414	2
Gehe	2-ethylhexyl laurate	130312	2
GEHE	2-ethylhexyl laurate	148-8013010218	2
Gehe / Pharmachem. Pökn...	2-ethylhexyl laurate	10616	2
Caelo	2-ethylhexyl laurate	148-8013011116	1
Ichthyol	2-ethylhexyl laurate	8015180213	1
Kehr	2-ethylhexyl laurate	18121802	1
L10	2-ethylhexyl laurate	18019405	1
L10	2-ethylhexyl laurate	18225901	1
L12	2-ethylhexyl laurate	148-8013011116	1
Nachtestung-Verlängerung	2-ethylhexyl laurate	275/18	1
Noweda	2-ethylhexyl laurate	130312	2
Caelo	2-ethylhexyl laurate	16143802	1
Caelo	2-ethylhexyl laurate	18019405	4
Pharm.Pöckneck/AHD	2-ethylhexyl laurate	10616	3
Pharma Pöckneck	2-ethylhexyl laurate	240314	1
Pharma Pöckneck	2-ethylhexyl laurate	10515	1
Pharmach.Pöckneck/AHD	2-ethylhexyl laurate	290317	5
Pharmach.Pöckneck/AHD	2-ethylhexyl laurate	260418	2
Pharmachem	2-ethylhexyl laurate	131111	2
Pharmachem	2-ethylhexyl laurate	50414	6
Pharmachem	2-ethylhexyl laurate	10515	5
Pharmachem	2-ethylhexyl laurate	10616	5
Pharmachem	2-ethylhexyl laurate	290317	4
Pharmachem	2-ethylhexyl laurate	260418	1
Pharmachem / Alliance H...	2-ethylhexyl laurate	10616	1
Pharmachem / Phönix	2-ethylhexyl laurate	10213	1
Pharmachem Anzag	2-ethylhexyl laurate	130312	2
pharmachem gmbh	2-ethylhexyl laurate	50414	1
pharmachem gmbh	2-ethylhexyl laurate	10616	1
Pharmachem GmbH	2-ethylhexyl laurate	131111	2
Pharmachem GmbH	2-ethylhexyl laurate	130312	1
Pharmachem GmbH	2-ethylhexyl laurate	10213	2
Pharmachem GmbH	2-ethylhexyl laurate	50414	1
Pharmachem GmbH	2-ethylhexyl laurate	10616	1
pharmachem GmbH Pöckneck	2-ethylhexyl laurate	10213	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	130312	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	10515	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	290317	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	260418	1
Pharmachem GmbH&Co.KG/N...	2-ethylhexyl laurate	10616	1
Pharmachem pöneck/Phönix	2-ethylhexyl laurate	260418	1
Pharmachem Pösneck	2-ethylhexyl laurate	50414	2
Pharmachem Pösneck/Noweda	2-ethylhexyl laurate	10515	4
Pharmachem Pöckneck	2-ethylhexyl laurate	10213	2
Pharmachem Pöckneck	2-ethylhexyl laurate	290317	1
Pharmachem Pöckneck	2-ethylhexyl laurate	260418	1
Pharmachem Pöckneck /Now...	2-ethylhexyl laurate	50414	2
Pharmachem Pöckneck /Now...	2-ethylhexyl laurate	10515	3
Pharmachem Pöckneck GmbH...	2-ethylhexyl laurate	10616	1
Pharmachem Pöckneck GmbH...	2-ethylhexyl laurate	290317	1
Pharmachem Pöckneck GmbH...	2-ethylhexyl laurate	260418	1
Pharmachem Pöckneck, GEHE	2-ethylhexyl laurate	10515	1
Pharmachem Pöckneck/Sana...	2-ethylhexyl laurate	50414	1
Pharmachem Pöckneck/Sana...	2-ethylhexyl laurate	10515	1
Pharmachem./Allianc.H.	2-ethylhexyl laurate	50414	1

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Supplier	Substance	Batch	Spectra
Pharmachem.Pöckneck	2-ethylhexyl laurate	10515	3
Pharmachem.Pöckneck/Phönix	2-ethylhexyl laurate	260418	1
Pharmachem/ Noweda	2-ethylhexyl laurate	130312	1
Pharmachem/ Noweda	2-ethylhexyl laurate	50414	1
Pharmachem/ Noweda	2-ethylhexyl laurate	10616	2
Pharmachem/ Sanacorp	2-ethylhexyl laurate	130312	1
Pharmachem/ Sanacorp	2-ethylhexyl laurate	50414	1
Pharmachem/ Sanacorp	2-ethylhexyl laurate	10515	1
Pharmachem/AHD	2-ethylhexyl laurate	10213	4
Pharmachem/Gehe	2-ethylhexyl laurate	131111	1
Pharmachem/Noweda	2-ethylhexyl laurate	131111	2
Pharmachem/Noweda	2-ethylhexyl laurate	10616	1
Pharmachem/Phoenix	2-ethylhexyl laurate	290317	1
Pharmachem/Phönix	2-ethylhexyl laurate	10213	1
Pharmachem/Phönix	2-ethylhexyl laurate	10616	1
Pharmachem/Phönix	2-ethylhexyl laurate	290317	1
Pharmachem/Phönix	2-ethylhexyl laurate	260418	3
Pharmachem/Sanacorp	2-ethylhexyl laurate	50414	6
Pharmachem/Sanacorp	2-ethylhexyl laurate	10515	5
Pharmachem/Sanacorp	2-ethylhexyl laurate	10616	2
Pharmachem/Sanacorp	2-ethylhexyl laurate	290317	1
Pharmachem/Sanacorp	2-ethylhexyl laurate	260418	2
Phoenix	2-ethylhexyl laurate	148-8013010616	1
Phoenix/Apomix	2-ethylhexyl laurate	8015010115	1
Phönix	2-ethylhexyl laurate	290317	1
Phönix / Pharmachem	2-ethylhexyl laurate	10616	1
Phönix Gotha	2-ethylhexyl laurate	131111	1
Phönix Gotha	2-ethylhexyl laurate	10213	1
phönix Pharmachem	2-ethylhexyl laurate	290317	1
Phönix/Pharmachem Pöckneck	2-ethylhexyl laurate	290317	1
pkh gmbh/Noweda	2-ethylhexyl laurate	1488013010218	1
PKH Halle,Anzag	2-ethylhexyl laurate	148-8013010616	1
PKH Halle/Sanacorp	2-ethylhexyl laurate	8013120913	1
Caelo	2-ethylhexyl laurate	8015180213	1
Caelo	2-ethylhexyl laurate	8014210112	1
Sanacorp/Pharmachem	2-ethylhexyl laurate	290317	2
Caelo	2-ethylhexyl laurate	14129304	1
Caelo	2-ethylhexyl laurate		1

- 137 983 spectra from 703 *Apo-Ident* customers from a total of 35 227 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *2-ethylhexyl laurate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *2-ethylhexyl laurate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	80	0	69 394
Type C	0	364	6	137 983

The substance/substance group *2-ethylhexyl laurate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	98.3784 % (> 97.5676 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *2-ethylhexyl laurate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Squalane	8.17	72.91
Triglycerides, medium-chain	15.81	—
Wool fat	17.05	—
Emulsifying hydrophobic base gel DAC	29.27	—
Soy lecithin, liquid	30.61	—
Camphor ointment	31.59	—
Softisan [®] 649	32.18	—
Laurel oil	32.35	—
Pasta Cordes [®]	32.66	—
Shea butter, refined	32.95	—
Wheatgerm oil, refined	35.43	—
Olive oil, native	36.33	—
Grape seed oil, refined	37.35	—
Soy oil, refined	38.20	—
Apricot kernel oil, refined	38.51	—
Hydrophobic base gel DAC	38.57	—
Sorbitan trioleate	39.27	—
Sunflower oil, refined	39.69	—
Isopropyl myristate	39.91	—
Isopropyl palmitate	40.32	—
Avocado oil, refined	40.68	—
Paraffin, light liquid	41.04	—
Decyl oleate	44.89	—
Corn oil, refined	45.21	—
Borage oil, refined, stabilised	45.42	—
Peanut oil, refined	45.59	—
Sesame oil, refined	46.07	—
Metronidazole 25% in white petrolatum	47.06	—
Guaiaculene 25%, water-soluble	47.56	—
Pumpkin seed oil, pressed	52.01	—
⋮	⋮	⋮

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Substanz	Distance in main model	Distance in second-stage model
Wool alcohol cream SR	>50	37.16
Base cream DAC	>50	44.01
Eucerin [®] cum Aqua	>50	53.31
Wool alcohol cream DAB	>50	61.19
Non-ionic hydrophil ointment	>50	69.49
Lanette [®] ointment (conserved)	>50	78.73

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *2-ethylhexyl laurate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31373	31878	2.21	9.97
31878	31878	0.00	9.99
33086	33086	0.00	8.17
31507	31878	2.44	9.02
33087	33087	0.00	8.68

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Acetic acid 30%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30487-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Acetic acid 30%; Acidum aceticum dilut. 30%

Special notes

When selecting the *Acetic acid 30%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Acetic acid 30%	3	2	15

Second-stage model

For differentiation of the substance/substance group *Acetic acid 30%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Acetic acid 30%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Acetic acid 30%	12376101	31131	40	20130107
Caelo	Acetic acid 30%	12376101	31318	60	20130107
Caelo	Acetic acid 30%	16079301	33426	40	1801528
Caelo	Acetic acid 30%	172744	33889	40	20171027*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Acetic acid 30%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56179 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Acetic acid 30%*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acetic acid 30%	18123201	34236	40
Caelo	Acetic acid 30%	191085	34632	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 115 spectra from 83 *Apo-Ident* customers from 18 batches from the substance/substance group *Acetic acid 30%*.
- Among them are spectra of independent samples from 15 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bombastus	Acetic acid 30%	16079301	1
Caelo	Acetic acid 30%	12376102	1
Caelo	Acetic acid 30%	14208501	27
Caelo	Acetic acid 30%	1408501	1
Caelo	Acetic acid 30%	14058001	3
Caelo	Acetic acid 30%	16079101	2
Caelo	Acetic acid 30%	16076101	1
Caelo	Acetic acid 30%	17274401	2
Caelo	Acetic acid 30%	1812301	1
Caelo	Acetic acid 30%	16049301	1
Caelo	Acetic acid 30%	18123201	7
Caelo	Acetic acid 30%	1428501	1
Caelo	Acetic acid 30%	1727441	1
Caelo	Acetic acid 30%	19108501	2
Caesar & Loretz GmbH	Acetic acid 30%	14208501	1
Caesar & Loretz GmbH	Acetic acid 30%	18123201	1
Caesar&Loretz	Acetic acid 30%	16079301	1
Cealo/Noweda	Acetic acid 30%	16079301	2
E Plus	Acetic acid 30%	18123201	1
Fagron	Acetic acid 30%	16079301	1
GEHE	Acetic acid 30%	18123201	1
GEHE am 21.05.2014	Acetic acid 30%	12376101	1
Caelo	Acetic acid 30%	11271701	3
L12	Acetic acid 30%	16079301	1
Phoenix	Acetic acid 30%	11271702	1
Phönix	Acetic acid 30%	16079301	3
Caelo	Acetic acid 30%	12376101	14
Caelo	Acetic acid 30%	16079301	32
Phönix	Acetic acid 30%		1

- 138 238 spectra from 703 *Apo-Ident* customers from a total of 35 278 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#),

the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Acetic acid 30%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Acetic acid 30%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	105	10	138 238

The substance/substance group *Acetic acid 30%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	91.3043 % (> 88.6957 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Acetic acid 30%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydrated liniment SR/DAC (NRF p.40)	29.04	—
Hydrophilic base emulsion (NRF p.25)	32.91	—
Dextrorotary lactic acid 20%	34.60	—
Non-ionic hydrous liniment SR/DAC (NRF...	41.23	—
Hydrophilic cream, non-ionic SR (NRF p...	42.80	—
Benzalkonium chloride solution 50%	45.69	—
Glycolic acid 70%	46.69	—
Hydrophilic cream, non-ionic without p...	47.74	—
Anionic hydrophilic cream SR (NRF p.27)	48.84	—
Polyhexanide solution 20%	49.46	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Acetic acid 30%* is separated from critical neighbours in a second-stage model,

all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31131	33889	7.01	36.65
31318	33889	2.99	34.01
33426	33426	0.00	32.91
33889	33889	0.00	33.82

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Acetic acid 99%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30486-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Acetic acid 99%; Acidum aceticum glaciale

Special notes

When selecting the *Acetic acid 99%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Acetic acid 99%	4	3	36

Second-stage model

For differentiation of the substance/substance group *Acetic acid 99%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Acetic acid 99%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Acetic acid 99%	13013101	31132	39	20130114
Caelo	Acetic acid 99%	13013101	31319	60	20130114
Caelo	Acetic acid 99%	16238401	33423	40	1801527
Caelo	Acetic acid 99%	182767	34473	40	20181105*
Hedinger	Acetic acid 99%	223083B	33428	40	20160727
Hedinger	Acetic acid 99%	223083B	33429	40	20160727

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 259 spectra of 6 reference samples from the substance/substance group *Acetic acid 99%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56100 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Acetic acid 99%*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acetic acid 99%	11186701	30486	40
Caelo	Acetic acid 99%	191119	34474	40
Caelo	Acetic acid 99%	191120	34475	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 169 spectra from 126 *Apo-Ident* customers from 39 batches from the substance/substance group *Acetic acid 99%*.
- Among them are spectra of independent samples from 36 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ACM	Acetic acid 99%	KNC1163J14	1
Anzag	Acetic acid 99%	7002101	1
Anzag	Acetic acid 99%	223088B	1
Bombastus	Acetic acid 99%	7006091	1
Caelo	Acetic acid 99%	11186701	1
Caelo	Acetic acid 99%	13218301	21
Caelo	Acetic acid 99%	15280701	11
Caelo	Acetic acid 99%	18031701	1
Caelo	Acetic acid 99%	15280702	6
Caelo	Acetic acid 99%	13218501	2
Caelo	Acetic acid 99%	10135706	1
Caelo	Acetic acid 99%	11349901	7
Caelo	Acetic acid 99%	18276701	4
Caelo	Acetic acid 99%	17200401	14
Caelo	Acetic acid 99%	7002101	1
Caesar & Loretz GmbH	Acetic acid 99%	18276701	1
Devisa/Noweda	Acetic acid 99%	13218301	1
Euro OTC	Acetic acid 99%	7006091	1
Fiebig	Acetic acid 99%	18276701	1
fischar	Acetic acid 99%	180406E/7006091	1
Fischar	Acetic acid 99%	7004051	1
Fischar	Acetic acid 99%	7003053	1
Fischar	Acetic acid 99%	7004111	1
Fischar	Acetic acid 99%	7005091	2
Fischar	Acetic acid 99%	90212/1	1
Fischar	Acetic acid 99%	7006091	3
Fischar	Acetic acid 99%	7008091	1
Fischar / Anzag	Acetic acid 99%	7002031	1
Fischar / Gehe	Acetic acid 99%	7006091	3
Fischar GmbH & Co.KG	Acetic acid 99%	7008091	1
Fischar Otto / Sanacorp	Acetic acid 99%	7005091	1
Fischar/Ebert	Acetic acid 99%	7006091	1
Fischar/Gehe	Acetic acid 99%	7002031	1
Fischar/Gehe	Acetic acid 99%	7003053	1
Fischar/Jenne	Acetic acid 99%	23(7006091)	1

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Supplier	Substance	Batch	Spectra
Fischar/Kehr	Acetic acid 99%	7005091	1
Fischar/Noweda	Acetic acid 99%	7004051	2
Fischar/Noweda	Acetic acid 99%	7006091	2
Fischar/Phoenix	Acetic acid 99%	7002101	1
Fischar/Phönix	Acetic acid 99%	7006091	4
Fischar/Sanacorp	Acetic acid 99%	7006091	3
Fischer	Acetic acid 99%	7005091	1
Fischer/Phönix	Acetic acid 99%	7004111	1
Fischar/AHD	Acetic acid 99%	7004111	1
Fischar/Phoenix	Acetic acid 99%	7002101	1
GEHE	Acetic acid 99%	7006091	2
GEHE	Acetic acid 99%	17200401	1
Hedinger	Acetic acid 99%	223018B	1
Hedinger	Acetic acid 99%	223052B	2
Hedinger	Acetic acid 99%	5113M-01010	1
Hedinger	Acetic acid 99%	223055B	1
Hedinger	Acetic acid 99%	223079B	1
Hedinger	Acetic acid 99%	223104B	1
Hedinger / Kehr	Acetic acid 99%	223079B	1
Hedinger/AHD	Acetic acid 99%	2230128	1
Hedinger/Gehe	Acetic acid 99%	223007B	1
Hedinger/Jenne	Acetic acid 99%	223044B	1
Hedinger/NOWEDA	Acetic acid 99%	223012B	1
otto fischar	Acetic acid 99%	7004111	1
Otto Fischar GmbH	Acetic acid 99%	7003053	1
Otto Fischar/ Phoenix	Acetic acid 99%	7002101	1
Otto Fischar/Phönix	Acetic acid 99%	7007081	1
Otto Fischer/Noweda	Acetic acid 99%	70006091	1
ph.eur /phönix	Acetic acid 99%	7002101	1
Phoenix	Acetic acid 99%	7003053	1
Caelo	Acetic acid 99%	13218401	1
PHÖNIX	Acetic acid 99%	18276701	1
Sanacorp	Acetic acid 99%	11349901	1
Sanacorp	Acetic acid 99%	13218301	1
Sanacorp	Acetic acid 99%	7006091	1
Wacker Chemie AG	Acetic acid 99%	223079B	1
Caelo	Acetic acid 99%	13013101	7
Caelo	Acetic acid 99%	16238401	18
Hedinger	Acetic acid 99%	223083B	1

- 138 184 spectra from 703 *Apo-Ident* customers from a total of 35 257 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Acetic acid 99%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Acetic acid 99%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	259	0	56 100
Type B	0	120	0	69 354
Type C	0	169	0	138 184

The substance/substance group *Acetic acid 99%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.6834 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 96.4497 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Acetic acid 99%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Salicylic acid 50% (paraffin)	40.63	–
Permethrin 25% solution	180.30	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Acetic acid 99%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31132	34473	5.00	96.02
31319	34473	4.67	89.34
33423	33423	0.00	90.46
33428	33423	1.83	92.35
33429	33423	1.84	92.26
34473	34473	0.00	95.20

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Acetone**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30539-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Acetone; Acetinum

Special notes

When selecting the *Acetone* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Acetone	4	2	235

Second-stage model

For differentiation of the substance/substance group *Acetone* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Acetone*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Hedinger	Acetone	011215B	31575	59	1505477
Hedinger	Acetone	011242B	31793	60	20150703
Otto Fischar	Acetone	4203051	31580	60	20130513
Otto Fischar	Acetone	4205031	31796	60	20150305

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 239 spectra of 4 reference samples from the substance/substance group *Acetone*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56120 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Acetone*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Hedinger	Acetone	011236B	32920	40
Hedinger	Acetone	011297B	33946	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 567 spectra from 235 *Apo-Ident* customers from 242 batches from the substance/substance group *Acetone*.
- Among them are spectra of independent samples from 234 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ACM	Acetone	KNC0783J13	2
ACM	Acetone	KNC1133J14	1
AHD	Acetone	11319B	1
AHD / Hedinger	Acetone	11203B	1
AHD 29.10.14 EK 6,70	Acetone	11210B	1
AHD Hedinger	Acetone	11260B	1
AHD/18.11.14/Hedinger	Acetone	112158	1
Alliance Health 04.06.2...	Acetone	11199B	1
Alliance health 12.01.15	Acetone	11218B	1
Alliance Healthcare/Hed...	Acetone	11224B	1
Anzag	Acetone	11173B	1
Anzag/ Hedinger	Acetone	11158B	1
Anzag/ Otto Fischar Gmb...	Acetone	4204032	1
Anzag/Dr. Seeger	Acetone	111488	1
Anzag/Seeger	Acetone	11185B	1
Apoth.E.Bartel / Noweda	Acetone	11173B	1
Barthel	Acetone	11177B	1
Caelo	Acetone	11283B	1
Caelo	Acetone	1018121	1
Caelo	Acetone	11148B	2
Caelo	Acetone	11171B	2
Caelo	Acetone	11252B	1
Caelo	Acetone	123456	1
Caelo	Acetone	11288b	1
Caelo	Acetone	11297B	1
Caelo	Acetone	1017082	1
Caelo	Acetone	11185B	2
Caelo	Acetone	11282B	1
Caelo	Acetone	11210B	1
Caelo	Acetone	111738	1
Caelo	Acetone	11234B	1
Caelo	Acetone	11224B	1
Caelo	Acetone	4206012	1
Caelo	Acetone	420891	1
Caelo	Acetone	112828	1
Caelo	Acetone	606001008	1
Caelo	Acetone	11289B	1
Caelo	Acetone	11250B	1
Caelo	Acetone	11227B	1
Caelo	Acetone	112898	1
Caelo	Acetone	4207102	1

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Supplier	Substance	Batch	Spectra
Caelo	Acetone	111938	1
Caelo	Acetone	11218B	1
Caelo	Acetone	11247B	2
Caelo	Acetone	11302B	1
Caelo	Acetone	4205062	2
Caesar & Loretz GmbH Hi...	Acetone	420511	2
Caesar & Loretz GmbH Hi...	Acetone	4205111	1
Delta	Acetone	4207013	1
Dr.Seeger GmbH	Acetone	11199B	1
Dr.Seeger/Jenne	Acetone	11188B	1
Ebert KKH 29.09.2016	Acetone	4206042	1
Euro OTC	Acetone	11297B	1
Euro OTC	Acetone	4204032	1
Euro OTC	Acetone	112618	1
Euro OTC	Acetone	11193B	1
Fagron	Acetone	4207012	1
fischar	Acetone	4205031	1
fischar	Acetone	4208021	1
fischar	Acetone	4208061	1
fischar	Acetone	4208062	1
fischar	Acetone	4208092	1
Fischar	Acetone	90110/1	2
Fischar	Acetone	16101206	1
Fischar	Acetone	4202101	1
Fischar	Acetone	6021303	1
Fischar	Acetone	4202061	1
Fischar	Acetone	28031301	1
Fischar	Acetone	4202121	2
Fischar	Acetone	9C205/1	1
Fischar	Acetone	4008978161101	1
Fischar	Acetone	30081301	1
Fischar	Acetone	25101302	1
Fischar	Acetone	4203032	1
Fischar	Acetone	22111302	1
Fischar	Acetone	123456	1
Fischar	Acetone	5041403	1
Fischar	Acetone	2051408	1
Fischar	Acetone	4203091	1
Fischar	Acetone	4204031	3
Fischar	Acetone	4204051	1
Fischar	Acetone	4204032	1
Fischar	Acetone	4204052	1
Fischar	Acetone	45204052	1
Fischar	Acetone	4205011	1
Fischar	Acetone	14101702	1
Fischar	Acetone	4091513	1
Fischar	Acetone	4205031	1
Fischar	Acetone	4205061	1
Fischar	Acetone	4206011	2
Fischar	Acetone	4206012	3
Fischar	Acetone	4206041	2
Fischar	Acetone	1016051	1
Fischar	Acetone	1016041	1
Fischar	Acetone	4206071	1
Fischar	Acetone	4207013	1
Fischar	Acetone	1017032	1
Fischar	Acetone	1017021	1
Fischar	Acetone	4207042	1
Fischar	Acetone	10170323	1
Fischar	Acetone	27101711	1

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Supplier	Substance	Batch	Spectra
Fischar	Acetone	1017092	1
Fischar	Acetone	7051801	1
Fischar	Acetone	29061801	1
Fischar	Acetone	4207102	1
Fischar	Acetone	11195B	1
Fischar	Acetone	1018052	1
Fischar	Acetone	1018062	1
Fischar	Acetone	20101803	1
Fischar	Acetone	24101803	1
Fischar	Acetone	4208121	1
Fischar	Acetone	4208122	2
Fischar	Acetone	4209031	1
Fischar	Acetone	4204072	1
Fischar	Acetone	4205071	1
Fischar	Acetone	5051704	1
Fischar	Acetone	7091706	1
fischar / ahd	Acetone	1017092	2
Fischar / Alliance Heal...	Acetone	4206012	1
Fischar / Alliance Heal...	Acetone	4206071	1
Fischar / Gehe	Acetone	1015062	1
Fischar / Gehe	Acetone	4207013	1
Fischar / Sanacorp	Acetone	4207041	1
Fischar Anzag	Acetone	90205/2	1
Fischar Anzag	Acetone	1(4207102)	1
Fischar GmbH	Acetone	1016101	1
Fischar GmbH	Acetone	1018052	1
Fischar GmbH/Krieger	Acetone	4206071	1
Fischar/ Anzag	Acetone	2(4208084)	1
Fischar/ Now	Acetone	4203111	1
Fischar/ Noweda	Acetone	1018011	1
Fischar/ Noweda	Acetone	1018101	1
fischar/AHD	Acetone	10180315628	1
Fischar/Alliance Heathc...	Acetone	4206011	1
Fischar/Gehe	Acetone	4202101	1
Fischar/Gehe	Acetone	4203031	3
Fischar/Gehe	Acetone	4203101	1
Fischar/Gehe	Acetone	4204031	1
Fischar/Gehe	Acetone	4204071	1
Fischar/Gehe	Acetone	4204032	1
Fischar/Gehe	Acetone	4205092	1
Fischar/Gehe	Acetone	4205032	1
Fischar/Gehe	Acetone	1016051	1
Fischar/Gehe	Acetone	4207043	1
Fischar/Gehe	Acetone	1018052	1
Fischar/Gehe	Acetone	4208091	1
Fischar/Gehe	Acetone	4205071	1
Fischar/Jenne	Acetone	1018062	1
Fischar/Kehr	Acetone	4207042	1
Fischar/Kehr	Acetone	4209031	1
Fischar/Noweda	Acetone	4203101	1
Fischar/Noweda	Acetone	4205062	1
Fischar/Noweda	Acetone	4206092	1
Fischar/Noweda	Acetone	4207011	1
Fischar/Phoenix	Acetone	4205031	1
Fischar/Phoenix	Acetone	4207013	1
Fischar/Phönix	Acetone	4204012	2
Fischar/Phönix	Acetone	4206041	1
Fischar/Phönix	Acetone	4205072	1
Fischar/Phönix	Acetone	1017092	1
Fischar/Phönix	Acetone	1018021	1

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Supplier	Substance	Batch	Spectra
Fischar/Phönix	Acetone	4208021	1
Fischar/Phönix	Acetone	1019041	2
Fischbar	Acetone	17091206	1
Fischbar	Acetone	22091201	1
Fischbar	Acetone	2101205	1
Fischbar	Acetone	4101302	1
Fischbar	Acetone	1016041	1
fischer	Acetone	4206061	1
Fischer	Acetone	A-040613-3	1
Fischer	Acetone	4205032	1
Fischer	Acetone	1015081	1
Fischer	Acetone	1016051	1
Fischer	Acetone	1016101	1
Fischer GmbH/Phönix	Acetone	4207041	1
Fischer/Alliance	Acetone	1018021	1
fischer/Anzag	Acetone	4202061	1
fischer/Anzag	Acetone	4203032	2
Fischer/Fiebig	Acetone	4207102	1
Fischer/Gehe	Acetone	4201051	1
Fischer/Gehe	Acetone	1015041	1
Fischer/Gehe 3.11.15	Acetone	4205062	1
Fischer/Sanacorp	Acetone	420301	1
fishar/Phoenix	Acetone	4208022	2
GEHE	Acetone	4202052	1
GEHE	Acetone	11308B	1
Gehe / Fischar	Acetone	1017081	1
Caelo	Acetone	11260B	1
Caelo	Acetone	11263B	3
Gehe/Fischar	Acetone	90110/2	1
H.Lamotte/Noweda	Acetone	11210B	2
Hed	Acetone	11203B	2
hedinger	Acetone	11210B	4
hedinger	Acetone	11218B	2
hedinger	Acetone	11252B	2
hedinger	Acetone	11250B	1
hedinger	Acetone	11271B	1
hedinger	Acetone	11283B	1
hedinger	Acetone	11277B	1
Hedinger	Acetone	11134B	1
Hedinger	Acetone	2704211002	1
Hedinger	Acetone	11143B	3
Hedinger	Acetone	11152B	1
Hedinger	Acetone	11148B	1
Hedinger	Acetone	11158B	3
Hedinger	Acetone	11168B	1
Hedinger	Acetone	11163B	1
Hedinger	Acetone	18011306	1
Hedinger	Acetone	11173B	11
Hedinger	Acetone	111688	1
Hedinger	Acetone	19041301	1
Hedinger	Acetone	4061306	1
Hedinger	Acetone	11177B	1
Hedinger	Acetone	11182B	2
Hedinger	Acetone	2713M1002	1
Hedinger	Acetone	111828	1
Hedinger	Acetone	11185B	2
Hedinger	Acetone	16081301	1
Hedinger	Acetone	11065B	1
Hedinger	Acetone	111888	1
Hedinger	Acetone	10091304	1

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Supplier	Substance	Batch	Spectra
Hedinger	Acetone	11188B	4
Hedinger	Acetone	11187B	1
Hedinger	Acetone	11195B	2
Hedinger	Acetone	11193B	1
Hedinger	Acetone	111938	1
Hedinger	Acetone	11199B	4
Hedinger	Acetone	11200B	2
Hedinger	Acetone	16061404	1
Hedinger	Acetone	220114	1
Hedinger	Acetone	11210B	6
Hedinger	Acetone	25071411	1
Hedinger	Acetone	112108	1
Hedinger	Acetone	16101402	1
Hedinger	Acetone	11215B	3
Hedinger	Acetone	8121401	1
Hedinger	Acetone	11241b	1
Hedinger	Acetone	11250B	4
Hedinger	Acetone	123456	1
Hedinger	Acetone	11139B	1
Hedinger	Acetone	11226B	1
Hedinger	Acetone	11232B	5
Hedinger	Acetone	11234B	2
Hedinger	Acetone	11247B	2
Hedinger	Acetone	11252B	1
Hedinger	Acetone	11256B	2
Hedinger	Acetone	111738	1
Hedinger	Acetone	11260B	2
Hedinger	Acetone	11261B	1
Hedinger	Acetone	11258B	1
Hedinger	Acetone	15230	1
Hedinger	Acetone	1261B	1
Hedinger	Acetone	11272B	2
Hedinger	Acetone	112618	2
Hedinger	Acetone	112718	1
Hedinger	Acetone	11278B	4
Hedinger	Acetone	112788	1
Hedinger	Acetone	11277B	1
Hedinger	Acetone	11282B	2
Hedinger	Acetone	11283B	1
Hedinger	Acetone	112898	2
Hedinger	Acetone	11295B	1
Hedinger	Acetone	11289B	3
Hedinger	Acetone	11301B	1
Hedinger	Acetone	11297B	1
Hedinger	Acetone	11302B	1
Hedinger	Acetone	11319B	1
Hedinger	Acetone	113198	1
Hedinger	Acetone	113318	1
Hedinger	Acetone	11236B	1
Hedinger , Noweda	Acetone	11168B	1
Hedinger , Stuttgart	Acetone	11182B	1
Hedinger / Gehe	Acetone	11173B	1
Hedinger / Noweda	Acetone	11203B	1
Hedinger / Noweda	Acetone	11210B	2
Hedinger / Noweda	Acetone	11199B	1
Hedinger / Noweda	Acetone	112158	1
Hedinger / Noweda	Acetone	11226B	1
Hedinger / Phoenix	Acetone	11195B	1
Hedinger / Sanacorp	Acetone	11188B	1
Hedinger / Sanacorp	Acetone	112038	1

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Supplier	Substance	Batch	Spectra
Hedinger / Sanacorp	Acetone	11210B	1
Hedinger GmbH	Acetone	11271B	1
Hedinger Jenne	Acetone	11158B	1
Hedinger Jenne	Acetone	11193B	1
Hedinger Phönix	Acetone	112008	1
Hedinger Phönix	Acetone	11308B	1
Hedinger über Phoenix	Acetone	11247B	1
Hedinger, Heiligenwiese...	Acetone	11148B	1
Hedinger, Noweda	Acetone	11163B	1
Hedinger, Noweda	Acetone	11188B	1
Hedinger/ Anzag	Acetone	111588	1
Hedinger/ Jenne	Acetone	11200B	1
Hedinger/ Noweda	Acetone	11177B	1
Hedinger/ Noweda	Acetone	11187B	1
Hedinger/ Noweda	Acetone	11283B	1
Hedinger/ NOWEDA	Acetone	11252B	1
Hedinger/ Phoenix	Acetone	1214M1002	1
Hedinger/AHD	Acetone	110958A2010	1
Hedinger/AHD	Acetone	11158B	1
Hedinger/AHD	Acetone	11227B	1
Hedinger/AHD	Acetone	11282B	1
Hedinger/Alliance	Acetone	112958	1
Hedinger/Alliance Haelt...	Acetone	11277B	1
Hedinger/Anzag	Acetone	11173B	1
Hedinger/Anzag	Acetone	11256B	1
Caelo	Acetone	11271B	2
Hedinger/Fiebig	Acetone	11241	1
Hedinger/Gehe	Acetone	11158B	1
Hedinger/Gehe	Acetone	11177B	1
Hedinger/Gehe	Acetone	11210B	1
Hedinger/Gehe	Acetone	311092	1
Hedinger/Gehe	Acetone	11227B	1
Hedinger/Kehr	Acetone	11227B	1
Hedinger/Now	Acetone	11289B	1
Hedinger/Noweda	Acetone	111528	1
Hedinger/Noweda	Acetone	11168B	1
Hedinger/Noweda	Acetone	111858	1
Hedinger/Noweda	Acetone	11210B	1
Hedinger/Noweda	Acetone	11224B	1
Hedinger/Noweda	Acetone	11226B	2
Hedinger/Noweda	Acetone	11232B	2
Hedinger/Noweda	Acetone	11252B	1
Hedinger/Noweda	Acetone	11263B	1
Hedinger/Noweda	Acetone	11272B	1
Hedinger/Noweda	Acetone	112868	1
Hedinger/Noweda	Acetone	11271B	1
Hedinger/Otto	Acetone	111738	1
Hedinger/Otto	Acetone	11193B	1
Hedinger/Phoenix	Acetone	11185B	1
Hedinger/Phoenix	Acetone	11187B	1
Hedinger/Phoenix	Acetone	11215B	1
Hedinger/Phoenix	Acetone	11224B	1
Hedinger/Phoenix	Acetone	11232B	1
Hedinger/Phoenix	Acetone	11260B	1
Hedinger/Phoenix	Acetone	11272B	1
Hedinger/Phoenix	Acetone	11278B	1
Hedinger/Phoenix	Acetone	11283B	1
Hedinger/Phoenix	Acetone	11289B	1
Hedinger/Phoenix	Acetone	112893	1
Hedinger/Phoenix	Acetone	112958	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phoenix	Acetone	11302B	1
Hedinger/Phoenix	Acetone	11308B	1
Hedinger/Phönix	Acetone	11168B	1
Hedinger/Phönix	Acetone	11173B	2
Hedinger/Phönix	Acetone	11195B	1
Hedinger/Phönix	Acetone	11224B	1
Hedinger/Phönix	Acetone	11250B	1
Hedinger/Phönix	Acetone	11232B	1
Hedinger/Phönix	Acetone	11234B	1
Hedinger/Phönix	Acetone	11260B	1
Hedinger/Phönix	Acetone	11278B	1
Hedinger/Phönix	Acetone	11289B	2
Hedinger/Phönix	Acetone	112958	1
Hedinger/Phönix	Acetone	11302B	1
Hedinger/Phönix	Acetone	11323B	1
Hedinger/Phönix	Acetone	11328B	1
HEDINGER/Phönix	Acetone	11260B	1
Hedinger/Sanacorp	Acetone	11185B	2
Hedinger/Sanacorp	Acetone	11187B	2
Hedinger/Sanacorp	Acetone	11200B	1
Hedinger/Sanacorp	Acetone	11210B	1
Hedinger/Sanacorp	Acetone	11215B	1
Hedinger/Sanacorp	Acetone	11234B	1
Hedinger/Sanacorp	Acetone	112788	1
Hedinger/V.d.L.	Acetone	11199B	1
Herdinger	Acetone	11210B	1
Herdinger Phönix	Acetone	11173B	1
Holdermann	Acetone	11158B	1
Hubertus Apotheke	Acetone	4205062	1
Infectopharm	Acetone	11227B	1
JENNE	Acetone	11302B	2
Kehr/A. Hedinger	Acetone	112828	1
Kögl	Acetone	162005152015	1
L10	Acetone	11302B	2
L12	Acetone	11322B	1
L12/Apoth.E.Bartel	Acetone	11272B	1
Merck	Acetone	212K17501605	1
Noweda	Acetone	901101	1
Noweda	Acetone	11224B	1
Noweda	Acetone	11226B	1
Noweda	Acetone	4207013	1
Noweda/Hedinger	Acetone	11252B	1
Noweda/Hedinger	Acetone	11272B	1
Noweda/Hedinger	Acetone	11302B	1
otto fischar	Acetone	12011501	1
otto fischar	Acetone	14031502	1
otto fischar	Acetone	23061503	1
Otto fischar	Acetone	22121812	1
Otto Fischar	Acetone	90110/1	1
Otto Fischar	Acetone	90205/1	1
Otto Fischar	Acetone	4203101	1
Otto Fischar	Acetone	1016031	1
Otto Fischar	Acetone	4204091	1
Otto Fischar	Acetone	1018012	1
Otto Fischar	Acetone	4208061	1
Otto Fischar	Acetone	1018062	1
Otto Fischar	Acetone	1018081	1
Otto Fischar	Acetone	9011/01	1
Otto Fischar / Noweda	Acetone	4206012	1
Otto Fischar gmbh	Acetone	1017092	1

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Supplier	Substance	Batch	Spectra
Otto Fischar GmbH	Acetone	4204032	1
Otto Fischar GmbH	Acetone	4206091	1
Otto Fischar GmbH	Acetone	4207041	1
Otto Fischar GmbH	Acetone	4207072	1
Otto Fischar GmbH & Co....	Acetone	4204051	1
Otto Fischar GmbH & Co....	Acetone	4206012	1
Otto Fischar GmbH & Co....	Acetone	4205071	1
Otto Fischar GmbH & Co....	Acetone	1015041	1
Otto Fischar GmbH & Co. KG	Acetone	1018051	1
Otto Fischar GmbH / Gehe	Acetone	4205092	1
Otto Fischar GmbH&Co.KG...	Acetone	4204032	1
Otto Fischar GmbH/AHD	Acetone	4204092	1
Otto Fischar GmbH/Phönix	Acetone	4208091	1
Otto Fischar/Ebert	Acetone	4205071	1
otto fischar/gehe	Acetone	4204032	1
Otto Fischar/Gehe	Acetone	4207041	2
Otto Fischar/Phoenix	Acetone	4202112	1
Otto Fischar/Phönix	Acetone	4205012	1
Otto Fischar/Phönix	Acetone	1018091	1
Otto Fischar/Phönix	Acetone	1018111	1
Otto Fischar/Phönix	Acetone	1019011	2
Otto Fischar/Sanacorp	Acetone	1017101	3
Otto Fischbar	Acetone	4204052	1
Otto Fischer	Acetone	4206061	1
Otto Fischer GmbH	Acetone	4205092	1
Otto Fischer/ Gehe	Acetone	4203101	1
Otto Fischer/ Gehe	Acetone	4204091	1
Phoen	Acetone	4208121	2
Phoenix	Acetone	11234B	1
Phoenix	Acetone	11271b	1
PHOENIX	Acetone	11195B	2
Phoenix/Cealo	Acetone	112898	1
Phoenix/Fischar	Acetone	106091	1
Phönix	Acetone	4202112	1
Phönix	Acetone	11250B	1
Phönix	Acetone	1016111	2
Phönix	Acetone	11242B	1
PHÖNIX	Acetone	11331B	1
Phönix Hedinger	Acetone	11295B	1
Phönix W.E:2.03.18 E....	Acetone	11271B	1
Phönix / Hedinger	Acetone	11283B	1
Phönix Gotha	Acetone	4204032	1
Phönix/Fischar	Acetone	4202062	1
Phönix/Fischer	Acetone	4202052	1
Sanacorp	Acetone	4202062	1
Sanacorp	Acetone	11286B	1
Sanacorp	Acetone	11271B	1
Sanacorp	Acetone	4206091	1
Sanacorp	Acetone	11288B	1
Sanacorp	Acetone	11323B	1
Caelo	Acetone	11215B	1
Sanacorp / Hedinger WE:...	Acetone	11227B	1
sanacorp, 6,64EUR, 20.04....	Acetone	11256B	1
Sanacorp/ Fischar	Acetone	4203111	1
Caelo	Acetone	11152b	1
Caelo	Acetone	59/AKD1	1
Sanacorp/Phoenix	Acetone	11210B	1
Seege/ Jenne	Acetone	11199B	2
Stumpf/Hedinger	Acetone	11210B	1
Caelo	Acetone		1

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Supplier	Substance	Batch	Spectra
Fischar / Gehe	Acetone		1
Hiperscan	Acetone		1
	Acetone	281013A	1
Sanacorp	Acetone		2

- 137 786 spectra from 703 *Apo-Ident* customers from a total of 35 056 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Acetone* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Acetone* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	239	0	56 120
Type B	0	80	0	69 394
Type C	0	561	6	137 786

The substance/substance group *Acetone* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.4895 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	98.9418 % (> 98.4127 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Acetone* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dimethyl sulfoxide	124.75	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Acetone* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31575	31575	0.00	148.64
31580	31575	5.19	144.99
31793	31575	2.80	147.85
31796	31575	6.28	142.54

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Acorus oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31159-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Acorus oil; Oleum calami rectific.

Special notes

When selecting the *Acorus oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Acorus oil	3	1	0

Second-stage model

For differentiation of the substance/substance group *Acorus oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Acorus oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Acorus oil	12356706	31159	40	1404623
Caelo	Acorus oil	15081901	32180	40	20150320
Caelo	Acorus oil	15081901	32348	40	20150320
Caelo	Acorus oil	15081901	33251	40	20150320
Caelo	Acorus oil	15081901	33835	40	20150320
Caelo	Acorus oil	172878	34704	40	20171017*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 6 reference samples from the substance/substance group *Acorus oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56119 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Acorus oil*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acorus oil	15081902	32347	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 0 spectra from 0 *Apo-Ident* customers from 0 batches from the substance/substance group *Acorus oil*.
- Among them are spectra of independent samples from 0 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.
- 138 353 spectra from 703 *Apo-Ident* customers from a total of 35 295 batches from a further 340 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Acorus oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Acorus oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	40	0	69 434
Type C	0	0	0	138 353

The substance/substance group *Acorus oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6479 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Acorus oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Bergamot oil	22.80	—
Lavender oil	33.47	—
Cedar wood oil	34.71	—
Coriander oil	37.67	—
Juniper oil	39.74	—
Verbena oil, nature-identical	41.47	—
Matricaria oil, rich in (-)-alpha-bisa...	46.42	—
Caraway oil	48.78	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Acorus oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31159	31159	0.00	35.83
32180	31159	4.91	31.72
32348	31159	5.33	30.15
33251	31159	5.20	32.69
33835	31159	5.54	33.94
34704	34704	0.00	34.71

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **All-rac-alpha-tocopheryl acetate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31020-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

All-rac-alpha-tocopheryl acetate; int-rac-alpha-Tocopherylis acetate

Special notes

When selecting the *All-rac-alpha-tocopheryl acetate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
All-rac-alpha-tocopheryl acetate	5	9	154

Second-stage model

For differentiation of the substance/substance group *All-rac-alpha-tocopheryl acetate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *All-rac-alpha-tocopheryl acetate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	All-rac-alpha-to...	12362307	31020	40	1402688
Caelo	All-rac-alpha-to...	13396304	31371	40	20131211
Euro OTC	All-rac-alpha-to...	1411025-01	31646	58	20141216
Euro OTC	All-rac-alpha-to...	1512007	31817	60	20151216*
Euro OTC	All-rac-alpha-to...	1901048	34422	40	20190304*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 238 spectra of 5 reference samples from the substance/substance group *All-rac-alpha-tocopheryl acetate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 121 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 400 spectra of 10 reference samples from the substance/substance group *All-rac-alpha-tocopheryl acetate*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 9 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	All-rac-alpha-tocopheryl ace...	172397	33688	40
Caelo	All-rac-alpha-tocopheryl ace...	180877	34223	40
Caelo	All-rac-alpha-tocopheryl ace...	190620	34652	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1604060	32286	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011	32469	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1704014	33446	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1710024	33842	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012	34096	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1910026	34750	40
Caelo	All-rac-alpha-tocopheryl ace...	172397	33886	40

- 69 074 spectra from a total of 1493 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 581 spectra from 235 *Apo-Ident* customers from 164 batches from the substance/substance group *All-rac-alpha-tocopheryl acetate*.
- Among them are spectra of independent samples from 155 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	All-rac-alpha-tocopheryl ace...	12053803	6
AHD	All-rac-alpha-tocopheryl ace...	18087710	1
Alliance health 05.01.15	All-rac-alpha-tocopheryl ace...	13396305	1
Anzag	All-rac-alpha-tocopheryl ace...	AP16128607T	1
Anzag	All-rac-alpha-tocopheryl ace...	82943389	1
ANZAG	All-rac-alpha-tocopheryl ace...	12319401	1
Anzag ek: 7.71	All-rac-alpha-tocopheryl ace...	11300002	1
Caelo	All-rac-alpha-tocopheryl ace...	1321702	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP11300004T	5
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP12362305T	4
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP12362305	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP11300004	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP13396303T	6
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP14363403T	7
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP13396303	2
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP15239006T	3
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP161286T5735	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	12362305T	2
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP143634003	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP16128607T	3
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP42555136W0T	2
Audor Pharma	All-rac-alpha-tocopheryl ace...	ap16128607t	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	13396303	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP161286T	2
Caelo	All-rac-alpha-tocopheryl ace...	18087703	9
Caelo	All-rac-alpha-tocopheryl ace...	11300005	3
Caelo	All-rac-alpha-tocopheryl ace...	20231012-4	1
Caelo	All-rac-alpha-tocopheryl ace...	11043011	1

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Supplier	Substance	Batch	Spectra
Caelo	All-rac-alpha-tocopheryl ace...	11043007	1
Caelo	All-rac-alpha-tocopheryl ace...	11300001	3
Caelo	All-rac-alpha-tocopheryl ace...	11300003	2
Caelo	All-rac-alpha-tocopheryl ace...	12053802	9
Caelo	All-rac-alpha-tocopheryl ace...	12319402	3
Caelo	All-rac-alpha-tocopheryl ace...	12319042	1
Caelo	All-rac-alpha-tocopheryl ace...	12362302	13
Caelo	All-rac-alpha-tocopheryl ace...	12319401	2
Caelo	All-rac-alpha-tocopheryl ace...	19071302	1
Caelo	All-rac-alpha-tocopheryl ace...	70913Toc	1
Caelo	All-rac-alpha-tocopheryl ace...	16091301	1
Caelo	All-rac-alpha-tocopheryl ace...	611toc	1
Caelo	All-rac-alpha-tocopheryl ace...	13217201	13
Caelo	All-rac-alpha-tocopheryl ace...	13217202	4
Caelo	All-rac-alpha-tocopheryl ace...	13217207	11
Caelo	All-rac-alpha-tocopheryl ace...	14011512	1
Caelo	All-rac-alpha-tocopheryl ace...	14363408	4
Caelo	All-rac-alpha-tocopheryl ace...	14101714	1
Caelo	All-rac-alpha-tocopheryl ace...	14363401	2
Caelo	All-rac-alpha-tocopheryl ace...	26011601	1
Caelo	All-rac-alpha-tocopheryl ace...	15239009	5
Caelo	All-rac-alpha-tocopheryl ace...	16128610	4
Caelo	All-rac-alpha-tocopheryl ace...	17239702	3
Caelo	All-rac-alpha-tocopheryl ace...	17239704	10
Caelo	All-rac-alpha-tocopheryl ace...	17359201	9
Caelo	All-rac-alpha-tocopheryl ace...	12091809	1
Caelo	All-rac-alpha-tocopheryl ace...	1628624	1
Caelo	All-rac-alpha-tocopheryl ace...	1710024-02	2
Caelo	All-rac-alpha-tocopheryl ace...	UT17040100	1
Caelo	All-rac-alpha-tocopheryl ace...	18087710	1
Caelo	All-rac-alpha-tocopheryl ace...	14076808	2
Caelo	All-rac-alpha-tocopheryl ace...	10247405	1
Caelo	All-rac-alpha-tocopheryl ace...	15239002	1
Caelo	All-rac-alpha-tocopheryl ace...	12362404	1
Caelo	All-rac-alpha-tocopheryl ace...	1504020-01	4
Caelo	All-rac-alpha-tocopheryl ace...	13396306	5
Caelo	All-rac-alpha-tocopheryl ace...	11300002	2
Caelo	All-rac-alpha-tocopheryl ace...	12319403	1
Caelo	All-rac-alpha-tocopheryl ace...	14076806	7
Caelo	All-rac-alpha-tocopheryl ace...	17359211	1
Caelo	All-rac-alpha-tocopheryl ace...	16128613	2
Caelo	All-rac-alpha-tocopheryl ace...	16128624	4
Caelo	All-rac-alpha-tocopheryl ace...	1512007-01	1
Caelo	All-rac-alpha-tocopheryl ace...	15126801	2
Caelo	All-rac-alpha-tocopheryl ace...	180877033	1
Caelo	All-rac-alpha-tocopheryl ace...	13201102	1
Caelo	All-rac-alpha-tocopheryl ace...	15239001	1
Caelo	All-rac-alpha-tocopheryl ace...	13075202	2
Caelo	All-rac-alpha-tocopheryl ace...	1606011-02	2
Caelo	All-rac-alpha-tocopheryl ace...	14076813	3
Caelo	All-rac-alpha-tocopheryl ace...	14363402	2
Caelo	All-rac-alpha-tocopheryl ace...	16128604	4
Caelo	All-rac-alpha-tocopheryl ace...	1411025	1
Caelo	All-rac-alpha-tocopheryl ace...	1504020-02	1
Caelo	All-rac-alpha-tocopheryl ace...	15239011	6
Caelo	All-rac-alpha-tocopheryl ace...	15238808	4
Caelo	All-rac-alpha-tocopheryl ace...	15239012	11
Caelo	All-rac-alpha-tocopheryl ace...	15238807	7
Caelo	All-rac-alpha-tocopheryl ace...	16128615	17
Caelo	All-rac-alpha-tocopheryl ace...	Ap16128607T	1

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Supplier	Substance	Batch	Spectra
Caelo	All-rac-alpha-tocopheryl ace...	13217205	12
Caelo	All-rac-alpha-tocopheryl ace...	7123623	1
Caelo	All-rac-alpha-tocopheryl ace...	15238806	4
Caelo	All-rac-alpha-tocopheryl ace...	16128609	16
Caelo	All-rac-alpha-tocopheryl ace...	16128614	7
Caelo	All-rac-alpha-tocopheryl ace...	17359203	11
Caelo	All-rac-alpha-tocopheryl ace...	161286T	1
Caelo	All-rac-alpha-tocopheryl ace...	14363410	5
Caelo	All-rac-alpha-tocopheryl ace...	15239010	4
Caelo	All-rac-alpha-tocopheryl ace...	1813M-02500	1
Caelo	All-rac-alpha-tocopheryl ace...	3312M-02500	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	12053802	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	13217202	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	15239011	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	18087704	1
Caesar & Loretz GmbH Hi...	All-rac-alpha-tocopheryl ace...	11300004	1
DSM Nutritional Prod./...	All-rac-alpha-tocopheryl ace...	15E18-B07	1
DSM Nutritional Prod./...	All-rac-alpha-tocopheryl ace...	12E16-N06	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1208020-01	4
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020-1	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1604060-01	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011-01	3
Euro OTC	All-rac-alpha-tocopheryl ace...	1604060-02	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1710024-01	3
Euro OTC	All-rac-alpha-tocopheryl ace...	1512007-01	7
Euro OTC	All-rac-alpha-tocopheryl ace...	1704014-01	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020	1
Euro OTC	All-rac-alpha-tocopheryl ace...	140503201	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020-02	2
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012-01	7
Euro OTC	All-rac-alpha-tocopheryl ace...	11300002	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1310005-01	3
Euro OTC	All-rac-alpha-tocopheryl ace...	1411025	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011-02	4
Euro OTC	All-rac-alpha-tocopheryl ace...	18087703	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1405032-01	6
Euro OTC	All-rac-alpha-tocopheryl ace...	1301010-01	3
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020-01	6
Euro OTC	All-rac-alpha-tocopheryl ace...	1901048-01	2
EUro/AHD	All-rac-alpha-tocopheryl ace...	1301010-01	1
Euro/Fiebig	All-rac-alpha-tocopheryl ace...	1606011-02	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011_02	1
Euro OTC	All-rac-alpha-tocopheryl ace...	303462	1
Euro OTC	All-rac-alpha-tocopheryl ace...	201201707103	2
Euro OTC	All-rac-alpha-tocopheryl ace...	17355903	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012-01-T20190115	1
Fagron	All-rac-alpha-tocopheryl ace...	12E16-N06	2
Fagron	All-rac-alpha-tocopheryl ace...	12362307	1
Fagron	All-rac-alpha-tocopheryl ace...	1228-B40-288705	1
Fagron	All-rac-alpha-tocopheryl ace...	UT13110302	1
Fagron	All-rac-alpha-tocopheryl ace...	14602-B05-303462	1
Fagron	All-rac-alpha-tocopheryl ace...	15e18-b07-311818	1
Fagron	All-rac-alpha-tocopheryl ace...	UT14030070	1
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-317323	1
Fagron	All-rac-alpha-tocopheryl ace...	17j02-B07-343845	1
Fagron	All-rac-alpha-tocopheryl ace...	17J02-B07	1
Fagron	All-rac-alpha-tocopheryl ace...	12I28-B40	2
Fagron	All-rac-alpha-tocopheryl ace...	UT12020065	1
Fagron	All-rac-alpha-tocopheryl ace...	14G02-B05-303462	2
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07	2

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Supplier	Substance	Batch	Spectra
Fagron	All-rac-alpha-tocopheryl ace...	12L14-N06	4
Fagron	All-rac-alpha-tocopheryl ace...	14G02-B05-3043462	1
Fagron	All-rac-alpha-tocopheryl ace...	14B03-B06-294690	2
Fagron	All-rac-alpha-tocopheryl ace...	16128604	1
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-322952	1
Fagron	All-rac-alpha-tocopheryl ace...	17J02-B07-343845	3
Fagron	All-rac-alpha-tocopheryl ace...	12/28-B40-288705	1
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-311818	2
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-326638	1
Fargon	All-rac-alpha-tocopheryl ace...	17J02-B07-343845	1
Finteler Apotheke	All-rac-alpha-tocopheryl ace...	15E18-B07-326638	1
Gatt-Koller	All-rac-alpha-tocopheryl ace...	1802578	1
Gehe	All-rac-alpha-tocopheryl ace...	1512007-01	1
Gehe	All-rac-alpha-tocopheryl ace...	16128609	1
GEHE	All-rac-alpha-tocopheryl ace...	15E18-B07-311818	2
GEHE	All-rac-alpha-tocopheryl ace...	16128610	1
Kögl	All-rac-alpha-tocopheryl ace...	31209164216	1
Kögl	All-rac-alpha-tocopheryl ace...	312309164216	1
Kögl	All-rac-alpha-tocopheryl ace...	146905172417	1
Kögl	All-rac-alpha-tocopheryl ace...	20171469	3
L12	All-rac-alpha-tocopheryl ace...	1803012-01	1
Noweda	All-rac-alpha-tocopheryl ace...	14363410	1
Noweda	All-rac-alpha-tocopheryl ace...	15239011	1
Noweda	All-rac-alpha-tocopheryl ace...	16128625	1
Caelo	All-rac-alpha-tocopheryl ace...	14363407	5
Noweda 06.04.2016	All-rac-alpha-tocopheryl ace...	14363406	1
Caelo	All-rac-alpha-tocopheryl ace...	14363405	4
Euro OTC	All-rac-alpha-tocopheryl ace...	171002401	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1511I-02500	1
PHOENIX am 27.03.2014	All-rac-alpha-tocopheryl ace...	1310005-01	1
phönix	All-rac-alpha-tocopheryl ace...	1512007-01	1
phönix	All-rac-alpha-tocopheryl ace...	16128615	1
Phönix	All-rac-alpha-tocopheryl ace...	1803012-01	1
Caelo	All-rac-alpha-tocopheryl ace...	16128625	11
Sanacorp	All-rac-alpha-tocopheryl ace...	12362307	1
Sanacorp	All-rac-alpha-tocopheryl ace...	1301010-01	1
Sanacorp	All-rac-alpha-tocopheryl ace...	AP11300004T	1
Sanacorp	All-rac-alpha-tocopheryl ace...	Ap12362305T	1
Sanacorp	All-rac-alpha-tocopheryl ace...	AP161286	1
Sanacorp	All-rac-alpha-tocopheryl ace...	18087703	1
Euro OTC	All-rac-alpha-tocopheryl ace...	12362307	1
Spinnrad	All-rac-alpha-tocopheryl ace...	915303112	1
Spinnrad	All-rac-alpha-tocopheryl ace...	1116303113	2
Spinnrad	All-rac-alpha-tocopheryl ace...	217303111	1
Spinnrad / Gehe	All-rac-alpha-tocopheryl ace...	116303111	1
Stumpf / Hedinger	All-rac-alpha-tocopheryl ace...	15126801	1
Caelo	All-rac-alpha-tocopheryl ace...	13396305	2
Caelo	All-rac-alpha-tocopheryl ace...	14076812	10
Caelo	All-rac-alpha-tocopheryl ace...	15239003	12
Caelo	All-rac-alpha-tocopheryl ace...	14076805	6
Caelo	All-rac-alpha-tocopheryl ace...	14363406	5
Fagron	All-rac-alpha-tocopheryl ace...	12G12-No7	1
VDL; 24,15EUR; 26.01.2015	All-rac-alpha-tocopheryl ace...	13217206	1
Wepa	All-rac-alpha-tocopheryl ace...	AP15239006T	1
zhedjiang Medicine	All-rac-alpha-tocopheryl ace...	1704014-01	3
Caelo	All-rac-alpha-tocopheryl ace...	13396304	4
Caelo	All-rac-alpha-tocopheryl ace...	12362307	16
Euro OTC	All-rac-alpha-tocopheryl ace...	1411025-01	10
Kehr	All-rac-alpha-tocopheryl ace...		1
Zhejiang, Gehe	All-rac-alpha-tocopheryl ace...		1

- 137 772 spectra from 703 *Apo-Ident* customers from a total of 35 132 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *All-rac-alpha-tocopheryl acetate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *All-rac-alpha-tocopheryl acetate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	238	0	56 121
Type B	0	400	0	69 074
Type C	0	577	4	137 772

The substance/substance group *All-rac-alpha-tocopheryl acetate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.4790 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.3115 % (> 98.7952 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *All-rac-alpha-tocopheryl acetate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Metronidazole 25% in white petrolatum	54.47	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *All-rac-alpha-tocopheryl acetate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31020	31020	0.00	73.13
31371	31817	2.45	73.12
31646	34422	2.41	72.90
31817	31817	0.00	74.15
34422	34422	0.00	72.90

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Angelica root oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30939-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Angelica root oil; Oleum angelicae (e radice)

Special notes

When selecting the *Angelica root oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Angelica root oil	4	2	3

Second-stage model

For differentiation of the substance/substance group *Angelica root oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Angelica root oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Angelica root oil	11352704	30939	50	1403252
Caelo	Angelica root oil	13157610	31632	60	1511618
Caelo	Angelica root oil	163376	33082	40	20161213*
Caelo	Angelica root oil	172038	33909	40	20170728*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 190 spectra of 4 reference samples from the substance/substance group *Angelica root oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 169 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Angelica root oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Angelica root oil	15337207	32929	40
Caelo	Angelica root oil	15337209	33513	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 3 spectra from 3 *Apo-Ident* customers from 3 batches from the substance/substance group *Angelica root oil*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Angelica root oil	11352706	1
Caelo	Angelica root oil	15337205	1
Caelo	Angelica root oil	21111819	1

- 138 350 spectra from 703 *Apo-Ident* customers from a total of 35 292 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Angelica root oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Angelica root oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	190	0	56 169
Type B	0	68	12	69 394
Type C	0	3	0	138 350

The substance/substance group *Angelica root oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.8421 %)
Type B	100.0000 % (> 99.9653 %)	85.0000 % (> 81.2500 %)
Type C	100.0000 % (> 99.6482 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Angelica root oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dwarf pine oil	17.10	—
Juniper oil	22.86	—
Bergamot oil	29.20	—
Pine silvestris oil	31.53	—
Caraway oil	38.31	—
Bitter orange oil	39.64	—
Cedar wood oil	42.23	—
Spearmint oil	43.33	—
Grapefruit oil	45.76	—
Acorus oil	47.10	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Angelica root oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30939	30939	0.00	26.95
31632	31632	0.00	20.82
33082	33082	0.00	24.18
33909	33909	0.00	20.26

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Anise oil / Star aniseed oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31158-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Anise oil / Star aniseed oil; Anise oil; Oleum anisi; Oleum anisi stellati; Star anise oil

Special notes

When selecting the *Anise oil / Star aniseed oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Anise oil	4	2	24
Star anise oil	5	3	56

Second-stage model

For differentiation of the substance/substance group *Anise oil* / *Star aniseed oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Anise oil* / *Star aniseed oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Anise oil	14230101	31596	60	AR-15-FG-004287-01
Caelo	Anise oil	15148901	31785	60	20150518
Caelo	Anise oil	16306802	32930	40	20161111
Caelo	Anise oil	16306803	33507	40	20161111
Caelo	Anise oil	16306803	33509	40	20161111
Caelo	Star anise oil	13056105	31158	40	1405104
Caelo	Star anise oil	13358202	31404	40	20131105
Euro OTC	Star anise oil	1303017-01	31525	60	20130422
Euro OTC	Star anise oil	511026	31810	60	20151214*
Euro OTC	Star anise oil	1609007	32775	40	20160919*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 480 spectra of 10 reference samples from the substance/substance group *Anise oil* / *Star aniseed oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 9 different batches.
- 55 879 spectra from a total of 1107 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 190 spectra of 5 reference samples from the substance/substance group *Anise oil / Star aniseed oil*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anise oil	171500	33908	40
Caelo	Anise oil	183151	34640	40
Caelo	Star anise oil	170162	33061	30
Caelo	Star anise oil	15337007	33468	40
Euro OTC	Star anise oil	1903016	34497	40

- 69 284 spectra from a total of 1497 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 201 spectra from 92 *Apo-Ident* customers from 80 batches from the substance/substance group *Anise oil / Star aniseed oil*.
- Among them are spectra of independent samples from 74 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Apotheke Bauer & Cie. oHG	Anise oil	68952-43-2	1
Caelo	Anise oil	15119401	4
Caelo	Anise oil	1612120A/15428901	1
Caelo	Anise oil	202170A15428901	1
Caelo	Anise oil	17150001	13
Caelo	Anise oil	18066202	1
Caelo	Anise oil	18244505	1
Caelo	Anise oil	14(16306803)	1
Caelo	Anise oil	18244502	4
Caelo	Anise oil	16308602	1
Caelo	Anise oil	15148904	2
Caelo	Anise oil	15428903	3
Caelo	Anise oil	15428906	4
Caelo	Anise oil	15428901	2
Caesar & Loretz	Anise oil	14230104	1
Caesar & Loretz	Anise oil	15148904	1
Caesar & Loretz GmbH	Anise oil	15337016	1
Caesar & Loretz GmbH	Anise oil	18244502	1
Caesar & Loretz/ Noweda	Anise oil	17150001	1
Caesar&Loretz/Noweda	Anise oil	16306802	1
GEHE	Anise oil	17150001	1
Ichthyol	Anise oil	17016206	1
L12	Anise oil	15428906	1
L12	Anise oil	17364102	1
Phoenix	Anise oil	15337020	1

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Supplier	Substance	Batch	Spectra
Taoasis	Anise oil	42803-127870	1
Taoasis	Anise oil	42803-2851	1
WE:Sanacorp 14.06.2014...	Anise oil	13358202	1
Anzag 10.12.12	Star anise oil	1206014-01	1
Beiersdorf/Noweda	Star anise oil	15337007	2
Caelo	Star anise oil	15337020	9
Caelo	Star anise oil	28051310	1
Caelo	Star anise oil	12322503	3
Caelo	Star anise oil	21111302	1
Caelo	Star anise oil	8012014A	1
Caelo	Star anise oil	5021403	1
Caelo	Star anise oil	31032014C	1
Caelo	Star anise oil	13051404	1
Caelo	Star anise oil	21102014B	1
Caelo	Star anise oil	14150303	1
Caelo	Star anise oil	14230102	1
Caelo	Star anise oil	22122014D	1
Caelo	Star anise oil	22122014C	1
Caelo	Star anise oil	27041501	1
Caelo	Star anise oil	14230104	2
Caelo	Star anise oil	25082015C	1
Caelo	Star anise oil	29081504	1
Caelo	Star anise oil	15085801	1
Caelo	Star anise oil	15085805	17
Caelo	Star anise oil	15085806	2
Caelo	Star anise oil	15337014	1
Caelo	Star anise oil	25021702	1
Caelo	Star anise oil	15337021	1
Caelo	Star anise oil	18111712	1
Caelo	Star anise oil	12011904	1
Caelo	Star anise oil	11352402	4
Caelo	Star anise oil	18066204	1
Caelo	Star anise oil	145230101	1
Caelo	Star anise oil	11352409	8
Caelo	Star anise oil	15(18307502)	1
Caelo	Star anise oil	14150301	1
Caelo	Star anise oil	1232207	1
Caelo	Star anise oil	13358208	1
Caelo	Star anise oil	13358201	1
Caelo	Star anise oil	12322501	2
Caelo	Star anise oil	12322505	1
Caelo	Star anise oil	13358209	3
Caelo	Star anise oil	14195202	6
Caelo	Star anise oil	14195208	2
Caelo	Star anise oil	17016209	1
Caelo	Star anise oil	15337004	1
Caelo	Star anise oil	15337013	5
Caelo	Star anise oil	12322507	5
Caelo	Star anise oil	13056103	1
Caelo	Star anise oil	14125501	1
Caesar/Noweda	Star anise oil	411I-01953	1
Caleo/Noweda	Star anise oil	15337020	3
E Plus	Star anise oil	17016201	1
EuRho/GEHE	Star anise oil	1303017-01	1
Euro OTC	Star anise oil	1609007-01	1
Euro OTC	Star anise oil	1502037-01	2
Gatt-Koller	Star anise oil	1803381	2
Gatt-Koller	Star anise oil	803381	1
Kögl	Star anise oil	20162385	1
Caelo	Star anise oil	15337007	4

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Supplier	Substance	Batch	Spectra
Caelo	Star anise oil	17016206	6
Phönix	Star anise oil	11352402	1
Phönix	Star anise oil	1502037-01	1
Taoasis	Star anise oil	106155	1
WE:Sanacorp14.06.2014 E...	Star anise oil	13358202	1
Caelo	Anise oil	15148901	1
Caelo	Anise oil	16306802	2
Caelo	Anise oil	16306803	4
Caelo	Star anise oil	13056105	7
Caelo	Star anise oil	13358202	3
Euro OTC	Star anise oil	1303017-01	1

- 138 152 spectra from 703 *Apo-Ident* customers from a total of 35 215 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Anise oil / Star aniseed oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Anise oil / Star aniseed oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	480	0	55 879
Type B	0	190	0	69 284
Type C	0	199	2	138 152

The substance/substance group *Anise oil / Star aniseed oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.7500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 96.8421 %)
Type C	100.0000 % (> 99.6452 %)	99.0050 % (> 97.5124 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Anise oil / Star aniseed oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Fennel oil, bitter	53.56	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Anise oil / Star aniseed oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31158	31158	0.00	52.77
31404	31810	2.71	55.28
31525	31810	4.23	54.45
31810	31810	0.00	56.68
32775	32775	0.00	56.84
31596	31596	0.00	61.88
31785	31596	1.42	59.86
32930	31596	5.39	58.70
33507	31596	4.25	58.62
33509	31596	2.91	59.18

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30520-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)

Special notes

When selecting the *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)	4	2	103

Second-stage model

For differentiation of the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Aqueous salicyli...	21A250913	31119	40	1404661
apomix	Aqueous salicyli...	13B291216	32992	40	20161230
apomix	Aqueous salicyli...	06B090617	33493	40	20170609
apomix	Aqueous salicyli...	10B011019	34682	40	20191002

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
apomix	Aqueous salicylic acid 50% (...)	05B160517	33492	40
apomix	Aqueous salicylic acid 50% (...)	11B021117	34035	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 290 spectra from 74 *Apo-Ident* customers from 113 batches from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*.
- Among them are spectra of independent samples from 103 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Aqueous salicylic acid 50% (...)	13B291216	1
AHD	Aqueous salicylic acid 50% (...)	382803317	1
AHD	Aqueous salicylic acid 50% (...)	2B050318	1
AHD	Aqueous salicylic acid 50% (...)	6B020718	1
AHD	Aqueous salicylic acid 50% (...)	10B231118	1
AHD	Aqueous salicylic acid 50% (...)	5B060519	1
aoi-mix	Aqueous salicylic acid 50% (...)	11B021117	1
apomix	Aqueous salicylic acid 50% (...)	6A030413	1
apomix	Aqueous salicylic acid 50% (...)	7B300617	1
apomix	Aqueous salicylic acid 50% (...)	3B260315	1
apomix	Aqueous salicylic acid 50% (...)	5B040615	1
apomix	Aqueous salicylic acid 50% (...)	4B280415	1
apomix	Aqueous salicylic acid 50% (...)	8B250815	2
apomix	Aqueous salicylic acid 50% (...)	10C2601015	1
apomix	Aqueous salicylic acid 50% (...)	10B261015	2
apomix	Aqueous salicylic acid 50% (...)	1B20016	1
apomix	Aqueous salicylic acid 50% (...)	3C230316	1
apomix	Aqueous salicylic acid 50% (...)	4C030516	1
apomix	Aqueous salicylic acid 50% (...)	4B030516	1
apomix	Aqueous salicylic acid 50% (...)	6B140616	1
apomix	Aqueous salicylic acid 50% (...)	8B110816	3
apomix	Aqueous salicylic acid 50% (...)	1B240117	1
apomix	Aqueous salicylic acid 50% (...)	2B270217	1
apomix	Aqueous salicylic acid 50% (...)	11B021117	1
apomix	Aqueous salicylic acid 50% (...)	1B070218	2
apomix	Aqueous salicylic acid 50% (...)	2B050318	1
apomix	Aqueous salicylic acid 50% (...)	5B070618	1
Apomix	Aqueous salicylic acid 50% (...)	9A020812	1
Apomix	Aqueous salicylic acid 50% (...)	12A300513	1
Apomix	Aqueous salicylic acid 50% (...)	19A160913	1
Apomix	Aqueous salicylic acid 50% (...)	22C161013	1
Apomix	Aqueous salicylic acid 50% (...)	2C060314	1
Apomix	Aqueous salicylic acid 50% (...)	4B200514	1
Apomix	Aqueous salicylic acid 50% (...)	6B170714	1
Apomix	Aqueous salicylic acid 50% (...)	8C170914	1
Apomix	Aqueous salicylic acid 50% (...)	9B051114	1

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Supplier	Substance	Batch	Spectra
Apomix	Aqueous salicylic acid 50% (...)	3B260315	1
Apomix	Aqueous salicylic acid 50% (...)	1B260115	1
Apomix	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix	Aqueous salicylic acid 50% (...)	9B240915	2
Apomix	Aqueous salicylic acid 50% (...)	1C200116	1
Apomix	Aqueous salicylic acid 50% (...)	2C230216	1
Apomix	Aqueous salicylic acid 50% (...)	3B230316	1
Apomix	Aqueous salicylic acid 50% (...)	4B030516	1
Apomix	Aqueous salicylic acid 50% (...)	6B140616	4
Apomix	Aqueous salicylic acid 50% (...)	9B060916	2
Apomix	Aqueous salicylic acid 50% (...)	10B121016	3
Apomix	Aqueous salicylic acid 50% (...)	8B110816	1
Apomix	Aqueous salicylic acid 50% (...)	12B251116	1
Apomix	Aqueous salicylic acid 50% (...)	13B291216	5
Apomix	Aqueous salicylic acid 50% (...)	2B270217	3
Apomix	Aqueous salicylic acid 50% (...)	4B180417	1
Apomix	Aqueous salicylic acid 50% (...)	3B280317	1
Apomix	Aqueous salicylic acid 50% (...)	7B300617	1
Apomix	Aqueous salicylic acid 50% (...)	5B160517	1
Apomix	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix	Aqueous salicylic acid 50% (...)	5B1605175356	1
Apomix	Aqueous salicylic acid 50% (...)	10B121017	3
Apomix	Aqueous salicylic acid 50% (...)	8B0808175412	1
Apomix	Aqueous salicylic acid 50% (...)	6B090617	1
Apomix	Aqueous salicylic acid 50% (...)	9B070917	2
Apomix	Aqueous salicylic acid 50% (...)	12B211117	1
Apomix	Aqueous salicylic acid 50% (...)	13B131217	1
Apomix	Aqueous salicylic acid 50% (...)	11B021117	1
Apomix	Aqueous salicylic acid 50% (...)	1B070218	1
Apomix	Aqueous salicylic acid 50% (...)	12B2111175532	1
Apomix	Aqueous salicylic acid 50% (...)	2B050318	1
Apomix	Aqueous salicylic acid 50% (...)	3B160418	1
Apomix	Aqueous salicylic acid 50% (...)	4B150518	2
Apomix	Aqueous salicylic acid 50% (...)	8B140918	1
Apomix	Aqueous salicylic acid 50% (...)	6B020718	1
Apomix	Aqueous salicylic acid 50% (...)	9B111018	1
Apomix	Aqueous salicylic acid 50% (...)	3B120319	1
Apomix	Aqueous salicylic acid 50% (...)	1B030119	1
Apomix / 11	Aqueous salicylic acid 50% (...)	25B041213	1
Apomix / 11	Aqueous salicylic acid 50% (...)	10B011214	1
APOMIX / 30	Aqueous salicylic acid 50% (...)	3B310314	1
apomix / AHD	Aqueous salicylic acid 50% (...)	2B0503185606	1
apomix / Alliance Healt...	Aqueous salicylic acid 50% (...)	3B230316	1
apomix / Alliance Healt...	Aqueous salicylic acid 50% (...)	5B060519	1
Apomix / GEHE	Aqueous salicylic acid 50% (...)	6B1708714	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	6B080715	2
Apomix / Noweda	Aqueous salicylic acid 50% (...)	12B251116	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	7B300617	1
apomix / Phoenix	Aqueous salicylic acid 50% (...)	8B140918	1
apomix / Phoenix	Aqueous salicylic acid 50% (...)	1B030119	1
Apomix / Phoenix	Aqueous salicylic acid 50% (...)	10B231118	1
apomix / Phoenix Leipzi...	Aqueous salicylic acid 50% (...)	6B020718	2
apomix / Phoenix Leipzi...	Aqueous salicylic acid 50% (...)	3b160418	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	12A300513	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	19A160913	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	22C161013	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	3C310314	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	12B211215	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	3C230316	1

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Supplier	Substance	Batch	Spectra
Apomix / Phönix	Aqueous salicylic acid 50% (...)	8B110816	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	10B121016	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	16A250713	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	5B270614	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	7B180814	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	3B260315	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	11B021215	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	13B131217	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	3b230316	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	5b250516	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	9b060916	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	3b280317	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	5B250516	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	13B291216	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	3B280317	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	12B11117	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	1B070218	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	6B020718	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	9B111018	1
apomix AMH Niemann GmbH...	Aqueous salicylic acid 50% (...)	2B120219	1
apomix PKH	Aqueous salicylic acid 50% (...)	8B180719	1
apomix PKH / Noweda	Aqueous salicylic acid 50% (...)	8B180719	1
apomix PKH GmbH Halle	Aqueous salicylic acid 50% (...)	6B170714	1
apomix, phoenix 28.05.2...	Aqueous salicylic acid 50% (...)	2b050318	1
apomix, Phönix, 09.01.2...	Aqueous salicylic acid 50% (...)	12b211117	2
Apomix,Phönix, 16.11.2017	Aqueous salicylic acid 50% (...)	10B121017	1
Apomix/ Gehe	Aqueous salicylic acid 50% (...)	10B121017	1
Apomix/ GEHE	Aqueous salicylic acid 50% (...)	6B140616	1
Apomix/ GEHE	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix/ GEHE	Aqueous salicylic acid 50% (...)	4B150518	1
Apomix/ GEHE	Aqueous salicylic acid 50% (...)	11B101218	1
Apomix/ NOWEDA	Aqueous salicylic acid 50% (...)	3B280317	1
Apomix/ NOWEDA	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix/ NOWEDA	Aqueous salicylic acid 50% (...)	13B131217	1
Apomix/ Noweda 12.07.18	Aqueous salicylic acid 50% (...)	4B150518	1
apomix/ Phoenix Leipzig...	Aqueous salicylic acid 50% (...)	3b280317	1
Apomix/ Phönix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix/ Sanacorp	Aqueous salicylic acid 50% (...)	2B230216	1
Apomix/ Sanacorp	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix/AHD	Aqueous salicylic acid 50% (...)	10B261015	2
Apomix/AHD	Aqueous salicylic acid 50% (...)	7B080818	1
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	2C230215	1
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	9C240915	1
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	7B080818	1
apomix/Anzag	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix/Gehe	Aqueous salicylic acid 50% (...)	12B211215	1
Apomix/Gehe	Aqueous salicylic acid 50% (...)	9B060916	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	12b211215	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	3B280317	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	13B291216	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	1B070218	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	6B020718	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	1B030119	1
apomix/Phoenix	Aqueous salicylic acid 50% (...)	6C080715	1

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Supplier	Substance	Batch	Spectra
apomix/Phoenix	Aqueous salicylic acid 50% (...)	12B211215	1
apomix/Phoenix	Aqueous salicylic acid 50% (...)	1B070218	1
Apomix/phoenix	Aqueous salicylic acid 50% (...)	6B020718	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	5B040615	2
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	2B050318	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	6B020718	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	10B231118	1
Apomix/Phoenix Leipzig ...	Aqueous salicylic acid 50% (...)	7B300617	1
Apomix/Phoenix Leipzig ...	Aqueous salicylic acid 50% (...)	5B160517	1
apomix/Phönix	Aqueous salicylic acid 50% (...)	2B230215	1
apomix/Phönix	Aqueous salicylic acid 50% (...)	1C200116	1
apomix/Phönix	Aqueous salicylic acid 50% (...)	6B140616	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	12B251116	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	13B131217	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	2B120219	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	5B160517	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121017	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6B0207185732	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	1B260115	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6B080715	2
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	7C280715	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	12B211215	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	12C211215	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	4B030516	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121016	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	1B240117	2
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	4B180417	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121017	3
Beiersdorf/Phönix	Aqueous salicylic acid 50% (...)	7B060716	1
Bombastus	Aqueous salicylic acid 50% (...)	6C170714	1
Bombastus	Aqueous salicylic acid 50% (...)	2B050318	1
Caelo	Aqueous salicylic acid 50% (...)	10B121016	1
Caelo	Aqueous salicylic acid 50% (...)	3B2803175320	1
Caelo	Aqueous salicylic acid 50% (...)	11B021215	1
Caelo	Aqueous salicylic acid 50% (...)	9B111018	1
Caelo	Aqueous salicylic acid 50% (...)	1B200116	1
Caelo	Aqueous salicylic acid 50% (...)	1B240117	1
Caelo	Aqueous salicylic acid 50% (...)	2B050318	1
Euro OTC	Aqueous salicylic acid 50% (...)	4B150518	1
Fagron	Aqueous salicylic acid 50% (...)	1B200116	1
Frago/Noweda	Aqueous salicylic acid 50% (...)	11B021117	1
Gehe	Aqueous salicylic acid 50% (...)	9A020812	1
Gehe	Aqueous salicylic acid 50% (...)	11A300513	1
Gehe	Aqueous salicylic acid 50% (...)	4A040313	1
Gehe	Aqueous salicylic acid 50% (...)	22B161013	1
Gehe	Aqueous salicylic acid 50% (...)	13B131217	1
Gehe	Aqueous salicylic acid 50% (...)	8B140918	1
GEHE	Aqueous salicylic acid 50% (...)	10B121016	1
GEHE	Aqueous salicylic acid 50% (...)	11B041116	2
GEHE	Aqueous salicylic acid 50% (...)	13B291216	1
GEHE	Aqueous salicylic acid 50% (...)	6B090617	1
GEHE	Aqueous salicylic acid 50% (...)	7B300617	1
GEHE	Aqueous salicylic acid 50% (...)	11B021117	1
GEHE	Aqueous salicylic acid 50% (...)	2B050318	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Aqueous salicylic acid 50% (...)	5B040615	1
Jenne	Aqueous salicylic acid 50% (...)	6B090617	1
JENNE	Aqueous salicylic acid 50% (...)	11B041116	1
Klenk	Aqueous salicylic acid 50% (...)	22B161013	1
Noweda/apomix	Aqueous salicylic acid 50% (...)	4B280415	1
Noweda/Apomix	Aqueous salicylic acid 50% (...)	9C051114	1
Noweda/PKH GmbH	Aqueous salicylic acid 50% (...)	4C280415	1
Noweda/PKH GmbH	Aqueous salicylic acid 50% (...)	5B250516	1
Pharmachem/30	Aqueous salicylic acid 50% (...)	38310314	1
Phoenix (PKH Halle)	Aqueous salicylic acid 50% (...)	3A110213	1
Phoenix/ PKH Halle	Aqueous salicylic acid 50% (...)	5A030413	1
Phönix/apomix	Aqueous salicylic acid 50% (...)	4B200514	1
PhR/Sanacorp	Aqueous salicylic acid 50% (...)	4A05/13	1
PKH / Noweda	Aqueous salicylic acid 50% (...)	1B260115	2
PKH GmbH	Aqueous salicylic acid 50% (...)	12A300513	1
PKH GmbH	Aqueous salicylic acid 50% (...)	25C041213	1
PKH GmbH	Aqueous salicylic acid 50% (...)	2C060314	1
PKH GmbH	Aqueous salicylic acid 50% (...)	6B170714	1
PKH GmbH	Aqueous salicylic acid 50% (...)	4B280415	1
PKH GmbH	Aqueous salicylic acid 50% (...)	7B060716	1
PKH GmbH/ Alliance Heal...	Aqueous salicylic acid 50% (...)	8B080817	1
PKH GmbH/ Alliance Heal...	Aqueous salicylic acid 50% (...)	4B150518	1
PKH Halle	Aqueous salicylic acid 50% (...)	2B270217	3
PKH Halle	Aqueous salicylic acid 50% (...)	12B211117	1
PKH Halle	Aqueous salicylic acid 50% (...)	4B150518	1
PKH Halle / Phoenix	Aqueous salicylic acid 50% (...)	21A250913	1
PKH Halle/ GEHE	Aqueous salicylic acid 50% (...)	2B050318	1
PKH Halle/ Noweda	Aqueous salicylic acid 50% (...)	10B011214	1
PKH Halle/ Phoenix	Aqueous salicylic acid 50% (...)	22C161013	1
PKH Halle/ Phoenix	Aqueous salicylic acid 50% (...)	1C270114	1
PKH Halle/ Phönix	Aqueous salicylic acid 50% (...)	11B041116	1
PKH Halle/AHD	Aqueous salicylic acid 50% (...)	2B050318	1
PKH Halle/Phoenix	Aqueous salicylic acid 50% (...)	7B030719	1
PKH Halle/Sanacorp	Aqueous salicylic acid 50% (...)	1B270114	1
PKH Halle/Sanacorp	Aqueous salicylic acid 50% (...)	5B250516	2
Sanacorp	Aqueous salicylic acid 50% (...)	12B211117	1
Sanacorp	Aqueous salicylic acid 50% (...)	3B160418	1
Sanacorp / apomix	Aqueous salicylic acid 50% (...)	11B101218	1

- 138 063 spectra from 703 *Apo-Ident* customers from a total of 35 182 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	288	2	138 063

The substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.3103 % (> 98.2759 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
(s)-Lactic acid	136.55	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31119	31119	0.00	145.94
32992	31119	9.92	153.19
33493	31119	11.54	148.20
34682	31119	8.29	147.34

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Base cream DAC
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30211-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Base cream DAC; Cremor basalis

Special notes

When selecting the *Base cream DAC* substance/substance group, the following information is displayed to the user:

- Advice for the identification of base cream DAC: Improper storage of samples can result in identification problems. Please homogenise the sample and let it adapt to room temperature before the measurement.

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Base cream DAC	16	108	2810

Second-stage model

For differentiation of the substance/substance group *Base cream DAC* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Base cream DAC*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Base cream DAC	18005744	34318	40	128927
Bombastus	Base cream DAC	19002698	34503	40	20190604
Caelo	Base cream DAC	13139901	31043	40	20130513
Caelo	Base cream DAC	14052901	31474	40	AR-15-FG-000163-02
Caelo	Base cream DAC	154204	31964	60	20151218*
Caelo	Base cream DAC	17028801	34030	40	AR-18-FG-013988-01
Euro OTC	Base cream DAC	1304006-01	31252	40	AR-15-FG-014906-01
Euro OTC	Base cream DAC	1506025	31709	60	20150618*
Euro OTC	Base cream DAC	1506025	31710	60	20150618*
Euro OTC	Base cream DAC	1506026	31711	60	20150618*
Euro OTC	Base cream DAC	1506026	31712	60	20150618*
Euro OTC	Base cream DAC	1506027	31713	60	20150618*
Euro OTC	Base cream DAC	1506027	31714	60	20150618*
Euro OTC	Base cream DAC	1506028	31715	60	20150618*
Euro OTC	Base cream DAC	1506028	31716	60	20150618*
Euro OTC	Base cream DAC	39210516	32345	40	20160623
Fagron	Base cream DAC	18L19-T15-062894	34482	40	1909294
Fagron	Base cream DAC	18L20-T12-062935	34485	40	20190408
Henry Lamotte	Base cream DAC	5215300	30923	80	20120102
Henry Lamotte	Base cream DAC	8004996002	34504	40	20190319

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1020 spectra of 20 reference samples from the substance/substance group *Base cream DAC*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 16 different batches.
- 55339 spectra from a total of 1100 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 5280 spectra of 122 reference samples from the substance/substance group *Base cream DAC*.
- Among them are spectra of independent samples from 108 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Base cream DAC	11297201	30891	60
Caelo	Base cream DAC	154198	31963	60
Caelo	Base cream DAC	154201	31965	60
Caelo	Base cream DAC	153911	31966	60
Caelo	Base cream DAC	153910	31967	60
Caelo	Base cream DAC	153909	31968	60
Caelo	Base cream DAC	153905	31969	60
Caelo	Base cream DAC	153904	31970	60
Caelo	Base cream DAC	153903	31971	60
Caelo	Base cream DAC	153902	31972	60
Caelo	Base cream DAC	153578	31973	60
Caelo	Base cream DAC	153869	31974	60
Caelo	Base cream DAC	153872	31975	60
Caelo	Base cream DAC	153868	31976	60
Caelo	Base cream DAC	153576	31977	60
Caelo	Base cream DAC	160051	31978	60
Caelo	Base cream DAC	160052	31979	60
Caelo	Base cream DAC	160053	31980	60
Caelo	Base cream DAC	160054	31981	60
Caelo	Base cream DAC	160055	31982	60
Caelo	Base cream DAC	161021	32236	40
Caelo	Base cream DAC	161347	32237	40
Caelo	Base cream DAC	161348	32238	40
Caelo	Base cream DAC	161349	32239	40
Caelo	Base cream DAC	161356	32240	40
Caelo	Base cream DAC	161357	32241	40
Caelo	Base cream DAC	161358	32244	40
Caelo	Base cream DAC	161359	32245	40
Caelo	Base cream DAC	161360	32246	40
Caelo	Base cream DAC	161361	32247	40
Caelo	Base cream DAC	161362	32248	40
Caelo	Base cream DAC	161363	32249	40
Caelo	Base cream DAC	161456	32250	40
Caelo	Base cream DAC	161038	32251	40
Caelo	Base cream DAC	160556	32252	40
Caelo	Base cream DAC	160588	32253	40
Caelo	Base cream DAC	160559	32254	40
Caelo	Base cream DAC	161020	32255	40
Caelo	Base cream DAC	161022	32260	40
Caelo	Base cream DAC	161501	32368	40
Caelo	Base cream DAC	161522	32369	40
Caelo	Base cream DAC	161460	32521	40
Caelo	Base cream DAC	162378	32522	40
Caelo	Base cream DAC	161499	32524	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Base cream DAC	161554	32525	40
Caelo	Base cream DAC	162204	32526	40
Caelo	Base cream DAC	162205	32527	40
Caelo	Base cream DAC	162379	32528	40
Caelo	Base cream DAC	162380	32529	40
Caelo	Base cream DAC	162381	32530	40
Caelo	Base cream DAC	162382	32531	40
Caelo	Base cream DAC	162383	32532	40
Caelo	Base cream DAC	162403	32533	40
Caelo	Base cream DAC	162406	32534	40
Caelo	Base cream DAC	162407	32535	40
Caelo	Base cream DAC	162410	32539	40
Caelo	Base cream DAC	162416	32540	40
Caelo	Base cream DAC	162417	32541	40
Caelo	Base cream DAC	162420	32542	40
Caelo	Base cream DAC	162422	32543	40
Caelo	Base cream DAC	162617	32544	40
Caelo	Base cream DAC	161500	32547	40
Caelo	Base cream DAC	161524	32548	40
Caelo	Base cream DAC	161558	32549	40
Caelo	Base cream DAC	171542	33380	40
Caelo	Base cream DAC	171533	33381	40
Caelo	Base cream DAC	171474	33382	40
Caelo	Base cream DAC	171532	33383	40
Caelo	Base cream DAC	171473	33384	40
Caelo	Base cream DAC	171082	33385	40
Caelo	Base cream DAC	171543	33386	40
Caelo	Base cream DAC	171004	33387	40
Caelo	Base cream DAC	171039	33388	40
Caelo	Base cream DAC	171476	33389	40
Caelo	Base cream DAC	171005	33390	40
Caelo	Base cream DAC	171557	33391	40
Caelo	Base cream DAC	171038	33392	40
Caelo	Base cream DAC	171475	33393	40
Caelo	Base cream DAC	171477	33394	40
Caelo	Base cream DAC	171170	33395	40
Caelo	Base cream DAC	171240	33397	40
Caelo	Base cream DAC	171534	33526	40
Caelo	Base cream DAC	171535	33527	40
Caelo	Base cream DAC	171536	33528	40
Caelo	Base cream DAC	171537	33529	40
Caelo	Base cream DAC	171538	33530	40
Caelo	Base cream DAC	171539	33531	40
Caelo	Base cream DAC	171540	33532	40
Caelo	Base cream DAC	171545	33533	40
Caelo	Base cream DAC	171546	33534	40
Caelo	Base cream DAC	171547	33535	40
Caelo	Base cream DAC	171548	33536	40
Caelo	Base cream DAC	171549	33537	40
Caelo	Base cream DAC	171550	33538	40
Caelo	Base cream DAC	171541	33539	40
Caelo	Base cream DAC	171551	33540	40
Caelo	Base cream DAC	171552	33541	40
Caelo	Base cream DAC	171554	33542	40
Caelo	Base cream DAC	171555	33543	40
Caelo	Base cream DAC	171556	33544	40
Caelo	Base cream DAC	171544	33546	40
Caelo	Base cream DAC	172259	33767	40
Caelo	Base cream DAC	182723	34352	40
D'Oroderm	Base cream DAC	1346001	31315	40

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Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Base cream DAC	1301023-01	31005	40
Euro OTC	Base cream DAC	07570418	34319	40
Euro OTC	Base cream DAC	76581018	34320	40
Euro OTC	Base cream DAC	92060819	34699	40
Caelo	Base cream DAC	161357	32242	40
Caelo	Base cream DAC	161357	32243	40
Caelo	Base cream DAC	161020	32256	40
Caelo	Base cream DAC	161020	32257	40
Caelo	Base cream DAC	161021	32258	40
Caelo	Base cream DAC	161021	32259	40
Caelo	Base cream DAC	161022	32261	40
Caelo	Base cream DAC	161361	32523	40
Caelo	Base cream DAC	162407	32536	40
Caelo	Base cream DAC	162407	32537	40
Caelo	Base cream DAC	162407	32538	40
Caelo	Base cream DAC	162617	32545	40
Caelo	Base cream DAC	162617	32546	40
Henry Lamotte	Base cream DAC	5215300	30744	40

- 64 194 spectra from a total of 1393 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 10 043 spectra from 648 *Apo-Ident* customers from 2850 batches from the substance/substance group *Base cream DAC*.
- Among them are spectra of independent samples from 2802 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
18.10.2016 Phoenix 12,6...	Base cream DAC	303422	1
18105101	Base cream DAC	18105101	1
AEP	Base cream DAC	296222	1
Bombastus	Base cream DAC	301158	3
AH Henry Lamotte GmbH	Base cream DAC	6003682017	2
AH Henry Lamotte GmbH	Base cream DAC	6004860001	1
AHC 27.06.13 EK 32,95	Base cream DAC	1212025-01	1
Bombastus	Base cream DAC	301148	1
AHC/Lamotte	Base cream DAC	8004134006	1
AHD	Base cream DAC	5650700	5
AHD	Base cream DAC	16101201	1
AHD	Base cream DAC	17240301	1
AHD	Base cream DAC	18192601	1
Bombastus	Base cream DAC	301743	1
Bombastus	Base cream DAC	301756	1
Caelo	Base cream DAC	16349502	7
Euro OTC	Base cream DAC	17006701	1
AHD / P.W. Beyvers GmbH	Base cream DAC	731/4	2
AHD / P.W. Beyvers GmbH	Base cream DAC	18001	1
Bombastus	Base cream DAC	301755	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	5489900	5
Caelo	Base cream DAC	5788000	1
AHD 11.12.14 EK 8,79	Base cream DAC	289664	1
AHD Lamotte GmbH	Base cream DAC	5910000	1
AHD Lamotte GmbH	Base cream DAC	6004860002	1
AHD Lamotte GmbH	Base cream DAC	800287008	1
AHD Lamotte GmbH	Base cream DAC	8003325009	1
AHD, 02.12.13	Base cream DAC	280079	1
AHD, 05.04.2013	Base cream DAC	275439	1
AHD/ Beyvers	Base cream DAC	640/2	2
AHD/ Beyvers	Base cream DAC	640/3	3
AHD/ Beyvers	Base cream DAC	731/1	1
Bombastus	Base cream DAC	538/2	2
AHD/Beyvers	Base cream DAC	515/2	3
AHD/Beyvers	Base cream DAC	538/1	1
Caelo	Base cream DAC	5909500	1
Fagron	Base cream DAC	15H04-T11-024997	2
Fagron	Base cream DAC	16B15-T04-030282	1
Fagron	Base cream DAC	15C11-T11-020411	3
AHD/Henry Lamotte	Base cream DAC	6003682016	2
AHDE 21.05.,2015	Base cream DAC	1346001	1
Caelo	Base cream DAC	17153601	4
ALH	Base cream DAC	16227001	1
Euro OTC	Base cream DAC	1407018-01	7
Euro OTC	Base cream DAC	1502029-01	2
Euro OTC	Base cream DAC	13111004-01	1
Euro OTC	Base cream DAC	1511002-01	15
Alliance Health 17.01.2...	Base cream DAC	5490100	1
Alliance Healthcare	Base cream DAC	12305301	1
Alliance Healthcare	Base cream DAC	5322400	1
Alliance Healthcare	Base cream DAC	13139801	1
Alliance Healthcare	Base cream DAC	13188101	1
Alliance Healthcare	Base cream DAC	14238501	1
Alliance Healthcare	Base cream DAC	79000916	2
Alliance Healthcare	Base cream DAC	303417	1
Alliance Healthcare	Base cream DAC	304353	1
Alliance Healthcare	Base cream DAC	19001	2
Alliance Healthcare/Ens...	Base cream DAC	15730518	1
Alliance Healthcare/Ens...	Base cream DAC	80340218	1
Fagron	Base cream DAC	19G08-T06-069156	1
Alliance Healthcare/Hed...	Base cream DAC	1502026-01	2
Caelo	Base cream DAC	17229601	3
Alliance/Henry	Base cream DAC	6004859002	1
Allianz	Base cream DAC	69530118	1
Allianz Healthcare 20.0...	Base cream DAC	14232201	1
Anzag	Base cream DAC	207/2	1
Anzag	Base cream DAC	5215600	1
Anzag	Base cream DAC	1205006-01	1
Anzag	Base cream DAC	5321000	1
Anzag	Base cream DAC	14177801	1
Anzag	Base cream DAC	292258	1
Anzag	Base cream DAC	293196	1
Anzag	Base cream DAC	292260	2
Anzag	Base cream DAC	39590217	1
Anzag	Base cream DAC	72270417	1
Anzag	Base cream DAC	69510118	1
Anzag 09.11.12	Base cream DAC	272216	1
Anzag 14.01.2013	Base cream DAC	1210011-01	1
Anzag 19.02.2013	Base cream DAC	275444	1
Anzag 19.12.14 3,82	Base cream DAC	14177501	1

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Supplier	Substance	Batch	Spectra
Anzag 25.10.12 ek:33,15EUR	Base cream DAC	1205005-01	1
anzag 29.01.13 ek: 33,15EUR	Base cream DAC	1212027-01	1
Bombastus	Base cream DAC	275279	1
Bombastus	Base cream DAC	289589	1
Euro OTC	Base cream DAC	1407021-01	1
Bombastus	Base cream DAC	289804	1
Caelo	Base cream DAC	14151801	4
Euro OTC	Base cream DAC	1205044-01	2
Euro OTC	Base cream DAC	1212027-01	1
Anzag/Henry Lamotte	Base cream DAC	5289100	1
Anzag/Lamotte	Base cream DAC	5408300	1
Anzag/Lamotte	Base cream DAC	591000	1
Anzag/Lamotte	Base cream DAC	6003682004	1
Anzag;8.14EUR;17.6.15	Base cream DAC	14232301	2
AnzagIchthyol	Base cream DAC	16329201	1
Anzah / Henry lamotte	Base cream DAC	57788600	1
Apomix	Base cream DAC	3B250616	1
Apomix / AHD	Base cream DAC	281328006/14	1
apomix, Phönix, 09.01.2...	Base cream DAC	17243401	1
Apomix/Jenne	Base cream DAC	4D061014	1
apomix/Noweda	Base cream DAC	17108101	1
Apomix/Noweda	Base cream DAC	3001016	1
Bambastus	Base cream DAC	293736	1
Basiscreme	Base cream DAC	1510027-01	1
Bayers	Base cream DAC	538/2	1
Bayvers	Base cream DAC	440/1	1
Bayvers	Base cream DAC	731/1	3
Bayvers	Base cream DAC	731/3	4
Bayvers/ AHD	Base cream DAC	515/3	1
Beyavers	Base cream DAC	18001	1
Beyers	Base cream DAC	234/1	1
beyvers	Base cream DAC	538/2	2
beyvers	Base cream DAC	440/3	1
beyvers	Base cream DAC	731/4	1
Beyvers	Base cream DAC	234/2	1
Beyvers	Base cream DAC	234/3	1
Beyvers	Base cream DAC	319/1	2
Beyvers	Base cream DAC	319-1	1
Beyvers	Base cream DAC	329/1	1
Beyvers	Base cream DAC	319/2	1
Beyvers	Base cream DAC	329/2	2
Beyvers	Base cream DAC	340/2	3
Beyvers	Base cream DAC	340/1	1
Beyvers	Base cream DAC	412/1	2
Beyvers	Base cream DAC	412/3	4
Beyvers	Base cream DAC	440/1	3
Beyvers	Base cream DAC	440/3	2
Beyvers	Base cream DAC	440/2	2
Beyvers	Base cream DAC	515/5	1
Beyvers	Base cream DAC	515/2	1
Beyvers	Base cream DAC	515/3	1
Beyvers	Base cream DAC	5153	1
Beyvers	Base cream DAC	538/2	1
Beyvers	Base cream DAC	538/1	2
Beyvers	Base cream DAC	640/1	3
Beyvers	Base cream DAC	640/2	1
Beyvers	Base cream DAC	640/3	1
Beyvers	Base cream DAC	731/2	7
Beyvers	Base cream DAC	731/3	1
Beyvers	Base cream DAC	18001	3

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Supplier	Substance	Batch	Spectra
Beyvers	Base cream DAC	18002	2
Beyvers	Base cream DAC	538-1	1
Beyvers / Alliance	Base cream DAC	731/4	3
Beyvers / Alliance	Base cream DAC	19001x2	1
Beyvers / Phönix	Base cream DAC	515/2	2
Beyvers Gmbh	Base cream DAC	13170717	1
Beyvers Gmbh	Base cream DAC	12170717	1
Beyvers GmbH	Base cream DAC	329/2	1
Beyvers GmbH	Base cream DAC	440/1	1
Beyvers GmbH	Base cream DAC	538/2	2
Beyvers GmbH	Base cream DAC	640/1	1
Beyvers GmbH	Base cream DAC	731/1	1
Beyvers GmbH	Base cream DAC	731/4	4
Beyvers GmbH	Base cream DAC	18002	4
Beyvers GmbH/ Noweda	Base cream DAC	329/1	1
Beyvers/ Phönix	Base cream DAC	538/2	1
Beyvers/AEP	Base cream DAC	731/4	1
Beyvers/Alliance	Base cream DAC	731/2	3
Beyvers/Alliance	Base cream DAC	18001	4
Beyvers/Anzag	Base cream DAC	340/1	1
Beyvers/Anzag	Base cream DAC	640/3	1
Beyvers/Anzag	Base cream DAC	731/2	2
Beyvers/Anzag	Base cream DAC	731/3	1
Beyvers/Beyvers	Base cream DAC	19001	1
Beyvers/Beyvers	Base cream DAC	19002	1
Beyvers/Gehe	Base cream DAC	180-01	1
Beyvers/Gumo	Base cream DAC	340/2	1
Beyvers/Noweda	Base cream DAC	538/2	1
Beyvers/Noweda	Base cream DAC	538/1	1
Beyvers/Noweda	Base cream DAC	640/2	3
Beyvers/Noweda	Base cream DAC	640/3	7
Beyvers/Noweda	Base cream DAC	731/1	1
Beyvers/Noweda	Base cream DAC	731/2	1
Bionorica/ Gehe	Base cream DAC	18003942	1
Bmbastus/Noweda	Base cream DAC	292256	1
Bomastus-Werke / Noweda	Base cream DAC	18003939	1
Bomastus-Werke AG	Base cream DAC	18003108	1
Bomastus-Werke AG	Base cream DAC	18001969	1
Bomastus-Werke AG	Base cream DAC	18005236	1
Bomastus-Werke AG	Base cream DAC	18005240	1
Bombastus	Base cream DAC	299325	3
Bombastus	Base cream DAC	293801	1
Bombastus	Base cream DAC	296231	3
Bombastus	Base cream DAC	298263	2
Bombastus	Base cream DAC	260416v3	1
Bombastus	Base cream DAC	305712	1
Bombastus	Base cream DAC	308801	4
Bombastus	Base cream DAC	130161	1
Bombastus	Base cream DAC	266524	1
Bombastus	Base cream DAC	269993	1
Bombastus	Base cream DAC	266799	1
Bombastus	Base cream DAC	270157	1
Bombastus	Base cream DAC	265036	2
Bombastus	Base cream DAC	272093	1
Bombastus	Base cream DAC	272372	1
Bombastus	Base cream DAC	268925	2
Bombastus	Base cream DAC	272375	2
Bombastus	Base cream DAC	272464	2
Bombastus	Base cream DAC	60090504	2
Bombastus	Base cream DAC	272219	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	272084	2
Bombastus	Base cream DAC	275277	1
Bombastus	Base cream DAC	275175	1
Bombastus	Base cream DAC	275447	1
Bombastus	Base cream DAC	1210043-01	1
Bombastus	Base cream DAC	275443	1
Bombastus	Base cream DAC	275184	2
Bombastus	Base cream DAC	275438	2
Bombastus	Base cream DAC	276944	2
Bombastus	Base cream DAC	275172	1
Bombastus	Base cream DAC	276950	2
Bombastus	Base cream DAC	277248	1
Bombastus	Base cream DAC	277099	7
Bombastus	Base cream DAC	278398	3
Bombastus	Base cream DAC	278563	2
Bombastus	Base cream DAC	275275	1
Bombastus	Base cream DAC	278475	2
Bombastus	Base cream DAC	278553	1
Bombastus	Base cream DAC	278557	2
Bombastus	Base cream DAC	277110	1
Bombastus	Base cream DAC	278560	2
Bombastus	Base cream DAC	278556	6
Bombastus	Base cream DAC	278558	1
Bombastus	Base cream DAC	280077	1
Bombastus	Base cream DAC	280082	2
Bombastus	Base cream DAC	281240	1
Bombastus	Base cream DAC	281329	3
Bombastus	Base cream DAC	281239	1
Bombastus	Base cream DAC	281331	4
Bombastus	Base cream DAC	282723	2
Bombastus	Base cream DAC	281328	1
Bombastus	Base cream DAC	279960	1
Bombastus	Base cream DAC	278555	3
Bombastus	Base cream DAC	282887	1
Bombastus	Base cream DAC	279829	1
Bombastus	Base cream DAC	281486	1
Bombastus	Base cream DAC	281242	2
Bombastus	Base cream DAC	282774	1
Bombastus	Base cream DAC	281335	1
Bombastus	Base cream DAC	283972	2
Bombastus	Base cream DAC	283917	1
Bombastus	Base cream DAC	286087	5
Bombastus	Base cream DAC	283971	1
Bombastus	Base cream DAC	285220	1
Bombastus	Base cream DAC	279962	1
Bombastus	Base cream DAC	286158	3
Bombastus	Base cream DAC	286161	1
Bombastus	Base cream DAC	286088	3
Bombastus	Base cream DAC	286162	1
Bombastus	Base cream DAC	287193	1
Bombastus	Base cream DAC	285227	1
Bombastus	Base cream DAC	287946	2
Bombastus	Base cream DAC	287111	1
Bombastus	Base cream DAC	287248	2
Bombastus	Base cream DAC	288058	1
Bombastus	Base cream DAC	290866	1
Bombastus	Base cream DAC	289660	1
Bombastus	Base cream DAC	288055	4
Bombastus	Base cream DAC	1401020-01	1
Bombastus	Base cream DAC	289530	4

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	289591	1
Bombastus	Base cream DAC	CHB289803	1
Bombastus	Base cream DAC	289665	1
Bombastus	Base cream DAC	291030	1
Bombastus	Base cream DAC	291032	2
Bombastus	Base cream DAC	292123	1
Bombastus	Base cream DAC	292267	2
Bombastus	Base cream DAC	289805	2
Bombastus	Base cream DAC	289669	1
Bombastus	Base cream DAC	292259	1
Bombastus	Base cream DAC	292256	3
Bombastus	Base cream DAC	294837	1
Bombastus	Base cream DAC	293800	1
Bombastus	Base cream DAC	295899	2
Bombastus	Base cream DAC	294842	4
Bombastus	Base cream DAC	293739	2
Bombastus	Base cream DAC	293942	4
Bombastus	Base cream DAC	295897	4
Bombastus	Base cream DAC	296155	5
Bombastus	Base cream DAC	293973	2
Bombastus	Base cream DAC	295837	1
Bombastus	Base cream DAC	294832	2
Bombastus	Base cream DAC	298256	5
Bombastus	Base cream DAC	294833	2
Bombastus	Base cream DAC	15387001	1
Bombastus	Base cream DAC	298264	3
Bombastus	Base cream DAC	297482	2
Bombastus	Base cream DAC	298172	1
Bombastus	Base cream DAC	297500	2
Bombastus	Base cream DAC	297495	1
Bombastus	Base cream DAC	298267	3
Bombastus	Base cream DAC	299321	2
Bombastus	Base cream DAC	298261	2
Bombastus	Base cream DAC	300011	3
Bombastus	Base cream DAC	16005201	1
Bombastus	Base cream DAC	298265	5
Bombastus	Base cream DAC	298266	2
Bombastus	Base cream DAC	300012	1
Bombastus	Base cream DAC	299943	1
Bombastus	Base cream DAC	299948	4
Bombastus	Base cream DAC	299950	3
Bombastus	Base cream DAC	301721	1
Bombastus	Base cream DAC	297497	1
Bombastus	Base cream DAC	299319	1
Bombastus	Base cream DAC	301722	2
Bombastus	Base cream DAC	301754	1
Bombastus	Base cream DAC	303052	2
Bombastus	Base cream DAC	301156	1
Bombastus	Base cream DAC	301160	6
Bombastus	Base cream DAC	303061	3
Bombastus	Base cream DAC	303414	3
Bombastus	Base cream DAC	303057	2
Bombastus	Base cream DAC	303060	3
Bombastus	Base cream DAC	301746	1
Bombastus	Base cream DAC	301760	1
Bombastus	Base cream DAC	303415	2
Bombastus	Base cream DAC	303133	1
Bombastus	Base cream DAC	303417	1
Bombastus	Base cream DAC	303425	1
Bombastus	Base cream DAC	16232201	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	303055	6
Bombastus	Base cream DAC	304341	1
Bombastus	Base cream DAC	304351	2
Bombastus	Base cream DAC	304361	3
Bombastus	Base cream DAC	303136	1
Bombastus	Base cream DAC	304354	4
Bombastus	Base cream DAC	304359	3
Bombastus	Base cream DAC	3042362	1
Bombastus	Base cream DAC	305731	3
Bombastus	Base cream DAC	304358	1
Bombastus	Base cream DAC	305711	3
Bombastus	Base cream DAC	305728	3
Bombastus	Base cream DAC	304343	1
Bombastus	Base cream DAC	305694	1
Bombastus	Base cream DAC	305734	3
Bombastus	Base cream DAC	306621	3
Bombastus	Base cream DAC	306617	1
Bombastus	Base cream DAC	306624	2
Bombastus	Base cream DAC	306623	3
Bombastus	Base cream DAC	306618	3
Bombastus	Base cream DAC	306610	6
Bombastus	Base cream DAC	306607	1
Bombastus	Base cream DAC	307964	1
Bombastus	Base cream DAC	306609	4
Bombastus	Base cream DAC	305714	3
Bombastus	Base cream DAC	307971	3
Bombastus	Base cream DAC	305715	5
Bombastus	Base cream DAC	307996	1
Bombastus	Base cream DAC	307834	6
Bombastus	Base cream DAC	308794	3
Bombastus	Base cream DAC	308799	8
Bombastus	Base cream DAC	307832	1
Bombastus	Base cream DAC	307959	1
Bombastus	Base cream DAC	308804	4
Bombastus	Base cream DAC	310726	4
Bombastus	Base cream DAC	306613	4
Bombastus	Base cream DAC	310722	1
Bombastus	Base cream DAC	310746	3
Bombastus	Base cream DAC	310753	10
Bombastus	Base cream DAC	310749	3
Bombastus	Base cream DAC	308795	1
Bombastus	Base cream DAC	310748	2
Bombastus	Base cream DAC	17000071	2
Bombastus	Base cream DAC	17000070	2
Bombastus	Base cream DAC	17000910	3
Bombastus	Base cream DAC	17000925	4
Bombastus	Base cream DAC	310751	5
Bombastus	Base cream DAC	17000923	5
Bombastus	Base cream DAC	17000904	5
Bombastus	Base cream DAC	18000487	1
Bombastus	Base cream DAC	18000966	3
Bombastus	Base cream DAC	18000972	4
Bombastus	Base cream DAC	17000913	1
Bombastus	Base cream DAC	17000905	3
Bombastus	Base cream DAC	17000069	5
Bombastus	Base cream DAC	18000493	1
Bombastus	Base cream DAC	18000485	1
Bombastus	Base cream DAC	18000958	1
Bombastus	Base cream DAC	17000915	1
Bombastus	Base cream DAC	18000967	2

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	18000956	4
Bombastus	Base cream DAC	18000962	4
Bombastus	Base cream DAC	18000961	3
Bombastus	Base cream DAC	18001969	6
Bombastus	Base cream DAC	18000969	1
Bombastus	Base cream DAC	18001965	2
Bombastus	Base cream DAC	18001968	4
Bombastus	Base cream DAC	18003108	1
Bombastus	Base cream DAC	18167001	1
Bombastus	Base cream DAC	18005233	1
Bombastus	Base cream DAC	18005743	2
Bombastus	Base cream DAC	18005754	3
Bombastus	Base cream DAC	18003945	3
Bombastus	Base cream DAC	18006773	4
Bombastus	Base cream DAC	18005237	1
Bombastus	Base cream DAC	18005747	2
Bombastus	Base cream DAC	19002679	6
Bombastus	Base cream DAC	190000954	1
Bombastus	Base cream DAC	19003295	1
Bombastus	Base cream DAC	294829	2
Bombastus	Base cream DAC	293943	2
Bombastus	Base cream DAC	293944	3
Bombastus	Base cream DAC	296230	3
Bombastus	Base cream DAC	296221	1
Bombastus	Base cream DAC	296156	2
Bombastus	Base cream DAC	298257	2
Bombastus	Base cream DAC	296225	6
Bombastus	Base cream DAC	297498	2
Bombastus	Base cream DAC	299326	1
Bombastus	Base cream DAC	297494	4
Bombastus	Base cream DAC	278472	4
Bombastus	Base cream DAC	279961	1
Bombastus	Base cream DAC	281332	1
Bombastus	Base cream DAC	283974	2
Bombastus	Base cream DAC	287941	1
Bombastus	Base cream DAC	289663	4
Bombastus	Base cream DAC	291028	1
Bombastus	Base cream DAC	291025	2
Bombastus	Base cream DAC	293201	2
Bombastus	Base cream DAC	299322	3
Bombastus	Base cream DAC	301758	3
Bombastus	Base cream DAC	294836	1
Bombastus	Base cream DAC	298171	1
Bombastus	Base cream DAC	304342	2
Bombastus	Base cream DAC	309923	2
Bombastus	Base cream DAC	17000067	2
Bombastus	Base cream DAC	310750	2
Bombastus	Base cream DAC	18000957	4
Bombastus	Base cream DAC	18003112	2
Bombastus	Base cream DAC	310725	1
Bombastus	Base cream DAC	310724	1
Bombastus	Base cream DAC	275591	1
Bombastus	Base cream DAC	278474	6
Bombastus	Base cream DAC	287944	2
Bombastus	Base cream DAC	289590	1
Bombastus	Base cream DAC	293796	1
Bombastus	Base cream DAC	308797	1
Bombastus	Base cream DAC	17000924	5
Bombastus	Base cream DAC	19000929	2
Bombastus	Base cream DAC	17000897	2

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	18003097	3
Bombastus	Base cream DAC	17000906	1
Bombastus	Base cream DAC	180032925	1
Bombastus	Base cream DAC	18005231	1
Bombastus	Base cream DAC	18006765	1
Bombastus	Base cream DAC	289667	1
Bombastus	Base cream DAC	292258	1
Bombastus	Base cream DAC	306616	2
Bombastus	Base cream DAC	1700908	1
Bombastus	Base cream DAC	18000491	1
Bombastus	Base cream DAC	18000955	1
Bombastus	Base cream DAC	18003113	2
Bombastus	Base cream DAC	18003934	2
Bombastus	Base cream DAC	18003941	1
Bombastus	Base cream DAC	19000942	1
Bombastus	Base cream DAC	19002680	4
Bombastus	Base cream DAC	19002693	1
Bombastus	Base cream DAC	19003288	2
Bombastus	Base cream DAC	298173	2
Bombastus	Base cream DAC	296228	1
Bombastus	Base cream DAC	292127	2
Bombastus	Base cream DAC	18001974	3
Bombastus	Base cream DAC	289526	2
Bombastus	Base cream DAC	293939	4
Bombastus	Base cream DAC	307958	1
Bombastus	Base cream DAC	18001964	2
Bombastus	Base cream DAC	19002677	1
Bombastus	Base cream DAC	19000928	2
Bombastus	Base cream DAC	303424	1
Bombastus	Base cream DAC	17000902	1
Bombastus	Base cream DAC	17000920	4
Bombastus	Base cream DAC	18003925	1
Bombastus	Base cream DAC	18005740	1
Bombastus	Base cream DAC	19000927	1
Bombastus	Base cream DAC	19002670	1
Bombastus	Base cream DAC	19003274	1
Bombastus	Base cream DAC	293795	6
Bombastus	Base cream DAC	1212029-01	3
Bombastus	Base cream DAC	295900	1
Bombastus	Base cream DAC	287251	3
Bombastus	Base cream DAC	294838	1
Bombastus	Base cream DAC	301745	6
Bombastus	Base cream DAC	306604	3
Bombastus	Base cream DAC	292122	2
Bombastus	Base cream DAC	293738	1
Bombastus	Base cream DAC	297496	1
Bombastus	Base cream DAC	303428	2
Bombastus	Base cream DAC	285228	4
Bombastus	Base cream DAC	281334	1
Bombastus	Base cream DAC	280078	2
Bombastus	Base cream DAC	287112	1
Bombastus	Base cream DAC	287117	1
Bombastus	Base cream DAC	289803	1
Bombastus	Base cream DAC	291026	2
Bombastus	Base cream DAC	292125	4
Bombastus	Base cream DAC	292263	3
Bombastus	Base cream DAC	296226	3
Bombastus	Base cream DAC	297484	2
Bombastus	Base cream DAC	299323	4
Bombastus	Base cream DAC	300014	5

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	300015	3
Bombastus	Base cream DAC	300013	2
Bombastus	Base cream DAC	301153	1
Bombastus	Base cream DAC	301157	2
Bombastus	Base cream DAC	303135	2
Bombastus	Base cream DAC	303422	2
Bombastus	Base cream DAC	304344	1
Bombastus	Base cream DAC	305733	2
Bombastus	Base cream DAC	307967	4
Bombastus	Base cream DAC	305713	2
Bombastus	Base cream DAC	306602	1
Bombastus	Base cream DAC	310747	4
Bombastus	Base cream DAC	310720	2
Bombastus	Base cream DAC	18000964	2
Bombastus	Base cream DAC	18000949	1
Bombastus	Base cream DAC	18000690	1
Bombastus	Base cream DAC	18003094	1
Bombastus	Base cream DAC	18003107	4
Bombastus	Base cream DAC	296224	4
Bombastus	Base cream DAC	287876	1
Bombastus	Base cream DAC	287875	1
Bombastus	Base cream DAC	18000492	1
Bombastus	Base cream DAC	18005230	1
Bombastus	Base cream DAC	18006775	1
Bombastus	Base cream DAC	17000907	4
Bombastus	Base cream DAC	310755	1
Bombastus	Base cream DAC	294831	1
Bombastus	Base cream DAC	301757	4
Bombastus	Base cream DAC	304352	5
Bombastus	Base cream DAC	306620	1
Bombastus	Base cream DAC	307963	1
Bombastus	Base cream DAC	1511002-01	1
Bombastus	Base cream DAC	18000496	1
Bombastus	Base cream DAC	18003114	2
Bombastus	Base cream DAC	18003940	2
Bombastus	Base cream DAC	18003943	5
Bombastus	Base cream DAC	18006772	3
Bombastus	Base cream DAC	18006774	2
Bombastus	Base cream DAC	19003287	1
Bombastus	Base cream DAC	19003292	3
Bombastus	Base cream DAC	17000917	2
Bombastus	Base cream DAC	17000918	1
Bombastus	Base cream DAC	18005749	1
Bombastus	Base cream DAC	19000948	4
Bombastus	Base cream DAC	19002692	1
Bombastus	Base cream DAC	272216	1
Bombastus	Base cream DAC	18003929	2
Bombastus	Base cream DAC	306611	4
Bombastus	Base cream DAC	305692	1
Bombastus	Base cream DAC	308791	1
Bombastus	Base cream DAC	310719	3
Bombastus	Base cream DAC	294843	4
Bombastus	Base cream DAC	286090	2
Bombastus	Base cream DAC	17000066	3
Bombastus	Base cream DAC	19002682	2
Bombastus	Base cream DAC	301147	1
Bombastus	Base cream DAC	303413	2
Bombastus	Base cream DAC	305693	2
Bombastus	Base cream DAC	17000899	4
Bombastus	Base cream DAC	280080	3

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	286159	1
Bombastus	Base cream DAC	18000965	1
Bombastus	Base cream DAC	19000947	1
Bombastus	Base cream DAC	19003291	2
Bombastus	Base cream DAC	19005670	1
Bombastus	Base cream DAC	275282	1
Bombastus	Base cream DAC	278397	1
Bombastus	Base cream DAC	278561	1
Bombastus	Base cream DAC	280079	2
Bombastus	Base cream DAC	281243	2
Bombastus	Base cream DAC	288054	1
Bombastus	Base cream DAC	289531	2
Bombastus	Base cream DAC	19000950	5
Bombastus	Base cream DAC	297480	1
Bombastus	Base cream DAC	279964	3
Bombastus	Base cream DAC	283918	1
Bombastus	Base cream DAC	303062	4
Bombastus	Base cream DAC	305710	1
Bombastus	Base cream DAC	18000963	2
Bombastus	Base cream DAC	293940	1
Bombastus	Base cream DAC	18005746	1
Bombastus	Base cream DAC	291029	1
Bombastus	Base cream DAC	292260	2
Bombastus	Base cream DAC	293196	1
Bombastus	Base cream DAC	298259	3
Bombastus	Base cream DAC	299320	3
Bombastus	Base cream DAC	301159	3
Bombastus	Base cream DAC	306608	1
Bombastus	Base cream DAC	19000943	2
Bombastus	Base cream DAC	275273	1
Bombastus	Base cream DAC	275590	2
Bombastus	Base cream DAC	301741	1
Bombastus	Base cream DAC	17000068	1
Bombastus	Base cream DAC	268821	1
Bombastus	Base cream DAC	296227	1
Bombastus	Base cream DAC	303058	3
Bombastus	Base cream DAC	303420	3
Bombastus	Base cream DAC	306606	1
Bombastus	Base cream DAC	282773	2
Bombastus	Base cream DAC	272373	1
Bombastus	Base cream DAC	275173	1
Bombastus	Base cream DAC	293200	2
Bombastus	Base cream DAC	299947	3
Bombastus	Base cream DAC	304356	1
Bombastus	Base cream DAC	18000960	6
Bombastus	Base cream DAC	18000968	3
Bombastus	Base cream DAC	18003110	3
Bombastus	Base cream DAC	18003111	3
Bombastus	Base cream DAC	18005239	3
Bombastus	Base cream DAC	18005750	3
Bombastus	Base cream DAC	19000953	1
Bombastus	Base cream DAC	19002690	3
Bombastus	Base cream DAC	288057	1
Bombastus	Base cream DAC	303416	1
Bombastus	Base cream DAC	18001962	2
Bombastus	Base cream DAC	278559	1
Bombastus	Base cream DAC	286155	1
Bombastus	Base cream DAC	306601	1
Bombastus	Base cream DAC	18000494	4
Bombastus	Base cream DAC	18001970	3

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	18005236	1
Bombastus	Base cream DAC	19000952	4
Bombastus	Base cream DAC	19003300	1
Bombastus	Base cream DAC	289802	1
Bombastus	Base cream DAC	292261	1
Bombastus	Base cream DAC	291034	2
Bombastus	Base cream DAC	304355	1
Bombastus	Base cream DAC	310723	2
Bombastus	Base cream DAC	6004859006	1
Bombastus	Base cream DAC	17000921	4
Bombastus	Base cream DAC	18003946	2
Bombastus	Base cream DAC	18003932	1
Bombastus	Base cream DAC	301738	1
Bombastus	Base cream DAC	286094	3
Bombastus	Base cream DAC	287197	5
Bombastus	Base cream DAC	298262	2
Bombastus	Base cream DAC	301155	3
Bombastus	Base cream DAC	301759	4
Bombastus	Base cream DAC	303423	4
Bombastus	Base cream DAC	303429	8
Bombastus	Base cream DAC	304353	2
Bombastus	Base cream DAC	304360	4
Bombastus	Base cream DAC	16319501	4
Bombastus	Base cream DAC	17000909	2
Bombastus	Base cream DAC	17000916	1
Bombastus	Base cream DAC	18001967	3
Bombastus	Base cream DAC	18E23-T16-056321	1
Bombastus	Base cream DAC	18006777	2
Bombastus	Base cream DAC	295901	1
Bombastus	Base cream DAC	276948	1
Bombastus	Base cream DAC	279958	3
Bombastus	Base cream DAC	286093	2
Bombastus	Base cream DAC	287945	3
Bombastus	Base cream DAC	286089	1
Bombastus	Base cream DAC	293199	1
Bombastus	Base cream DAC	293941	1
Bombastus	Base cream DAC	296152	2
Bombastus	Base cream DAC	299324	2
Bombastus	Base cream DAC	60090502	4
Bombastus	Base cream DAC	303419	3
Bombastus	Base cream DAC	307962	1
Bombastus	Base cream DAC	17000065	4
Bombastus	Base cream DAC	310752	3
Bombastus	Base cream DAC	17000922	2
Bombastus	Base cream DAC	18000959	3
Bombastus	Base cream DAC	18001401	1
Bombastus	Base cream DAC	18001971	2
Bombastus	Base cream DAC	1800970	1
Bombastus	Base cream DAC	18003102	1
Bombastus	Base cream DAC	LD251118	1
Bombastus	Base cream DAC	18003938	3
Bombastus	Base cream DAC	294841	2
Bombastus	Base cream DAC	296229	4
Bombastus	Base cream DAC	18003933	1
Bombastus	Base cream DAC	298260	1
Bombastus	Base cream DAC	303059	1
Bombastus	Base cream DAC	307970	2
Bombastus	Base cream DAC	308798	1
Bombastus	Base cream DAC	306614	3
Bombastus	Base cream DAC	18001972	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	19000945	2
Bombastus	Base cream DAC	19003298	1
Bombastus	Base cream DAC	262001	1
Bombastus	Base cream DAC	15C-11T05-020388	1
Bombastus	Base cream DAC	294840	2
Bombastus	Base cream DAC	16B15-T02-030277	1
Bombastus	Base cream DAC	305729	1
Bombastus	Base cream DAC	305730	5
Bombastus	Base cream DAC	306615	6
Bombastus	Base cream DAC	305735	2
Bombastus	Base cream DAC	306619	1
Bombastus	Base cream DAC	307829	3
Bombastus	Base cream DAC	307968	3
Bombastus	Base cream DAC	17000072	3
Bombastus	Base cream DAC	307969	1
Bombastus	Base cream DAC	18000497	1
Bombastus	Base cream DAC	17000914	1
Bombastus	Base cream DAC	17000911	1
Bombastus	Base cream DAC	17000912	1
Bombastus	Base cream DAC	180001971	1
Bombastus	Base cream DAC	180001973	1
Bombastus	Base cream DAC	18003936	1
Bombastus	Base cream DAC	18003942	1
Bombastus	Base cream DAC	19002687	1
Bombastus	Base cream DAC	19004711	2
Bombastus	Base cream DAC	1508001-01	2
Bombastus	Base cream DAC	17000896	1
Bombastus	Base cream DAC	303063	2
Bombastus	Base cream DAC	307830	3
Bombastus	Base cream DAC	307965	4
Bombastus	Base cream DAC	17000919	2
Bombastus	Base cream DAC	18000954	4
Bombastus	Base cream DAC	308796	3
Bombastus	Base cream DAC	303056	5
Bombastus	Base cream DAC	287110	1
Bombastus	Base cream DAC	291024	1
Bombastus	Base cream DAC	298170	2
Bombstus	Base cream DAC	1700907	1
Bombstus	Base cream DAC	310752	1
Caealo	Base cream DAC	16101901	1
Caealo/Gehe	Base cream DAC	19003701	1
Caealo	Base cream DAC	16232001	1
Caeko	Base cream DAC	16220201	1
Cael/Phönix	Base cream DAC	17243401	1
Caeli / Kehr	Base cream DAC	17029001	1
Caelo	Base cream DAC	12191801	4
Caelo	Base cream DAC	1713M-01309	1
Caelo	Base cream DAC	13120301	7
Caelo	Base cream DAC	5490000	3
Caelo	Base cream DAC	28031401	1
Caelo	Base cream DAC	28031404	1
Caelo	Base cream DAC	14053301	2
Caelo	Base cream DAC	14326701	13
Caelo	Base cream DAC	13051503	1
Caelo	Base cream DAC	15184101	3
Caelo	Base cream DAC	15184301	8
Caelo	Base cream DAC	16101301	5
Caelo	Base cream DAC	16136101	1
Caelo	Base cream DAC	16205601	1
Caelo	Base cream DAC	16207001	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15031805	1
Caelo	Base cream DAC	18232801	5
Caelo	Base cream DAC	11278701	1
Caelo	Base cream DAC	11296301	1
Caelo	Base cream DAC	11295801	2
Caelo	Base cream DAC	11279401	1
Caelo	Base cream DAC	11296601	1
Caelo	Base cream DAC	11087101	1
Caelo	Base cream DAC	11206201	2
Caelo	Base cream DAC	11297001	1
Caelo	Base cream DAC	1202001	2
Caelo	Base cream DAC	11330201	1
Caelo	Base cream DAC	1004211309	1
Caelo	Base cream DAC	11330301	1
Caelo	Base cream DAC	12000401	1
Caelo	Base cream DAC	11330601	1
Caelo	Base cream DAC	12000501	3
Caelo	Base cream DAC	12005501	4
Caelo	Base cream DAC	12005201	2
Caelo	Base cream DAC	26061204	1
Caelo	Base cream DAC	12004901	2
Caelo	Base cream DAC	12071202	1
Caelo	Base cream DAC	12062701	2
Caelo	Base cream DAC	12062801	2
Caelo	Base cream DAC	12005701	6
Caelo	Base cream DAC	12159401	2
Caelo	Base cream DAC	11297201	9
Caelo	Base cream DAC	12174901	1
Caelo	Base cream DAC	1205007-01	2
Caelo	Base cream DAC	12159301	1
Caelo	Base cream DAC	31081205	1
Caelo	Base cream DAC	12174801	3
Caelo	Base cream DAC	1109211309	1
Caelo	Base cream DAC	12175001	5
Caelo	Base cream DAC	12178301	4
Caelo	Base cream DAC	12101203	1
Caelo	Base cream DAC	12159201	1
Caelo	Base cream DAC	12111202	1
Caelo	Base cream DAC	12245101	2
Caelo	Base cream DAC	12249401	2
Caelo	Base cream DAC	12175201	2
Caelo	Base cream DAC	12249501	2
Caelo	Base cream DAC	12262402	3
Caelo	Base cream DAC	30111201	1
Caelo	Base cream DAC	12262801	6
Caelo	Base cream DAC	12192101	1
Caelo	Base cream DAC	12191902	1
Caelo	Base cream DAC	1226290	1
Caelo	Base cream DAC	12263001	1
Caelo	Base cream DAC	4512Q-01309	1
Caelo	Base cream DAC	12263301	3
Caelo	Base cream DAC	8011302	1
Caelo	Base cream DAC	12289701	4
Caelo	Base cream DAC	213M-01309	1
Caelo	Base cream DAC	12263201	6
Caelo	Base cream DAC	272084	2
Caelo	Base cream DAC	5012Q-01309	1
Caelo	Base cream DAC	12191901	14
Caelo	Base cream DAC	1230901	1
Caelo	Base cream DAC	2901311309	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	12339001	2
Caelo	Base cream DAC	513Q-01309	1
Caelo	Base cream DAC	12343801	5
Caelo	Base cream DAC	12304701	9
Caelo	Base cream DAC	713I-01309	1
Caelo	Base cream DAC	19021304	1
Caelo	Base cream DAC	12347301	5
Caelo	Base cream DAC	12347201	1
Caelo	Base cream DAC	12304801	12
Caelo	Base cream DAC	913I-01309	1
Caelo	Base cream DAC	12304901	3
Caelo	Base cream DAC	1013Q-01309	2
Caelo	Base cream DAC	12305001	5
Caelo	Base cream DAC	12339301	4
Caelo	Base cream DAC	13012301	2
Caelo	Base cream DAC	1213M-01309	1
Caelo	Base cream DAC	275591	1
Caelo	Base cream DAC	22031303	1
Caelo	Base cream DAC	13000601	1
Caelo	Base cream DAC	12305101	1
Caelo	Base cream DAC	13012501	3
Caelo	Base cream DAC	130000601	1
Caelo	Base cream DAC	13007201	3
Caelo	Base cream DAC	13017201	4
Caelo	Base cream DAC	22041306	1
Caelo	Base cream DAC	13115901	2
Caelo	Base cream DAC	13083101	3
Caelo	Base cream DAC	2213V01309	1
Caelo	Base cream DAC	1061303	1
Caelo	Base cream DAC	13115601	8
Caelo	Base cream DAC	132011-01	1
Caelo	Base cream DAC	13119901	1
Caelo	Base cream DAC	13111101	3
Caelo	Base cream DAC	13111301	5
Caelo	Base cream DAC	13116001	2
Caelo	Base cream DAC	17061305	1
Caelo	Base cream DAC	13017101	1
Caelo	Base cream DAC	12116001	1
Caelo	Base cream DAC	13120201	5
Caelo	Base cream DAC	13139801	5
Caelo	Base cream DAC	1239201	1
Caelo	Base cream DAC	13120101	5
Caelo	Base cream DAC	1306002-01	1
Caelo	Base cream DAC	13158440	1
Caelo	Base cream DAC	160704	1
Caelo	Base cream DAC	13173601	14
Caelo	Base cream DAC	13158801	2
Caelo	Base cream DAC	13E21-T08-003906	2
Caelo	Base cream DAC	13188101	3
Caelo	Base cream DAC	1387801	1
Caelo	Base cream DAC	1081302	1
Caelo	Base cream DAC	13173701	4
Caelo	Base cream DAC	2025-T05	1
Caelo	Base cream DAC	13158401	1
Caelo	Base cream DAC	5091308	1
Caelo	Base cream DAC	16B290713	1
Caelo	Base cream DAC	13198601	8
Caelo	Base cream DAC	12384002	2
Caelo	Base cream DAC	24091301	1
Caelo	Base cream DAC	13198701	10

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	280913B	1
Caelo	Base cream DAC	13198801	19
Caelo	Base cream DAC	1318701	1
Caelo	Base cream DAC	13199001	11
Caelo	Base cream DAC	13198901	7
Caelo	Base cream DAC	11101302	1
Caelo	Base cream DAC	19101302	1
Caelo	Base cream DAC	13188801	2
Caelo	Base cream DAC	13249901	2
Caelo	Base cream DAC	13E21-T06-003900	1
Caelo	Base cream DAC	8111302	1
Caelo	Base cream DAC	13249702	3
Caelo	Base cream DAC	1319901	2
Caelo	Base cream DAC	3121302	1
Caelo	Base cream DAC	13311401	9
Caelo	Base cream DAC	13312301	4
Caelo	Base cream DAC	CH5490000	1
Caelo	Base cream DAC	13347101	17
Caelo	Base cream DAC	13311801	7
Caelo	Base cream DAC	13311606	1
Caelo	Base cream DAC	11011405	1
Caelo	Base cream DAC	13311901	5
Caelo	Base cream DAC	13311502	3
Caelo	Base cream DAC	13347201	6
Caelo	Base cream DAC	13377201	11
Caelo	Base cream DAC	25011401	1
Caelo	Base cream DAC	130704501	1
Caelo	Base cream DAC	13378201	7
Caelo	Base cream DAC	13378101	6
Caelo	Base cream DAC	13378001	9
Caelo	Base cream DAC	25021402	1
Caelo	Base cream DAC	13H14-T01-006203	2
Caelo	Base cream DAC	13386201	5
Caelo	Base cream DAC	13384901	10
Caelo	Base cream DAC	13812013	1
Caelo	Base cream DAC	13386001	7
Caelo	Base cream DAC	13386101	2
Caelo	Base cream DAC	14035901	3
Caelo	Base cream DAC	13381101	2
Caelo	Base cream DAC	31031405	1
Caelo	Base cream DAC	14053701	7
Caelo	Base cream DAC	14036201	11
Caelo	Base cream DAC	13E22-T08-003987	1
Caelo	Base cream DAC	23041403	1
Caelo	Base cream DAC	131100701	1
Caelo	Base cream DAC	14091401	3
Caelo	Base cream DAC	14090601	9
Caelo	Base cream DAC	14053201	1
Caelo	Base cream DAC	14144001	4
Caelo	Base cream DAC	14092001	6
Caelo	Base cream DAC	16061402	1
Caelo	Base cream DAC	14144201	3
Caelo	Base cream DAC	14091601	7
Caelo	Base cream DAC	15071405	1
Caelo	Base cream DAC	14151001	7
Caelo	Base cream DAC	14144202	1
Caelo	Base cream DAC	1312001-01	1
Caelo	Base cream DAC	14151601	8
Caelo	Base cream DAC	14151901	3
Caelo	Base cream DAC	21081407	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	14178201	14
Caelo	Base cream DAC	14177801	2
Caelo	Base cream DAC	14177501	8
Caelo	Base cream DAC	26091405	1
Caelo	Base cream DAC	14D08T04-011692	1
Caelo	Base cream DAC	14263601	3
Caelo	Base cream DAC	14303501	3
Caelo	Base cream DAC	14325501	1
Caelo	Base cream DAC	14368101	4
Caelo	Base cream DAC	15166601	4
Caelo	Base cream DAC	14325201	1
Caelo	Base cream DAC	15190901	3
Caelo	Base cream DAC	15272402	7
Caelo	Base cream DAC	15190501	1
Caelo	Base cream DAC	15313501	1
Caelo	Base cream DAC	16101201	11
Caelo	Base cream DAC	16059201	4
Caelo	Base cream DAC	6002237003	1
Caelo	Base cream DAC	16232601	5
Caelo	Base cream DAC	23091703	1
Caelo	Base cream DAC	1409041	1
Caelo	Base cream DAC	1415001	1
Caelo	Base cream DAC	287876	1
Caelo	Base cream DAC	1417780	1
Caelo	Base cream DAC	14223201	11
Caelo	Base cream DAC	14223001	1
Caelo	Base cream DAC	14238301	5
Caelo	Base cream DAC	14227901	4
Caelo	Base cream DAC	14263301	5
Caelo	Base cream DAC	14232301	4
Caelo	Base cream DAC	14238401	2
Caelo	Base cream DAC	14289601	5
Caelo	Base cream DAC	14263201	2
Caelo	Base cream DAC	1426331	1
Caelo	Base cream DAC	1423101	1
Caelo	Base cream DAC	2121403	1
Caelo	Base cream DAC	14289701	6
Caelo	Base cream DAC	14303301	3
Caelo	Base cream DAC	14289801	11
Caelo	Base cream DAC	14289901	9
Caelo	Base cream DAC	14327101	3
Caelo	Base cream DAC	14327001	7
Caelo	Base cream DAC	14011515	1
Caelo	Base cream DAC	14303901	14
Caelo	Base cream DAC	14303801	8
Caelo	Base cream DAC	14327901	7
Caelo	Base cream DAC	140705401	1
Caelo	Base cream DAC	14f05-t07-012965	1
Caelo	Base cream DAC	14232001	6
Caelo	Base cream DAC	14327401	3
Caelo	Base cream DAC	14326901	5
Caelo	Base cream DAC	20021503	1
Caelo	Base cream DAC	14325801	2
Caelo	Base cream DAC	15000801	4
Caelo	Base cream DAC	14368201	4
Caelo	Base cream DAC	14327801	2
Caelo	Base cream DAC	14327601	3
Caelo	Base cream DAC	15040701	9
Caelo	Base cream DAC	31031506	1
Caelo	Base cream DAC	15040901	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	1401020-01	1
Caelo	Base cream DAC	14374401	2
Caelo	Base cream DAC	15064401	7
Caelo	Base cream DAC	14274601	1
Caelo	Base cream DAC	15064501	4
Caelo	Base cream DAC	15064601	2
Caelo	Base cream DAC	15083001	1
Caelo	Base cream DAC	15070201	9
Caelo	Base cream DAC	14325901	1
Caelo	Base cream DAC	15164601	7
Caelo	Base cream DAC	180615010	1
Caelo	Base cream DAC	23061506	1
Caelo	Base cream DAC	15083201	1
Caelo	Base cream DAC	15164701	11
Caelo	Base cream DAC	15164301	1
Caelo	Base cream DAC	15166801	7
Caelo	Base cream DAC	15184001	4
Caelo	Base cream DAC	15173301	1
Caelo	Base cream DAC	15191202	8
Caelo	Base cream DAC	151191001	1
Caelo	Base cream DAC	15190701	1
Caelo	Base cream DAC	1513301	1
Caelo	Base cream DAC	19081503	1
Caelo	Base cream DAC	15250801	7
Caelo	Base cream DAC	15250201	6
Caelo	Base cream DAC	15250701	3
Caelo	Base cream DAC	15191201	1
Caelo	Base cream DAC	1520601	1
Caelo	Base cream DAC	15242001	12
Caelo	Base cream DAC	15315401	7
Caelo	Base cream DAC	15357801	6
Caelo	Base cream DAC	15357601	17
Caelo	Base cream DAC	1502027-01	1
Caelo	Base cream DAC	1509021-01	1
Caelo	Base cream DAC	15391001	5
Caelo	Base cream DAC	26011602	1
Caelo	Base cream DAC	15390801	9
Caelo	Base cream DAC	153868	1
Caelo	Base cream DAC	298259	2
Caelo	Base cream DAC	1518901	2
Caelo	Base cream DAC	170216Vi4	1
Caelo	Base cream DAC	16005201	3
Caelo	Base cream DAC	15420001	12
Caelo	Base cream DAC	1587201	1
Caelo	Base cream DAC	15J13-T03-026895	1
Caelo	Base cream DAC	16005401	4
Caelo	Base cream DAC	16055701	11
Caelo	Base cream DAC	testmessung	1
Caelo	Base cream DAC	16005501	5
Caelo	Base cream DAC	1507018-01	1
Caelo	Base cream DAC	298260	1
Caelo	Base cream DAC	15420101	2
Caelo	Base cream DAC	80316-250-376	1
Caelo	Base cream DAC	16055501	3
Caelo	Base cream DAC	16041301	3
Caelo	Base cream DAC	16097601	5
Caelo	Base cream DAC	16101901	7
Caelo	Base cream DAC	16102001	1
Caelo	Base cream DAC	16103901	11
Caelo	Base cream DAC	16103801	12

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	160592	1
Caelo	Base cream DAC	16102201	7
Caelo	Base cream DAC	16055601	3
Caelo	Base cream DAC	160976012	1
Caelo	Base cream DAC	16131501	7
Caelo	Base cream DAC	16134901	4
Caelo	Base cream DAC	16136301	9
Caelo	Base cream DAC	16134701	10
Caelo	Base cream DAC	16136201	6
Caelo	Base cream DAC	16135201	4
Caelo	Base cream DAC	16135801	2
Caelo	Base cream DAC	16145801	10
Caelo	Base cream DAC	301743	2
Caelo	Base cream DAC	16D06-T10-031951	1
Caelo	Base cream DAC	16145701	11
Caelo	Base cream DAC	16135001	19
Caelo	Base cream DAC	16149901	14
Caelo	Base cream DAC	16C24-To5-031490	1
Caelo	Base cream DAC	16205501	3
Caelo	Base cream DAC	16203301	3
Caelo	Base cream DAC	16815-T05-030285	1
Caelo	Base cream DAC	29220416	6
Caelo	Base cream DAC	16227101	10
Caelo	Base cream DAC	16220401	15
Caelo	Base cream DAC	16155401	4
Caelo	Base cream DAC	(2x) 16005101	1
Caelo	Base cream DAC	16206801	8
Caelo	Base cream DAC	16227201	3
Caelo	Base cream DAC	16232102	3
Caelo	Base cream DAC	16219501	3
Caelo	Base cream DAC	16219401	1
Caelo	Base cream DAC	16152101	2
Caelo	Base cream DAC	16214801	12
Caelo	Base cream DAC	303419	1
Caelo	Base cream DAC	160809B	1
Caelo	Base cream DAC	16240301	4
Caelo	Base cream DAC	16220601	1
Caelo	Base cream DAC	1652101	1
Caelo	Base cream DAC	16220501	2
Caelo	Base cream DAC	16231901	7
Caelo	Base cream DAC	16232201	2
Caelo	Base cream DAC	16242001	7
Caelo	Base cream DAC	16232501	2
Caelo	Base cream DAC	161111B/16155601	1
Caelo	Base cream DAC	19H04T08	1
Caelo	Base cream DAC	1623801	1
Caelo	Base cream DAC	303421	1
Caelo	Base cream DAC	16241701	1
Caelo	Base cream DAC	162070	1
Caelo	Base cream DAC	16253101	3
Caelo	Base cream DAC	16241601	5
Caelo	Base cream DAC	16249801	7
Caelo	Base cream DAC	16253501	6
Caelo	Base cream DAC	16260901	6
Caelo	Base cream DAC	16260801	10
Caelo	Base cream DAC	16232801	1
Caelo	Base cream DAC	16261101	12
Caelo	Base cream DAC	16261801	4
Caelo	Base cream DAC	16262301	1
Caelo	Base cream DAC	16319601	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16325801	9
Caelo	Base cream DAC	20011701	1
Caelo	Base cream DAC	304352	1
Caelo	Base cream DAC	16318701	6
Caelo	Base cream DAC	16329101	2
Caelo	Base cream DAC	166349502	1
Caelo	Base cream DAC	16360201	1
Caelo	Base cream DAC	16329201	4
Caelo	Base cream DAC	17003201	4
Caelo	Base cream DAC	17003401	11
Caelo	Base cream DAC	273416352701	1
Caelo	Base cream DAC	17010201	4
Caelo	Base cream DAC	16352901	3
Caelo	Base cream DAC	17003501	6
Caelo	Base cream DAC	16352801	1
Caelo	Base cream DAC	17014401	5
Caelo	Base cream DAC	16281101	1
Caelo	Base cream DAC	17014601	5
Caelo	Base cream DAC	163505	1
Caelo	Base cream DAC	16319301	4
Caelo	Base cream DAC	17003301	2
Caelo	Base cream DAC	17023401	5
Caelo	Base cream DAC	17019601	5
Caelo	Base cream DAC	17031901	1
Caelo	Base cream DAC	17019301	1
Caelo	Base cream DAC	17029301	2
Caelo	Base cream DAC	17023501	10
Caelo	Base cream DAC	306619	1
Caelo	Base cream DAC	17029201	4
Caelo	Base cream DAC	126328901	1
Caelo	Base cream DAC	17000102	4
Caelo	Base cream DAC	17035901	2
Caelo	Base cream DAC	5x17031501	1
Caelo	Base cream DAC	17035701	2
Caelo	Base cream DAC	17089701	2
Caelo	Base cream DAC	17090502	2
Caelo	Base cream DAC	17097101	9
Caelo	Base cream DAC	17100401	10
Caelo	Base cream DAC	17100501	10
Caelo	Base cream DAC	17103701	4
Caelo	Base cream DAC	17104001	10
Caelo	Base cream DAC	170909015284	1
Caelo	Base cream DAC	17094601	1
Caelo	Base cream DAC	17108201	3
Caelo	Base cream DAC	17023601	1
Caelo	Base cream DAC	17094501	1
Caelo	Base cream DAC	17A03-T07-040044	1
Caelo	Base cream DAC	17116701	17
Caelo	Base cream DAC	17124001	10
Caelo	Base cream DAC	17121501	7
Caelo	Base cream DAC	17116901	8
Caelo	Base cream DAC	17129901	9
Caelo	Base cream DAC	17103901	3
Caelo	Base cream DAC	17116801	1
Caelo	Base cream DAC	17133603	1
Caelo	Base cream DAC	17117002	3
Caelo	Base cream DAC	17147401	4
Caelo	Base cream DAC	17133602	3
Caelo	Base cream DAC	3811016	1
Caelo	Base cream DAC	171476015345	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	17153701	5
Caelo	Base cream DAC	86490517	4
Caelo	Base cream DAC	17153901	2
Caelo	Base cream DAC	17155101	7
Caelo	Base cream DAC	17225002	6
Caelo	Base cream DAC	17225601	7
Caelo	Base cream DAC	731/1	2
Caelo	Base cream DAC	171552015374	1
Caelo	Base cream DAC	17154201	3
Caelo	Base cream DAC	17232401	1
Caelo	Base cream DAC	17239901	14
Caelo	Base cream DAC	1722501	1
Caelo	Base cream DAC	17229201	3
Caelo	Base cream DAC	86450517	1
Caelo	Base cream DAC	1755701	1
Caelo	Base cream DAC	17240301	5
Caelo	Base cream DAC	17230001	11
Caelo	Base cream DAC	28111708	1
Caelo	Base cream DAC	27111703	1
Caelo	Base cream DAC	17229801	4
Caelo	Base cream DAC	1734041	1
Caelo	Base cream DAC	27300917	1
Caelo	Base cream DAC	17240201	1
Caelo	Base cream DAC	17243501	6
Caelo	Base cream DAC	1753501	1
Caelo	Base cream DAC	17229501	3
Caelo	Base cream DAC	86460517	1
Caelo	Base cream DAC	17251501	4
Caelo	Base cream DAC	17266501	11
Caelo	Base cream DAC	17H25-T06-047736	3
Caelo	Base cream DAC	17240501	1
Caelo	Base cream DAC	13011808	1
Caelo	Base cream DAC	17239915453	1
Caelo	Base cream DAC	17267001	9
Caelo	Base cream DAC	17267301	11
Caelo	Base cream DAC	16349501	1
Caelo	Base cream DAC	8002875008	2
Caelo	Base cream DAC	17264701	5
Caelo	Base cream DAC	17230101	3
Caelo	Base cream DAC	17265701	1
Caelo	Base cream DAC	17090501	5
Caelo	Base cream DAC	17264501	4
Caelo	Base cream DAC	17267201	5
Caelo	Base cream DAC	17000909	1
Caelo	Base cream DAC	17264301	5
Caelo	Base cream DAC	17266901	6
Caelo	Base cream DAC	17268701	2
Caelo	Base cream DAC	172668001	1
Caelo	Base cream DAC	1726601	1
Caelo	Base cream DAC	172668015477	1
Caelo	Base cream DAC	69520118	1
Caelo	Base cream DAC	17345801	7
Caelo	Base cream DAC	17267701	4
Caelo	Base cream DAC	17269201	4
Caelo	Base cream DAC	17267801	4
Caelo	Base cream DAC	17349801	5
Caelo	Base cream DAC	17269001	4
Caelo	Base cream DAC	18037301	2
Caelo	Base cream DAC	16041802	1
Caelo	Base cream DAC	18081701	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	17352001	9
Caelo	Base cream DAC	18001401	10
Caelo	Base cream DAC	18055601	4
Caelo	Base cream DAC	17349802	1
Caelo	Base cream DAC	18091101	4
Caelo	Base cream DAC	17000923	1
Caelo	Base cream DAC	18081601	2
Caelo	Base cream DAC	107805-815	1
Caelo	Base cream DAC	18015301	7
Caelo	Base cream DAC	18091202	6
Caelo	Base cream DAC	18104701	1
Caelo	Base cream DAC	18081702	6
Caelo	Base cream DAC	8061802	1
Caelo	Base cream DAC	18105201	6
Caelo	Base cream DAC	18129301	6
Caelo	Base cream DAC	18104901	2
Caelo	Base cream DAC	18126301	7
Caelo	Base cream DAC	18105301	4
Caelo	Base cream DAC	7071803	1
Caelo	Base cream DAC	18081602	6
Caelo	Base cream DAC	8003325004	1
Caelo	Base cream DAC	18138201	6
Caelo	Base cream DAC	18105501	5
Caelo	Base cream DAC	7560418	2
Caelo	Base cream DAC	11081803	1
Caelo	Base cream DAC	18137001	8
Caelo	Base cream DAC	18137501	1
Caelo	Base cream DAC	18165301	12
Caelo	Base cream DAC	18003107	1
Caelo	Base cream DAC	8091808	1
Caelo	Base cream DAC	18165601	14
Caelo	Base cream DAC	22091802	1
Caelo	Base cream DAC	18126401	4
Caelo	Base cream DAC	18001971	1
Caelo	Base cream DAC	18166101	8
Caelo	Base cream DAC	18166501	11
Caelo	Base cream DAC	18165701	7
Caelo	Base cream DAC	18137101	3
Caelo	Base cream DAC	18167001	5
Caelo	Base cream DAC	18166301	3
Caelo	Base cream DAC	18167101	4
Caelo	Base cream DAC	18192501	9
Caelo	Base cream DAC	28111811	1
Caelo	Base cream DAC	18193201	8
Caelo	Base cream DAC	18166201	6
Caelo	Base cream DAC	18193301	6
Caelo	Base cream DAC	18192901	4
Caelo	Base cream DAC	19011902	1
Caelo	Base cream DAC	18232601	4
Caelo	Base cream DAC	18006772	1
Caelo	Base cream DAC	18232701	6
Caelo	Base cream DAC	18269201	5
Caelo	Base cream DAC	18269501	7
Caelo	Base cream DAC	18270601	1
Caelo	Base cream DAC	18270701	6
Caelo	Base cream DAC	18269401	4
Caelo	Base cream DAC	18270801	2
Caelo	Base cream DAC	18270901	8
Caelo	Base cream DAC	18272201	6
Caelo	Base cream DAC	18270501	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	19003601	2
Caelo	Base cream DAC	19020201	6
Caelo	Base cream DAC	19052501	2
Caelo	Base cream DAC	19052301	1
Caelo	Base cream DAC	19052801	1
Caelo	Base cream DAC	19117401	4
Caelo	Base cream DAC	19117501	3
Caelo	Base cream DAC	19117801	2
Caelo	Base cream DAC	19148001	1
Caelo	Base cream DAC	1501052-01	1
Caelo	Base cream DAC	15250601	2
Caelo	Base cream DAC	294834	1
Caelo	Base cream DAC	15250902	14
Caelo	Base cream DAC	296229	1
Caelo	Base cream DAC	1601023-01	1
Caelo	Base cream DAC	16232701	1
Caelo	Base cream DAC	25021701	1
Caelo	Base cream DAC	17041702	1
Caelo	Base cream DAC	3061701	1
Caelo	Base cream DAC	30061713	1
Caelo	Base cream DAC	3081702	1
Caelo	Base cream DAC	16237901	5
Caelo	Base cream DAC	18105402	11
Caelo	Base cream DAC	45348616	1
Caelo	Base cream DAC	12005401	1
Caelo	Base cream DAC	13125001	4
Caelo	Base cream DAC	310756	1
Caelo	Base cream DAC	18015101	7
Caelo	Base cream DAC	13187901	9
Caelo	Base cream DAC	14151501	10
Caelo	Base cream DAC	6003682015	1
Caelo	Base cream DAC	17097401	4
Caelo	Base cream DAC	306615	1
Caelo	Base cream DAC	18006774	2
Caelo	Base cream DAC	100(18166401)	1
Caelo	Base cream DAC	101(18166602)	1
Caelo	Base cream DAC	16350301	6
Caelo	Base cream DAC	13A09-T10-232	2
Caelo	Base cream DAC	13377901	5
Caelo	Base cream DAC	14143901	6
Caelo	Base cream DAC	15315301	9
Caelo	Base cream DAC	16136001	4
Caelo	Base cream DAC	16152401	5
Caelo	Base cream DAC	17225201	8
Caelo	Base cream DAC	18137301	8
Caelo	Base cream DAC	18104801	1
Caelo	Base cream DAC	18165101	1
Caelo	Base cream DAC	18271101	3
Caelo	Base cream DAC	15250301	9
Caelo	Base cream DAC	17266601-20180206Ma1	1
Caelo	Base cream DAC	15040601	9
Caelo	Base cream DAC	18269801	8
Caelo	Base cream DAC	19003502	1
Caelo	Base cream DAC	12339201	9
Caelo	Base cream DAC	13007001	5
Caelo	Base cream DAC	1301681	1
Caelo	Base cream DAC	14053002	2
Caelo	Base cream DAC	14090401	8
Caelo	Base cream DAC	14177701	2
Caelo	Base cream DAC	14263401	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15272201	16
Caelo	Base cream DAC	15419901	8
Caelo	Base cream DAC	16058801	16
Caelo	Base cream DAC	16238301	11
Caelo	Base cream DAC	17023301	9
Caelo	Base cream DAC	17097301	4
Caelo	Base cream DAC	170824CB/17136501	1
Caelo	Base cream DAC	17000912	1
Caelo	Base cream DAC	19053001	1
Caelo	Base cream DAC	15306601	3
Caelo	Base cream DAC	15387101	7
Caelo	Base cream DAC	16240701	8
Caelo	Base cream DAC	17263901	4
Caelo	Base cream DAC	18137801	12
Caelo	Base cream DAC	19003401	2
Caelo	Base cream DAC	13312401	2
Caelo	Base cream DAC	55850317	1
Caelo	Base cream DAC	13249701	8
Caelo	Base cream DAC	17006701	2
Caelo	Base cream DAC	305735	1
Caelo	Base cream DAC	307964	2
Caelo	Base cream DAC	17147301	9
Caelo	Base cream DAC	17229301	7
Caelo	Base cream DAC	8003325005	1
Caelo	Base cream DAC	18037402	1
Caelo	Base cream DAC	18105101	2
Caelo	Base cream DAC	19153601	1
Caelo	Base cream DAC	15004001	5
Caelo	Base cream DAC	12061701	1
Caelo	Base cream DAC	14368001	8
Caelo	Base cream DAC	14327301	2
Caelo	Base cream DAC	16261501	4
Caelo	Base cream DAC	17019501	5
Caelo	Base cream DAC	17147501	5
Caelo	Base cream DAC	17154501	2
Caelo	Base cream DAC	17147601	1
Caelo	Base cream DAC	17243601	11
Caelo	Base cream DAC	18137201	7
Caelo	Base cream DAC	18138101	9
Caelo	Base cream DAC	18138401	7
Caelo	Base cream DAC	19052601	3
Caelo	Base cream DAC	12062001	1
Caelo	Base cream DAC	12249701	1
Caelo	Base cream DAC	13000501	1
Caelo	Base cream DAC	13111401	2
Caelo	Base cream DAC	14178001	6
Caelo	Base cream DAC	50205/1Gra	1
Caelo	Base cream DAC	13385301	4
Caelo	Base cream DAC	14090701	7
Caelo	Base cream DAC	12168201	1
Caelo	Base cream DAC	12240801	1
Caelo	Base cream DAC	12262501	5
Caelo	Base cream DAC	12245201	1
Caelo	Base cream DAC	14143801	7
Caelo	Base cream DAC	14290001	6
Caelo	Base cream DAC	15420001/20160309/4	1
Caelo	Base cream DAC	15166901	3
Caelo	Base cream DAC	15420201	9
Caelo	Base cream DAC	16055901	6
Caelo	Base cream DAC	12263101	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	160102801	1
Caelo	Base cream DAC	12062901	1
Caelo	Base cream DAC	13000701	2
Caelo	Base cream DAC	18071302	1
Caelo	Base cream DAC	17240101	1
Caelo	Base cream DAC	15191102	5
Caelo	Base cream DAC	16232401	3
Caelo	Base cream DAC	14232101	5
Caelo	Base cream DAC	14227701	4
Caelo	Base cream DAC	12159601	5
Caelo	Base cream DAC	12240901	3
Caelo	Base cream DAC	13125101	2
Caelo	Base cream DAC	1319702	1
Caelo	Base cream DAC	13198301	4
Caelo	Base cream DAC	15191301	2
Caelo	Base cream DAC	13139702	10
Caelo	Base cream DAC	5537000	2
Caelo	Base cream DAC	18137201-20180830Ma5	1
Caelo	Base cream DAC	303058	1
Caelo	Base cream DAC	15250001	4
Caelo	Base cream DAC	14178401	5
Caelo	Base cream DAC	14232201	10
Caelo	Base cream DAC	16158401	9
Caelo	Base cream DAC	16152201	11
Caelo	Base cream DAC	17009801	3
Caelo	Base cream DAC	16059101	2
Caelo	Base cream DAC	102(18192701)	1
Caelo	Base cream DAC	103(18193201)	1
Caelo	Base cream DAC	104(18232501)	1
Caelo	Base cream DAC	106(18272301)	1
Caelo	Base cream DAC	305732	1
Caelo	Base cream DAC	308795	3
Caelo	Base cream DAC	18003937	1
Caelo	Base cream DAC	16150101	5
Caelo	Base cream DAC	1709501	1
Caelo	Base cream DAC	18232901	5
Caelo	Base cream DAC	12168301	1
Caelo	Base cream DAC	16132001	10
Caelo	Base cream DAC	17097001	12
Caelo	Base cream DAC	17263801	6
Caelo	Base cream DAC	17264401	3
Caelo	Base cream DAC	15000701	2
Caelo	Base cream DAC	13187801	11
Caelo	Base cream DAC	108(19052501)	1
Caelo	Base cream DAC	18211701	7
Caelo	Base cream DAC	279963	1
Caelo	Base cream DAC	1604001-01	1
Caelo	Base cream DAC	16C24-T05-031490	3
Caelo	Base cream DAC	16c24-T05-031490	1
Caelo	Base cream DAC	1650201	1
Caelo	Base cream DAC	171128BC/17153802	1
Caelo	Base cream DAC	18105701	4
Caelo	Base cream DAC	15H04-T08-024987	1
Caelo	Base cream DAC	13188701	11
Caelo	Base cream DAC	19170601	4
Caelo	Base cream DAC	19170401	1
Caelo	Base cream DAC	19172301	2
Caelo	Base cream DAC	15357701	12
Caelo	Base cream DAC	13115801	4
Caelo	Base cream DAC	14036101	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15070101	10
Caelo	Base cream DAC	14053001	4
Caelo	Base cream DAC	16238001	1
Caelo	Base cream DAC	16241001	6
Caelo	Base cream DAC	16260701	11
Caelo	Base cream DAC	1620901	1
Caelo	Base cream DAC	6671116	1
Caelo	Base cream DAC	17267601	11
Caelo	Base cream DAC	13007301	2
Caelo	Base cream DAC	13310901	7
Caelo	Base cream DAC	14228001	1
Caelo	Base cream DAC	14290101	2
Caelo	Base cream DAC	15083101	1
Caelo	Base cream DAC	1542041	1
Caelo	Base cream DAC	1605801	1
Caelo	Base cream DAC	17000927	1
Caelo	Base cream DAC	18166801	3
Caelo	Base cream DAC	2991016	1
Caelo	Base cream DAC	16261602	4
Caelo	Base cream DAC	13017001	2
Caelo	Base cream DAC	5408000	1
Caelo	Base cream DAC	5909600	1
Caelo	Base cream DAC	161555601	1
Caelo	Base cream DAC	89(17229901)	1
Caelo	Base cream DAC	91(17251601)	1
Caelo	Base cream DAC	18269901	8
Caelo	Base cream DAC	19C19-T18-065187	2
Caelo	Base cream DAC	19000942	1
Caelo	Base cream DAC	5909300	1
Caelo	Base cream DAC	5909200	2
Caelo	Base cream DAC	17154901	13
Caelo	Base cream DAC	17265101	2
Caelo	Base cream DAC	14035801	1
Caelo	Base cream DAC	2x16261801	1
Caelo	Base cream DAC	18166901	2
Caelo	Base cream DAC	16150201	1
Caelo	Base cream DAC	15250101	9
Caelo	Base cream DAC	12262901	3
Caelo	Base cream DAC	5289100	1
Caelo	Base cream DAC	277111	1
Caelo	Base cream DAC	12344001	1
Caelo	Base cream DAC	13012401	10
Caelo	Base cream DAC	13140001	5
Caelo	Base cream DAC	5537500	2
Caelo	Base cream DAC	15000901	6
Caelo	Base cream DAC	14374501	3
Caelo	Base cream DAC	15173401	3
Caelo	Base cream DAC	15390601	2
Caelo	Base cream DAC	15390901	1
Caelo	Base cream DAC	16135101	1
Caelo	Base cream DAC	16220201	3
Caelo	Base cream DAC	17006501	12
Caelo	Base cream DAC	92(17266601)	1
Caelo	Base cream DAC	94(17269001)	1
Caelo	Base cream DAC	96(18037901)	1
Caelo	Base cream DAC	97(18138301)	1
Caelo	Base cream DAC	14227801	8
Caelo	Base cream DAC	1301023-01	1
Caelo	Base cream DAC	14328001	3
Caelo	Base cream DAC	1502016-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16232301	10
Caelo	Base cream DAC	17251601	12
Caelo	Base cream DAC	18001301	7
Caelo	Base cream DAC	14036001	2
Caelo	Base cream DAC	14177901	5
Caelo	Base cream DAC	16325901	1
Caelo	Base cream DAC	12192001	1
Caelo	Base cream DAC	12263401	4
Caelo	Base cream DAC	12305301	4
Caelo	Base cream DAC	12347101	2
Caelo	Base cream DAC	13000801	2
Caelo	Base cream DAC	13016901	3
Caelo	Base cream DAC	13173501	4
Caelo	Base cream DAC	3513I-01309	1
Caelo	Base cream DAC	13250001	8
Caelo	Base cream DAC	4913E01309	1
Caelo	Base cream DAC	13E23-T10-004023	1
Caelo	Base cream DAC	1214I01309	1
Caelo	Base cream DAC	14053601	4
Caelo	Base cream DAC	4121	1
Caelo	Base cream DAC	14053101	2
Caelo	Base cream DAC	1311009-01	1
Caelo	Base cream DAC	13K12-t07-008057	1
Caelo	Base cream DAC	13K12-T06-008054	2
Caelo	Base cream DAC	14090501	1
Caelo	Base cream DAC	412/2	1
Caelo	Base cream DAC	1307003-01	1
Caelo	Base cream DAC	14222801	2
Caelo	Base cream DAC	14325401	1
Caelo	Base cream DAC	14303401	1
Caelo	Base cream DAC	14325701	1
Caelo	Base cream DAC	15167001	14
Caelo	Base cream DAC	15191401	2
Caelo	Base cream DAC	15241901	3
Caelo	Base cream DAC	15390401	3
Caelo	Base cream DAC	15391201	6
Caelo	Base cream DAC	1140116	1
Caelo	Base cream DAC	16/078/B	1
Caelo	Base cream DAC	16101401	3
Caelo	Base cream DAC	16237801	2
Caelo	Base cream DAC	16207101	1
Caelo	Base cream DAC	16206902	1
Caelo	Base cream DAC	39210516	5
Caelo	Base cream DAC	16227001	3
Caelo	Base cream DAC	6003682012	1
Caelo	Base cream DAC	6003682014	1
Caelo	Base cream DAC	306620	1
Caelo	Base cream DAC	17103801	9
Caelo	Base cream DAC	1110517/16326001	1
Caelo	Base cream DAC	171003801	1
Caelo	Base cream DAC	1100717/17124001	1
Caelo	Base cream DAC	172294401	1
Caelo	Base cream DAC	17229901	4
Caelo	Base cream DAC	17264601	2
Caelo	Base cream DAC	17267101	4
Caelo	Base cream DAC	17267401	7
Caelo	Base cream DAC	17352201	10
Caelo	Base cream DAC	18016701	5
Caelo	Base cream DAC	18085202	6
Caelo	Base cream DAC	18166401	9

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	18137401	1
Caelo	Base cream DAC	181666501	1
Caelo	Base cream DAC	18137901	1
Caelo	Base cream DAC	18192601	8
Caelo	Base cream DAC	18232401	5
Caelo	Base cream DAC	18272301	4
Caelo	Base cream DAC	19117601	1
Caelo	Base cream DAC	19116801	4
Caelo	Base cream DAC	12005101	3
Caelo	Base cream DAC	12168101	2
Caelo	Base cream DAC	12178401	3
Caelo	Base cream DAC	12347401	5
Caelo	Base cream DAC	13111201	4
Caelo	Base cream DAC	13187701	2
Caelo	Base cream DAC	13199101	19
Caelo	Base cream DAC	13311301	11
Caelo	Base cream DAC	13347301	7
Caelo	Base cream DAC	2514U1309	1
Caelo	Base cream DAC	14144101	9
Caelo	Base cream DAC	14327501	6
Caelo	Base cream DAC	19003801	4
Caelo	Base cream DAC	16F30-T13-034789	1
Caelo	Base cream DAC	15040801	4
Caelo	Base cream DAC	171003101	1
Caelo	Base cream DAC	15306401	11
Caelo	Base cream DAC	2020216	2
Caelo	Base cream DAC	13385201	5
Caelo	Base cream DAC	17225901	5
Caelo	Base cream DAC	90(17229601)	1
Caelo	Base cream DAC	93(17266901)	1
Caelo	Base cream DAC	17268001	7
Caelo	Base cream DAC	173450801	1
Caelo	Base cream DAC	17269301	2
Caelo	Base cream DAC	95(18085202)	1
Caelo	Base cream DAC	18085201	4
Caelo	Base cream DAC	99(18126301)	1
Caelo	Base cream DAC	105(18269301)	1
Caelo	Base cream DAC	107(18269601)	1
Caelo	Base cream DAC	19051802	1
Caelo	Base cream DAC	109(19170501)	1
Caelo	Base cream DAC	110(19147901)	1
Caelo	Base cream DAC	18269001	9
Caelo	Base cream DAC	15041001	7
Caelo	Base cream DAC	16005101	12
Caelo	Base cream DAC	16205801	9
Caelo	Base cream DAC	17028901	5
Caelo	Base cream DAC	18G13-T09-058073	2
Caelo	Base cream DAC	12063001	2
Caelo	Base cream DAC	1539101	1
Caelo	Base cream DAC	17010001	1
Caelo	Base cream DAC	13312001	6
Caelo	Base cream DAC	13082203	7
Caelo	Base cream DAC	16261401	5
Caelo	Base cream DAC	1401025-01	1
Caelo	Base cream DAC	12167901	12
Caelo	Base cream DAC	12241001	5
Caelo	Base cream DAC	131203801	1
Caelo	Base cream DAC	17153501	4
Caelo	Base cream DAC	11279301	3
Caelo	Base cream DAC	11330101	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	12062601	1
Caelo	Base cream DAC	5490100	1
Caelo	Base cream DAC	13381201	7
Caelo	Base cream DAC	1338091	1
Caelo	Base cream DAC	1334701	1
Caelo	Base cream DAC	190814A	1
Caelo	Base cream DAC	14238501	2
Caelo	Base cream DAC	15064301	7
Caelo	Base cream DAC	1346001	2
Caelo	Base cream DAC	15390501	3
Caelo	Base cream DAC	1511001-01	1
Caelo	Base cream DAC	1510030-01	1
Caelo	Base cream DAC	16041001	4
Caelo	Base cream DAC	16091901	5
Caelo	Base cream DAC	1603037-01	1
Caelo	Base cream DAC	16128901	3
Caelo	Base cream DAC	16132101	14
Caelo	Base cream DAC	16132201	2
Caelo	Base cream DAC	1603015-01	1
Caelo	Base cream DAC	16135701	4
Caelo	Base cream DAC	16155701	2
Caelo	Base cream DAC	16155601	7
Caelo	Base cream DAC	45380616	5
Caelo	Base cream DAC	45340616	1
Caelo	Base cream DAC	16240601	3
Caelo	Base cream DAC	16261002	3
Caelo	Base cream DAC	16260501	2
Caelo	Base cream DAC	6002237005	1
Caelo	Base cream DAC	16326001	15
Caelo	Base cream DAC	16350101	5
Caelo	Base cream DAC	16352701	11
Caelo	Base cream DAC	16319401	1
Caelo	Base cream DAC	17009902	7
Caelo	Base cream DAC	17031501	8
Caelo	Base cream DAC	17031801	2
Caelo	Base cream DAC	17029101	2
Caelo	Base cream DAC	17031701	1
Caelo	Base cream DAC	109647	1
Caelo	Base cream DAC	17108101	3
Caelo	Base cream DAC	17079201	1
Caelo	Base cream DAC	17116902	4
Caelo	Base cream DAC	170729185	1
Caelo	Base cream DAC	17155701	14
Caelo	Base cream DAC	17154701	4
Caelo	Base cream DAC	170928B/17155101	1
Caelo	Base cream DAC	17155601	5
Caelo	Base cream DAC	171114BC/17153802	1
Caelo	Base cream DAC	3011016	1
Caelo	Base cream DAC	17266301	4
Caelo	Base cream DAC	17264001	2
Caelo	Base cream DAC	17266601	9
Caelo	Base cream DAC	17153401	1
Caelo	Base cream DAC	39630217	1
Caelo	Base cream DAC	17243301	2
Caelo	Base cream DAC	17264201	1
Caelo	Base cream DAC	17266401	10
Caelo	Base cream DAC	17268801	4
Caelo	Base cream DAC	17349601	1
Caelo	Base cream DAC	17268901	2
Caelo	Base cream DAC	17H25-T11-047756	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	18033702	4
Caelo	Base cream DAC	29860117	2
Caelo	Base cream DAC	18055602	1
Caelo	Base cream DAC	18105001	7
Caelo	Base cream DAC	273717268701	1
Caelo	Base cream DAC	1805201	1
Caelo	Base cream DAC	18037901	1
Caelo	Base cream DAC	18137702	3
Caelo	Base cream DAC	18E23-T15-056314	2
Caelo	Base cream DAC	15690518	1
Caelo	Base cream DAC	18005746	1
Caelo	Base cream DAC	18192801	1
Caelo	Base cream DAC	18270101	1
Caelo	Base cream DAC	18271001	2
Caelo	Base cream DAC	19020001	3
Caelo	Base cream DAC	15391101	2
Caelo	Base cream DAC	15390701	1
Caelo	Base cream DAC	16226901	1
Caelo	Base cream DAC	16241707	1
Caelo	Base cream DAC	16319701	2
Fagron	Base cream DAC	18166901	1
Caelo	Base cream DAC	13082101	10
Caelo	Base cream DAC	13H14T05-006551	1
Caelo	Base cream DAC	640/3	1
Caelo	Base cream DAC	731/4	3
Caelo	Base cream DAC	4113E-01309	1
Caelo	Base cream DAC	14151101	3
Caelo	Base cream DAC	150671	1
Caelo	Base cream DAC	14374201	3
Caelo	Base cream DAC	15064701	11
Caelo	Base cream DAC	14130715	1
Caelo	Base cream DAC	15313601	3
Caelo	Base cream DAC	15386801	1
Caelo	Base cream DAC	15386901	4
Caelo	Base cream DAC	16102101	2
Caelo	Base cream DAC	16145901	1
Caelo	Base cream DAC	16104001	1
Caelo	Base cream DAC	16155801	3
Caelo	Base cream DAC	16150301	2
Caelo	Base cream DAC	16262101	10
Caelo	Base cream DAC	16328901	1
Caelo	Base cream DAC	16359502	1
Caelo	Base cream DAC	17103701-20170704Ma1	1
Caelo	Base cream DAC	17155401	4
Caelo	Base cream DAC	17224901	1
Caelo	Base cream DAC	17154601	9
Caelo	Base cream DAC	17240001	5
Caelo	Base cream DAC	17243401	1
Caelo	Base cream DAC	17266801	15
Caelo	Base cream DAC	17349901	7
Caelo	Base cream DAC	17352101	9
Caelo	Base cream DAC	18138301	10
Caelo	Base cream DAC	18165401	11
Caelo	Base cream DAC	18192701	6
Caelo	Base cream DAC	18232501	8
Caelo	Base cream DAC	18269101	9
Caelo	Base cream DAC	19003701	13
Caelo	Base cream DAC	19052401	2
Caelo	Base cream DAC	19052701	1
Caelo	Base cream DAC	19117301	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	19147901	3
Caelo	Base cream DAC	15390301	1
Caelo	Base cream DAC	1331201	1
Caelo	Base cream DAC	14325601	1
Caelo	Base cream DAC	16318702	2
Caelo	Base cream DAC	19051801	2
Caelo	Base cream DAC	13188501	12
Caelo	Base cream DAC	13311201	11
Caelo	Base cream DAC	1428201	1
Caelo	Base cream DAC	125044-1	1
Caelo	Base cream DAC	275438	2
Caelo	Base cream DAC	13158501	8
Caelo	Base cream DAC	1306031-01	1
Caelo	Base cream DAC	13385101	5
Caelo	Base cream DAC	14053401	3
Caelo	Base cream DAC	14090801	10
Caelo	Base cream DAC	412/3	1
Caelo	Base cream DAC	1408009-01	1
Caelo	Base cream DAC	15/138/B	1
Caelo	Base cream DAC	1501039-1	1
Caelo	Base cream DAC	1501019-01	1
Caelo	Base cream DAC	15173201	6
Caelo	Base cream DAC	15054501	1
Caelo	Base cream DAC	15184201	1
Caelo	Base cream DAC	15318801	8
Caelo	Base cream DAC	15387001	3
Caelo	Base cream DAC	1601027-01	1
Caelo	Base cream DAC	16005301	8
Caelo	Base cream DAC	16103701	5
Caelo	Base cream DAC	299323	1
Caelo	Base cream DAC	16135901	6
Caelo	Base cream DAC	16220301	17
Caelo	Base cream DAC	16C14-T02-031202	1
Caelo	Base cream DAC	1623601	1
Caelo	Base cream DAC	16242201	3
Caelo	Base cream DAC	16261701	2
Caelo	Base cream DAC	16326101	14
Caelo	Base cream DAC	17006601	11
Caelo	Base cream DAC	16350401	1
Caelo	Base cream DAC	17031601	7
Caelo	Base cream DAC	17100201	8
Caelo	Base cream DAC	17094401	4
Caelo	Base cream DAC	17097202	2
Caelo	Base cream DAC	17121401	8
Caelo	Base cream DAC	17090701	1
Caelo	Base cream DAC	17136501	6
Caelo	Base cream DAC	17136301	12
Caelo	Base cream DAC	17154801	6
Caelo	Base cream DAC	86480517	1
Caelo	Base cream DAC	86580517	1
Caelo	Base cream DAC	17155001	10
Caelo	Base cream DAC	17153802	10
Caelo	Base cream DAC	72260417	2
Caelo	Base cream DAC	17C16-T06-042610	2
Caelo	Base cream DAC	17225101	6
Caelo	Base cream DAC	17E11/T08-044210	1
Caelo	Base cream DAC	17154101	1
Caelo	Base cream DAC	17232402	2
Caelo	Base cream DAC	72270417	1
Caelo	Base cream DAC	27290917	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	88660717	1
Caelo	Base cream DAC	17125201	1
Caelo	Base cream DAC	17229401	8
Caelo	Base cream DAC	39600117	1
Caelo	Base cream DAC	17225501	3
Caelo	Base cream DAC	17240401	2
Caelo	Base cream DAC	223711-779	1
Caelo	Base cream DAC	17251701	6
Caelo	Base cream DAC	17265001	2
Caelo	Base cream DAC	17229701	1
Caelo	Base cream DAC	17267501	3
Caelo	Base cream DAC	17269101	1
Caelo	Base cream DAC	18015401	4
Caelo	Base cream DAC	17268301	8
Caelo	Base cream DAC	17H25-T07-047741	2
Caelo	Base cream DAC	17268401	2
Caelo	Base cream DAC	18037101	4
Caelo	Base cream DAC	93780318	1
Caelo	Base cream DAC	18091102	5
Caelo	Base cream DAC	18137601	13
Caelo	Base cream DAC	8620717	1
Caelo	Base cream DAC	18138001	10
Caelo	Base cream DAC	18166602	13
Caelo	Base cream DAC	18003935	2
Caelo	Base cream DAC	18193101	13
Caelo	Base cream DAC	1820401	1
Caelo	Base cream DAC	8003325011	1
Caelo	Base cream DAC	18269701	5
Caelo	Base cream DAC	18270401	2
Caelo	Base cream DAC	18271301	2
Caelo	Base cream DAC	19003201	1
Caelo	Base cream DAC	19003101	4
Caelo	Base cream DAC	19003501	2
Caelo	Base cream DAC	19053201	2
Caelo	Base cream DAC	19117101	1
Caelo	Base cream DAC	1971801	1
Caelo	Base cream DAC	15191001	5
Caelo	Base cream DAC	6002237002	1
Caelo	Base cream DAC	3001016	1
Caelo	Base cream DAC	19053301	2
Caelo	Base cream DAC	172686015582	1
Caelo	Base cream DAC	180977025637	1
Caelo	Base cream DAC	181380015686	1
Caelo	Base cream DAC	181656015738	1
Caelo	Base cream DAC	12192201	2
Caelo	Base cream DAC	13016801	2
Caelo	Base cream DAC	13022401	3
Caelo	Base cream DAC	13120001	2
Caelo	Base cream DAC	13173301	2
Caelo	Base cream DAC	13188401	6
Caelo	Base cream DAC	13188001	6
Caelo	Base cream DAC	13188601	4
Caelo	Base cream DAC	13198501	2
Caelo	Base cream DAC	13249801	6
Caelo	Base cream DAC	13198401	1
Caelo	Base cream DAC	13252101	4
Caelo	Base cream DAC	13311101	3
Caelo	Base cream DAC	13312201	4
Caelo	Base cream DAC	13311301-3462312170	1
Caelo	Base cream DAC	13311601	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	13311701	5
Caelo	Base cream DAC	13381001	15
Caelo	Base cream DAC	13380901	10
Caelo	Base cream DAC	14091501	9
Caelo	Base cream DAC	14091701	10
Caelo	Base cream DAC	14091801	7
Caelo	Base cream DAC	1409101	1
Caelo	Base cream DAC	14238201	2
Caelo	Base cream DAC	15306701	8
Caelo	Base cream DAC	14303101	5
Caelo	Base cream DAC	292122	1
Caelo	Base cream DAC	15190601	2
Caelo	Base cream DAC	15173601	9
Caelo	Base cream DAC	15420401	11
Caelo	Base cream DAC	16145601	6
Caelo	Base cream DAC	301157	1
Caelo	Base cream DAC	303061	1
Caelo	Base cream DAC	79/AKD16	1
Caelo	Base cream DAC	16261901	4
Caelo	Base cream DAC	16261201	5
Caelo	Base cream DAC	16262001	4
Caelo	Base cream DAC	16238102	3
Caelo	Base cream DAC	16350201	4
Caelo	Base cream DAC	305714	1
Caelo	Base cream DAC	17014501	10
Caelo	Base cream DAC	17029001	9
Caelo	Base cream DAC	17100301	7
Caelo	Base cream DAC	306624	2
Caelo	Base cream DAC	6004860001	1
Caelo	Base cream DAC	17154401	7
Caelo	Base cream DAC	307833	1
Caelo	Base cream DAC	17155201	8
Caelo	Base cream DAC	17147701	3
Caelo	Base cream DAC	17225801	7
Caelo	Base cream DAC	308796	1
Caelo	Base cream DAC	17154001	2
Caelo	Base cream DAC	172230001	1
Caelo	Base cream DAC	17266001	11
Caelo	Base cream DAC	17240601	3
Caelo	Base cream DAC	17265801	4
Caelo	Base cream DAC	17265901	3
Caelo	Base cream DAC	18037201	2
Caelo	Base cream DAC	17349501	3
Caelo	Base cream DAC	17351901	4
Caelo	Base cream DAC	1768601	1
Caelo	Base cream DAC	18105801	10
Caelo	Base cream DAC	18165801	15
Caelo	Base cream DAC	18165901	3
Caelo	Base cream DAC	18193001	2
Caelo	Base cream DAC	18270001	1
Caelo	Base cream DAC	19052001	2
Caelo	Base cream DAC	19116901	1
Caelo	Base cream DAC	19117201	1
Caelo	Base cream DAC	19118301	1
Caelo	Base cream DAC	19118101	2
Caelo	Base cream DAC	19170201	1
Caelo	Base cream DAC	295898	1
Caelo	Base cream DAC	15306501	6
Caelo	Base cream DAC	15306101	1
Caelo	Base cream DAC	75/AKD7	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15387201	10
Caelo	Base cream DAC	AKD6	1
Caelo	Base cream DAC	305711	1
Caelo	Base cream DAC	303428	1
Caelo	Base cream DAC	15164501	6
Caelo	Base cream DAC	18097702	11
Caelo	Base cream DAC	13115701	2
Caelo	Base cream DAC	3013M-01309	1
Caelo	Base cream DAC	3413E-01309	1
Caelo	Base cream DAC	14121-01309	1
Caelo	Base cream DAC	16055801	8
Caelo	Base cream DAC	14151401	7
Caelo	Base cream DAC	15272301	8
Caeolo	Base cream DAC	16005301	2
Caeolo ,	Base cream DAC	17264401	1
Caeolo/Krieger	Base cream DAC	17240301	2
Caeolo/Noweda	Base cream DAC	16152101	1
Caesar & Loretz GmbH	Base cream DAC	18269001	1
Caesar & Loretz GmbH	Base cream DAC	18269501	3
Caesar & Loretz GmbH	Base cream DAC	18269901	2
Caesar & Loretz GmbH	Base cream DAC	18272201	1
Caesar & Loretz GmbH	Base cream DAC	18270801	1
Caesar & Loretz GmbH	Base cream DAC	18271101	1
Caesar & Loretz GmbH	Base cream DAC	18269601	1
Caesar & Loretz GmbH	Base cream DAC	19000946	3
Caesar & Loretz GmbH	Base cream DAC	18270701	1
Caesar & Loretz GmbH	Base cream DAC	18269401	1
Caesar & Loretz GmbH	Base cream DAC	18270901	2
Caesar & Loretz GmbH	Base cream DAC	19052601	1
Caesar & Loretz GmbH	Base cream DAC	19020201	3
Caesar & Loretz GmbH	Base cream DAC	19053101	1
Caesar & Loretz GmbH	Base cream DAC	19153601	1
Caesar & Loretz GmbH	Base cream DAC	19170401	1
Caesar & Loretz GmbH	Base cream DAC	19170301	1
Caesar & Loretz GmbH / K	Base cream DAC	19003502	1
Caesar & Loretz GmbH Hi...	Base cream DAC	1308013-01	1
Caesar & Loretz GmbH, 4...	Base cream DAC	11278901	1
Caesar & Loretz GmbH, 4...	Base cream DAC	12062601	1
Caesar & Loretz GmbH, 4...	Base cream DAC	12339101	1
Caesar & Loretz GmbH, 4...	Base cream DAC	13139702	1
Caesar & Loretz GmbH/G	Base cream DAC	18269501	1
Caesar & Loretz GmbH/Ph...	Base cream DAC	19003701	1
Caesar & Loretz GmbH/Sa...	Base cream DAC	18269401	1
Caesar & Loretz/ Caesar...	Base cream DAC	18037201	1
Caesar & Loretz/ Noweda	Base cream DAC	18105101	1
Caesar & Loretz/AHC	Base cream DAC	38540516	3
Caesar & Loretz/Noweda	Base cream DAC	15184401	1
Caesar & Loretz/Noweda	Base cream DAC	17154001	1
Caesar /phönix	Base cream DAC	13139901	2
Caesar und Loretz GmbH	Base cream DAC	17155001	1
Caesar&Loretz	Base cream DAC	16005201	1
Caesar&Loretz	Base cream DAC	16219401	1
Caesar&Loretz	Base cream DAC	16350501	1
Caesar&Loretz	Base cream DAC	17031901	1
Caesar&Loretz GmbH	Base cream DAC	16241601	1
Caesar&Loretz GmbH	Base cream DAC	16329201	3
Caesar&Loretz GmbH	Base cream DAC	18192501	1
Caesar&Loretz,Anzag	Base cream DAC	15250101	1
Caesar&Loretz/Caesar&Lo...	Base cream DAC	15272601	1
calo	Base cream DAC	13012401	1

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Supplier	Substance	Batch	Spectra
Calo	Base cream DAC	15306701	1
Cealo	Base cream DAC	12249401	1
Cealo	Base cream DAC	142990001	1
Cealo	Base cream DAC	15184301	1
Cealo	Base cream DAC	16055801	1
Cealo	Base cream DAC	17264601	1
Cealo / Noweda	Base cream DAC	14092001	1
Cealo/ Noweda	Base cream DAC	17000921	1
Cealo/Gehe	Base cream DAC	12175101	1
Cealo/Gehe	Base cream DAC	18138401	1
Cealo/Gehe	Base cream DAC	18165301	2
Cealo/Phönix	Base cream DAC	18165301	1
Cealo/Sanacorp	Base cream DAC	16261501	1
Cealo/Sanacorp	Base cream DAC	171338001	1
Cealo/Sanacorp	Base cream DAC	19053001	4
celo	Base cream DAC	16329201	1
Celo	Base cream DAC	16005101	1
celo/phönix	Base cream DAC	13377901	3
Euro OTC	Base cream DAC	1209039-01	1
chaelo/gehe	Base cream DAC	17251701	1
D'Oroderm	Base cream DAC	1346001	1
DORODERM GmbH & Co.KG	Base cream DAC	1346001	2
DAC 2011	Base cream DAC	12061901	1
DAC 2011	Base cream DAC	13188401	1
Defektur	Base cream DAC	16325901	2
Delta	Base cream DAC	17154401	2
Delta	Base cream DAC	18037101	2
Delta	Base cream DAC	18105402	7
Dermasence	Base cream DAC	260820	1
Direkt/Phönix	Base cream DAC	50211015	4
D'oroderm	Base cream DAC	1346001	4
D'ORODERM	Base cream DAC	1346001	1
doroderm GmbH	Base cream DAC	1202001	2
Doroderm GmbH/ Noweda	Base cream DAC	1202001	4
D'ORODERM/Noweda	Base cream DAC	1346001	2
Dr. Wolff	Base cream DAC	14325601	1
E Plus	Base cream DAC	18000961	3
E Plus	Base cream DAC	18005744	1
eigene Herstellung	Base cream DAC	16261801	1
Eimer/ Noweda	Base cream DAC	72240417	1
Eimerbacher GmbH, Gesche...	Base cream DAC	61361217-20180830Ma6	1
Eimermacher	Base cream DAC	2770713	1
Eimermacher	Base cream DAC	28310913	2
Eimermacher	Base cream DAC	36140913	1
Eimermacher	Base cream DAC	97870214	2
Eimermacher	Base cream DAC	12170214	2
Eimermacher	Base cream DAC	23090414	1
Eimermacher	Base cream DAC	8811114	1
Eimermacher	Base cream DAC	57090315	2
Eimermacher	Base cream DAC	57080315	1
Eimermacher	Base cream DAC	50211015	1
Eimermacher	Base cream DAC	50221015	1
Eimermacher	Base cream DAC	86440517	1
Eimermacher	Base cream DAC	72240417	11
Eimermacher	Base cream DAC	14130817	1
Eimermacher	Base cream DAC	79000916	4
Eimermacher	Base cream DAC	61371217	4
Eimermacher	Base cream DAC	62550918	1
Eimermacher	Base cream DAC	76561018	1
Eimermacher	Base cream DAC	3301218	1

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Supplier	Substance	Batch	Spectra
Eimermacher	Base cream DAC	23780219	1
Eimermacher	Base cream DAC	36500319	1
Eimermacher	Base cream DAC	47870419	1
Eimermacher	Base cream DAC	60640519	1
Eimermacher / Sanacorp	Base cream DAC	86440517	1
Eimermacher Direktbezug	Base cream DAC	57080315	1
Eimermacher/Alliance	Base cream DAC	63340317	2
Eimermacher/Direkt	Base cream DAC	61361217	5
Eimermacher/Direkt	Base cream DAC	10067198	1
Eimermacher/Direkt	Base cream DAC	15730518	8
Eimermacher/Eimermacher	Base cream DAC	14130715	5
Eimermacher/Ensbona	Base cream DAC	14130715	1
Eimermacher/Ensbona	Base cream DAC	29230416	2
Eimermacher/Ensbona	Base cream DAC	63340317	1
Eimermacher/Noweda	Base cream DAC	14120715	2
Eimermacher/Noweda	Base cream DAC	39590217	1
Eimermacher/Noweda	Base cream DAC	8630717	2
Eimermacher/Phönix	Base cream DAC	15730518	1
Eimermacher/Sanacorp	Base cream DAC	14120715	1
EimermacherGmbH-Geschen...	Base cream DAC	14150817-20180404Ma9	1
Eimmermacher	Base cream DAC	6681116	1
Engel apotheker	Base cream DAC	2119Q-07011	1
Engel-Apotheke	Base cream DAC	2119I-07011	1
Engel-Apotheke	Base cream DAC	2219Q-07011	1
Ensboa	Base cream DAC	64570816	2
Ensboa	Base cream DAC	6681116	1
Ensboa	Base cream DAC	2020216	1
Ensboa	Base cream DAC	63340317	4
ensbona	Base cream DAC	74000513	1
ensbona	Base cream DAC	79000916	1
Ensbona	Base cream DAC	98480713	1
Ensbona	Base cream DAC	57090315	4
Ensbona	Base cream DAC	1200216	3
Ensbona	Base cream DAC	14130715	1
Ensbona	Base cream DAC	55350716	15
Ensbona	Base cream DAC	79000916	8
Ensbona	Base cream DAC	6671116	3
Ensbona	Base cream DAC	39590217	1
Ensbona	Base cream DAC	52830317	9
Ensbona	Base cream DAC	63350317	4
Ensbona	Base cream DAC	86440517	2
Ensbona	Base cream DAC	72250417	2
Ensbona	Base cream DAC	1111	1
Ensbona	Base cream DAC	14110817	3
Ensbona	Base cream DAC	61381217	2
Ensbona	Base cream DAC	80340218	2
Ensbona	Base cream DAC	15730518	3
Ensbona	Base cream DAC	95980718	2
Ensbona	Base cream DAC	7580418	1
Ensbona	Base cream DAC	93780318	1
Ensbona	Base cream DAC	87231118	5
Ensbona	Base cream DAC	76561018	2
Ensbona	Base cream DAC	13520119	3
Ensbona	Base cream DAC	36510319	1
Ensbona	Base cream DAC	47880419	2
Ensbona	Base cream DAC	8811114	1
Ensbona	Base cream DAC	2020216	2
ENSBONA	Base cream DAC	22251214	1
ENSBONA	Base cream DAC	2020216	1
ENSBONA	Base cream DAC	63350317	1

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Supplier	Substance	Batch	Spectra
ENSBONA	Base cream DAC	29580618	1
Ensbona / Ferd. Eimerma...	Base cream DAC	55350716	5
Ensbona/ Sanacorp	Base cream DAC	1200216	3
Ensbona/ Sanacorp	Base cream DAC	50211015	1
Ensbona/ Alliance	Base cream DAC	8630717	1
Ensbona/ Anzag	Base cream DAC	50211015	4
Ensbona/ Eimermacher	Base cream DAC	14130715	1
Ensbona/ Eimermacher	Base cream DAC	14120715	1
Ensbona/ Eimermacher	Base cream DAC	29230416	1
Ensbona/ Eimermacher	Base cream DAC	45150616	1
Ensbona/ Gehe	Base cream DAC	44960616	1
Ensbona/ Gehe	Base cream DAC	14150817	2
Ensbona/ Gehe	Base cream DAC	39590217	1
Ensbona/ Gehe	Base cream DAC	95980718	1
Ensbona/ Gehe	Base cream DAC	87231118	1
Ensbona/ Nordwalde	Base cream DAC	63350317	1
ensbona/ Noweda	Base cream DAC	14120715	1
Ensbona/ Noweda	Base cream DAC	44960616	1
Ensbona/ Noweda	Base cream DAC	14150817	1
Ensbona/ phönix	Base cream DAC	50211015	1
Ensbona/ phönix	Base cream DAC	72240417	1
Ensbona/ Sanacorp	Base cream DAC	22251214	2
Ensbona/ Sanacorp	Base cream DAC	57090315	3
Ensbona/ Sanacorp	Base cream DAC	29220416	1
Ensbona/ Sanacorp	Base cream DAC	39590217	1
Ensbona/ Sanacorp	Base cream DAC	63350317	1
Ensbona/ Sanacorp	Base cream DAC	72240417	2
EnsbonaNoweda	Base cream DAC	72240417	1
Enzbona/ Eimermacher	Base cream DAC	14120715	2
Enzbona/ Eimermacher	Base cream DAC	29220416	1
E-plus	Base cream DAC	308799	1
Esbona/ Alliance	Base cream DAC	10067198	1
Euro OTC	Base cream DAC	450380616	1
Eur	Base cream DAC	1407022-01	1
Eurho	Base cream DAC	38540516	1
Eurho	Base cream DAC	93750318	3
EuRho	Base cream DAC	1108002-01	1
EuRho	Base cream DAC	1111050-01	1
EuRho	Base cream DAC	1111048-01	1
EuRho	Base cream DAC	1210011-01	2
EuRho	Base cream DAC	1204022-01	1
EuRho	Base cream DAC	1209037-01	1
EuRho	Base cream DAC	130400501	1
EuRho	Base cream DAC	1302009-01	1
EuRho	Base cream DAC	1302036-01	1
EuRho	Base cream DAC	1301023-01	1
EuRho	Base cream DAC	13K29-B32-288245	1
EuRho	Base cream DAC	1401026-01	2
EuRho	Base cream DAC	1502008-01	1
EuRho	Base cream DAC	1501050-01	1
EuRho	Base cream DAC	1502029-01	2
EuRho	Base cream DAC	1511002-01	3
EuRho	Base cream DAC	1606028-01	1
EuRho	Base cream DAC	1603028-01	1
EuRho	Base cream DAC	44950616	1
EuRho	Base cream DAC	45340616	1
EuRho	Base cream DAC	55360616	1
EuRho	Base cream DAC	3001016	1
EuRho	Base cream DAC	27320917	1
EuRho	Base cream DAC	3570117	1

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Supplier	Substance	Batch	Spectra
EuRho	Base cream DAC	14140817	1
EuRho	Base cream DAC	86450517	1
EuRho	Base cream DAC	51580217	1
EuRho	Base cream DAC	27350917	1
EuRho	Base cream DAC	80300218	1
EuRho	Base cream DAC	1508001-01	1
EuRho / Phoenix	Base cream DAC	1506046-01	1
EuRho / Phoenix	Base cream DAC	55360616	1
EuRho Anzag ek:33,16 03...	Base cream DAC	1111027-01	1
Euro OTC	Base cream DAC	1209037-01	4
Euro OTC	Base cream DAC	1312038-01	5
EuRho/ Ebert	Base cream DAC	1401026-01	1
EuRho/Anzag	Base cream DAC	98(18081602)	1
Eurho/Noweda	Base cream DAC	1508001-01	1
Eurho/Phoenix	Base cream DAC	13C05-T03-001756	1
EuRho/Phoenix	Base cream DAC	1311031-01	1
EuRho/Phönix	Base cream DAC	1312002-01	1
EuRho/Phönix	Base cream DAC	1312037-01	1
EuRho/Phönix	Base cream DAC	1502017-01	1
EuRhoNoweda 11.3..17	Base cream DAC	91350916	2
Euro	Base cream DAC	1501040-01	2
Euro OTC	Base cream DAC	160302801	1
Euro OCT	Base cream DAC	1210055-01	1
Euro OCT	Base cream DAC	1307047-01	1
Euro OTC	Base cream DAC	8620717	12
Euro OTC	Base cream DAC	1520202801	1
Euro OTC	Base cream DAC	1502016-01	4
Euro OTC	Base cream DAC	1501053-01	2
Euro OTC	Base cream DAC	1604023-01	1
Euro OTC	Base cream DAC	51570217	7
Euro OTC	Base cream DAC	6951018	1
Euro OTC	Base cream DAC	7578418	1
Euro OTC	Base cream DAC	45950718	1
Euro OTC	Base cream DAC	1111028-01	1
Euro OTC	Base cream DAC	1111051-01	2
Euro OTC	Base cream DAC	1204025-01	2
Euro OTC	Base cream DAC	1209038-01	2
Euro OTC	Base cream DAC	1210044-01	4
Euro OTC	Base cream DAC	1212025-01	1
Euro OTC	Base cream DAC	1212028-01	2
Euro OTC	Base cream DAC	1301040-01	1
Euro OTC	Base cream DAC	1301023-01	8
Euro OTC	Base cream DAC	121202801	1
Euro OTC	Base cream DAC	1210054-01	1
Euro OTC	Base cream DAC	1301042-01	1
Euro OTC	Base cream DAC	1304005-01	2
Euro OTC	Base cream DAC	1304004-01	1
Euro OTC	Base cream DAC	1302036-01	1
Euro OTC	Base cream DAC	1306031-01	1
Euro OTC	Base cream DAC	1301043-01	1
Euro OTC	Base cream DAC	130603001	1
Euro OTC	Base cream DAC	1306007-01	1
Euro OTC	Base cream DAC	1307035-01	1
Euro OTC	Base cream DAC	1307034-01	2
Euro OTC	Base cream DAC	1306042-01	1
Euro OTC	Base cream DAC	130703601	2
Euro OTC	Base cream DAC	1308013-01	4
Euro OTC	Base cream DAC	1307046-01	1
Euro OTC	Base cream DAC	1307044-01	3
Euro OTC	Base cream DAC	13312201	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	130704701	2
Euro OTC	Base cream DAC	130703101	1
Euro OTC	Base cream DAC	1307047-01	1
Euro OTC	Base cream DAC	130704801	1
Euro OTC	Base cream DAC	1309008-01	1
Euro OTC	Base cream DAC	1311008-01	2
Euro OTC	Base cream DAC	1311009-01	1
Euro OTC	Base cream DAC	1311018-01	1
Euro OTC	Base cream DAC	131101601	1
Euro OTC	Base cream DAC	1312001-01	2
Euro OTC	Base cream DAC	131103101	1
Euro OTC	Base cream DAC	1311031-01	1
Euro OTC	Base cream DAC	140102001	1
Euro OTC	Base cream DAC	5650900	1
Euro OTC	Base cream DAC	3011016	12
Euro OTC	Base cream DAC	14090801	1
Euro OTC	Base cream DAC	14223101	1
Euro OTC	Base cream DAC	140705501	1
Euro OTC	Base cream DAC	1407022-01	2
Euro OTC	Base cream DAC	1407023-01	1
Euro OTC	Base cream DAC	150200701	1
Euro OTC	Base cream DAC	1502028	1
Euro OTC	Base cream DAC	1501040-01	1
Euro OTC	Base cream DAC	1502026-01	4
Euro OTC	Base cream DAC	1601025-01	1
Euro OTC	Base cream DAC	1603030-01	1
Euro OTC	Base cream DAC	44950616	19
Euro OTC	Base cream DAC	45380616	18
Euro OTC	Base cream DAC	52490616	6
Euro OTC	Base cream DAC	72430816	2
Euro OTC	Base cream DAC	524490616	1
Euro OTC	Base cream DAC	39218516	1
Euro OTC	Base cream DAC	91330916	2
Euro OTC	Base cream DAC	11841116	6
Euro OTC	Base cream DAC	29870117	4
Euro OTC	Base cream DAC	118471116	1
Euro OTC	Base cream DAC	3001016	12
Euro OTC	Base cream DAC	72270417	2
Euro OTC	Base cream DAC	27300917	7
Euro OTC	Base cream DAC	27290917	3
Euro OTC	Base cream DAC	61391217	6
Euro OTC	Base cream DAC	46731117	5
Euro OTC	Base cream DAC	69520118	6
Euro OTC	Base cream DAC	51850217	1
Euro OTC	Base cream DAC	8003325004	1
Euro OTC	Base cream DAC	1410817	1
Euro OTC	Base cream DAC	69530118	2
Euro OTC	Base cream DAC	29550618	7
Euro OTC	Base cream DAC	97570413	1
Euro OTC	Base cream DAC	3695474	1
Euro OTC	Base cream DAC	255700618	1
Euro OTC	Base cream DAC	76571018	5
Euro OTC	Base cream DAC	15700518	1
Euro OTC	Base cream DAC	62540918	3
Euro OTC	Base cream DAC	87221118	7
Euro OTC	Base cream DAC	87241118	4
Euro OTC	Base cream DAC	76591018	2
Euro OTC	Base cream DAC	8722118	1
Euro OTC	Base cream DAC	1501051-01	4
Euro OTC	Base cream DAC	1507018-01	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	1601028-01	3
Euro OTC	Base cream DAC	72440816	3
Euro OTC	Base cream DAC	11110023-01	1
Euro OTC	Base cream DAC	15720518	10
Euro OTC	Base cream DAC	1509021-01	16
Euro OTC	Base cream DAC	17031701	2
Euro OTC	Base cream DAC	14232001	1
Euro OTC	Base cream DAC	1502008-01	7
Euro OTC	Base cream DAC	1307003-01	2
Euro OTC	Base cream DAC	1312003-01	1
Euro OTC	Base cream DAC	1412002-01	4
Euro OTC	Base cream DAC	160404101	1
Euro OTC	Base cream DAC	16Do6-T10-031949	1
Euro OTC	Base cream DAC	14140871	1
Euro OTC	Base cream DAC	38540516	13
Euro OTC	Base cream DAC	45970718	16
Euro OTC	Base cream DAC	60610519	4
Euro OTC	Base cream DAC	47890419	1
Euro OTC	Base cream DAC	1506028-01	3
Euro OTC	Base cream DAC	1502027-01	5
Euro OTC	Base cream DAC	49650616	2
Euro OTC	Base cream DAC	129037-01	1
Euro OTC	Base cream DAC	121005401	1
Euro OTC	Base cream DAC	1210053-01	1
Euro OTC	Base cream DAC	120903701	1
Euro OTC	Base cream DAC	13113101	1
Euro OTC	Base cream DAC	131200101	1
Euro OTC	Base cream DAC	140702201	1
Euro OTC	Base cream DAC	1501007-01	1
Euro OTC	Base cream DAC	150100801	1
Euro OTC	Base cream DAC	1506046-01	4
Euro OTC	Base cream DAC	151003001	1
Euro OTC	Base cream DAC	15060-46-01	1
Euro OTC	Base cream DAC	1509028-01	1
Euro OTC	Base cream DAC	1605014-01	2
Euro OTC	Base cream DAC	1603039-01	1
Euro OTC	Base cream DAC	1601027-01	1
Euro OTC	Base cream DAC	1512002-01	7
Euro OTC	Base cream DAC	11811116	6
Euro OTC	Base cream DAC	91350916	3
Euro OTC	Base cream DAC	2991016	18
Euro OTC	Base cream DAC	39620117	4
Euro OTC	Base cream DAC	3601016	1
Euro OTC	Base cream DAC	80300218	11
Euro OTC	Base cream DAC	27350917	13
Euro OTC	Base cream DAC	27310917	1
Euro OTC	Base cream DAC	93740318	1
Euro OTC	Base cream DAC	1510027-01	1
Euro OTC	Base cream DAC	1306030-01	1
Euro OTC	Base cream DAC	1301022-01	6
Euro OTC	Base cream DAC	1308010-01	1
Euro OTC	Base cream DAC	1311004-01	2
Euro OTC	Base cream DAC	1308011-01	1
Euro OTC	Base cream DAC	80616-8	1
Euro OTC	Base cream DAC	1312020-01	1
Euro OTC	Base cream DAC	1407019-01	1
Euro OTC	Base cream DAC	1502016	1
Euro OTC	Base cream DAC	1601055-01	2
Euro OTC	Base cream DAC	1507017-01	3
Euro OTC	Base cream DAC	1604040-01	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	160301601	1
Euro OTC	Base cream DAC	1507017_01	1
Euro OTC	Base cream DAC	2981016	18
Euro OTC	Base cream DAC	91340916	8
Euro OTC	Base cream DAC	51560217	2
Euro OTC	Base cream DAC	8660717	4
Euro OTC	Base cream DAC	80320218	4
Euro OTC	Base cream DAC	62570918	2
Euro OTC	Base cream DAC	1511002-02	2
Euro OTC	Base cream DAC	1306020-01	6
Euro OTC	Base cream DAC	1308022-01	6
Euro OTC	Base cream DAC	1309013-01	7
Euro OTC	Base cream DAC	1309015-01	3
Euro OTC	Base cream DAC	13080224-01	1
Euro OTC	Base cream DAC	15502028-01	1
Euro OTC	Base cream DAC	15110011-01	1
Euro OTC	Base cream DAC	1603028-01	10
Euro OTC	Base cream DAC	1502025-01	1
Euro OTC	Base cream DAC	1110037-01	2
Euro OTC	Base cream DAC	1509021-21	1
Euro OTC	Base cream DAC	45340616	11
Euro OTC	Base cream DAC	1506053-01	6
Euro OTC	Base cream DAC	701228	1
Euro OTC	Base cream DAC	44960616	2
Euro OTC	Base cream DAC	6004860001	1
Euro OTC	Base cream DAC	131100901	1
Euro OTC	Base cream DAC	1305013-01	1
Euro OTC	Base cream DAC	1306002-01	1
Euro OTC	Base cream DAC	1603016-01	5
Euro OTC	Base cream DAC	80390719	1
Euro OTC	Base cream DAC	1401024-01	6
Euro OTC	Base cream DAC	1509025-01	1
Euro OTC	Base cream DAC	29860117	3
Euro OTC	Base cream DAC	1210055-01	3
Euro OTC	Base cream DAC	1308021-01	3
Euro OTC	Base cream DAC	131100801	1
Euro OTC	Base cream DAC	1401026-01	3
Euro OTC	Base cream DAC	150215-01	1
Euro OTC	Base cream DAC	1501055-01	1
Euro OTC	Base cream DAC	17A03-T08-040047	1
Euro OTC	Base cream DAC	1204024-01	1
Euro OTC	Base cream DAC	1401022-01	5
Euro OTC	Base cream DAC	1501050-01	3
Euro OTC	Base cream DAC	1401020-01	4
Euro OTC	Base cream DAC	1502015-01	5
Euro OTC	Base cream DAC	1111009-01	1
Euro OTC	Base cream DAC	1107040-01	1
Euro OTC	Base cream DAC	1502017-01	7
Euro OTC	Base cream DAC	86479517	1
Euro OTC	Base cream DAC	13490119	5
Euro OTC	Base cream DAC	1301044-01	1
Euro OTC	Base cream DAC	130201001	1
Euro OTC	Base cream DAC	160123-01	1
Euro OTC	Base cream DAC	1205004-01	1
Euro OTC	Base cream DAC	937770318	1
Euro OTC	Base cream DAC	72260417	1
Euro OTC	Base cream DAC	11821116	8
Euro OTC	Base cream DAC	69510118	8
Euro OTC	Base cream DAC	15690518	3
Euro OTC	Base cream DAC	29880117	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	93770318	1
Euro OTC	Base cream DAC	91320916	1
Euro OTC	Base cream DAC	1311007-01	3
Euro OTC	Base cream DAC	1401021-01	1
Euro OTC	Base cream DAC	7570418	3
Euro OTC	Base cream DAC	1603015-01	4
Euro OTC	Base cream DAC	1506026-011	1
Euro OTC	Base cream DAC	B72430816	1
Euro OTC	Base cream DAC	140102601	1
Euro OTC	Base cream DAC	151100201	1
Euro OTC	Base cream DAC	1308024-01	7
Euro OTC	Base cream DAC	1407055-01	2
Euro OTC	Base cream DAC	1601030-01	1
Euro OTC	Base cream DAC	1603037-01	1
Euro OTC	Base cream DAC	151200201	1
Euro OTC	Base cream DAC	305711	1
Euro OTC	Base cream DAC	16G20-T06-035312	1
Euro OTC	Base cream DAC	B55850317	1
Euro OTC	Base cream DAC	86490517	8
Euro OTC	Base cream DAC	170318181	2
Euro OTC	Base cream DAC	55850317	1
Euro OTC	Base cream DAC	180208BC/86498517	1
Euro OTC	Base cream DAC	181113081	1
Euro OTC	Base cream DAC	80330218	2
Euro OTC	Base cream DAC	7560418	3
Euro OTC	Base cream DAC	87211118	1
Euro OTC	Base cream DAC	1409056-01	1
Euro OTC	Base cream DAC	29910169	1
Euro OTC	Base cream DAC	1501052-01	1
Euro OTC	Base cream DAC	15420101	1
Euro OTC	Base cream DAC	1501054-01	1
Euro OTC	Base cream DAC	91310616	1
Euro OTC	Base cream DAC	1205018-01	3
Euro OTC	Base cream DAC	1205019-01	1
Euro OTC	Base cream DAC	1205040-01	1
Euro OTC	Base cream DAC	1205041-01	1
Euro OTC	Base cream DAC	11033-01	1
Euro OTC	Base cream DAC	121209-01	1
Euro OTC	Base cream DAC	13201101	1
Euro OTC	Base cream DAC	1302037-01	1
Euro OTC	Base cream DAC	1306044-01	2
Euro OTC	Base cream DAC	1307031-01	3
Euro OTC	Base cream DAC	1311005-01	5
Euro OTC	Base cream DAC	131007-01	1
Euro OTC	Base cream DAC	1407020-01	1
Euro OTC	Base cream DAC	1312021-01	1
Euro OTC	Base cream DAC	1407054-01	3
Euro OTC	Base cream DAC	1411031-01	1
Euro OTC	Base cream DAC	1501020-01	1
Euro OTC	Base cream DAC	1501019-01	1
Euro OTC	Base cream DAC	11831116	3
Euro OTC	Base cream DAC	36920117	1
Euro OTC	Base cream DAC	46701117	2
Euro OTC	Base cream DAC	27340917	7
Euro OTC	Base cream DAC	15710518	1
Euro OTC	Base cream DAC	46721117	1
Euro OTC	Base cream DAC	87251118	2
Euro OTC	Base cream DAC	62568918	1
Euro OTC	Base cream DAC	23800219	1
Euro OTC	Base cream DAC	12339301	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	1204004-01	3
Euro OTG	Base cream DAC	1309008-01	2
Euro OTG/ Euro OTG Pharma	Base cream DAC	1501041-01	1
Euro/ Phönix	Base cream DAC	91310916	1
Euro/ Phönix	Base cream DAC	1117Q-01309	1
Euro/ Phönix	Base cream DAC	4317E-01309	1
Euro/ Phönix	Base cream DAC	27290917	1
Euro/ Phönix	Base cream DAC	15700518	1
Euro/Gehe	Base cream DAC	1312002-01	1
Euro OTC	Base cream DAC	1111042-01	1
Euro OTC	Base cream DAC	1506053	1
Euro OTC	Base cream DAC	55360616	12
Euro OTC	Base cream DAC	553600616	2
Euro OTC	Base cream DAC	39600117	1
Euro OTC	Base cream DAC	39570177	1
Euro OTC	Base cream DAC	39570117	7
Euro OTC	Base cream DAC	300116	1
Euro OTC	Base cream DAC	298116	1
Euro OTC	Base cream DAC	395802017	1
Euro OTC	Base cream DAC	35980217	1
Euro OTC	Base cream DAC	86480517	1
Euro OTC	Base cream DAC	69500118	8
Euro OTC	Base cream DAC	79000916	1
Euro OTC	Base cream DAC	23810219	1
Euro OTC	Base cream DAC	47908419	1
Euro OTC	Base cream DAC	1603029-01	8
Euro OTC	Base cream DAC	45330616	18
Euro OTC	Base cream DAC	93730318	3
Euro OTC	Base cream DAC	46711117	1
Euro OTC	Base cream DAC	1401025-01	8
Euro OTC	Base cream DAC	1502007-01	3
Euro OTC	Base cream DAC	1502028-01	4
Euro OTC	Base cream DAC	62560918	10
Euro OTC	Base cream DAC	91310916	4
Euro OTC	Base cream DAC	14140817	13
Euro OTC	Base cream DAC	1506045-01	9
Euro OTC	Base cream DAC	1306009-01	2
Euro OTC	Base cream DAC	1510030-01	15
Euro OTC	Base cream DAC	1308023-01	3
Euro OTC	Base cream DAC	1309007-01	8
Euro OTC	Base cream DAC	1312035-01	6
Euro OTC	Base cream DAC	1312036-01	1
Euro OTC	Base cream DAC	1312004-01	1
Euro OTC	Base cream DAC	93760318	3
Euro OTC	Base cream DAC	76581018	8
Euro OTC	Base cream DAC	3281218	3
Euro OTC	Base cream DAC	1509026-01	2
Euro OTC	Base cream DAC	16721117	1
Euro OTC	Base cream DAC	150150-01	1
Euro OTC	Base cream DAC	1309005-01	2
Euro OTC	Base cream DAC	1309006-01	1
Euro OTC	Base cream DAC	1312037-01	1
Euro OTC	Base cream DAC	1312039-01	6
Euro OTC	Base cream DAC	1401023-01	6
Euro OTC	Base cream DAC	1506047-01	4
Euro OTC	Base cream DAC	1511001-01	6
Euro OTC	Base cream DAC	1306001-01	6
Euro OTC	Base cream DAC	1603038-01	2
Euro OTC	Base cream DAC	1604042-01	3
Euro OTC	Base cream DAC	1506026-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	49660616	1
Euro OTC	Base cream DAC	86450517	1
Euro OTC	Base cream DAC	27320917	3
Euro OTC	Base cream DAC	62530918	4
Euro OTC	Base cream DAC	1501009-01	1
Euro OTC	Base cream DAC	1508001-01	12
Europ Ots Pharma	Base cream DAC	1501040-01	1
EuroPharm	Base cream DAC	1501008-01	2
Euopharm/Otto	Base cream DAC	1111028-01	2
Euopharm/Otto	Base cream DAC	1411030-01	1
F.Eimermacher GmbH	Base cream DAC	79000916	1
F.Eimermacher GmbH&Co.KG	Base cream DAC	79000916	3
Fagron	Base cream DAC	13311701	1
Fagron	Base cream DAC	17F08-T03-045267	8
Fagron	Base cream DAC	11297301	1
Fagron	Base cream DAC	1130-T01	1
Fagron	Base cream DAC	12C02-T08	5
Fagron	Base cream DAC	12C26-T08	2
Fagron	Base cream DAC	12G25-T12	2
Fagron	Base cream DAC	12G25-T03	1
Fagron	Base cream DAC	5321100	1
Fagron	Base cream DAC	12C02-T09	1
Fagron	Base cream DAC	12G25-T06	2
Fagron	Base cream DAC	13A08-T06-000034	1
Fagron	Base cream DAC	13A09-T10-000232	3
Fagron	Base cream DAC	13A09-T19-001952	1
Fagron	Base cream DAC	13A09-T12-000238	1
Fagron	Base cream DAC	13C05-T03-00175	1
Fagron	Base cream DAC	13C05-T09-001778	3
Fagron	Base cream DAC	13C05-T03-001756	7
Fagron	Base cream DAC	13111101	1
Fagron	Base cream DAC	13A09-T19-00194	1
Fagron	Base cream DAC	13E21-T08-003906	11
Fagron	Base cream DAC	13A09-T14-000244	1
Fagron	Base cream DAC	13A09-T19-001949	1
Fagron	Base cream DAC	13C05T10003301	1
Fagron	Base cream DAC	13C05T03001756	1
Fagron	Base cream DAC	13E20-T01-003865	1
Fagron	Base cream DAC	13C05-T10-003301	2
Fagron	Base cream DAC	3613E-01309	1
Fagron	Base cream DAC	13E21-T04-003893	1
Fagron	Base cream DAC	13E22-T05-003978	1
Fagron	Base cream DAC	13249901	1
Fagron	Base cream DAC	13E23-T08-004015	1
Fagron	Base cream DAC	13E21-T06-003900	1
Fagron	Base cream DAC	13E21-T07-003903	3
Fagron	Base cream DAC	13E22-T07-003984	1
Fagron	Base cream DAC	13h14_t02_006207	1
Fagron	Base cream DAC	13H14T02006207	1
Fagron	Base cream DAC	13H14-T10-007314	1
Fagron	Base cream DAC	13A09-T14-000244	1
Fagron	Base cream DAC	13H14-T01-006203	2
Fagron	Base cream DAC	13H14T01006203	1
Fagron	Base cream DAC	283915	1
Fagron	Base cream DAC	14A13-T02-009280	1
Fagron	Base cream DAC	13H14-T03-006212	1
Fagron	Base cream DAC	286157	1
Fagron	Base cream DAC	13K12-T08-008063	1
Fagron	Base cream DAC	14D08-T-03-011689	1
Fagron	Base cream DAC	14D-08-T01-011683	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	14D08-T06-011702	1
Fagron	Base cream DAC	14d08t02011686	1
Fagron	Base cream DAC	14D08-T03-01168	1
Fagron	Base cream DAC	14A13-T04009286	1
Fagron	Base cream DAC	14D085T045011692	1
Fagron	Base cream DAC	14F05-T08-012969	1
Fagron	Base cream DAC	16C14T03-031205	1
Fagron	Base cream DAC	287197	1
Fagron	Base cream DAC	13H14-T06-006224	1
Fagron	Base cream DAC	14223201	1
Fagron	Base cream DAC	14D08-T10-011716	2
Fagron	Base cream DAC	14d08-t04-011632	1
Fagron	Base cream DAC	1586	1
Fagron	Base cream DAC	14F05-T07	1
Fagron	Base cream DAC	14F05-T06-012961	6
Fagron	Base cream DAC	14J07-T14-015986	1
Fagron	Base cream DAC	14F05T08	2
Fagron	Base cream DAC	289803	1
Fagron	Base cream DAC	14F05-T07-012965	4
Fagron	Base cream DAC	14J07-T07	1
Fagron	Base cream DAC	14322301	1
Fagron	Base cream DAC	14J07-T09	1
Fagron	Base cream DAC	14J07-T07-015961	2
Fagron	Base cream DAC	14K05-T08-016808	1
Fagron	Base cream DAC	14K05-T07-016800	8
Fagron	Base cream DAC	14J07-T10-015971	2
Fagron	Base cream DAC	14j07-T07-015961	1
Fagron	Base cream DAC	14K05_T07	1
Fagron	Base cream DAC	14k05-t06-016796	1
Fagron	Base cream DAC	14k05t07016800	1
Fagron	Base cream DAC	14A10-T05-009253	1
Fagron	Base cream DAC	15B19-T13-019450	1
Fagron	Base cream DAC	15C11T13020416	1
Fagron	Base cream DAC	15C11-T07	2
Fagron	Base cream DAC	15C11-T14-020420	2
Fagron	Base cream DAC	15H04-T06-024978	9
Fagron	Base cream DAC	15H04-T06	1
Fagron	Base cream DAC	15H04T06024978	2
Fagron	Base cream DAC	15L17-T06-028791	1
Fagron	Base cream DAC	15h3-T03-026895	1
Fagron	Base cream DAC	15L17-T03-028775	8
Fagron	Base cream DAC	16815-T04-030282	1
Fagron	Base cream DAC	16C14-T02-031202	3
Fagron	Base cream DAC	16B15-T04-030281	7
Fagron	Base cream DAC	16C14-T03	1
Fagron	Base cream DAC	16b15-T01-030274	1
Fagron	Base cream DAC	16C24-T05-031490	9
Fagron	Base cream DAC	15H04T11024997	1
Fagron	Base cream DAC	16C14-T02	1
Fagron	Base cream DAC	16c14t02-031202	1
Fagron	Base cream DAC	16C24-T06-031494	8
Fagron	Base cream DAC	16D06-T05-031923	5
Fagron	Base cream DAC	16C14-T01-031199	3
Fagron	Base cream DAC	16D06-T09-031941	6
Fagron	Base cream DAC	16D06-T06-031926	2
Fagron	Base cream DAC	16A25-T02-029645	1
Fagron	Base cream DAC	16C-T06-031494	1
Fagron	Base cream DAC	16G20-T08-035321	3
Fagron	Base cream DAC	39210516	2
Fagron	Base cream DAC	16C24-T05031490	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	16D06-T07-031930	1
Fagron	Base cream DAC	701228-0017	1
Fagron	Base cream DAC	16D06-T04-0311914	1
Fagron	Base cream DAC	16J11-T01-037607	4
Fagron	Base cream DAC	16G20-T05-035308	15
Fagron	Base cream DAC	16g20-t08-035321	1
Fagron	Base cream DAC	26F30T14034792	1
Fagron	Base cream DAC	17A03-T13-040067	4
Fagron	Base cream DAC	16J11-T03-037614	2
Fagron	Base cream DAC	16g20-t06-035312	1
Fagron	Base cream DAC	17A03-T10-040056	3
Fagron	Base cream DAC	51570217	1
Fagron	Base cream DAC	17A03T11040060	1
Fagron	Base cream DAC	17a03_t08_040047	1
Fagron	Base cream DAC	17C16-T06-042610	1
Fagron	Base cream DAC	17F08-T02-045262	19
Fagron	Base cream DAC	17E11-T07-044186	3
Fagron	Base cream DAC	17E11-T10-044214	2
Fagron	Base cream DAC	17F08-T02-045262	1
Fagron	Base cream DAC	17Fo8-T03-045267	1
Fagron	Base cream DAC	17H25-T06-0477360687	1
Fagron	Base cream DAC	17243301	1
Fagron	Base cream DAC	17F08T02045262	1
Fagron	Base cream DAC	17K24-T03-050489	6
Fagron	Base cream DAC	17K24-T04-050495	2
Fagron	Base cream DAC	18C19-T22-053971	6
Fagron	Base cream DAC	18C19-T17-053948	12
Fagron	Base cream DAC	18C19-T23-053974	2
Fagron	Base cream DAC	18C19-T24	2
Fagron	Base cream DAC	18C19-T23	2
Fagron	Base cream DAC	18E23-T15-056314	8
Fagron	Base cream DAC	18C19-T20-053962	2
Fagron	Base cream DAC	18E23-T22-056352	4
Fagron	Base cream DAC	56314	1
Fagron	Base cream DAC	18E23-T16-056321	7
Fagron	Base cream DAC	18e23-t15-056314	1
Fagron	Base cream DAC	18E23-T17-056325	2
Fagron	Base cream DAC	18E23-T20-056346	2
Fagron	Base cream DAC	53945	1
Fagron	Base cream DAC	18E23-T20	3
Fagron	Base cream DAC	18G13-T11-058079	9
Fagron	Base cream DAC	18G13-T16-058096	1
Fagron	Base cream DAC	17H25-T08-047745	1
Fagron	Base cream DAC	58079	1
Fagron	Base cream DAC	18E23-T22-o56352	1
Fagron	Base cream DAC	18G13-T12-058084	2
Fagron	Base cream DAC	18G13-T10-058076	8
Fagron	Base cream DAC	19C21-T05-065270	1
Fagron	Base cream DAC	19C21-T05	2
Fagron	Base cream DAC	19B28T06064721	1
Fagron	Base cream DAC	18L20-T14-062943	1
Fagron	Base cream DAC	19B28-T06-064721	1
Fagron	Base cream DAC	19G08-T09-069166	2
Fagron	Base cream DAC	15E27-T02-022881	6
Fagron	Base cream DAC	14J07-T13-015981	2
Fagron	Base cream DAC	14k05-t07016800	1
Fagron	Base cream DAC	14K05-T05-061793	1
Fagron	Base cream DAC	15C11-T06-020392	2
Fagron	Base cream DAC	15H04-T08-024987	2
Fagron	Base cream DAC	15c11t07020396	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	15H04-T08	1
Fagron	Base cream DAC	15H04-T07	1
Fagron	Base cream DAC	15H04-T12-025000	1
Fagron	Base cream DAC	15L17-T04	1
Fagron	Base cream DAC	16B15-T02-030277	10
Fagron	Base cream DAC	15H04-T13-025003	2
Fagron	Base cream DAC	17A03-T13-040067	1
Fagron	Base cream DAC	16B15-T05-030285	1
Fagron	Base cream DAC	16D06-T07-031931	1
Fagron	Base cream DAC	16D06-T10-031950	1
Fagron	Base cream DAC	18G13-T09-058073	3
Fagron	Base cream DAC	18G13-T09-058073	1
Fagron	Base cream DAC	18I19-t15-062894	1
Fagron	Base cream DAC	17K24-T02-050485	1
Fagron	Base cream DAC	17A03-T07-040044	8
Fagron	Base cream DAC	13E23T10004023	1
Fagron	Base cream DAC	15C11-T05-020388	8
Fagron	Base cream DAC	11B11-T05	4
Fagron	Base cream DAC	12G25-T04	2
Fagron	Base cream DAC	13E21-T05-003897	6
Fagron	Base cream DAC	13E23-T09	3
Fagron	Base cream DAC	13K12-T02-008039	5
Fagron	Base cream DAC	14D08-T05-011697	4
Fagron	Base cream DAC	14D08-T04-011692	8
Fagron	Base cream DAC	14K05-T06-016796	3
Fagron	Base cream DAC	14K05-016793	1
Fagron	Base cream DAC	12C26-T14	1
Fagron	Base cream DAC	13A09-T12-236	1
Fagron	Base cream DAC	16F30-T14-034792	12
Fagron	Base cream DAC	13E21-T09-003910	1
Fagron	Base cream DAC	15L17-T05-028785	2
Fagron	Base cream DAC	13C05-T03-001755	1
Fagron	Base cream DAC	13H14-T01-006202	1
Fagron	Base cream DAC	15173601	1
Fagron	Base cream DAC	19D01-T14-065578	2
Fagron	Base cream DAC	14D08-T01-011683	4
Fagron	Base cream DAC	15L17-T04-028778	2
Fagron	Base cream DAC	18-E23-T15-056414	1
Fagron	Base cream DAC	45340616	1
Fagron	Base cream DAC	16G20-T07-035317	1
Fagron	Base cream DAC	17F08-T07-045282	4
Fagron	Base cream DAC	13H14-T09	1
Fagron	Base cream DAC	16D06H07-031930	1
Fagron	Base cream DAC	13A09-T18-000259	2
Fagron	Base cream DAC	13E23-T12	1
Fagron	Base cream DAC	15C11T05020388	1
Fagron	Base cream DAC	15G09-T19-024416	2
Fagron	Base cream DAC	16c24-t06-031494	2
Fagron	Base cream DAC	16920-t05-035308	1
Fagron	Base cream DAC	T08-015887	1
Fagron	Base cream DAC	15E27-T02-22881	1
Fagron	Base cream DAC	18G13-T09_058073	1
Fagron	Base cream DAC	13C05-T-003297	1
Fagron	Base cream DAC	13E23-T06-004008	3
Fagron	Base cream DAC	13E23-T10-004023	1
Fagron	Base cream DAC	17A03-T09-040052	1
Fagron	Base cream DAC	17F08-T05-045274	3
Fagron	Base cream DAC	8003325007	1
Fagron	Base cream DAC	18C19-T21-053965	1
Fagron	Base cream DAC	18G13-T16-058086	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	15011-T04-020384	1
Fagron	Base cream DAC	14J07-T09-015967	3
Fagron	Base cream DAC	16J11-T02-037610	1
Fagron	Base cream DAC	16G20-T09-035324	1
Fagron	Base cream DAC	13A09T10000232	1
Fagron	Base cream DAC	16F30-T15-034796	3
Fagron	Base cream DAC	17F08-T04-045271	3
Fagron	Base cream DAC	18L20-T11-062930	4
Fagron	Base cream DAC	12G25-T10	1
Fagron	Base cream DAC	13C05-T10-003297	1
Fagron	Base cream DAC	13E23-T16-004035	2
Fagron	Base cream DAC	13H14T080	1
Fagron	Base cream DAC	14A13-T04-009286	1
Fagron	Base cream DAC	1408-T08-011710	1
Fagron	Base cream DAC	14A13-T06	1
Fagron	Base cream DAC	14F06-T05-013014	1
Fagron	Base cream DAC	14J23-T04-016463	2
Fagron	Base cream DAC	14J07-T12	1
Fagron	Base cream DAC	14K05-T05-016793	2
Fagron	Base cream DAC	14J07-T08-015964	3
Fagron	Base cream DAC	14F06-T04	1
Fagron	Base cream DAC	15C11-T09	1
Fagron	Base cream DAC	15H04-T10-024994	2
Fagron	Base cream DAC	16f30-T14-034792	1
Fagron	Base cream DAC	16F30-T15-034797	6
Fagron	Base cream DAC	18E23-T21-056349	1
Fagron	Base cream DAC	18E-23T19-056343	1
Fagron	Base cream DAC	15H04-T14-025007	4
Fagron	Base cream DAC	13E23-T07-004011	3
Fagron	Base cream DAC	13E23-004023	1
Fagron	Base cream DAC	14D08-T02-011686	4
Fagron	Base cream DAC	14D08-T08-011710	4
Fagron	Base cream DAC	14J07-T11-015975	2
Fagron	Base cream DAC	14F06-T04-013010	1
Fagron	Base cream DAC	15J13-T03-026895	5
Fagron	Base cream DAC	15117-T01_028772	1
Fagron	Base cream DAC	15117-T03-028775	4
Fagron	Base cream DAC	16B15-T01-030274	6
Fagron	Base cream DAC	16D06-T04-031914	8
Fagron	Base cream DAC	16D06-T08-031938	2
Fagron	Base cream DAC	16F30-T13-034789	9
Fagron	Base cream DAC	16G20-T10-035327	1
Fagron	Base cream DAC	16J11-T04-037619	4
Fagron	Base cream DAC	16G20-T06-035312	4
Fagron	Base cream DAC	17A03-T08-040047	14
Fagron	Base cream DAC	17A03-T15-040074	8
Fagron	Base cream DAC	17A03-T-08-040047	1
Fagron	Base cream DAC	17A03t10040056	1
Fagron	Base cream DAC	17A03-To8-040047	1
Fagron	Base cream DAC	17F08T04-045271	1
Fagron	Base cream DAC	17H25-T06-047736	20
Fagron	Base cream DAC	17H25-T10-047753	8
Fagron	Base cream DAC	17H25-T12-047760	2
Fagron	Base cream DAC	17K24-T06-050503	1
Fagron	Base cream DAC	17K24-T07-050508	2
Fagron	Base cream DAC	18G13-T14-058090	1
Fagron	Base cream DAC	18L20-T21	1
Fagron	Base cream DAC	19C12-T05-065270	1
Fagron	Base cream DAC	15H04-T07-024983	2
Fagron	Base cream DAC	15H04-T05-024975	15

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	15C11-T04-020384	3
Fagron	Base cream DAC	14J07-T06-015957	5
Fagron	Base cream DAC	13E22t06003981	1
Fagron	Base cream DAC	19G08-T03-069142	2
Fagron	Base cream DAC	14A10-T06-009259	6
Fagron	Base cream DAC	701228-0002	1
Fagron	Base cream DAC	16F01-T10-033893	1
Fagron	Base cream DAC	17k24-T03-050489	1
Fagron	Base cream DAC	13C05-T06-001767	1
Fagron	Base cream DAC	13H14-T04-006218	3
Fagron	Base cream DAC	14B28T04010673	1
Fagron	Base cream DAC	14F06-T04-013010	1
Fagron	Base cream DAC	14J06-T08-015886	9
Fagron	Base cream DAC	14F05-T24	1
Fagron	Base cream DAC	14F05T06012961	1
Fagron	Base cream DAC	15C11-T05020388	1
Fagron	Base cream DAC	15J13-T04-026901	1
Fagron	Base cream DAC	16b15t02-030277	1
Fagron	Base cream DAC	15G09-19-024414	1
Fagron	Base cream DAC	16c24-t05-031490	1
Fagron	Base cream DAC	15C11-T04-020383	1
Fagron	Base cream DAC	16b15-f04-030281	1
Fagron	Base cream DAC	16c24-t05031490	1
Fagron	Base cream DAC	16f30-t13-034789	1
Fagron	Base cream DAC	16220401	1
Fagron	Base cream DAC	117U-01309	1
Fagron	Base cream DAC	16D06-T07-0319930	1
Fagron	Base cream DAC	17E11-T0744186	1
Fagron	Base cream DAC	17H25-T07-047741	8
Fagron	Base cream DAC	18G13-T11_058079	1
Fagron	Base cream DAC	15G09-T19-024415	2
Fagron	Base cream DAC	12C26-T04	1
Fagron	Base cream DAC	13E22T09003991	1
Fagron	Base cream DAC	14A10-T06	1
Fagron	Base cream DAC	13K12-T04008048	1
Fagron	Base cream DAC	16b15-t01-030274	1
Fagron	Base cream DAC	17K24-T04-050494	4
Fagron	Base cream DAC	17F08T04045271	1
Fagron	Base cream DAC	18C19-T18-053952	6
Fagron	Base cream DAC	18c19-t18-053952	1
Fagron	Base cream DAC	15J15-T01-027034	1
Fagron	Base cream DAC	13E22-T08-003987	2
Fagron	Base cream DAC	13378001	1
Fagron	Base cream DAC	412/2	2
Fagron	Base cream DAC	14F05-T07-012966	1
Fagron	Base cream DAC	16B15-T01-0300274	1
Fagron	Base cream DAC	16261501	1
Fagron	Base cream DAC	16B15_T01_030274	1
Fagron	Base cream DAC	17229901	1
Fagron	Base cream DAC	17A03-T13-040070	1
Fagron	Base cream DAC	17K24T05050498	1
Fagron	Base cream DAC	18E23-T15-156314	1
Fagron	Base cream DAC	18C19-T24-053978	1
Fagron	Base cream DAC	18G13-T13-058087	1
Fagron	Base cream DAC	18E23-T19-056343	1
Fagron	Base cream DAC	19C19-T22-065192	1
Fagron	Base cream DAC	18H20-T16-059356	1
Fagron	Base cream DAC	19D01-T14-065578	1
Fagron	Base cream DAC	13C05-T04-001760	1
Fagron	Base cream DAC	13E22-T04-003975	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	13E21-T04-003894	4
Fagron	Base cream DAC	13H14-T02-006207	1
Fagron	Base cream DAC	14D08-T03-011689	7
Fagron	Base cream DAC	14A10-T05-009254	1
Fagron	Base cream DAC	14151501	1
Fagron	Base cream DAC	15241801	1
Fagron	Base cream DAC	14D08-T05-011698	1
Fagron	Base cream DAC	15C11-T07-020396	5
Fagron	Base cream DAC	295898	1
Fagron	Base cream DAC	15L17-T01-028772	3
Fagron	Base cream DAC	1614-T02-031202	1
Fagron	Base cream DAC	16C14-T03-031205	2
Fagron	Base cream DAC	16F30-T16-034800	3
Fagron	Base cream DAC	17A03-T11-040060	1
Fagron	Base cream DAC	17240001	1
Fagron	Base cream DAC	17269301	1
Fagron	Base cream DAC	17K24-T05-050498	2
Fagron	Base cream DAC	18L20-T19-062951	1
Fagron	Base cream DAC	17A03-T12-040064	1
Fagron	Base cream DAC	17F08-T06-045279	2
Fagron	Base cream DAC	17023401	1
Fargon	Base cream DAC	13E20-T01-003865	1
Fargon	Base cream DAC	17A03-T07-040044	4
Fargon GmbH & Co.KG	Base cream DAC	16C24-T05-031490	1
Fargon/ Phönix	Base cream DAC	14K05T06016796	1
Fargon/Anzag	Base cream DAC	13H14-T01-006203	1
Fargon/Gehe	Base cream DAC	27348917	1
Ferd. Eimermacher GmbH	Base cream DAC	44960616	1
Ferd. Eimermacher GmbH	Base cream DAC	72240417	1
Ferd. Eimermacher GmbH ...	Base cream DAC	6671116	4
Ferd. Eimermacher GmbH ...	Base cream DAC	14120715	4
Ferd. Eimermacher GmbH ...	Base cream DAC	51590217	1
Ferd. Eimermacher GmbH ...	Base cream DAC	63340317	1
Ferd. Eimermacher GmbH ...	Base cream DAC	14130817	1
Ferd. Eimermacher GmbH ...	Base cream DAC	14110817	2
Ferd. Eimermacher GmbH ...	Base cream DAC	61371217	1
Ferd. Eimermacher GmbH ...	Base cream DAC	72250417	1
Ferd. Eimermacher GmbH ...	Base cream DAC	29220416	3
Ferd.Eimermacher GmbH/ ...	Base cream DAC	14120715	3
Ferdi	Base cream DAC	21220113	1
Ferdinand Eimermacher	Base cream DAC	57090315	3
Ferdinand Eimermacher	Base cream DAC	61361217	4
Ferdinand Eimermacher	Base cream DAC	80340218	2
Fiebig	Base cream DAC	16135001	1
Fiebig	Base cream DAC	17003201	1
Fiebig	Base cream DAC	17014401	1
Fiebig	Base cream DAC	17029101	1
Fiebig	Base cream DAC	17019501	1
Fiebig	Base cream DAC	17010001	1
Fiebig	Base cream DAC	17121501	1
Fiebig	Base cream DAC	17267701	1
Fiebig	Base cream DAC	18091102	1
Fiebig	Base cream DAC	18166401	1
Fiebig	Base cream DAC	18270101	1
Fiebig	Base cream DAC	18269501	1
Fiebig	Base cream DAC	18270901	1
Caelo	Base cream DAC	16F30-T034792	1
Caelo	Base cream DAC	18E23-T16-056321	1
Fagron	Base cream DAC	16D06-T05-031922	1
Finteler Apotheke	Base cream DAC	16325801	1

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Supplier	Substance	Batch	Spectra
Finze	Base cream DAC	12174901	1
Frago/Gehe	Base cream DAC	16J11-T01-037607	1
Frago/Gehe	Base cream DAC	17A03-T11-040060	1
Fragon	Base cream DAC	13E23-T15-005569	1
Frau Brinn-Holtz	Base cream DAC	16005401	1
Gatt-Koller	Base cream DAC	1802206	1
gehe	Base cream DAC	16005501	1
gehe	Base cream DAC	17230001	1
Gehe	Base cream DAC	207/2	1
Gehe	Base cream DAC	207/1	4
Gehe	Base cream DAC	219/1	3
Gehe	Base cream DAC	12005301	1
Gehe	Base cream DAC	219/2	3
Gehe	Base cream DAC	229/2	4
Gehe	Base cream DAC	234/1	1
Gehe	Base cream DAC	234/2	4
Gehe	Base cream DAC	1230113	1
Gehe	Base cream DAC	275277	1
Gehe	Base cream DAC	12262901	1
Gehe	Base cream DAC	12347301	1
Gehe	Base cream DAC	111105101	1
Gehe	Base cream DAC	275590	1
Gehe	Base cream DAC	13012501	2
Gehe	Base cream DAC	319/1	2
Gehe	Base cream DAC	279961	1
Gehe	Base cream DAC	329/1	3
Gehe	Base cream DAC	13E22T05003978	1
Gehe	Base cream DAC	329/2	1
Gehe	Base cream DAC	1306044-01	1
Gehe	Base cream DAC	340/1	2
Gehe	Base cream DAC	280082	1
Gehe	Base cream DAC	13310901	1
Gehe	Base cream DAC	282769	1
Gehe	Base cream DAC	13199101	1
Gehe	Base cream DAC	cdbgsgdb	1
Gehe	Base cream DAC	1302036-01	1
Gehe	Base cream DAC	13198501	1
Gehe	Base cream DAC	283974	1
Gehe	Base cream DAC	283975	1
Gehe	Base cream DAC	286088	1
Gehe	Base cream DAC	287941	1
Gehe	Base cream DAC	287947	1
Gehe	Base cream DAC	291025	1
Gehe	Base cream DAC	15040801	1
Gehe	Base cream DAC	1502008-01	1
Gehe	Base cream DAC	1502026-01	1
Gehe	Base cream DAC	294834	1
Gehe	Base cream DAC	15173301	1
Gehe	Base cream DAC	15315401	1
Gehe	Base cream DAC	1508001-01	1
Gehe	Base cream DAC	15357701	2
Gehe	Base cream DAC	15420001	1
Gehe	Base cream DAC	1603029-01	1
Gehe	Base cream DAC	16205501	1
Gehe	Base cream DAC	45330616	1
Gehe	Base cream DAC	16232201	1
Gehe	Base cream DAC	16240301	1
Gehe	Base cream DAC	16260801	1
Gehe	Base cream DAC	305731	1
Gehe	Base cream DAC	17003501	1

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Supplier	Substance	Batch	Spectra
Gehe	Base cream DAC	17097401	1
Gehe	Base cream DAC	17090601	1
Gehe	Base cream DAC	306620	1
Gehe	Base cream DAC	29870117	1
Gehe	Base cream DAC	6004859005	2
Gehe	Base cream DAC	17000922	1
Gehe	Base cream DAC	27340917	1
Gehe	Base cream DAC	18015301	1
Gehe	Base cream DAC	15250501	1
GEHE	Base cream DAC	12174801	1
GEHE	Base cream DAC	305712	1
GEHE	Base cream DAC	304359	1
GEHE	Base cream DAC	305713	1
GEHE	Base cream DAC	306621	1
GEHE	Base cream DAC	307965	1
GEHE	Base cream DAC	307964	1
GEHE	Base cream DAC	310723	1
GEHE	Base cream DAC	310722	1
GEHE	Base cream DAC	17000071	1
GEHE	Base cream DAC	18000964	1
GEHE	Base cream DAC	18081701	1
GEHE	Base cream DAC	18105101	1
GEHE	Base cream DAC	18137901	1
GEHE	Base cream DAC	45940718	1
GEHE	Base cream DAC	18166801	1
GEHE	Base cream DAC	18193001	1
GEHE	Base cream DAC	18270401	1
GEHE	Base cream DAC	19003201	1
GEHE	Base cream DAC	19116901	1
Caelo	Base cream DAC	14053501	1
Caelo	Base cream DAC	16G20-T04-035305	1
Euro OTC	Base cream DAC	16B15-T04-030281	1
Gehe / Spinnrad	Base cream DAC	16325801	1
Fagron	Base cream DAC	3987	2
Caelo	Base cream DAC	16B15-T02-030277	2
Caelo	Base cream DAC	16B15-T04-030281	4
Fagron	Base cream DAC	15h04-t06-024978	2
Gehe 07.12.18	Base cream DAC	18167001	1
GEHE 15.05.2014	Base cream DAC	14053701	1
Gehe 21-01-2019	Base cream DAC	18192601	1
GEHE 24.06.2014	Base cream DAC	14091601	1
Gehe 25.02.15	Base cream DAC	14325401	1
Gehe 28.05.2014	Base cream DAC	14090601	1
gehe 28.11.13	Base cream DAC	340/2	1
Gehe am 08.04.2014	Base cream DAC	412/1	2
Gehe,27.0415	Base cream DAC	14F27-T03-013614	1
Bombastus	Base cream DAC	6862441	1
Gehe/Beyvers	Base cream DAC	440/2	1
Bombastus	Base cream DAC	299945	1
Bombastus	Base cream DAC	308805	2
Bombastus	Base cream DAC	308800	3
Bombastus	Base cream DAC	310756	4
Bombastus	Base cream DAC	17000926	6
Bombastus	Base cream DAC	287115	2
Bombastus	Base cream DAC	263429	1
Bombastus	Base cream DAC	286160	3
Bombastus	Base cream DAC	287116	1
Bombastus	Base cream DAC	270000	2
Bombastus	Base cream DAC	266749	1
Bombastus	Base cream DAC	269996	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	283975	1
Caelo	Base cream DAC	1331502	1
Caelo	Base cream DAC	140409	1
Caelo	Base cream DAC	14177601	1
Caelo	Base cream DAC	14D08-T05-011698	1
Caelo	Base cream DAC	14151701	1
Caelo	Base cream DAC	14325101	2
Caelo	Base cream DAC	14374301	2
Caelo	Base cream DAC	14j07T06015957	1
Caelo	Base cream DAC	15166701	4
Caelo	Base cream DAC	1541901	1
Caelo	Base cream DAC	1291116	1
Caelo	Base cream DAC	16319501	2
Caelo	Base cream DAC	16261101/1170117	1
Caelo	Base cream DAC	1040417	1
Caelo	Base cream DAC	17136601	3
Caelo	Base cream DAC	1040917/17147401	1
Caelo	Base cream DAC	1081117/17229201	1
Caelo	Base cream DAC	17240801	6
Caelo	Base cream DAC	18085202/1300518	1
Caelo	Base cream DAC	18L20-T11-062930	1
Caelo	Base cream DAC	16F30-T14-034792	3
Caelo	Base cream DAC	15F30-T14-034792	1
Euro OTC	Base cream DAC	55840317	2
Euro OTC	Base cream DAC	130102301	1
Euro OTC	Base cream DAC	1307045-01	1
Euro OTC	Base cream DAC	1501008-01	1
Euro OTC	Base cream DAC	3854056	1
Fagron	Base cream DAC	16G20-T04-035305	10
Gehe/P.W.Beyvers	Base cream DAC	731/1	1
Gehe/P.W.Beyvers	Base cream DAC	731/2	1
Gehe/P.W.Beyvers	Base cream DAC	731/3	3
Caelo	Base cream DAC	151564501	1
Caelo	Base cream DAC	15184401	13
Caelo	Base cream DAC	15318901	6
Caelo	Base cream DAC	17240301-20171127Ma8	1
Euro OTC	Base cream DAC	150202601	1
Caelo	Base cream DAC	16325101	3
Caelo	Base cream DAC	17035801	5
Gutenberg-Apotheke	Base cream DAC	13378201	1
Gutenberg-Apotheke	Base cream DAC	14035801	1
H.Lamotte Oils/AHD	Base cream DAC	6003682012	2
Hedinger	Base cream DAC	1309006-01	3
Hedinger	Base cream DAC	281718	1
Hedinger/Phoenix	Base cream DAC	7580418	2
henry lamotte	Base cream DAC	6002237003	1
henry lamotte	Base cream DAC	6003682013	2
henry lamotte	Base cream DAC	6004859001	2
henry lamotte	Base cream DAC	8003325003	2
henry lamotte	Base cream DAC	6004859005	1
henry lamotte	Base cream DAC	8003325006	1
Henry Lamotte	Base cream DAC	5163400	1
Henry Lamotte	Base cream DAC	5100000	1
Henry Lamotte	Base cream DAC	5215400	1
Henry Lamotte	Base cream DAC	5289000	1
Henry Lamotte	Base cream DAC	5321000	1
Henry Lamotte	Base cream DAC	5322300	3
Henry Lamotte	Base cream DAC	5407700	1
Henry Lamotte	Base cream DAC	5408100	1
Henry Lamotte	Base cream DAC	5408000	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Base cream DAC	5489800	1
Henry Lamotte	Base cream DAC	5321100	1
Henry Lamotte	Base cream DAC	5489900	2
Henry Lamotte	Base cream DAC	5408300	1
Henry Lamotte	Base cream DAC	5490100	1
Henry Lamotte	Base cream DAC	5537100	2
Henry Lamotte	Base cream DAC	5909300	1
Henry Lamotte	Base cream DAC	6002237003	1
Henry Lamotte	Base cream DAC	5788200	1
Henry Lamotte	Base cream DAC	5909500	1
Henry Lamotte	Base cream DAC	6002237001	2
Henry Lamotte	Base cream DAC	6002237002	2
Henry Lamotte	Base cream DAC	5909600	1
Henry Lamotte	Base cream DAC	6003682004	1
Henry Lamotte	Base cream DAC	6003682012	1
Henry Lamotte	Base cream DAC	6003682016	1
Henry Lamotte	Base cream DAC	6004859001	1
Henry Lamotte	Base cream DAC	6004859006	2
Henry Lamotte	Base cream DAC	8003325010	1
Henry Lamotte	Base cream DAC	8003325005	1
Henry Lamotte	Base cream DAC	8003325003	1
Henry Lamotte	Base cream DAC	8004134005	1
henry Lamotte / Noweda	Base cream DAC	5408000	1
Henry Lamotte /AHD	Base cream DAC	5910000	1
Henry Lamotte /AHD	Base cream DAC	6003682017	1
Henry Lamotte /Noveda	Base cream DAC	5909600	1
Henry Lamotte Oils	Base cream DAC	5215600	1
Henry Lamotte Oils	Base cream DAC	5321200	1
Henry Lamotte Oils	Base cream DAC	5322400	1
Henry Lamotte Oils	Base cream DAC	5407900	1
Henry Lamotte Oils	Base cream DAC	60260	1
Henry Lamotte Oils	Base cream DAC	6002237006	1
Henry Lamotte Oils	Base cream DAC	6002237005	2
Henry Lamotte Oils	Base cream DAC	8003325010	1
Henry Lamotte Oils / Gehe	Base cream DAC	5407700	1
Henry Lamotte Oils / No...	Base cream DAC	5788200	1
Henry Lamotte Oils / No...	Base cream DAC	5909500	1
Henry Lamotte Oils / No...	Base cream DAC	6002237005	1
Henry Lamotte Oils / Ph...	Base cream DAC	5537000	1
henry lamotte oils gmbh	Base cream DAC	5537000	1
henry lamotte oils gmbh	Base cream DAC	5650900	1
henry lamotte oils gmbh	Base cream DAC	6004859002	1
Henry Lamotte oils GmbH	Base cream DAC	5490100	1
Henry Lamotte oils GmbH	Base cream DAC	5650600	1
Henry Lamotte oils GmbH	Base cream DAC	5650900	1
Henry Lamotte oils GmbH	Base cream DAC	5651100	1
Henry Lamotte oils GmbH	Base cream DAC	5787800	2
Henry Lamotte oils GmbH	Base cream DAC	6004859004	1
Henry Lamotte oils GmbH	Base cream DAC	6004859005	1
Henry Lamotte oils GmbH	Base cream DAC	8004134004	1
Henry Lamotte oils GmbH	Base cream DAC	8004996003	1
Henry Lamotte Oils GmbH	Base cream DAC	6002237004	1
Henry Lamotte Oils GmbH	Base cream DAC	5215500	1
Henry Lamotte Oils GmbH	Base cream DAC	5151700	1
Henry Lamotte Oils GmbH	Base cream DAC	5215300	2
Henry Lamotte Oils GmbH	Base cream DAC	5321000	4
Henry Lamotte Oils GmbH	Base cream DAC	5407700	5
Henry Lamotte Oils GmbH	Base cream DAC	5537000	12
Henry Lamotte Oils GmbH	Base cream DAC	5909400	1
Henry Lamotte Oils GmbH	Base cream DAC	5909600	2

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Base cream DAC	6002237002	5
Henry Lamotte Oils GmbH	Base cream DAC	6002237003	2
Henry Lamotte Oils GmbH	Base cream DAC	6003682004	1
Henry Lamotte Oils GmbH	Base cream DAC	600382004	1
Henry Lamotte Oils GmbH	Base cream DAC	6003682015	3
Henry Lamotte Oils GmbH	Base cream DAC	8003325007	2
Henry Lamotte Oils GmbH	Base cream DAC	80003325007	1
Henry Lamotte Oils GmbH	Base cream DAC	8004134006	1
Henry Lamotte Oils GmbH	Base cream DAC	8004134007	1
Henry Lamotte Oils GmbH	Base cream DAC	8004134004	1
Henry Lamotte Oils GmbH	Base cream DAC	8004134005	2
Henry Lamotte Oils GMBH	Base cream DAC	170124BC/6003682013	1
henry lamotte Oils GmbH...	Base cream DAC	8003325005	5
Henry Lamotte Oils GmbH...	Base cream DAC	8003325006	1
Henry Lamotte Oils GMBH...	Base cream DAC	170612BC/6004859002	1
Henry Lamotte Oils GmbH...	Base cream DAC	6003682015	2
Henry Lamotte Oils GmbH...	Base cream DAC	6004859003	2
Henry Lamotte Oils GmbH...	Base cream DAC	6004859004	2
Henry Lamotte Oils GmbH...	Base cream DAC	6004859006	2
Henry Lamotte Oils GmbH...	Base cream DAC	5489900	1
Henry Lamotte Oils GmbH...	Base cream DAC	8004134007	2
Henry Lamotte Oils/ Gehe	Base cream DAC	5321000	2
Henry Lamotte Oils/ San...	Base cream DAC	5909700	1
Henry Lamotte Oils/Phönix	Base cream DAC	5788700	2
Henry Lamotte Oils/Sana...	Base cream DAC	5650600	1
Henry Lamotte Olis GmbH	Base cream DAC	5651100	1
Henry Lamotte/ Phönix	Base cream DAC	8004134005	2
Henry Lamotte/ AHDE 02....	Base cream DAC	5537000	1
Henry Lamotte/ Alliance	Base cream DAC	6004859002	1
Henry Lamotte/ Krieger	Base cream DAC	6003682004	1
Henry Lamotte/ Krieger	Base cream DAC	6003682013	2
Henry Lamotte/ Noweda	Base cream DAC	532220	1
Henry Lamotte/ Noweda	Base cream DAC	5537300	4
Henry Lamotte/ Noweda	Base cream DAC	5537000	2
Henry Lamotte/ Noweda	Base cream DAC	5909300	1
Henry Lamotte/ Phönix	Base cream DAC	8003325003	1
Henry Lamotte/AHD	Base cream DAC	5909700	2
Henry Lamotte/AHD	Base cream DAC	5909900	1
Henry Lamotte/AHD	Base cream DAC	6004859003	2
Henry Lamotte/Anzag	Base cream DAC	5289200	1
Henry Lamotte/Anzag	Base cream DAC	5408300	2
Henry Lamotte/Anzag	Base cream DAC	5537600	2
Henry Lamotte/Anzag	Base cream DAC	5651100	1
Henry Lamotte/Anzag	Base cream DAC	5651200	1
Henry Lamotte/Anzag	Base cream DAC	5788600	1
Henry Lamotte/Anzag	Base cream DAC	5788700	3
Henry Lamotte/Anzag	Base cream DAC	5909800	1
Henry Lamotte/Anzag	Base cream DAC	5909500	1
Henry Lamotte/Anzag	Base cream DAC	6002237009	2
Henry Lamotte/Noewda	Base cream DAC	6004859001	1
Henry Lamotte/OG	Base cream DAC	6002237002	1
Henry Lamotte/OG	Base cream DAC	6003682013	1
Henry Lamotte/Phönix	Base cream DAC	6004860002	1
Henry Lamotte/Sanacorp	Base cream DAC	13140001	1
Henry/Noweda	Base cream DAC	6002237004	1
Henry/Noweda	Base cream DAC	6002237006	1
Henry/Sanacorp	Base cream DAC	600223705	1
Henry/Sanacorp	Base cream DAC	81/AKD16	1
HENRYLAMOTTE/Gehe	Base cream DAC	5408000	1
HenryLamotteGmbH/Noweda	Base cream DAC	5650800	1

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Supplier	Substance	Batch	Spectra
Herstellung	Base cream DAC	13173601	1
Hirsch	Base cream DAC	1210054-01	1
Holdermann	Base cream DAC	280078	1
Ichthyol	Base cream DAC	6004860002	1
Ichthyol	Base cream DAC	18165401	1
Ichthyol / Gehe	Base cream DAC	14A10-T06	1
Ichthyol-Gesellschaft	Base cream DAC	16232001	1
Ichthyol-Gesellschaft	Base cream DAC	16238001	1
Ichthyol-Gesellschaft C...	Base cream DAC	15040701	1
Ichtyol	Base cream DAC	5407700	1
Infecto/Phönix	Base cream DAC	12191901	1
Jenne	Base cream DAC	18G13-Tro-058076	1
Kehr	Base cream DAC	307958	1
Kehr	Base cream DAC	17000200	1
Kehr	Base cream DAC	17000897	1
Kehr	Base cream DAC	45950718	1
KEHR / Beyvers GmbH	Base cream DAC	71112PML01	1
Bombastus	Base cream DAC	291069	1
Caelo	Base cream DAC	4918A-01309	1
Caelo	Base cream DAC	18269601	12
Caelo	Base cream DAC	19117001	2
Klenk	Base cream DAC	1205004-01	1
Klosterring	Base cream DAC	17229201	1
Klosterring	Base cream DAC	17225901	1
Klosterring	Base cream DAC	18269001	1
kögl	Base cream DAC	1900812	1
Kögl	Base cream DAC	329110160517	1
Kögl	Base cream DAC	35402171317	1
Kögl	Base cream DAC	35402171017	1
Kögl	Base cream DAC	329110164116	1
Kögl	Base cream DAC	1800403	2
Kögl	Base cream DAC	1801872	2
KOKO GmbH	Base cream DAC	18269401	1
Krieger	Base cream DAC	12339301	1
Krieger	Base cream DAC	86470517	3
Caelo	Base cream DAC	18269301	8
Krieger/ Henry Lamotte	Base cream DAC	6003682016	1
Krieger/ Henry Lamotte	Base cream DAC	6004859003	1
Krieger/ Henry Lamotte	Base cream DAC	6004859006	1
Krieger/ Henry Lamotte	Base cream DAC	8003325005	2
Krieger/ Henry Lamotte	Base cream DAC	8003325006	2
Krieger/ Henry Lamotte	Base cream DAC	8004134006	1
Caelo	Base cream DAC	17124101	4
Krieger/Hedinger	Base cream DAC	18272301	1
L10	Base cream DAC	18269201	3
L12	Base cream DAC	16350301	1
L12	Base cream DAC	17006701	1
L12	Base cream DAC	17100501	1
L12	Base cream DAC	17155601	1
L12	Base cream DAC	18126301	2
Caelo	Base cream DAC	16155501	2
Caelo	Base cream DAC	17123901	7
Caelo	Base cream DAC	19052901	4
lamotte	Base cream DAC	5537300	3
Lamotte	Base cream DAC	5099700	1
Lamotte	Base cream DAC	5099800	1
Lamotte	Base cream DAC	5163400	1
Lamotte	Base cream DAC	5321200	1
Lamotte	Base cream DAC	5322300	1
Lamotte	Base cream DAC	5322200	1

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Supplier	Substance	Batch	Spectra
Lamotte	Base cream DAC	5408000	1
Lamotte	Base cream DAC	5489900	1
Lamotte	Base cream DAC	5537000	1
Lamotte	Base cream DAC	5537300	1
Lamotte	Base cream DAC	5650700	3
Lamotte	Base cream DAC	5651000	1
Lamotte	Base cream DAC	5787800	1
Lamotte	Base cream DAC	5787900	2
Lamotte	Base cream DAC	5788000	1
Lamotte	Base cream DAC	5788200	2
Lamotte	Base cream DAC	5785800	1
Lamotte	Base cream DAC	5909300	3
Lamotte	Base cream DAC	60260	1
Lamotte	Base cream DAC	5909600	2
Lamotte	Base cream DAC	59096006002237002	1
Lamotte	Base cream DAC	6002237002	1
Lamotte	Base cream DAC	6002237005	1
Lamotte	Base cream DAC	5651100	1
Lamotte	Base cream DAC	16132001	1
Lamotte	Base cream DAC	6003682018	1
Lamotte	Base cream DAC	60004860001	1
Lamotte	Base cream DAC	6004860001	1
Lamotte	Base cream DAC	6004859002	2
Lamotte	Base cream DAC	8002875008	1
Lamotte	Base cream DAC	6004859003	1
Lamotte	Base cream DAC	8004134006	1
Lamotte	Base cream DAC	590990	1
Lamotte / AHC	Base cream DAC	6004859004	1
Lamotte / AHC	Base cream DAC	8003325007	1
Lamotte / AHC	Base cream DAC	8004134008	1
Lamotte / AHD	Base cream DAC	6002237001	1
Lamotte / Anzag	Base cream DAC	5408000	1
Lamotte / Anzag	Base cream DAC	5408100	1
Lamotte / Anzag	Base cream DAC	5408200	1
Lamotte / Noweda	Base cream DAC	6004859002	1
Lamotte / Noweda	Base cream DAC	6004859003	1
Lamotte / Noweda	Base cream DAC	6004859004	1
Lamotte / Noweda	Base cream DAC	6004859006	1
Lamotte / Noweda	Base cream DAC	8003325003	1
Lamotte / Noweda	Base cream DAC	8003325004	2
Lamotte / Noweda	Base cream DAC	8003325007	1
Lamotte / Phoenix	Base cream DAC	8004134005	1
Lamotte / Phoenix	Base cream DAC	8004996001	1
Lamotte / Phoenix	Base cream DAC	8004134007	1
Lamotte / Phoenix	Base cream DAC	8004996003	1
Lamotte / Phoenix	Base cream DAC	8004996004	2
Lamotte / Noweda	Base cream DAC	6002237002	1
Lamotte 001	Base cream DAC	5321000	1
Lamotte 001	Base cream DAC	5322400	1
Lamotte/ AHDE	Base cream DAC	5407700	1
Lamotte/ Anzag	Base cream DAC	6003682005	1
Lamotte/ Noweda	Base cream DAC	5407900	1
Lamotte/ Noweda	Base cream DAC	5537300	1
Lamotte/ Noweda	Base cream DAC	8003325004	1
Lamotte//AHD	Base cream DAC	5787900	1
Lamotte//AHD	Base cream DAC	6002237004	1
Lamotte/AHD	Base cream DAC	5407900	1
Lamotte/AHD	Base cream DAC	589900	1
Lamotte/AHD	Base cream DAC	5651300	1
Lamotte/AHD	Base cream DAC	5909600	1

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Supplier	Substance	Batch	Spectra
Lamotte/AHD	Base cream DAC	6002237009	1
Lamotte/AHD	Base cream DAC	600237004	1
Lamotte/AHD	Base cream DAC	6002237006	1
Lamotte/AHD	Base cream DAC	6003682005	1
Lamotte/AHD	Base cream DAC	6003682013	1
Lamotte/AHD	Base cream DAC	6003682012	1
Lamotte/AHD	Base cream DAC	6003682016	1
Lamotte/AHD	Base cream DAC	6004859003	1
Lamotte/AHD	Base cream DAC	6004860003	1
Lamotte/AHD	Base cream DAC	6004859004	1
Lamotte/AHD	Base cream DAC	8003325008	1
Lamotte/AHD	Base cream DAC	8004134008	1
Lamotte/AHD	Base cream DAC	8004134005	1
Lamotte/AHD	Base cream DAC	5909900	1
Lamotte/Alliance	Base cream DAC	5537600	1
Lamotte/Alliance	Base cream DAC	5651300	1
Lamotte/Alliance	Base cream DAC	5651200	1
Lamotte/Anzag	Base cream DAC	5408100	1
Lamotte/Anzag	Base cream DAC	5651100	1
Lamotte/Anzag	Base cream DAC	6003682004	1
Lamotte/ANZAG	Base cream DAC	6002237008	1
Lamotte/Gehe	Base cream DAC	6002237002	1
lamotte/Kehr	Base cream DAC	8004134008	1
Lamotte/Noweda	Base cream DAC	5909600	1
Lamotte/Noweda	Base cream DAC	6002237001	1
Lamotte/Noweda	Base cream DAC	6003682016	1
Lamotte/Otto	Base cream DAC	5215800	2
Lamotte/Otto	Base cream DAC	5321000	1
Lamotte/P	Base cream DAC	8003325003	1
Lamotte/Phoenix	Base cream DAC	5322200	1
Lamotte/Phoenix	Base cream DAC	8003325005	1
Lamotte/Phönix	Base cream DAC	5909600	1
Lamotte/Phönix	Base cream DAC	6003682016	1
lamotte/sanacorb	Base cream DAC	5651000	2
lamotte/sanacorb	Base cream DAC	5787800	1
Lamotte/Sanacorp	Base cream DAC	5788700	2
Lamotte/Sanacorp	Base cream DAC	6003682005	1
Lamotte/Sanacorp	Base cream DAC	6002237010	1
Lamotte/Sanacorp	Base cream DAC	6002237009	1
Lamotte-oils/Noweda	Base cream DAC	8003325004	1
medphano	Base cream DAC	6500115	4
Medphano Phönix	Base cream DAC	6500117	1
mephano	Base cream DAC	6500115	1
Midas	Base cream DAC	16261501	1
Midas	Base cream DAC	17029201	1
Midas	Base cream DAC	306623	2
Midas	Base cream DAC	17090901	1
Midas	Base cream DAC	17129901	1
Midas	Base cream DAC	17147301	1
Midas	Base cream DAC	310722	1
Midas	Base cream DAC	17225201	1
Midas	Base cream DAC	17225002	1
Midas	Base cream DAC	310755	2
Midas	Base cream DAC	17240401	1
Midas	Base cream DAC	17267001	1
Midas	Base cream DAC	17000905	1
Midas	Base cream DAC	17266401	1
Midas	Base cream DAC	18000966	1
Midas	Base cream DAC	17351901	2
Midas	Base cream DAC	18091102	1

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Supplier	Substance	Batch	Spectra
Midas	Base cream DAC	18129301	1
Midas	Base cream DAC	18137801	1
Midas	Base cream DAC	18001972	1
Midas	Base cream DAC	18166401	1
Midas	Base cream DAC	18003935	3
Midas	Base cream DAC	18005746	1
Midas	Base cream DAC	18269401	1
Midas	Base cream DAC	18006777	1
Midas	Base cream DAC	19000939	3
Midas Phönix	Base cream DAC	308803	1
Nachprüfung	Base cream DAC	1118H-01309	1
Nachprüfung	Base cream DAC	123456	1
Nokun	Base cream DAC	18105402	1
noweda	Base cream DAC	13347101	1
Noweda	Base cream DAC	5163300	1
Noweda	Base cream DAC	5100000	1
Noweda	Base cream DAC	12005601	1
Noweda	Base cream DAC	12263501	1
Noweda	Base cream DAC	12305001	1
Noweda	Base cream DAC	12339201	1
Noweda	Base cream DAC	131250001	1
Noweda	Base cream DAC	13139901	1
Noweda	Base cream DAC	13139702	1
Noweda	Base cream DAC	13198601	2
Noweda	Base cream DAC	13347201	1
Noweda	Base cream DAC	14144101	1
Noweda	Base cream DAC	1311004-01	1
Noweda	Base cream DAC	1312037-01	1
Noweda	Base cream DAC	1502028-01	2
Noweda	Base cream DAC	14F05-T06-012961	2
Noweda	Base cream DAC	1511001-01	1
Noweda	Base cream DAC	16350201	1
Noweda	Base cream DAC	17097401	4
Noweda	Base cream DAC	91340916	1
Noweda	Base cream DAC	6004859002	1
Noweda	Base cream DAC	305715	1
Noweda	Base cream DAC	17028801	1
Noweda	Base cream DAC	6004859003	1
Noweda	Base cream DAC	3011016	2
Noweda	Base cream DAC	17136601	2
Noweda	Base cream DAC	2981016	1
Noweda	Base cream DAC	6004859004	1
Noweda	Base cream DAC	17240201	1
Noweda	Base cream DAC	51580217	1
Noweda	Base cream DAC	17267801	1
Noweda	Base cream DAC	16058801	1
Noweda / Beyvers	Base cream DAC	412/2	1
Caelo	Base cream DAC	12339401	6
Caelo	Base cream DAC	14178101	4
Noweda 17.10.2014	Base cream DAC	1346001	1
Caelo	Base cream DAC	170100001	1
Bombastus	Base cream DAC	278562	2
Noweda/ Eimermacher	Base cream DAC	50211015	1
Noweda/ Eimermacher	Base cream DAC	55350716	2
Fagron	Base cream DAC	16G20-T04-035304	2
Fagron	Base cream DAC	11831116	1
Noweda/ Lamotte	Base cream DAC	60036820015	1
Noweda/ Lamotte	Base cream DAC	6004859001	2
Noweda/Beyvers	Base cream DAC	412/3	1
Caelo	Base cream DAC	12339101	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	13158701	1
Caelo	Base cream DAC	14238101	3
Caelo	Base cream DAC	15164401	4
Caelo	Base cream DAC	14222901	1
Caelo	Base cream DAC	44950616	2
Caelo	Base cream DAC	17268601	3
Caelo	Base cream DAC	171535501	1
Caelo	Base cream DAC	15272601	2
Caelo	Base cream DAC	19117701	4
Noweda/Eimermacher	Base cream DAC	80340218	1
Noweda/Ensbona	Base cream DAC	24180414	4
Noweda/Ensbona	Base cream DAC	8821114	5
Noweda/Ensbona	Base cream DAC	56590714	5
Noweda/Ensbona	Base cream DAC	57090315	1
Noweda/Ensbona	Base cream DAC	222512	1
Fagron	Base cream DAC	13K12-T06-0004	1
Fagron	Base cream DAC	13K12-T07-008057	1
Fagron	Base cream DAC	14A13-T07-009298	1
Fagron	Base cream DAC	14F05-T24-012983	7
Fagron	Base cream DAC	6879559	1
Fagron	Base cream DAC	14J07-T10-015972	2
Fagron	Base cream DAC	15C11-T09-020405	1
Fagron	Base cream DAC	15C11-To4-020384	1
Noweda/Lamotte	Base cream DAC	6004859006	1
Noweda/Lamotte	Base cream DAC	8003325007	1
Euro OTC	Base cream DAC	1305012-01	1
Euro OTC	Base cream DAC	150200801	1
Euro OTC	Base cream DAC	1210011-01	3
Euro OTC	Base cream DAC	150604601	1
Euro OTC	Base cream DAC	52500616	1
Euro OTC	Base cream DAC	1111041-01	1
Euro OTC	Base cream DAC	1204023-01	1
Euro OTC	Base cream DAC	16249801	2
Euro OTC	Base cream DAC	62991016	1
p w Beyvers	Base cream DAC	640/3	1
P&M Cosmetics GmbH & Co...	Base cream DAC	150317	1
P. W. Beyvers	Base cream DAC	319/1	1
P. W. Beyvers GmbH	Base cream DAC	329/2	3
P. W. Beyvers GmbH	Base cream DAC	515/2	1
P. W. Beyvers GmbH	Base cream DAC	640/1	2
P. W. Beyvers GmbH	Base cream DAC	640/3	1
P. W. Beyvers GmbH	Base cream DAC	731/1	2
P. W. Beyvers GmbH	Base cream DAC	731/2	1
P. W. Beyvers GmbH	Base cream DAC	731/3	1
P. W. Beyvers GmbH	Base cream DAC	731/4	2
P. W. Beyvers GmbH / No...	Base cream DAC	18002	1
P.W Beyver/Noweda	Base cream DAC	731/1	1
P.W. Beyvers	Base cream DAC	329/2	4
P.W. Beyvers	Base cream DAC	329/1	1
P.W. Beyvers	Base cream DAC	319/2	1
P.W. Beyvers	Base cream DAC	440/3	1
P.W. Beyvers	Base cream DAC	640/2	1
P.W. Beyvers / Anzag	Base cream DAC	340/2	1
P.W. Beyvers / Noweda	Base cream DAC	731/3	8
P.W. Beyvers / Noweda	Base cream DAC	731/4	2
P.W. Beyvers GmbH	Base cream DAC	515/3	2
P.W. Beyvers GmbH	Base cream DAC	538/1	1
P.W. Beyvers GmbH	Base cream DAC	640/1	1
P.W. Beyvers GmbH	Base cream DAC	731/1	1
P.W. Beyvers GmbH	Base cream DAC	731/3	2

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Supplier	Substance	Batch	Spectra
P.W. Beyvers GmbH	Base cream DAC	731/4	1
P.W. Beyvers GmbH / Phö...	Base cream DAC	538/1	2
P.W. Beyvers GmbH/Gehe	Base cream DAC	640/2	1
P.W. Beyvers/Noweda	Base cream DAC	538/1	1
P.W.Bayvers GmbH	Base cream DAC	234-2	1
p.w.beyvers	Base cream DAC	515/2	1
P.W.Beyvers	Base cream DAC	229/1	2
P.W.Beyvers	Base cream DAC	234/1	1
P.W.Beyvers	Base cream DAC	229/2	1
P.W.Beyvers	Base cream DAC	340/2	3
P.W.Beyvers	Base cream DAC	340/1	1
P.W.Beyvers	Base cream DAC	412/1	2
P.W.Beyvers	Base cream DAC	412/3	1
P.W.Beyvers	Base cream DAC	440/1	1
P.W.Beyvers	Base cream DAC	440/2	1
P.W.Beyvers	Base cream DAC	640/1	2
P.W.Beyvers	Base cream DAC	640/3	1
P.W.Beyvers	Base cream DAC	731/1	3
P.W.Beyvers	Base cream DAC	731/3	3
P.W.Beyvers	Base cream DAC	731/2	1
P.W.Beyvers	Base cream DAC	731/4	3
P.W.Beyvers	Base cream DAC	18002	2
P.W.Beyvers	Base cream DAC	229/1	1
P.W.Beyvers GmbH	Base cream DAC	640/2	4
P.W.Beyvers GmbH	Base cream DAC	640/3	3
P.W.Beyvers GmbH	Base cream DAC	731/1	3
P.W.Beyvers GmbH	Base cream DAC	18002	1
P.W.Beyvers GmbH / Noweda	Base cream DAC	515/3	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	207/2	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	234/3	2
P.W.Beyvers GmbH,Phönix	Base cream DAC	329/1	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	440/1	2
P.W.Beyvers GmbH,Phönix	Base cream DAC	440/2	1
P.W.Beyvers GmbH/ Sanac...	Base cream DAC	515/2	1
P.W.Beyvers GmbH/Anzag	Base cream DAC	340/2	1
P.W.Beyvers GmbH/Anzag	Base cream DAC	412/2	1
P.W.Beyvers GmbH/Phönix	Base cream DAC	340/2	1
P.W.Beyvers/Jenne 18.12...	Base cream DAC	340/2	1
P.W.Peyvers/ Sanacorp	Base cream DAC	18001	2
P.W.Weyers GmbH	Base cream DAC	340/1	1
P.W: Beyvers GmbH	Base cream DAC	18001	1
pharmachem	Base cream DAC	640/2	2
Pharmachem GmbH / Phönix	Base cream DAC	62560918	1
Phoenix	Base cream DAC	272091	1
Phoenix	Base cream DAC	272219	2
Phoenix	Base cream DAC	5289100	1
Phoenix	Base cream DAC	275591	1
Phoenix	Base cream DAC	14036001	1
Phoenix	Base cream DAC	5651300	2
Phoenix	Base cream DAC	1306002-01	1
Phoenix	Base cream DAC	16059101	1
Phoenix	Base cream DAC	16041301	1
Phoenix	Base cream DAC	16205601	1
Phoenix	Base cream DAC	72440816	1
Phoenix	Base cream DAC	16349502	1
Phoenix	Base cream DAC	17031501	2
Phoenix	Base cream DAC	55360616	2
Phoenix	Base cream DAC	17121501	1
Phoenix	Base cream DAC	17136301	1
Phoenix	Base cream DAC	16102017-BH-A	1

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Supplier	Substance	Batch	Spectra
Phoenix	Base cream DAC	17229201	1
Phoenix	Base cream DAC	39600117	1
Phoenix	Base cream DAC	17243501	1
Phoenix	Base cream DAC	46711117	2
Phoenix	Base cream DAC	27350917	1
Phoenix	Base cream DAC	18105402	1
Phoenix	Base cream DAC	19052601	1
Caelo	Base cream DAC	12245001	2
phoenix 01.10.14	Base cream DAC	14178001	1
PHÖNIX 03.03.2014	Base cream DAC	5537200	2
Phoenix 13.11.14	Base cream DAC	14143801	1
Phoenix 20.02.15	Base cream DAC	291032	1
Phoenix 20.06.2014	Base cream DAC	14090601	1
Phoenix Cottbus 27.06.17	Base cream DAC	17123901	1
Phoenix Goettin	Base cream DAC	14289601	1
Bombastus	Base cream DAC	272221	1
Bombastus	Base cream DAC	278396	2
Bombastus	Base cream DAC	19002684	2
Caelo	Base cream DAC	5321200	2
Euro OTC	Base cream DAC	13460119	1
Caelo	Base cream DAC	13312101	2
Caelo	Base cream DAC	19170501	1
Fagron	Base cream DAC	17K24-T07-050507	7
Phonix	Base cream DAC	29570618	1
phönix	Base cream DAC	13007101	1
phönix	Base cream DAC	5408200	1
phönix	Base cream DAC	15j13-t03-026895	1
phönix	Base cream DAC	16C24-T06-031494	1
phönix	Base cream DAC	16b15-t01-030274	1
phönix	Base cream DAC	16c24t06031494	1
phönix	Base cream DAC	16D06-T06-0311926	1
phönix	Base cream DAC	16c14-t01-031199	1
phönix	Base cream DAC	16F30-T15-034797	1
phönix	Base cream DAC	16j11t02037610	1
phönix	Base cream DAC	16J11-T03-037614	1
Phönix	Base cream DAC	1111029-01	1
Phönix	Base cream DAC	13000601	1
Phönix	Base cream DAC	13007101	1
Phönix	Base cream DAC	13000701	1
Phönix	Base cream DAC	13111401	1
Phönix	Base cream DAC	278475	1
Phönix	Base cream DAC	13E21-T05-003897	1
Phönix	Base cream DAC	13311801	1
Phönix	Base cream DAC	14035801	1
Phönix	Base cream DAC	14053501	1
Phönix	Base cream DAC	6207	1
Phönix	Base cream DAC	14D08-T02-0002	1
Phönix	Base cream DAC	14052901	4
Phönix	Base cream DAC	14303901	1
Phönix	Base cream DAC	55360616	2
Phönix	Base cream DAC	307963	1
Phönix	Base cream DAC	17f08-t04-045271	1
Phönix	Base cream DAC	18166801	1
Phönix	Base cream DAC	62560918	1
Phönix	Base cream DAC	18272201	1
PHÖNIX	Base cream DAC	16261002	1
PHÖNIX	Base cream DAC	17230101	1
PHÖNIX	Base cream DAC	17269201	1
PHÖNIX	Base cream DAC	18137001	1

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Supplier	Substance	Batch	Spectra
PHÖNIX	Base cream DAC	18105402	1
PHÖNIX	Base cream DAC	18L20-T12-062936	1
Caelo	Base cream DAC	14140817	2
Euro OTC	Base cream DAC	3661016	1
Euro OTC	Base cream DAC	39580217	4
Euro OTC	Base cream DAC	39630217	14
Phönix 22.11.12	Base cream DAC	272218	1
Phönix 23.01.15	Base cream DAC	14290001	1
Phönix Gotha	Base cream DAC	5215600	2
Phönix Gotha	Base cream DAC	5215800	1
Phönix Gotha	Base cream DAC	5321000	1
Phönix Gotha	Base cream DAC	5322100	1
Phönix Gotha	Base cream DAC	5489800	1
Phönix Gotha	Base cream DAC	5537100	1
Phönix Gotha	Base cream DAC	5537300	1
Phönix Gotha	Base cream DAC	5650600	1
Phönix Gotha	Base cream DAC	5650900	1
Phönix Gotha	Base cream DAC	5787900	1
Phönix Gotha	Base cream DAC	5788000	1
Phönix Gotha	Base cream DAC	515/1	1
Phönix Gotha	Base cream DAC	1502025-01	1
Phönix Gotha	Base cream DAC	515/3	1
Phönix Gotha	Base cream DAC	538/1	1
Phönix, 28.10.2013	Base cream DAC	279961	1
Caelo	Base cream DAC	14A10-T06-009259	1
Fagron	Base cream DAC	18C19-T16-053945	1
Caelo	Base cream DAC	12191701	3
Caelo	Base cream DAC	12241201	1
Caelo	Base cream DAC	12262601	3
Caelo	Base cream DAC	13007101	5
Caelo	Base cream DAC	5537400	1
Caelo	Base cream DAC	14227601	3
Caelo	Base cream DAC	14244501	4
Caelo	Base cream DAC	15041101	8
Caelo	Base cream DAC	17268501	10
Euro OTC	Base cream DAC	35840516	1
Euro OTC	Base cream DAC	86470517	3
Euro OTC	Base cream DAC	7550418	13
Euro OTC	Base cream DAC	51580217	21
Euro OTC	Base cream DAC	17023401	1
Phytocomm	Base cream DAC	16058801	1
PKH GmbH	Base cream DAC	34567890	1
Pößneck Pharma / Gehe	Base cream DAC	16261101	1
PW Beyves Alliance	Base cream DAC	412/3	1
Raben-Apotheke Mildenau	Base cream DAC	14143901	1
Raben-Apotheke Mildenau	Base cream DAC	14090601	1
Salderman GmbH+Co.KG	Base cream DAC	161207	1
Sana 03.12.16 EK 8,04EUR	Base cream DAC	16253101	1
Sana 11.02.15 EK 8,05	Base cream DAC	14303801	1
Sana 17.11.14 EK 7,89	Base cream DAC	14232301	1
Sana 19.09.14 EK 7,89	Base cream DAC	14227801	1
Sana 23.03.16 Ek 8,09	Base cream DAC	16055801	1
Sana/Henry Lamotte	Base cream DAC	6002237003	1
Sanacop WE:10.11.17 1kg...	Base cream DAC	17225801	1
Caelo	Base cream DAC	5788100	1
sanacoro	Base cream DAC	15357601	1
Sanacoro W.E:01.03.18 ...	Base cream DAC	17266901	1
sanacorp	Base cream DAC	548900	1
Sanacorp	Base cream DAC	12191801	1
Sanacorp	Base cream DAC	12262801	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Base cream DAC	12262402	1
Sanacorp	Base cream DAC	12263001	1
Sanacorp	Base cream DAC	12262901	1
Sanacorp	Base cream DAC	12289701	1
Sanacorp	Base cream DAC	12304701	1
Sanacorp	Base cream DAC	12339001	1
Sanacorp	Base cream DAC	1202001	3
Sanacorp	Base cream DAC	12304901	2
Sanacorp	Base cream DAC	12304801	1
Sanacorp	Base cream DAC	13000901	1
Sanacorp	Base cream DAC	13007201	1
Sanacorp	Base cream DAC	13007301	1
Sanacorp	Base cream DAC	13082101	1
Sanacorp	Base cream DAC	13082203	1
Sanacorp	Base cream DAC	13139801	1
Sanacorp	Base cream DAC	13158401	2
Sanacorp	Base cream DAC	13173701	1
Sanacorp	Base cream DAC	1317301	1
Sanacorp	Base cream DAC	13173601	1
Sanacorp	Base cream DAC	13187901	1
Sanacorp	Base cream DAC	13188701	1
Sanacorp	Base cream DAC	13188801	1
Sanacorp	Base cream DAC	13250001	1
Sanacorp	Base cream DAC	13199101	3
Sanacorp	Base cream DAC	13310901	1
Sanacorp	Base cream DAC	13312001	1
Sanacorp	Base cream DAC	13311301	2
Sanacorp	Base cream DAC	13347201	1
Sanacorp	Base cream DAC	282772	1
Sanacorp	Base cream DAC	13312301	1
Sanacorp	Base cream DAC	13381101	1
Sanacorp	Base cream DAC	13377201	1
Sanacorp	Base cream DAC	13381001	1
Sanacorp	Base cream DAC	283972	2
Sanacorp	Base cream DAC	13380901	1
Sanacorp	Base cream DAC	13311801	1
Sanacorp	Base cream DAC	5537000	2
Sanacorp	Base cream DAC	14091501	2
Sanacorp	Base cream DAC	72/AKD2	1
Sanacorp	Base cream DAC	14090401	1
Sanacorp	Base cream DAC	14091701	1
Sanacorp	Base cream DAC	14144001	1
Sanacorp	Base cream DAC	287942	1
Sanacorp	Base cream DAC	14144101	1
Sanacorp	Base cream DAC	14227901	1
Sanacorp	Base cream DAC	14244501	1
Sanacorp	Base cream DAC	14289801	1
Sanacorp	Base cream DAC	14327501	1
Sanacorp	Base cream DAC	15070101	1
Sanacorp	Base cream DAC	15000701	1
Sanacorp	Base cream DAC	75/AKD4	1
Sanacorp	Base cream DAC	15164601	2
Sanacorp	Base cream DAC	75/AKD6	1
Sanacorp	Base cream DAC	15250001	1
Sanacorp	Base cream DAC	15315301	1
Sanacorp	Base cream DAC	15387101	1
Sanacorp	Base cream DAC	15390801	2
Sanacorp	Base cream DAC	16145701	1
Sanacorp	Base cream DAC	17100201	1
Sanacorp	Base cream DAC	17154801	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Base cream DAC	17225002	1
Sanacorp	Base cream DAC	17229301	1
Sanacorp	Base cream DAC	17229601	2
Sanacorp	Base cream DAC	17240001	1
Sanacorp	Base cream DAC	17264501	1
Sanacorp	Base cream DAC	2x310752	1
Sanacorp	Base cream DAC	310752	3
Sanacorp	Base cream DAC	170000926	1
Sanacorp	Base cream DAC	310756	1
Sanacorp	Base cream DAC	17268601	1
Sanacorp	Base cream DAC	17349501	1
Sanacorp	Base cream DAC	18000497	1
Sanacorp	Base cream DAC	18000955	3
Sanacorp	Base cream DAC	18037901	1
Sanacorp	Base cream DAC	18138001	1
Sanacorp	Base cream DAC	18105602	1
Sanacorp	Base cream DAC	18165801	1
Sanacorp	Base cream DAC	18003938	2
Sanacorp	Base cream DAC	18166801	1
Sanacorp	Base cream DAC	18003933	1
Sanacorp	Base cream DAC	18193201	1
Sanacorp	Base cream DAC	18232601	1
Sanacorp	Base cream DAC	18269301	1
Sanacorp	Base cream DAC	18005242	1
Sanacorp	Base cream DAC	78/AKD12	1
SANACORP	Base cream DAC	19040101	2
Sanacorp 16.07.2016	Base cream DAC	1604023-01	1
Caelo	Base cream DAC	14091901	6
Caelo	Base cream DAC	14151301	2
Caelo	Base cream DAC	14327701	7
Caelo	Base cream DAC	15173501	7
Caelo	Base cream DAC	15250501	15
Caelo	Base cream DAC	16261301	3
Caelo	Base cream DAC	170195501	1
Caelo	Base cream DAC	19170301	2
Sanacorp 05.01.15 EK 7,89	Base cream DAC	14290001	1
Sanacorp 07.11 Ek.8,04	Base cream DAC	16241001	1
Sanacorp 22.02.17 EK:8,04	Base cream DAC	16352701	1
Sanacorp 26.01.15 EK 7,89	Base cream DAC	1403801	1
Sanacorp 30.03.2017 ek:...	Base cream DAC	17028901	1
Sanacorp 31.07.2014 EK:...	Base cream DAC	14143901	1
Sanacorp W.E:17.03.18 ...	Base cream DAC	17266401	1
Sanacorp WE 12.04.17 -8...	Base cream DAC	17029001	1
Sanacorp WE 20.02.17 E...	Base cream DAC	16350301	1
Sanacorp WE: 24.08.17 ...	Base cream DAC	17155201	1
Sanacorp WE:5.01.18	Base cream DAC	17230001	1
Sanacorp, 8,04EUR, 24.1.17	Base cream DAC	16350101	1
Bombastus	Base cream DAC	271999	1
Bombastus	Base cream DAC	272215	4
Bombastus	Base cream DAC	272086	3
Bombastus	Base cream DAC	275182	1
Bombastus	Base cream DAC	275181	2
Bombastus	Base cream DAC	278470	2
Bombastus	Base cream DAC	282771	1
Caelo	Base cream DAC	268820	2
Caelo	Base cream DAC	18220401	7
Caelo	Base cream DAC	19003901	3
Sanacorp/ Ferd. Eimerma...	Base cream DAC	8821114	2
Sanacorp/Beyvers	Base cream DAC	640/1	3
Sanacorp/Beyvers	Base cream DAC	731/2	3

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Supplier	Substance	Batch	Spectra
Sanacorp/Beyvers	Base cream DAC	731/3	2
Caelo	Base cream DAC	12000601	1
Caelo	Base cream DAC	12175101	1
Caelo	Base cream DAC	72/AKD1	1
Caelo	Base cream DAC	74/AKD2	1
Caelo	Base cream DAC	14326801	6
Caelo	Base cream DAC	16131901	7
Caelo	Base cream DAC	16146001	9
Caelo	Base cream DAC	16232001	6
Caelo	Base cream DAC	6003682004	1
Caelo	Base cream DAC	18037401	2
Fagron	Base cream DAC	17103801	1
Sanacorp/Fargon	Base cream DAC	17K24-T07-050507	1
Sanacorp/Henry Lamotte	Base cream DAC	5909300	1
Sanacorp/Henry Lamotte	Base cream DAC	6002237005	2
Schmittmann GmbH	Base cream DAC	14151901	1
Sonnenberg-Apotheke	Base cream DAC	289663	1
Stumpf/Beyvers	Base cream DAC	412/2	1
Stumpf/Beyvers	Base cream DAC	412/3	1
Bombastus	Base cream DAC	286086	2
Bombastus	Base cream DAC	283976	1
Caelo	Base cream DAC	12241101	1
Caelo	Base cream DAC	13012601	2
Caelo	Base cream DAC	1315601	1
Caelo	Base cream DAC	13158601	5
unbekannt	Base cream DAC	53812	1
Unisan	Base cream DAC	5537000	5
VDL	Base cream DAC	13380901	1
Caelo	Base cream DAC	12168001	1
Caelo	Base cream DAC	12061601	1
Caelo	Base cream DAC	12303901	2
Caelo	Base cream DAC	13000901	1
WE:06.04.2016 Sanacorp	Base cream DAC	16058801	1
WE:16.02.2016	Base cream DAC	15420201	1
WE:Sanacorp 10.08.2016 ...	Base cream DAC	16152201	1
WE:Sanacorp 31.10.2016 ...	Base cream DAC	16232301	1
WE:Sanacorp26.09.2016 ...	Base cream DAC	16155401	1
WESanacorp 17.12.2016 ...	Base cream DAC	16260801	2
/ Anzag	Base cream DAC		1
	Base cream DAC	287114	1
	Base cream DAC	289527	1
Beyvers	Base cream DAC		3
Beyvers/AHD	Base cream DAC		1
Bombastus	Base cream DAC		2
Bombastus	Base cream DAC	18005744	1
Caelo	Base cream DAC	13139901	14
Caelo	Base cream DAC		16
Caelo	Base cream DAC	14052901	12
Caelo	Base cream DAC	17028801	6
	Base cream DAC	27290917	1
Ensbona/ Sanacorp	Base cream DAC		2
Euro OTC	Base cream DAC	1304006-01	5
Euro OTC	Base cream DAC	39210516	1
Fagron	Base cream DAC	18L19-T15-062894	6
Fagron	Base cream DAC		5
Fagron	Base cream DAC	18L20-T12-062935	3
Gehe	Base cream DAC		8
	Base cream DAC	5909300	2
p.w beyers gmbh,phönix	Base cream DAC		4
P.W.Beyvers	Base cream DAC		1

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Supplier	Substance	Batch	Spectra
Sanacorp	Base cream DAC		2

- 128 310 spectra from 702 *Apo-Ident* customers from a total of 32 476 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Base cream DAC* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Base cream DAC* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1020	0	55 339
Type B	0	5229	51	64 114
Type C	0	9209	834	128 305

The substance/substance group *Base cream DAC* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.4118 %)
Type B	100.0000 % (> 99.9654 %)	99.0341 % (> 98.9773 %)
Type C	100.0000 % (> 99.6500 %)	91.6957 % (> 91.6658 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Base cream DAC* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Non-ionic hydrophil ointment	12.12	16.03
Eucerin [®] cum Aqua	17.39	21.03
Wool alcohol cream SR	20.75	18.38
Psorisol base cream Audor [®]	29.56	—
Wool alcohol cream DAB	30.50	24.51

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Substanz	Distance in main model	Distance in second-stage model
⋮	⋮	⋮
Lanette [®] ointment (conserved)	>50	17.85
2-ethylhexyl laurate	>50	118.05
Squalane	>50	130.37

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Base cream DAC* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31474	31474	0.00	17.39
31712	31712	0.00	25.79
30923	31252	8.58	15.49
31043	34030	5.51	20.21
31716	31716	0.00	22.77
31714	31714	0.00	24.03
31709	31709	0.00	23.47
31710	31710	0.00	22.97
31715	31715	0.00	24.91
31711	31711	0.00	24.22
34485	31716	6.37	12.12
31252	31252	0.00	17.12
34503	31714	3.97	20.74
34030	34030	0.00	19.79
31713	31713	0.00	24.10
31964	31964	0.00	17.91
32345	31716	4.22	16.43
34482	34482	0.00	22.31
34318	31716	3.81	19.07
34504	34030	7.74	14.18

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Basis Cordes® RK**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30892-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Basis Cordes® RK

Special notes

When selecting the *Basis Cordes® RK* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Basis Cordes® RK	4	2	64

Second-stage model

For differentiation of the substance/substance group *Basis Cordes*[®] *RK* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Basis Cordes*[®] *RK*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Ichthyol	Basis Cordes [®] RK	12A114	30892	60	1405097
Ichthyol	Basis Cordes [®] RK	13A038	31078	40	20130301
Ichthyol	Basis Cordes [®] RK	14A087	31660	60	1511145
Ichthyol	Basis Cordes [®] RK	19A097	34688	40	20190411

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 4 reference samples from the substance/substance group *Basis Cordes*[®] *RK*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Basis Cordes*[®] *RK*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Basis Cordes [®] RK	16A035	32951	40
Ichthyol	Basis Cordes [®] RK	16A034	33617	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 767 spectra from 298 *Apo-Ident* customers from 73 batches from the substance/substance group *Basis Cordes® RK*.
- Among them are spectra of independent samples from 64 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
200	Basis Cordes® RK	13A206	1
AHD	Basis Cordes® RK	18A108	1
AHD 04.02.15	Basis Cordes® RK	14A087	1
AHD 13.12.16 EK 16,54	Basis Cordes® RK	16A035	1
AHD/ichthyol	Basis Cordes® RK	16A035	1
AHD17.11.14 EK 16,06	Basis Cordes® RK	13A206	1
Alliance healthcare	Basis Cordes® RK	13A038	1
Anzag/ Ichtyol	Basis Cordes® RK	12A046	2
Anzag/Ichtyol	Basis Cordes® RK	12A046	1
Anzag/Ichtyol-Gesellsch...	Basis Cordes® RK	13A104	1
Anzag/Ichtyol-Gesellsch...	Basis Cordes® RK	14A051	1
AnzagIchthyol	Basis Cordes® RK	16A035	1
apomix/Noweda	Basis Cordes® RK	16A034	1
Bombastus	Basis Cordes® RK	16A035	4
Bombastus	Basis Cordes® RK	17A149	1
Bombastus	Basis Cordes® RK	13A103	1
Caelo	Basis Cordes® RK	12345	1
Caelo	Basis Cordes® RK	13A104	1
Caelo	Basis Cordes® RK	17A046	1
Caelo	Basis Cordes® RK	17A083	1
Caelo	Basis Cordes® RK	17A149	5
Caelo	Basis Cordes® RK	17A198	1
Caelo	Basis Cordes® RK	18A108	2
Caelo	Basis Cordes® RK	17A046	5
Caelo	Basis Cordes® RK	13A038	2
Caelo	Basis Cordes® RK	15A172	1
Caelo	Basis Cordes® RK	13A206	2
Caelo	Basis Cordes® RK	16A035	2
Caelo	Basis Cordes® RK	P160/14	1
Caelo	Basis Cordes® RK	14D87	1
Fagron	Basis Cordes® RK	18A106	1
Caelo	Basis Cordes® RK	15A057	2
Caelo	Basis Cordes® RK	16A034	7
Caelo	Basis Cordes® RK	13A103	1
Caelo	Basis Cordes® RK	14A205	3
Caelo	Basis Cordes® RK	4312A-03300	1
Cordes	Basis Cordes® RK	17A046	1
Cordes / Gehe	Basis Cordes® RK	18A108	1
Cordes, Hermani / Gehe	Basis Cordes® RK	13A206	1
Cordes, Hermani / Gehe	Basis Cordes® RK	15A115	1
Cordes, Hermann & Co	Basis Cordes® RK	13A206	2

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Supplier	Substance	Batch	Spectra
Cordes/AHD	Basis Cordes [®] RK	13A038	1
Cordes/Anzag	Basis Cordes [®] RK	13A038	2
Cordes/Gehe	Basis Cordes [®] RK	16A034	1
Cordes/Phoenix	Basis Cordes [®] RK	12A114	1
Delta Apotheke	Basis Cordes [®] RK	17A149	1
Ebert	Basis Cordes [®] RK	11A079	1
Euro OTC	Basis Cordes [®] RK	15A194	2
Fagron	Basis Cordes [®] RK	17A083	1
Fagron	Basis Cordes [®] RK	17A046	1
Fagron	Basis Cordes [®] RK	13A103	2
Gehe	Basis Cordes [®] RK	12A045	4
Gehe	Basis Cordes [®] RK	12A030	2
Gehe	Basis Cordes [®] RK	13A039	1
Gehe	Basis Cordes [®] RK	13A104	2
GEHE	Basis Cordes [®] RK	17A083	1
GEHE	Basis Cordes [®] RK	17A149	1
Gehe - Ichthyol	Basis Cordes [®] RK	13A039	1
GEHE / ICHTYOL Gesellsc...	Basis Cordes [®] RK	17A046	1
Caelo	Basis Cordes [®] RK	15A194	3
Gehe/Ichthyol	Basis Cordes [®] RK	14A087	1
Gehe/Ichthyol	Basis Cordes [®] RK	16A035	1
Gehe/ICHTHYOL	Basis Cordes [®] RK	16A035	1
Gehe/Ichthyol 23.11.16	Basis Cordes [®] RK	16A035	1
Gehe/Ichthyol	Basis Cordes [®] RK	18A103	1
Ichthyol	Basis Cordes [®] RK	15A057	1
Ichthol/ gehe 28.01.19	Basis Cordes [®] RK	18A108	1
Ichthol/ Noweda	Basis Cordes [®] RK	16A035	1
Ichthol-Gesellschaft/Ph...	Basis Cordes [®] RK	18A108	1
ICHTHYL-GESELLSCHAFT Co...	Basis Cordes [®] RK	17A149	1
Ichthyo/Phönix	Basis Cordes [®] RK	16A034	1
ichthyol	Basis Cordes [®] RK	1213Q-03300	1
ichthyol	Basis Cordes [®] RK	13A103	1
ichthyol	Basis Cordes [®] RK	16A035	1
ichthyol	Basis Cordes [®] RK	17A083	2
Ichthyol	Basis Cordes [®] RK	11A156	1
Ichthyol	Basis Cordes [®] RK	10A138	1
Ichthyol	Basis Cordes [®] RK	11A067	4
Ichthyol	Basis Cordes [®] RK	10A064	1
Ichthyol	Basis Cordes [®] RK	12A030	8
Ichthyol	Basis Cordes [®] RK	12A046	1
Ichthyol	Basis Cordes [®] RK	19111208	1
Ichthyol	Basis Cordes [®] RK	12A167	4
Ichthyol	Basis Cordes [®] RK	11A079	1
Ichthyol	Basis Cordes [®] RK	13A039	2
Ichthyol	Basis Cordes [®] RK	13A104	2
Ichthyol	Basis Cordes [®] RK	30041301	1
Ichthyol	Basis Cordes [®] RK	12A045	1
Ichthyol	Basis Cordes [®] RK	12A103	1
Ichthyol	Basis Cordes [®] RK	13A039	2
Ichthyol	Basis Cordes [®] RK	13A103	5
Ichthyol	Basis Cordes [®] RK	14A038	1
Ichthyol	Basis Cordes [®] RK	10071401	1
Ichthyol	Basis Cordes [®] RK	13A206	7
Ichthyol	Basis Cordes [®] RK	27102014B	1
Ichthyol	Basis Cordes [®] RK	28011507	1
Ichthyol	Basis Cordes [®] RK	14A087	1
Ichthyol	Basis Cordes [®] RK	20061501	1
Ichthyol	Basis Cordes [®] RK	15A057	4
Ichthyol	Basis Cordes [®] RK	15A057	1
Ichthyol	Basis Cordes [®] RK	14A205	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Basis Cordes [®] RK	15A051	2
Ichthyol	Basis Cordes [®] RK	15A115	4
Ichthyol	Basis Cordes [®] RK	15A172	3
Ichthyol	Basis Cordes [®] RK	15A194	1
Ichthyol	Basis Cordes [®] RK	16A035	2
Ichthyol	Basis Cordes [®] RK	16A125	2
Ichthyol	Basis Cordes [®] RK	16A034	6
Ichthyol	Basis Cordes [®] RK	17A046	7
Ichthyol	Basis Cordes [®] RK	17A083	4
Ichthyol	Basis Cordes [®] RK	16A197	1
Ichthyol	Basis Cordes [®] RK	17A149	5
Ichthyol	Basis Cordes [®] RK	14A149	1
Ichthyol	Basis Cordes [®] RK	18A182	1
ICHTHYOL / Sanacorp	Basis Cordes [®] RK	16A034	1
Ichthyol - Gesellschaft	Basis Cordes [®] RK	11A079	1
Ichthyol - Gesellschaft	Basis Cordes [®] RK	12A046	1
Ichthyol , Noweda	Basis Cordes [®] RK	13A038	1
ICHTHYOL / 20	Basis Cordes [®] RK	15A194	1
ICHTHYOL / 30	Basis Cordes [®] RK	15A057	1
Ichthyol / Anzag	Basis Cordes [®] RK	11A156	1
Ichthyol / G	Basis Cordes [®] RK	15A194	1
Ichthyol / Gehe	Basis Cordes [®] RK	17A046	5
Ichthyol / Gehe	Basis Cordes [®] RK	18A108	1
Ichthyol / Noweda	Basis Cordes [®] RK	13A039	1
Ichthyol / Noweda	Basis Cordes [®] RK	15A057	1
Ichthyol / Noweda	Basis Cordes [®] RK	17A046	1
Ichthyol / Phönix	Basis Cordes [®] RK	16A034	1
Ichthyol / Phönix	Basis Cordes [®] RK	17A046	1
Ichthyol / Phönix	Basis Cordes [®] RK	17A083	1
Ichthyol / Sanacorp	Basis Cordes [®] RK	15A115	1
Ichthyol / Gehe	Basis Cordes [®] RK	14A087	1
Ichthyol / Noweda	Basis Cordes [®] RK	13A039	2
Ichthyol / Noweda	Basis Cordes [®] RK	13A103	3
Ichthyol AG /Alliance H...	Basis Cordes [®] RK	17A149	1
Ichthyol Cordes	Basis Cordes [®] RK	13A104	1
Ichthyol Cordes/Gehe	Basis Cordes [®] RK	17A046	1
Ichthyol Ges.	Basis Cordes [®] RK	15A057	1
Ichthyol Ges. / Gehe	Basis Cordes [®] RK	15A057	1
Ichthyol Ges. / Gehe	Basis Cordes [®] RK	15A194	1
Ichthyol Gesellsch./Now...	Basis Cordes [®] RK	15A194	1
Ichthyol Gesellsch./Pho...	Basis Cordes [®] RK	17A083	1
ichthyol gesellschaft	Basis Cordes [®] RK	14A205	1
ichthyol Gesellschaft	Basis Cordes [®] RK	13A206	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	12A045	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	13A104	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	13A039	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	14A148	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	14A205	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	15A057	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	16A035	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	17A046	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	17A149	1
Ichthyol -Gesellschaft	Basis Cordes [®] RK	13A038	1
Ichthyol- Gesellschaft	Basis Cordes [®] RK	13A039	2
Ichthyol- Gesellschaft	Basis Cordes [®] RK	16A035	1
ichthyol Gesellschaft ...	Basis Cordes [®] RK	14A205	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	14A087	2
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	15A057	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	16A035	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	12A045	1

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Supplier	Substance	Batch	Spectra
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	12A046	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	15A057	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	17A046	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	1417E-03300	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	16A034	2
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	17A083	2
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	19A097	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	15A115	1
Ichthyol Gesellschaft- ...	Basis Cordes [®] RK	14A205	2
Ichthyol Gesellschaft- ...	Basis Cordes [®] RK	15A194	1
Ichthyol Gesellschaft/AHD	Basis Cordes [®] RK	15A194	1
Ichthyol Gesellschaft/AHD	Basis Cordes [®] RK	17A083	1
Ichthyol Gesellschaft/AHD	Basis Cordes [®] RK	18A0108	1
Ichthyol Gesellschaft/AHD	Basis Cordes [®] RK	18A182	1
Ichthyol Gesellschaft/G...	Basis Cordes [®] RK	17A083	1
Ichthyol Gesellschaft/G...	Basis Cordes [®] RK	18A108	1
Ichthyol Gesellschaft/G...	Basis Cordes [®] RK	18A182	1
Ichthyol Gesellschaft/J...	Basis Cordes [®] RK	16A034	1
Ichthyol Gesellschaft/K...	Basis Cordes [®] RK	17A149	1
Ichthyol Gesellschaft/N...	Basis Cordes [®] RK	17A046	1
Ichthyol GmbH	Basis Cordes [®] RK	17A083	1
Ichthyol GmbH	Basis Cordes [®] RK	13A038	1
Ichthyol GmbH, Phönix	Basis Cordes [®] RK	13A038	1
Ichthyol über Phoenix	Basis Cordes [®] RK	13A206	1
Ichthyol Werke	Basis Cordes [®] RK	12A114	1
Ichthyol Werke	Basis Cordes [®] RK	15A115	1
Ichthyol Werke	Basis Cordes [®] RK	15A194	1
Ichthyol, Noweda	Basis Cordes [®] RK	13A039	1
Ichthyol/ Anzag	Basis Cordes [®] RK	15A115	2
Ichthyol/ Krieger	Basis Cordes [®] RK	15A172	1
Ichthyol/ Noweda	Basis Cordes [®] RK	12A046	1
Ichthyol/ Noweda	Basis Cordes [®] RK	11A079	1
Ichthyol/ Noweda	Basis Cordes [®] RK	14A087	1
Ichthyol/ Noweda	Basis Cordes [®] RK	17A083	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	13A206	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	14A205	3
Ichthyol/ Phoenix	Basis Cordes [®] RK	16A035	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	16A034	5
Ichthyol/ Phönix	Basis Cordes [®] RK	15A115	1
Ichthyol/ Sanacorp	Basis Cordes [®] RK	15A057	1
ichthyol/AHD	Basis Cordes [®] RK	13A039	1
Ichthyol/AHD	Basis Cordes [®] RK	14A205	1
Ichthyol/AHD	Basis Cordes [®] RK	16A035	1
Ichthyol/ Alliance	Basis Cordes [®] RK	17A046	2
Ichthyol/Alliance	Basis Cordes [®] RK	18A108	1
Ichthyol/Alliance healt...	Basis Cordes [®] RK	13A103	1
Ichthyol/Alliance Healt...	Basis Cordes [®] RK	14A087	1
Ichthyol/Alliance Healt...	Basis Cordes [®] RK	15A194	1
Ichthyol/Alliance Healt...	Basis Cordes [®] RK	17A083	1
Ichthyol/Anzag	Basis Cordes [®] RK	12A045	1
Ichthyol/Anzag	Basis Cordes [®] RK	13A206	1
Ichthyol/Anzag	Basis Cordes [®] RK	15A051	1
Ichthyol/Anzag	Basis Cordes [®] RK	16A034	1
Ichthyol/Anzag	Basis Cordes [®] RK	17A149	1
Ichthyol/Ebert	Basis Cordes [®] RK	12A114	1
Ichthyol/Ebert	Basis Cordes [®] RK	17A046	1
Ichthyol/Fiebig	Basis Cordes [®] RK	14A205	2
Ichthyol/Fiebig	Basis Cordes [®] RK	12A114	1
Ichthyol/Fiebig	Basis Cordes [®] RK	17A083	1
ichthyol/Gehe	Basis Cordes [®] RK	13A104	2

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Supplier	Substance	Batch	Spectra
Ichthyol/gehe	Basis Cordes [®] RK	13A039	1
Ichthyol/gehe	Basis Cordes [®] RK	13A103	1
Ichthyol/Gehe	Basis Cordes [®] RK	13A103	1
Ichthyol/Gehe	Basis Cordes [®] RK	14A038	2
Ichthyol/Gehe	Basis Cordes [®] RK	13A206	1
Ichthyol/Gehe	Basis Cordes [®] RK	14A205	1
Ichthyol/Gehe	Basis Cordes [®] RK	15A115	3
Ichthyol/Gehe	Basis Cordes [®] RK	16A035	2
Ichthyol/Gehe	Basis Cordes [®] RK	17A046	1
Ichthyol/Gehe	Basis Cordes [®] RK	17A083	1
Ichthyol/GEHE	Basis Cordes [®] RK	15A057	1
ICHTHYOL/GEHE	Basis Cordes [®] RK	14A087	1
Ichthyol/Jenne	Basis Cordes [®] RK	17A149	1
Ichthyol/Kehr	Basis Cordes [®] RK	16A197	1
Ichthyol/Krieger	Basis Cordes [®] RK	14A087	1
Ichthyol/N	Basis Cordes [®] RK	15A115	1
Ichthyol/N/17.04.2013/P...	Basis Cordes [®] RK	12A167	1
Ichthyol/N/PZN:01114881	Basis Cordes [®] RK	13A104	1
ichthyol/noweda	Basis Cordes [®] RK	15A057	1
ichthyol/noweda	Basis Cordes [®] RK	17A083	1
ichthyol/noweda	Basis Cordes [®] RK	17A149	1
Ichthyol/Noweda	Basis Cordes [®] RK	13A104	1
Ichthyol/Noweda	Basis Cordes [®] RK	13A103	2
Ichthyol/Noweda	Basis Cordes [®] RK	14A087	2
Ichthyol/Noweda	Basis Cordes [®] RK	15A057	5
Ichthyol/Noweda	Basis Cordes [®] RK	15a115	1
Ichthyol/Noweda	Basis Cordes [®] RK	15a194	1
Ichthyol/Noweda	Basis Cordes [®] RK	15A194	2
Ichthyol/Noweda	Basis Cordes [®] RK	16A034	2
Ichthyol/Noweda	Basis Cordes [®] RK	17A046	2
Ichthyol/Noweda	Basis Cordes [®] RK	17A083	2
Ichthyol/Noweda	Basis Cordes [®] RK	17A149	3
Ichthyol/Noweda	Basis Cordes [®] RK	18A108	2
Ichthyol/Otto	Basis Cordes [®] RK	13A103	1
Ichthyol/Otto	Basis Cordes [®] RK	14A087	1
Ichthyol/P	Basis Cordes [®] RK	17A046	2
Ichthyol/P	Basis Cordes [®] RK	19A097	2
Ichthyol/Phoenix	Basis Cordes [®] RK	14A205	1
Ichthyol/Phoenix	Basis Cordes [®] RK	15A051	7
Ichthyol/Phoenix	Basis Cordes [®] RK	16A035	2
Ichthyol/Phoenix	Basis Cordes [®] RK	16A034	1
Ichthyol/Phoenix	Basis Cordes [®] RK	17A046	1
Ichthyol/Phoenix	Basis Cordes [®] RK	17A083	2
Ichthyol/Phoenix	Basis Cordes [®] RK	18A108	1
Ichthyol/Phoenix	Basis Cordes [®] RK	18A109	1
Ichthyol/Phoenix	Basis Cordes [®] RK	18A182	1
Ichthyol/phönix	Basis Cordes [®] RK	14A205	3
Ichthyol/Phönix	Basis Cordes [®] RK	12A114	1
Ichthyol/Phönix	Basis Cordes [®] RK	14A038	4
Ichthyol/Phönix	Basis Cordes [®] RK	14A087	1
Ichthyol/Phönix	Basis Cordes [®] RK	14A148	5
Ichthyol/Phönix	Basis Cordes [®] RK	15A194	4
Ichthyol/Phönix	Basis Cordes [®] RK	15A172	4
Ichthyol/Phönix	Basis Cordes [®] RK	16A125	8
Ichthyol/Phönix	Basis Cordes [®] RK	16A035	2
Ichthyol/Phönix	Basis Cordes [®] RK	16A034	3
Ichthyol/Phönix	Basis Cordes [®] RK	16A197	5
Ichthyol/Phönix	Basis Cordes [®] RK	17A046	1
Ichthyol/Phönix	Basis Cordes [®] RK	17A083	2
Ichthyol/Phönix	Basis Cordes [®] RK	17A198	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Basis Cordes [®] RK	18A108	1
Ichthyol/Phönix	Basis Cordes [®] RK	17A193	1
Ichthyol/Phönix	Basis Cordes [®] RK	18A134	2
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A038	3
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A104	3
Ichthyol/Sanacorp	Basis Cordes [®] RK	12A167	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A206	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	14A038	3
Ichthyol/Sanacorp	Basis Cordes [®] RK	14A148	4
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A051	5
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A115	2
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A194	2
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A172	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	17A046	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	17A083	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	18A108	1
Ichthyol/VDL	Basis Cordes [®] RK	14A205	1
IchthyolAlliance Health...	Basis Cordes [®] RK	13A206	1
ICHTHYOL-GES.	Basis Cordes [®] RK	12A114	1
Ichthyol-Ges. / G	Basis Cordes [®] RK	18A108	1
ICHTHYOL-GES/GEHE	Basis Cordes [®] RK	11A079	1
ICHTHYOL-GES/GEHE	Basis Cordes [®] RK	12A045	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A046	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A030	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A114	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A038	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A039	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A103	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A087	2
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A206	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A205	5
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A148	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A057	7
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A051	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A115	4
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A194	5
Ichthyol-Gesellschaft	Basis Cordes [®] RK	16A035	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A172	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	16A034	8
Ichthyol-Gesellschaft	Basis Cordes [®] RK	16A125	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17A046	4
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17A083	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17a083	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12051803	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17A149	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	18A182	2
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	11A079	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	12A046	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	14A205	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	16A035	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	17A083	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	17A083	2
Ichthyol-Gesellschaft / E	Basis Cordes [®] RK	12A045	1
Ichthyol-Gesellschaft / G	Basis Cordes [®] RK	13A038	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	14A205	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	16A034	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	17A046	2
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	13A206	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	14A038	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A172	4
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	17A149	2
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	18A108	2
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	15A057	1
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	15A115	1
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	14A087	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	14A038	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	14A148	2
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A051	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A172	4
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	16A035	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	16A125	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	16A034	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A194	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	16A035	1
Ichthyol-Gesellschaft/...	Basis Cordes [®] RK	17A083	1
Ichthyol-Gesellschaft/...	Basis Cordes [®] RK	15A194	1
Ichthyol-Gesellschaft/...	Basis Cordes [®] RK	13A206	1
Ichthyol-Gesellschaft/AHD	Basis Cordes [®] RK	15A194	1
Ichthyol-Gesellschaft/A...	Basis Cordes [®] RK	17A193	1
Ichthyol-Gesellschaft/A...	Basis Cordes [®] RK	15A057	1
Ichthyol-Gesellschaft/G...	Basis Cordes [®] RK	18A182	1
Ichthyol-Gesellschaft/N...	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft/N...	Basis Cordes [®] RK	13A206	2
Ichthyol-Gesellschaft/P...	Basis Cordes [®] RK	13A039	1
Ichthyol-Gesellschaft/P...	Basis Cordes [®] RK	16A035	1
Ichthyol-Gesellschaft/P...	Basis Cordes [®] RK	16A035	1
Ichthyol-Gesellschaft/P...	Basis Cordes [®] RK	17A046	2
ICHTHYOL-GESELLSCHAFT/P...	Basis Cordes [®] RK	16A035	1
ICHTHYOL-GESELLSCHAFT/P...	Basis Cordes [®] RK	17A149	1
Ichthyol-Gesellschaft/V...	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	24061704	1
Ichthyol-Gesellschaft Co...	Basis Cordes [®] RK	18A182	1
Ichthyol-Gesellschaft/Ph...	Basis Cordes [®] RK	16A034	1
ICHTL/Phönix	Basis Cordes [®] RK	18A108	3
Ichthyol/Sanacorp	Basis Cordes [®] RK	16A034	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	15A115	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	16A035	1
Ichtyol	Basis Cordes [®] RK	12A114	1
Ichtyol	Basis Cordes [®] RK	11A156	1
Ichtyol	Basis Cordes [®] RK	13A038	1
Ichtyol	Basis Cordes [®] RK	13A103	2
Ichtyol	Basis Cordes [®] RK	15A115	1
Ichtyol	Basis Cordes [®] RK	16A035	2
Ichtyol - Gesellschaft	Basis Cordes [®] RK	13A206	1
Ichtyol - Gesellschaft	Basis Cordes [®] RK	17A046	1
Ichtyol / Gehe	Basis Cordes [®] RK	17A083	4
Ichtyol / Gehe	Basis Cordes [®] RK	18A108	1
Ichtyol /Gehe	Basis Cordes [®] RK	17A046	1
Ichtyol /Jenne 16.01.2014	Basis Cordes [®] RK	13A039	1
Ichtyol 004	Basis Cordes [®] RK	12A046	1
Ichtyol Gehe	Basis Cordes [®] RK	13A206	1
Ichtyol Gesellschaft	Basis Cordes [®] RK	15A057	3
Ichtyol Gesellschaft /...	Basis Cordes [®] RK	15A194	1
ICHTYOL GESELLSCHAFT Co...	Basis Cordes [®] RK	15A057	1
ICHTYOL GESELLSCHAFT Co...	Basis Cordes [®] RK	16A197	1
Ichtyol Gesllschaft	Basis Cordes [®] RK	15A194	1
Ichtyol Gesllschaft	Basis Cordes [®] RK	16A034	1
Ichtyol GmbH	Basis Cordes [®] RK	17A149	1

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Supplier	Substance	Batch	Spectra
Ichtyol GmbH	Basis Cordes [®] RK	17A083	1
Ichtyol GmbH	Basis Cordes [®] RK	18A182	1
Ichtyol/ Noweda	Basis Cordes [®] RK	17A046	1
Ichtyol/ Anzag	Basis Cordes [®] RK	17A083	1
Ichtyol/ Gehe	Basis Cordes [®] RK	13A206	1
Ichtyol/ Noweda	Basis Cordes [®] RK	15A194	1
Ichtyol/ Noweda	Basis Cordes [®] RK	16A035	1
Ichtyol/ Noweda	Basis Cordes [®] RK	16A034	1
Ichtyol/ Noweda	Basis Cordes [®] RK	17A046	1
Ichtyol/ Phoenix	Basis Cordes [®] RK	14A148	1
Ichtyol/ Phoenix	Basis Cordes [®] RK	15A057	1
Ichtyol/ Phönix	Basis Cordes [®] RK	18A182	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	13A038	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	13A206	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	14A087	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	14A205	2
Ichtyol-Gesellschaft	Basis Cordes [®] RK	15A057	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	16A034	2
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A046	3
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A083	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A149	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A198	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	18A108	1
Ichtyol-Gesellschaft / Ph	Basis Cordes [®] RK	17A083	4
Ichtyol-Gesellschaft / Ph	Basis Cordes [®] RK	17A149	1
Ichtyol-Gesellschaft / ...	Basis Cordes [®] RK	18A182	3
Ichtyol-Gesellschaft/Ph...	Basis Cordes [®] RK	12A114	1
Infectopharm	Basis Cordes [®] RK	3318J-003300	1
Krieger	Basis Cordes [®] RK	17A083	2
Krieger	Basis Cordes [®] RK	17A149	1
L10	Basis Cordes [®] RK	17A046	1
L12	Basis Cordes [®] RK	18A108	1
Noweda	Basis Cordes [®] RK	11A156	1
Noweda	Basis Cordes [®] RK	13A038	1
Noweda	Basis Cordes [®] RK	14A087	1
Noweda	Basis Cordes [®] RK	15A057	1
Noweda	Basis Cordes [®] RK	15A194	1
Noweda 29.032016	Basis Cordes [®] RK	15A115	2
Bombastus	Basis Cordes [®] RK	13A038	1
Noweda/ Ichthyol	Basis Cordes [®] RK	16A0335	1
Noweda/ Cordes	Basis Cordes [®] RK	17A046	1
Noweda/ Ichthyol	Basis Cordes [®] RK	14A038	1
Caelo	Basis Cordes [®] RK	17A0462ma1250g	1
Noweda/ Wepa	Basis Cordes [®] RK	13A206	1
Occasio/ Ichthyol	Basis Cordes [®] RK	16A197	1
Occasio/ Ichthyol	Basis Cordes [®] RK	17A198	1
Phoe	Basis Cordes [®] RK	16A035	1
Phoenix	Basis Cordes [®] RK	13A039	1
phoenix/ ichtthyol-gesel...	Basis Cordes [®] RK	18A182	4
phönix	Basis Cordes [®] RK	15A115	1
Phönix	Basis Cordes [®] RK	12A167	2
Phönix	Basis Cordes [®] RK	15A194	2
Phönix	Basis Cordes [®] RK	16A034	1
Phönix / Gehe	Basis Cordes [®] RK	17A149	1
Phönix Gotha	Basis Cordes [®] RK	12A045	1
Phönix Gotha	Basis Cordes [®] RK	12A114	1
Phönix Gotha	Basis Cordes [®] RK	13A103	2
Phönix Gotha	Basis Cordes [®] RK	13A2C6	1
Phönix Gotha	Basis Cordes [®] RK	14A205	1
Phönix Gotha	Basis Cordes [®] RK	15A051	1

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Supplier	Substance	Batch	Spectra
Caelo	Basis Cordes [®] RK	15A115	2
Phönix/Ichthyol	Basis Cordes [®] RK	12A046	1
Phönix/Ichthyol	Basis Cordes [®] RK	17A149	5
sanacorp	Basis Cordes [®] RK	12A046	1
Sanacorp	Basis Cordes [®] RK	13A103	1
Sanacorp	Basis Cordes [®] RK	16A034	1
Sanacorp	Basis Cordes [®] RK	17A083	1
SANACORP	Basis Cordes [®] RK	18A182	1
Sanacorp / Ichthyol	Basis Cordes [®] RK	12A167	2
Sanacorp/ Ichthyol Gese...	Basis Cordes [®] RK	12A045	1
Sonnenberg-Apotheke	Basis Cordes [®] RK	4643491	1
WEPA	Basis Cordes [®] RK	17A046	1
Ychthyol-Gesellschaft	Basis Cordes [®] RK	16A035	2
Ichthyol	Basis Cordes [®] RK	12A114	5
Ichthyol	Basis Cordes [®] RK	13A038	10
Ichthyol	Basis Cordes [®] RK	14A087	2
Ichthyol	Basis Cordes [®] RK	19A097	2

- 137 586 spectra from 703 *Apo-Ident* customers from a total of 35 223 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Basis Cordes[®] RK* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Basis Cordes[®] RK* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	80	0	69 354
Type C	0	757	10	137 269

The substance/substance group *Basis Cordes[®] RK* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6401 %)	98.6962 % (> 98.3051 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Basis Cordes® RK* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Cooling cream DAB	33.54	—
Clotrimazole 10% Cordes® RK	36.35	—
Lanolin DAB	37.31	—
Cooling cream DAB 6 (stabilised, conta...	52.13	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Basis Cordes® RK* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30892	30892	0.00	44.02
31078	30892	5.76	49.57
31660	31660	0.00	41.68
34688	31660	8.98	44.23

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Benzalkonium chloride solution 50%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30667-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Benzalkonium chloride solution 50%; Solutio benzalkonii chlorati 50%

Special notes

When selecting the *Benzalkonium chloride solution 50%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Benzalkonium chloride solution 50%	3	4	46

Second-stage model

For differentiation of the substance/substance group *Benzalkonium chloride solution 50%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Benzalkonium chloride solution 50%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Benzalkonium chl. . .	11271919	30667	40	1402369
Caelo	Benzalkonium chl. . .	15051325	33605	40	20150804
Euro OTC	Benzalkonium chl. . .	1105041V-03	31613	60	20130809

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 140 spectra of 3 reference samples from the substance/substance group *Benzalkonium chloride solution 50%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56219 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 160 spectra of 4 reference samples from the substance/substance group *Benzalkonium chloride solution 50%*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzalkonium chloride soluti. . .	15051305	32960	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzalkonium chloride soluti...	15051327	33834	40
Caelo	Benzalkonium chloride soluti...	182660	34334	40
Euro OTC	Benzalkonium chloride soluti...	1105041-01	30646	40

- 69 314 spectra from a total of 1498 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 234 spectra from 159 *Apo-Ident* customers from 49 batches from the substance/substance group *Benzalkonium chloride solution 50%*.
- Among them are spectra of independent samples from 46 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Benzalkonium chloride soluti...	11271906	2
Caelo	Benzalkonium chloride soluti...	12254603	1
Caelo	Benzalkonium chloride soluti...	11271912	1
Caelo	Benzalkonium chloride soluti...	12254610	2
Caelo	Benzalkonium chloride soluti...	12254608	2
Caelo	Benzalkonium chloride soluti...	12254615	3
Caelo	Benzalkonium chloride soluti...	611benz	1
Caelo	Benzalkonium chloride soluti...	31011402	1
Caelo	Benzalkonium chloride soluti...	8041406	1
Caelo	Benzalkonium chloride soluti...	13152123	3
Caelo	Benzalkonium chloride soluti...	13152125	21
Caelo	Benzalkonium chloride soluti...	1315225	1
Caelo	Benzalkonium chloride soluti...	13152115	1
Caelo	Benzalkonium chloride soluti...	15051305	8
Caelo	Benzalkonium chloride soluti...	15051317	10
Caelo	Benzalkonium chloride soluti...	15051320	3
Caelo	Benzalkonium chloride soluti...	15051323	12
Caelo	Benzalkonium chloride soluti...	15051327	3
Caelo	Benzalkonium chloride soluti...	17044901	17
Caelo	Benzalkonium chloride soluti...	18039405	13
Caelo	Benzalkonium chloride soluti...	7111806	1
Caelo	Benzalkonium chloride soluti...	18266003	1
Caelo	Benzalkonium chloride soluti...	15051309	10
Caelo	Benzalkonium chloride soluti...	13152114	1
Caelo	Benzalkonium chloride soluti...	15051312	8
Caelo	Benzalkonium chloride soluti...	180394095743	1
Caelo	Benzalkonium chloride soluti...	13152121	1
Caelo	Benzalkonium chloride soluti...	18266001	6
Caelo	Benzalkonium chloride soluti...	12254620	3
Caelo	Benzalkonium chloride soluti...	13152105	6
Caelo	Benzalkonium chloride soluti...	15119501	5
Caelo	Benzalkonium chloride soluti...	180394505	1
Caelo	Benzalkonium chloride soluti...	15119505	10
Caelo	Benzalkonium chloride soluti...	13152111	4
Caelo	Benzalkonium chloride soluti...	18039409	12

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Supplier	Substance	Batch	Spectra
Caeolo	Benzalkonium chloride soluti...	15119505	1
Caesar & Loretz GmbH	Benzalkonium chloride soluti...	18266001	1
Caesar & Loretz GmbH	Benzalkonium chloride soluti...	18039409	1
Caesar/Noweda	Benzalkonium chloride soluti...	5012m-01168	1
Ebert-Jacobi	Benzalkonium chloride soluti...	15051325	1
Euro OTC	Benzalkonium chloride soluti...	110041V-03	1
Euro OTC	Benzalkonium chloride soluti...	1105041-01	2
Euro OTC	Benzalkonium chloride soluti...	15051309	1
Euro OTC	Benzalkonium chloride soluti...	1105041V	1
Fagron	Benzalkonium chloride soluti...	7F21-N09	1
Fagron	Benzalkonium chloride soluti...	2913A-01168	1
Fagron	Benzalkonium chloride soluti...	15051323	1
Fagron	Benzalkonium chloride soluti...	1105041-01	2
Fagron	Benzalkonium chloride soluti...	15119501	1
Fischar	Benzalkonium chloride soluti...	17044901	1
Gehe	Benzalkonium chloride soluti...	15051325	1
Gehe	Benzalkonium chloride soluti...	18039409	1
GEHE	Benzalkonium chloride soluti...	18039405	1
L10	Benzalkonium chloride soluti...	18039405	1
L12	Benzalkonium chloride soluti...	15051312	1
Löhr Center/	Benzalkonium chloride soluti...	2013U-01168	1
Noweda	Benzalkonium chloride soluti...	12254615	1
Phoenix	Benzalkonium chloride soluti...	15051309	1
Caelo	Benzalkonium chloride soluti...	13152104	1
Phönix	Benzalkonium chloride soluti...	13152125	1
Caelo	Benzalkonium chloride soluti...	17344901	1
Phönix Gotha	Benzalkonium chloride soluti...	13152125	1
Sanacorp	Benzalkonium chloride soluti...	12254608	1
Sanacorp	Benzalkonium chloride soluti...	4/AKD2	1
Sanacorp	Benzalkonium chloride soluti...	13152125	1
Caelo	Benzalkonium chloride soluti...	18039410	6
Caelo	Benzalkonium chloride soluti...	11271919	3
Caelo	Benzalkonium chloride soluti...	15051325	14
Euro OTC	Benzalkonium chloride soluti...	1105041V-03	3

- 138 119 spectra from 703 *Apo-Ident* customers from a total of 35 248 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Benzalkonium chloride solution 50%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Benzalkonium chloride solution 50%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	140	0	56 219
Type B	0	160	0	69 314
Type C	0	233	1	138 119

The substance/substance group *Benzalkonium chloride solution 50%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 96.2500 %)
Type C	100.0000 % (> 99.6452 %)	99.5726 % (> 98.2906 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Benzalkonium chloride solution 50%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Anionic hydrophilic cream without prese...	46.57	—
Anionic hydrophilic cream SR (NRF p.27)	48.69	—
Glycolic acid 70%	54.88	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Benzalkonium chloride solution 50%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30667	30667	0.00	51.47
31613	30667	8.64	50.47
33605	30667	14.60	50.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Benzyl alcohol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30574-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Benzyl alcohol; Alkohol benzylicus

Special notes

When selecting the *Benzyl alcohol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Benzyl alcohol	4	2	26

Second-stage model

For differentiation of the substance/substance group *Benzyl alcohol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Benzyl alcohol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Benzyl alcohol	13292103	31220	40	1403478
Caelo	Benzyl alcohol	13292107	31369	60	20131028
Caelo	Benzyl alcohol	16277302	32969	40	20161024
Caelo	Benzyl alcohol	190780	34631	40	20190410*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Benzyl alcohol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Benzyl alcohol*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl alcohol	16341802	32968	40
Caelo	Benzyl alcohol	17191002	33857	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 57 spectra from 16 *Apo-Ident* customers from 29 batches from the substance/substance group *Benzyl alcohol*.
- Among them are spectra of independent samples from 26 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Benzyl alcohol	12256208	1
Caelo	Benzyl alcohol	12108503	1
Caelo	Benzyl alcohol	13056803	1
Caelo	Benzyl alcohol	14206201	2
Caelo	Benzyl alcohol	14206209	1
Caelo	Benzyl alcohol	15318406	1
Caelo	Benzyl alcohol	16341805	3
Caelo	Benzyl alcohol	17353904	1
Caelo	Benzyl alcohol	18087804	1
Caelo	Benzyl alcohol	17353906	1
Caelo	Benzyl alcohol	16341802	2
Caelo	Benzyl alcohol	17191002	3
Caelo	Benzyl alcohol	17353903	2
Caelo	Benzyl alcohol	15318403	3
Caelo	Benzyl alcohol	15437503	3
Caelo	Benzyl alcohol	15014901	5
Caelo	Benzyl alcohol	15014907	1
Caelo	Benzyl alcohol	16341809	1
Caesar & Loretz GmbH	Benzyl alcohol	18087809	1
Caesar & Loretz GmbH	Benzyl alcohol	19078001	2
Gatt-Koller	Benzyl alcohol	1803541	2
Gehe	Benzyl alcohol	15318406	1
Gehe	Benzyl alcohol	15437509	1
Gehe	Benzyl alcohol	15437512	1
Gehe	Benzyl alcohol	15437503	1
GEHE	Benzyl alcohol	17353903	1
GEHE	Benzyl alcohol	17353906	1
Kögl	Benzyl alcohol	241507163116	1
Kögl	Benzyl alcohol	241507161217	1
Kögl	Benzyl alcohol	1800440	2
PHÖNIX	Benzyl alcohol	17191002	2
Sanacorp	Benzyl alcohol	15014907	1
Caelo	Benzyl alcohol	16277302	1
Caelo	Benzyl alcohol	13292107	2
Caelo	Benzyl alcohol	13292103	3

- 138 296 spectra from 703 *Apo-Ident* customers from a total of 35 266 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Benzyl alcohol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Benzyl alcohol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	57	0	138 296

The substance/substance group *Benzyl alcohol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 89.4737 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Benzyl alcohol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydroxyethyl salicylate	57.01	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Benzyl alcohol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31220	31220	0.00	100.32
31369	31220	1.75	101.84
32969	31220	12.62	99.87
34631	34631	0.00	107.77

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Benzyl benzoate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31208-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Benzyl benzoate; Benzylium benzoicum

Special notes

When selecting the *Benzyl benzoate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Benzyl benzoate	5	2	24

Second-stage model

For differentiation of the substance/substance group *Benzyl benzoate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Benzyl benzoate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Benzyl benzoate	13099320	31208	40	1403156
Caelo	Benzyl benzoate	14029602	31435	60	20140207
Caelo	Benzyl benzoate	171562	33695	40	20170530*
Caelo	Benzyl benzoate	181819	34219	40	20180907*
Caelo	Benzyl benzoate	190546	34634	40	20190314*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Benzyl benzoate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Benzyl benzoate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl benzoate	16140805	32959	40
Caelo	Benzyl benzoate	172351	33696	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 32 spectra from 11 *Apo-Ident* customers from 24 batches from the substance/substance group *Benzyl benzoate*.
- Among them are spectra of independent samples from 24 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Benzyl benzoate	11340415	1
Caelo	Benzyl benzoate	16140806	2
Caelo	Benzyl benzoate	15243012	1
Caelo	Benzyl benzoate	16140807	1
Caelo	Benzyl benzoate	15250301	1
Caelo	Benzyl benzoate	18003202	1
Caelo	Benzyl benzoate	14029613	1
Caelo	Benzyl benzoate	17235101	2
Caelo	Benzyl benzoate	1723	1
Caelo	Benzyl benzoate	16140808	2
Caelo	Benzyl benzoate	16250301	1
Caelo	Benzyl benzoate	17156204	1
Caelo	Benzyl benzoate	15243005	1
Caelo	Benzyl benzoate	15133401	1
Caesar & Loretz GmbH	Benzyl benzoate	12141003	2
Caesar & Loretz GmbH	Benzyl benzoate	13099313	1
Caesar & Loretz GmbH	Benzyl benzoate	14029613	1
Caesar & Loretz GmbH	Benzyl benzoate	14029603	1
Caesar & Loretz GmbH	Benzyl benzoate	15133401	1
Gatt-Koller	Benzyl benzoate	KNC0919J18	1
Gehe	Benzyl benzoate	13099317	1
Gehe	Benzyl benzoate	15243003	1
Gehe	Benzyl benzoate	15243006	1
Bombastus	Benzyl benzoate	16140807	1
Caelo	Benzyl benzoate	16140810	2
Phönix	Benzyl benzoate	12141008	1
Sanacorp	Benzyl benzoate	15243014	1

- 138 321 spectra from 703 *Apo-Ident* customers from a total of 35 272 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Benzyl benzoate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Benzyl benzoate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 394
Type C	0	31	1	138 321

The substance/substance group *Benzyl benzoate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6454 %)	96.8750 % (> 87.5000 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Benzyl benzoate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Benzyl nicotinate	32.19	—
Methyl salicylate	97.98	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Benzyl benzoate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31208	31208	0.00	46.42
31435	31208	2.01	48.71
33695	33695	0.00	42.86
34219	34219	0.00	44.62
34634	34634	0.00	47.46

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Benzyl nicotinate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30502-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Benzyl nicotinate; Benzyliis nicotinas

Special notes

When selecting the *Benzyl nicotinate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Benzyl nicotinate	5	2	36

Second-stage model

For differentiation of the substance/substance group *Benzyl nicotinate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Benzyl nicotinate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Benzyl nicotinate	13272502	31199	40	1403109
Caelo	Benzyl nicotinate	14112404	31383	40	20140407
Caelo	Benzyl nicotinate	16358301	32967	40	20170113
Caelo	Benzyl nicotinate	163583	33055	40	20170113*
Caelo	Benzyl nicotinate	191097	34450	40	20190614*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 5 reference samples from the substance/substance group *Benzyl nicotinate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56159 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Benzyl nicotinate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl nicotinate	15444804	32592	40
Caelo	Benzyl nicotinate	16358302	32966	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 71 spectra from 43 *Apo-Ident* customers from 38 batches from the substance/substance group *Benzyl nicotinate*.
- Among them are spectra of independent samples from 36 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
anzag	Benzyl nicotinate	12282802	1
Anzag	Benzyl nicotinate	12282802	1
Anzag	Benzyl nicotinate	16358302	1
Anzag	Benzyl nicotinate	17236704	1
Caelo	Benzyl nicotinate	13035402	3
Caelo	Benzyl nicotinate	13157201	1
Anzag/ichthyol	Benzyl nicotinate	13035408	1
Beiersdorf AG	Benzyl nicotinate	15293104	1
Caelo	Benzyl nicotinate	10111403	1
Caelo	Benzyl nicotinate	12142004	1
Caelo	Benzyl nicotinate	12142008	2
Caelo	Benzyl nicotinate	12282802	2
Caelo	Benzyl nicotinate	2091301	1
Caelo	Benzyl nicotinate	1529304	1
Caelo	Benzyl nicotinate	15444803	1
Caelo	Benzyl nicotinate	16154409	1
Caelo	Benzyl nicotinate	16358302	7
Caelo	Benzyl nicotinate	17236705	1
Caelo	Benzyl nicotinate	18032112	2
Caelo	Benzyl nicotinate	19028908	1
Caelo	Benzyl nicotinate	19028904	2
Caelo	Benzyl nicotinate	13157205	3
Caelo	Benzyl nicotinate	19109704	1
Caelo	Benzyl nicotinate	16358308	3
Caelo	Benzyl nicotinate	15124402	4
Caelo	Benzyl nicotinate	14112408	4
Caelo	Benzyl nicotinate	12282804	1
Caelo	Benzyl nicotinate	15293104	1
Caelo	Benzyl nicotinate	17236704	1
Caelo	Benzyl nicotinate	17236707	1
Caelo	Benzyl nicotinate	18215204	1
Caelo	Benzyl nicotinate	14112405	1
Caelo	Benzyl nicotinate	15444804	4
Caelo	Benzyl nicotinate	18032105	2
Caelo	Benzyl nicotinate	180321125750	1
Caelo	Benzyl nicotinate	15124408	1

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Supplier	Substance	Batch	Spectra
Caesar Loretz Gmbh	Benzyl nicotinate	17191405	1
Fagron	Benzyl nicotinate	12I20-N01	1
Fagron	Benzyl nicotinate	18215206	1
Gatt-Koller	Benzyl nicotinate	1803252	1
Phönix 28.01.2014	Benzyl nicotinate	13272502	1
VDL	Benzyl nicotinate	12D25-N07	1
Caelo	Benzyl nicotinate	13272502	2
Caelo	Benzyl nicotinate	14112404	1

- 138 282 spectra from 703 *Apo-Ident* customers from a total of 35 257 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Benzyl nicotinate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Benzyl nicotinate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	80	0	69 394
Type C	0	70	1	138 282

The substance/substance group *Benzyl nicotinate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	98.5915 % (> 94.3662 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Benzyl nicotinate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Benzyl benzoate	23.86	—
Cinnamon bark oil, artificial	64.33	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Benzyl nicotinate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31199	31199	0.00	31.76
31383	34450	3.00	29.73
32967	33055	1.63	33.17
33055	33055	0.00	33.39
34450	34450	0.00	31.18

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Bergamot oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31678-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Bergamot oil; Oleum citrus bergamia

Special notes

When selecting the *Bergamot oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Bergamot oil	4	2	14

Second-stage model

For differentiation of the substance/substance group *Bergamot oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Bergamot oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Bergamot oil	15042001	31678	60	AR-15-FG-008850-02
Caelo	Bergamot oil	15042001	31696	60	20150217
Caelo	Bergamot oil	16083611	33497	40	20160404
Caelo	Bergamot oil	16083611	33655	40	20160404
Caelo	Bergamot oil	190681	34445	40	20190312*
Caelo	Bergamot oil	192330	34705	40	20190828*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 280 spectra of 6 reference samples from the substance/substance group *Bergamot oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 079 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Bergamot oil*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Bergamot oil	171992	33894	40
Caelo	Bergamot oil	180207	34230	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 36 spectra from 20 *Apo-Ident* customers from 15 batches from the substance/substance group *Bergamot oil*.
- Among them are spectra of independent samples from 14 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bombastus	Bergamot oil	17199205	3
Bombastus	Bergamot oil	300470	1
Bombastus	Bergamot oil	309494	1
Caelo	Bergamot oil	14125805	1
Caelo	Bergamot oil	15042008	1
Caelo	Bergamot oil	16083601	13
Caelo	Bergamot oil	17199201	1
Caelo	Bergamot oil	18020702	1
Caelo	Bergamot oil	15042011	2
Caelo	Bergamot oil	18020710	1
Caelo	Bergamot oil	17199204	3
Caeolo / Phönix	Bergamot oil	17199204	1
Caelo	Bergamot oil	18020711	1
Taoasis	Bergamot oil	19821-122171	1
Taoasis	Bergamot oil	53731-127819	1
	Bergamot oil	18020710	1
Caelo	Bergamot oil	15042001	3

- 138 317 spectra from 703 *Apo-Ident* customers from a total of 35 280 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Bergamot oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Bergamot oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	280	0	56 079
Type B	0	80	0	69 394
Type C	0	36	0	138 317

The substance/substance group *Bergamot oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6454 %)	100.0000 % (> 83.3333 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Bergamot oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Spearmint oil	45.08	—
Dwarf pine oil	48.33	—
Caraway oil	48.48	—
Bitter orange oil	48.73	—
Juniper oil	59.60	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Bergamot oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31678	31678	0.00	62.19
31696	31678	1.53	62.70
33497	31678	9.15	63.82
33655	31678	11.65	63.27

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34445	34445	0.00	51.91
34705	34705	0.00	53.74

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Cajeput (essentiel oil)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	31502-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Cajeput (essentiel oil); Oleum Cajeputi artificiale

Special notes

When selecting the *Cajeput (essentiel oil)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cajeput (essentiel oil)	2	3	9

Second-stage model

For differentiation of the substance/substance group *Cajeput (essentiel oil)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cajeput (essentiel oil)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cajeput (essenti...	13141409	31502	60	1412341
Caelo	Cajeput (essenti...	14225206	31605	60	20140730

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 2 reference samples from the substance/substance group *Cajeput (essentiel oil)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 239 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Cajeput (essentiel oil)*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cajeput (essentiel oil)	162770	32688	40
Caelo	Cajeput (essentiel oil)	16277003	33620	40
Caelo	Cajeput (essentiel oil)	172410	33910	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 10 spectra from 5 *Apo-Ident* customers from 9 batches from the substance/substance group *Cajeput (essentiell oil)*.
- Among them are spectra of independent samples from 9 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cajeput (essentiell oil)	21111818	1
Caelo	Cajeput (essentiell oil)	17241002	1
Caelo	Cajeput (essentiell oil)	15063501	2
Caelo	Cajeput (essentiell oil)	16277004	1
Caesar & Loretz/Noweda	Cajeput (essentiell oil)	14225210	1
Fagron	Cajeput (essentiell oil)	15063511	1
Taoasis	Cajeput (essentiell oil)	6781010-120111	1
Taoasis	Cajeput (essentiell oil)	6781012-119058	1
Taoasis	Cajeput (essentiell oil)	1518-122595	1

- 138 343 spectra from 703 *Apo-Ident* customers from a total of 35 286 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cajeput (essentiell oil)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cajeput (essentiell oil)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	120	0	69 354
Type C	0	9	1	138 343

The substance/substance group *Cajeput (essentiell oil)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6461 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cajeput (essentielle oil)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Myrtle oil	17.19	—
Turpentine oil	19.81	—
Rosemary oil	20.07	—
Juniper wood oil	22.47	—
Eucalyptus oil	23.33	—
Cypress oil	32.50	—
Verbena oil, nature-identical	39.87	—
Acorus oil	43.84	—
Peppermint oil	45.65	—
Cedar wood oil	47.36	—
Juniper oil	50.88	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cajeput (essentielle oil)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31502	31502	0.00	21.28
31605	31502	9.86	19.25

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Camphor oil 20%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30551-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Camphor oil 20%; Oleum camphoratum 20%

Special notes

When selecting the *Camphor oil 20%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Camphor oil 20%	2	1	19

Second-stage model

For differentiation of the substance/substance group *Camphor oil 20%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Camphor oil 20%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Camphor oil 20%	12261202	31154	40	1404534
Caelo	Camphor oil 20%	13369902	31347	60	20131112

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 100 spectra of 2 reference samples from the substance/substance group *Camphor oil 20%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 259 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Camphor oil 20%*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Camphor oil 20%	17083502	33494	40
Caelo	Camphor oil 20%	17083502	33495	40

- 69 394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 61 spectra from 36 *Apo-Ident* customers from 20 batches from the substance/substance group *Camphor oil 20%*.
- Among them are spectra of independent samples from 19 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ahd/lamotte	Camphor oil 20%	133699902	1
Caelo	Camphor oil 20%	9250001	2
Caelo	Camphor oil 20%	13039603	1
Caelo	Camphor oil 20%	1226103	1
Caelo	Camphor oil 20%	12261203	2
Caelo	Camphor oil 20%	14028202	2
Caelo	Camphor oil 20%	14147303	1
Caelo	Camphor oil 20%	15056907	12
Caelo	Camphor oil 20%	15246805	2
Caelo	Camphor oil 20%	15246809	7
Caelo	Camphor oil 20%	15056906	1
Caelo	Camphor oil 20%	16085301	1
Caelo	Camphor oil 20%	16316101	4
Caelo	Camphor oil 20%	17083502	3
Caelo	Camphor oil 20%	12122502	6
Caelo	Camphor oil 20%	16085302	2
Caelo	Camphor oil 20%	17301902	2
Caelo	Camphor oil 20%	18143002	1
Caesar & Loretz GmbH/ Ph	Camphor oil 20%	18143005	1
gehe	Camphor oil 20%	15246805	1
Noweda	Camphor oil 20%	14147303	1
Phoenix	Camphor oil 20%	16316101	1
Phönix	Camphor oil 20%	13039603	1
Sanacorp	Camphor oil 20%	13039603	1
Caelo	Camphor oil 20%	13369902	4

- 138 292 spectra from 703 *Apo-Ident* customers from a total of 35 275 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Camphor oil 20%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Camphor oil 20%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	100	0	56 259
Type B	0	80	0	69 394
Type C	0	60	1	138 292

The substance/substance group *Camphor oil 20%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 94.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	98.3607 % (> 93.4426 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Camphor oil 20%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Petroleum oil, white, cohobated	27.32	—
All-rac-alpha-tocopheryl acetate	34.59	—
Guaiazulene 25%, water-soluble	40.13	—
Triglycerides, medium-chain	48.19	—
Metronidazole 25% in white petrolatum	60.33	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Camphor oil 20%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31154	31154	0.00	28.92
31347	31154	2.75	28.19

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Camphor ointment
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	32515-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Camphor ointment; Unguentum camphoratum

Special notes

When selecting the *Camphor ointment* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Camphor ointment	2	1	0

Second-stage model

For differentiation of the substance/substance group *Camphor ointment* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Camphor ointment*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Camphor ointment	161773	32515	40	20160711*
Caelo	Camphor ointment	17045702	33224	40	20170214

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 80 spectra of 2 reference samples from the substance/substance group *Camphor ointment*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 279 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Camphor ointment*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Camphor ointment	180955	34159	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 0 spectra from 0 *Apo-Ident* customers from 0 batches from the substance/substance group *Camphor ointment*.
- Among them are spectra of independent samples from 0 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.
- 138 353 spectra from 703 *Apo-Ident* customers from a total of 35 295 batches from a further 340 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Camphor ointment* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Camphor ointment* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	80	0	56 279
Type B	0	40	0	69 434
Type C	0	0	0	138 353

The substance/substance group *Camphor ointment* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9784 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6479 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Camphor ointment* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Squalane	21.99	—
Wool fat	27.24	—
Triglycerides, medium-chain	31.64	—
Isopropyl palmitate	39.72	—
Pasta Cordes®	41.51	—
Isopropyl myristate	41.77	—
Emulsifying hydrophobic base gel DAC	45.79	—
Metronidazole 25% in white petrolatum	46.66	—
Shea butter, refined	47.08	—
Laurel oil	57.14	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Camphor ointment* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32515	32515	0.00	21.99
33224	32515	7.81	27.05

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Camphor spirit
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30937-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Camphor spirit; Spiritus camphoratus

Special notes

When selecting the *Camphor spirit* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Camphor spirit	5	2	42

Second-stage model

For differentiation of the substance/substance group *Camphor spirit* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Camphor spirit*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Camphor spirit	12196804	30937	50	20120721
Caelo	Camphor spirit	13354201	31389	40	1506005
Caelo	Camphor spirit	16039501	32307	40	20160229
Euro OTC	Camphor spirit	1506006	31700	60	20150625*
Euro OTC	Camphor spirit	1506007	31701	60	20150625*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 250 spectra of 5 reference samples from the substance/substance group *Camphor spirit*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56109 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Camphor spirit*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Camphor spirit	170923	33327	40
Caelo	Camphor spirit	182721	34328	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 100 spectra from 60 *Apo-Ident* customers from 45 batches from the substance/substance group *Camphor spirit*.
- Among them are spectra of independent samples from 42 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ANZAG	Camphor spirit	121002801	1
Anzag ek:13.14EUR 14.08.12	Camphor spirit	11347401	1
Caelo	Camphor spirit	17318506	2
Caelo	Camphor spirit	11347401	1
Caelo	Camphor spirit	22101201	1
Caelo	Camphor spirit	12196803	4
Caelo	Camphor spirit	10058403	1
Caelo	Camphor spirit	30101309	1
Caelo	Camphor spirit	5031507	1
Caelo	Camphor spirit	62143436	1
Caelo	Camphor spirit	16141105	3
Caelo	Camphor spirit	17092305	6
Caelo	Camphor spirit	18272104	2
Caelo	Camphor spirit	18272101	4
Caelo	Camphor spirit	17092302	3
Caelo	Camphor spirit	13354204	2
Caelo	Camphor spirit	16141106	1
Caelo	Camphor spirit	16141101	1
Caelo	Camphor spirit	13354206	1
Caelo	Camphor spirit	17092303	2
Caelo	Camphor spirit	17318502	5
Caelo	Camphor spirit	13354210	1
Caelo	Camphor spirit	19139601	1
Caelo	Camphor spirit	10514C	1
Caesar & Loretz GmbH	Camphor spirit	18272101	1
Caleo/ Anzag	Camphor spirit	11347401	1
Eigen	Camphor spirit	5016E-02319	1
Eu Rho	Camphor spirit	1405029-01	1
Euro OCT	Camphor spirit	1210028-01	1
Euro OTC	Camphor spirit	110022-02	1
Euro OTC	Camphor spirit	1307040-01	2
Euro OTC	Camphor spirit	1108022-01	1
Euro OTC	Camphor spirit	19071208	1
Euro OTC	Camphor spirit	1210028-01	6
Euro OTC	Camphor spirit	1405029-01	4
Euro OTC	Camphor spirit	140503010	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Camphor spirit	1506006-01	6
Euro OTC	Camphor spirit	1301024-02	2
Euro OTC	Camphor spirit	1108022-02	1
Euro OTC	Camphor spirit	121028-01	1
Euro OTC	Camphor spirit	1405030	1
Euro OTC	Camphor spirit	1307040	1
Euro OTC	Camphor spirit	1307039-01	4
Euro OTC	Camphor spirit	1405030-01	3
Fagron	Camphor spirit	17092303	1
GEHE	Camphor spirit	1301024-02	1
gepapharm/Gehe	Camphor spirit	17092303	1
Caelo	Camphor spirit	16039505	2
Phoenix 03.12.12	Camphor spirit	1307039-01	1
PKH GmbH	Camphor spirit	1405030-01	1
Sanacorp	Camphor spirit	1210026-01	1
Spreewälder/AHD	Camphor spirit	1301024-02	1
SpreewälderArzneimittel ...	Camphor spirit	702110	1
Caelo	Camphor spirit	12196804	1
Caelo	Camphor spirit	16039501	1
Caelo	Camphor spirit		1

- 138 253 spectra from 703 *Apo-Ident* customers from a total of 35 251 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Camphor spirit* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Camphor spirit* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	250	0	56 109
Type B	0	73	7	69 394
Type C	0	96	4	138 253

The substance/substance group *Camphor spirit* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.6000 %)
Type B	100.0000 % (> 99.9653 %)	91.2500 % (> 87.5000 %)
Type C	100.0000 % (> 99.6452 %)	96.0000 % (> 93.0000 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to

exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Camphor spirit* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Isopropyl alcohol 70%	57.20	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Camphor spirit* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30937	31701	5.32	63.24
31389	31389	0.00	64.38
31700	31700	0.00	60.58
31701	31701	0.00	61.39
32307	31389	5.80	65.95

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Caraway oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30876-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Caraway oil; Oleum carvi

Special notes

When selecting the *Caraway oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Caraway oil	3	2	86

Second-stage model

For differentiation of the substance/substance group *Caraway oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Caraway oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Caraway oil	12043508	31024	40	AR-14-FG-012307-01
Caelo	Caraway oil	14166811	31666	60	20140604
Fagron	Caraway oil	12J22-N03	30876	39	20121025

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 139 spectra of 3 reference samples from the substance/substance group *Caraway oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 220 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Caraway oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Caraway oil	16252906	33252	40
Caelo	Caraway oil	181649	34229	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 208 spectra from 101 *Apo-Ident* customers from 89 batches from the substance/substance group *Caraway oil*.
- Among them are spectra of independent samples from 86 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Caraway oil	1508506	1
Bombastus	Caraway oil	303305	8
Bombastus	Caraway oil	270424	3
Bombastus	Caraway oil	268955	1
Bombastus	Caraway oil	276856	3
Bombastus	Caraway oil	280523	1
Bombastus	Caraway oil	272320	1
Bombastus	Caraway oil	290759	1
Bombastus	Caraway oil	291934	5
Bombastus	Caraway oil	297505	3
Bombastus	Caraway oil	17001363	2
Bombastus	Caraway oil	308593	1
Bombastus	Caraway oil	18004843	3
Bombastus	Caraway oil	308902	3
Bombastus	Caraway oil	287889	1
Bombastus	Caraway oil	284758	4
Bombastus	Caraway oil	287725	1
Bombastus	Caraway oil	18001017	1
Bombastus	Caraway oil	299609	1
Bombastus	Caraway oil	295058	5
Bombastus	Caraway oil	17001364	1
Bombastus	Caraway oil	300797	5
Bombastus	Caraway oil	295572	1
Bombastus	Caraway oil	274361	1
Caelo	Caraway oil	10319115	2
Caelo	Caraway oil	12043502	1
Caelo	Caraway oil	10319117	1
Caelo	Caraway oil	28091205	1
Caelo	Caraway oil	12043503	4
Caelo	Caraway oil	19121207	1
Caelo	Caraway oil	22051306	1
Caelo	Caraway oil	12013508	1
Caelo	Caraway oil	10319116	1
Caelo	Caraway oil	17101301	1
Caelo	Caraway oil	10319108	1
Caelo	Caraway oil	12043516	1
Caelo	Caraway oil	5091402	1
Caelo	Caraway oil	6091401	1
Caelo	Caraway oil	12043518	1
Caelo	Caraway oil	14166803	3
Caelo	Caraway oil	14166806	2

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Supplier	Substance	Batch	Spectra
Caelo	Caraway oil	15085707	4
Caelo	Caraway oil	15085709	2
Caelo	Caraway oil	14166807	1
Caelo	Caraway oil	2031504	1
Caelo	Caraway oil	27041503	1
Caelo	Caraway oil	291934	5
Caelo	Caraway oil	300797	1
Caelo	Caraway oil	15085714	1
Caelo	Caraway oil	1041705	1
Caelo	Caraway oil	16252910	3
Caelo	Caraway oil	16252918	2
Caelo	Caraway oil	17001363	2
Caelo	Caraway oil	18164901	1
Caelo	Caraway oil	2011903	1
Caelo	Caraway oil	15085704	4
Caelo	Caraway oil	14166802	4
Caelo	Caraway oil	15085710	5
Caelo	Caraway oil	15085703	1
Caelo	Caraway oil	16252902	2
Caelo	Caraway oil	12043511	8
Caelo	Caraway oil	10319118	4
Caelo	Caraway oil	12043513	9
Caelo	Caraway oil	12043512	1
Caelo	Caraway oil	15085706	2
Caelo	Caraway oil	10319120	2
Caelo	Caraway oil	12043507	3
Caelo	Caraway oil	16252917	3
Caelo	Caraway oil	14166812	1
Caelo	Caraway oil	297505	1
Caelo	Caraway oil	14166810	3
Caelo	Caraway oil	16252903	4
Caesar & Loretz GmbH	Caraway oil	18164901	1
Caesar/Noweda	Caraway oil	712Q-01968	2
Cealo/Gehe	Caraway oil	16252909	1
Euro OTC	Caraway oil	17001363	1
Fagron	Caraway oil	11/13-N03	2
Fagron	Caraway oil	11L13-N03	2
Fagron	Caraway oil	13c08-N08	1
Fagron	Caraway oil	6999440	1
Fagron	Caraway oil	11A19-N08	1
Fagron	Caraway oil	13E06-N13	1
Fagron	Caraway oil	287725	1
Fagron	Caraway oil	12J2-N03	1
Fagron	Caraway oil	13C08-N03	3
Fiebig	Caraway oil	15085707	1
Caelo	Caraway oil	15085713	2
Gatt-Koller	Caraway oil	1801492	2
Gehe	Caraway oil	14166811	1
GEHE	Caraway oil	18164901	1
Kögl	Caraway oil	49303162716	1
Kögl	Caraway oil	49303161217	1
L12	Caraway oil	16252903	1
Phönix	Caraway oil	12J22-N03	1
Phönix	Caraway oil	276856	1
Phönix	Caraway oil	12043511	1
Klenk	Caraway oil	274361	1
Bombastus	Caraway oil	19002890	1
Caelo	Caraway oil	16252906	4
Schubert	Caraway oil	1031E0-801	1
Caelo	Caraway oil	12043508	3

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Supplier	Substance	Batch	Spectra
Fagron	Caraway oil	12J22-N03	1
Caelo	Caraway oil	14166811	1
	Caraway oil	81816288	1

- 138 145 spectra from 703 *Apo-Ident* customers from a total of 35 207 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Caraway oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Caraway oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	139	0	56 220
Type B	0	80	0	69 394
Type C	0	203	5	138 145

The substance/substance group *Caraway oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.6835 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	97.5962 % (> 96.1538 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Caraway oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Citric oil	32.87	—
Bitter orange oil	34.32	—
Spearmint oil	35.60	—

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Substanz	Distance in main model	Distance in second-stage model
Grapefruit oil	40.01	—
Sweet orange oil	45.95	—
Dwarf pine oil	47.34	—
Bergamot oil	48.79	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Caraway oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30876	31024	7.64	32.45
31024	31024	0.00	35.57
31666	31024	11.58	33.03

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50% greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Castor oil, virgin / Sorbitan- and glycerol monooleate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30741-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Castor oil, virgin / Sorbitan- and glycerol monooleate; Castor oil; Oleum ricini; Sorbitan- and glycerol monooleate

Special notes

When selecting the *Castor oil, virgin / Sorbitan- and glycerol monooleate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Castor oil	7	22	444
Sorbitan- and glycerol monooleate	4	2	5

Second-stage model

For differentiation of the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Castor oil	12114603	30741	40	20120504
Caelo	Castor oil	14020104	31343	40	AR-15-FG-005211-01
Caelo	Castor oil	14304807	31751	60	20141106
Euro OTC	Castor oil	1509003	31739	60	20150918*
Euro OTC	Castor oil	1512024	31845	60	20160111*
Fagron	Castor oil	15D02-B02-314240	31824	60	20150410
Fagron	Castor oil	16J12-B01-328159	32943	40	20161121
Caelo	Sorbitan- and gl...	14202402	31574	60	AR-15-FG-009320-01
Caelo	Sorbitan- and gl...	15122301	31726	60	20150420
Caelo	Sorbitan- and gl...	16234301	33454	40	20160829
Caelo	Sorbitan- and gl...	16234301	33455	40	20160829
Caelo	Sorbitan- and gl...	190802	34534	40	20190411*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 600 spectra of 12 reference samples from the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 11 different batches.
- 55 759 spectra from a total of 1105 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples:

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 960 spectra of 24 reference samples from the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate*.
- Among them are spectra of independent samples from 24 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Castor oil	12149306	30776	40
Caelo	Castor oil	161028	32201	40
Caelo	Castor oil	160922	32207	40
Caelo	Castor oil	162000	32311	40
Caelo	Castor oil	161672	32312	40
Caelo	Castor oil	162362	32344	40
Caelo	Castor oil	162731	32681	40
Caelo	Castor oil	170272	33071	40
Caelo	Castor oil	163146	33072	40
Caelo	Castor oil	170271	33073	40
Caelo	Castor oil	171899	33678	40
Caelo	Castor oil	191326	34603	40
Caelo	Castor oil	191970	34665	40
Caelo	Castor oil	192511	34732	40
Caelo	Castor oil	192831	34738	40
Euro OTC	Castor oil	1109001-01	30608	40
Euro OTC	Castor oil	1604019	32192	40
Euro OTC	Castor oil	1611005	32858	40
Euro OTC	Castor oil	1705035	33596	40
Euro OTC	Castor oil	1801007	34004	40
Euro OTC	Castor oil	1807003-01	34211	40
Euro OTC	Castor oil	1902019	34428	40
Caelo	Sorbitan- and glycerol monoo...	17132202	33936	40
Caelo	Sorbitan- and glycerol monoo...	182151	34252	40

- 68514 spectra from a total of 1478 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2256 spectra from 457 *Apo-Ident* customers from 458 batches from the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate*.
- Among them are spectra of independent samples from 449 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
13.10.2016 Phoenix 3,77EUR	Castor oil	1512024-02	1
ACM	Castor oil	KNC0899J15	1
AHD	Castor oil	14199604	2

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Supplier	Substance	Batch	Spectra
AHD	Castor oil	1000005818	1
Fagron	Castor oil	14c17-b01-293832	1
AHD 27.11.14 EK 2,53	Castor oil	1407053-01	1
AHD/Caealo 15.08.14	Castor oil	14020109	1
Caelo	Castor oil	15067306	1
ALH	Castor oil	1000002766	1
ALH	Castor oil	1000004198	2
Alliance	Castor oil	300629	1
Alliance Healthcare	Castor oil	1512024-02	1
AllianceHealthcare	Castor oil	15144304	1
Allianz	Castor oil	18001340	1
Allianz Healthcare	Castor oil	16102804	1
Alte Apotheke	Castor oil	1000002384	1
Anzag	Castor oil	5334001	4
Anzag	Castor oil	292409	1
Anzag	Castor oil	16016207	1
Anzag	Castor oil	305230	1
Anzag 04.03.2014	Castor oil	1308019-02	1
Caelo	Castor oil	1412006-02	2
Anzag/Henry Lamotte	Castor oil	1504006-02	1
apo-ident/Gehe	Castor oil	1801007-01	1
Bären Apotheke	Castor oil	1611005-01	1
Bom	Castor oil	280791	1
Bomastus	Castor oil	297429	5
Bomastus-Werke AG	Castor oil	307456	1
Bomastus-Werke/Phönix	Castor oil	300629	1
Bombas	Castor oil	278660	1
Bombastus	Castor oil	278660	3
Bombastus	Castor oil	273390	5
Bombastus	Castor oil	271753	2
Bombastus	Castor oil	273881	2
Bombastus	Castor oil	281943	15
Bombastus	Castor oil	283620	7
Bombastus	Castor oil	281944	7
Bombastus	Castor oil	285801	11
Bombastus	Castor oil	288126	14
Bombastus	Castor oil	290213	16
Bombastus	Castor oil	291722	17
Bombastus	Castor oil	91696	1
Bombastus	Castor oil	1412006-01	1
Bombastus	Castor oil	294668	14
Bombastus	Castor oil	294667	6
Bombastus	Castor oil	29730	1
Bombastus	Castor oil	297430	10
Bombastus	Castor oil	297429	2
Bombastus	Castor oil	300628	2
Bombastus	Castor oil	301587	3
Bombastus	Castor oil	110816-3	1
Bombastus	Castor oil	303857	3
Bombastus	Castor oil	3888	1
Bombastus	Castor oil	307457	15
Bombastus	Castor oil	308825	34
Bombastus	Castor oil	17001710	3
Bombastus	Castor oil	18003730	12
Bombastus	Castor oil	280791	17
Bombastus	Castor oil	284505	6
Bombastus	Castor oil	6861795	2
Bombastus	Castor oil	305229	6
Bombastus	Castor oil	307456	9
Bombastus	Castor oil	308824	3

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Supplier	Substance	Batch	Spectra
Bombastus	Castor oil	288639	16
Bombastus	Castor oil	415Q-02009	1
Bombastus	Castor oil	301591	25
Bombastus	Castor oil	30825	1
Bombastus	Castor oil	275938	12
Bombastus	Castor oil	161101R/301591	1
Bombastus	Castor oil	270580	1
Bombastus	Castor oil	180306R/311684	1
Bombastus	Castor oil	60082103	4
Bombastus	Castor oil	295412	22
Bombastus	Castor oil	296751	15
Bombastus	Castor oil	275937	10
Bombastus	Castor oil	18003729	1
Bombastus	Castor oil	17002279	2
Bombastus	Castor oil	17001711	15
Bombastus	Castor oil	288638	6
Bombastus	Castor oil	290212	4
Bombastus	Castor oil	268699	1
Bombastus	Castor oil	303858	26
Bombastus	Castor oil	18001340	29
Bombastus	Castor oil	18001339	3
Bombastus	Castor oil	285757	3
Bombastus	Castor oil	287167	10
Bombastus	Castor oil	278661	12
Bombastus	Castor oil	301590	3
Bombastus	Castor oil	305230	28
Bombastus	Castor oil	292409	12
Bombastus	Castor oil	298699	27
Bombastus	Castor oil	300629	19
Bombastus	Castor oil	104356	1
Bombastus	Castor oil	6861789	1
Bombastus	Castor oil	311684	17
Bombastus	Castor oil	17002280	3
Bombastus	Castor oil	18006815	4
Bombastus	Castor oil	273882	9
Bombastus	Castor oil	298698	6
Bombastus	Castor oil	19002830	1
Bombastus	Castor oil	290714a	1
Bombastu-Werke AG/Gehe	Castor oil	278660	1
Bombastu-Werke AG/Gehe	Castor oil	281944	1
Bombasus/ Anzag	Castor oil	288126	1
Caelo	Castor oil	1407053-02man	1
Caelo	Castor oil	20161102-3	1
Caelo	Castor oil	1620007	1
Caelo	Castor oil	272591	1
Caelo	Castor oil	30031302	1
Caelo	Castor oil	22051303	1
Caelo	Castor oil	12318204	1
Caelo	Castor oil	12318207	1
Caelo	Castor oil	22071302	1
Caelo	Castor oil	13065401	1
Caelo	Castor oil	13134608	6
Caelo	Castor oil	12121307	1
Caelo	Castor oil	13196309	8
Caelo	Castor oil	10021402	1
Caelo	Castor oil	131344604	1
Caelo	Castor oil	13196313	12
Caelo	Castor oil	1319609	1
Caelo	Castor oil	26041403	1
Caelo	Castor oil	13174505	2

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	13357506	1
Caelo	Castor oil	14020105	4
Caelo	Castor oil	6051411	1
Caelo	Castor oil	13174507	1
Caelo	Castor oil	287167	2
Caelo	Castor oil	1403024-02	2
Caelo	Castor oil	14058810	2
Caelo	Castor oil	14181102	1
Caelo	Castor oil	14058809	1
Caelo	Castor oil	14199502	3
Caelo	Castor oil	24101402	1
Caelo	Castor oil	14058808	1
Caelo	Castor oil	6861795	1
Caelo	Castor oil	14199605	8
Caelo	Castor oil	14199609	8
Caelo	Castor oil	18021505	1
Caelo	Castor oil	14304806	1
Caelo	Castor oil	30031504	1
Caelo	Castor oil	14330604	6
Caelo	Castor oil	14330605	6
Caelo	Castor oil	28051512	1
Caelo	Castor oil	14304803	5
Caelo	Castor oil	15144302	7
Caelo	Castor oil	15145101	5
Caelo	Castor oil	1091505	1
Caelo	Castor oil	14144305	2
Caelo	Castor oil	15253404	4
Caelo	Castor oil	15144305	2
Caelo	Castor oil	4614M-02009	1
Caelo	Castor oil	15145104	2
Caelo	Castor oil	15012016	1
Caelo	Castor oil	16016206	5
Caelo	Castor oil	297430	1
Caelo	Castor oil	298699	3
Caelo	Castor oil	300629	3
Caelo	Castor oil	16017102	1
Caelo	Castor oil	16016203	7
Caelo	Castor oil	16102804	10
Caelo	Castor oil	15392005	1
Caelo	Castor oil	301587	2
Caelo	Castor oil	16017101	1
Caelo	Castor oil	303857	3
Caelo	Castor oil	16102801	9
Caelo	Castor oil	303858	1
Caelo	Castor oil	1000003564	5
Caelo	Castor oil	16102802	7
Caelo	Castor oil	16273105	1
Caelo	Castor oil	1000004198	4
Caelo	Castor oil	16296301	1
Caelo	Castor oil	16200007	10
Caelo	Castor oil	16273101	1
Caelo	Castor oil	8041711	1
Caelo	Castor oil	17027201	1
Caelo	Castor oil	17015501	2
Caelo	Castor oil	17027206	1
Caelo	Castor oil	3071713	1
Caelo	Castor oil	1000004554	3
Caelo	Castor oil	307429	1
Caelo	Castor oil	17113803	17
Caelo	Castor oil	1707403	1

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	16091703	1
Caelo	Castor oil	135277	1
Caelo	Castor oil	17107501	1
Caelo	Castor oil	17027204	2
Caelo	Castor oil	17107506	1
Caelo	Castor oil	18121704	1
Caelo	Castor oil	17107402	1
Caelo	Castor oil	1705035-01	7
Caelo	Castor oil	17251901	14
Caelo	Castor oil	17189906	1
Caelo	Castor oil	13041803	1
Caelo	Castor oil	30041808	1
Caelo	Castor oil	17273906	1
Caelo	Castor oil	17273903	1
Caelo	Castor oil	9061817	1
Caelo	Castor oil	1801007-01	3
Caelo	Castor oil	17359304	1
Caelo	Castor oil	19091802	1
Caelo	Castor oil	311683	1
Caelo	Castor oil	18154902	1
Caelo	Castor oil	5121809	1
Caelo	Castor oil	18155804	1
Caelo	Castor oil	18224107	1
Caelo	Castor oil	19080701	1
Caelo	Castor oil	11359507	1
Caelo	Castor oil	12270111	5
Caelo	Castor oil	13096304	9
Caelo	Castor oil	13134609	14
Caelo	Castor oil	16016207	7
Caelo	Castor oil	60082103	1
Caelo	Castor oil	14020109	6
Caelo	Castor oil	124637	1
Caelo	Castor oil	15392003	7
Caelo	Castor oil	17107504	1
Caelo	Castor oil	305230	2
Caelo	Castor oil	19132603	1
Caelo	Castor oil	18295702	3
Caelo	Castor oil	1206039-01	1
Caelo	Castor oil	14020108	11
Caelo	Castor oil	1304013-01	2
Caelo	Castor oil	12270108	3
Caelo	Castor oil	5334001	1
Caelo	Castor oil	5899201	1
Caelo	Castor oil	15144303	7
Caelo	Castor oil	14199604	5
Caelo	Castor oil	15144307	3
Caelo	Castor oil	124189	3
Caelo	Castor oil	12270106	8
Caelo	Castor oil	17307702	3
Caelo	Castor oil	278661	3
Caelo	Castor oil	16236205	1
Caelo	Castor oil	3791723	1
Caelo	Castor oil	14330601	2
Caelo	Castor oil	16016202	5
Caelo	Castor oil	17251906	6
Caelo	Castor oil	17107403	5
Caelo	Castor oil	18001340	4
Caelo	Castor oil	294667	1
Caelo	Castor oil	18114502	7
Caelo	Castor oil	15392002	2

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	Fertigarzneimittel	1
Caelo	Castor oil	18224104	1
Caelo	Castor oil	14199603	4
Caelo	Castor oil	1604019-02	1
Caelo	Castor oil	17113801	1
Caelo	Castor oil	14181103	6
Caelo	Castor oil	17107407	10
Caelo	Castor oil	294668	3
Caelo	Castor oil	16314604	2
Caelo	Castor oil	308824	2
Caelo	Castor oil	311684	3
Caelo	Castor oil	18033501	26
Caelo	Castor oil	12071107	1
Caelo	Castor oil	12149306	4
Caelo	Castor oil	5450801	4
Caelo	Castor oil	13I27-B01-287858	1
Caelo	Castor oil	13196308	1
Caelo	Castor oil	14199501	12
Caelo	Castor oil	1420106	1
Caelo	Castor oil	1407053-01	1
Caelo	Castor oil	14199602	1
Caelo	Castor oil	16/081/R	1
Caelo	Castor oil	15399806	1
Caelo	Castor oil	16167203	1
Caelo	Castor oil	307457	3
Caelo	Castor oil	1713803	1
Caelo	Castor oil	18154904	1
Caelo	Castor oil	18238102	8
Caelo	Castor oil	12114606	2
Caelo	Castor oil	13134603	3
Caelo	Castor oil	13134604	20
Caelo	Castor oil	12114605	10
Caelo	Castor oil	301591	5
Caelo	Castor oil	17359306	1
Caelo	Castor oil	14330606	10
Caelo	Castor oil	P161/14	1
Caelo	Castor oil	13G29-B01	1
Caelo	Castor oil	11359508	1
Caelo	Castor oil	14115405	1
Caelo	Castor oil	1504006-02	3
Caelo	Castor oil	150400602	1
Caelo	Castor oil	296751	5
Caelo	Castor oil	15383201	1
Caelo	Castor oil	1000002384	1
Caelo	Castor oil	16314602	1
Caelo	Castor oil	17113802	2
Caelo	Castor oil	1611005-01	1
Caelo	Castor oil	17001711	2
Caelo	Castor oil	18224101	1
Caelo	Castor oil	11359502	1
Caelo	Castor oil	13043601	10
Caelo	Castor oil	292409	1
Caelo	Castor oil	295412	2
Caelo	Castor oil	1509003-01	8
Caelo	Castor oil	15J15-B08-318730	1
Caelo	Castor oil	1611005-012x	1
Caelo	Castor oil	1000005818	5
Caelo	Castor oil	1800134006861795	1
Caelo	Castor oil	19012709	1
Caelo	Castor oil	275938	3

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	288126	1
Caelo	Castor oil	1412006-01	2
Caelo	Castor oil	15/355/Ri	1
Caelo	Castor oil	1509003-001	1
Caelo	Castor oil	16314603	2
Caelo	Castor oil	100004198	1
Caelo	Castor oil	17107503	2
Caelo	Castor oil	308825	3
Caelo	Castor oil	17273902	1
Caelo	Castor oil	17002280	2
Caelo	Castor oil	18003730	2
Caelo	Castor oil	8003726002	1
Caelo	Castor oil	15145105	1
Caelo	Castor oil	15253403	1
Caelo	Castor oil	13065405	18
Caelo	Castor oil	13134603-3417310103	1
Caelo	Castor oil	13134608-3438311151	1
Caelo	Castor oil	284505	1
Caelo	Castor oil	298698	1
Caelo	Castor oil	15392007	4
Caelo	Castor oil	17107401	1
Caelo	Castor oil	17189909	1
Caelo	Castor oil	290212	6
Caelo	Castor oil	1913A-02009	1
Caelo	Castor oil	15392001	11
Caelo	Castor oil	8003726001	4
Caelo	Castor oil	15145106	1
Caesar & Loretz GmbH	Castor oil	16102802	1
Caesar & Loretz GmbH	Castor oil	16236202	1
Caesar & Loretz GmbH	Castor oil	16273105	1
Caesar & Loretz GmbH	Castor oil	17113803	1
Caesar & Loretz GmbH	Castor oil	18114503	1
Caesar&Loretz/Caesar&Lo...	Castor oil	15144304	1
Calo/Sanacorp	Castor oil	16102802	2
castor Products company	Castor oil	136225	1
Castor Pruducts Company...	Castor oil	1407053-02	1
Castor Pruducts Company...	Castor oil	1512024-01	1
Castor Pruducts Company...	Castor oil	1512024-02	1
Castor/Phönix	Castor oil	1509003-02	1
Cealo	Castor oil	14199609	1
Cealo	Castor oil	16102801	1
Cealo	Castor oil	13096304	1
Defektur	Castor oil	5052	3
Defektur	Castor oil	5196	1
Defektur	Castor oil	5253	2
Defektur	Castor oil	5334	3
Defektur	Castor oil	5408	2
Defektur	Castor oil	5775	1
Defektur	Castor oil	6442	1
Defektur Abfüllung	Castor oil	5945	1
Defektur Abfüllung	Castor oil	6001	2
Defektur Abfüllung	Castor oil	6081	1
Defektur Abfüllung	Castor oil	6189	1
Defektur Abfüllung	Castor oil	6260	1
Defektur Abfüllung	Castor oil	6333	1
Defektur Abfüllung	Castor oil	6414	1
Delta	Castor oil	17251906	1
Ebert-Jacobi	Castor oil	6861795	1
Eur	Castor oil	1407053-01	1
EuRho	Castor oil	1206039-02	1

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Supplier	Substance	Batch	Spectra
EuRho	Castor oil	1304013-02	1
EuRho	Castor oil	141-2006-02	1
EuRho	Castor oil	1509003-01	1
EuRho	Castor oil	1512024-01	1
EuRho	Castor oil	1212008-01	3
EuRho	Castor oil	1212008-02	1
EuRho / 11	Castor oil	1504006-02	2
Eurho / Sanacorp	Castor oil	121008-02	1
EuRho AHC	Castor oil	1611005-01	1
EuRho/Geilenkirchen	Castor oil	1304013-02	1
Euro OCT	Castor oil	14112006-02	1
Euro OTC	Castor oil	1509003-02	20
Euro OTC	Castor oil	1304013-02	11
Euro OTC	Castor oil	130801902	1
Euro OTC	Castor oil	130401313-02	1
Euro OTC	Castor oil	1308019-02	3
Euro OTC	Castor oil	1403024-02	8
Euro OTC	Castor oil	ChB120115	1
Euro OTC	Castor oil	1407053-01	4
Euro OTC	Castor oil	141200601	1
Euro OTC	Castor oil	141200602	2
Euro OTC	Castor oil	150400602	1
Euro OTC	Castor oil	303858	1
Euro OTC	Castor oil	1604019-02	7
Euro OTC	Castor oil	1611005-01	14
Euro OTC	Castor oil	161100501	2
Euro OTC	Castor oil	180700301	1
Euro OTC	Castor oil	1513A03553	2
Euro OTC	Castor oil	121008-01	1
Euro OTC	Castor oil	1212008-01	4
Euro OTC	Castor oil	3313U-03553	1
Euro OTC	Castor oil	3513I-03553	1
Euro OTC	Castor oil	1504006-02	6
Euro OTC	Castor oil	1604019-01	21
Euro OTC	Castor oil	16040019-02	1
Euro OTC	Castor oil	150900301	1
Euro OTC	Castor oil	13071301	2
Euro OTC	Castor oil	1112013C	1
Euro OTC	Castor oil	15072014B	1
Euro OTC	Castor oil	290714b	1
Euro OTC	Castor oil	2022015C	1
Euro OTC	Castor oil	10022015D	1
Euro OTC	Castor oil	60082103	1
Euro OTC	Castor oil	31032015A	1
Euro OTC	Castor oil	1509003-01	23
Euro OTC	Castor oil	1512004-02	1
Euro OTC	Castor oil	1705035-01	26
Euro OTC	Castor oil	1902019-01	2
Euro OTC	Castor oil	1212008-02	8
Euro OTC	Castor oil	126279	1
Euro OTC	Castor oil	1206039-01	2
Euro OTC	Castor oil	160401902	1
Euro OTC	Castor oil	705035-01	1
Euro OTC	Castor oil	1807003-01	3
Euro OTC	Castor oil	145943	1
Euro OTC	Castor oil	135277	1
Euro OTC	Castor oil	170503-01	1
Euro OTC	Castor oil	1304013-01	7
Euro OTC	Castor oil	128224	1
Euro OTC	Castor oil	142862	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Castor oil	131(1801007-01)	1
Euro OTC	Castor oil	18033501	1
Euro OTC	Castor oil	1014A03553	1
Euro OTC	Castor oil	3413U03553	1
Euro OTC	Castor oil	151204-02	1
Euro OTC	Castor oil	129(1705035-01)	1
Euro OTC	Castor oil	130(1801007-01)	1
Euro OTC	Castor oil	1512024-01	13
Euro OTC	Castor oil	1801007-01	18
Euro OTC	Castor oil	1220616	1
Euro OTC	Castor oil	8003726001	1
Euro OTC	Castor oil	140705301	2
Euro OTC	Castor oil	140302402	1
Euro OTC	Castor oil	1202041-01	1
Euro OTC	Castor oil	154006-02	1
Euro/Noweda	Castor oil	1412006-02	1
Euro/Noweda	Castor oil	1604019-02	1
Euro/Noweda	Castor oil	1604019-01	2
Euro OTC	Castor oil	1407053-02	9
Euro OTC	Castor oil	1412006-02	12
Euro OTC	Castor oil	5581	1
Euro OTC	Castor oil	140302401	1
Euro OTC	Castor oil	1611005-02	3
Euro OTC	Castor oil	1308019-01	9
Euro OTC	Castor oil	1403024-01	9
Euro OTC	Castor oil	170503501	1
Fagron	Castor oil	12H29-N04	2
Fagron	Castor oil	12D04-N09	2
Fagron	Castor oil	13G29-B01-285422	1
Fagron	Castor oil	13134609	1
Fagron	Castor oil	13/27-B01-287857	1
Fagron	Castor oil	13G29B01	1
Fagron	Castor oil	14020108	1
Fagron	Castor oil	14330601	1
Fagron	Castor oil	15A28-B07-304816	2
Fagron	Castor oil	1528-B07-3048	1
Fagron	Castor oil	15A28B07	1
Fagron	Castor oil	15A28-B07-304818	1
Fagron	Castor oil	15J15-B08	4
Fagron	Castor oil	16C29-B01	1
Fagron	Castor oil	16C29-B01-322133	2
Fagron	Castor oil	126F07-B06-324379	1
Fagron	Castor oil	16H05-B03	3
Fagron	Castor oil	16J12-B01-328160	1
Fagron	Castor oil	16J12-B01	1
Fagron	Castor oil	16J12-B328159	1
Fagron	Castor oil	18003730	1
Fagron	Castor oil	14C17-B01-293834	1
Fagron	Castor oil	16H05-B03-326864	9
Fagron	Castor oil	13I27-B01-287857	1
Fagron	Castor oil	16F07-B06	1
Fagron	Castor oil	13065405	1
Fagron	Castor oil	127170	1
Fagron	Castor oil	13C08-N08	2
Fagron	Castor oil	15J15-B08-318730	1
Fagron	Castor oil	301591	1
Fagron	Castor oil	133085	1
Fagron	Castor oil	14A28-B07-304816	1
Fagron	Castor oil	15A28-B07-304817	1
Fagron	Castor oil	13I27-B01-287858	1

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Supplier	Substance	Batch	Spectra
Fagron	Castor oil	14C17-B01-293833	2
Fagron	Castor oil	15J15-B08-316099	1
Fagron	Castor oil	1705035-01	1
Fagron	Castor oil	16F07-B06-324379	3
Fagron	Castor oil	16h05-b03-326864	2
Fagron	Castor oil	17H22-B01-341047	1
Fagron	Castor oil	5450801	1
Fagron	Castor oil	15D02-B02-311714	1
Fagron	Castor oil	1801007-01	1
Fagron	Castor oil	13D29-N01	1
Fagron	Castor oil	14C17-B01	3
Fargon /12.07.2013 / No...	Castor oil	13D29-N01	1
Fiebig	Castor oil	1000004554	3
Fiebig	Castor oil	8003726002	1
Finteler Apotheke	Castor oil	1611005-01	1
Gatt-Koller	Castor oil	1803582	2
Gatt-Koller	Castor oil	1900038	2
Gehe	Castor oil	275937	1
Gehe	Castor oil	283620	3
Gehe	Castor oil	1412006/02	1
Gehe	Castor oil	1412006-02	1
Gehe	Castor oil	305229	1
Gehe	Castor oil	1304013-01	2
GEHE	Castor oil	17107506	1
GEHE	Castor oil	18003730	2
GEHE	Castor oil	11359507	1
Gehe 05.03.2014	Castor oil	278660	1
GEHE 17.07.2014	Castor oil	285757	1
Gehe Kassel	Castor oil	288638	2
Gehe Kassel 06.06.2015	Castor oil	290212	1
Caelo	Castor oil	269565	1
Caelo	Castor oil	4330605	1
Caelo	Castor oil	1140318/17113803	1
Euro OTC	Castor oil	180100701	4
Gehe/Lamotte	Castor oil	1000004198	1
Gehe/Lamotte	Castor oil	1000004554	1
Gehe/Lamotte	Castor oil	1000005199	1
Geo-Chem/sanacorp	Castor oil	1206039-01	1
Geo-Chem/sanacorp	Castor oil	1212008-01	1
H.Lamotte	Castor oil	1000004554	2
H.Lamotte/Noweda	Castor oil	123812	1
H.Lamotte/Noweda	Castor oil	125162	2
H.Lamotte/Noweda	Castor oil	1000001914	1
Hedinger / Noweda	Castor oil	1407053-02	3
Hedinger/Sanacorp	Castor oil	290213	1
Henning/ Phoenix	Castor oil	5899201	2
Henry la Motte	Castor oil	5899201	1
Henry la Motte	Castor oil	125162	1
Henry la Motte	Castor oil	1000005818	1
Henry Lamotte	Castor oil	5334001	1
Henry Lamotte	Castor oil	5450801	1
Henry Lamotte	Castor oil	123812	1
Henry Lamotte	Castor oil	125473	3
Henry Lamotte	Castor oil	125162	1
Henry Lamotte	Castor oil	1000000714	1
Henry Lamotte	Castor oil	1000001128	4
Henry Lamotte	Castor oil	1000001914	10
Henry Lamotte	Castor oil	1000002766	3
Henry Lamotte	Castor oil	1000002384	6
Henry Lamotte	Castor oil	1000003564	8

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Castor oil	1000004198	1
Henry Lamotte	Castor oil	2X1000004554	1
Henry Lamotte	Castor oil	10000005818	1
Henry Lamotte	Castor oil	1000005818	2
Henry Lamotte	Castor oil	1000004553L100	1
Henry Lamotte	Castor oil	1000007724	1
Henry Lamotte	Castor oil	8003726002	2
Henry Lamotte / Kehr	Castor oil	1000000714	1
Henry Lamotte / Noweda	Castor oil	5450801	2
Henry Lamotte / Noweda	Castor oil	123384	1
Henry Lamotte Oils	Castor oil	5334001	1
Henry Lamotte Oils	Castor oil	5450801	2
Henry Lamotte Oils	Castor oil	123812	1
Henry Lamotte Oils	Castor oil	8003726001	1
Henry Lamotte Oils GmbH	Castor oil	5450801	1
Henry Lamotte Oils GmbH	Castor oil	123812	1
Henry Lamotte Oils GmbH	Castor oil	1000000714	1
Henry Lamotte Oils GmbH	Castor oil	1000001914	1
Henry Lamotte Oils GmbH	Castor oil	1000002384	1
Henry Lamotte Oils GmbH	Castor oil	1000002766	1
Henry Lamotte Oils GmbH	Castor oil	1000005199	2
Henry Lamotte Oils GmbH	Castor oil	8003726001	1
Henry Lamotte oils GmbH...	Castor oil	10000000714	1
Henry Lamotte oils GmbH...	Castor oil	1000001128	1
Henry Lamotte Oils GmbH...	Castor oil	123384	1
Henry Lamotte Oils GmbH...	Castor oil	124189	1
Henry Lamotte Oils GmbH...	Castor oil	123812	2
Henry Lamotte Oils, Gehe	Castor oil	5450801	1
Henry Lamotte Oils/ San...	Castor oil	16102804	1
Henry Lamotte Oils/Ebert	Castor oil	1000004554	1
Henry Lamotte Oils/Gehe	Castor oil	5334001	1
Henry Lamotte Oils/Gehe	Castor oil	123384	1
Henry Lamotte Oils/GEHE	Castor oil	124637	1
Henry Lamotte Oils/GEHE	Castor oil	5899201	1
Henry Lamotte Oils/Noweda	Castor oil	123812	1
Henry Lamotte/ Alliance...	Castor oil	1000004554	1
Henry Lamotte/ Alliance...	Castor oil	8003726002	1
Henry Lamotte/ Phönix	Castor oil	1000003564	1
Henry Lamotte/ Phönix	Castor oil	1000004198	1
Henry Lamotte/AHD	Castor oil	1000001128	2
Henry Lamotte/Ebert	Castor oil	5450801	3
Henry Lamotte/Gehe	Castor oil	5450801	2
Henry Lamotte/Gehe	Castor oil	1000001128	1
Henry Lamotte/Noewda	Castor oil	100000238	1
Henry Lamotte/Noewda	Castor oil	1000004198	1
Henry Lamotte/Noweda	Castor oil	123812	1
Henry Lamotte/Noweda	Castor oil	124637	1
Henry Lamotte/Noweda	Castor oil	1000001914	1
Henry Lamotte/Noweda	Castor oil	1000002384	1
Henry Lamotte/Noweda	Castor oil	1000004554	3
Henry Lamotte/Phoenix	Castor oil	125473	2
Henry Lamotte/Phoenix	Castor oil	1000000714	1
Henry Lamotte/Phoenix	Castor oil	1000001914	3
Henry Lamotte/Sanacorp	Castor oil	123384	3
Henry Lamotte/Sanacorp	Castor oil	124189	1
Henry Lamotte/Sanacorp	Castor oil	5899201	2
Henry Lamotte/Sanacorp	Castor oil	1000001914	3
Henry Lamotte-Phönix	Castor oil	1000005818	1
Henry Lamotte-Phönix	Castor oil	1000005199	1
HenryLamotte	Castor oil	5899201	1

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Supplier	Substance	Batch	Spectra
HenryLamotte	Castor oil	1914	1
HenryLamotte/Anzag	Castor oil	2114I-02009	1
HenryLamotte/Phoenix	Castor oil	5280301	1
Hubertus Apotheke	Castor oil	16J12-B01-328159	1
Jenne,Lamotte	Castor oil	123384	1
Kehr	Castor oil	308824	5
Kehr	Castor oil	311683	3
Kehr	Castor oil	18001339	1
Kehr/Henry Lamotte	Castor oil	1000005818	1
Kögl	Castor oil	254508163316	1
Kögl	Castor oil	404411164916	2
Kögl	Castor oil	36102170817	1
Kögl	Castor oil	36102171217	1
Kögl	Castor oil	112304172017	3
Kögl	Castor oil	20172348	2
Kögl	Castor oil	1701849	3
Kögl	Castor oil	1801521	2
Kögl	Castor oil	1802385	1
KÖGL	Castor oil	1900992	1
Krieger/Lamotte	Castor oil	1000001128	1
L10	Castor oil	17015501	1
Caelo	Castor oil	16016210	2
Caelo	Castor oil	16102803	1
Caelo	Castor oil	17107404	1
Caelo	Castor oil	18083604	1
lamotte	Castor oil	5450801	1
lamotte	Castor oil	1000004198	1
Lamotte	Castor oil	5188401	1
Lamotte	Castor oil	5334001	3
Lamotte	Castor oil	5450801	4
Lamotte	Castor oil	123812	2
Lamotte	Castor oil	124189	2
Lamotte	Castor oil	1000000714	1
Lamotte	Castor oil	1000004198	1
Lamotte	Castor oil	5199	1
Lamotte	Castor oil	10000045545455	1
Lamotte	Castor oil	8003726001	2
Lamotte	Castor oil	1000009899	1
Lamotte / Sanacorp	Castor oil	10000051995648	1
Lamotte Jenne	Castor oil	1000004554	2
Lamotte Jenne	Castor oil	1000005818	1
Lamotte / AHC	Castor oil	8003726002	3
Lamotte / AHC	Castor oil	1000009899	1
Lamotte / AHC	Castor oil	1000010810	2
Lamotte / Gehe	Castor oil	5334001	1
Lamotte / Gehe	Castor oil	123384	2
Lamotte / Gehe	Castor oil	8003726001	2
Lamotte / Noweda	Castor oil	125162	1
LaMotte / Phoenix	Castor oil	1000001128	3
LaMotte / Phoenix	Castor oil	1000002766	2
LaMotte / Phoenix	Castor oil	1000002384	1
lamotte Phoenix	Castor oil	288721	1
lamotte phönix	Castor oil	125162	1
Lamotte Phönix	Castor oil	5450801	2
lamotte/ Phoenix	Castor oil	1000003564	1
lamotte/ Phoenix	Castor oil	1000004198	1
lamotte/ Phoenix	Castor oil	1000004554	1
Lamotte/Alliance	Castor oil	5450801	1
Lamotte/Alliance	Castor oil	124637	2
lamotte/anzag	Castor oil	5334001	1

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Supplier	Substance	Batch	Spectra
Lamotte/Anzag	Castor oil	123812	1
Lamotte/Anzag	Castor oil	1000001914	2
Lamotte/Anzag	Castor oil	1000002384	1
Lamotte/Anzag	Castor oil	1000005818	1
Lamotte/Anzag	Castor oil	800372602	1
Caelo	Castor oil	123384	2
lamotte/Gehe	Castor oil	124189	2
lamotte/Gehe	Castor oil	124637	1
Lamotte/gehe	Castor oil	1241892	1
Lamotte/gehe	Castor oil	125162	1
Lamotte/gehe	Castor oil	125473	1
Lamotte/Gehe	Castor oil	1914	2
Lamotte/Gehe	Castor oil	4198	1
Lamotte/Gehe	Castor oil	8003726002	1
Lamotte/Krieger	Castor oil	1000001128	1
Lamotte/L3	Castor oil	5450801	1
Lamotte/N/04.06.13/PZN:...	Castor oil	123384	1
Lamotte/Noweda	Castor oil	1000005199	1
lamotte/Phönix	Castor oil	5899201	1
Lamotte/Phönix	Castor oil	1128	1
Lamotte/Phönix	Castor oil	1000003564	7
Lamotte/Phönix	Castor oil	1000004198	2
Lamotte/Phönix	Castor oil	1000005818	2
Lamotte/Phönix	Castor oil	1000005199	1
Lamotte/Phönix	Castor oil	1000009899	1
Lamotte/Sanacorp	Castor oil	123812	1
Lamotte/Sanacorp	Castor oil	124189	3
Lamotte/Sanacorp	Castor oil	125162	1
Lamotte/Sanacorp	Castor oil	125473	2
Lamotte/Sanacorp	Castor oil	1000001128	2
Lamotte/Sanacorp	Castor oil	1000002384	2
Lamotte/Sanacorp	Castor oil	1000004198	1
Now/Cael030.12.16 EUR2,25	Castor oil	16236202	1
Noweda	Castor oil	273390	1
Noweda	Castor oil	1304013-01	1
Noweda	Castor oil	1308019-01	1
Noweda	Castor oil	13196313	1
Noweda	Castor oil	1000003564	1
Noweda	Castor oil	1000004554	1
Noweda / H. Lamotte	Castor oil	1000004198	1
Noweda / Henry Lamotte	Castor oil	5280301	1
Noweda / Henry Lamotte	Castor oil	5334001	2
Noweda / Henry Lamotte	Castor oil	123384	2
Noweda/ Bombatus	Castor oil	305230	1
Bombastus	Castor oil	4958	2
Caelo	Castor oil	1604019-01	1
Noweda/Euro	Castor oil	1611005-02	1
Euro OTC	Castor oil	1504006-01	9
Euro OTC	Castor oil	1512024-02	15
Fagron	Castor oil	294668	1
Noweda/Henry Lamotte	Castor oil	123812	4
Noweda/Henry Lamotte	Castor oil	124637	1
Noweda/Henry Lamotte	Castor oil	125473	1
Noweda/Henry Lamotte	Castor oil	5899201	2
Noweda/Henry Lamotte	Castor oil	1000001914	1
Euro OTC	Castor oil	1412006-01	5
Otto Fischar	Castor oil	1000001914	1
Otto Fischar GmbH	Castor oil	5334001	1
Ph.Eur.	Castor oil	6861795	1
Ph.Eur.8.0	Castor oil	140705301	1

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Supplier	Substance	Batch	Spectra
phö	Castor oil	5450801	1
Phoenix	Castor oil	1705035-01	1
Phoenix	Castor oil	1000006447	1
Phoenix	Castor oil	180100-01	1
Phoenix/ Bombatus-Werke...	Castor oil	17002280	1
Caelo	Castor oil	151202402	2
Phoenix/ Henry Lamotte	Castor oil	125162	1
Phoenix/Lamotte	Castor oil	123812	2
phönix	Castor oil	305230	2
Phönix	Castor oil	123384	1
Phönix	Castor oil	13043601	1
Phönix	Castor oil	1308019-01	1
Phönix	Castor oil	1403024-01	1
Phönix	Castor oil	1212008-01	1
PHÖNIX	Castor oil	308825	1
Phönix Gotha	Castor oil	1509003-01	1
Caelo	Castor oil	1308019-02	1
Fagron	Castor oil	1407053-02	1
Phönix/Fischar	Castor oil	17002280	1
Products Company	Castor oil	1604019-02	1
Rez	Castor oil	5519	2
Rondell Apotheke	Castor oil	15145101	1
Sana 10.02.15 EK 2,57	Castor oil	1407053-02	1
sanacorp	Castor oil	15144302	2
Sanacorp	Castor oil	12149306	1
Sanacorp	Castor oil	128224	1
Sanacorp	Castor oil	281943	1
Sanacorp	Castor oil	123812	3
Sanacorp	Castor oil	13196308	1
Sanacorp	Castor oil	14020105	1
Sanacorp	Castor oil	130260	1
Sanacorp	Castor oil	14330601	1
Sanacorp	Castor oil	1504006-01	1
Sanacorp	Castor oil	1509003-01	1
Sanacorp	Castor oil	15D02-Bo2-311714	1
Sanacorp	Castor oil	307459	1
Sanacorp	Castor oil	17107403	1
Sanacorp	Castor oil	308824	1
Sanacorp	Castor oil	17002279	1
Sanacorp	Castor oil	12270111	1
Caelo	Castor oil	15144304	6
Sanacorp, 9,48EUR, 17.1.17	Castor oil	301587	1
Bombastus	Castor oil	273389	1
Caelo	Castor oil	1/AKD1	1
Fagron	Castor oil	1504006-01	1
Sanacorp;09,04.15; 3,33EUR	Castor oil	291722	1
Spinnrad	Castor oil	31730112	1
Stumpf/Henry Lamotte	Castor oil	124189	4
Stumpf/Henry Lamotte	Castor oil	125162	1
Unisan	Castor oil	1504006-02	1
VDL	Castor oil	290213	1
VDL; 9,58EUR; 6.10.2015	Castor oil	294667	2
VDL;17.10.14.3,96EUR	Castor oil	288639	1
apomix	Sorbitan- and glycerol monoo...	11116	4
apomix	Sorbitan- and glycerol monoo...	10118	1
Apomix	Sorbitan- and glycerol monoo...	20515	3
Apomix	Sorbitan- and glycerol monoo...	11116	1
apomix/ Noweda	Sorbitan- and glycerol monoo...	21115	1
Apomix/Gehe	Sorbitan- and glycerol monoo...	11116	1
Apomix/Noweda	Sorbitan- and glycerol monoo...	21115	1

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Supplier	Substance	Batch	Spectra
Pharmachem	Sorbitan- and glycerol monoo...	280617	1
Phönix	Sorbitan- and glycerol monoo...	21115	1
	Castor oil	288126	1
Caelo	Castor oil	14304807	1
Caelo	Castor oil	12114603	2
Caelo	Castor oil	14020104	2
Euro OTC	Castor oil	1512024	1
Fagron	Castor oil		1
Fagron	Castor oil	16J12-B01-328159	3
Fagron	Castor oil	15D02-B02-314240	1
	Castor oil	13341606	1
Caelo	Sorbitan- and glycerol monoo...	16234301	12

- 136 097 spectra from 703 *Apo-Ident* customers from a total of 34 867 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Castor oil, virgin / Sorbitan- and glycerol monooleate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	600	0	55 759
Type B	0	960	0	68 514
Type C	0	2254	2	136 003

The substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.3750 %)
Type C	100.0000 % (> 99.6439 %)	99.9113 % (> 99.7784 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Triglycerol diisostearate	36.13	–
Soy lecithin, liquid	42.45	–
Shea butter, refined	53.30	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Castor oil, virgin / Sorbitan- and glycerol monooleate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31574	31574	0.00	49.28
31726	31574	5.98	59.36
33454	34534	5.42	53.82
33455	31574	5.31	53.15
34534	34534	0.00	58.58
30741	31343	1.99	62.14
31343	31343	0.00	65.56
31739	31739	0.00	66.45
31751	31739	1.36	65.27
31824	31739	0.66	66.18
31845	31845	0.00	68.02
32943	31739	3.48	67.40

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Cedar leaf oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31106-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Cedar leaf oil; Oleum cedri e fol. aether.

Special notes

When selecting the *Cedar leaf oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cedar leaf oil	2	1	1

Second-stage model

For differentiation of the substance/substance group *Cedar leaf oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cedar leaf oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cedar leaf oil	13337901	31106	40	1404622
Caelo	Cedar leaf oil	13337901	31200	40	20131011
Caelo	Cedar leaf oil	13337902	31421	60	20131011

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 140 spectra of 3 reference samples from the substance/substance group *Cedar leaf oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 219 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Cedar leaf oil*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cedar leaf oil	15305207	33607	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 12 spectra from 4 *Apo-Ident* customers from 1 batches from the substance/substance group *Cedar leaf oil*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cedar leaf oil	15305206	12

- 138 341 spectra from 703 *Apo-Ident* customers from a total of 35 294 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cedar leaf oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cedar leaf oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	140	0	56 219
Type B	0	40	0	69 434
Type C	0	12	0	138 341

The substance/substance group *Cedar leaf oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6459 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cedar leaf oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Wormwood oil	63.90	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cedar leaf oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31106	31106	0.00	81.22
31200	31106	1.33	82.42
31421	31106	2.35	83.60

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50% greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Cedar wood oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30938-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Cedar wood oil; Oleum cedri ligni aether.

Special notes

When selecting the *Cedar wood oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cedar wood oil	6	2	11

Second-stage model

For differentiation of the substance/substance group *Cedar wood oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cedar wood oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cedar wood oil	12180708	30938	50	1404506
Caelo	Cedar wood oil	12180710	31267	40	20120628
Caelo	Cedar wood oil	14230204	32455	40	1610271
Caelo	Cedar wood oil	181579	34444	40	20180605*
Caelo	Cedar wood oil	181983	34453	40	20180718*
Caelo	Cedar wood oil	191665	34622	40	20190624*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 250 spectra of 6 reference samples from the substance/substance group *Cedar wood oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 6 different batches.
- 56109 spectra from a total of 1110 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Cedar wood oil*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cedar wood oil	14230211	32748	40
Caelo	Cedar wood oil	16028815	33785	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 14 spectra from 11 *Apo-Ident* customers from 12 batches from the substance/substance group *Cedar wood oil*.
- Among them are spectra of independent samples from 11 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cedar wood oil	16028804	1
Caelo	Cedar wood oil	16028815	1
Caelo	Cedar wood oil	14230211	3
Caelo	Cedar wood oil	16028805	1
Caelo	Cedar wood oil	12180703	1
Caelo	Cedar wood oil	12180709	1
Caelo	Cedar wood oil	12180715	1
Caelo	Cedar wood oil	1218718	1
L12	Cedar wood oil	18157901	1
Caelo	Cedar wood oil	16028812	1
Phönix	Cedar wood oil	308062	1
Caelo	Cedar wood oil	12180710	1

- 138 339 spectra from 703 *Apo-Ident* customers from a total of 35 283 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cedar wood oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cedar wood oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	250	0	56 109
Type B	0	80	0	69 394
Type C	0	14	0	138 339

The substance/substance group *Cedar wood oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.6000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6458 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cedar wood oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Acorus oil	12.55	—
Verbena oil, nature-identical	24.62	—
Juniper oil	30.56	—
Dwarf pine oil	30.77	—
Cypress oil	31.10	—
Bergamot oil	34.59	—
Myrtle oil	36.76	—
Peppermint oil	39.53	—
Bitter orange oil	42.25	—
Turpentine oil	43.06	—
Citric oil	46.15	—
Geranium oil, genuine	46.54	—
Caraway oil	49.70	—
Matricaria oil, rich in (-)-alpha-bisa...	50.01	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cedar wood oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32455	32455	0.00	21.93
30938	30938	0.00	24.42
31267	30938	2.07	24.80
34444	34444	0.00	26.04
34453	34453	0.00	23.81
34622	34622	0.00	23.50

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Cinnamon bark oil, artificial**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30605-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Cinnamon bark oil, artificial; Oleum Cinnamomi artificiale

Special notes

When selecting the *Cinnamon bark oil, artificial* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cinnamon bark oil, artificial	2	1	6

Second-stage model

For differentiation of the substance/substance group *Cinnamon bark oil, artificial* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cinnamon bark oil, artificial*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cinnamon bark oi...	14377301	31617	60	20150107
Caelo	Cinnamon bark oi...	180217	34057	40	20180124*
Caelo	Cinnamon bark oi...	180217	34625	40	20180124*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 140 spectra of 3 reference samples from the substance/substance group *Cinnamon bark oil, artificial*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 219 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Cinnamon bark oil, artificial*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cinnamon bark oil, artificial	16026505	33609	40
Caelo	Cinnamon bark oil, artificial	16026505	33610	40

- 69 394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 6 spectra from 6 *Apo-Ident* customers from 6 batches from the substance/substance group *Cinnamon bark oil, artificial*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cinnamon bark oil, artificial	10112014	1
Caelo	Cinnamon bark oil, artificial	11275903	1
Caelo	Cinnamon bark oil, artificial	2031501	1
Caelo	Cinnamon bark oil, artificial	14377304	1
Caelo	Cinnamon bark oil, artificial	14377307	1
Caelo	Cinnamon bark oil, artificial	12019604	1

- 138 347 spectra from 703 *Apo-Ident* customers from a total of 35 289 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cinnamon bark oil, artificial* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cinnamon bark oil, artificial* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	140	0	56 219
Type B	0	80	0	69 394
Type C	0	5	1	138 347

The substance/substance group *Cinnamon bark oil, artificial* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6467 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cinnamon bark oil, artificial* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Cinnamon bark oil, Ceylon	18.12	—
Benzyl nicotinate	89.40	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cinnamon bark oil, artificial* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31617	34057	2.71	16.59
34057	34057	0.00	16.98
34625	34625	0.00	18.50

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Cinnamon bark oil, Ceylon**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30251-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Cinnamon bark oil, Ceylon; Oleum cinnamomi ceylanici

Special notes

When selecting the *Cinnamon bark oil, Ceylon* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cinnamon bark oil, Ceylon	2	2	24

Second-stage model

For differentiation of the substance/substance group *Cinnamon bark oil, Ceylon* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cinnamon bark oil, Ceylon*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cinnamon bark oi. . .	14092802	31560	60	AR-15-FG-001171-01
Caelo	Cinnamon bark oi. . .	163243	33091	40	20161129*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 100 spectra of 2 reference samples from the substance/substance group *Cinnamon bark oil, Ceylon*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 259 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Cinnamon bark oil, Ceylon*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cinnamon bark oil, Ceylon	15278210	33480	40
Caelo	Cinnamon bark oil, Ceylon	15278218	33783	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 47 spectra from 28 *Apo-Ident* customers from 25 batches from the substance/substance group *Cinnamon bark oil, Ceylon*.
- Among them are spectra of independent samples from 24 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
/Noweda	Cinnamon bark oil, Ceylon	13044802	2
Caelo	Cinnamon bark oil, Ceylon	14092806	2
Caelo	Cinnamon bark oil, Ceylon	14071203	1
Caelo	Cinnamon bark oil, Ceylon	12181403	2
Caelo	Cinnamon bark oil, Ceylon	13044802	4
Caelo	Cinnamon bark oil, Ceylon	13044809	2
Caelo	Cinnamon bark oil, Ceylon	13044808	1
Caelo	Cinnamon bark oil, Ceylon	14092805	5
Caelo	Cinnamon bark oil, Ceylon	15151106	1
Caelo	Cinnamon bark oil, Ceylon	24061702	1
Caelo	Cinnamon bark oil, Ceylon	24061703	1
Caelo	Cinnamon bark oil, Ceylon	16324307	1
Caelo	Cinnamon bark oil, Ceylon	18013004	2
Caelo	Cinnamon bark oil, Ceylon	16324308	2
Caelo	Cinnamon bark oil, Ceylon	12181408	1
Caelo	Cinnamon bark oil, Ceylon	15278206	3
Caelo	Cinnamon bark oil, Ceylon	13044810	3
Caelo	Cinnamon bark oil, Ceylon	18013005	1
Caesar & Loretz GmbH	Cinnamon bark oil, Ceylon	18013004	1
Dr.Schlegels Resana/NOW	Cinnamon bark oil, Ceylon	1205-3566	1
Dr.Schlegels Resana/NOW	Cinnamon bark oil, Ceylon	1407-4584	1
Kögl	Cinnamon bark oil, Ceylon	20170928	1
L12	Cinnamon bark oil, Ceylon	18013004	1
Now	Cinnamon bark oil, Ceylon	15278210	1
Ölbaum / Anzag	Cinnamon bark oil, Ceylon	10220032803	1
Taoasis	Cinnamon bark oil, Ceylon	130111-110762	1
Taoasis GmbH	Cinnamon bark oil, Ceylon	130111-110345	1
Caelo	Cinnamon bark oil, Ceylon	14092802	3

- 138 306 spectra from 703 *Apo-Ident* customers from a total of 35 270 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cinnamon bark oil, Ceylon* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cinnamon bark oil, Ceylon* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	100	0	56 259
Type B	0	80	0	69 394
Type C	0	42	5	138 306

The substance/substance group *Cinnamon bark oil, Ceylon* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 94.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6454 %)	89.3617 % (> 82.9787 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cinnamon bark oil, Ceylon* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Cinnamon bark oil, artificial	19.35	—
Benzyl nicotinate	86.76	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cinnamon bark oil, Ceylon* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31560	31560	0.00	32.88
33091	33091	0.00	28.82

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Citronella oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30208-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Citronella oil; Oleum cymbopogon winterianus

Special notes

When selecting the *Citronella oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Citronella oil	4	2	49

Second-stage model

For differentiation of the substance/substance group *Citronella oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Citronella oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Citronella oil	12359903	31251	40	1405526
Caelo	Citronella oil	13287808	31408	40	20130827
Caelo	Citronella oil	14229803	31631	60	20140825
Caelo	Citronella oil	190590	34645	40	20190307*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Citronella oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Citronella oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Citronella oil	162791	32692	40
Caelo	Citronella oil	172831	33675	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 67 spectra from 43 *Apo-Ident* customers from 51 batches from the substance/substance group *Citronella oil*.
- Among them are spectra of independent samples from 49 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bergland	Citronella oil	C400822	1
Bombastus	Citronella oil	276241	1
Bombastus	Citronella oil	286270	2
Bombastus	Citronella oil	297194	1
Bombastus	Citronella oil	303977	2
Bombastus	Citronella oil	302910	1
Bombastus	Citronella oil	280657	1
Bombastus	Citronella oil	269807	1
Bombastus	Citronella oil	297193	1
Bombastus	Citronella oil	310645	2
Bombastus	Citronella oil	302908	1
Bombastus	Citronella oil	18004736	2
Caelo	Citronella oil	11074201	1
Caelo	Citronella oil	10193312	1
Caelo	Citronella oil	12359902	1
Caelo	Citronella oil	11101301	1
Caelo	Citronella oil	13287809	1
Caelo	Citronella oil	18084105	1
Caelo	Citronella oil	286270	1
Caelo	Citronella oil	15257304	3
Caelo	Citronella oil	15222302	1
Caelo	Citronella oil	11074203	1
Caelo	Citronella oil	3216M-01974	1
Caelo	Citronella oil	5117E-01974	1
Caelo	Citronella oil	14229805	1
Caelo	Citronella oil	18084103	2
Caelo	Citronella oil	12359909	1
Caelo	Citronella oil	15257309	2
Caelo	Citronella oil	276241	1
Caelo	Citronella oil	13287802	1
Caelo	Citronella oil	13287804	1
Caelo	Citronella oil	12359907	1
Caelo	Citronella oil	1328780	1
Caelo	Citronella oil	13287807	2
Caelo	Citronella oil	14229806	2
Caelo	Citronella oil	15222303	1

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Supplier	Substance	Batch	Spectra
Caelo	Citronella oil	15257305	1
Caelo	Citronella oil	15257308	1
Caelo	Citronella oil	16014103	1
Caelo	Citronella oil	17364801	2
Caelo	Citronella oil	9208297	1
Caesar/Lorenz	Citronella oil	12224603	1
Kaders	Citronella oil	131097	1
Kögl	Citronella oil	228107163916	1
Kögl	Citronella oil	1701478	1
Caelo	Citronella oil	303977	2
Caelo	Citronella oil	16279105	2
Phönix Gotha	Citronella oil	288826	1
Bombastus	Citronella oil	1213A-01974	1
Resana	Citronella oil	1701-5627	1
Bombastus	Citronella oil	309032	1
Taoasis	Citronella oil	104719-125577	1
Caelo	Citronella oil	14229803	1
Caelo	Citronella oil	12359903	1

- 138 286 spectra from 703 *Apo-Ident* customers from a total of 35 245 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Citronella oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Citronella oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	66	1	138 286

The substance/substance group *Citronella oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	98.5075 % (> 94.0299 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Citronella oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Melissa oil	38.72	—
Rose oil (genuine / artificial)	39.26	—
Geranium oil, genuine	41.05	—
Tea tree oil	47.01	—
Matricaria oil, rich in (-)-alpha-bisa...	49.41	—
Mint oil	52.37	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Citronella oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31251	31251	0.00	41.71
31408	31251	7.17	42.14
31631	31251	2.59	43.31
34645	34645	0.00	42.67

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Citrus oils**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31017-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Citrus oils; Bitter orange oil; Citric oil; Grapefruit oil; Oleum aurantii dulcis; Oleum aurantii pericarpium; Oleum citri; Oleum citri paradisi artificiale; Sweet orange oil

Special notes

When selecting the *Citrus oils* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Bitter orange oil	4	1	5
Citric oil	5	3	133
Grapefruit oil	4	2	12
Sweet orange oil	6	2	51

Second-stage model

For differentiation of the substance/substance group *Citrus oils* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Citrus oils*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Bitter orange oil	13303803	31861	60	1606482
Caelo	Bitter orange oil	15397901	32181	40	20151125
Caelo	Bitter orange oil	170369	33062	30	20170224*
Caelo	Bitter orange oil	191187	34601	40	20190503*
Caelo	Citric oil	13259522	31432	60	20130816
Caelo	Citric oil	183280	34627	40	20190122*
Euro OTC	Citric oil	1202024-01	31524	60	20120312
Fagron	Citric oil	13E06-N10	31046	40	20130618
Fagron	Citric oil	12G13-B06-287454	31261	40	1407356
Caelo	Grapefruit oil	12367403	31017	40	1404621
Caelo	Grapefruit oil	13252306	31417	60	20130802
Caelo	Grapefruit oil	15429104	33630	40	20151222
Caelo	Grapefruit oil	191292	34606	40	20190508*
Caelo	Sweet orange oil	12043412	31164	40	1405105
Caelo	Sweet orange oil	13378901	31206	40	1405107
Caelo	Sweet orange oil	13024204	31273	40	20130124
Caelo	Sweet orange oil	13378906	31295	40	1407188
Caelo	Sweet orange oil	13401605	31297	40	20131220
Caelo	Sweet orange oil	13024204	31411	40	20130124
Caelo	Sweet orange oil	13378906	31418	60	20131127
Caelo	Sweet orange oil	191138	34438	40	20190430*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 930 spectra of 21 reference samples from the substance/substance group *Citrus oils*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 19 different batches.
- 55 429 spectra from a total of 1097 batches from further 215 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 360 spectra of 9 reference samples from the substance/substance group *Citrus oils*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Bitter orange oil	180889	34078	40
Caelo	Citric oil	162752	32687	40
Caelo	Citric oil	171068	33305	40
Caelo	Citric oil	192813	34722	40
Caelo	Grapefruit oil	172307	34054	40
Caelo	Grapefruit oil	182318	34237	40
Caelo	Sweet orange oil	171596	33307	40
Caelo	Sweet orange oil	16015501	33467	40
Caelo	Bitter orange oil	15397901	32351	40

- 69 114 spectra from a total of 1493 batches from further 357 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 437 spectra from 194 *Apo-Ident* customers from 211 batches from the substance/substance group *Citrus oils*.
- Among them are spectra of independent samples from 198 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Bitter orange oil	15397903	1
Caelo	Bitter orange oil	23061815	1
Caelo	Bitter orange oil	15397905	1
Caelo	Bitter orange oil	170369035481	1
Caelo	Bitter orange oil	12121802	1
Anzag 15.11.12 ek:17,18	Citric oil	12040507	1
Bombastus	Citric oil	256839	1
Bombastus	Citric oil	269281	1
Bombastus	Citric oil	266679	1
Bombastus	Citric oil	280999	4
Bombastus	Citric oil	284351	1
Bombastus	Citric oil	285568	1

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Supplier	Substance	Batch	Spectra
Bombastus	Citric oil	289673	1
Bombastus	Citric oil	294337	2
Bombastus	Citric oil	297734	1
Bombastus	Citric oil	300294	1
Bombastus	Citric oil	308515	1
Bombastus	Citric oil	307781	1
Bombastus	Citric oil	305855	1
Bombastus	Citric oil	299753	1
Bombastus	Citric oil	18001850	7
Bombastus	Citric oil	294951	1
Bombastus	Citric oil	17000590	1
Bombastus	Citric oil	18002047	2
Caelo	Citric oil	12360012x2	1
Caelo	Citric oil	24071801	1
Caelo	Citric oil	10375012	1
Caelo	Citric oil	3710A-01973	1
Caelo	Citric oil	9322815	1
Caelo	Citric oil	9322802	1
Caelo	Citric oil	12040504	9
Caelo	Citric oil	31121206	1
Caelo	Citric oil	12360002	6
Caelo	Citric oil	15051314	1
Caelo	Citric oil	28051308	1
Caelo	Citric oil	123600001	1
Caelo	Citric oil	20111307	1
Caelo	Citric oil	13259504	8
Caelo	Citric oil	12360010c	1
Caelo	Citric oil	13259512	1
Caelo	Citric oil	1135408	1
Caelo	Citric oil	1325904	1
Caelo	Citric oil	13259508	8
Caelo	Citric oil	15121403	1
Caelo	Citric oil	14121807	4
Caelo	Citric oil	16028702	9
Caelo	Citric oil	15182718	3
Caelo	Citric oil	202170C16028702	1
Caelo	Citric oil	16028715	2
Caelo	Citric oil	16028703	1
Caelo	Citric oil	15F29-B04	1
Caelo	Citric oil	17B14-B04-334835	1
Caelo	Citric oil	17106807	6
Caelo	Citric oil	1706807	1
Caelo	Citric oil	17321102	1
Caelo	Citric oil	173201	1
Caelo	Citric oil	15182702	1
Caelo	Citric oil	16028709	1
Caelo	Citric oil	12360011	11
Caelo	Citric oil	15182703	11
Caelo	Citric oil	18092216	2
Caelo	Citric oil	17B14-B04-341736	1
Caelo	Citric oil	14121815	5
Caelo	Citric oil	123600002	1
Caelo	Citric oil	90(16275216)	1
Caelo	Citric oil	18328003	2
Caelo	Citric oil	18092202	9
Caelo	Citric oil	16028719	7
Caelo	Citric oil	10375003	1
Caelo	Citric oil	2515I-01973	1
Caelo	Citric oil	16028712	1
Caelo	Citric oil	16275203	2

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Supplier	Substance	Batch	Spectra
Caelo	Citric oil	1359512	1
Caelo	Citric oil	14121808	2
Caelo	Citric oil	14365202	4
Caelo	Citric oil	14365201	3
Caelo	Citric oil	12360001	2
Caelo	Citric oil	11231807	1
Caelo	Citric oil	12040502	3
Caelo	Citric oil	132259504	1
Caelo	Citric oil	16275202	8
Caelo	Citric oil	14B14-B04-338799	1
Caelo	Citric oil	12360012	7
Caelo	Citric oil	12367408	1
Caelo	Citric oil	12360002	1
Fagro/Gehe	Citric oil	14H06-B02-299949	1
Fagron	Citric oil	15F29-B04-328222	1
Fagron	Citric oil	11I05-N13	1
Fagron	Citric oil	645920	3
Fagron	Citric oil	268961	1
Fagron	Citric oil	13B01-N02	5
Fagron	Citric oil	13B01N02	2
Fagron	Citric oil	13b01-n02	1
Fagron	Citric oil	12g13-b06-287454	1
Fagron	Citric oil	13K14-B03-289819	1
Fagron	Citric oil	709110	1
Fagron	Citric oil	733117	1
Fagron	Citric oil	14H06_B02_308273	1
Fagron	Citric oil	14H06-B02	1
Fagron	Citric oil	14H06-B02-308273	3
Fagron	Citric oil	15F29-B04-322985	3
Fagron	Citric oil	15F29-B04-327600	3
Fagron	Citric oil	15F29-B04	2
Fagron	Citric oil	17b14-b04-334835	1
Fagron	Citric oil	17B14-B04	1
Fagron	Citric oil	13K14-B03	1
Fagron	Citric oil	11K28-N04	1
Fagron	Citric oil	602796	1
Fagron	Citric oil	11C28-N060363/440	2
Fagron	Citric oil	14H06-B02-299949	5
Fagron	Citric oil	17B14-B04-334835	1
Fagron	Citric oil	13K14-B03-787033	1
Fagron	Citric oil	12A23-N05	8
Fagron	Citric oil	12A23-N05	1
Fagron	Citric oil	13K14-B03-294706	5
Fagron	Citric oil	881578	2
Fagron	Citric oil	17B14-B004	1
Fagron	Citric oil	11B04-N02	1
Fagron	Citric oil	12G04-N21	2
Fagron	Citric oil	13K14-B03	2
Fagron	Citric oil	15F29-B04-309901	1
Fagron	Citric oil	174B14-B04-352490	1
Fagron	Citric oil	15F29-B04-325354	1
Gatt-Koller	Citric oil	1800504	1
Gehe	Citric oil	306549	1
GEHE	Citric oil	16275216	1
Bombastus	Citric oil	284045	1
Caelo	Citric oil	10375014	1
Caelo	Citric oil	16275216	7
L12	Citric oil	17B14-B04-352490	1
Noweda	Citric oil	12360002	1
Caelo	Citric oil	13259523	6

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Supplier	Substance	Batch	Spectra
Phoenix	Citric oil	310806	1
Caelo	Citric oil	15182711	4
Sanacorp	Citric oil	12040504	1
Sanacorp	Citric oil	13259504	1
Sanacorp	Citric oil	5/AKD1	1
Sanacorp	Citric oil	15182711	1
Caelo	Citric oil	14365212	14
Taoasis	Citric oil	2LI08M-73396	1
Taoasis	Citric oil	3805201	1
Taoasis	Citric oil	5LI12M-109229	1
Taoasis	Citric oil	140116-115338	1
Taoasis	Citric oil	4LI14M-118369	1
Taoasis	Citric oil	1401270-121612	1
Taoasis	Citric oil	122527-122620	1
Taoasis	Citric oil	122650-123634	1
Taoasis	Citric oil	3J16M-125453	1
Taoasis	Citric oil	1786-125280	1
VDL;4,32EUR;25.04.15	Citric oil	14121815	1
Caelo	Grapefruit oil	13252303	1
Caelo	Grapefruit oil	14107304	2
Caelo	Grapefruit oil	15171201	1
Caelo	Grapefruit oil	15429101	2
Caelo	Grapefruit oil	15429103	1
Caelo	Grapefruit oil	17072302	1
Caelo	Grapefruit oil	15429105	2
Taoasis	Grapefruit oil	333555-111392	1
Taoasis	Grapefruit oil	31564-120540	1
Taoasis	Grapefruit oil	44040A-124468	1
Taoasis	Grapefruit oil	AR18-12022-3600	2
Anzag	Sweet orange oil	11310411	1
Bombastus	Sweet orange oil	285361	1
Bombastus	Sweet orange oil	17001382	2
Bombastus	Sweet orange oil	271897	1
Caelo	Sweet orange oil	8121204	1
Caelo	Sweet orange oil	15051313	1
Caelo	Sweet orange oil	7051301	1
Caelo	Sweet orange oil	10375113	1
Caelo	Sweet orange oil	120430103	1
Caelo	Sweet orange oil	13389407	1
Caelo	Sweet orange oil	13389401	1
Caelo	Sweet orange oil	14150105	2
Caelo	Sweet orange oil	14133504	2
Caelo	Sweet orange oil	15285	1
Caelo	Sweet orange oil	15316601	3
Caelo	Sweet orange oil	15402407	2
Caelo	Sweet orange oil	16083507	1
Caelo	Sweet orange oil	16015501	1
Caelo	Sweet orange oil	16083501	1
Caelo	Sweet orange oil	26041703	1
Caelo	Sweet orange oil	4111710	1
Caelo	Sweet orange oil	17159603	3
Caelo	Sweet orange oil	17347510	1
Caelo	Sweet orange oil	18171601	3
Caelo	Sweet orange oil	19033301	1
Caelo	Sweet orange oil	13389406	3
Caelo	Sweet orange oil	14348803	3
Caelo	Sweet orange oil	14348809	1
Caelo	Sweet orange oil	15182904	1
Caelo	Sweet orange oil	15051701	1
Caelo	Sweet orange oil	12322603	1

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Supplier	Substance	Batch	Spectra
Caelo	Sweet orange oil	14133505	1
Caelo	Sweet orange oil	12043403	4
Caelo	Sweet orange oil	17347513	2
Caelo	Sweet orange oil	12043406	1
Caelo	Sweet orange oil	15402404	1
Caelo	Sweet orange oil	18171603	1
Caelo	Sweet orange oil	13024202	1
Caelo	Sweet orange oil	1302404	1
Caelo	Sweet orange oil	12043409	1
Caelo	Sweet orange oil	15045104	2
Caelo	Sweet orange oil	12043410	1
Caelo	Sweet orange oil	15045101	6
Fiebig 09.11.12 ek:6,92	Sweet orange oil	11031802	1
Jenne	Sweet orange oil	17347509	1
Nachprüfung	Sweet orange oil	12043403	1
Phoenix	Sweet orange oil	16015502	1
Phoenix	Sweet orange oil	16083506	1
Primavera	Sweet orange oil	530914	1
Taoasis	Sweet orange oil	140129-115917	1
Taoasis GmbH	Sweet orange oil	128129	1
Fagron	Citric oil	13E06-N10	5
Fagron	Citric oil		1
Fagron	Citric oil	12G13-B06-287454	1
Sanacorp	Citric oil		1
Apotheker-Bauer	Grapefruit oil		1
Caelo	Grapefruit oil	12367403	1
Caelo	Grapefruit oil	13252306	1
Caelo	Sweet orange oil	13024204	4
Caelo	Sweet orange oil	13303803	1
Caelo	Sweet orange oil	13378906	1

- 137 916 spectra from 703 *Apo-Ident* customers from a total of 35 084 batches from a further 336 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Citrus oils* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Citrus oils* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	930	0	55 429
Type B	0	360	0	69 114
Type C	0	429	8	137 916

The substance/substance group *Citrus oils* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.3548 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.3333 %)
Type C	100.0000 % (> 99.6452 %)	98.1693 % (> 97.4828 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Citrus oils* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Mandarin oil	21.73	—
Caraway oil	25.53	—
Bergamot oil	57.71	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Citrus oils* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31164	31164	0.00	42.46
31206	31206	0.00	43.69
31273	31206	2.66	46.68
31295	31295	0.00	42.89
31297	31295	2.65	44.18
31411	31295	1.98	44.25
31418	31295	1.80	42.42
34438	34438	0.00	41.08
31017	31017	0.00	41.32
31417	31164	2.39	41.34
33630	31164	2.66	40.40
34606	34606	0.00	42.29
31046	34627	7.94	32.41
31261	31261	0.00	28.89
31432	31261	2.01	27.94
31524	31261	5.54	29.78
34627	34627	0.00	30.93
31861	31861	0.00	28.33

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32181	31861	8.86	36.59
33062	33062	0.00	34.76
34601	34601	0.00	33.34

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Clotrimazole 10% Cordes® RK
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30213-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Clotrimazole 10% Cordes® RK

Special notes

When selecting the *Clotrimazole 10% Cordes® RK* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Clotrimazole 10% Cordes® RK	4	1	7

Second-stage model

For differentiation of the substance/substance group *Clotrimazole 10% Cordes® RK* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Clotrimazole 10% Cordes® RK*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Ichthyol	Clotrimazole 10%...	11D044	30729	40	20111213
Ichthyol	Clotrimazole 10%...	12D016	31101	40	1507525
Ichthyol	Clotrimazole 10%...	14D009	31806	60	20140606
Ichthyol	Clotrimazole 10%...	14D009	32950	40	20140606
Ichthyol	Clotrimazole 10%...	17D005	34483	40	20170915

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Clotrimazole 10% Cordes® RK*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 139 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Clotrimazole 10% Cordes® RK*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Clotrimazole 10% Cordes [®] RK	16D003	33498	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 110 spectra from 26 *Apo-Ident* customers from 11 batches from the substance/substance group *Clotrimazole 10% Cordes[®] RK*.
- Among them are spectra of independent samples from 7 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD/ichthyol	Clotrimazole 10% Cordes [®] RK	14D0089	1
Caelo	Clotrimazole 10% Cordes [®] RK	16D003	17
Caelo	Clotrimazole 10% Cordes [®] RK	12D016	11
Cordes	Clotrimazole 10% Cordes [®] RK	11D044	1
Ichthyol	Clotrimazole 10% Cordes [®] RK	9D036	9
Ichthyol Noweda	Clotrimazole 10% Cordes [®] RK	12D016	1
ICHTHYOL / Noweda	Clotrimazole 10% Cordes [®] RK	16D003	1
Ichthyol Gesellschaft C...	Clotrimazole 10% Cordes [®] RK	11D044	1
Ichthyol Gesellschaft/J...	Clotrimazole 10% Cordes [®] RK	16D003	2
Ichthyol Gesellschaft/N...	Clotrimazole 10% Cordes [®] RK	17D005	1
Ichthyol/AHD	Clotrimazole 10% Cordes [®] RK	12D016	1
Ichthyol/Alliance Healt...	Clotrimazole 10% Cordes [®] RK	12D016	1
Ichthyol/Gehe	Clotrimazole 10% Cordes [®] RK	14D009	2
Ichthyol/Gehe	Clotrimazole 10% Cordes [®] RK	16D003	1
Ichthyol/Gehe	Clotrimazole 10% Cordes [®] RK	17D005	5
Ichthyol/Jenne	Clotrimazole 10% Cordes [®] RK	11D044	1
Ichthyol/Noweda	Clotrimazole 10% Cordes [®] RK	14D009	1
Ichthyol/Noweda	Clotrimazole 10% Cordes [®] RK	17D005	1
Ichthyol/Phönix	Clotrimazole 10% Cordes [®] RK	16D003	1
Ichthyol4D/ Noweda	Clotrimazole 10% Cordes [®] RK	14D009	1
Ichthyol-Ges. / G	Clotrimazole 10% Cordes [®] RK	17D005	1
Ichthyol-Gesellschaft	Clotrimazole 10% Cordes [®] RK	12D016	2
Ichthyol-Gesellschaft / K	Clotrimazole 10% Cordes [®] RK	12D016	1
ICHTHYOL-GESELLSCHAFT C...	Clotrimazole 10% Cordes [®] RK	14D009	1
Ichthyol-Gesellschaft/ ...	Clotrimazole 10% Cordes [®] RK	16D003	1
Ichthyol-Gesellschaft/N...	Clotrimazole 10% Cordes [®] RK	11D044	1
Ichthyol-Gesellschaft/ N...	Clotrimazole 10% Cordes [®] RK	14D009	2
Ichthyol	Clotrimazole 10% Cordes [®] RK	11D044	1
Noweda	Clotrimazole 10% Cordes [®] RK	14D009	1
Noweda/Ichthyol-Gesells...	Clotrimazole 10% Cordes [®] RK	12D016	3
WE 29.11.16 Ichthyol/Sa...	Clotrimazole 10% Cordes [®] RK	14D009	1
Ichthyol	Clotrimazole 10% Cordes [®] RK	11D044	25
Ichthyol	Clotrimazole 10% Cordes [®] RK	12D016	8
Ichthyol	Clotrimazole 10% Cordes [®] RK	14D009	1
Ichthyol	Clotrimazole 10% Cordes [®] RK	17D005	1

- 138 243 spectra from 703 *Apo-Ident* customers from a total of 35 285 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Clotrimazole 10% Cordes® RK* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Clotrimazole 10% Cordes® RK* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	40	0	69 434
Type C	0	110	0	138 243

The substance/substance group *Clotrimazole 10% Cordes® RK* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 94.5455 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Clotrimazole 10% Cordes® RK* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Lanolin DAB	54.91	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Clotrimazole 10% Cordes® RK* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested

reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30729	31101	4.91	88.75
31101	31101	0.00	86.74
31806	31101	18.86	104.28
32950	31101	22.20	100.19
34483	31101	8.07	92.93

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Clove oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30858-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Clove oil; Oleum caryophylli

Special notes

When selecting the *Clove oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Clove oil	4	5	150

Second-stage model

For differentiation of the substance/substance group *Clove oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Clove oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Clove oil	12165905	30858	40	20120627
Caelo	Clove oil	13334902	31299	40	20131009
Caelo	Clove oil	13334902	31409	40	20131009
Euro OTC	Clove oil	1210057-01	31526	60	AR-14-FG-013260-01
Euro OTC	Clove oil	1505022	31707	60	0000010252

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 5 reference samples from the substance/substance group *Clove oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 119 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 200 spectra of 5 reference samples from the substance/substance group *Clove oil*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Clove oil	15402108	33299	40
Caelo	Clove oil	171965	33683	40
Euro OTC	Clove oil	1710036	33847	40
Euro OTC	Clove oil	1802017	33999	40
Euro OTC	Clove oil	1906025	34658	40

- 69 274 spectra from a total of 1497 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 573 spectra from 170 *Apo-Ident* customers from 154 batches from the substance/substance group *Clove oil*.
- Among them are spectra of independent samples from 149 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Clove oil	16131413	1
Anzag	Clove oil	10272002	3
Bombastus	Clove oil	267699	1
Bombastus	Clove oil	273027	1
Bombastus	Clove oil	265673	1
Bombastus	Clove oil	288875	2
Bombastus	Clove oil	294000	1
Bombastus	Clove oil	300899	1
Bombastus	Clove oil	296428	1
Bombastus	Clove oil	302858	2
Bombastus	Clove oil	295672	2
Bombastus	Clove oil	1612020C/296428	1
Bombastus	Clove oil	296568	4
Bombastus	Clove oil	274829	1
Bombastus	Clove oil	308074	1
Bombastus	Clove oil	307074	1
Bombastus	Clove oil	279262	2
Bombastus	Clove oil	297263	1
Bombastus	Clove oil	60010610	1
Bombastus	Clove oil	274495	1
Bombastus	Clove oil	300901	1
Bombastus	Clove oil	310830	3
Bombastus	Clove oil	18000797	4
Bombastus	Clove oil	296979	1
Bombastus	Clove oil	308728	1
Caelo	Clove oil	123806012x	1
Caelo	Clove oil	15101401	1
Caelo	Clove oil	15316103	14
Caelo	Clove oil	16131413	22
Caelo	Clove oil	18178002	2
Caelo	Clove oil	10272014	2
Caelo	Clove oil	11231703	4
Caelo	Clove oil	3512M-01969	1

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Supplier	Substance	Batch	Spectra
Caelo	Clove oil	20021308	1
Caelo	Clove oil	28051313	1
Caelo	Clove oil	0-130513-1	1
Caelo	Clove oil	18071302	1
Caelo	Clove oil	2091306	1
Caelo	Clove oil	13106501	11
Caelo	Clove oil	16121305	1
Caelo	Clove oil	30111304	1
Caelo	Clove oil	23041404	1
Caelo	Clove oil	17051402	1
Caelo	Clove oil	23051405	1
Caelo	Clove oil	13334905	7
Caelo	Clove oil	4061404	1
Caelo	Clove oil	12272004-1-0	1
Caelo	Clove oil	2081402	1
Caelo	Clove oil	23081402	1
Caelo	Clove oil	14243101	4
Caelo	Clove oil	14133608	9
Caelo	Clove oil	18121411	1
Caelo	Clove oil	12011502	1
Caelo	Clove oil	15119304	20
Caelo	Clove oil	15316101	2
Caelo	Clove oil	15316012	1
Caelo	Clove oil	28051510	1
Caelo	Clove oil	15051508	1
Caelo	Clove oil	6071501	1
Caelo	Clove oil	14243103	12
Caelo	Clove oil	14133606	1
Caelo	Clove oil	15316403	1
Caelo	Clove oil	302858	1
Caelo	Clove oil	303337	1
Caelo	Clove oil	15402109	3
Caelo	Clove oil	15402120	1
Caelo	Clove oil	16131412	15
Caelo	Clove oil	19081706	1
Caelo	Clove oil	1540208	1
Caelo	Clove oil	7051806	1
Caelo	Clove oil	9308768	1
Caelo	Clove oil	17354205	16
Caelo	Clove oil	17354203	4
Caelo	Clove oil	16081806	1
Caelo	Clove oil	21111817	1
Caelo	Clove oil	181780022	1
Caelo	Clove oil	18178005	6
Caelo	Clove oil	11231704	3
Caelo	Clove oil	15402101	6
Caelo	Clove oil	11231705	1
Caelo	Clove oil	12165904	1
Caelo	Clove oil	14243105	1
Caelo	Clove oil	15119303	2
Caelo	Clove oil	10272012	3
Caelo	Clove oil	14243104	18
Caelo	Clove oil	11K17-No7	1
Caelo	Clove oil	13182301	18
Caelo	Clove oil	294000	2
Caelo	Clove oil	11231702	8
Caelo	Clove oil	14133602	7
Caelo	Clove oil	1519304	1
Caelo	Clove oil	14133603	4
Caelo	Clove oil	17354209	14

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Supplier	Substance	Batch	Spectra
Caelo	Clove oil	16131416	1
Caelo	Clove oil	11231706	8
Caelo	Clove oil	15402108	27
Caelo	Clove oil	15402102	4
Caelo	Clove oil	2965568	1
Caelo	Clove oil	16131401	12
Caelo	Clove oil	12380601	11
Caelo	Clove oil	13182301-3373319042	1
Caelo	Clove oil	15316102	47
Caelo	Clove oil	402109	1
Caelo	Clove oil	154021	1
Caelo	Clove oil	3613Q01969	1
Caesar & Loretz	Clove oil	15402102	1
Caesar/Noweda	Clove oil	12165902	1
Caesar/Noweda	Clove oil	13334905	1
Calo	Clove oil	13106501	1
Cealo	Clove oil	12165905	1
EuRho	Clove oil	1210057-01	2
Euro OTC	Clove oil	1505022-01	3
Euro OTC	Clove oil	1505022-02	1
Euro OTC	Clove oil	171003601	1
Euro OTC	Clove oil	1809002-01	1
Euro/Gehe	Clove oil	1210057-01	1
Euro OTC	Clove oil	1108015-01	2
Euro OTC	Clove oil	1206013-01	8
Euro OTC	Clove oil	1206012-01	1
Euro OTC	Clove oil	121005701	1
Euro OTC	Clove oil	5210A-01969	1
Euro OTC	Clove oil	274495	1
Fagron	Clove oil	204211969	1
Fagron	Clove oil	208211969	1
Fagron	Clove oil	1512211969	1
Fagron	Clove oil	11L21-N07	1
Fagron	Clove oil	12F01-N01	3
Fagron	Clove oil	3113Q01969	1
Fagron	Clove oil	13L03-B01_294950	1
Fagron	Clove oil	13L03-B01	3
Fagron	Clove oil	792191	1
Fagron	Clove oil	826188	1
Fagron	Clove oil	11K17-N07	1
Fagron	Clove oil	11L21-N07	2
Fagron	Clove oil	13L03-B01-292270	1
Fagron	Clove oil	12C27N04	1
Fagron	Clove oil	12C27-N04	2
Fagron	Clove oil	14G11-B04-297218	3
Fischar/Gehe	Clove oil	13334905	1
Gatt-Koller	Clove oil	1900308	1
Gehe	Clove oil	13106501	1
Gehe	Clove oil	15316103	1
Gehe	Clove oil	303338	1
GEHE	Clove oil	15402108	1
GEHE	Clove oil	16131414	1
Gehe/Lamotte	Clove oil	16131401	1
Kögl	Clove oil	307209160217	1
Kögl	Clove oil	428812160317	1
Kögl	Clove oil	1700323	1
Kögl	Clove oil	102415	1
L10	Clove oil	16131413	1
Euro OTC	Clove oil	15402101	1
L12	Clove oil	15402108	2

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Supplier	Substance	Batch	Spectra
L12	Clove oil	16131401	3
L30	Clove oil	17354205	2
L30	Clove oil	17354209	1
Nachprüfung	Clove oil	123456	1
Noweda	Clove oil	13334902	1
Euro OTC	Clove oil	725892	1
Phoenix	Clove oil	15316102	1
Phonix	Clove oil	13334905	1
phönix	Clove oil	297263	1
Phönix	Clove oil	12165905	1
Caelo	Clove oil	13106502	4
Caelo	Clove oil	11231709	3
Sanacorp	Clove oil	12165905	1
Sanacorp	Clove oil	16131401	1
Sanacorp EK:17,64 EU...	Clove oil	15402109	1
Caelo	Clove oil	265130	1
Caelo	Clove oil	267700	1
Caelo	Clove oil	272735	2
Caelo	Clove oil	12165902	6
Taoasis	Clove oil	97204	1
Taoasis	Clove oil	130301-110695	2
Taoasis/ Sanacorp	Clove oil	B130612-112414	1
Vögele	Clove oil	2017107539	1
Vögele	Clove oil	2018100124	1
Vögele	Clove oil	2018102519	1
WE:Sanacorp 13.08.2016...	Clove oil	15316103	1
Wolf	Clove oil	6811	1
Bombastus	Clove oil		1
Caelo	Clove oil	12165905	14
Caelo	Clove oil	13334902	14
Euro OTC	Clove oil	1210057-01	1
Kögl	Clove oil		1

- 137 780 spectra from 703 *Apo-Ident* customers from a total of 35 143 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Clove oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Clove oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	200	0	69 274
Type C	0	562	11	137 780

The substance/substance group *Clove oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6452 %)	98.0803 % (> 97.5567 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Clove oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Eugenol	21.85	—
Pine tar	201.66	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Clove oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31526	31526	0.00	26.96
30858	31707	3.49	40.03
31299	31707	4.50	35.18
31409	31707	5.33	34.51
31707	31707	0.00	37.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Coal tar spirit SR**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31126-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Coal tar spirit SR; Spiritus picis lithanthracis SR

Special notes

When selecting the *Coal tar spirit SR* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Coal tar spirit SR	4	1	63

Second-stage model

For differentiation of the substance/substance group *Coal tar spirit SR* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Coal tar spirit SR*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Coal tar spirit SR	04C151014	31626	60	20141022
apomix	Coal tar spirit SR	05B170715	33466	40	20150728
Fagron	Coal tar spirit SR	13D05-M14	31126	40	1403343
Fagron	Coal tar spirit SR	05A290319	34595	40	20190409

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Coal tar spirit SR*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Coal tar spirit SR*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Coal tar spirit SR	04B200916	33464	40
Fagron	Coal tar spirit SR	04B200916	33465	40

- 69 394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 143 spectra from 95 *Apo-Ident* customers from 65 batches from the substance/substance group *Coal tar spirit SR*.
- Among them are spectra of independent samples from 63 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD /apomix	Coal tar spirit SR	2B270215	2
AHD /apomix	Coal tar spirit SR	4B200916	1
AHD /apomix	Coal tar spirit SR	5C231116	1
Caelo	Coal tar spirit SR	2A161017	1
apomix	Coal tar spirit SR	3C230508	1
apomix	Coal tar spirit SR	7633599	1
apomix	Coal tar spirit SR	5B170715	1
apomix	Coal tar spirit SR	3B170616	1
apomix	Coal tar spirit SR	5A231116	2
apomix	Coal tar spirit SR	5C231116	1
apomix	Coal tar spirit SR	1C300617	1
apomix	Coal tar spirit SR	3A111018	1
Apomix	Coal tar spirit SR	5A101210	1
Apomix	Coal tar spirit SR	1A040112	1
Apomix	Coal tar spirit SR	5B271112	1
Apomix	Coal tar spirit SR	1B120214	2
Apomix	Coal tar spirit SR	2C280414	1
Apomix	Coal tar spirit SR	3B010415	1
Apomix	Coal tar spirit SR	5B170715	1
Apomix	Coal tar spirit SR	1A190216	3
Apomix	Coal tar spirit SR	5C231116	3
Apomix	Coal tar spirit SR	2A161017	1
Apomix	Coal tar spirit SR	3B270613	1
Apomix	Coal tar spirit SR	1D020718	2
Apomix	Coal tar spirit SR	3A111018	1
ApoMix	Coal tar spirit SR	4B221009	1
apomix 004	Coal tar spirit SR	4A190712	1
apomix PKH GmbH Halle	Coal tar spirit SR	4A170615	1
Apomix / Alliance Healt...	Coal tar spirit SR	5B170715	1
Apomix / Alliance Healt...	Coal tar spirit SR	4A170615	1
Apomix / Alliance Healt...	Coal tar spirit SR	5B231116	1
Apomix / Alliance Healt...	Coal tar spirit SR	1B300617	1
apomix / Anzag	Coal tar spirit SR	1A140115	1
apomix / Gehe	Coal tar spirit SR	2A161017	1
apomix / Gehe	Coal tar spirit SR	1C300617	1
Apomix / Gehe	Coal tar spirit SR	5C231116	1
Apomix / Gehe	Coal tar spirit SR	1C020718	1
apomix / Noweda	Coal tar spirit SR	4A070319	1
apomix / Phönix	Coal tar spirit SR	1C020718	1
Apomix / Sanacorp	Coal tar spirit SR	2C040413	1
Apomix /AllianceHC	Coal tar spirit SR	1A140115	1

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Supplier	Substance	Batch	Spectra
apomix AMH Niemann GmbH...	Coal tar spirit SR	6A210915	1
apomix AMH Niemann GmbH...	Coal tar spirit SR	1A190216	3
apomix AMH Niemann GmbH...	Coal tar spirit SR	1B300617	1
Apomix Anzag	Coal tar spirit SR	3B270613	1
Apomix Anzag	Coal tar spirit SR	6B031213	1
Apomix PKH Halle	Coal tar spirit SR	2A161017	2
Apomix/ Gehe	Coal tar spirit SR	5B231116	1
Apomix/ Noweda	Coal tar spirit SR	6A211212	1
apomix/AHD	Coal tar spirit SR	2D161017	1
Apomix/Alliance	Coal tar spirit SR	2A161017	1
apomix/Anzag	Coal tar spirit SR	4B220813	1
Apomix/Gehe	Coal tar spirit SR	5A231116	1
Apomix/Noweda	Coal tar spirit SR	4C151014	1
Apomix/Noweda	Coal tar spirit SR	5B170715	1
Apomix/Noweda	Coal tar spirit SR	5C231116	2
Apomix/Noweda	Coal tar spirit SR	1B020718	1
Apomix/Phoenix	Coal tar spirit SR	1B190216	1
Apomix/Phoenix	Coal tar spirit SR	2A161017	1
Apomix/Phönix	Coal tar spirit SR	1B020718	1
Apomix/PKH Halle/Noweda	Coal tar spirit SR	1A190216	1
ApomixNoweda	Coal tar spirit SR	1C020718	1
Bombastus	Coal tar spirit SR	4C151014	1
Caelo	Coal tar spirit SR	3B150507	1
Caelo	Coal tar spirit SR	1B020718	1
Caelo	Coal tar spirit SR	5C271112	1
Caelo	Coal tar spirit SR	6B031213	1
Caelo	Coal tar spirit SR	6A031213	1
Caelo	Coal tar spirit SR	2A070316	1
Euro OTC	Coal tar spirit SR	1414/04-M02	1
Fagron	Coal tar spirit SR	11E18-M02	1
Fagron	Coal tar spirit SR	14A30-M01	2
Fagron	Coal tar spirit SR	14/04-M02	1
Fagron	Coal tar spirit SR	2A270215	2
Fagron	Coal tar spirit SR	6b210915	1
Fagron	Coal tar spirit SR	2A070316	4
Fagron	Coal tar spirit SR	170209SKTS02A070316	1
Fagron	Coal tar spirit SR	2A120918	4
Fagron	Coal tar spirit SR	2A140219	2
Fagron	Coal tar spirit SR	4B200916	4
Fagron	Coal tar spirit SR	1404-M02	1
Fagron	Coal tar spirit SR	5A290319	2
Fagron	Coal tar spirit SR	14I04-M02	1
Fagron	Coal tar spirit SR	15C11-M09	2
Fagron	Coal tar spirit SR	6B210915	3
Fagron	Coal tar spirit SR	3A130614	1
Fagron	Coal tar spirit SR	5C231116	1
Fagron	Coal tar spirit SR	13G16-M01	1
Fragon	Coal tar spirit SR	1B170119	1
Gehe	Coal tar spirit SR	6B211212	1
Gehe	Coal tar spirit SR	13D05-M14	1
GEHE	Coal tar spirit SR	2A120918	1
Ichthyol-Gesellschaft	Coal tar spirit SR	1B300617	1
Noweda/Aapomix	Coal tar spirit SR	5B170715	1
Phönix/Apomix	Coal tar spirit SR	3B170616	1
PKH GmbH	Coal tar spirit SR	5B181113	1
PKH GmbH / Noweda	Coal tar spirit SR	7A160519	1
PKH GmbH/ Gehe	Coal tar spirit SR	3C170616	1
PKH GmbH/Noweda	Coal tar spirit SR	2A070316	2
PKH Halle	Coal tar spirit SR	4C151014	1
PKH Halle	Coal tar spirit SR	5B170715	1

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Supplier	Substance	Batch	Spectra
PKH Halle / Anzag	Coal tar spirit SR	4C151014	1
pkh halle,phönix	Coal tar spirit SR	4A170615	1
PKH Halle/Sanacorp	Coal tar spirit SR	3A010415	1
PKH/ Noweda	Coal tar spirit SR	1B020718	1
Reichelt	Coal tar spirit SR	4B200916	1
Sanacorp	Coal tar spirit SR	4B151014	1
Sanacorp / apomix	Coal tar spirit SR	5C231116	1
Sanacorp / apomix	Coal tar spirit SR	1C020718	2
Caelo	Coal tar spirit SR	3A111018	2
Sanacorp/ apomix	Coal tar spirit SR	5B231116	1
Fagron	Coal tar spirit SR	13D05-M14	1

- 138 210 spectra from 703 *Apo-Ident* customers from a total of 35 231 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Coal tar spirit SR* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Coal tar spirit SR* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	143	0	138 210

The substance/substance group *Coal tar spirit SR* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 95.8042 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Coal tar spirit SR* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Ethanol 96%	47.93	—
Dexpanthenol	80.16	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Coal tar spirit SR* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31126	31126	0.00	72.10
31626	31126	4.56	72.14
33466	31126	12.29	66.97
34595	31126	11.10	54.64

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Collodion 4%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30210-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Collodion 4%

Special notes

When selecting the *Collodion 4%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Collodion 4%	4	2	30

Second-stage model

For differentiation of the substance/substance group *Collodion 4%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Collodion 4%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Collodion 4%	13325403	31186	40	1402569
Caelo	Collodion 4%	13325411	31434	60	20131016
Caelo	Collodion 4%	16284201	32962	40	20161107
Caelo	Collodion 4%	190996	34635	40	20190418*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Collodion 4%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Collodion 4%*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Collodion 4%	16337201	33514	40
Caelo	Collodion 4%	18070501	34070	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 79 spectra from 34 *Apo-Ident* customers from 33 batches from the substance/substance group *Collodion 4%*.
- Among them are spectra of independent samples from 30 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Collodion 4%	12035903	2
Caelo	Collodion 4%	11336001	1
Caelo	Collodion 4%	12035913	2
Caelo	Collodion 4%	20021305	1
Caelo	Collodion 4%	7031404	1
Caelo	Collodion 4%	14079101	4
Caelo	Collodion 4%	27041502	1
Caelo	Collodion 4%	15199203	6
Caelo	Collodion 4%	15199206	3
Caelo	Collodion 4%	16337201	6
Caelo	Collodion 4%	18070501	4
Caelo	Collodion 4%	5011905	1
Caelo	Collodion 4%	90266259	1
Caelo	Collodion 4%	15429002	2
Caelo	Collodion 4%	13325402	3
Caelo	Collodion 4%	13325405	3
Caelo	Collodion 4%	12035916	5
Caesar & Loretz/Sanacorp	Collodion 4%	15199206	1
Caesar&Loretz GmbH /Anzag	Collodion 4%	14079105	1
Caesar&lorenz,Phoenix	Collodion 4%	12035916	1
Defektur	Collodion 4%	12035916	1
Euro OTC	Collodion 4%	14079105	1
Euro OTC	Collodion 4%	16284202	1
Euro OTC	Collodion 4%	16337201	1
Euro OTC	Collodion 4%	16337202	1
Euro OTC	Collodion 4%	15199203	1
Gatt-Koller	Collodion 4%	1803807	2
Gatt-Koller	Collodion 4%	1900117	1
Gehe	Collodion 4%	11336004	1
kögl	Collodion 4%	1900585	2
Kögl	Collodion 4%	20171534	1
Kögl	Collodion 4%	384211160717	1
Kögl	Collodion 4%	1700246	1
Kögl	Collodion 4%	1701628	1
Kögl	Collodion 4%	1801945	2
Caelo	Collodion 4%	14079105	3

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Supplier	Substance	Batch	Spectra
Caelo	Collodion 4%	13325401	1
Caelo	Collodion 4%	13325403	3
Caelo	Collodion 4%	13325411	2
Caelo	Collodion 4%	16284201	3

- 138 274 spectra from 703 *Apo-Ident* customers from a total of 35 262 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Collodion 4%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Collodion 4%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	79	0	138 274

The substance/substance group *Collodion 4%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 92.4051 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Collodion 4%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Permethrin 25% solution	144.00	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Collodion 4%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31186	31186	0.00	184.65
31434	34635	4.77	185.80
32962	31186	25.62	174.64
34635	34635	0.00	191.50

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Cooling cream / Cooling cream with rose oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30889-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Cooling cream / Cooling cream with rose oil; Cooling cream DAB; Cooling cream DAB 6 (stabilised, contains rose oil); Unguentum leniens; Unguentum leniens DAB 6

Special notes

When selecting the *Cooling cream / Cooling cream with rose oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cooling cream DAB	12	62	1252
Cooling cream DAB 6 (stabilised, contains rose oil)	8	3	291

Second-stage model

For differentiation of the substance/substance group *Cooling cream / Cooling cream with rose oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Cooling cream / Cooling cream with rose oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Cooling cream DAB	275667	30890	90	20121221
Bombastus	Cooling cream DAB	19001417	34501	40	20190318
Caelo	Cooling cream DAB	12364802	30889	130	20121217
Caelo	Cooling cream DAB	13051601	31052	40	20130221
Caelo	Cooling cream DAB	13315101	31224	70	20130925
Caelo	Cooling cream DAB	14118002	31471	40	AR-14-FG-012400-01
Caelo	Cooling cream DAB	153277	31992	60	20150930*
Caelo	Cooling cream DAB	172551	33779	30	20170927*
Fagron	Cooling cream DAB	18K05-T08-061775	34499	40	20190125
Fagron	Cooling cream DAB	19C21-T06-065275	34500	40	20190614
Henry Lamotte	Cooling cream DAB	5321500	30921	80	20120627
Henry Lamotte	Cooling cream DAB	8005213002	34502	40	20190306
Caelo	Cooling cream DA...	13317001	31249	40	1405180
Caelo	Cooling cream DA...	14085901	31457	40	20140326
Caelo	Cooling cream DA...	153029	31922	60	20150911*
Caelo	Cooling cream DA...	160897	32293	40	20160405*
Caelo	Cooling cream DA...	160896	32294	40	20160405*
Caelo	Cooling cream DA...	162223	32506	40	20160727*
Caelo	Cooling cream DA...	162224	32507	40	20160727*
Caelo	Cooling cream DA...	170413	33180	40	20170221*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1040 spectra of 20 reference samples from the substance/substance group *Cooling cream / Cooling cream with rose oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 20 different batches.
- 55 319 spectra from a total of 1096 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 2820 spectra of 70 reference samples from the substance/substance group *Cooling cream / Cooling cream with rose oil*.
- Among them are spectra of independent samples from 65 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cooling cream DAB	153281	31993	60
Caelo	Cooling cream DAB	161293	32227	40
Caelo	Cooling cream DAB	161294	32229	40
Caelo	Cooling cream DAB	161295	32230	40
Caelo	Cooling cream DAB	161296	32231	40
Caelo	Cooling cream DAB	161297	32232	40
Caelo	Cooling cream DAB	161341	32233	40
Caelo	Cooling cream DAB	161342	32234	40
Caelo	Cooling cream DAB	161338	32235	40
Caelo	Cooling cream DAB	161718	32408	40
Caelo	Cooling cream DAB	161719	32409	40
Caelo	Cooling cream DAB	161720	32411	40
Caelo	Cooling cream DAB	161725	32413	40
Caelo	Cooling cream DAB	161727	32414	40
Caelo	Cooling cream DAB	161728	32415	40
Caelo	Cooling cream DAB	161729	32416	40
Caelo	Cooling cream DAB	162445	32624	40
Caelo	Cooling cream DAB	162446	32625	40
Caelo	Cooling cream DAB	162447	32626	40
Caelo	Cooling cream DAB	162462	32627	40
Caelo	Cooling cream DAB	162463	32628	40
Caelo	Cooling cream DAB	162464	32629	40
Caelo	Cooling cream DAB	163017	32888	40
Caelo	Cooling cream DAB	163018	32889	40
Caelo	Cooling cream DAB	163019	32890	40
Caelo	Cooling cream DAB	163020	32891	40
Caelo	Cooling cream DAB	163021	32892	40
Caelo	Cooling cream DAB	170004	33112	40
Caelo	Cooling cream DAB	170005	33113	40
Caelo	Cooling cream DAB	163540	33164	40
Caelo	Cooling cream DAB	163544	33165	40
Caelo	Cooling cream DAB	170003	33168	40
Caelo	Cooling cream DAB	170006	33169	40
Caelo	Cooling cream DAB	171251	33340	40
Caelo	Cooling cream DAB	171157	33341	40
Caelo	Cooling cream DAB	171250	33342	40
Caelo	Cooling cream DAB	171159	33343	40
Caelo	Cooling cream DAB	171249	33344	40
Caelo	Cooling cream DAB	171160	33345	40
Caelo	Cooling cream DAB	171227	33346	40
Caelo	Cooling cream DAB	171228	33347	40
Caelo	Cooling cream DAB	171156	33348	40
Caelo	Cooling cream DAB	171248	33349	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cooling cream DAB	170748	33404	40
Caelo	Cooling cream DAB	171567	33563	40
Caelo	Cooling cream DAB	171570	33564	40
Caelo	Cooling cream DAB	171571	33565	40
Caelo	Cooling cream DAB	171572	33566	40
Caelo	Cooling cream DAB	171573	33567	40
Caelo	Cooling cream DAB	171897	33568	40
Caelo	Cooling cream DAB	172536	33771	40
Caelo	Cooling cream DAB	172539	33773	40
Caelo	Cooling cream DAB	172540	33774	40
Caelo	Cooling cream DAB	172541	33775	40
Caelo	Cooling cream DAB	172544	33776	40
Caelo	Cooling cream DAB	172545	33777	40
Caelo	Cooling cream DAB	172546	33778	40
Caelo	Cooling cream DAB	172548	33780	40
Caelo	Cooling cream DAB	172549	33781	40
Caelo	Cooling cream DAB	172550	33782	40
Caelo	Cooling cream DAB	180424	34150	40
Caelo	Cooling cream DAB	182729	34354	40
Caelo	Cooling cream DAB 6 (stabili...	12306001	31037	40
Caelo	Cooling cream DAB 6 (stabili...	180218	34142	40
Caelo	Cooling cream DAB 6 (stabili...	181897	34265	40
Caelo	Cooling cream DAB	161293	32228	40
Caelo	Cooling cream DAB	161719	32410	40
Caelo	Cooling cream DAB	161720	32412	40
Caelo	Cooling cream DAB	170004	33166	40
Caelo	Cooling cream DAB	170005	33167	40

- 66 654 spectra from a total of 1437 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 5231 spectra from 549 *Apo-Ident* customers from 1327 batches from the substance/substance group *Cooling cream / Cooling cream with rose oil*.
- Among them are spectra of independent samples from 1310 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	1289501	1
/Phoenix	Cooling cream DAB	17189701	1
A.H.D.	Cooling cream DAB	13226301	1
Bombastus	Cooling cream DAB	18002244	4
AHC/Lamotte	Cooling cream DAB	8003478009	1
AHD	Cooling cream DAB	16354401	2
AHD	Cooling cream DAB	17189701	1
AHD	Cooling cream DAB	18272801	1
AHD	Cooling cream DAB	19001402	1
Euro OTC	Cooling cream DAB	16354401	1
AHD, 08.11.13	Cooling cream DAB	13225801	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	284303	3
Bombastus	Cooling cream DAB	287542	1
AHDFiebig	Cooling cream DAB	17075101	1
AHL	Cooling cream DAB	302385	1
AHL	Cooling cream DAB	8003158005	2
Caelo	Cooling cream DAB	310004	1
AHL/Henry	Cooling cream DAB	61360	1
AHL/Henry	Cooling cream DAB	8003478008	1
AlH	Cooling cream DAB	305131	1
Alliance	Cooling cream DAB	15066601	1
Alliance	Cooling cream DAB	17189701	1
Alliance H.	Cooling cream DAB	15434401	1
Alliance Healthcare	Cooling cream DAB	277534	1
Alliance Healthcare	Cooling cream DAB	277368	1
Alliance Healthcare	Cooling cream DAB	277366	1
Alliance Healthcare	Cooling cream DAB	278444	1
Alliance Healthcare	Cooling cream DAB	278523	1
Allianz Healthcare 05.1...	Cooling cream DAB	14271101	1
Anzag	Cooling cream DAB	5253700	1
Anzag	Cooling cream DAB	272348	1
Anzag	Cooling cream DAB	272347	1
Anzag	Cooling cream DAB	274042	1
Anzag	Cooling cream DAB	60082802	1
Anzag	Cooling cream DAB	274911	1
Anzag	Cooling cream DAB	13175101	1
Anzag	Cooling cream DAB	6002062002	1
ANZAG	Cooling cream DAB	273504	1
Anzag 05.02.13 ek: 9,38EUR	Cooling cream DAB	12312801	1
Anzag 07.05.13 ek: 9,38EUR	Cooling cream DAB	13059701	1
Anzag 21.02.2013	Cooling cream DAB	12291901	1
Anzag 25.10.12	Cooling cream DAB	272484	1
Anzag 27.12.12 ek:9,09	Cooling cream DAB	12312301	1
Anzag 31.10.12 ek:9.12EUR	Cooling cream DAB	12187301	1
Bombastus	Cooling cream DAB	279680	2
Bombastus	Cooling cream DAB	279681	1
Caelo	Cooling cream DAB	13004402	4
Caelo	Cooling cream DAB	13059902	3
Bombastus	Cooling cream DAB	271623	1
Bombastus	Cooling cream DAB	274080	2
Caelo	Cooling cream DAB	1097071	2
Anzag/Lamotte	Cooling cream DAB	5407300	1
apomix Fiebig	Cooling cream DAB	299362	1
Beiersdorf / E	Cooling cream DAB	290486	1
Berkel AHK	Cooling cream DAB	13226301	3
Berkel AHK	Cooling cream DAB	14268101	1
Bionorica Ethics	Cooling cream DAB	17001966	1
Bomastus/Phönix	Cooling cream DAB	304582	1
Bomastus-Werke AG	Cooling cream DAB	18005195	1
bomb	Cooling cream DAB	296316	1
Bomba/AHD	Cooling cream DAB	277269	1
Bomba/AHD	Cooling cream DAB	281031	2
Bomba/AHD	Cooling cream DAB	281920	1
Bomba/AHD	Cooling cream DAB	283115	1
bombast	Cooling cream DAB	17001964	1
Bombastus	Cooling cream DAB	303155	1
Bombastus	Cooling cream DAB	17001969	2
Bombastus	Cooling cream DAB	265549	1
Bombastus	Cooling cream DAB	266717	1
Bombastus	Cooling cream DAB	2405212541	1
Bombastus	Cooling cream DAB	92086	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	22487	1
Bombastus	Cooling cream DAB	269092	1
Bombastus	Cooling cream DAB	1109212541	1
Bombastus	Cooling cream DAB	271624	1
Bombastus	Cooling cream DAB	272564	2
Bombastus	Cooling cream DAB	273503	1
Bombastus	Cooling cream DAB	274042	1
Bombastus	Cooling cream DAB	273444	1
Bombastus	Cooling cream DAB	2112212541	1
Bombastus	Cooling cream DAB	274044	2
Bombastus	Cooling cream DAB	274791	2
Bombastus	Cooling cream DAB	275663	1
Bombastus	Cooling cream DAB	272353	1
Bombastus	Cooling cream DAB	276281	1
Bombastus	Cooling cream DAB	275664	2
Bombastus	Cooling cream DAB	276288	1
Bombastus	Cooling cream DAB	277534	2
Bombastus	Cooling cream DAB	277371	1
Bombastus	Cooling cream DAB	273443	1
Bombastus	Cooling cream DAB	277525	2
Bombastus	Cooling cream DAB	278439	2
Bombastus	Cooling cream DAB	2413Q02541	1
Bombastus	Cooling cream DAB	278438	1
Bombastus	Cooling cream DAB	278342	1
Bombastus	Cooling cream DAB	278674	1
Bombastus	Cooling cream DAB	276282	1
Bombastus	Cooling cream DAB	2713Q2541	1
Bombastus	Cooling cream DAB	279765	2
Bombastus	Cooling cream DAB	276284	1
Bombastus	Cooling cream DAB	278441	1
Bombastus	Cooling cream DAB	278440	2
Bombastus	Cooling cream DAB	278525	3
Bombastus	Cooling cream DAB	279755	3
Bombastus	Cooling cream DAB	279682	1
Bombastus	Cooling cream DAB	281820	1
Bombastus	Cooling cream DAB	281030	1
Bombastus	Cooling cream DAB	272480	1
Bombastus	Cooling cream DAB	77309	1
Bombastus	Cooling cream DAB	281134	1
Bombastus	Cooling cream DAB	283118	1
Bombastus	Cooling cream DAB	281138	1
Bombastus	Cooling cream DAB	281919	1
Bombastus	Cooling cream DAB	283117	1
Bombastus	Cooling cream DAB	284265	1
Bombastus	Cooling cream DAB	284302	2
Bombastus	Cooling cream DAB	283051	1
Bombastus	Cooling cream DAB	285069	3
Bombastus	Cooling cream DAB	285499	2
Bombastus	Cooling cream DAB	285634	2
Bombastus	Cooling cream DAB	285063	1
Bombastus	Cooling cream DAB	285639	1
Bombastus	Cooling cream DAB	285503	1
Bombastus	Cooling cream DAB	285644	1
Bombastus	Cooling cream DAB	287485	2
Bombastus	Cooling cream DAB	286650	1
Bombastus	Cooling cream DAB	285635	2
Bombastus	Cooling cream DAB	287539	1
Bombastus	Cooling cream DAB	288152	3
Bombastus	Cooling cream DAB	289188	1
Bombastus	Cooling cream DAB	289191	3

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	287544	2
Bombastus	Cooling cream DAB	289251	1
Bombastus	Cooling cream DAB	289260	3
Bombastus	Cooling cream DAB	289265	1
Bombastus	Cooling cream DAB	288112	2
Bombastus	Cooling cream DAB	289256	1
Bombastus	Cooling cream DAB	286567	1
Bombastus	Cooling cream DAB	292107	1
Bombastus	Cooling cream DAB	297213	1
Bombastus	Cooling cream DAB	288107	1
Bombastus	Cooling cream DAB	291619	1
Bombastus	Cooling cream DAB	291620	2
Bombastus	Cooling cream DAB	291552	1
Bombastus	Cooling cream DAB	292280	1
Bombastus	Cooling cream DAB	292997	4
Bombastus	Cooling cream DAB	293616	2
Bombastus	Cooling cream DAB	292930	2
Bombastus	Cooling cream DAB	293621	3
Bombastus	Cooling cream DAB	295019	3
Bombastus	Cooling cream DAB	29072015A	1
Bombastus	Cooling cream DAB	293747	1
Bombastus	Cooling cream DAB	6861938	1
Bombastus	Cooling cream DAB	293750	1
Bombastus	Cooling cream DAB	295756	1
Bombastus	Cooling cream DAB	296314	1
Bombastus	Cooling cream DAB	295190	1
Bombastus	Cooling cream DAB	297097	2
Bombastus	Cooling cream DAB	295124	1
Bombastus	Cooling cream DAB	298881	3
Bombastus	Cooling cream DAB	160321 (intern)	1
Bombastus	Cooling cream DAB	299358	1
Bombastus	Cooling cream DAB	299354	1
Bombastus	Cooling cream DAB	299970	1
Bombastus	Cooling cream DAB	299966	1
Bombastus	Cooling cream DAB	300717	1
Bombastus	Cooling cream DAB	299355	1
Bombastus	Cooling cream DAB	300722	1
Bombastus	Cooling cream DAB	299352	1
Bombastus	Cooling cream DAB	299351	2
Bombastus	Cooling cream DAB	301700	3
Bombastus	Cooling cream DAB	301669	1
Bombastus	Cooling cream DAB	299978	1
Bombastus	Cooling cream DAB	300796	1
Bombastus	Cooling cream DAB	301693	1
Bombastus	Cooling cream DAB	301673	1
Bombastus	Cooling cream DAB	303151	1
Bombastus	Cooling cream DAB	301674	1
Bombastus	Cooling cream DAB	301699	2
Bombastus	Cooling cream DAB	302370	2
Bombastus	Cooling cream DAB	302382	1
Bombastus	Cooling cream DAB	303163	2
Bombastus	Cooling cream DAB	303153	1
Bombastus	Cooling cream DAB	304582	3
Bombastus	Cooling cream DAB	301670	1
Bombastus	Cooling cream DAB	301692	1
Bombastus	Cooling cream DAB	302371	1
Bombastus	Cooling cream DAB	304580	1
Bombastus	Cooling cream DAB	303619	1
Bombastus	Cooling cream DAB	303622	1
Bombastus	Cooling cream DAB	305021	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	305131	3
Bombastus	Cooling cream DAB	305129	3
Bombastus	Cooling cream DAB	306937	1
Bombastus	Cooling cream DAB	304579	1
Bombastus	Cooling cream DAB	306529	3
Bombastus	Cooling cream DAB	306939	1
Bombastus	Cooling cream DAB	306932	3
Bombastus	Cooling cream DAB	305957	1
Bombastus	Cooling cream DAB	305949	1
Bombastus	Cooling cream DAB	306930	2
Bombastus	Cooling cream DAB	307348	1
Bombastus	Cooling cream DAB	307916	2
Bombastus	Cooling cream DAB	307932	1
Bombastus	Cooling cream DAB	306944	2
Bombastus	Cooling cream DAB	303159	1
Bombastus	Cooling cream DAB	308710	1
Bombastus	Cooling cream DAB	308489	1
Bombastus	Cooling cream DAB	305952	2
Bombastus	Cooling cream DAB	307357	1
Bombastus	Cooling cream DAB	308725	2
Bombastus	Cooling cream DAB	307923	1
Bombastus	Cooling cream DAB	305955	1
Bombastus	Cooling cream DAB	308720	1
Bombastus	Cooling cream DAB	305959	1
Bombastus	Cooling cream DAB	310002	2
Bombastus	Cooling cream DAB	309999	2
Bombastus	Cooling cream DAB	310975	1
Bombastus	Cooling cream DAB	308713	1
Bombastus	Cooling cream DAB	307914	1
Bombastus	Cooling cream DAB	17000221	2
Bombastus	Cooling cream DAB	309995	1
Bombastus	Cooling cream DAB	17000223	1
Bombastus	Cooling cream DAB	17000976	3
Bombastus	Cooling cream DAB	17000225	1
Bombastus	Cooling cream DAB	17000222	4
Bombastus	Cooling cream DAB	17000228	1
Bombastus	Cooling cream DAB	17000972	1
Bombastus	Cooling cream DAB	17000979	1
Bombastus	Cooling cream DAB	17001966	1
Bombastus	Cooling cream DAB	17001964	3
Bombastus	Cooling cream DAB	17000971	1
Bombastus	Cooling cream DAB	17001970	6
Bombastus	Cooling cream DAB	18000333	2
Bombastus	Cooling cream DAB	310972	1
Bombastus	Cooling cream DAB	18002087	2
Bombastus	Cooling cream DAB	18002094	3
Bombastus	Cooling cream DAB	18001079	3
Bombastus	Cooling cream DAB	18002096	3
Bombastus	Cooling cream DAB	18002084	1
Bombastus	Cooling cream DAB	18001078	1
Bombastus	Cooling cream DAB	18002088	1
Bombastus	Cooling cream DAB	18000336	1
Bombastus	Cooling cream DAB	18003174	1
Bombastus	Cooling cream DAB	18003744	1
Bombastus	Cooling cream DAB	18003172	1
Bombastus	Cooling cream DAB	18004428	1
Bombastus	Cooling cream DAB	18004426	2
Bombastus	Cooling cream DAB	18005195	1
Bombastus	Cooling cream DAB	18002090	2
Bombastus	Cooling cream DAB	18004433	2

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	18005606	1
Bombastus	Cooling cream DAB	18005603	2
Bombastus	Cooling cream DAB	18006325	2
Bombastus	Cooling cream DAB	18006314	1
Bombastus	Cooling cream DAB	19000335	4
Bombastus	Cooling cream DAB	18005601	2
Bombastus	Cooling cream DAB	18005203	1
Bombastus	Cooling cream DAB	19000763	1
Bombastus	Cooling cream DAB	19001406	1
Bombastus	Cooling cream DAB	270310	1
Bombastus	Cooling cream DAB	275665	1
Bombastus	Cooling cream DAB	17000226	1
Bombastus	Cooling cream DAB	307356	1
Bombastus	Cooling cream DAB	18001076	1
Bombastus	Cooling cream DAB	310989	1
Bombastus	Cooling cream DAB	281824	1
Bombastus	Cooling cream DAB	17000977	3
Bombastus	Cooling cream DAB	18002308	1
Bombastus	Cooling cream DAB	19003468	1
Bombastus	Cooling cream DAB	285502	2
Bombastus	Cooling cream DAB	285065	1
Bombastus	Cooling cream DAB	290483	2
Bombastus	Cooling cream DAB	291618	1
Bombastus	Cooling cream DAB	300720	2
Bombastus	Cooling cream DAB	305956	1
Bombastus	Cooling cream DAB	18006319	2
Bombastus	Cooling cream DAB	18005193	1
Bombastus	Cooling cream DAB	272571	1
Bombastus	Cooling cream DAB	60082801	3
Bombastus	Cooling cream DAB	300730	3
Bombastus	Cooling cream DAB	289189	1
Bombastus	Cooling cream DAB	295185	1
Bombastus	Cooling cream DAB	304591	1
Bombastus	Cooling cream DAB	18005201	3
Bombastus	Cooling cream DAB	290487	1
Bombastus	Cooling cream DAB	281140	1
Bombastus	Cooling cream DAB	284299	2
Bombastus	Cooling cream DAB	295021	1
Bombastus	Cooling cream DAB	278436	1
Bombastus	Cooling cream DAB	308715	1
Bombastus	Cooling cream DAB	17000973	1
Bombastus	Cooling cream DAB	17001962	1
Bombastus	Cooling cream DAB	292103	1
Bombastus	Cooling cream DAB	301701	3
Bombastus	Cooling cream DAB	308716	1
Bombastus	Cooling cream DAB	18004434	1
Bombastus	Cooling cream DAB	307917	1
Bombastus	Cooling cream DAB	282021	2
Bombastus	Cooling cream DAB	286654	2
Bombastus	Cooling cream DAB	295184	2
Bombastus	Cooling cream DAB	302385	4
Bombastus	Cooling cream DAB	297206	1
Bombastus	Cooling cream DAB	299362	1
Bombastus	Cooling cream DAB	286648	3
Bombastus	Cooling cream DAB	285645	2
Bombastus	Cooling cream DAB	303625	2
Bombastus	Cooling cream DAB	18002306	4
Bombastus	Cooling cream DAB	277526	1
Bombastus	Cooling cream DAB	309370	2
Bombastus	Cooling cream DAB	300729	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	292281	1
Bombastus	Cooling cream DAB	293749	1
Bombastus	Cooling cream DAB	292931	2
Bombastus	Cooling cream DAB	4013Q2541	1
Bombastus	Cooling cream DAB	614U2541	1
Bombastus	Cooling cream DAB	17000229	2
Bombastus	Cooling cream DAB	279751	1
Bombastus	Cooling cream DAB	283116	1
Bombastus	Cooling cream DAB	284263	1
Bombastus	Cooling cream DAB	284298	1
Bombastus	Cooling cream DAB	286564	3
Bombastus	Cooling cream DAB	276419	2
Bombastus	Cooling cream DAB	18001074	3
Bombastus	Cooling cream DAB	282019	2
Bombastus	Cooling cream DAB	281139	2
Bombastus	Cooling cream DAB	13315701	1
Bombastus	Cooling cream DAB	293622	2
Bombastus	Cooling cream DAB	297214	2
Bombastus	Cooling cream DAB	301676	1
Bombastus	Cooling cream DAB	306532	2
Bombastus	Cooling cream DAB	18004435	2
Bombastus	Cooling cream DAB	268194	1
Bombastus	Cooling cream DAB	277367	1
Bombastus	Cooling cream DAB	277369	1
Bombastus	Cooling cream DAB	278335	3
Bombastus	Cooling cream DAB	281823	1
Bombastus	Cooling cream DAB	284300	3
Bombastus	Cooling cream DAB	18002093	2
Bombastus	Cooling cream DAB	18006321	2
Bombastus	Cooling cream DAB	19001405	2
Bombastus	Cooling cream DAB	19002519	1
Bombastus	Cooling cream DAB	19003477	4
Bombastus	Cooling cream DAB	281912	1
Bombastus	Cooling cream DAB	283058	1
Bombastus	Cooling cream DAB	282017	1
Bombastus	Cooling cream DAB	18001084	2
Bombastus	Cooling cream DAB	273499	1
Bombastus	Cooling cream DAB	274083	2
Bombastus	Cooling cream DAB	275670	1
Bombastus	Cooling cream DAB	274783	1
Bombastus	Cooling cream DAB	285070	1
Bombastus	Cooling cream DAB	290490	1
Bombastus	Cooling cream DAB	308490	2
Bombastus	Cooling cream DAB	18002069	1
Bombastus	Cooling cream DAB	266941	1
Bombastus	Cooling cream DAB	307358	1
Bombastus	Cooling cream DAB	269088	1
Bombastus	Cooling cream DAB	277530	2
Bombastus	Cooling cream DAB	283054	1
Bombastus	Cooling cream DAB	289258	1
Bombastus	Cooling cream DAB	272482	1
Bombastus	Cooling cream DAB	297209	1
Bombastus	Cooling cream DAB	297102	1
Bombastus	Cooling cream DAB	296312	3
Bombastus	Cooling cream DAB	295761	1
Bombastus	Cooling cream DAB	19001416	2
Bombastus	Cooling cream DAB	513A-02541	1
Bombastus	Cooling cream DAB	13315101	2
Bombastus	Cooling cream DAB	285637	1
Bombastus	Cooling cream DAB	289187	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	295189	1
Bombastus	Cooling cream DAB	297099	1
Bombastus	Cooling cream DAB	298113	3
Bombastus	Cooling cream DAB	298119	2
Bombastus	Cooling cream DAB	298879	2
Bombastus	Cooling cream DAB	299974	1
Bombastus	Cooling cream DAB	300727	3
Bombastus	Cooling cream DAB	300724	1
Bombastus	Cooling cream DAB	301672	2
Bombastus	Cooling cream DAB	104948	1
Bombastus	Cooling cream DAB	299980	3
Bombastus	Cooling cream DAB	303158	1
Bombastus	Cooling cream DAB	306530	2
Bombastus	Cooling cream DAB	308491	2
Bombastus	Cooling cream DAB	310974	3
Bombastus	Cooling cream DAB	310006	2
Bombastus	Cooling cream DAB	17000986	1
Bombastus	Cooling cream DAB	17001967	3
Bombastus	Cooling cream DAB	17000982	2
Bombastus	Cooling cream DAB	17001958	2
Bombastus	Cooling cream DAB	18001082	4
Bombastus	Cooling cream DAB	180003302x	1
Bombastus	Cooling cream DAB	18002095	2
Bombastus	Cooling cream DAB	18003746	1
Bombastus	Cooling cream DAB	19001402	1
Bombastus	Cooling cream DAB	17001965	3
Bombastus	Cooling cream DAB	270315	1
Bombastus	Cooling cream DAB	271627	1
Bombastus	Cooling cream DAB	276418	3
Bombastus	Cooling cream DAB	3100004	1
Bombastus	Cooling cream DAB	285068	2
Bombastus	Cooling cream DAB	299981	2
Bombastus	Cooling cream DAB	306940	1
Bombastus	Cooling cream DAB	310986	3
Bombastus	Cooling cream DAB	17000983	5
Bombastus	Cooling cream DAB	283057	1
Bombastus	Cooling cream DAB	287543	1
Bombastus	Cooling cream DAB	286653	2
Bombastus	Cooling cream DAB	288110	1
Bombastus	Cooling cream DAB	287483	1
Bombastus	Cooling cream DAB	288158	1
Bombastus	Cooling cream DAB	91709	1
Bombastus	Cooling cream DAB	292202	1
Bombastus	Cooling cream DAB	295120	1
Bombastus	Cooling cream DAB	295760	2
Bombastus	Cooling cream DAB	297211	2
Bombastus	Cooling cream DAB	297210	2
Bombastus	Cooling cream DAB	298117	1
Bombastus	Cooling cream DAB	299968	1
Bombastus	Cooling cream DAB	301675	2
Bombastus	Cooling cream DAB	302380	1
Bombastus	Cooling cream DAB	302372	2
Bombastus	Cooling cream DAB	305954	1
Bombastus	Cooling cream DAB	304592	1
Bombastus	Cooling cream DAB	307929	3
Bombastus	Cooling cream DAB	307933	2
Bombastus	Cooling cream DAB	309369	2
Bombastus	Cooling cream DAB	310000	2
Bombastus	Cooling cream DAB	310984	1
Bombastus	Cooling cream DAB	308724	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	18000337	2
Bombastus	Cooling cream DAB	17000970	1
Bombastus	Cooling cream DAB	18000339	3
Bombastus	Cooling cream DAB	17001963	1
Bombastus	Cooling cream DAB	18002083	3
Bombastus	Cooling cream DAB	18002309	2
Bombastus	Cooling cream DAB	18003176	1
Bombastus	Cooling cream DAB	18004432	1
Bombastus	Cooling cream DAB	18006323	1
Bombastus	Cooling cream DAB	18004431	1
Bombastus	Cooling cream DAB	278341	2
Bombastus	Cooling cream DAB	278442	1
Bombastus	Cooling cream DAB	279676	2
Bombastus	Cooling cream DAB	284264	1
Bombastus	Cooling cream DAB	283119	1
Bombastus	Cooling cream DAB	300728	3
Bombastus	Cooling cream DAB	310977	2
Bombastus	Cooling cream DAB	18000331	1
Bombastus	Cooling cream DAB	18000338	1
Bombastus	Cooling cream DAB	18005197	3
Bombastus	Cooling cream DAB	19000329	1
Bombastus	Cooling cream DAB	278437	1
Bombastus	Cooling cream DAB	298121	2
Bombastus	Cooling cream DAB	304584	1
Bombastus	Cooling cream DAB	305022	1
Bombastus	Cooling cream DAB	310987	4
Bombastus	Cooling cream DAB	18003753	1
Bombastus	Cooling cream DAB	19000753	1
Bombastus	Cooling cream DAB	277363	1
Bombastus	Cooling cream DAB	310005	4
Bombastus	Cooling cream DAB	17075201	1
Bombastus	Cooling cream DAB	310979	1
Bombastus	Cooling cream DAB	17000975	2
Bombastus	Cooling cream DAB	17001957	1
Bombastus	Cooling cream DAB	17000984	1
Bombastus	Cooling cream DAB	17001961	1
Bombastus	Cooling cream DAB	18002239	1
Bombastus	Cooling cream DAB	18003175	1
Bombastus	Cooling cream DAB	18001075	1
Bombastus	Cooling cream DAB	18005602	1
Bombastus	Cooling cream DAB	18005608	2
Bombastus	Cooling cream DAB	19001403	2
Bombastus	Cooling cream DAB	19000754	1
Bombastus	Cooling cream DAB	277533	1
Bombastus	Cooling cream DAB	281033	1
Bombastus	Cooling cream DAB	299976	3
Bombastus	Cooling cream DAB	285638	2
Bombastus	Cooling cream DAB	286562	1
Bombastus	Cooling cream DAB	290380	2
Bombastus	Cooling cream DAB	292106	3
Bombastus	Cooling cream DAB	272485	1
Bombastus	Cooling cream DAB	272349	1
Bombastus	Cooling cream DAB	271541	1
Bombastus	Cooling cream DAB	273501	1
Bombastus	Cooling cream DAB	274077	1
Bombastus	Cooling cream DAB	274914	1
Bombastus	Cooling cream DAB	274785	1
Bombastus	Cooling cream DAB	275668	1
Bombastus	Cooling cream DAB	277275	2
Bombastus	Cooling cream DAB	278337	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	286652	1
Bombastus	Cooling cream DAB	288109	2
Bombastus	Cooling cream DAB	289253	1
Bombastus	Cooling cream DAB	291555	1
Bombastus	Cooling cream DAB	292936	1
Bombastus	Cooling cream DAB	298120	1
Bombastus	Cooling cream DAB	300715	1
Bombastus	Cooling cream DAB	299967	1
Bombastus	Cooling cream DAB	18002243	2
Bombastus	Cooling cream DAB	18005609	1
Bombastus	Cooling cream DAB	264601	1
Bombastus	Cooling cream DAB	276422	2
Bombastus	Cooling cream DAB	12082013A	1
Bombastus	Cooling cream DAB	151113a	1
Bombastus	Cooling cream DAB	13012014A	1
Bombastus	Cooling cream DAB	7022014B	1
Bombastus	Cooling cream DAB	14052014B	1
Bombastus	Cooling cream DAB	3092014A	1
Bombastus	Cooling cream DAB	290489	1
Bombastus	Cooling cream DAB	3022015B	1
Bombastus	Cooling cream DAB	4032015B	1
Bombastus	Cooling cream DAB	297205	2
Bombastus	Cooling cream DAB	295183	1
Bombastus	Cooling cream DAB	295192	1
Bombastus	Cooling cream DAB	298882	1
Bombastus	Cooling cream DAB	298118	1
Bombastus	Cooling cream DAB	302374	2
Bombastus	Cooling cream DAB	304593	4
Bombastus	Cooling cream DAB	302375	2
Bombastus	Cooling cream DAB	305961	2
Bombastus	Cooling cream DAB	307353	2
Bombastus	Cooling cream DAB	306528	1
Bombastus	Cooling cream DAB	307927	1
Bombastus	Cooling cream DAB	309365	1
Bombastus	Cooling cream DAB	306934	2
Bombastus	Cooling cream DAB	310003	2
Bombastus	Cooling cream DAB	17000974	1
Bombastus	Cooling cream DAB	17000985	2
Bombastus	Cooling cream DAB	18000332	2
Bombastus	Cooling cream DAB	18000325	2
Bombastus	Cooling cream DAB	18002240	2
Bombastus	Cooling cream DAB	18002086	1
Bombastus	Cooling cream DAB	18005206	1
Bombastus	Cooling cream DAB	19001401	1
Bombastus	Cooling cream DAB	19003479	2
Bombastus	Cooling cream DAB	296316	1
Bombastus	Cooling cream DAB	299361	1
Bombastus	Cooling cream DAB	16095503	1
Bombastus	Cooling cream DAB	309371	3
Bombastus	Cooling cream DAB	19032014A	1
Bombastus	Cooling cream DAB	296317	1
Bombastuts/Gehe	Cooling cream DAB	60082802	1
Bombastuts/Gehe	Cooling cream DAB	307350	1
Bombastuts/Gehe	Cooling cream DAB	307919	1
Bombastuts/Gehe	Cooling cream DAB	308712	1
Bombastuts/Noweda	Cooling cream DAB	300726	1
Bumbastus	Cooling cream DAB	297213	1
Cae/Phönix	Cooling cream DAB	15228601	1
cael	Cooling cream DAB	13004201	1
Caelo	Cooling cream DAB	4061203	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	12312101	2
Caelo	Cooling cream DAB	14101401	1
Caelo	Cooling cream DAB	1798201	1
Caelo	Cooling cream DAB	11322901	1
Caelo	Cooling cream DAB	12045901	1
Caelo	Cooling cream DAB	11323101	2
Caelo	Cooling cream DAB	11323501	1
Caelo	Cooling cream DAB	12002401	1
Caelo	Cooling cream DAB	120601202	1
Caelo	Cooling cream DAB	12089901	1
Caelo	Cooling cream DAB	27061201	1
Caelo	Cooling cream DAB	7071203	1
Caelo	Cooling cream DAB	12001901	3
Caelo	Cooling cream DAB	14071204	1
Caelo	Cooling cream DAB	12089402	2
Caelo	Cooling cream DAB	2081201	1
Caelo	Cooling cream DAB	12174401	4
Caelo	Cooling cream DAB	10081209	1
Caelo	Cooling cream DAB	12089601	5
Caelo	Cooling cream DAB	10081210	1
Caelo	Cooling cream DAB	12090501	2
Caelo	Cooling cream DAB	12052001	1
Caelo	Cooling cream DAB	7091201	1
Caelo	Cooling cream DAB	12187301	4
Caelo	Cooling cream DAB	12182801	3
Caelo	Cooling cream DAB	12178902	3
Caelo	Cooling cream DAB	12253101	4
Caelo	Cooling cream DAB	12090601	1
Caelo	Cooling cream DAB	16101201	1
Caelo	Cooling cream DAB	6111201	1
Caelo	Cooling cream DAB	12174601	2
Caelo	Cooling cream DAB	6111202	1
Caelo	Cooling cream DAB	8111201	1
Caelo	Cooling cream DAB	12253301	2
Caelo	Cooling cream DAB	12174301	2
Caelo	Cooling cream DAB	27111201	1
Caelo	Cooling cream DAB	12292201	6
Caelo	Cooling cream DAB	1287201	1
Caelo	Cooling cream DAB	12253401	2
Caelo	Cooling cream DAB	12292102	12
Caelo	Cooling cream DAB	18121205	1
Caelo	Cooling cream DAB	5132	1
Caelo	Cooling cream DAB	28121203	1
Caelo	Cooling cream DAB	11269101	1
Caelo	Cooling cream DAB	12292401	4
Caelo	Cooling cream DAB	15011304	1
Caelo	Cooling cream DAB	12292301	3
Caelo	Cooling cream DAB	12090401	3
Caelo	Cooling cream DAB	31011301	1
Caelo	Cooling cream DAB	613I-02541	1
Caelo	Cooling cream DAB	7021301	1
Caelo	Cooling cream DAB	12312102	5
Caelo	Cooling cream DAB	12312601	3
Caelo	Cooling cream DAB	13004101	5
Caelo	Cooling cream DAB	22021305	1
Caelo	Cooling cream DAB	12174501	1
Caelo	Cooling cream DAB	28021306	1
Caelo	Cooling cream DAB	913I-02541	1
Caelo	Cooling cream DAB	12364601	13
Caelo	Cooling cream DAB	1113Q-02541	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	1213M-02541	2
Caelo	Cooling cream DAB	13004501	7
Caelo	Cooling cream DAB	12046101	1
Caelo	Cooling cream DAB	13004201	4
Caelo	Cooling cream DAB	8041304	1
Caelo	Cooling cream DAB	12253001	1
Caelo	Cooling cream DAB	13059701	6
Caelo	Cooling cream DAB	22051307	1
Caelo	Cooling cream DAB	13068101	3
Caelo	Cooling cream DAB	6061303	1
Caelo	Cooling cream DAB	22061301	1
Caelo	Cooling cream DAB	13121002	2
Caelo	Cooling cream DAB	13175201	7
Caelo	Cooling cream DAB	26071307	1
Caelo	Cooling cream DAB	13121601	1
Caelo	Cooling cream DAB	16081303	1
Caelo	Cooling cream DAB	13191401	10
Caelo	Cooling cream DAB	30081302	1
Caelo	Cooling cream DAB	10091306	1
Caelo	Cooling cream DAB	13175001	2
Caelo	Cooling cream DAB	25091308	1
Caelo	Cooling cream DAB	13191801	7
Caelo	Cooling cream DAB	13192201	1
Caelo	Cooling cream DAB	13121503	1
Caelo	Cooling cream DAB	28101302	1
Caelo	Cooling cream DAB	279753	1
Caelo	Cooling cream DAB	13226701	4
Caelo	Cooling cream DAB	1322601	1
Caelo	Cooling cream DAB	13227001	3
Caelo	Cooling cream DAB	13327101	1
Caelo	Cooling cream DAB	13315201	9
Caelo	Cooling cream DAB	17121301	1
Caelo	Cooling cream DAB	13227301	4
Caelo	Cooling cream DAB	13227201	7
Caelo	Cooling cream DAB	12011402	1
Caelo	Cooling cream DAB	13401801	27
Caelo	Cooling cream DAB	13402001	5
Caelo	Cooling cream DAB	13402101	7
Caelo	Cooling cream DAB	13315401	1
Caelo	Cooling cream DAB	14000101	2
Caelo	Cooling cream DAB	25021414	1
Caelo	Cooling cream DAB	14000401	2
Caelo	Cooling cream DAB	281140	1
Caelo	Cooling cream DAB	14055301	7
Caelo	Cooling cream DAB	14055601	10
Caelo	Cooling cream DAB	14055702	11
Caelo	Cooling cream DAB	14086101	3
Caelo	Cooling cream DAB	13315901	1
Caelo	Cooling cream DAB	14086201	5
Caelo	Cooling cream DAB	13316001	1
Caelo	Cooling cream DAB	12051401	1
Caelo	Cooling cream DAB	14086401	3
Caelo	Cooling cream DAB	1408631	1
Caelo	Cooling cream DAB	285504	2
Caelo	Cooling cream DAB	4061405	1
Caelo	Cooling cream DAB	1408601	1
Caelo	Cooling cream DAB	1412801	1
Caelo	Cooling cream DAB	1071407	1
Caelo	Cooling cream DAB	14086501	1
Caelo	Cooling cream DAB	21071401	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	14055501	2
Caelo	Cooling cream DAB	1484701	1
Caelo	Cooling cream DAB	2091404	1
Caelo	Cooling cream DAB	14184901	5
Caelo	Cooling cream DAB	1418401	2
Caelo	Cooling cream DAB	30091402	1
Caelo	Cooling cream DAB	14271101	4
Caelo	Cooling cream DAB	142681012	1
Caelo	Cooling cream DAB	14268301	15
Caelo	Cooling cream DAB	14184501	17
Caelo	Cooling cream DAB	14132001	1
Caelo	Cooling cream DAB	14268201	4
Caelo	Cooling cream DAB	1468201	1
Caelo	Cooling cream DAB	8121403	1
Caelo	Cooling cream DAB	14278201	9
Caelo	Cooling cream DAB	23121412	1
Caelo	Cooling cream DAB	14271501	3
Caelo	Cooling cream DAB	30011505	1
Caelo	Cooling cream DAB	15058901	3
Caelo	Cooling cream DAB	15066701	4
Caelo	Cooling cream DAB	15058801	5
Caelo	Cooling cream DAB	15152801	3
Caelo	Cooling cream DAB	15153101	3
Caelo	Cooling cream DAB	15327701	6
Caelo	Cooling cream DAB	15413701	5
Caelo	Cooling cream DAB	1543512	1
Caelo	Cooling cream DAB	14101713	1
Caelo	Cooling cream DAB	14288701	4
Caelo	Cooling cream DAB	14268102	1
Caelo	Cooling cream DAB	5031509	1
Caelo	Cooling cream DAB	14271301	2
Caelo	Cooling cream DAB	14328901	3
Caelo	Cooling cream DAB	123test	2
Caelo	Cooling cream DAB	4051503	2
Caelo	Cooling cream DAB	15017601	1
Caelo	Cooling cream DAB	19051505	1
Caelo	Cooling cream DAB	15152901	4
Caelo	Cooling cream DAB	15066501	2
Caelo	Cooling cream DAB	16071505	1
Caelo	Cooling cream DAB	15153701	8
Caelo	Cooling cream DAB	29081509	1
Caelo	Cooling cream DAB	15228701	9
Caelo	Cooling cream DAB	14143101	1
Caelo	Cooling cream DAB	15066801test	1
Caelo	Cooling cream DAB	15236701	1
Caelo	Cooling cream DAB	1506601	1
Caelo	Cooling cream DAB	295123	1
Caelo	Cooling cream DAB	15417201	6
Caelo	Cooling cream DAB	15328101	3
Caelo	Cooling cream DAB	16085902	6
Caelo	Cooling cream DAB	1686101	1
Caelo	Cooling cream DAB	1256856	1
Caelo	Cooling cream DAB	15000501	1
Caelo	Cooling cream DAB	2x16129501	1
Caelo	Cooling cream DAB	1629401	1
Caelo	Cooling cream DAB	161333801	1
Caelo	Cooling cream DAB	16134202	1
Caelo	Cooling cream DAB	160859	1
Caelo	Cooling cream DAB	302378	1
Caelo	Cooling cream DAB	6002062002	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	1097065	3
Caelo	Cooling cream DAB	1605901	1
Caelo	Cooling cream DAB	304590	1
Caelo	Cooling cream DAB	16133801	2
Caelo	Cooling cream DAB	163020001	1
Caelo	Cooling cream DAB	162446901	1
Caelo	Cooling cream DAB	304582	1
Caelo	Cooling cream DAB	304591	2
Caelo	Cooling cream DAB	170207UL/16323101	1
Caelo	Cooling cream DAB	16031707	1
Caelo	Cooling cream DAB	123456	1
Caelo	Cooling cream DAB	1041702	1
Caelo	Cooling cream DAB	170000301	1
Caelo	Cooling cream DAB	306941	1
Caelo	Cooling cream DAB	6051702	1
Caelo	Cooling cream DAB	301701	1
Caelo	Cooling cream DAB	17061702	1
Caelo	Cooling cream DAB	10071705	1
Caelo	Cooling cream DAB	170754015325	1
Caelo	Cooling cream DAB	17124802	3
Caelo	Cooling cream DAB	17075105	1
Caelo	Cooling cream DAB	309370	1
Caelo	Cooling cream DAB	17254101	26
Caelo	Cooling cream DAB	8003158005	1
Caelo	Cooling cream DAB	17000978	1
Caelo	Cooling cream DAB	17124911	1
Caelo	Cooling cream DAB	173308021	1
Caelo	Cooling cream DAB	18012201	1
Caelo	Cooling cream DAB	12051809	1
Caelo	Cooling cream DAB	18002087	1
Caelo	Cooling cream DAB	8003478008	2
Caelo	Cooling cream DAB	16071809	1
Caelo	Cooling cream DAB	18181201	1
Caelo	Cooling cream DAB	16081812	1
Caelo	Cooling cream DAB	16081813	1
Caelo	Cooling cream DAB	8091807	1
Caelo	Cooling cream DAB	18218301	5
Caelo	Cooling cream DAB	18182602	1
Caelo	Cooling cream DAB	18005204	3
Caelo	Cooling cream DAB	18005202	1
Caelo	Cooling cream DAB	18273001	2
Caelo	Cooling cream DAB	19000333	2
Caelo	Cooling cream DAB	19073802	4
Caelo	Cooling cream DAB	18272601	1
Caelo	Cooling cream DAB	19073801	5
Caelo	Cooling cream DAB	11268501	1
Caelo	Cooling cream DAB	13214010	1
Caelo	Cooling cream DAB	3963/V12/14	1
Caelo	Cooling cream DAB	13315801	4
Caelo	Cooling cream DAB	5600300	1
Caelo	Cooling cream DAB	15338601	2
Caelo	Cooling cream DAB	1700601	2
Caelo	Cooling cream DAB	19001201	4
Caelo	Cooling cream DAB	275666	2
Caelo	Cooling cream DAB	5321500	1
Caelo	Cooling cream DAB	12290102	1
Caelo	Cooling cream DAB	14129402	2
Caelo	Cooling cream DAB	8003478006	1
Caelo	Cooling cream DAB	13051602	3
Caelo	Cooling cream DAB	3964/V01/15	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	13226301	5
Caelo	Cooling cream DAB	14145602	1
Caelo	Cooling cream DAB	16086001-20160615Ma1	1
Caelo	Cooling cream DAB	1523609	1
Caelo	Cooling cream DAB	14086001	3
Caelo	Cooling cream DAB	190744301	1
Caelo	Cooling cream DAB	14055703	2
Caelo	Cooling cream DAB	14185101	5
Caelo	Cooling cream DAB	272479	2
Caelo	Cooling cream DAB	271631	1
Caelo	Cooling cream DAB	273441	2
Caelo	Cooling cream DAB	12089701	1
Caelo	Cooling cream DAB	15434401/20160309/1	1
Caelo	Cooling cream DAB	15434401/20160309/2	1
Caelo	Cooling cream DAB	15434401/201603093	1
Caelo	Cooling cream DAB	18006325	1
Caelo	Cooling cream DAB	310005	1
Caelo	Cooling cream DAB	14184402	3
Caelo	Cooling cream DAB	15066901	2
Caelo	Cooling cream DAB	17000218	1
Caelo	Cooling cream DAB	15053001	3
Caelo	Cooling cream DAB	12291301	1
Caelo	Cooling cream DAB	13225701	2
Caelo	Cooling cream DAB	133227401	1
Caelo	Cooling cream DAB	18001083	2
Caelo	Cooling cream DAB	18001082	3
Caelo	Cooling cream DAB	43(18219201)	1
Caelo	Cooling cream DAB	307358	1
Caelo	Cooling cream DAB	1427801	1
Caelo	Cooling cream DAB	16000801	4
Caelo	Cooling cream DAB	15066801	5
Caelo	Cooling cream DAB	142728301	1
Caelo	Cooling cream DAB	12178901	2
Caelo	Cooling cream DAB	1315601	1
Caelo	Cooling cream DAB	1543502	1
Caelo	Cooling cream DAB	170728UL/17081801	1
Caelo	Cooling cream DAB	19001101	1
Caelo	Cooling cream DAB	1312601	1
Caelo	Cooling cream DAB	13191601	6
Caelo	Cooling cream DAB	13227101	6
Caelo	Cooling cream DAB	13315102	3
Caelo	Cooling cream DAB	295762	1
Caelo	Cooling cream DAB	19237701	1
Caelo	Cooling cream DAB	14000501	5
Caelo	Cooling cream DAB	289265	1
Caelo	Cooling cream DAB	16322901	2
Caelo	Cooling cream DAB	281822	2
Caelo	Cooling cream DAB	17330801	8
Caelo	Cooling cream DAB	18006312	3
Caelo	Cooling cream DAB	18273201	3
Caelo	Cooling cream DAB	16129502	2
Caelo	Cooling cream DAB	17298101	8
Caelo	Cooling cream DAB	3012M-02541	1
Caelo	Cooling cream DAB	5215A-02541	1
Caelo	Cooling cream DAB	17000986	1
Caelo	Cooling cream DAB	12046401	1
Caelo	Cooling cream DAB	17298501	4
Caelo	Cooling cream DAB	19198501	1
Caelo	Cooling cream DAB	19074301	1
Caelo	Cooling cream DAB	14085902	4

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	14129501	4
Caelo	Cooling cream DAB	14145901	10
Caelo	Cooling cream DAB	12312201	4
Caelo	Cooling cream DAB	12291901	2
Caelo	Cooling cream DAB	1290301	1
Caelo	Cooling cream DAB	13192001	8
Caelo	Cooling cream DAB	13315601	6
Caelo	Cooling cream DAB	13402201	16
Caelo	Cooling cream DAB	14000201	7
Caelo	Cooling cream DAB	13225801	1
Caelo	Cooling cream DAB	14000301	11
Caelo	Cooling cream DAB	14086801	4
Caelo	Cooling cream DAB	14132401	12
Caelo	Cooling cream DAB	14278601	4
Caelo	Cooling cream DAB	1502801	1
Caelo	Cooling cream DAB	14184301	1
Caelo	Cooling cream DAB	5735600	1
Caelo	Cooling cream DAB	14268002	1
Caelo	Cooling cream DAB	14329501	3
Caelo	Cooling cream DAB	1513101	2
Caelo	Cooling cream DAB	1509201	1
Caelo	Cooling cream DAB	15153401	1
Caelo	Cooling cream DAB	310989	1
Caelo	Cooling cream DAB	17000226	3
Caelo	Cooling cream DAB	1725421	1
Caelo	Cooling cream DAB	1718902	1
Caelo	Cooling cream DAB	17254001	1
Caelo	Cooling cream DAB	19001401	1
Caelo	Cooling cream DAB	19154901	3
Caelo	Cooling cream DAB	14186601	1
Caelo	Cooling cream DAB	41(17189701)	1
Caelo	Cooling cream DAB	42(17298002)	1
Caelo	Cooling cream DAB	19155001	1
Caelo	Cooling cream DAB	307356	1
Caelo	Cooling cream DAB	310988	1
Caelo	Cooling cream DAB	14185001	8
Caelo	Cooling cream DAB	P158/14	1
Caelo	Cooling cream DAB	15048701	1
Caelo	Cooling cream DAB	293748	1
Caelo	Cooling cream DAB	16000601	11
Caelo	Cooling cream DAB	299352	1
Caelo	Cooling cream DAB	16173001	1
Caelo	Cooling cream DAB	16434201	1
Caelo	Cooling cream DAB	8002320007	2
Caelo	Cooling cream DAB	16354402	6
Caelo	Cooling cream DAB	8002875004	1
Caelo	Cooling cream DAB	170614182	1
Caelo	Cooling cream DAB	306944	1
Caelo	Cooling cream DAB	170926UL/17122701	1
Caelo	Cooling cream DAB	171229UL/17122801	1
Caelo	Cooling cream DAB	17000985	1
Caelo	Cooling cream DAB	18002243	2
Caelo	Cooling cream DAB	18000339	1
Caelo	Cooling cream DAB	18002309	1
Caelo	Cooling cream DAB	18004433	1
Caelo	Cooling cream DAB	19150101	1
Fagron	Cooling cream DAB	18218801	1
Caelo	Cooling cream DAB	12178801	2
Caelo	Cooling cream DAB	12253201	2
Caelo	Cooling cream DAB	12312301	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	13059601	7
Caelo	Cooling cream DAB	12312001	1
Caelo	Cooling cream DAB	4313I-02541	1
Caelo	Cooling cream DAB	14055401	1
Caelo	Cooling cream DAB	14086601	3
Caelo	Cooling cream DAB	14129401	13
Caelo	Cooling cream DAB	14200401	1
Caelo	Cooling cream DAB	15069201	1
Caelo	Cooling cream DAB	1718980	1
Caelo	Cooling cream DAB	19002511	1
Caelo	Cooling cream DAB	1827201	1
Caelo	Cooling cream DAB	14278502	5
Caelo	Cooling cream DAB	17081801-20170818Ma8	1
Caelo	Cooling cream DAB	14145801	2
Caelo	Cooling cream DAB	13121301	5
Caelo	Cooling cream DAB	12090201	2
Caelo	Cooling cream DAB	13004301	3
Caelo	Cooling cream DAB	12364701	2
Caelo	Cooling cream DAB	14132201	4
Caelo	Cooling cream DAB	14145701	5
Caelo	Cooling cream DAB	1915M-02541	1
Caelo	Cooling cream DAB	160850801	1
Caelo	Cooling cream DAB	16000401	1
Caelo	Cooling cream DAB	16301901	6
Caelo	Cooling cream DAB	305022	1
Caelo	Cooling cream DAB	17033011	2
Caelo	Cooling cream DAB	170975201	1
Caelo	Cooling cream DAB	3144-17156801	1
Caelo	Cooling cream DAB	18002305	1
Caelo	Cooling cream DAB	18005206	2
Caelo	Cooling cream DAB	1828801	1
Caelo	Cooling cream DAB	19074401	3
Caelo	Cooling cream DAB	12089301	2
Caelo	Cooling cream DAB	12089201	1
Caelo	Cooling cream DAB	1312091	1
Caelo	Cooling cream DAB	13191301	2
Caelo	Cooling cream DAB	13226901	8
Caelo	Cooling cream DAB	13226602	1
Caelo	Cooling cream DAB	14328701	2
Caelo	Cooling cream DAB	14097214	1
Caelo	Cooling cream DAB	15228801	9
Caelo	Cooling cream DAB	1513201	2
Caelo	Cooling cream DAB	15417601	5
Caelo	Cooling cream DAB	1543501	1
Caelo	Cooling cream DAB	16129601	4
Caelo	Cooling cream DAB	16133901	3
Caelo	Cooling cream DAB	163230001	1
Caelo	Cooling cream DAB	18272502	1
Caelo	Cooling cream DAB	19000756	1
Caelo	Cooling cream DAB	170750101	1
Caelo	Cooling cream DAB	16323001	7
Caelo	Cooling cream DAB	3413E-02541	1
Caeolo/Phönix	Cooling cream DAB	16354401	1
Caesar & Loretz GmbH	Cooling cream DAB	12178901	1
Caesar & Loretz GmbH	Cooling cream DAB	12306001	1
Caesar & Loretz GmbH	Cooling cream DAB	282019	1
Caesar & Loretz GmbH	Cooling cream DAB	13315101	1
Caesar & Loretz GmbH	Cooling cream DAB	13315201	1
Caesar & Loretz GmbH	Cooling cream DAB	14085901	3
Caesar & Loretz GmbH	Cooling cream DAB	14184501	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Cooling cream DAB	15228601	1
Caesar & Loretz GmbH	Cooling cream DAB	15434401	1
Caesar & Loretz GmbH	Cooling cream DAB	14278701	1
Caesar & Loretz GmbH	Cooling cream DAB	18219201	1
Caesar & Loretz GmbH	Cooling cream DAB	18218701	2
Caesar & Loretz GmbH	Cooling cream DAB	18272901	4
Caesar & Loretz GmbH	Cooling cream DAB	18005202	1
Caesar & Loretz GmbH	Cooling cream DAB	18273101	2
Caesar & Loretz GmbH	Cooling cream DAB	19001402	5
Caesar & Loretz GmbH	Cooling cream DAB	19006002	1
Caesar & Loretz GmbH	Cooling cream DAB	18182501	1
Caesar & Loretz GmbH	Cooling cream DAB	18273001	1
Caesar & Loretz GmbH	Cooling cream DAB	19001201	1
Caesar & Loretz GmbH	Cooling cream DAB	19001301	2
Caesar & Loretz GmbH	Cooling cream DAB	19073701	3
Caesar & Loretz GmbH	Cooling cream DAB	19073801	1
Caesar & Loretz GmbH 40...	Cooling cream DAB	11299001	1
Caesar & Loretz GmbH D...	Cooling cream DAB	12253001	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12046001	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12046201	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12174401	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12182801	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12292301	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13059601	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13121401	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13121701	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13175101	4
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13192001	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13315601	1
Caesar und Loretz GmbH	Cooling cream DAB	17122801	1
Caesar&Loretz	Cooling cream DAB	15228501	2
Caesar&Loretz	Cooling cream DAB	16354401	2
Caesar&Loretz/Noweda	Cooling cream DAB	15328001	1
Caesar/Lorenz	Cooling cream DAB	13004401	1
Caleo/Phönix	Cooling cream DAB	14086501	1
calo	Cooling cream DAB	13004701	2
Calo/AHD	Cooling cream DAB	14328702	1
cealo	Cooling cream DAB	15066901	1
Cealo	Cooling cream DAB	14086201	1
Cealo	Cooling cream DAB	14288701	1
Cealo/ Noweda	Cooling cream DAB	14c06-t02010890	1
Cealo/ Noweda	Cooling cream DAB	15228501	1
Cealo/AHD	Cooling cream DAB	15434402	1
Cealo/Gehe	Cooling cream DAB	12052002	2
Celo/ Kehr	Cooling cream DAB	16172001	1
chaelo/gehe	Cooling cream DAB	17254101	2
Chiesi	Cooling cream DAB	15228701	1
Cordes/Gehe	Cooling cream DAB	17255101	1
Cordes/Phönix	Cooling cream DAB	15434402	1
DAB 2008	Cooling cream DAB	12089601	1
DAB 2010	Cooling cream DAB	14269301	1
Defektur	Cooling cream DAB	160308004	1
Delta	Cooling cream DAB	17330802	1
Delta	Cooling cream DAB	18042401	1
Delta Apotheke	Cooling cream DAB	18182301	1
Delta Apotheke	Cooling cream DAB	18182501	2
Dr.August Wolff/Phönix	Cooling cream DAB	16172701	1
E Plus	Cooling cream DAB	305957	1
E Plus	Cooling cream DAB	307929	1
E Plus	Cooling cream DAB	309999	1

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Supplier	Substance	Batch	Spectra
E Plus	Cooling cream DAB	17001961	2
Ebert & Jacobi 02.08.16	Cooling cream DAB	301701	1
Ebert/Lamotte	Cooling cream DAB	8002696003	1
EB-Ho	Cooling cream DAB	295184	1
Euro OTC	Cooling cream DAB	308491	1
Euro OTC	Cooling cream DAB	caelo	1
Euro OTC	Cooling cream DAB	16134201	1
Euro OTC	Cooling cream DAB	306931	1
Euro OTC	Cooling cream DAB	286563	1
Euro OTC	Cooling cream DAB	299976	1
Euro OTC	Cooling cream DAB	307358	1
Euro OTC	Cooling cream DAB	13227101	1
Euro OTC	Cooling cream DAB	8003478007	1
Fagron	Cooling cream DAB	12G25-T02	2
Fagron	Cooling cream DAB	13E10-T01-003539	2
Fagron	Cooling cream DAB	14A20	1
Fagron	Cooling cream DAB	15A30-T07-018974	1
Fagron	Cooling cream DAB	289253	1
Fagron	Cooling cream DAB	B15A30T07018676	1
Fagron	Cooling cream DAB	1802D001	1
Fagron	Cooling cream DAB	18219201	1
Fagron	Cooling cream DAB	1807d001	1
Fagron	Cooling cream DAB	13D19-T01-002941	1
Fagron	Cooling cream DAB	16301801	1
Fagron	Cooling cream DAB	17075101	1
Fagron	Cooling cream DAB	15228601	1
Fagron	Cooling cream DAB	8003478004	3
Fagron	Cooling cream DAB	18002094	1
Fagron	Cooling cream DAB	277533	1
Fagron	Cooling cream DAB	14132001	1
Fagron	Cooling cream DAB	18002243	1
Fagron	Cooling cream DAB	304595	1
Fagron	Cooling cream DAB	7070001	1
Fagron	Cooling cream DAB	15236801	1
Fiebig	Cooling cream DAB	18218301	2
Fiebig ek: 9.07EUR	Cooling cream DAB	1204001	1
Fontapharm/Phönix	Cooling cream DAB	286565	1
gehe	Cooling cream DAB	13315102	1
gehe	Cooling cream DAB	17189701	1
Gehe	Cooling cream DAB	266839	2
Gehe	Cooling cream DAB	269098	3
Gehe	Cooling cream DAB	269093	2
Gehe	Cooling cream DAB	271535	1
Gehe	Cooling cream DAB	270314	1
Gehe	Cooling cream DAB	12292401	1
Gehe	Cooling cream DAB	274044	2
Gehe	Cooling cream DAB	274909	2
Gehe	Cooling cream DAB	12312801	1
Gehe	Cooling cream DAB	12364601	1
Gehe	Cooling cream DAB	13004701	1
Gehe	Cooling cream DAB	276283	3
Gehe	Cooling cream DAB	279681	2
Gehe	Cooling cream DAB	13191501	1
Gehe	Cooling cream DAB	278518	1
Gehe	Cooling cream DAB	283053	1
Gehe	Cooling cream DAB	282020	1
Gehe	Cooling cream DAB	13315201	1
Gehe	Cooling cream DAB	283114	1
Gehe	Cooling cream DAB	281036	1
Gehe	Cooling cream DAB	282022	1

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Supplier	Substance	Batch	Spectra
Gehe	Cooling cream DAB	284300	1
Gehe	Cooling cream DAB	285066	1
Gehe	Cooling cream DAB	286565	1
Gehe	Cooling cream DAB	14129402	1
Gehe	Cooling cream DAB	290485	2
Gehe	Cooling cream DAB	14329501	1
Gehe	Cooling cream DAB	293618	1
Gehe	Cooling cream DAB	293677	1
Gehe	Cooling cream DAB	294121	1
Gehe	Cooling cream DAB	295023	1
Gehe	Cooling cream DAB	15417201	1
Gehe	Cooling cream DAB	6001092002	1
Gehe	Cooling cream DAB	16244601	1
Gehe	Cooling cream DAB	6003682010	3
Gehe	Cooling cream DAB	8002320007	1
Gehe	Cooling cream DAB	8002320008	1
Gehe	Cooling cream DAB	305961	1
Gehe	Cooling cream DAB	308723	5
Gehe	Cooling cream DAB	17002971	1
Gehe	Cooling cream DAB	19000331	1
GEHE	Cooling cream DAB	12364801	1
GEHE	Cooling cream DAB	304594	1
GEHE	Cooling cream DAB	305953	1
GEHE	Cooling cream DAB	307933	1
GEHE	Cooling cream DAB	308725	1
GEHE	Cooling cream DAB	309370	1
GEHE	Cooling cream DAB	17254101	1
GEHE	Cooling cream DAB	18042801	1
GEHE	Cooling cream DAB	18182702	1
GEHE	Cooling cream DAB	18218701	1
GEHE	Cooling cream DAB	18183301	1
GEHE	Cooling cream DAB	19074401	1
GEHE	Cooling cream DAB	19074501	1
GEHE	Cooling cream DAB	19154701	1
Caelo	Cooling cream DAB	14258301	1
GEHE 3.04.2014	Cooling cream DAB	14055703	2
gehe 7.12.13	Cooling cream DAB	13226701	1
Gehe am 03.02.2014	Cooling cream DAB	1322701	1
Bombastus	Cooling cream DAB	288159	1
Bombastus	Cooling cream DAB	299973	1
Bombastus	Cooling cream DAB	302377	1
Bombastus	Cooling cream DAB	305017	2
Bombastus	Cooling cream DAB	307931	1
Bombastus	Cooling cream DAB	17000227	1
Bombastus	Cooling cream DAB	265548	1
Bombastus	Cooling cream DAB	268073	3
Caelo	Cooling cream DAB	1291116	1
Caelo	Cooling cream DAB	308723	1
Caelo	Cooling cream DAB	1040917/17075201	1
Caelo	Cooling cream DAB	17255901	2
Caelo	Cooling cream DAB	17296401	1
Caelo	Cooling cream DAB	18002094	1
Euro OTC	Cooling cream DAB	16129501	1
Gutenberg-Apotheke	Cooling cream DAB	84187	1
Hedinger/Gehe	Cooling cream DAB	16134201	1
Henry L/Spangro	Cooling cream DAB	80026960003	1
Henry L/Spangro	Cooling cream DAB	8003158005	4
Henry L/Spangro	Cooling cream DAB	8003478005	6
Henry Lamotte	Cooling cream DAB	5407300	1
Henry Lamotte	Cooling cream DAB	5496300	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Cooling cream DAB	14328702	1
Henry Lamotte	Cooling cream DAB	8003158004	3
Henry Lamotte	Cooling cream DAB	8003478006	1
Henry Lamotte	Cooling cream DAB	8005213001	1
Henry Lamotte Oils	Cooling cream DAB	6003682010	1
Henry Lamotte Oils	Cooling cream DAB	6001092001	1
Henry Lamotte Oils / Al...	Cooling cream DAB	6012127001	1
Henry Lamotte Oils / Gehe	Cooling cream DAB	8002875004	1
Henry Lamotte Oils GmbH	Cooling cream DAB	12292301	3
Henry Lamotte Oils GmbH	Cooling cream DAB	17001970	2
Henry Lamotte Oils GmbH	Cooling cream DAB	6012127001	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8003478005	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8003478008	2
Henry Lamotte oils GmbH...	Cooling cream DAB	8002320008	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	6002062002	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8002320007	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8003478006	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8004538001	1
Henry Lamotte Oils/ Gehe	Cooling cream DAB	8003158004	2
Henry Lamotte Oils/GEHE	Cooling cream DAB	5407600	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5496200	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5600300	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5691200	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5735600	1
Henry Lamotte Oils GmbH	Cooling cream DAB	5735600	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	5600300	2
Henry Lamotte/Anzag	Cooling cream DAB	8002320007	1
Henry Lamotte/GEHE	Cooling cream DAB	5163700	1
Henry Lamotte/GEHE	Cooling cream DAB	5316800	1
Henry Lamotte/GEHE	Cooling cream DAB	5321500	1
Henry Lamotte/GEHE	Cooling cream DAB	5407300	1
Henry Lamotte/N/19.11.12	Cooling cream DAB	5253700	1
Henry Lamotte/Noweda	Cooling cream DAB	8003478005	1
Henry Lamotte/Noweda	Cooling cream DAB	8003478006	1
Henry Lamotte Oils GmbH	Cooling cream DAB	6002062002	1
HenryFiebig	Cooling cream DAB	8003478007	1
HenryL/Spangro	Cooling cream DAB	61360	1
Hepart	Cooling cream DAB	18042402	1
Herbasinica	Cooling cream DAB	14085901	1
Hubert Müller	Cooling cream DAB	15417501	1
Ichthyol	Cooling cream DAB	16000801	1
Ichthyol	Cooling cream DAB	19000762	1
Ichthyol Gesellschaft	Cooling cream DAB	17254501	1
ichthyol/AHD	Cooling cream DAB	281921	2
Ichthyol-Gesellschaft	Cooling cream DAB	16172601	1
Kehr	Cooling cream DAB	8002875004	1
Kehr	Cooling cream DAB	301702	1
Kehr	Cooling cream DAB	17000986	1
Kehr	Cooling cream DAB	18182701	1
Klenk	Cooling cream DAB	17033001	3
Klenk	Cooling cream DAB	13226801	1
Kremer/Phönix	Cooling cream DAB	15/158/K	1
L12	Cooling cream DAB	16301801	4
Lamotte	Cooling cream DAB	13226601	1
Lamotte	Cooling cream DAB	600008306	1
Lamotte	Cooling cream DAB	6000744001	1
Lamotte	Cooling cream DAB	8003478007	2
Lamotte / AHC	Cooling cream DAB	8005213001	5
Lamotte / AHD	Cooling cream DAB	8003478004	1
Lamotte / Phönix	Cooling cream DAB	6012127002	3

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Supplier	Substance	Batch	Spectra
Lamotte Sanacorp	Cooling cream DAB	5496200	3
Lamotte Sanacorp	Cooling cream DAB	5600300	1
Lamotte/ Phönix	Cooling cream DAB	5600300	1
Lamotte/AHC	Cooling cream DAB	8002696003	1
Lamotte/AHD	Cooling cream DAB	5600300	2
Lamotte/AHD	Cooling cream DAB	6001092001	1
Lamotte/AHD	Cooling cream DAB	8002696003	3
Lamotte/AHD	Cooling cream DAB	8003478005	2
Lamotte/AHD	Cooling cream DAB	8003478007	2
Lamotte/AHD	Cooling cream DAB	8003478008	1
Lamotte/AHD	Cooling cream DAB	8003478009	1
Lamotte/AHD	Cooling cream DAB	6012127002	1
Lamotte/AHD	Cooling cream DAB	8005213001	1
Lamotte/Alliance	Cooling cream DAB	15417201	1
lamotte/anzag	Cooling cream DAB	8002112004	1
lamotte/anzag	Cooling cream DAB	8002320008	1
Lamotte/Anzag	Cooling cream DAB	5496200	2
Lamotte/Anzag	Cooling cream DAB	6002062003	1
Lamotte/Noweda	Cooling cream DAB	6002062003	1
Lamotte/Noweda	Cooling cream DAB	8002320008	1
Lamotte/Phoenix	Cooling cream DAB	8003478007	4
Lamotte/Phoenix	Cooling cream DAB	8003478008	7
lamotte/sanacorb	Cooling cream DAB	5496200	1
Lamotte/Spangro	Cooling cream DAB	5735700	1
Lamotte/Spangro	Cooling cream DAB	5861100	12
Lamotte/Spangro	Cooling cream DAB	6001092002	8
Lamotte/Spangro	Cooling cream DAB	8002320008	2
Lamotte/Spangro	Cooling cream DAB	8002696003	8
Lamotte/Spangroh	Cooling cream DAB	6000744001	3
Maros/Phoenix	Cooling cream DAB	13191901	1
Midas	Cooling cream DAB	16244701	1
Midas	Cooling cream DAB	306938	1
Midas	Cooling cream DAB	17033001	6
Midas	Cooling cream DAB	308717	1
Midas	Cooling cream DAB	3100001	1
Midas	Cooling cream DAB	17000227	1
Midas	Cooling cream DAB	17000220	1
Midas	Cooling cream DAB	17254201	1
Midas	Cooling cream DAB	18042401	1
Midas	Cooling cream DAB	18002090	2
Midas	Cooling cream DAB	18004426	2
Midas	Cooling cream DAB	18182401	1
Bombastus	Cooling cream DAB	18006315	1
Bombastus	Cooling cream DAB	19000761	1
Bombastus	Cooling cream DAB	19001419	2
Nachprüfung	Cooling cream DAB	123456	1
Noweda	Cooling cream DAB	12992301	1
Noweda	Cooling cream DAB	274043	1
Noweda	Cooling cream DAB	13121002	1
Noweda	Cooling cream DAB	276284	1
Noweda	Cooling cream DAB	13315101	1
Noweda	Cooling cream DAB	14085901	1
Noweda	Cooling cream DAB	14129801	2
Noweda	Cooling cream DAB	15066601	1
Noweda	Cooling cream DAB	15417201	1
Noweda	Cooling cream DAB	16000801	1
Noweda	Cooling cream DAB	306943	1
Noweda	Cooling cream DAB	16323101	1
Noweda	Cooling cream DAB	17122801	3
Noweda	Cooling cream DAB	8003478005	1

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Supplier	Substance	Batch	Spectra
Noweda	Cooling cream DAB	17075101	1
Noweda	Cooling cream DAB	17157201	1
Noweda	Cooling cream DAB	17254301	2
Noweda	Cooling cream DAB	17298101	1
Caelo	Cooling cream DAB	13315701	3
Caelo	Cooling cream DAB	14132301	8
Euro OTC	Cooling cream DAB	16129701	1
Bombastus	Cooling cream DAB	306941	1
Noweda/Henry	Cooling cream DAB	8003478007	1
Pharmachem/AHD	Cooling cream DAB	279680	1
phoenix	Cooling cream DAB	308717	1
Phoenix	Cooling cream DAB	269094	1
Phoenix	Cooling cream DAB	16085801	1
Phoenix	Cooling cream DAB	16086001	1
Phoenix	Cooling cream DAB	16134001	1
Phoenix	Cooling cream DAB	16172001	1
Phoenix	Cooling cream DAB	16172701	1
Phoenix	Cooling cream DAB	306932	1
Phoenix	Cooling cream DAB	17038501	1
Phoenix	Cooling cream DAB	17075401	1
Phoenix	Cooling cream DAB	17254201	1
Phoenix	Cooling cream DAB	17189801	1
Phoenix	Cooling cream DAB	18218301	1
Phoenix 07.12.18	Cooling cream DAB	18218601	1
Phoenix 20.06.2014	Cooling cream DAB	14086001	1
Caelo	Cooling cream DAB	12312801	3
Caelo	Cooling cream DAB	13059501	2
Caelo	Cooling cream DAB	13121501	1
Caelo	Cooling cream DAB	13401901	13
phönix	Cooling cream DAB	12292201	1
phönix	Cooling cream DAB	12312102	1
phönix	Cooling cream DAB	15435101	1
phönix	Cooling cream DAB	17033001	1
Phönix	Cooling cream DAB	268978	1
Phönix	Cooling cream DAB	271541	1
Phönix	Cooling cream DAB	12312101	2
Phönix	Cooling cream DAB	13059501	1
Phönix	Cooling cream DAB	13051602	1
Phönix	Cooling cream DAB	13059901	1
Phönix	Cooling cream DAB	13121701	1
Phönix	Cooling cream DAB	278516	2
Phönix	Cooling cream DAB	13192101	1
Phönix	Cooling cream DAB	13191801	1
Phönix	Cooling cream DAB	13226302	1
Phönix	Cooling cream DAB	13227401	1
Phönix	Cooling cream DAB	14055401	2
Phönix	Cooling cream DAB	14850901	1
Phönix	Cooling cream DAB	287486	1
Phönix	Cooling cream DAB	289188	1
Phönix	Cooling cream DAB	14328801	1
Phönix	Cooling cream DAB	15434401	1
Phönix	Cooling cream DAB	17033001	2
PHÖNIX	Cooling cream DAB	17254301	1
PHÖNIX	Cooling cream DAB	17254901	1
Phönix 26.10.12	Cooling cream DAB	12187301	1
Phönix Gotha	Cooling cream DAB	12089501	1
Phönix Gotha	Cooling cream DAB	SRTM1104	1
Caelo	Cooling cream DAB	305131	1
Bombastus	Cooling cream DAB	274079	1
Caelo	Cooling cream DAB	13004601	4

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	14184701	5
Caelo	Cooling cream DAB	17345103	1
Euro OTC	Cooling cream DAB	311218182501	1
Rondell Apotheke	Cooling cream DAB	15228601	1
Sana 29.12.14 EK 5,59	Cooling cream DAB	14268301	1
Caelo	Cooling cream DAB	13227401	9
sanacorp	Cooling cream DAB	15228601	1
Sanacorp	Cooling cream DAB	12187201	1
Sanacorp	Cooling cream DAB	12187301	1
Sanacorp	Cooling cream DAB	12312401	1
Sanacorp	Cooling cream DAB	274077	1
Sanacorp	Cooling cream DAB	12312801	1
Sanacorp	Cooling cream DAB	13004401	2
Sanacorp	Cooling cream DAB	13059601	1
Sanacorp	Cooling cream DAB	13192101	1
Sanacorp	Cooling cream DAB	13121001	1
Sanacorp	Cooling cream DAB	13226701	1
Sanacorp	Cooling cream DAB	281037	1
Sanacorp	Cooling cream DAB	13226501	1
Sanacorp	Cooling cream DAB	13402001	1
Sanacorp	Cooling cream DAB	13227001	1
Sanacorp	Cooling cream DAB	13401801	1
Sanacorp	Cooling cream DAB	73AKD4	1
Sanacorp	Cooling cream DAB	14145501	1
Sanacorp	Cooling cream DAB	14268101	1
Sanacorp	Cooling cream DAB	76/AKD3	1
Sanacorp	Cooling cream DAB	14328801	2
Sanacorp	Cooling cream DAB	77/AKD6	1
Sanacorp	Cooling cream DAB	15413901	1
Sanacorp	Cooling cream DAB	77/AKD10	1
Sanacorp	Cooling cream DAB	307932	1
Sanacorp	Cooling cream DAB	17075101	1
Sanacorp	Cooling cream DAB	17157001	2
Sanacorp	Cooling cream DAB	17000228	4
Sanacorp	Cooling cream DAB	17189701	1
Sanacorp	Cooling cream DAB	17254501	1
Sanacorp	Cooling cream DAB	17000984	1
Sanacorp	Cooling cream DAB	17001970	1
Sanacorp	Cooling cream DAB	18000337	1
Sanacorp	Cooling cream DAB	18001077	1
Sanacorp	Cooling cream DAB	18002239	1
Sanacorp	Cooling cream DAB	18005199	1
Sanacorp	Cooling cream DAB	19001501	1
Sanacorp 08.03.2017 EK:...	Cooling cream DAB	16301801	1
sanacorp, 9,51EUR, 27.09....	Cooling cream DAB	16172001	1
Bombastus	Cooling cream DAB	268981	1
Bombastus	Cooling cream DAB	270381	1
Bombastus	Cooling cream DAB	270309	1
Bombastus	Cooling cream DAB	271726	1
Bombastus	Cooling cream DAB	272573	2
Bombastus	Cooling cream DAB	18001086	1
Bombastus	Cooling cream DAB	18002085	6
Bombastus	Cooling cream DAB	18004427	1
Bombastus	Cooling cream DAB	18005604	1
Caelo	Cooling cream DAB	12002501	3
Caelo	Cooling cream DAB	72/AD2	1
Caelo	Cooling cream DAB	73/AKD3	1
Sanacorp/Ebert	Cooling cream DAB	17156901	1
Sanacorp/Henry Lamotte	Cooling cream DAB	6000083005	1
Sanacorp/Henry Lamotte	Cooling cream DAB	6003682010	3

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Supplier	Substance	Batch	Spectra
sanacorp/ichthyol	Cooling cream DAB	16086001	1
sanacorp/Lamotte	Cooling cream DAB	5735600	1
Sonnen-Apotheke Wefensl...	Cooling cream DAB	17000971	2
VDL	Cooling cream DAB	12090501	1
AHD	Cooling cream DAB 6 (stabili...	18218301	1
Caelo	Cooling cream DAB 6 (stabili...	17157301	8
Anzag	Cooling cream DAB 6 (stabili...	17075102	1
Bombastus	Cooling cream DAB 6 (stabili...	17254201	2
Bombastus	Cooling cream DAB 6 (stabili...	298319	1
Bombastus	Cooling cream DAB 6 (stabili...	303621	3
Bombastus	Cooling cream DAB 6 (stabili...	304585	2
Bombastus	Cooling cream DAB 6 (stabili...	308711	1
Bombastus	Cooling cream DAB 6 (stabili...	303620	3
Bombastus	Cooling cream DAB 6 (stabili...	305953	3
Bombastus	Cooling cream DAB 6 (stabili...	2/2018	1
Bombastus	Cooling cream DAB 6 (stabili...	17189701	5
Bombastus	Cooling cream DAB 6 (stabili...	18000327	3
Bombastus	Cooling cream DAB 6 (stabili...	290486	1
Bombastus	Cooling cream DAB 6 (stabili...	295191	1
Bombastus	Cooling cream DAB 6 (stabili...	310976	2
Bombastus	Cooling cream DAB 6 (stabili...	19001418	2
Caelo	Cooling cream DAB 6 (stabili...	14145501	22
Caelo	Cooling cream DAB 6 (stabili...	14184801	6
Caelo	Cooling cream DAB 6 (stabili...	15134404	1
Caelo	Cooling cream DAB 6 (stabili...	5328001	1
Caelo	Cooling cream DAB 6 (stabili...	15434402	21
Caelo	Cooling cream DAB 6 (stabili...	1097214	1
Caelo	Cooling cream DAB 6 (stabili...	1712901	1
Caelo	Cooling cream DAB 6 (stabili...	18182601	12
Caelo	Cooling cream DAB 6 (stabili...	12312401	10
Caelo	Cooling cream DAB 6 (stabili...	12182701	7
Caelo	Cooling cream DAB 6 (stabili...	20130912-3	1
Caelo	Cooling cream DAB 6 (stabili...	213E-02541	1
Caelo	Cooling cream DAB 6 (stabili...	12312501	4
Caelo	Cooling cream DAB 6 (stabili...	13004401	4
Caelo	Cooling cream DAB 6 (stabili...	13047201	2
Caelo	Cooling cream DAB 6 (stabili...	12187201	3
Caelo	Cooling cream DAB 6 (stabili...	13120901	20
Caelo	Cooling cream DAB 6 (stabili...	13051401	7
Caelo	Cooling cream DAB 6 (stabili...	12364801	5
Caelo	Cooling cream DAB 6 (stabili...	13059901	11
Caelo	Cooling cream DAB 6 (stabili...	13191501	5
Caelo	Cooling cream DAB 6 (stabili...	13226801	21
Caelo	Cooling cream DAB 6 (stabili...	13191901	5
Caelo	Cooling cream DAB 6 (stabili...	14129801	21
Caelo	Cooling cream DAB 6 (stabili...	14086301	10
Caelo	Cooling cream DAB 6 (stabili...	14271201	3
Caelo	Cooling cream DAB 6 (stabili...	14271401	9
Caelo	Cooling cream DAB 6 (stabili...	14278401	4
Caelo	Cooling cream DAB 6 (stabili...	14329301	8
Caelo	Cooling cream DAB 6 (stabili...	14329601	9
Caelo	Cooling cream DAB 6 (stabili...	14184601	22
Caelo	Cooling cream DAB 6 (stabili...	15153201	10
Caelo	Cooling cream DAB 6 (stabili...	15228502	5
Caelo	Cooling cream DAB 6 (stabili...	15228601	43
Caelo	Cooling cream DAB 6 (stabili...	15052801	20
Caelo	Cooling cream DAB 6 (stabili...	15228401	6
Caelo	Cooling cream DAB 6 (stabili...	15237101	14
Caelo	Cooling cream DAB 6 (stabili...	15228501	29
Caelo	Cooling cream DAB 6 (stabili...	15327801	5

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	15417501	8
Caelo	Cooling cream DAB 6 (stabili...	1547501	2
Caelo	Cooling cream DAB 6 (stabili...	15434502	18
Caelo	Cooling cream DAB 6 (stabili...	16086101	11
Caelo	Cooling cream DAB 6 (stabili...	16129401	11
Caelo	Cooling cream DAB 6 (stabili...	16129501	13
Caelo	Cooling cream DAB 6 (stabili...	16134201	41
Caelo	Cooling cream DAB 6 (stabili...	16134101	8
Caelo	Cooling cream DAB 6 (stabili...	16171901	7
Caelo	Cooling cream DAB 6 (stabili...	16172601	52
Caelo	Cooling cream DAB 6 (stabili...	16172501	1
Caelo	Cooling cream DAB 6 (stabili...	16172801	9
Caelo	Cooling cream DAB 6 (stabili...	16244701	62
Caelo	Cooling cream DAB 6 (stabili...	1617260	1
Caelo	Cooling cream DAB 6 (stabili...	16244601	12
Caelo	Cooling cream DAB 6 (stabili...	1630210101097214	1
Caelo	Cooling cream DAB 6 (stabili...	16246201	13
Caelo	Cooling cream DAB 6 (stabili...	16301801	30
Caelo	Cooling cream DAB 6 (stabili...	16302001	6
Caelo	Cooling cream DAB 6 (stabili...	16323101	4
Caelo	Cooling cream DAB 6 (stabili...	16354401	31
Caelo	Cooling cream DAB 6 (stabili...	17035301	12
Caelo	Cooling cream DAB 6 (stabili...	16301702	6
Caelo	Cooling cream DAB 6 (stabili...	17000501	3
Caelo	Cooling cream DAB 6 (stabili...	17000401	9
Caelo	Cooling cream DAB 6 (stabili...	17000301	11
Caelo	Cooling cream DAB 6 (stabili...	17074801	11
Caelo	Cooling cream DAB 6 (stabili...	17035501	4
Caelo	Cooling cream DAB 6 (stabili...	17035401	7
Caelo	Cooling cream DAB 6 (stabili...	17075301	15
Caelo	Cooling cream DAB 6 (stabili...	17075102	3
Caelo	Cooling cream DAB 6 (stabili...	17075001	16
Caelo	Cooling cream DAB 6 (stabili...	17081801	15
Caelo	Cooling cream DAB 6 (stabili...	1705401	1
Caelo	Cooling cream DAB 6 (stabili...	17115701	13
Caelo	Cooling cream DAB 6 (stabili...	17122801	11
Caelo	Cooling cream DAB 6 (stabili...	17156801	24
Caelo	Cooling cream DAB 6 (stabili...	17124801	4
Caelo	Cooling cream DAB 6 (stabili...	13121717	1
Caelo	Cooling cream DAB 6 (stabili...	8003478005	1
Caelo	Cooling cream DAB 6 (stabili...	17189701	11
Caelo	Cooling cream DAB 6 (stabili...	17157001	13
Caelo	Cooling cream DAB 6 (stabili...	17157201	3
Caelo	Cooling cream DAB 6 (stabili...	17254501	11
Caelo	Cooling cream DAB 6 (stabili...	29011801	1
Caelo	Cooling cream DAB 6 (stabili...	1715002	1
Caelo	Cooling cream DAB 6 (stabili...	172545015478	1
Caelo	Cooling cream DAB 6 (stabili...	17254201	27
Caelo	Cooling cream DAB 6 (stabili...	17254801	5
Caelo	Cooling cream DAB 6 (stabili...	23051806	1
Caelo	Cooling cream DAB 6 (stabili...	23051809	1
Caelo	Cooling cream DAB 6 (stabili...	20061802	1
Caelo	Cooling cream DAB 6 (stabili...	18042801	21
Caelo	Cooling cream DAB 6 (stabili...	172983010	1
Caelo	Cooling cream DAB 6 (stabili...	18042401	30
Caelo	Cooling cream DAB 6 (stabili...	18104601	6
Caelo	Cooling cream DAB 6 (stabili...	1812401	1
Caelo	Cooling cream DAB 6 (stabili...	18042403	4
Caelo	Cooling cream DAB 6 (stabili...	18182901	7
Caelo	Cooling cream DAB 6 (stabili...	18183101	7

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	6111802	1
Caelo	Cooling cream DAB 6 (stabili...	18183301	7
Caelo	Cooling cream DAB 6 (stabili...	5011902	1
Caelo	Cooling cream DAB 6 (stabili...	18218502	1
Caelo	Cooling cream DAB 6 (stabili...	19001402	6
Caelo	Cooling cream DAB 6 (stabili...	18258401	1
Caelo	Cooling cream DAB 6 (stabili...	19073701	10
Caelo	Cooling cream DAB 6 (stabili...	17254901	3
Caelo	Cooling cream DAB 6 (stabili...	182188	1
Caelo	Cooling cream DAB 6 (stabili...	19074501	8
Caelo	Cooling cream DAB 6 (stabili...	181046	2
Caelo	Cooling cream DAB 6 (stabili...	18218801	7
Caelo	Cooling cream DAB 6 (stabili...	18272802	4
Caelo	Cooling cream DAB 6 (stabili...	15434501	26
Caelo	Cooling cream DAB 6 (stabili...	17125002	9
Caelo	Cooling cream DAB 6 (stabili...	17156901	5
Caelo	Cooling cream DAB 6 (stabili...	18183401	11
Caelo	Cooling cream DAB 6 (stabili...	18218601	17
Caelo	Cooling cream DAB 6 (stabili...	18218901	9
Caelo	Cooling cream DAB 6 (stabili...	13121701	8
Caelo	Cooling cream DAB 6 (stabili...	15014701	1
Caelo	Cooling cream DAB 6 (stabili...	17000601	47
Caelo	Cooling cream DAB 6 (stabili...	19150201	1
Caelo	Cooling cream DAB 6 (stabili...	17157101	12
Caelo	Cooling cream DAB 6 (stabili...	19001403	2
Caelo	Cooling cream DAB 6 (stabili...	17254301-20180206Ma1	1
Caelo	Cooling cream DAB 6 (stabili...	18219401	4
Caelo	Cooling cream DAB 6 (stabili...	18273101	5
Caelo	Cooling cream DAB 6 (stabili...	13174901	2
Caelo	Cooling cream DAB 6 (stabili...	13226302	7
Caelo	Cooling cream DAB 6 (stabili...	17189802	8
Caelo	Cooling cream DAB 6 (stabili...	18183001	4
Caelo	Cooling cream DAB 6 (stabili...	17157002	8
Caelo	Cooling cream DAB 6 (stabili...	17298401	14
Caelo	Cooling cream DAB 6 (stabili...	17298301	5
Caelo	Cooling cream DAB 6 (stabili...	18042701	13
Caelo	Cooling cream DAB 6 (stabili...	14278301	17
Caelo	Cooling cream DAB 6 (stabili...	12312701	4
Caelo	Cooling cream DAB 6 (stabili...	16129701	6
Caelo	Cooling cream DAB 6 (stabili...	16085801	14
Caelo	Cooling cream DAB 6 (stabili...	15153301	5
Caelo	Cooling cream DAB 6 (stabili...	15413601	6
Caelo	Cooling cream DAB 6 (stabili...	15413901	6
Caelo	Cooling cream DAB 6 (stabili...	12179001	4
Caelo	Cooling cream DAB 6 (stabili...	13121401	9
Caelo	Cooling cream DAB 6 (stabili...	13191701	8
Caelo	Cooling cream DAB 6 (stabili...	13175101	8
Caelo	Cooling cream DAB 6 (stabili...	17124901	12
Caelo	Cooling cream DAB 6 (stabili...	18042402	6
Caelo	Cooling cream DAB 6 (stabili...	15328001	54
Caelo	Cooling cream DAB 6 (stabili...	16246301	15
Caelo	Cooling cream DAB 6 (stabili...	15049202	6
Caelo	Cooling cream DAB 6 (stabili...	15417301	5
Caelo	Cooling cream DAB 6 (stabili...	16000501	9
Caelo	Cooling cream DAB 6 (stabili...	15435101	18
Caelo	Cooling cream DAB 6 (stabili...	16000201	9
Caelo	Cooling cream DAB 6 (stabili...	16222401	1
Caelo	Cooling cream DAB 6 (stabili...	16222402	1
Caelo	Cooling cream DAB 6 (stabili...	17041301	4
Caelo	Cooling cream DAB 6 (stabili...	17075201	38

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	17075101	19
Caelo	Cooling cream DAB 6 (stabili...	17298201	6
Caelo	Cooling cream DAB 6 (stabili...	17298701	3
Caelo	Cooling cream DAB 6 (stabili...	18218701	12
Caelo	Cooling cream DAB 6 (stabili...	18219301	3
Caelo	Cooling cream DAB 6 (stabili...	19001501	4
Caelo	Cooling cream DAB 6 (stabili...	13121001	9
Caelo	Cooling cream DAB 6 (stabili...	17125101	10
Caelo	Cooling cream DAB 6 (stabili...	17189801	9
Caelo	Cooling cream DAB 6 (stabili...	18182702	4
Caelo	Cooling cream DAB 6 (stabili...	15049201	20
Caelo	Cooling cream DAB 6 (stabili...	16134001	8
Caelo	Cooling cream DAB 6 (stabili...	16123501	1
Caelo	Cooling cream DAB 6 (stabili...	16172701	9
Caelo	Cooling cream DAB 6 (stabili...	17117401	1
Caelo	Cooling cream DAB 6 (stabili...	17298001	16
Caelo	Cooling cream DAB 6 (stabili...	18021803	1
Caelo	Cooling cream DAB 6 (stabili...	17115901	3
Caelo	Cooling cream DAB 6 (stabili...	13226501	9
Caelo	Cooling cream DAB 6 (stabili...	15413501	5
Caelo	Cooling cream DAB 6 (stabili...	13121201	10
Caelo	Cooling cream DAB 6 (stabili...	15153501	23
Caelo	Cooling cream DAB 6 (stabili...	1718970101	1
Caelo	Cooling cream DAB 6 (stabili...	19001301	1
Caelo	Cooling cream DAB 6 (stabili...	19074101	6
Caelo	Cooling cream DAB 6 (stabili...	17298002	8
Caelo	Cooling cream DAB 6 (stabili...	17199003	1
Caelo	Cooling cream DAB 6 (stabili...	18189702	1
Caelo	Cooling cream DAB 6 (stabili...	18258402	1
Caelo	Cooling cream DAB 6 (stabili...	19047002	2
Caelo	Cooling cream DAB 6 (stabili...	16172001	11
Caelo	Cooling cream DAB 6 (stabili...	18218503	2
Caelo	Cooling cream DAB 6 (stabili...	13175301	26
Caelo	Cooling cream DAB 6 (stabili...	17254401	6
Caelo	Cooling cream DAB 6 (stabili...	14328801	26
Caelo	Cooling cream DAB 6 (stabili...	15153001	4
Caelo	Cooling cream DAB 6 (stabili...	15059201	34
Caelo	Cooling cream DAB 6 (stabili...	15236901	26
Caelo	Cooling cream DAB 6 (stabili...	15236801	4
Caelo	Cooling cream DAB 6 (stabili...	15327901	5
Caelo	Cooling cream DAB 6 (stabili...	16086001	7
Caelo	Cooling cream DAB 6 (stabili...	16302101	9
Caelo	Cooling cream DAB 6 (stabili...	170522UL/16323101	1
Caelo	Cooling cream DAB 6 (stabili...	17117402	4
Caelo	Cooling cream DAB 6 (stabili...	17254301	4
Caelo	Cooling cream DAB 6 (stabili...	181016186	2
Caelo	Cooling cream DAB 6 (stabili...	18002802	1
Caelo	Cooling cream DAB 6 (stabili...	18106401	4
Caelo	Cooling cream DAB 6 (stabili...	18104501	12
Caelo	Cooling cream DAB 6 (stabili...	18182301	20
Caelo	Cooling cream DAB 6 (stabili...	18182701	15
Caelo	Cooling cream DAB 6 (stabili...	18183201	3
Caelo	Cooling cream DAB 6 (stabili...	13192101	13
Caelo	Cooling cream DAB 6 (stabili...	14329401	9
Caelo	Cooling cream DAB 6 (stabili...	16089702	1
Caelo	Cooling cream DAB 6 (stabili...	16085901	17
Caelo	Cooling cream DAB 6 (stabili...	17038501	11
Caelo	Cooling cream DAB 6 (stabili...	16311604	1
Caelo	Cooling cream DAB 6 (stabili...	17075401	7
Caelo	Cooling cream DAB 6 (stabili...	17255001	10

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	17330802	29
Caelo	Cooling cream DAB 6 (stabili...	18272901	12
Caelo	Cooling cream DAB 6 (stabili...	152327901	1
Caelo	Cooling cream DAB 6 (stabili...	14328702	11
Caelo	Cooling cream DAB 6 (stabili...	15059001	5
Caelo	Cooling cream DAB 6 (stabili...	15066601	17
Caelo	Cooling cream DAB 6 (stabili...	14329201	5
Caelo	Cooling cream DAB 6 (stabili...	14184401	9
Caelo	Cooling cream DAB 6 (stabili...	15417401	3
Caelo	Cooling cream DAB 6 (stabili...	15434503	6
Caelo	Cooling cream DAB 6 (stabili...	16172902	9
Caelo	Cooling cream DAB 6 (stabili...	17116001	10
Caelo	Cooling cream DAB 6 (stabili...	17115601	27
Caelo	Cooling cream DAB 6 (stabili...	18182401	25
Caelo	Cooling cream DAB 6 (stabili...	18182501	15
Caelo	Cooling cream DAB 6 (stabili...	311218182501	1
Caelo	Cooling cream DAB 6 (stabili...	18218302	20
Caelo	Cooling cream DAB 6 (stabili...	1328702	1
Caelo	Cooling cream DAB 6 (stabili...	172983015595	1
Caelo	Cooling cream DAB 6 (stabili...	181829015742	1
Caelo	Cooling cream DAB 6 (stabili...	13226601	28
Caelo	Cooling cream DAB 6 (stabili...	15434401	22
Caelo	Cooling cream DAB 6 (stabili...	1608601	1
Caelo	Cooling cream DAB 6 (stabili...	17122701	8
Caelo	Cooling cream DAB 6 (stabili...	17254601	6
Caelo	Cooling cream DAB 6 (stabili...	17255101	4
Caesar & Loretz GmbH	Cooling cream DAB 6 (stabili...	16222401	1
Caesar & Loretz GmbH	Cooling cream DAB 6 (stabili...	18218302	1
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	15328001	1
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	16172601	1
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	16134201	1
Caesar und Loretz GmbH	Cooling cream DAB 6 (stabili...	17157201	1
Caesar&Loretz	Cooling cream DAB 6 (stabili...	17298001	2
Cealo	Cooling cream DAB 6 (stabili...	18182701	1
Cealo/AHD	Cooling cream DAB 6 (stabili...	16011901	1
Euro OTC	Cooling cream DAB 6 (stabili...	15435101	2
Euroct/Gehe	Cooling cream DAB 6 (stabili...	16089701	2
Fagron	Cooling cream DAB 6 (stabili...	18106401	2
Fagron	Cooling cream DAB 6 (stabili...	17000301	1
Fagron	Cooling cream DAB 6 (stabili...	18182301	2
Fagron	Cooling cream DAB 6 (stabili...	18/182/K	1
Fiebig	Cooling cream DAB 6 (stabili...	17075101	1
Fiebig	Cooling cream DAB 6 (stabili...	18182701	4
Finteler Apotheke	Cooling cream DAB 6 (stabili...	16244701	1
Finteler Apotheke	Cooling cream DAB 6 (stabili...	17000601	1
gehe	Cooling cream DAB 6 (stabili...	15228601	1
Gehe	Cooling cream DAB 6 (stabili...	12312601	1
Gehe	Cooling cream DAB 6 (stabili...	14184501	1
Gehe	Cooling cream DAB 6 (stabili...	14268301	1
Gehe	Cooling cream DAB 6 (stabili...	16301901	1
Gehe	Cooling cream DAB 6 (stabili...	17035501	1
Gehe	Cooling cream DAB 6 (stabili...	16302001	1
Bombastus	Cooling cream DAB 6 (stabili...	18005204	4
Caelo	Cooling cream DAB 6 (stabili...	13051501	10
Caelo	Cooling cream DAB 6 (stabili...	18272801	3
Henry Lamotte/ Henry La...	Cooling cream DAB 6 (stabili...	16171901	1
hochhaus-Apotheke	Cooling cream DAB 6 (stabili...	17033001	1
Hubertus Apotheke	Cooling cream DAB 6 (stabili...	15236901	1
Ichthyol/Phönix	Cooling cream DAB 6 (stabili...	16172601	1
Jenne	Cooling cream DAB 6 (stabili...	19073701	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	18219201	3
L12	Cooling cream DAB 6 (stabili...	17000601	2
L12	Cooling cream DAB 6 (stabili...	17330802	1
L12	Cooling cream DAB 6 (stabili...	18182501	1
Lamotte / AHC	Cooling cream DAB 6 (stabili...	1000010942	1
Lamotte/Noweda	Cooling cream DAB 6 (stabili...	8002112004	1
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	8002112004	11
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	8003478009	7
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	6012127002	8
Midas	Cooling cream DAB 6 (stabili...	17189701	4
Midas	Cooling cream DAB 6 (stabili...	17254101	3
Midas	Cooling cream DAB 6 (stabili...	18182601	1
Midas	Cooling cream DAB 6 (stabili...	19001402	1
Noweda	Cooling cream DAB 6 (stabili...	13026301	1
Caelo	Cooling cream DAB 6 (stabili...	14329001	5
Caelo	Cooling cream DAB 6 (stabili...	17331001	11
Caelo	Cooling cream DAB 6 (stabili...	14268101	10
Euro OTC	Cooling cream DAB 6 (stabili...	16172801	1
Caelo	Cooling cream DAB 6 (stabili...	14288601	7
Phoenix	Cooling cream DAB 6 (stabili...	16000501	2
Phoenix	Cooling cream DAB 6 (stabili...	18182301	2
Caelo	Cooling cream DAB 6 (stabili...	19513102	1
phönix	Cooling cream DAB 6 (stabili...	14329501	1
phönix	Cooling cream DAB 6 (stabili...	17075201	1
phönix	Cooling cream DAB 6 (stabili...	17156801	1
Phönix	Cooling cream DAB 6 (stabili...	15434502	1
Phönix	Cooling cream DAB 6 (stabili...	17075101	1
Caelo	Cooling cream DAB 6 (stabili...	17033001	52
Caelo	Cooling cream DAB 6 (stabili...	19153201	3
Phönix/Hedinger	Cooling cream DAB 6 (stabili...	17254101	1
Sanacorp	Cooling cream DAB 6 (stabili...	13121601	1
Sanacorp	Cooling cream DAB 6 (stabili...	13191301	1
Sanacorp	Cooling cream DAB 6 (stabili...	15066601	2
Sanacorp	Cooling cream DAB 6 (stabili...	18182601	1
Sanacorp	Cooling cream DAB 6 (stabili...	18218302	1
Sanacorp	Cooling cream DAB 6 (stabili...	18272901	1
Sanacorp W.E: 18.01.18 ...	Cooling cream DAB 6 (stabili...	17157001	2
Caelo	Cooling cream DAB 6 (stabili...	15435102	21
Caelo	Cooling cream DAB 6 (stabili...	16172901	19
Caelo	Cooling cream DAB	13315101	26
Bombastus	Cooling cream DAB	275667	1
Bombastus	Cooling cream DAB		1
Caelo	Cooling cream DAB	12364802	2
Caelo	Cooling cream DAB	13051601	11
Caelo	Cooling cream DAB	14085901	15
Caelo	Cooling cream DAB		9
	Cooling cream DAB	15L03-T06-028365	1
Sanacorp	Cooling cream DAB		1
	Cooling cream DAB	14328801	1
	Cooling cream DAB 6 (stabili...	17075102	1
Caelo	Cooling cream DAB 6 (stabili...	14118002	1

- 133 122 spectra from 702 *Apo-Ident* customers from a total of 33 988 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Cooling cream / Cooling cream with rose oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Cooling cream / Cooling cream with rose oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1040	0	55 319
Type B	0	2792	28	66 654
Type C	0	5157	74	133 122

The substance/substance group *Cooling cream / Cooling cream with rose oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.4231 %)
Type B	100.0000 % (> 99.9653 %)	99.0071 % (> 98.9007 %)
Type C	100.0000 % (> 99.6452 %)	98.5854 % (> 98.5280 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Cooling cream / Cooling cream with rose oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Lanolin DAB	31.59	—
Clotrimazole 10% Cordes [®] RK	38.54	—
Basis Cordes [®] RK	50.62	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Cooling cream / Cooling cream with rose oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31249	31249	0.00	47.29
31457	31992	10.36	41.54
31922	31922	0.00	46.82
32293	32293	0.00	47.15
32294	32294	0.00	41.40
32506	32506	0.00	48.86
32507	32507	0.00	48.80
33180	33180	0.00	50.34
30889	33779	8.07	40.49
30890	32293	7.48	50.36
30921	31249	5.00	46.30
31052	31922	7.38	43.57
31224	31992	6.31	44.28
31471	31471	0.00	41.05
31992	31992	0.00	45.74
33779	33779	0.00	41.96
34499	31992	20.90	47.26
34500	31992	14.17	46.81
34501	31249	9.99	49.81
34502	32294	25.34	46.61

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Coriander oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31192-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Coriander oil; Oleum coriandri

Special notes

When selecting the *Coriander oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Coriander oil	4	2	47

Second-stage model

For differentiation of the substance/substance group *Coriander oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Coriander oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Coriander oil	12228509	31192	40	1407274
Caelo	Coriander oil	13288109	31407	40	20130903
Caelo	Coriander oil	170504	33913	40	20170228*
Caelo	Coriander oil	190810	34648	40	20190510*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Coriander oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Coriander oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Coriander oil	16140410	33253	40
Caelo	Coriander oil	181257	34056	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 104 spectra from 44 *Apo-Ident* customers from 49 batches from the substance/substance group *Coriander oil*.
- Among them are spectra of independent samples from 47 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD, 05.11.2013	Coriander oil	12228510	1
AHD, 19.07.2013	Coriander oil	12228507	1
AHD, 26.09.2013	Coriander oil	12228509	2
Caelo	Coriander oil	18061201	1
Caelo	Coriander oil	31081203	1
Caelo	Coriander oil	7021303	1
Caelo	Coriander oil	2081306	1
Caelo	Coriander oil	12228501	1
Caelo	Coriander oil	14011403	1
Caelo	Coriander oil	12228503	2
Caelo	Coriander oil	12061413	1
Caelo	Coriander oil	13288112	4
Caelo	Coriander oil	14319902	3
Caelo	Coriander oil	14319904	4
Caelo	Coriander oil	15229608	1
Caelo	Coriander oil	15229607	3
Caelo	Coriander oil	15229601	5
Caelo	Coriander oil	15229613	2
Caelo	Coriander oil	16140401	2
Caelo	Coriander oil	1612210C/16140401	1
Caelo	Coriander oil	16140406	1
Caelo	Coriander oil	16140405	7
Caelo	Coriander oil	17050403	1
Caelo	Coriander oil	18125703	6
Caelo	Coriander oil	18125708	1
Caelo	Coriander oil	17050409	1
Caelo	Coriander oil	10293307	1
Caelo	Coriander oil	152229601	1
Caelo	Coriander oil	1711200C/17050403	1
Caelo	Coriander oil	19081003	1
Caelo	Coriander oil	16140403	1
Caelo	Coriander oil	17050408	6
Caelo	Coriander oil	11324003	1
Caelo	Coriander oil	11324002	1
Caelo	Coriander oil	11324005	4
Caelo	Coriander oil	16140410	3

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Supplier	Substance	Batch	Spectra
Caelo	Coriander oil	15229610	1
Caelo	Coriander oil	17364702	3
Caelo	Coriander oil	11324004	1
Caelo	Coriander oil	13288113	1
Caelo	Coriander oil	17364701	6
Caelo	Coriander oil	19081002	2
Caelo/Sanacorp	Coriander oil	17364701	1
GEHE	Coriander oil	16140405	1
Kaders	Coriander oil	131528	1
Noweda	Coriander oil	11324005	1
Caelo	Coriander oil	16140409	1
Taoasis	Coriander oil	32040-108625	1
Taoasis	Coriander oil	31920-1111173	1
Taoasis	Coriander oil	33485-112618	1
Taoasis	Coriander oil	104709-125892	1
VDI	Coriander oil	14319902	1
Caelo	Coriander oil	13288109	4
Caelo	Coriander oil	12228509	1

- 138 249 spectra from 703 *Apo-Ident* customers from a total of 35 246 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Coriander oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Coriander oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	102	2	138 249

The substance/substance group *Coriander oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	98.0769 % (> 95.1923 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Coriander oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Lavender oil	45.26	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Coriander oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31192	31192	0.00	71.94
31407	33913	5.09	64.59
33913	33913	0.00	64.58
34648	34648	0.00	66.11

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **D-alpha tocopherol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30485-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

D-alpha tocopherol; alpha-Tocopherolum

Special notes

When selecting the *D-alpha tocopherol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
D-alpha tocopherol	4	1	45

Second-stage model

For differentiation of the substance/substance group *D-alpha tocopherol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *D-alpha tocopherol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	D-alpha tocopherol	13248808	31501	60	1507770
Caelo	D-alpha tocopherol	16005002	32072	60	20160203
Fagron	D-alpha tocopherol	16D14-B05-324514	32725	40	20160422
Fagron	D-alpha tocopherol	16H29-B08-334064	33418	40	20161027
Fagron	D-alpha tocopherol	16H29-B08-334064	33419	40	20161027

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 5 reference samples from the substance/substance group *D-alpha tocopherol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 119 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *D-alpha tocopherol*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	D-alpha tocopherol	17B14-B02-336290	34036	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 81 spectra from 51 *Apo-Ident* customers from 48 batches from the substance/substance group *D-alpha tocopherol*.
- Among them are spectra of independent samples from 45 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alte Apotheke	D-alpha tocopherol	16D14B05324514	1
Audor Pharma	D-alpha tocopherol	16D14-B05-322951	1
Caela/Phönix 05.07.18	D-alpha tocopherol	17057509	1
Caelo	D-alpha tocopherol	14159303	1
Caelo	D-alpha tocopherol	11313308	3
Caelo	D-alpha tocopherol	5012I-03257	1
Caelo	D-alpha tocopherol	12106907	2
Caelo	D-alpha tocopherol	12106901	1
Caelo	D-alpha tocopherol	11313311	2
Caelo	D-alpha tocopherol	12106910	2
Caelo	D-alpha tocopherol	12106908	1
Caelo	D-alpha tocopherol	13248802	2
Caelo	D-alpha tocopherol	13248803	1
Caelo	D-alpha tocopherol	14159302	1
Caelo	D-alpha tocopherol	712015	1
Caelo	D-alpha tocopherol	14353802	1
Caelo	D-alpha tocopherol	17057508	1
Caelo	D-alpha tocopherol	18068402	1
Caelo	D-alpha tocopherol	18220810	1
Caelo	D-alpha tocopherol	11313309	1
Caelo	D-alpha tocopherol	13248804	1
Caelo	D-alpha tocopherol	15102611	1
Caelo	D-alpha tocopherol	14159305	1
Caelo	D-alpha tocopherol	16187606	1
Caelo	D-alpha tocopherol	16187604	7
Caelo	D-alpha tocopherol	11313302	1
Caelo	D-alpha tocopherol	11313301	1
Caelo	D-alpha tocopherol	17057501	2
Caelo	D-alpha tocopherol	18068403	3
Caelo	D-alpha tocopherol	8705007	1
Caelo	D-alpha tocopherol	132488003	1
Caelo	D-alpha tocopherol	13248801	1
Caelo	D-alpha tocopherol	15102606	2
Euro/Phönix	D-alpha tocopherol	16187606	1
Fagron	D-alpha tocopherol	20170816-03257	1
Fagron	D-alpha tocopherol	17J31-B01	1
Fagron	D-alpha tocopherol	17J31-B01-342312	2

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Supplier	Substance	Batch	Spectra
Fagron	D-alpha tocopherol	17B14-B02336290	1
Fagron	D-alpha tocopherol	UT107060047	1
Frago/Noweda	D-alpha tocopherol	17B14-B02	1
Gehe	D-alpha tocopherol	16187606	1
Caelo	D-alpha tocopherol	14353806	2
Klosterring	D-alpha tocopherol	18220813	1
Kögl	D-alpha tocopherol	16005006	1
Kögl	D-alpha tocopherol	17B14B02334704	2
Kögl	D-alpha tocopherol	17B14B02	1
Kögl	D-alpha tocopherol	18220801	1
Midas	D-alpha tocopherol	17057509	1
Sanacorp	D-alpha tocopherol	13248801	1
Caelo	D-alpha tocopherol	16005002	10
Fagron	D-alpha tocopherol	16D14-B05-324514	2
Caelo	D-alpha tocopherol		1

- 138 272 spectra from 703 *Apo-Ident* customers from a total of 35 248 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *D-alpha tocopherol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *D-alpha tocopherol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	40	0	69 434
Type C	0	81	0	138 272

The substance/substance group *D-alpha tocopherol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 92.5926 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *D-alpha tocopherol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Guaiazulene 25%, water-soluble	42.96	—
Geranium oil, genuine	60.33	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *D-alpha tocopherol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31501	31501	0.00	50.14
32072	31501	6.25	50.42
33418	31501	26.91	66.56
32725	31501	17.89	61.58
33419	31501	26.61	64.92

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dexpanthenol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30884-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dexpanthenol; Dexpanthenolum

Special notes

When selecting the *Dexpanthenol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dexpanthenol	10	12	520

Second-stage model

For differentiation of the substance/substance group *Dexpanthenol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dexpanthenol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dexpanthenol	12018707	30884	40	20120207
Caelo	Dexpanthenol	14051903	31317	40	20140319
Caelo	Dexpanthenol	171721	33716	40	20170711*
Caelo	Dexpanthenol	172877	33903	40	20171109*
Caelo	Dexpanthenol	191068	34637	40	20190424*
Caelo	Dexpanthenol	190888	34639	40	20190410*
Euro OTC	Dexpanthenol	1309030-03	31532	60	AR-15-FG-005869-01
Euro OTC	Dexpanthenol	1510008	31769	57	20151102*
Fagron	Dexpanthenol	17B06-B04-332078	33239	40	20170315
Fagron	Dexpanthenol	19F10-B08-191442	34596	40	20190619

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 437 spectra of 10 reference samples from the substance/substance group *Dexpanthenol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55 922 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 480 spectra of 12 reference samples from the substance/substance group *Dexpanthenol*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dexpanthenol	190087	34337	40
Caelo	Dexpanthenol	190101	34479	40
Caelo	Dexpanthenol	191070	34638	40
Euro OTC	Dexpanthenol	1606015	32465	40
Euro OTC	Dexpanthenol	1607027	32467	40
Euro OTC	Dexpanthenol	1610041	32829	40
Euro OTC	Dexpanthenol	1703029	33238	40
Euro OTC	Dexpanthenol	1708013	33664	40
Euro OTC	Dexpanthenol	1801011	33929	40
Euro OTC	Dexpanthenol	1803008	34090	40
Euro OTC	Dexpanthenol	1806019-01	34210	40
Euro OTC	Dexpanthenol	1808007	34217	40

- 68 994 spectra from a total of 1490 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2278 spectra from 499 *Apo-Ident* customers from 542 batches from the substance/substance group *Dexpanthenol*.
- Among them are spectra of independent samples from 521 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
14356201	Dexpanthenol	14356201	1
A.H.D.	Dexpanthenol	13D22-N12	1
A.H.D.	Dexpanthenol	14E01-B11-300068	1
ACM	Dexpanthenol	KNC0684J15	1
ACM	Dexpanthenol	KNC1152J15	1
Caelo	Dexpanthenol	TL01508051	1
ALH	Dexpanthenol	1510008-02	1
Alliance	Dexpanthenol	1301009-01	1
Alliance	Dexpanthenol	15A30-B08-310962	2
Alliance	Dexpanthenol	15F26-B01-317520	2
Alliance	Dexpanthenol	16D07-B04-323097	1
Alliance	Dexpanthenol	15F26-B01-319991	1
Alliance H.	Dexpanthenol	15260905	1
Alliance health	Dexpanthenol	1204010-01	1
Alliance Health 03.12.2...	Dexpanthenol	1309030-03	1
Alliance Health 27.03.2...	Dexpanthenol	1407039-02	1
Caelo	Dexpanthenol	13342611	4
Caelo	Dexpanthenol	14214511	5
Caelo	Dexpanthenol	14214512	5

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Supplier	Substance	Batch	Spectra
Allianz	Dexpanthenol	1801011-01	2
anzag	Dexpanthenol	14E01-B11-293624	7
Anzag	Dexpanthenol	12E11-N02	3
Anzag	Dexpanthenol	12126705	2
Anzag	Dexpanthenol	12K27-N04	1
Anzag	Dexpanthenol	12H28-N07	1
Anzag	Dexpanthenol	13/04-N04	1
Anzag	Dexpanthenol	12J30-B03-287502	1
Anzag	Dexpanthenol	13j29-B05-287527	1
Anzag	Dexpanthenol	14E01-B11-295534	3
Anzag	Dexpanthenol	14H05-B02-305656	3
Anzag	Dexpanthenol	14H05-B02-300067	1
Anzag	Dexpanthenol	64778675L0	1
Anzag	Dexpanthenol	1610041-02	1
Anzag	Dexpanthenol	1703029	1
Anzag	Dexpanthenol	1708013-01	1
apo ident	Dexpanthenol	1703029-01	1
Apo Ident	Dexpanthenol	180300801	1
apomix AMH Niemann GmbH...	Dexpanthenol	180619-01	1
apomix/Holdermann	Dexpanthenol	14H05-B02-300066	1
apomix/Holdermann	Dexpanthenol	16D07-B04-323096	2
Bären Apotheke	Dexpanthenol	1703020-01	1
BASF	Dexpanthenol	2181	1
BASF	Dexpanthenol	1407039-01	1
BASF AG	Dexpanthenol	1309030-01	1
BASF AG	Dexpanthenol	94515888Q0	1
BASF AG/Noweda	Dexpanthenol	1510008-01	1
BASF AG/Noweda	Dexpanthenol	1607027-01	1
BASF/ Phönix	Dexpanthenol	1502019-02	2
BASF/Noweda	Dexpanthenol	5116I-01082	1
beyvers	Dexpanthenol	1703029-01	1
Bombastus	Dexpanthenol	13342605	1
Bombastus	Dexpanthenol	1502019-02	2
Bombastus	Dexpanthenol	1803008-01	1
Bombastus	Dexpanthenol	1808007-01	1
Caelo	Dexpanthenol	20061203	1
Caelo	Dexpanthenol	14H05_B02_300069	1
Caelo	Dexpanthenol	10869002	1
Caelo	Dexpanthenol	11293507	4
Caelo	Dexpanthenol	12018706	2
Caelo	Dexpanthenol	20071205	1
Caelo	Dexpanthenol	9081206	1
Caelo	Dexpanthenol	12018703	8
Caelo	Dexpanthenol	3101202	1
Caelo	Dexpanthenol	25101203	1
Caelo	Dexpanthenol	12018713	4
Caelo	Dexpanthenol	24111201	1
Caelo	Dexpanthenol	12126704	5
Caelo	Dexpanthenol	19121204	1
Caelo	Dexpanthenol	19121205	1
Caelo	Dexpanthenol	12126705	11
Caelo	Dexpanthenol	20261012-1	1
Caelo	Dexpanthenol	18011303	1
Caelo	Dexpanthenol	12018715	1
Caelo	Dexpanthenol	13021305	1
Caelo	Dexpanthenol	22021304	1
Caelo	Dexpanthenol	25031305	1
Caelo	Dexpanthenol	12285211	7
Caelo	Dexpanthenol	12126706	1
Caelo	Dexpanthenol	3051305	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	5061306	1
Caelo	Dexpanthenol	13084706	6
Caelo	Dexpanthenol	15071304	1
Caelo	Dexpanthenol	13084707	2
Caelo	Dexpanthenol	13084703	7
Caelo	Dexpanthenol	3713A-01082	1
Caelo	Dexpanthenol	13091309	1
Caelo	Dexpanthenol	2101303	1
Caelo	Dexpanthenol	16101305	1
Caelo	Dexpanthenol	18111306	1
Caelo	Dexpanthenol	3121303	1
Caelo	Dexpanthenol	13189506	8
Caelo	Dexpanthenol	20121301	1
Caelo	Dexpanthenol	16021307	1
Caelo	Dexpanthenol	13342601	5
Caelo	Dexpanthenol	25021405	1
Caelo	Dexpanthenol	13342603	2
Caelo	Dexpanthenol	14031410	1
Caelo	Dexpanthenol	23041401	1
Caelo	Dexpanthenol	13342610	6
Caelo	Dexpanthenol	2187	1
Caelo	Dexpanthenol	13342606	12
Caelo	Dexpanthenol	14051905	7
Caelo	Dexpanthenol	26081401	1
Caelo	Dexpanthenol	1309030-03	1
Caelo	Dexpanthenol	14214504	6
Caelo	Dexpanthenol	14051913	1
Caelo	Dexpanthenol	1407039-01	2
Caelo	Dexpanthenol	14214508	1
Caelo	Dexpanthenol	22011511	1
Caelo	Dexpanthenol	142141508	1
Caelo	Dexpanthenol	14214510	3
Caelo	Dexpanthenol	4031502	1
Caelo	Dexpanthenol	14051909	2
Caelo	Dexpanthenol	14356203	2
Caelo	Dexpanthenol	14356204	5
Caelo	Dexpanthenol	1502019-01	2
Caelo	Dexpanthenol	15097703	8
Caelo	Dexpanthenol	15097709	6
Caelo	Dexpanthenol	15097713	7
Caelo	Dexpanthenol	15097714	14
Caelo	Dexpanthenol	15097711	13
Caelo	Dexpanthenol	15260907	9
Caelo	Dexpanthenol	15097712	3
Caelo	Dexpanthenol	15395502	12
Caelo	Dexpanthenol	12031602	1
Caelo	Dexpanthenol	1560907	1
Caelo	Dexpanthenol	15395506	2
Caelo	Dexpanthenol	1235899	1
Caelo	Dexpanthenol	15395504	8
Caelo	Dexpanthenol	16043505	8
Caelo	Dexpanthenol	16043506	8
Caelo	Dexpanthenol	23081602	1
Caelo	Dexpanthenol	15260901	2
Caelo	Dexpanthenol	23081603	1
Caelo	Dexpanthenol	1604305	1
Caelo	Dexpanthenol	16043504	3
Caelo	Dexpanthenol	16043512	12
Caelo	Dexpanthenol	16043502	11
Caelo	Dexpanthenol	117M-01082	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	1606015-01	1
Caelo	Dexpanthenol	16164816	2
Caelo	Dexpanthenol	16311610	7
Caelo	Dexpanthenol	17065403	4
Caelo	Dexpanthenol	16311606	3
Caelo	Dexpanthenol	17065407	4
Caelo	Dexpanthenol	17065404	10
Caelo	Dexpanthenol	17065411	15
Caelo	Dexpanthenol	170654060	1
Caelo	Dexpanthenol	17065413	3
Caelo	Dexpanthenol	17172105	9
Caelo	Dexpanthenol	17172110	3
Caelo	Dexpanthenol	4121701	1
Caelo	Dexpanthenol	17172107	15
Caelo	Dexpanthenol	172587709	1
Caelo	Dexpanthenol	17287701	2
Caelo	Dexpanthenol	17287708	7
Caelo	Dexpanthenol	17335103	10
Caelo	Dexpanthenol	17287705	12
Caelo	Dexpanthenol	17335104	8
Caelo	Dexpanthenol	17335101	2
Caelo	Dexpanthenol	30041803	1
Caelo	Dexpanthenol	27041801	1
Caelo	Dexpanthenol	17335102	1
Caelo	Dexpanthenol	17339106	1
Caelo	Dexpanthenol	18069003	1
Caelo	Dexpanthenol	18069002	8
Caelo	Dexpanthenol	1806019-01	1
Caelo	Dexpanthenol	17335114	1
Caelo	Dexpanthenol	18069103	2
Caelo	Dexpanthenol	18176603	2
Caelo	Dexpanthenol	19008703	1
Caelo	Dexpanthenol	18197201	1
Caelo	Dexpanthenol	19006705	1
Caelo	Dexpanthenol	19045006	2
Caelo	Dexpanthenol	19045007	2
Caelo	Dexpanthenol	19065802	1
Caelo	Dexpanthenol	19045005	3
Caelo	Dexpanthenol	19088802	3
Caelo	Dexpanthenol	19088801	6
Caelo	Dexpanthenol	19106809	3
Caelo	Dexpanthenol	19106808	2
Caelo	Dexpanthenol	1910606810	1
Caelo	Dexpanthenol	19106802	1
Caelo	Dexpanthenol	12018702	1
Caelo	Dexpanthenol	13342605	8
Caelo	Dexpanthenol	11293501	2
Caelo	Dexpanthenol	12285201	6
Caelo	Dexpanthenol	15260908	1
Caelo	Dexpanthenol	18069107	4
Caelo	Dexpanthenol	17355108	1
Caelo	Dexpanthenol	12E11-N02	1
Caelo	Dexpanthenol	17B06-B04-332076	1
Caelo	Dexpanthenol	17172112	6
Caelo	Dexpanthenol	17121-B01-340264	1
Caelo	Dexpanthenol	18009109	1
Caelo	Dexpanthenol	19106803	7
Caelo	Dexpanthenol	19106806	4
Caelo	Dexpanthenol	19107004	4
Caelo	Dexpanthenol	19106902	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	19106807	1
Caelo	Dexpanthenol	1302009	1
Caelo	Dexpanthenol	1304023	1
Caelo	Dexpanthenol	14051908	1
Caelo	Dexpanthenol	TL01503022	1
Caelo	Dexpanthenol	18197203	9
Caelo	Dexpanthenol	19062102	6
Caelo	Dexpanthenol	19065804	3
Caelo	Dexpanthenol	14H05-B02-300069	1
Caelo	Dexpanthenol	16D07-B04-322110	1
Caelo	Dexpanthenol	17065406	7
Caelo	Dexpanthenol	12126702	13
Caelo	Dexpanthenol	13084705	3
Caelo	Dexpanthenol	15260905	8
Caelo	Dexpanthenol	19134405	1
Caelo	Dexpanthenol	19065801	1
Caelo	Dexpanthenol	17121-b01-340266	1
Caelo	Dexpanthenol	13084704	6
Caelo	Dexpanthenol	13084711	1
Caelo	Dexpanthenol	12126707	2
Caelo	Dexpanthenol	16043511	9
Caelo	Dexpanthenol	11293503	1
Caelo	Dexpanthenol	12285203	4
Caelo	Dexpanthenol	122852211	1
Caelo	Dexpanthenol	1703029-01	2
Caelo	Dexpanthenol	14051901	1
Caelo	Dexpanthenol	19008706	5
Caelo	Dexpanthenol	16043510	14
Caelo	Dexpanthenol	15097716	1
Caelo	Dexpanthenol	15097704	9
Caelo	Dexpanthenol	14356210	5
Caelo	Dexpanthenol	1801011-01	3
Caelo	Dexpanthenol	18069001	15
Caelo	Dexpanthenol	13342608	1
Caelo	Dexpanthenol	14051904	7
Caelo	Dexpanthenol	16164808	8
Caelo	Dexpanthenol	16164809	7
Caelo	Dexpanthenol	16164810	7
Caelo	Dexpanthenol	3815464	1
Caelo	Dexpanthenol	15097710	6
Caelo	Dexpanthenol	19134401	1
Caelo	Dexpanthenol	12L28-N03	1
Caelo	Dexpanthenol	13J29-B05-287526	1
Caelo	Dexpanthenol	18069110	6
Caelo	Dexpanthenol	1808007-01	1
Caelo	Dexpanthenol	1910684	1
Caelo	Dexpanthenol	17065412	16
Caelo	Dexpanthenol	13342602	4
Caelo	Dexpanthenol	1301009-02	1
Caelo	Dexpanthenol	12285205	1
Caelo	Dexpanthenol	15097705	5
Caelo	Dexpanthenol	1510008-01	2
Caelo	Dexpanthenol	16Do07-B04-323096	1
Caelo	Dexpanthenol	16311604	10
Caelo	Dexpanthenol	17065405	5
Caelo	Dexpanthenol	17172111	7
Caelo	Dexpanthenol	19045004	1
Caelo	Dexpanthenol	17172103	15
Caelo	Dexpanthenol	91(18197202)	1
Caelo	Dexpanthenol	19008708	5

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	12285212	3
Caelo	Dexpanthenol	13084702	15
Caelo	Dexpanthenol	14214507	3
Caelo	Dexpanthenol	14356201	9
Caelo	Dexpanthenol	13022-N12	1
Caelo	Dexpanthenol	15260906	11
Caelo	Dexpanthenol	15395508	9
Caelo	Dexpanthenol	1616488	1
Caelo	Dexpanthenol	16311605	16
Caelo	Dexpanthenol	17172102	2
Caelo	Dexpanthenol	17065410	1
Caelo	Dexpanthenol	27335103	1
Caelo	Dexpanthenol	17172113	5
Caelo	Dexpanthenol	17335106	19
Caelo	Dexpanthenol	14I21-B01-340267	1
Caelo	Dexpanthenol	17K30-B01-343821	1
Caelo	Dexpanthenol	16311603	11
Caelo	Dexpanthenol	TL01110076	1
Caelo	Dexpanthenol	12285204	4
Caelo	Dexpanthenol	13189503	13
Caelo	Dexpanthenol	14214505	5
Caelo	Dexpanthenol	14H05-B02-3000066	1
Caelo	Dexpanthenol	15097708	10
Caelo	Dexpanthenol	15395507	5
Caelo	Dexpanthenol	17172106	16
Caelo	Dexpanthenol	1708013-01	1
Caelo	Dexpanthenol	18176605	3
Caelo	Dexpanthenol	82729498	1
Caelo	Dexpanthenol	2614E-01082	1
Caelo	Dexpanthenol	1421508	1
Caelo	Dexpanthenol	1502019	1
Caelo	Dexpanthenol	15A30-B08-312353	1
Caelo	Dexpanthenol	16043503	8
Caelo	Dexpanthenol	15F26-B01-317520	1
Caelo	Dexpanthenol	16164811	3
Caelo	Dexpanthenol	16311608	1
Caelo	Dexpanthenol	16311611	2
Caelo	Dexpanthenol	17335107	3
Caelo	Dexpanthenol	17287703	1
Caelo	Dexpanthenol	17335108	16
Caelo	Dexpanthenol	8069002	1
Caelo	Dexpanthenol	17335110	1
Caelo	Dexpanthenol	19008707	4
Caelo	Dexpanthenol	1906807	1
Caelo	Dexpanthenol	13084709	5
Caelo	Dexpanthenol	15097701	7
Caelo	Dexpanthenol	16164813	12
Caelo	Dexpanthenol	16164802	1
Caelo	Dexpanthenol	17287709	2
Caelo	Dexpanthenol	19088803	1
Caelo	Dexpanthenol	1213A-01082	1
Caelo	Dexpanthenol	1513F-01082	1
Caelo	Dexpanthenol	17287704	11
Caelo	Dexpanthenol	14H05-B02-305656	1
caesar	Dexpanthenol	16043512	1
Caesar & Loretz GmbH	Dexpanthenol	19045007	1
Caesar & Loretz GmbH	Dexpanthenol	19008705	1
Caesar & Loretz GmbH	Dexpanthenol	19045006	2
Caesar & Loretz GmbH	Dexpanthenol	19062102	2
Caesar & Loretz GmbH	Dexpanthenol	19088802	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Dexpanthenol	19106805	1
Caesar & Loretz GmbH	Dexpanthenol	19106806	1
Caesar & Loretz GmbH	Dexpanthenol	19106809	1
Caesar & Loretz GmbH / ...	Dexpanthenol	18069107	1
Caesar & Loretz GmbH Hi...	Dexpanthenol	15097714	2
Caesar & Loretz GmbH/E	Dexpanthenol	19106807	1
Caelo	Dexpanthenol	19106805	6
Caesar&lorenz,Phoenix	Dexpanthenol	12285201	1
Caesar/Noweda	Dexpanthenol	4811A-01082	1
Caesar/Noweda	Dexpanthenol	13084709	2
Caolo	Dexpanthenol	15395506	1
Cealo/Sanacorp	Dexpanthenol	15395506	1
cesar&lorenz/Phönix	Dexpanthenol	12285203	1
Daiichi Fine Chemicals	Dexpanthenol	1301009-01	1
Fagron	Dexpanthenol	18C20-B07-350624	4
DSM Nutritional Products UK	Dexpanthenol	15F26-B01-314370	1
DSM Nutritional Prod./...	Dexpanthenol	TL01212052	1
DSM Nutritional Prod./...	Dexpanthenol	16043505	1
DSM Nutritional Prod./...	Dexpanthenol	16311610	1
DSM Nutritional Prod./...	Dexpanthenol	17065412	1
Eurho	Dexpanthenol	1610041-01	1
Eurho	Dexpanthenol	170302901	1
Eurho	Dexpanthenol	1801011-01	3
EuRho	Dexpanthenol	1110032-01	1
EuRho	Dexpanthenol	1107023-01	1
EuRho	Dexpanthenol	1204010-02	1
EuRho	Dexpanthenol	1301009-01	4
EuRho	Dexpanthenol	1309030-01	1
EuRho	Dexpanthenol	23223009T0	1
EuRho	Dexpanthenol	1801011-01	1
EuRho/Noweda	Dexpanthenol	1407039-02	1
Euro	Dexpanthenol	2091710	1
Euro OTC	Dexpanthenol	160601501	1
Euro OTC	Dexpanthenol	1204010-01	9
Euro OTC	Dexpanthenol	1204010-02	12
Euro OTC	Dexpanthenol	1301009-02	12
Euro OTC	Dexpanthenol	130100902	2
Euro OTC	Dexpanthenol	1309030-01	7
Euro OTC	Dexpanthenol	130903002	1
Euro OTC	Dexpanthenol	2081403	1
Euro OTC	Dexpanthenol	17091401	1
Euro OTC	Dexpanthenol	23101409	1
Euro OTC	Dexpanthenol	14070399-01	1
Euro OTC	Dexpanthenol	1111406	1
Euro OTC	Dexpanthenol	140703901	3
Euro OTC	Dexpanthenol	28111404	1
Euro OTC	Dexpanthenol	7011503	1
Euro OTC	Dexpanthenol	11021503	1
Euro OTC	Dexpanthenol	27031503	1
Euro OTC	Dexpanthenol	10061508	1
Euro OTC	Dexpanthenol	150201901	1
Euro OTC	Dexpanthenol	4091514	1
Euro OTC	Dexpanthenol	1502019-02	16
Euro OTC	Dexpanthenol	150201902	2
Euro OTC	Dexpanthenol	1510008-01	34
Euro OTC	Dexpanthenol	15100008-02	2
Euro OTC	Dexpanthenol	160702701	4
Euro OTC	Dexpanthenol	161220D/1606015-01	1
Euro OTC	Dexpanthenol	17B06-B04-332077	2
Euro OTC	Dexpanthenol	14071702	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Dexpanthenol	28031801	1
Euro OTC	Dexpanthenol	180619-01	1
Euro OTC	Dexpanthenol	12091801	1
Euro OTC	Dexpanthenol	180300802	1
Euro OTC	Dexpanthenol	5121806	1
Euro OTC	Dexpanthenol	5121807	1
Euro OTC	Dexpanthenol	1510008-02	19
Euro OTC	Dexpanthenol	1806019-01	11
Euro OTC	Dexpanthenol	73709736W0	1
Euro OTC	Dexpanthenol	1610041-02	13
Euro OTC	Dexpanthenol	1703029-02	4
Euro OTC	Dexpanthenol	151000801	2
Euro OTC	Dexpanthenol	E0EIE22902	1
Euro OTC	Dexpanthenol	1301009-01	18
Euro OTC	Dexpanthenol	28071501	1
Euro OTC	Dexpanthenol	151008-01	2
Euro OTC	Dexpanthenol	15100008-01	1
Euro OTC	Dexpanthenol	1606015-01	23
Euro OTC	Dexpanthenol	9031703	1
Euro OTC	Dexpanthenol	28041729	1
Euro OTC	Dexpanthenol	140703902	1
Euro OTC	Dexpanthenol	1803008-01	8
Euro OTC	Dexpanthenol	E0EJD41902	1
Euro OTC	Dexpanthenol	95700556P0	2
Euro OTC	Dexpanthenol	140739	1
Euro OTC	Dexpanthenol	1502010-02	1
Euro OTC	Dexpanthenol	150219-02	1
Euro OTC	Dexpanthenol	151000802	1
Euro OTC	Dexpanthenol	15260908	1
Euro OTC	Dexpanthenol	161004101	3
Euro OTC	Dexpanthenol	1801011	1
Euro OTC	Dexpanthenol	23223009T0	1
Euro OTC	Dexpanthenol	15F26-B01-314370	1
Euro OTC	Dexpanthenol	171106D/1703029-01	1
Euro OTC	Dexpanthenol	1301009	1
Euro OTC	Dexpanthenol	130903001	2
Euro OTC	Dexpanthenol	1708013-01	15
Euro OTC	Dexpanthenol	1607027-01	15
Euro OTC	Dexpanthenol	1808007-01	5
Euro OTC	Dexpanthenol	1407039-1	1
Euro OTC	Dexpanthenol	14H05-B02-300069	2
Euro OTC	Dexpanthenol	1309030-02	9
Euro OTC	Dexpanthenol	1801011-01	31
Euro/ Phönix	Dexpanthenol	5117E-01082	1
EUro/AHD	Dexpanthenol	1301009-01	2
Euro/Noweda	Dexpanthenol	1610041-01	3
Euro/Noweda	Dexpanthenol	180300802	1
Euro/Noweda30.01.17	Dexpanthenol	1606015-01	1
Euro OTC	Dexpanthenol	5051504	1
Euroo/Ebert	Dexpanthenol	3813E-01082	1
Euro OTC	Dexpanthenol	1407039-02	7
Euro OTC	Dexpanthenol	1502010-01	1
Euro OTC	Dexpanthenol	31071501	1
Euro OTC	Dexpanthenol	13011809	1
Euro OTC	Dexpanthenol	57545077L0	2
Euro OTC	Dexpanthenol	1407039-01	10
Euro OTC	Dexpanthenol	129401002	1
Euro OTC	Dexpanthenol	64778675L0	1
Euro OTC	Dexpanthenol	130100901	2
Euro OTC	Dexpanthenol	1301009-001	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Dexpanthenol	14070390	1
Euro OTC	Dexpanthenol	1502019-01	21
Euro OTC	Dexpanthenol	1803008-02	7
Euro OTC	Dexpanthenol	1610041-01	26
Euro OTC	Dexpanthenol	170302901	1
Euro OTC	Dexpanthenol	17335105	1
Europ Ots Pharma	Dexpanthenol	13084705	1
europharm/gehe	Dexpanthenol	1610041-01	1
europharm/gehe	Dexpanthenol	1801011-01	2
Fagron	Dexpanthenol	1721-B01-340266	1
Fagron	Dexpanthenol	13/29-B05-287528	1
Fagron	Dexpanthenol	12E11-N02	22
Fagron	Dexpanthenol	TL01110074	1
Fagron	Dexpanthenol	TL01110074	4
Fagron	Dexpanthenol	12e11-no2	1
Fagron	Dexpanthenol	12E11-No2	1
Fagron	Dexpanthenol	12K27-N04	6
Fagron	Dexpanthenol	13D22-N12	14
Fagron	Dexpanthenol	TL01212052	1
Fagron	Dexpanthenol	8572983	1
Fagron	Dexpanthenol	12e11-N02	1
Fagron	Dexpanthenol	12K27-N04	1
Fagron	Dexpanthenol	TL01212052	1
Fagron	Dexpanthenol	13I04-N04	15
Fagron	Dexpanthenol	12I04-N04	1
Fagron	Dexpanthenol	12L28-No3	1
Fagron	Dexpanthenol	13J29-B05-287526	7
Fagron	Dexpanthenol	13J04-N04	2
Fagron	Dexpanthenol	13J29-B05	9
Fagron	Dexpanthenol	13J29-B05-287527	2
Fagron	Dexpanthenol	13J29-b05-287526	1
Fagron	Dexpanthenol	246019-0001	1
Fagron	Dexpanthenol	1309030-02	1
Fagron	Dexpanthenol	13L02-B04	2
Fagron	Dexpanthenol	13L02-BB04-292067	1
Fagron	Dexpanthenol	13j29-B05-287525	1
Fagron	Dexpanthenol	14E01-B11-293624	2
Fagron	Dexpanthenol	TL01312070	1
Fagron	Dexpanthenol	13L02-B04-292067	2
Fagron	Dexpanthenol	14E01-B11-295544	2
Fagron	Dexpanthenol	14E01-B11-295534	1
Fagron	Dexpanthenol	14E01-B11-295577	3
Fagron	Dexpanthenol	13J29-B05-287525	1
Fagron	Dexpanthenol	14214510	1
Fagron	Dexpanthenol	14e01-b11-293623	1
Fagron	Dexpanthenol	14E01-B11-300068	12
Fagron	Dexpanthenol	14E01-B11-295578	11
Fagron	Dexpanthenol	14E01-b11-295544	1
Fagron	Dexpanthenol	14H05-B02-300066	1
Fagron	Dexpanthenol	14E01-B11-300068	1
Fagron	Dexpanthenol	14H05-B02-300069	12
Fagron	Dexpanthenol	15A30-B08-306694	4
Fagron	Dexpanthenol	15A30-B08	5
Fagron	Dexpanthenol	15A30-B08-312353	5
Fagron	Dexpanthenol	TL01601003	1
Fagron	Dexpanthenol	17B06-B04-332077	3
Fagron	Dexpanthenol	17B06-B04-332075	10
Fagron	Dexpanthenol	15F26-B01	1
Fagron	Dexpanthenol	17B0619	1
Fagron	Dexpanthenol	17B06-B04-332076	1

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Supplier	Substance	Batch	Spectra
Fagron	Dexpanthenol	17I21-B01	1
Fagron	Dexpanthenol	7/21-B01-3402651	1
Fagron	Dexpanthenol	17/21-B01-340264	3
Fagron	Dexpanthenol	17I21B01-340266	1
Fagron	Dexpanthenol	17I21B01340267	1
Fagron	Dexpanthenol	17I21-B01-340267	2
Fagron	Dexpanthenol	17K30-B01-343821	5
Fagron	Dexpanthenol	17I21-B01-340269	1
Fagron	Dexpanthenol	17K30-B01-344320	1
Fagron	Dexpanthenol	17k30-B01-343821	1
Fagron	Dexpanthenol	17i21-B01-340265	1
Fagron	Dexpanthenol	18C20-B07-348241	5
Fagron	Dexpanthenol	1803008-02	1
Fagron	Dexpanthenol	18C20-B07-351396	3
Fagron	Dexpanthenol	5021904	1
Fagron	Dexpanthenol	18C20-B07-350625	1
Fagron	Dexpanthenol	14E01-811-295577	1
Fagron	Dexpanthenol	295544	1
Fagron	Dexpanthenol	13i04-n04	1
Fagron	Dexpanthenol	17/21-B01-340265	1
Fagron	Dexpanthenol	16D07-B04-323096	5
Fagron	Dexpanthenol	17B06-B04-332612	1
Fagron	Dexpanthenol	17J21-B01-340267	1
Fagron	Dexpanthenol	18C20-B07-349242	5
Fagron	Dexpanthenol	14E01-B11-295533	1
Fagron	Dexpanthenol	13D11-N12	1
Fagron	Dexpanthenol	14H05-B02-305656	2
Fagron	Dexpanthenol	12H28-N07	5
Fagron	Dexpanthenol	14E01-B11-300065	2
Fagron	Dexpanthenol	14E01-B11-293623	1
Fagron	Dexpanthenol	15A30-B08-306695	7
Fagron	Dexpanthenol	12L28-N03	6
Fagron	Dexpanthenol	17B06_B04_332076	1
Fagron	Dexpanthenol	15F26-B01-319991	6
Fagron	Dexpanthenol	16D07-B04-323097	2
Fagron	Dexpanthenol	14H05-B02-0001	1
Fagron	Dexpanthenol	12L28-N02	1
Fagron	Dexpanthenol	18C20-B07-349944	3
Fagron	Dexpanthenol	19088801	1
Fagron	Dexpanthenol	19B26-B01-361218	1
Fagron	Dexpanthenol	19F10-B08-191444	1
Fagron	Dexpanthenol	18C20-B07-349943	1
Fagron	Dexpanthenol	17I21-B01-340274	1
Fagron	Dexpanthenol	16D07-B04-322110	6
Fagron	Dexpanthenol	18C20-B07-349243	3
Fagron	Dexpanthenol	17/21-B01-340266	2
Fagron	Dexpanthenol	18J25-B04-357388	1
Fagron	Dexpanthenol	18C20-B07-353894	3
Fagron	Dexpanthenol	18J25-B04-357387	2
Fagron	Dexpanthenol	18J25-B04-357388	1
Fagron	Dexpanthenol	11B21-N01	1
Fagron	Dexpanthenol	TL01305030	8
Fagron	Dexpanthenol	16D07-B04	1
Fagron	Dexpanthenol	17I21-B01-340265	4
Fagron	Dexpanthenol	TL01706056	1
Fagron	Dexpanthenol	18C20-B07-348242	1
Fagron	Dexpanthenol	15F26-B01-317519	2
Fagron	Dexpanthenol	17K30-B01	1
Fagron	Dexpanthenol	12L28-N03	1
Fagron	Dexpanthenol	14E01B11293623	1

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Supplier	Substance	Batch	Spectra
Fagron	Dexpanthenol	14E01-B11	8
Fagron	Dexpanthenol	11B21-N01	1
Fagron	Dexpanthenol	TL01203018	3
Fagron	Dexpanthenol	13/04-N04	3
Fagron	Dexpanthenol	13J29B05287526	1
Fagron	Dexpanthenol	13L02-B04-292068	8
Fagron	Dexpanthenol	14051908	2
Fagron	Dexpanthenol	13J29-B05-287528	1
Fagron	Dexpanthenol	2914E-01082	1
Fagron	Dexpanthenol	14E01-B11-3000068	1
Fagron	Dexpanthenol	16D07-B04322508	1
Fagron	Dexpanthenol	18C20-B07-353895	1
Fagron	Dexpanthenol	16007-804-322508	1
Fagron	Dexpanthenol	18C20_B07_349243	1
Fagron	Dexpanthenol	16d07-b04	1
Fagron	Dexpanthenol	17b06-b04-332076	2
Fagron	Dexpanthenol	17k30-b01-343821	1
Fagron	Dexpanthenol	14e01-811-300068	1
Fagron	Dexpanthenol	16D07-B04-327322	5
Fagron	Dexpanthenol	11H26-N03	4
Fagron	Dexpanthenol	12B13-N07	2
Fagron	Dexpanthenol	15F26-B01-314370	11
Fagron	Dexpanthenol	15A30-B08-310962	2
Fagron	Dexpanthenol	TL01503022	1
Fagron	Dexpanthenol	TL01611112	1
Fagron	Dexpanthenol	171120D/TL01601003	1
Fagron	Dexpanthenol	17B06-B04-3322078	1
Fagron	Dexpanthenol	17I21-B01-340264	5
Fagron	Dexpanthenol	15f26b01_319991	1
Fagron	Dexpanthenol	14H05-B02	2
Fagron	Dexpanthenol	12E11-N02	1
Fagron	Dexpanthenol	12J30-B03-287502	1
Fagron	Dexpanthenol	15F26-B01-317520	1
Fagron	Dexpanthenol	18069103	1
Fagron	Dexpanthenol	13L02B04292068	1
Fagron	Dexpanthenol	16D07-B04-322508	10
Fagron	Dexpanthenol	17B06-B04	6
Fagron	Dexpanthenol	17I21-B01-340264	2
Fagron	Dexpanthenol	1801011-01	3
Fagron	Dexpanthenol	1703029-01	1
Fagron	Dexpanthenol	17I21-B01-340268	1
Fagron	Dexpanthenol	17K30-B01-343822	1
Fagron	Dexpanthenol	1721-B01-340264	1
Fargon/Alliance HC	Dexpanthenol	14E01-B11295578	1
fargon/Sanacorp	Dexpanthenol	12E11-N02	1
Fargron	Dexpanthenol	9L10/N01	1
Fiebig	Dexpanthenol	19106804	1
Fragron	Dexpanthenol	12E11-N02	1
Gatt-Koller	Dexpanthenol	1900112	1
Gehe	Dexpanthenol	12E11-N02	2
Gehe	Dexpanthenol	12285203	1
Gehe	Dexpanthenol	11293501	1
Gehe	Dexpanthenol	1703029-01	1
Gehe	Dexpanthenol	17B06-B04-332077	1
Gehe	Dexpanthenol	17I21-B01	1
Gehe	Dexpanthenol	17335103	1
Gehe	Dexpanthenol	17335105	1
Gehe	Dexpanthenol	17/21-B01-340266	1
Gehe	Dexpanthenol	17K30-B01-343822	2
Gehe	Dexpanthenol	18C20-B07-349944	1

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Supplier	Substance	Batch	Spectra
GEHE	Dexpanthenol	161004101	1
GEHE	Dexpanthenol	17065413	1
GEHE	Dexpanthenol	1607027-01	1
GEHE 17.06.2014	Dexpanthenol	13342610	1
Caelo	Dexpanthenol	18c20-b07-349242	1
Gehe/ Euro	Dexpanthenol	1510008-01	1
Caelo	Dexpanthenol	12285214	6
Caelo	Dexpanthenol	17287707	9
Caelo	Dexpanthenol	1193507	1
Gehe/Euro 30.06.15	Dexpanthenol	1502019-01	1
Hedinger	Dexpanthenol	16043505	1
Hedinger/AHD	Dexpanthenol	1301009-02	1
hochhaus-Apotheke	Dexpanthenol	1610041-01	1
Holdermann	Dexpanthenol	13/04-N04	1
Ichtyol gesellschaft GmbH	Dexpanthenol	16043511	1
Kehr	Dexpanthenol	16D07-B04-327322	1
Caelo	Dexpanthenol	17335105	14
Kögl	Dexpanthenol	402211160217	1
Kögl	Dexpanthenol	442812161017	1
Kögl	Dexpanthenol	442812161517	2
Kögl	Dexpanthenol	KNC1672J16	1
Kögl	Dexpanthenol	240707172717	1
Kögl	Dexpanthenol	20172407	2
Kögl	Dexpanthenol	1701687	2
Kögl	Dexpanthenol	1800586	2
Kögl	Dexpanthenol	1802261	3
Krieger	Dexpanthenol	17172105	1
Krieger	Dexpanthenol	17335108	2
L10/apo-ident	Dexpanthenol	1607027-01	2
L12	Dexpanthenol	17287704	1
L12	Dexpanthenol	TL01706056	1
Euro OTC	Dexpanthenol	1703029-01	27
Midas	Dexpanthenol	16311611	1
Midas	Dexpanthenol	17287707	1
Midas	Dexpanthenol	17335105	2
Midas	Dexpanthenol	17335107	1
Midas	Dexpanthenol	17335108	1
Midas	Dexpanthenol	18176605	1
Midas	Dexpanthenol	18197204	1
MIDAS	Dexpanthenol	16164811	1
Midas Göttingen	Dexpanthenol	17335106	2
Nachprüfung	Dexpanthenol	1407039-01	1
Noweda	Dexpanthenol	11010703	1
Noweda	Dexpanthenol	12285211	2
Noweda	Dexpanthenol	12E11-N02	2
Noweda	Dexpanthenol	13342601	1
Noweda	Dexpanthenol	13342605	1
Noweda	Dexpanthenol	13342606	1
Noweda	Dexpanthenol	15097712	1
Noweda	Dexpanthenol	16043505	1
Noweda	Dexpanthenol	16D07B04322508	1
Noweda	Dexpanthenol	17B06-B04-332078	2
Noweda	Dexpanthenol	1510008	1
Noweda	Dexpanthenol	17D07-B04-322508	1
Noweda	Dexpanthenol	17B06-B04-322078	1
Noweda	Dexpanthenol	17/21-B01-340264	1
Noweda	Dexpanthenol	1708013-01	2
Noweda	Dexpanthenol	17I21B01340269	1
Noweda	Dexpanthenol	1801011-01	1
Caelo	Dexpanthenol	16D07-804-322508	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	14214501	3
Caelo	Dexpanthenol	18197204	11
Noweda/EuRo	Dexpanthenol	1610041-01	1
Fagron	Dexpanthenol	15097709	1
Fagron	Dexpanthenol	17B06_B04	1
Euro OTC	Dexpanthenol	17041503	1
Pharmachem Pößneck/AHD	Dexpanthenol	18C20-B07-351396	1
Pharmachem/Phoenix	Dexpanthenol	1803008-01	1
Phoenix	Dexpanthenol	1510008-02	1
Phoenix	Dexpanthenol	17065412	1
Phoenix	Dexpanthenol	1801011-01	1
Phoenix	Dexpanthenol	17335103	1
Phoenix goettin	Dexpanthenol	14214512	1
Caelo	Dexpanthenol	13189504	2
phönix	Dexpanthenol	15a30b08312353	1
phönix	Dexpanthenol	16D07-B04-322110	1
Phönix	Dexpanthenol	12285204	1
Phönix	Dexpanthenol	1301009-02	1
Phönix	Dexpanthenol	1309030-01	1
Phönix	Dexpanthenol	13J29-B05287525	1
Phönix	Dexpanthenol	16311603	1
Phönix	Dexpanthenol	1721b01-340264	1
PHÖNIX	Dexpanthenol	1801011-01	2
Caelo	Dexpanthenol	1717203	1
Phönix Gotha	Dexpanthenol	1204010-01	1
Phönix Gotha	Dexpanthenol	1502019-01	1
Phönix Gotha	Dexpanthenol	1502019-02	1
Caelo	Dexpanthenol	18197202	14
Caelo	Dexpanthenol	12285202	7
Caelo	Dexpanthenol	13189502	3
Raben-Apotheke Mildenau	Dexpanthenol	1309030-03	1
Sanacorp	Dexpanthenol	36/AKD22	1
Sanacorp	Dexpanthenol	13342601	1
Sanacorp	Dexpanthenol	1407039-02	1
Sanacorp	Dexpanthenol	2/AKD4	1
Sanacorp	Dexpanthenol	14E01-B11	1
Sanacorp	Dexpanthenol	15097714	1
Sanacorp	Dexpanthenol	160601501	1
Sanacorp	Dexpanthenol	1703029-01	1
Sanacorp	Dexpanthenol	1610041-02	1
Sanacorp	Dexpanthenol	17172106	1
Sanacorp	Dexpanthenol	17172107	1
Sanacorp	Dexpanthenol	1801011-01	1
Caelo	Dexpanthenol	14E01-B11	1
Sanacorp/ euRho	Dexpanthenol	1103053-01	1
Caelo	Dexpanthenol	11293506	3
Caelo	Dexpanthenol	14214502	5
sanaEuro	Dexpanthenol	311V-01082	1
Sanaorp	Dexpanthenol	17B06-B04-332077	2
siehe Protokoll	Dexpanthenol	16043502	1
Spinnrad	Dexpanthenol	18069107	1
Caelo	Dexpanthenol	1610041-01	4
	Dexpanthenol	13J29-B05-287527	6
	Dexpanthenol	13J29B05287527	1
	Dexpanthenol	17287705	1
Caelo	Dexpanthenol		2
Caelo	Dexpanthenol	12018707	4
Caelo	Dexpanthenol	14051903	5
	Dexpanthenol	1407039-02	2
Euro OTC	Dexpanthenol	1309030-03	3

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Supplier	Substance	Batch	Spectra
Fagron	Dexpanthenol	17B06-B04-332078	4
Fagron	Dexpanthenol	19F10-B08-191442	2
Fagron	Dexpanthenol		1
Sanacorp	Dexpanthenol		1

- 136 075 spectra from 703 *Apo-Ident* customers from a total of 34 761 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dexpanthenol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dexpanthenol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	437	0	55 922
Type B	0	480	0	68 994
Type C	0	2273	5	136 075

The substance/substance group *Dexpanthenol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.6270 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.7500 %)
Type C	100.0000 % (> 99.6452 %)	99.7805 % (> 99.6488 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dexpanthenol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol concentrate 50%	75.13	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dexpanthenol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34639	34639	0.00	91.49
30884	31769	2.83	119.36
31317	31532	1.64	129.06
31532	31532	0.00	132.74
31769	31769	0.00	121.20
33239	31532	1.88	128.83
33716	33716	0.00	113.31
33903	33903	0.00	116.64
34596	31532	2.59	130.52
34637	34637	0.00	89.48

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dexpanthenol concentrate 50%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30492-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dexpanthenol concentrate 50%; Pantothenum 50%

Special notes

When selecting the *Dexpanthenol concentrate 50%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dexpanthenol concentrate 50%	8	2	114

Second-stage model

For differentiation of the substance/substance group *Dexpanthenol concentrate 50%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dexpanthenol concentrate 50%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dexpanthenol con. . .	12171803	30664	40	20120724
Caelo	Dexpanthenol con. . .	15408002	31835	60	20151211
Caelo	Dexpanthenol con. . .	153314	31879	60	20151014*
Caelo	Dexpanthenol con. . .	162483	32579	40	20160901*
Caelo	Dexpanthenol con. . .	173261	33974	40	20171207*
Caelo	Dexpanthenol con. . .	172781	33975	40	20171114*
Caelo	Dexpanthenol con. . .	18050802	34130	40	20180213
Caelo	Dexpanthenol con. . .	190581	34533	40	20190319*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 360 spectra of 8 reference samples from the substance/substance group *Dexpanthenol concentrate 50%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55 999 spectra from a total of 1108 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 100 spectra of 2 reference samples from the substance/substance group *Dexpanthenol concentrate 50%*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dexpanthenol concentrate 50%	14116302	31461	60
Caelo	Dexpanthenol concentrate 50%	163336	33161	40

- 69374 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 879 spectra from 213 *Apo-Ident* customers from 119 batches from the substance/substance group *Dexpanthenol concentrate 50%*.
- Among them are spectra of independent samples from 113 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alliance	Dexpanthenol concentrate 50%	17194601	1
Alliance Health	Dexpanthenol concentrate 50%	13068003	1
Alliance Healthcare	Dexpanthenol concentrate 50%	12256001	1
Alliance Healthcare	Dexpanthenol concentrate 50%	13174703	1
Alliance Healthcare	Dexpanthenol concentrate 50%	16136503	2
Anzag	Dexpanthenol concentrate 50%	14020803	2
Caelo	Dexpanthenol concentrate 50%	13174702	7
Apomix/Noweda	Dexpanthenol concentrate 50%	17059203	1
Audor Pharma	Dexpanthenol concentrate 50%	AP83943088QOP	1
Audor Pharma	Dexpanthenol concentrate 50%	AP83943088QOP	1
Audor Pharma	Dexpanthenol concentrate 50%	AP65524488QOP	2
Audor Pharma	Dexpanthenol concentrate 50%	AP36716516KOP	1
Bombastus	Dexpanthenol concentrate 50%	16025303	1
Bombastus	Dexpanthenol concentrate 50%	17135702	1
Bombastus	Dexpanthenol concentrate 50%	17059202	1
Caelo	Dexpanthenol concentrate 50%	14275203	8
Caelo	Dexpanthenol concentrate 50%	11279703	1
Caelo	Dexpanthenol concentrate 50%	11358202	1
Caelo	Dexpanthenol concentrate 50%	12256002	4
Caelo	Dexpanthenol concentrate 50%	12256001	4
Caelo	Dexpanthenol concentrate 50%	12340302	3
Caelo	Dexpanthenol concentrate 50%	13019203	8
Caelo	Dexpanthenol concentrate 50%	13068003	5
Caelo	Dexpanthenol concentrate 50%	p-050413-2	1
Caelo	Dexpanthenol concentrate 50%	13019204	1
Caelo	Dexpanthenol concentrate 50%	12127003	2
Caelo	Dexpanthenol concentrate 50%	13068004	4
Caelo	Dexpanthenol concentrate 50%	13174703	5
Caelo	Dexpanthenol concentrate 50%	13305003	9
Caelo	Dexpanthenol concentrate 50%	13305004	4
Caelo	Dexpanthenol concentrate 50%	11358201	2

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol concentrate 50%	13382102	3
Caelo	Dexpanthenol concentrate 50%	14116302	6
Caelo	Dexpanthenol concentrate 50%	14199101	1
Caelo	Dexpanthenol concentrate 50%	12081406	1
Caelo	Dexpanthenol concentrate 50%	2101404	1
Caelo	Dexpanthenol concentrate 50%	14198103	3
Caelo	Dexpanthenol concentrate 50%	13100408	1
Caelo	Dexpanthenol concentrate 50%	15196202	11
Caelo	Dexpanthenol concentrate 50%	1514902	1
Caelo	Dexpanthenol concentrate 50%	15331404	18
Caelo	Dexpanthenol concentrate 50%	15331402	2
Caelo	Dexpanthenol concentrate 50%	1508002	1
Caelo	Dexpanthenol concentrate 50%	16136503	20
Caelo	Dexpanthenol concentrate 50%	17031301	4
Caelo	Dexpanthenol concentrate 50%	170313035279	1
Caelo	Dexpanthenol concentrate 50%	1633603	1
Caelo	Dexpanthenol concentrate 50%	17135701	4
Caelo	Dexpanthenol concentrate 50%	17194602	10
Caelo	Dexpanthenol concentrate 50%	17194603	14
Caelo	Dexpanthenol concentrate 50%	17278101	4
Caelo	Dexpanthenol concentrate 50%	11121706	1
Caelo	Dexpanthenol concentrate 50%	17326102	29
Caelo	Dexpanthenol concentrate 50%	7051805	1
Caelo	Dexpanthenol concentrate 50%	18131403	3
Caelo	Dexpanthenol concentrate 50%	173261012x	1
Caelo	Dexpanthenol concentrate 50%	18131402	8
Caelo	Dexpanthenol concentrate 50%	18204509	2
Caelo	Dexpanthenol concentrate 50%	18248001	23
Caelo	Dexpanthenol concentrate 50%	19058102	9
Caelo	Dexpanthenol concentrate 50%	19058101	1
Caelo	Dexpanthenol concentrate 50%	182048001	1
Caelo	Dexpanthenol concentrate 50%	19230601	1
Caelo	Dexpanthenol concentrate 50%	14198101	15
Caelo	Dexpanthenol concentrate 50%	14275204	4
Caelo	Dexpanthenol concentrate 50%	15408003	10
Caelo	Dexpanthenol concentrate 50%	18050803 (2)	1
Caelo	Dexpanthenol concentrate 50%	18131301	25
Caelo	Dexpanthenol concentrate 50%	19140303	3
Caelo	Dexpanthenol concentrate 50%	16333602	18
Caelo	Dexpanthenol concentrate 50%	17059202	21
Caelo	Dexpanthenol concentrate 50%	17059201	1
Caelo	Dexpanthenol concentrate 50%	14116301	6
Caelo	Dexpanthenol concentrate 50%	16333603	46
Caelo	Dexpanthenol concentrate 50%	17326101	27
Caelo	Dexpanthenol concentrate 50%	15142902	5
Caelo	Dexpanthenol concentrate 50%	14373302	8
Caelo	Dexpanthenol concentrate 50%	11279704	1
Caelo	Dexpanthenol concentrate 50%	1805082	1
Caelo	Dexpanthenol concentrate 50%	15050801	2
Caelo	Dexpanthenol concentrate 50%	14275202	1
Caelo	Dexpanthenol concentrate 50%	1602503	1
Caelo	Dexpanthenol concentrate 50%	16315102	8
Caelo	Dexpanthenol concentrate 50%	17278103	10
Caelo	Dexpanthenol concentrate 50%	19106202	3
Caelo	Dexpanthenol concentrate 50%	19106201	3
Caelo	Dexpanthenol concentrate 50%	18050803	16
Caelo	Dexpanthenol concentrate 50%	16136505	8
Caelo	Dexpanthenol concentrate 50%	14275207	4
Caelo	Dexpanthenol concentrate 50%	19158302	1
Caelo	Dexpanthenol concentrate 50%	16248303	29

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol concentrate 50%	18028901	1
Caelo	Dexpanthenol concentrate 50%	18050804	4
Caelo	Dexpanthenol concentrate 50%	2x19140303	2
Caelo	Dexpanthenol concentrate 50%	18247901	9
Caelo	Dexpanthenol concentrate 50%	14373301	4
Caelo	Dexpanthenol concentrate 50%	16025303	15
Caelo	Dexpanthenol concentrate 50%	16248301	38
Caelo	Dexpanthenol concentrate 50%	17194601	25
Caelo	Dexpanthenol concentrate 50%	14020804	7
Caelo	Dexpanthenol concentrate 50%	15142901	8
Caelo	Dexpanthenol concentrate 50%	15196203	14
Caelo	Dexpanthenol concentrate 50%	17135702	19
Caelo	Dexpanthenol concentrate 50%	18247902	2
Caelo	Dexpanthenol concentrate 50%	15050802	19
Caesar & Lorenz GmbH	Dexpanthenol concentrate 50%	17194601	2
Caesar & Lorenz GmbH	Dexpanthenol concentrate 50%	17326102	1
Caesar & Loretz	Dexpanthenol concentrate 50%	18050803	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16248301	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16315102	2
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16248303	2
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16333603	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	17135701	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	17135702	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	18050803	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	18248001	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	18247901	1
Caesar&Loretz GmbH	Dexpanthenol concentrate 50%	15408003	1
Caesar&Loretz GmbH,27.0...	Dexpanthenol concentrate 50%	17059203	1
caesar&Loretz GmbH,AHC,...	Dexpanthenol concentrate 50%	16248301	1
Caesar&Loretz GmbH,Phön...	Dexpanthenol concentrate 50%	15408002	1
Caesar&lorenz,Phoenix	Dexpanthenol concentrate 50%	14116302	2
Cealo	Dexpanthenol concentrate 50%	17059203	1
Cealo	Dexpanthenol concentrate 50%	18248001	1
Ebert & Jacobi 01.06...	Dexpanthenol concentrate 50%	16025303	1
Euro OTC	Dexpanthenol concentrate 50%	15408003	2
Euro OTC	Dexpanthenol concentrate 50%	16333603	2
Euro OTC	Dexpanthenol concentrate 50%	15142902	1
Fagron	Dexpanthenol concentrate 50%	16333603	1
Fagron	Dexpanthenol concentrate 50%	17059202	1
Fagron	Dexpanthenol concentrate 50%	17194601	1
Fagron	Dexpanthenol concentrate 50%	17194602	1
Fagron	Dexpanthenol concentrate 50%	14198103	1
Finteler Apotheke	Dexpanthenol concentrate 50%	17031303	1
Gehe	Dexpanthenol concentrate 50%	11358204	1
Gehe	Dexpanthenol concentrate 50%	13019203	1
Gehe	Dexpanthenol concentrate 50%	13019204	1
Gehe	Dexpanthenol concentrate 50%	14373302	1
GEHE	Dexpanthenol concentrate 50%	17326102	1
Gehe 17.06.2014	Dexpanthenol concentrate 50%	13382102	1
gehe 31.01.2014	Dexpanthenol concentrate 50%	13068004	1
Caelo	Dexpanthenol concentrate 50%	16248301/1210217	1
Caelo	Dexpanthenol concentrate 50%	1021117/17059203	1
Caelo	Dexpanthenol concentrate 50%	1220218/17194603	1
Caelo	Dexpanthenol concentrate 50%	17031303	2
Kehr	Dexpanthenol concentrate 50%	18050803	3
Lamotte	Dexpanthenol concentrate 50%	AP83943088Q0P	1
Nachprüfung	Dexpanthenol concentrate 50%	13019203	1
Nachprüfung	Dexpanthenol concentrate 50%	15142902	1
Noweda	Dexpanthenol concentrate 50%	12171802	1
Noweda	Dexpanthenol concentrate 50%	12340302	1

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Supplier	Substance	Batch	Spectra
Noweda	Dexpanthenol concentrate 50%	12340303	2
Noweda	Dexpanthenol concentrate 50%	15196202	1
Noweda	Dexpanthenol concentrate 50%	15408002	1
Caelo	Dexpanthenol concentrate 50%	16136504	21
Caelo	Dexpanthenol concentrate 50%	1402003	1
Caelo	Dexpanthenol concentrate 50%	17059203/2230418	1
Caelo	Dexpanthenol concentrate 50%	14020803	5
Caelo	Dexpanthenol concentrate 50%	17059203	21
Phönix	Dexpanthenol concentrate 50%	18050802	1
Caelo	Dexpanthenol concentrate 50%	17194605	1
Caelo	Dexpanthenol concentrate 50%	2090817/17135701	1
Caelo	Dexpanthenol concentrate 50%	19140301	1
Raben-Apotheke Mildenau	Dexpanthenol concentrate 50%	14116302	1
Rondell Apotheke	Dexpanthenol concentrate 50%	15331404	1
sanacorp	Dexpanthenol concentrate 50%	14116301	1
sanacorp	Dexpanthenol concentrate 50%	14198103	1
Sanacorp	Dexpanthenol concentrate 50%	12340302	1
Sanacorp	Dexpanthenol concentrate 50%	AKD29	1
Sanacorp	Dexpanthenol concentrate 50%	14116302	1
Sanacorp	Dexpanthenol concentrate 50%	16136505	1
Sanacorp	Dexpanthenol concentrate 50%	17326101	1
Sanacorp	Dexpanthenol concentrate 50%	1805083	1
Sanacorp	Dexpanthenol concentrate 50%	19106204	1
Sonnenberg-Apotheke	Dexpanthenol concentrate 50%	13305004	1
Taoasis	Dexpanthenol concentrate 50%	18050804	1
VDL	Dexpanthenol concentrate 50%	14020804	1
Caelo	Dexpanthenol concentrate 50%	12171803	2
Caelo	Dexpanthenol concentrate 50%	15408002	14
Caelo	Dexpanthenol concentrate 50%	162483	1
Caelo	Dexpanthenol concentrate 50%	18050802	16
Caelo	Dexpanthenol concentrate 50%		1
Sanacorp	Dexpanthenol concentrate 50%		1

- 137 474 spectra from 703 *Apo-Ident* customers from a total of 35 178 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dexpanthenol concentrate 50%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dexpanthenol concentrate 50%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	360	0	55 999
Type B	0	100	0	69 374
Type C	0	878	1	137 474

The substance/substance group *Dexpanthenol concentrate 50%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.3333 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.8862 % (> 99.5449 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dexpanthenol concentrate 50%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol	22.01	—
Propylene glycol	31.86	—
1,3-butanediol	91.77	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dexpanthenol concentrate 50%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30664	34533	15.17	49.00
31835	32579	2.75	48.74
31879	31879	0.00	40.53
32579	32579	0.00	47.45
33974	33974	0.00	44.51
33975	33975	0.00	46.18
34130	31879	2.37	41.94
34533	34533	0.00	43.80

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances,

thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dextrorotary lactic acid 20%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30740-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dextrorotary lactic acid 20%; Acidum L (+)-lacticum 20%

Special notes

When selecting the *Dextrorotary lactic acid 20%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dextrorotary lactic acid 20%	5	2	6

Second-stage model

For differentiation of the substance/substance group *Dextrorotary lactic acid 20%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dextrorotary lactic acid 20%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dextrorotary lac...	12105501	30740	40	1405101
Caelo	Dextrorotary lac...	15113303	31720	60	20150622
Caelo	Dextrorotary lac...	161639	32341	40	20160805*
Caelo	Dextrorotary lac...	162572	33318	40	20170216*
Caelo	Dextrorotary lac...	191837	34731	40	20191014*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Dextrorotary lactic acid 20%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Dextrorotary lactic acid 20%*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dextrorotary lactic acid 20%	172086	33711	40
Caelo	Dextrorotary lactic acid 20%	181763	34343	40
Caelo	Dextrorotary lactic acid 20%	172086	34083	40

- 69 354 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 20 spectra from 6 *Apo-Ident* customers from 7 batches from the substance/substance group *Dextrorotary lactic acid 20%*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Dextrorotary lactic acid 20%	16257201	2
Caelo	Dextrorotary lactic acid 20%	18176303	4
Caelo	Dextrorotary lactic acid 20%	17208603	6
Caelo	Dextrorotary lactic acid 20%	18176308	1
Caelo	Dextrorotary lactic acid 20%	17208605	4
Caelo	Dextrorotary lactic acid 20%	15334302	1
Caelo	Dextrorotary lactic acid 20%	15113303	2

- 138 333 spectra from 703 *Apo-Ident* customers from a total of 35 288 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dextrorotary lactic acid 20%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dextrorotary lactic acid 20%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	120	0	69 354
Type C	0	18	2	138 333

The substance/substance group *Dextrorotary lactic acid 20%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6456 %)	90.0000 % (> 75.0000 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dextrorotary lactic acid 20%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Aluminium acetotartrate solution	17.48	—
Hydrophilic base emulsion (NRF p.25)	22.45	—
Chlorhexidine digluconate solution 20%	22.61	—
Polyhexanide solution 20%	32.00	—
Chest elixir	35.12	—
Gel basis Audor®	35.25	—
Water	36.39	—
Non-ionic hydrous liniment SR/DAC (NRF...	38.21	—
Hydrophilic cream, non-ionic SR (NRF p...	40.33	—
Hydrated liniment SR/DAC (NRF p.40)	40.78	—
Acetic acid 30%	44.18	—
Liquorice juice purified, diluted	45.44	—
Hydrophilic cream, non-ionic without p...	46.58	—
Fortified wine	48.76	—
Anionic hydrophilic cream SR (NRF p.27)	50.35	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dextrorotary lactic acid 20%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31720	30740	3.56	17.48
32341	32341	0.00	17.62
34731	34731	0.00	18.12

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33318	33318	0.00	20.04
30740	30740	0.00	19.54

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Diethyl ether**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31651-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Diethyl ether; Aether

Special notes

When selecting the *Diethyl ether* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Diethyl ether	4	1	110

Second-stage model

For differentiation of the substance/substance group *Diethyl ether* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Diethyl ether*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Hedinger	Diethyl ether	052159	31854	60	9337
Hedinger	Diethyl ether	052161	33214	40	20160621
Otto Fischar	Diethyl ether	5975088	31855	60	20150817
Otto Fischar	Diethyl ether	5977054	33633	40	20170524

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 4 reference samples from the substance/substance group *Diethyl ether*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Diethyl ether*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Hedinger	Diethyl ether	052162	34122	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 228 spectra from 107 *Apo-Ident* customers from 112 batches from the substance/substance group *Diethyl ether*.
- Among them are spectra of independent samples from 110 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Otto Fischer GmbH & Co...	Diethyl ether	5978012	1
Allianc. Health. / Otto...	Diethyl ether	597606B	1
Alliance Healthcare/Fis...	Diethyl ether	5973065	1
Alliance Healthcare/Fis...	Diethyl ether	597401A	1
Caelo	Diethyl ether	597606B	2
Caelo	Diethyl ether	28051304	1
Caelo	Diethyl ether	5974058	1
Caelo	Diethyl ether	5976064	1
Caelo	Diethyl ether	52156	1
Caelo	Diethyl ether	5977016	5
Caelo	Diethyl ether	5973014	1
Chiesi	Diethyl ether	5978016	1
E+J, 28.09.2016	Diethyl ether	597601C	1
fischar	Diethyl ether	5977056	1
fischar	Diethyl ether	5978013	1
fischar	Diethyl ether	5972083	1
fischar	Diethyl ether	5975012	1
fischar	Diethyl ether	597601C	1
Fischar	Diethyl ether	597601C	1
Fischar	Diethyl ether	597606B	1
Fischar	Diethyl ether	5977057	1
Fischar	Diethyl ether	5977059	1
Fischar	Diethyl ether	5978019	2
Fischar	Diethyl ether	5971081	1
Fischar	Diethyl ether	597208C	1
Fischar	Diethyl ether	5973013	1
Fischar	Diethyl ether	5972082	1
Fischar	Diethyl ether	5973063	1
Fischar	Diethyl ether	5972089	1
Fischar	Diethyl ether	5973069	1
Fischar	Diethyl ether	5973067	1
Fischar	Diethyl ether	5974013	1
Fischar	Diethyl ether	597401A	1
Fischar	Diethyl ether	5973065	1
Fischar	Diethyl ether	52157	1
Fischar	Diethyl ether	597401C	1
Fischar	Diethyl ether	5974051	1
Fischar	Diethyl ether	5974059	2
Fischar / Alliance Heal...	Diethyl ether	5976067	3
Fischar / Alliance Heal...	Diethyl ether	5978061	6
Fischar / Alliance Heal...	Diethyl ether	597801C	6

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Supplier	Substance	Batch	Spectra
Fischar / Gehe	Diethyl ether	5976063	1
Fischar / Gehe	Diethyl ether	5977018	1
Fischar / Kehr	Diethyl ether	597606B	2
fischar /noweda	Diethyl ether	5978017	1
Fischar /Zentrum-Apotheke	Diethyl ether	5974013	1
Fischar 001	Diethyl ether	597204B	1
Fischar Anzag	Diethyl ether	85(5978015)	1
Fischar Anzag	Diethyl ether	86(5978066)	1
Fischar Anzag	Diethyl ether	89(5979031)	1
Fischar/ Alliance Healt...	Diethyl ether	5977051	6
Fischar/ Anzag	Diethyl ether	87(5978066)	1
Fischar/ Anzag	Diethyl ether	88(5979036)	1
Fischar/ Now	Diethyl ether	597301C	1
Fischar/ Now	Diethyl ether	597306C	1
Fischar/AHD	Diethyl ether	83(5977053)	1
Fischar/AHD	Diethyl ether	84(5978012)	1
Fischar/Alliance	Diethyl ether	5978015	1
Fischar/Alliance Health...	Diethyl ether	5978066	1
Fischar/Anzag	Diethyl ether	5973063	1
Fischar/Fiebig	Diethyl ether	5976062	2
Fischar/Gehe	Diethyl ether	5973018	1
Fischar/Gehe	Diethyl ether	597405A	1
Fischar/Jenne	Diethyl ether	5978013	1
Fischar/Kehr	Diethyl ether	5977055	1
Fischar/Kehr	Diethyl ether	5978015	1
Fischar/Kehr	Diethyl ether	5979032	2
Fischar/Noweda	Diethyl ether	5976019	1
Fischar/Noweda	Diethyl ether	5973019	1
Fischar/Phoenix	Diethyl ether	5974014	1
Fischar/Phoenix	Diethyl ether	5974058	1
Fischar/Phönix	Diethyl ether	5978018	1
Fischar/Phönix	Diethyl ether	5973064	1
Fischar/Sanacorp	Diethyl ether	597606B	1
Fischar/Sanacorp	Diethyl ether	5977018	1
Fischar/Sanacorp	Diethyl ether	597606	1
Fischar/Sanacorp	Diethyl ether	5977056	3
Fischar/Sanacorp	Diethyl ether	5978014	1
Fischar/Sanacorp	Diethyl ether	5978016	1
Fischar/Sanacorp	Diethyl ether	5978017	1
Fischar/Sanacorp	Diethyl ether	5972042	1
Fischar/Sanacorp	Diethyl ether	5973066	1
Fischbar	Diethyl ether	597701B	1
fischer	Diethyl ether	5977058	1
fischer	Diethyl ether	597801C	1
Fischer	Diethyl ether	5978017	1
Fischer	Diethyl ether	5973066	1
Fischer	Diethyl ether	597306A	1
FISCHER GMBH / GEHE	Diethyl ether	5974051	1
Fischer Saarbrücken/GEHE	Diethyl ether	5972047	1
Fischer/AEP	Diethyl ether	5976061	1
fischer/Kehr	Diethyl ether	5977058	1
Fischer/Phönix	Diethyl ether	597606b	1
fISHA Noweda	Diethyl ether	5977054	1
fishar/ Sanacorp	Diethyl ether	5977054	2
Gehe	Diethyl ether	5972082	1
Gehe /Hedinger	Diethyl ether	52163	1
Gehe/Fischar	Diethyl ether	597301	2
gepepharm GmbH	Diethyl ether	52155	1
Hedinger	Diethyl ether	52153	2
Hedinger	Diethyl ether	13011812	1

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Supplier	Substance	Batch	Spectra
Hedinger	Diethyl ether	52161	1
Hedinger	Diethyl ether	21071803	1
Hedinger	Diethyl ether	5121813	1
Hedinger	Diethyl ether	52152	1
Hedinger	Diethyl ether	52153	4
Hedinger	Diethyl ether	52155	1
Hedinger	Diethyl ether	30011406	1
Hedinger	Diethyl ether	14070804	1
Hedinger	Diethyl ether	52156	1
Hedinger / Gehe	Diethyl ether	52163	2
Hedinger / Noweda	Diethyl ether	52156	4
hedinger/anzag	Diethyl ether	52153	2
Hedinger/Anzag	Diethyl ether	52161	1
Hedinger/Anzag	Diethyl ether	52163	1
hedinger/gehe	Diethyl ether	52163	1
Hedinger/Gehe	Diethyl ether	52162	1
Hedinger/Gehe	Diethyl ether	52164	2
Hedinger/Gehe	Diethyl ether	52153	1
Hedinger/Gehe	Diethyl ether	52156	2
Hedinger/Gehe	Diethyl ether	52157	1
Hedinger/Kehr	Diethyl ether	52157	1
Hedinger/Noweda	Diethyl ether	52161	2
Hedinger/Noweda	Diethyl ether	52153	1
Hedinger/Noweda	Diethyl ether	52157	3
Hedinger/Phönix	Diethyl ether	52162	1
Hedinger/Sanacorp	Diethyl ether	12114902	1
Hedinger/V.d.L.	Diethyl ether	52153	1
Heninger	Diethyl ether	52162	3
Herdinger	Diethyl ether	52162	1
Ichthyol/Phönix	Diethyl ether	5978017	1
Ichthyol-Gesellschaft	Diethyl ether	5976011	1
Kehr/Fischar	Diethyl ether	5977052	1
L12/Hedinger	Diethyl ether	52161	1
noweda/fischar	Diethyl ether	5974056	1
Noweda	Diethyl ether	5971381	1
noweda/ Otto Fischar	Diethyl ether	5976066	1
otto fischar	Diethyl ether	5978016	1
Otto Fischar	Diethyl ether	5976019	1
Otto Fischar	Diethyl ether	5975089	1
Otto Fischar	Diethyl ether	597606B	1
Otto Fischar / Noweda	Diethyl ether	77016	1
Otto Fischar / Sanacorp	Diethyl ether	5975015	1
Otto Fischar GmbH	Diethyl ether	5972088	1
Otto Fischar GmbH	Diethyl ether	5972089	1
Otto Fischar GmbH	Diethyl ether	5972048	1
Otto Fischar GmbH	Diethyl ether	5972045	1
Otto Fischar GmbH	Diethyl ether	597208	1
Otto Fischar GmbH	Diethyl ether	5972082	1
Otto Fischar GmbH	Diethyl ether	597301B	1
Otto Fischar GmbH & Co....	Diethyl ether	5976065	1
Otto Fischar GmbH & Co....	Diethyl ether	5977016	1
Otto Fischar GmbH & Co....	Diethyl ether	5974102	2
Otto Fischar GmbH & Co. KG	Diethyl ether	5977057	1
Otto Fischar GmbH& Co.KG	Diethyl ether	5972049	1
Otto Fischar GmbH& Co.KG	Diethyl ether	597204C	1
Otto Fischar/ Anzag	Diethyl ether	5977017	1
Otto Fischar/AHD	Diethyl ether	5978014	1
Otto Fischar/Gehe	Diethyl ether	597705B	1
Otto Fischar/Gehe	Diethyl ether	5977059	1
Otto Fischar/GEHE	Diethyl ether	597301B/311152/2	1

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Supplier	Substance	Batch	Spectra
otto fischer/Sana	Diethyl ether	597401B	1
Otto Fischer/Sanacorp	Diethyl ether	5974104	1
Otto Fischer/Sanacorp	Diethyl ether	597301A	1
Otto Fischer /Noweda	Diethyl ether	5977018	1
Otto Fischer GmbH	Diethyl ether	5976069	1
Otto Fischer/ Kehr	Diethyl ether	5976062	1
Otto Fischer/Anzag	Diethyl ether	5978063	1
Otto Fischer/Kehr	Diethyl ether	5976067	1
Otto Fischer/Kehr	Diethyl ether	5977051	1
Otto Fischer/Kehr	Diethyl ether	5977056	1
Otto FischerGmbH / Alli...	Diethyl ether	597401B	1
Phoenix/Fischarl	Diethyl ether	5973066	1
Phönix	Diethyl ether	597204B	1
Phönix	Diethyl ether	52153	1
Phönix/Fischer	Diethyl ether	5977018	1
Sanacorp	Diethyl ether	52152	1
Sanacorp/Hedinger	Diethyl ether	52163	2
Stumpf/Fischer	Diethyl ether	5974052	1

- 138 125 spectra from 703 *Apo-Ident* customers from a total of 35 183 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Diethyl ether* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Diethyl ether* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	40	0	69 434
Type C	0	226	2	138 125

The substance/substance group *Diethyl ether* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.1228 % (> 97.8070 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Diethyl ether* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Metronidazole 25% in white petrolatum	84.12	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Diethyl ether* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31854	31854	0.00	149.55
31855	31854	0.53	149.72
33214	31854	5.00	143.56
33633	31854	4.03	147.17

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dimethyl sulfoxide**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31498-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dimethyl sulfoxide; Dimethylsulfoxidum

Special notes

When selecting the *Dimethyl sulfoxide* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dimethyl sulfoxide	8	22	158

Second-stage model

For differentiation of the substance/substance group *Dimethyl sulfoxide* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dimethyl sulfoxide*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dimethyl sulfoxide	181976	34221	40	20180815*
Euro OTC	Dimethyl sulfoxide	131000802	31498	60	AR-15-FG-002774-01
Euro OTC	Dimethyl sulfoxide	1508018	31734	60	0000010817
Euro OTC	Dimethyl sulfoxide	1511013	31803	60	20151124*
Euro OTC	Dimethyl sulfoxide	1511028	31813	60	20151202*
Euro OTC	Dimethyl sulfoxide	1601048	31848	60	20160129*
Euro OTC	Dimethyl sulfoxide	1604010	32280	40	20160513*
Fagron	Dimethyl sulfoxide	15A16-C01-16194	31732	60	20150130

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 440 spectra of 8 reference samples from the substance/substance group *Dimethyl sulfoxide*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55919 spectra from a total of 1108 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 880 spectra of 22 reference samples from the substance/substance group *Dimethyl sulfoxide*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 22 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Dimethyl sulfoxide	1606007	32460	40
Euro OTC	Dimethyl sulfoxide	1608009	32707	40
Euro OTC	Dimethyl sulfoxide	1608029	32708	40
Euro OTC	Dimethyl sulfoxide	1609006	32713	40
Euro OTC	Dimethyl sulfoxide	1610015	32835	40
Euro OTC	Dimethyl sulfoxide	1701006	33233	40
Euro OTC	Dimethyl sulfoxide	1705025	33451	40
Euro OTC	Dimethyl sulfoxide	1705005	33452	40
Euro OTC	Dimethyl sulfoxide	1709010	33666	40
Euro OTC	Dimethyl sulfoxide	1710001	33667	40
Euro OTC	Dimethyl sulfoxide	1801008	33925	40
Euro OTC	Dimethyl sulfoxide	1711020	33933	40
Euro OTC	Dimethyl sulfoxide	1803015	34097	40
Euro OTC	Dimethyl sulfoxide	1805002	34181	40
Euro OTC	Dimethyl sulfoxide	1806021	34193	40
Euro OTC	Dimethyl sulfoxide	1808012	34216	40
Euro OTC	Dimethyl sulfoxide	1809024	34301	40
Euro OTC	Dimethyl sulfoxide	1809025	34305	40
Euro OTC	Dimethyl sulfoxide	1902028	34427	40
Euro OTC	Dimethyl sulfoxide	1903021	34494	40
Euro OTC	Dimethyl sulfoxide	1906016	34657	40
Euro OTC	Dimethyl sulfoxide	1908024	34698	40

- 68 594 spectra from a total of 1480 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 913 spectra from 358 *Apo-Ident* customers from 160 batches from the substance/substance group *Dimethyl sulfoxide*.
- Among them are spectra of independent samples from 154 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Dimethyl sulfoxide	151102801	1
AHD,17.10.13	Dimethyl sulfoxide	1306010-02	1
Alliance	Dimethyl sulfoxide	1601048-02	1
Alliance	Dimethyl sulfoxide	1606007-01	1
Alliance	Dimethyl sulfoxide	1705025-01	1
Alliance Healthcare	Dimethyl sulfoxide	1210059-01	1
Alliance Healthcare	Dimethyl sulfoxide	1604010-01	1
Alte Apotheke	Dimethyl sulfoxide	1606007-01	1
Anzag	Dimethyl sulfoxide	1606007-01	2
Euro OTC	Dimethyl sulfoxide	180602101	2
Caelo	Dimethyl sulfoxide	1711020-01	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Dimethyl sulfoxide	171102001	3
apo ident	Dimethyl sulfoxide	1610015-01	1
apoident	Dimethyl sulfoxide	1806021-01	1
apo-ident	Dimethyl sulfoxide	1805002-02	1
apo-ident/ AHD	Dimethyl sulfoxide	1808012-01	1
Audor Pharma	Dimethyl sulfoxide	AP1306010-01D	3
Audor Pharma	Dimethyl sulfoxide	1111059-01D	1
Audor Pharma	Dimethyl sulfoxide	1306010-01D	1
Audor Pharma	Dimethyl sulfoxide	AP1210059-01D	1
Audor Pharma	Dimethyl sulfoxide	AP1303010-01D	1
Bombastus	Dimethyl sulfoxide	1601048-02	1
Bombastus	Dimethyl sulfoxide	1606007-01	2
Bombastus	Dimethyl sulfoxide	1705025-01	1
Bombastus	Dimethyl sulfoxide	1710001-01	1
Bombastus	Dimethyl sulfoxide	1805002	1
Caelo	Dimethyl sulfoxide	29081202	1
Caelo	Dimethyl sulfoxide	1210059-01	4
Caelo	Dimethyl sulfoxide	140403101	1
Caelo	Dimethyl sulfoxide	1601048-01	1
Caelo	Dimethyl sulfoxide	1206010-01	1
Caelo	Dimethyl sulfoxide	1606007-01	3
Caelo	Dimethyl sulfoxide	160015-02	1
Caelo	Dimethyl sulfoxide	1705025-01	2
Caelo	Dimethyl sulfoxide	SYN180319	1
Caelo	Dimethyl sulfoxide	7111807	1
Caelo	Dimethyl sulfoxide	1808012-01	5
Caelo	Dimethyl sulfoxide	17111806	1
Caelo	Dimethyl sulfoxide	18197609	1
Caelo	Dimethyl sulfoxide	18197601	1
Caelo	Dimethyl sulfoxide	17075702	1
Caelo	Dimethyl sulfoxide	1310008-02	1
Caelo	Dimethyl sulfoxide	18197602	1
Caelo	Dimethyl sulfoxide	1508018-01	3
Caelo	Dimethyl sulfoxide	1601048-02	1
Caelo	Dimethyl sulfoxide	1610015-02	4
Caelo	Dimethyl sulfoxide	1610015_02	1
Caelo	Dimethyl sulfoxide	1411039-02	2
Caelo	Dimethyl sulfoxide	1306010-01	2
Caelo	Dimethyl sulfoxide	1306010-02	1
Caelo	Dimethyl sulfoxide	1404031-01	3
Caelo	Dimethyl sulfoxide	180500202	1
Caelo	Dimethyl sulfoxide	106007-01	1
Caelo	Dimethyl sulfoxide	170901001	1
Caelo	Dimethyl sulfoxide	1508018-02	1
Caelo	Dimethyl sulfoxide	1511028-01	1
Caelo	Dimethyl sulfoxide	1609006-01	2
Caelo	Dimethyl sulfoxide	18197615	1
Caerol / Gehe	Dimethyl sulfoxide	1508018-01	1
Caecio	Dimethyl sulfoxide	1310008-01	1
Caesar & Loretz GmbH	Dimethyl sulfoxide	18197616	1
Caesar & Loretz GmbH	Dimethyl sulfoxide	18197613	1
Caesar & Loretz GmbH / G	Dimethyl sulfoxide	18197621	1
CeloAnzag	Dimethyl sulfoxide	18197602	1
Chemical Corp.	Dimethyl sulfoxide	1404031-02	1
Chemical corp. / Noweda	Dimethyl sulfoxide	1306010-02	1
Chemical Corp./Sanacorp	Dimethyl sulfoxide	1310008-02	1
Ebert 09.08.16 KKH	Dimethyl sulfoxide	1604010-01	1
Ebert 12.08.16	Dimethyl sulfoxide	1604040-01	1
Ebert KKH29.09.16	Dimethyl sulfoxide	16060074-01	1
EuRho	Dimethyl sulfoxide	1111059-02	1

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Supplier	Substance	Batch	Spectra
EuRho	Dimethyl sulfoxide	1210059-01	1
EuRho	Dimethyl sulfoxide	1411039-02	1
EuRho	Dimethyl sulfoxide	1606007-01	2
EuRho	Dimethyl sulfoxide	1610015-02	1
EuRho	Dimethyl sulfoxide	SYN160216	1
EuRho	Dimethyl sulfoxide	1705025	1
EuRHo	Dimethyl sulfoxide	1809024-01	1
EuRho / Alliance Health...	Dimethyl sulfoxide	SYN160215	1
EuRho AHC	Dimethyl sulfoxide	1610015-02	1
Euro OTC	Dimethyl sulfoxide	1508018-01	26
EuRho/Fiebig	Dimethyl sulfoxide	SYN150525	1
EuRho/Fiebig	Dimethyl sulfoxide	1903021	1
EuRho/Noweda	Dimethyl sulfoxide	1601048-01	2
EuRho/Noweda	Dimethyl sulfoxide	1610015-02	1
EuRho/Phoenix	Dimethyl sulfoxide	1705025-01	4
EuRho/Phoenix	Dimethyl sulfoxide	1711020-01	2
EuRho/Phönix	Dimethyl sulfoxide	1310008-02	1
EuRho/Sanacorp	Dimethyl sulfoxide	1610015-02	1
Euro	Dimethyl sulfoxide	140403-01	1
Euro OT/Phönix	Dimethyl sulfoxide	SYN1608022	1
Euro OTC	Dimethyl sulfoxide	170502501	2
Euro OTC	Dimethyl sulfoxide	1805002	1
Euro OTC	Dimethyl sulfoxide	160104801	2
Euro OTC	Dimethyl sulfoxide	17100001-01	1
Euro OTC	Dimethyl sulfoxide	1004041-01	1
Euro OTC	Dimethyl sulfoxide	12101202	1
Euro OTC	Dimethyl sulfoxide	26011301	1
Euro OTC	Dimethyl sulfoxide	613A-01336	1
Euro OTC	Dimethyl sulfoxide	13011403	1
Euro OTC	Dimethyl sulfoxide	14051404	1
Euro OTC	Dimethyl sulfoxide	130008-01	1
Euro OTC	Dimethyl sulfoxide	1404031	1
Euro OTC	Dimethyl sulfoxide	15011503	1
Euro OTC	Dimethyl sulfoxide	1411039-2	1
Euro OTC	Dimethyl sulfoxide	160048-02	1
Euro OTC	Dimethyl sulfoxide	1604010-01	20
Euro OTC	Dimethyl sulfoxide	1606007	1
Euro OTC	Dimethyl sulfoxide	1610015-02	49
Euro OTC	Dimethyl sulfoxide	4817A-01336	1
Euro OTC	Dimethyl sulfoxide	1805002-01	23
Euro OTC	Dimethyl sulfoxide	29091809	1
Euro OTC	Dimethyl sulfoxide	5121810	1
Euro OTC	Dimethyl sulfoxide	19011906	1
Euro OTC	Dimethyl sulfoxide	6021902	1
Euro OTC	Dimethyl sulfoxide	161001502	1
Euro OTC	Dimethyl sulfoxide	1809024-01	9
Euro OTC	Dimethyl sulfoxide	1310008-01	11
Euro OTC	Dimethyl sulfoxide	1310008-02	8
Euro OTC	Dimethyl sulfoxide	1210059-01	14
Euro OTC	Dimethyl sulfoxide	170522DS/1610015-01	1
Euro OTC	Dimethyl sulfoxide	1705025-01	35
Euro OTC	Dimethyl sulfoxide	1809024-21	1
Euro OTC	Dimethyl sulfoxide	170001-01	1
Euro OTC	Dimethyl sulfoxide	1609006-01	21
Euro OTC	Dimethyl sulfoxide	110600601	1
Euro OTC	Dimethyl sulfoxide	PHS111205	1
Euro OTC	Dimethyl sulfoxide	13003010-01	1
Euro OTC	Dimethyl sulfoxide	1404031-02	8
Euro OTC	Dimethyl sulfoxide	141103902	2
Euro OTC	Dimethyl sulfoxide	169006-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Dimethyl sulfoxide	17525-01	1
Euro OTC	Dimethyl sulfoxide	1711020-01	31
Euro OTC	Dimethyl sulfoxide	1808012-01	11
Euro OTC	Dimethyl sulfoxide	1805002-02	15
Euro OTC	Dimethyl sulfoxide	SYN180319	4
Euro OTC	Dimethyl sulfoxide	1106006-01	4
Euro OTC	Dimethyl sulfoxide	1303010-01	15
Euro OTC	Dimethyl sulfoxide	170502	1
Euro OTC	Dimethyl sulfoxide	1709090-01	1
Euro OTC	Dimethyl sulfoxide	1903021-02	9
Euro OTC	Dimethyl sulfoxide	171001-01	1
Euro OTC	Dimethyl sulfoxide	1207008-02	1
Euro OTC	Dimethyl sulfoxide	1411039-01	15
Euro OTC	Dimethyl sulfoxide	1511028-01	5
Euro OTC	Dimethyl sulfoxide	1601048-01	10
Euro OTC	Dimethyl sulfoxide	1709010-01	19
Euro OTC	Dimethyl sulfoxide	1404031-01	9
Euro OTC	Dimethyl sulfoxide	1508018-02	25
Euro OTC	Dimethyl sulfoxide	1906016-01	3
Euro OTC	Dimethyl sulfoxide	14H28-M01	2
Euro OTC	Dimethyl sulfoxide	1505021	1
Euro OTC	Dimethyl sulfoxide	15111028-01	1
Euro OTC	Dimethyl sulfoxide	1610015-01	30
Euro OTC	Dimethyl sulfoxide	1601048-02	9
Euro OTC	Dimethyl sulfoxide	1806021-01	20
Euro OTC	Dimethyl sulfoxide	1411039-02	8
Euro OTC	Dimethyl sulfoxide	180500202	1
Euro OTC	Dimethyl sulfoxide	160401001	2
Euro OTC	Dimethyl sulfoxide	141039-02	1
Euro OTC	Dimethyl sulfoxide	1306010-01	24
Euro OTC	Dimethyl sulfoxide	1207008-01	2
Euro OTC	Dimethyl sulfoxide	1606007-01	27
Euro OTC	Dimethyl sulfoxide	170505-01	1
Euro OTC	Dimethyl sulfoxide	1804621-01	1
Euro OTC	Dimethyl sulfoxide	13063010-01	1
Euro OTG/ AHD	Dimethyl sulfoxide	1411039-02	1
Euro OTG/ AHD	Dimethyl sulfoxide	1705025-01	3
Euro OTG/ AHD	Dimethyl sulfoxide	1711020-01	1
Euro/ Fiebig	Dimethyl sulfoxide	1306010-02	1
Euro/ Gehe	Dimethyl sulfoxide	1404031-02	1
Euro/ Phönix	Dimethyl sulfoxide	1711020-01	1
euro//Noweda	Dimethyl sulfoxide	1705025-01	2
Euro/Gehe	Dimethyl sulfoxide	1601048-01	1
Euro/Noweda	Dimethyl sulfoxide	1610015-01	1
Euro/phönix	Dimethyl sulfoxide	1411039-01	1
Euroct/Gehe	Dimethyl sulfoxide	1508018-02	1
Euro OTC	Dimethyl sulfoxide	1505021-01	16
Euro OTC	Dimethyl sulfoxide	1508012-02	1
Euro OTC	Dimethyl sulfoxide	175025-01	1
Euro OTC	Dimethyl sulfoxide	1903021-01	16
Euro OTC	Dimethyl sulfoxide	151102801	2
Euro OTC	Dimethyl sulfoxide	SYN160215	2
Euro OTC	Dimethyl sulfoxide	150801801	1
Euro OTC	Dimethyl sulfoxide	170901001	1
Euro OTC	Dimethyl sulfoxide	1705025	3
Euro OTC	Dimethyl sulfoxide	SYN170605	1
Euro OTC	Dimethyl sulfoxide	1508013-01	1
Euro OTC	Dimethyl sulfoxide	171000-01	1
europharm/gehe	Dimethyl sulfoxide	1610015-01	1
EuRro/Anzag	Dimethyl sulfoxide	1710001-01	1

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Supplier	Substance	Batch	Spectra
Fagron	Dimethyl sulfoxide	11K29-N03	1
Fagron	Dimethyl sulfoxide	11E03-M04	2
Fagron	Dimethyl sulfoxide	13071201	1
Fagron	Dimethyl sulfoxide	27061203	1
Fagron	Dimethyl sulfoxide	11G18-N15	1
Fagron	Dimethyl sulfoxide	1306010-02	1
Fagron	Dimethyl sulfoxide	1310008-02	1
Fagron	Dimethyl sulfoxide	1404031-02	1
Fagron	Dimethyl sulfoxide	14H28-M01	2
Fagron	Dimethyl sulfoxide	15A16-C01-16195	1
Fagron	Dimethyl sulfoxide	1705025-01	1
Fagron	Dimethyl sulfoxide	1711020-01	1
Fagron	Dimethyl sulfoxide	14H28-M03	1
Fagron	Dimethyl sulfoxide	161001502	1
Fagron	Dimethyl sulfoxide	14H28-M02	1
Gatt-Koller	Dimethyl sulfoxide	1802552	4
gaylord	Dimethyl sulfoxide	1210059-01	1
Gaylord	Dimethyl sulfoxide	1709010-01	1
Gaylord / Fiebig	Dimethyl sulfoxide	1505021-01	1
gaylord chem.USA/Phoenix	Dimethyl sulfoxide	1806021-01	1
Gaylord Chemical Corp./...	Dimethyl sulfoxide	1508018-02	2
Gaylord Chemical Corp./...	Dimethyl sulfoxide	1508018-01	1
Gaylord Chemical Corpor...	Dimethyl sulfoxide	1610015-02	1
gaylord chemical corpor...	Dimethyl sulfoxide	1711020-01	2
Gaylord Chemical Corpor...	Dimethyl sulfoxide	SYN180319	1
Gaylord ChemicalCorp./ ...	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	SYN170717	2
Gaylord/Sanacorp	Dimethyl sulfoxide	1306010-01	1
Gaylord/Sanacorp 28.08.14	Dimethyl sulfoxide	1404031-01	1
Gehe	Dimethyl sulfoxide	1111059-01	1
Gehe	Dimethyl sulfoxide	1111059-02	1
Gehe	Dimethyl sulfoxide	160600701	1
Gehe	Dimethyl sulfoxide	1610015-1	1
GEHE	Dimethyl sulfoxide	1610015-01	1
GEHE	Dimethyl sulfoxide	1805002-01	1
GEHE	Dimethyl sulfoxide	1903021-02	1
gehe 07.01.14	Dimethyl sulfoxide	1306010-02	2
Caelo	Dimethyl sulfoxide	SYN140623	1
Gehe/EuRo	Dimethyl sulfoxide	1609006-01	1
Euro OTC	Dimethyl sulfoxide	121005901	1
Hedinger/Noweda	Dimethyl sulfoxide	1006007-01	1
Kehr	Dimethyl sulfoxide	1711020-01	1
Euro OTC	Dimethyl sulfoxide	SYN140623	1
Kögl	Dimethyl sulfoxide	259008164916	1
Kögl	Dimethyl sulfoxide	259008164116	1
Kögl	Dimethyl sulfoxide	259008160217	1
Kögl	Dimethyl sulfoxide	158305171917	1
Kögl	Dimethyl sulfoxide	1700333	2
L10	Dimethyl sulfoxide	1709010-01	1
L12	Dimethyl sulfoxide	1610015-01	1
L12	Dimethyl sulfoxide	1808012-01	1
L30	Dimethyl sulfoxide	1711020-01	2
Noweda	Dimethyl sulfoxide	1111059-01	1
Noweda	Dimethyl sulfoxide	1111059-02	1
Noweda	Dimethyl sulfoxide	1404031-02	1
Noweda	Dimethyl sulfoxide	140403101	1
Noweda	Dimethyl sulfoxide	1610015-01	2
Noweda	Dimethyl sulfoxide	SYN1608022	1
Noweda	Dimethyl sulfoxide	1705025-01	1
Noweda	Dimethyl sulfoxide	170502501	1

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Supplier	Substance	Batch	Spectra
Noweda	Dimethyl sulfoxide	1709010-01	2
Noweda	Dimethyl sulfoxide	170001-01	1
Euro OTC	Dimethyl sulfoxide	1411039_01	1
Fagron	Dimethyl sulfoxide	1610015-02	1
Euro OTC	Dimethyl sulfoxide	2071301	1
Euro OTC	Dimethyl sulfoxide	5111303	1
Euro OTC	Dimethyl sulfoxide	161005-01	1
Euro OTC	Dimethyl sulfoxide	1(1806021-01)	1
Euro OTC	Dimethyl sulfoxide	131000801	1
Euro OTC	Dimethyl sulfoxide	1813A-01336	1
phoenix	Dimethyl sulfoxide	1610015-01	1
Phoenix	Dimethyl sulfoxide	1601048-01	1
Phoenix	Dimethyl sulfoxide	18197612	1
phoenix 06.03.14	Dimethyl sulfoxide	1306010-02	1
PHOENIX 06.03.2014	Dimethyl sulfoxide	1306010-01	1
phoenix 06.05.14	Dimethyl sulfoxide	1310008-01	1
Phoenix 10.06.14	Dimethyl sulfoxide	131008-01	1
Phoenix WE08.04.17 -4,8. ...	Dimethyl sulfoxide	1610015-01	2
Caelo	Dimethyl sulfoxide	131000801	1
phönix	Dimethyl sulfoxide	1606007-01	1
Phönix	Dimethyl sulfoxide	1210059-01	1
Phönix	Dimethyl sulfoxide	1310008-01	1
Phönix	Dimethyl sulfoxide	1511028-01	1
Phönix	Dimethyl sulfoxide	1606007-01	1
Phönix	Dimethyl sulfoxide	1705025-01	1
Phönix	Dimethyl sulfoxide	1711020-01	1
Euro OTC	Dimethyl sulfoxide	1306010-02	19
Phönix Gotha	Dimethyl sulfoxide	1111059-02	1
Phönix Gotha	Dimethyl sulfoxide	1404031-02	1
Phönix Gotha	Dimethyl sulfoxide	1505021-01	1
Phönix/apo ident	Dimethyl sulfoxide	1808012-01	1
Phönix/EuRho	Dimethyl sulfoxide	1207008-01	1
Phönix/Euro	Dimethyl sulfoxide	1610015-02	2
Phönix/Euro	Dimethyl sulfoxide	1610015-01	1
Sanacorp	Dimethyl sulfoxide	1207008-01	1
Sanacorp	Dimethyl sulfoxide	1306010-02	1
Sanacorp	Dimethyl sulfoxide	1508018-01	1
Sanacorp	Dimethyl sulfoxide	160600701	1
Sanacorp	Dimethyl sulfoxide	161001502	1
Sanacorp	Dimethyl sulfoxide	171000101	2
Sanacorp	Dimethyl sulfoxide	1808012-01	1
Sanacorp	Dimethyl sulfoxide	1809024	1
Sanacorp	Dimethyl sulfoxide	1903021-01	1
Caelo	Dimethyl sulfoxide	1705025	1
Euro OTC	Dimethyl sulfoxide	1710001-01	10
Sanacorp W.E: 23.01.18 ...	Dimethyl sulfoxide	1710001-01	1
Sanacorp/ PZN08597061	Dimethyl sulfoxide	1306010-01-339413100	1
	Dimethyl sulfoxide	1411039-02	1
Euro OTC	Dimethyl sulfoxide	1601048	1
Euro OTC	Dimethyl sulfoxide		3
Fagron	Dimethyl sulfoxide	15A16-C01-16194	2
	Dimethyl sulfoxide	1306010-02	1
vitalundfitmit100/ Sana...	Dimethyl sulfoxide		1

- 137 440 spectra from 703 *Apo-Ident* customers from a total of 35 136 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#),

the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dimethyl sulfoxide* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dimethyl sulfoxide* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	440	0	55 919
Type B	0	880	0	68 594
Type C	0	908	5	137 440

The substance/substance group *Dimethyl sulfoxide* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.6364 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.3182 %)
Type C	100.0000 % (> 99.6452 %)	99.4524 % (> 99.1238 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dimethyl sulfoxide* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Acetone	85.35	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dimethyl sulfoxide* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31498	31498	0.00	128.87
31732	31848	1.38	132.42
31734	31734	0.00	132.50
31803	31803	0.00	133.23
31813	31813	0.00	132.99
31848	31848	0.00	132.37
32280	32280	0.00	136.71
34221	34221	0.00	158.71

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dimeticon 100 / 350 / 1000**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30660-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dimeticon 100 / 350 / 1000; Dimeticone 100; Dimeticone 1000; Dimeticone 350; Dimeticonum 100; Dimeticonum 1000; Dimeticonum 350

Special notes

When selecting the *Dimeticon 100 / 350 / 1000* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dimeticone 100	3	2	6
Dimeticone 1000	3	2	1
Dimeticone 350	5	1	66

Second-stage model

For differentiation of the substance/substance group *Dimeticon 100 / 350 / 1000* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dimeticon 100 / 350 / 1000*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dimeticone 100	12140101	30660	40	1403158
Caelo	Dimeticone 100	13049608	31333	40	20130301
Caelo	Dimeticone 100	172164	33918	40	20170809*
Caelo	Dimeticone 1000	161307	32169	60	20160427*
Caelo	Dimeticone 1000	15349907	32587	40	20151106
Fagron	Dimeticone 1000	14C20-B04-306781	32485	40	20140331
Caelo	Dimeticone 350	13236306	31334	40	AR-15-FG-009277-01
Euro OTC	Dimeticone 350	1702002	33234	40	20170302*
Euro OTC	Dimeticone 350	1909012	34747	40	20191129*
Fagron	Dimeticone 350	14C20-B05-292285	31659	60	20140331
Fagron	Dimeticone 350	14D30-B07-330851	33278	40	20140513

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 480 spectra of 11 reference samples from the substance/substance group *Dimeticon 100 / 350 / 1000*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 11 different batches.
- 55 879 spectra from a total of 1105 batches from further 216 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 200 spectra of 5 reference samples from the substance/substance group *Dimeticon 100 / 350 / 1000*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dimeticon 100	15199409	32304	40
Caelo	Dimeticon 100	15404609	33628	40
Caelo	Dimeticon 1000	16348504	33654	40
Caelo	Dimeticon 1000	171981	33919	40
Caelo	Dimeticon 350	160754	32208	40

- 69 274 spectra from a total of 1497 batches from further 358 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 204 spectra from 84 *Apo-Ident* customers from 78 batches from the substance/substance group *Dimeticon 100 / 350 / 1000*.
- Among them are spectra of independent samples from 72 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Dimeticon 100	12310801	1
Caelo	Dimeticon 100	13049603	1
Caelo	Dimeticon 100	15199401	1
Caelo	Dimeticon 100	13362904	1
Caelo	Dimeticon 100	11215905	1
Noweda	Dimeticon 100	12316701	1
Caelo	Dimeticon 1000	16348503	2
AHD	Dimeticon 350	17090204	1
AHD, 07.11.13	Dimeticon 350	13049804	1
Anzag 24.01.2013	Dimeticon 350	12186301	1
Beiersdorf Ag	Dimeticon 350	1207015-02	1
cae	Dimeticon 350	13236306	1
Caelo	Dimeticon 350	12193302	1
Caelo	Dimeticon 350	12193307	2
Caelo	Dimeticon 350	12193313	1
Caelo	Dimeticon 350	12193315	1
Caelo	Dimeticon 350	13049803	2
Caelo	Dimeticon 350	13049809	1
Caelo	Dimeticon 350	13236302	2
Caelo	Dimeticon 350	13049813	1
Caelo	Dimeticon 350	13236312	2
Caelo	Dimeticon 350	14074509	15
Caelo	Dimeticon 350	14704509	1
Caelo	Dimeticon 350	14074511	1
Caelo	Dimeticon 350	14074512	17

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Supplier	Substance	Batch	Spectra
Caelo	Dimeticone 350	14336402	7
Caelo	Dimeticone 350	14336403	1
Caelo	Dimeticone 350	13236307	1
Caelo	Dimeticone 350	14C20-B05-292285	1
Caelo	Dimeticone 350	1407004-01	1
Caelo	Dimeticone 350	16075401	4
Caelo	Dimeticone 350	14D30-B07-300432	2
Caelo	Dimeticone 350	16075407	5
Caelo	Dimeticone 350	16075405	2
Caelo	Dimeticone 350	17090203	17
Caelo	Dimeticone 350	17366905	3
Caelo	Dimeticone 350	18211105	3
Caelo	Dimeticone 350	10111314	1
Caelo	Dimeticone 350	13049802	2
Caelo	Dimeticone 350	13236308	2
Caelo	Dimeticone 350	17090201	13
Caelo	Dimeticone 350	17090204	2
Caelo	Dimeticone 350	16075410	1
Caelo	Dimeticone 350	18211117	1
Caelo	Dimeticone 350	9371810	1
Caelo	Dimeticone 350	11042104	1
Caelo	Dimeticone 350	12186301	1
Caelo	Dimeticone 350	18211113	1
Caelo	Dimeticone 350	12193308	1
Caelo	Dimeticone 350	12193303	2
Caelo	Dimeticone 350	13049804	2
Caelo	Dimeticone 350	14074518	1
Caelo	Dimeticone 350	16348504	1
Caesar & Loretz GmbH	Dimeticone 350	18211105	1
Euro OTC	Dimeticone 350	1207015-01	1
Euro OTC	Dimeticone 350	1207015-02	1
Euro OTC	Dimeticone 350	14C20-B05-292285	1
Euro OTC	Dimeticone 350	1702002-01	5
EuRo/Phönix	Dimeticone 350	1207015-01	1
Fagron	Dimeticone 350	3111Q-02251	1
Fagron	Dimeticone 350	9B10	1
Fagron	Dimeticone 350	14C20-B05	1
Fagron	Dimeticone 350	16075401	1
Fagron	Dimeticone 350	14D30-B07	1
Fagron	Dimeticone 350	144D30-B07	1
Fagron	Dimeticone 350	14D30-B07-334577	1
Fagron	Dimeticone 350	14D30-B07-343668	3
Fagron	Dimeticone 350	14D30-B07-333434	2
Fagron	Dimeticone 350	14D30-B07-300432	2
Fagron	Dimeticone 350	14030-807	1
Fagron	Dimeticone 350	14D30-B07-335878	1
Fagron	Dimeticone 350	17020002-01	1
Fagron	Dimeticone 350	14D30-B07-328248	1
Fargon	Dimeticone 350	14C20-B05_292282	1
Gatt-Koller	Dimeticone 350	190003	2
Gehe	Dimeticone 350	1407004-01	1
Caelo	Dimeticone 350	301115	1
Jenne	Dimeticone 350	14074509	1
Kögl	Dimeticone 350	124604161816	1
Kögl	Dimeticone 350	124604160517	1
Kögl	Dimeticone 350	KNC0320J16	1
Kögl	Dimeticone 350	1700492	1
Kögl	Dimeticone 350	knc0320j16	1
Kögl	Dimeticone 350	1801089	2
Nachtestung-Verlängerung	Dimeticone 350	3/16	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Dimeticone 350	1407004-01	1
Ph.Eur.8.0	Dimeticone 350	14C20B05292285	1
Caelo	Dimeticone 100	12140101	1
Caelo	Dimeticone 350	13236306	12
Caelo	Dimeticone 350	15349907	1
Fagron	Dimeticone 350	14C20-B05-292285	5
Caelo	Dimeticone 350		1

- 138 149 spectra from 703 *Apo-Ident* customers from a total of 35 220 batches from a further 337 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dimeticon 100 / 350 / 1000* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dimeticon 100 / 350 / 1000* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	480	0	55 879
Type B	0	200	0	69 274
Type C	0	204	0	138 149

The substance/substance group *Dimeticon 100 / 350 / 1000* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.7500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 97.0588 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dimeticon 100 / 350 / 1000* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Sage oil	297.62	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dimeticon 100 / 350 / 1000* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30660	30660	0.00	397.24
31333	33918	1.97	400.68
33918	33918	0.00	396.06
31334	31334	0.00	400.07
31659	33918	2.42	397.34
33234	33234	0.00	396.73
33278	33234	2.17	394.68
34747	34747	0.00	397.79
32169	32169	0.00	402.24
32485	33918	4.62	396.34
32587	33234	2.11	397.08

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Dwarf pine oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30204-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Dwarf pine oil; Oleum pini pumilionis

Special notes

When selecting the *Dwarf pine oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Dwarf pine oil	8	6	77

Second-stage model

For differentiation of the substance/substance group *Dwarf pine oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Dwarf pine oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dwarf pine oil	11375614	31189	40	20120102
Caelo	Dwarf pine oil	16114705	33266	40	20160420
Caelo	Dwarf pine oil	16114706	33282	40	20160420
Caelo	Dwarf pine oil	172158	33679	40	20170807*
Euro OTC	Dwarf pine oil	1210024-02	31529	60	20140806
Euro OTC	Dwarf pine oil	1511014	31818	60	20151214*
Fagron	Dwarf pine oil	12C29-N17	31184	40	1403167
Fagron	Dwarf pine oil	15A05-B06-322743	33276	40	20150126

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 360 spectra of 8 reference samples from the substance/substance group *Dwarf pine oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55 999 spectra from a total of 1108 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 240 spectra of 6 reference samples from the substance/substance group *Dwarf pine oil*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dwarf pine oil	192716	34717	40
Euro OTC	Dwarf pine oil	1606003	32470	40
Euro OTC	Dwarf pine oil	1703031	33235	40
Euro OTC	Dwarf pine oil	1801001	33931	40
Euro OTC	Dwarf pine oil	1807002	34194	40
Euro OTC	Dwarf pine oil	1905020	34491	40

- 69 234 spectra from a total of 1496 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 196 spectra from 99 *Apo-Ident* customers from 82 batches from the substance/substance group *Dwarf pine oil*.
- Among them are spectra of independent samples from 76 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alliance	Dwarf pine oil	11375601	1
Apo-Ident/Phoenix	Dwarf pine oil	17364201	1
Caelo	Dwarf pine oil	1137575601	1
Caelo	Dwarf pine oil	12239904	3
Caelo	Dwarf pine oil	23021301	1
Caelo	Dwarf pine oil	11375608	1
Caelo	Dwarf pine oil	11375613	3
Caelo	Dwarf pine oil	13084309	1
Caelo	Dwarf pine oil	21051403	1
Caelo	Dwarf pine oil	14083301	7
Caelo	Dwarf pine oil	14083311	1
Caelo	Dwarf pine oil	14083315	1
Caelo	Dwarf pine oil	15239202	2
Caelo	Dwarf pine oil	15375505	4
Caelo	Dwarf pine oil	621H23	1
Caelo	Dwarf pine oil	15375502	1
Caelo	Dwarf pine oil	24061712	1
Caelo	Dwarf pine oil	17219801	1
Caelo	Dwarf pine oil	17364201	4
Caelo	Dwarf pine oil	17364202	1
Caelo	Dwarf pine oil	17364206	2
Caelo	Dwarf pine oil	5011903	1
Caelo	Dwarf pine oil	17012014	2
Caelo	Dwarf pine oil	153239202	1
Caelo	Dwarf pine oil	16114701	7
Caelo	Dwarf pine oil	1792977	2
Caelo	Dwarf pine oil	11375601	9

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Supplier	Substance	Batch	Spectra
Caelo	Dwarf pine oil	37(18309501)	1
Caelo	Dwarf pine oil	12239903	2
Caelo	Dwarf pine oil	17215801	7
Caelo	Dwarf pine oil	15375501	7
Caelo	Dwarf pine oil	15239201	4
Caelo	Dwarf pine oil	15239203	1
Caelo	Dwarf pine oil	1606003-01	1
Caelo	Dwarf pine oil	1703031-01	1
Caelo	Dwarf pine oil	16114702	2
Caelo	Dwarf pine oil	12239902	2
Caelo	Dwarf pine oil	14083310	1
Caelo	Dwarf pine oil	17215802	5
Euro OTC	Dwarf pine oil	1703031-01	1
Euro OTC	Dwarf pine oil	1511014-01	4
Euro OTC	Dwarf pine oil	1411021-01	5
Euro OTC	Dwarf pine oil	1606003-01	1
Fagron	Dwarf pine oil	11G18-N10	2
Fagron	Dwarf pine oil	27111207	1
Fagron	Dwarf pine oil	12G12-N11	2
Fagron	Dwarf pine oil	13C04-N02	7
Fagron	Dwarf pine oil	13E06-N04	5
Fagron	Dwarf pine oil	736339	3
Fagron	Dwarf pine oil	12-K06-N06	1
Fagron	Dwarf pine oil	12K06-N06	1
Fagron	Dwarf pine oil	15051509	1
Fagron	Dwarf pine oil	1606003-01	1
Fagron	Dwarf pine oil	15A05-B06-305065	1
Fagron	Dwarf pine oil	15A05B06	1
Fagron	Dwarf pine oil	15A05-B06-305064	1
Fagron	Dwarf pine oil	13H28-N04	3
Fagron	Dwarf pine oil	14D14-B01	5
Fagron	Dwarf pine oil	15A05-B06	5
Fargo	Dwarf pine oil	13C04-N02	1
Franz GmbH/Phönix	Dwarf pine oil	12C29-N17	2
Frey & Lau GmbH/Phoenix	Dwarf pine oil	13C04-N020133/265	1
Gatt-Koller	Dwarf pine oil	1701129	1
Ichthyol-Gesellschaft	Dwarf pine oil	1610280P/15375501	1
Kögl	Dwarf pine oil	37202163916	1
Kögl	Dwarf pine oil	484101172017	1
Kögl	Dwarf pine oil	484101170517	1
Caelo	Dwarf pine oil	14083303	1
Noweda/EuRoh	Dwarf pine oil	160600301	1
Phoenix	Dwarf pine oil	17364206	1
Phönix	Dwarf pine oil	11/19-N12	1
Fagron	Dwarf pine oil	13C04-N02	1
PVL	Dwarf pine oil	1360313	1
Caelo	Dwarf pine oil	14083302	3
Taoasis	Dwarf pine oil	30985-106654	1
Taoasis	Dwarf pine oil	30985-111105	2
Taoasis	Dwarf pine oil	30985-110461	1
Taoasis	Dwarf pine oil	33347-112503	1
Taoasis	Dwarf pine oil	586/116867	1
Taoasis	Dwarf pine oil	586-116867	1
Taoasis	Dwarf pine oil	25599-117839	1
Taoasis	Dwarf pine oil	25599-118829	1
Taoasis	Dwarf pine oil	8783-125163	1
Taoasis	Dwarf pine oil	1148-148	1
Taoasis GmbH	Dwarf pine oil	30985-110461	1
VDL; 7.50EUR; 28.9.2015	Dwarf pine oil	15239201	1
Caelo	Dwarf pine oil	11375614	3

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Supplier	Substance	Batch	Spectra
Caelo	Dwarf pine oil	16114705	10
Caelo	Dwarf pine oil	16114706	4
Euro OTC	Dwarf pine oil	1210024-02	1
Fritz Schiele	Dwarf pine oil		1

- 138 157 spectra from 703 *Apo-Ident* customers from a total of 35 214 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Dwarf pine oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Dwarf pine oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	360	0	55 999
Type B	0	240	0	69 234
Type C	0	190	6	138 157

The substance/substance group *Dwarf pine oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.3333 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.5000 %)
Type C	100.0000 % (> 99.6452 %)	96.9388 % (> 95.4082 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Dwarf pine oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Pine silvestris oil	23.13	—
Bergamot oil	24.65	—

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Substanz	Distance in main model	Distance in second-stage model
Juniper oil	25.07	—
Bitter orange oil	25.54	—
Angelica root oil	26.07	—
Grapefruit oil	31.85	—
Caraway oil	32.30	—
Spearmint oil	34.75	—
Citric oil	39.22	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Dwarf pine oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33266	31818	5.48	28.18
33282	33679	5.87	29.76
33679	33679	0.00	31.16
31184	31184	0.00	29.88
31189	31184	4.54	31.06
31529	31818	1.90	25.32
31818	31818	0.00	25.65
33276	31184	7.34	30.35

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Ethanol 90%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30379-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ethanol 90%; Ethanolum 90% rein / vergällt

Special notes

When selecting the *Ethanol 90%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Ethanol 90%	4	10	345

Second-stage model

For differentiation of the substance/substance group *Ethanol 90%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Ethanol 90%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Ethanol 90%	25A040913	31056	40	1404654
apomix	Ethanol 90%	03A290419	34512	40	20190429
Caelo	Ethanol 90%	14052802	31392	40	20140225
Caelo	Ethanol 90%	163144	33102	40	20161209*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Ethanol 90%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 400 spectra of 10 reference samples from the substance/substance group *Ethanol 90%*.
- Among them are spectra of independent samples from 10 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ethanol 90%	161944	32324	40
Caelo	Ethanol 90%	163142	33103	40
Caelo	Ethanol 90%	163143	33104	40
Caelo	Ethanol 90%	171741	33714	40
Caelo	Ethanol 90%	171739	33715	40
Caelo	Ethanol 90%	183064	34322	40
Caelo	Ethanol 90%	190983	34628	40
Caelo	Ethanol 90%	191966	34735	40
Caelo	Ethanol 90%	191964	34736	40
Caelo	Ethanol 90%	191965	34737	40

- 69 074 spectra from a total of 1492 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 722 spectra from 257 *Apo-Ident* customers from 354 batches from the substance/substance group *Ethanol 90%*.
- Among them are spectra of independent samples from 345 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Adler	Ethanol 90%	4618Q-03042	1
Adler	Ethanol 90%	5018E-03042	1
AHD	Ethanol 90%	16314401	1
Alte Apo Defektur	Ethanol 90%	3318M-03019	1
Alte Apotheke	Ethanol 90%	4716E-03042	1
Anzag 06.10.12	Ethanol 90%	25A290812	1
Apo Ident/ Noweda	Ethanol 90%	18200201	1
ApoAmKlini	Ethanol 90%	918Q-02303	1
apomix	Ethanol 90%	15A090512	1
apomix	Ethanol 90%	8A170215	1
apomix	Ethanol 90%	7A170215	1
apomix	Ethanol 90%	18A080615	1
apomix	Ethanol 90%	45A261015	1
apomix	Ethanol 90%	7A200317	1
apomix	Ethanol 90%	39A281116	1
apomix	Ethanol 90%	26A160817	1
apomix	Ethanol 90%	17A290517	1
apomix	Ethanol 90%	35A061117	1
apomix	Ethanol 90%	6A310718	1
apomix	Ethanol 90%	6a310718	1
apomix	Ethanol 90%	1a140119	1
apomix	Ethanol 90%	2A110319	1
apomix	Ethanol 90%	3a290419	1
Apomix	Ethanol 90%	46A071215	1
Apomix	Ethanol 90%	21A110416	1
Apomix	Ethanol 90%	39A281116	1
Apomix	Ethanol 90%	37A071116	1
Apomix	Ethanol 90%	8A200317	1

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Supplier	Substance	Batch	Spectra
Apomix	Ethanol 90%	11A150517	1
Apomix	Ethanol 90%	19A120617	1
Apomix	Ethanol 90%	12A150517	1
Apomix	Ethanol 90%	34A231017	1
Apomix	Ethanol 90%	2A070518	1
Apomix	Ethanol 90%	9A240417	1
Apomix	Ethanol 90%	32A141211	1
Apomix	Ethanol 90%	35A211112	1
Apomix	Ethanol 90%	37A101212	1
Apomix	Ethanol 90%	12A150513	1
Apomix	Ethanol 90%	21A310713	1
Apomix	Ethanol 90%	2A130114	1
Apomix	Ethanol 90%	14A120514	1
Apomix	Ethanol 90%	37A021214	1
apomix PKH GmbH Halle	Ethanol 90%	30A310815	1
Apomix / Alliance Healt...	Ethanol 90%	13A170516	1
Apomix / Alliance Healt...	Ethanol 90%	5A200217	1
Apomix / Phoenix	Ethanol 90%	47A071215	1
Apomix / Phoenix	Ethanol 90%	5A150216	1
Apomix / Phoenix	Ethanol 90%	2040030717	1
Apomix / Phönix	Ethanol 90%	5A130214	1
Apomix/Kehr	Ethanol 90%	8A200317	1
Apomix/Noweda	Ethanol 90%	25A160817	1
Apomix/Phoenix/Noweda	Ethanol 90%	5A16018	1
Apomix/Phönix	Ethanol 90%	40A201117	1
Apomix/Phönix	Ethanol 90%	16A210610	1
Apomix/PKH Halle/Phönix	Ethanol 90%	5A160718	1
Apomix/PKH Halle/Sanacorp	Ethanol 90%	38A201117	1
Apomix/PKH Halle/Sanacorp	Ethanol 90%	8A061118	1
Apotärze	Ethanol 90%	4513M-02303	1
Apotärze	Ethanol 90%	4414E-03042	1
Apotärze/Zentrum	Ethanol 90%	10092013-D	1
Apotheke	Ethanol 90%	3116Q-03042	1
Audor Pharma	Ethanol 90%	1614E-03042	1
bison	Ethanol 90%	616H2	1
Brinn- Holtz	Ethanol 90%	1258-06/17	1
Brinn-Holtz	Ethanol 90%	190615	2
Caelo	Ethanol 90%	15010502	1
Caelo	Ethanol 90%	15014002	8
Caelo	Ethanol 90%	15010601	1
Caelo	Ethanol 90%	15150701	7
Caelo	Ethanol 90%	15073203	2
Caelo	Ethanol 90%	15328201	8
Caelo	Ethanol 90%	15219501	3
Caelo	Ethanol 90%	15328301	13
Caelo	Ethanol 90%	15328202	2
Caelo	Ethanol 90%	15442602	3
Caelo	Ethanol 90%	15442702	7
Caelo	Ethanol 90%	15442603	1
Caelo	Ethanol 90%	14122202	1
Caelo	Ethanol 90%	9A270416	1
Caelo	Ethanol 90%	16107002	1
Caelo	Ethanol 90%	15442703	3
Caelo	Ethanol 90%	16106802	5
Caelo	Ethanol 90%	16194501	3
Caelo	Ethanol 90%	16107003	4
Caelo	Ethanol 90%	16106801	4
Caelo	Ethanol 90%	16194401	1
Caelo	Ethanol 90%	16194402	2
Caelo	Ethanol 90%	16106803	4

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 90%	16194701	6
Caelo	Ethanol 90%	16194601	4
Caelo	Ethanol 90%	16314201	4
Caelo	Ethanol 90%	16314302	6
Caelo	Ethanol 90%	16314401	2
Caelo	Ethanol 90%	42A151216	1
Caelo	Ethanol 90%	16314301	5
Caelo	Ethanol 90%	17047804	2
Caelo	Ethanol 90%	16314202	1
Caelo	Ethanol 90%	17048004	3
Caelo	Ethanol 90%	17173902	1
Caelo	Ethanol 90%	17173903	5
Caelo	Ethanol 90%	17173901	1
Caelo	Ethanol 90%	17174101	3
Caelo	Ethanol 90%	17206401	5
Caelo	Ethanol 90%	17174102	6
Caelo	Ethanol 90%	17306001	5
Caelo	Ethanol 90%	23051805	1
Caelo	Ethanol 90%	18089902	13
Caelo	Ethanol 90%	18200201	4
Caelo	Ethanol 90%	18200203	10
Caelo	Ethanol 90%	18306202	5
Caelo	Ethanol 90%	18306201	1
Caelo	Ethanol 90%	18200202	3
Caelo	Ethanol 90%	19098202	4
Caelo	Ethanol 90%	11329304	1
Caelo	Ethanol 90%	12068301	1
Caelo	Ethanol 90%	12068202	1
Caelo	Ethanol 90%	12355601	4
Caelo	Ethanol 90%	12275403	1
Caelo	Ethanol 90%	13019601	1
Caelo	Ethanol 90%	13019701	2
Caelo	Ethanol 90%	13019602	2
Caelo	Ethanol 90%	2413Q-03042	1
Caelo	Ethanol 90%	13085901	4
Caelo	Ethanol 90%	13160601	3
Caelo	Ethanol 90%	13085801	1
Caelo	Ethanol 90%	13086001	4
Caelo	Ethanol 90%	13160501	2
Caelo	Ethanol 90%	13086002	1
Caelo	Ethanol 90%	13290202	2
Caelo	Ethanol 90%	13160703	2
Caelo	Ethanol 90%	13160701	2
Caelo	Ethanol 90%	13399605	4
Caelo	Ethanol 90%	13399801	1
Caelo	Ethanol 90%	814E-02303	1
Caelo	Ethanol 90%	5A130214	1
Caelo	Ethanol 90%	12275501	1
Caelo	Ethanol 90%	14027502	1
Caelo	Ethanol 90%	14027302	1
Caelo	Ethanol 90%	14027301	1
Caelo	Ethanol 90%	14027402	1
Caelo	Ethanol 90%	14052601	3
Caelo	Ethanol 90%	14027305	1
Caelo	Ethanol 90%	14122201	4
Caelo	Ethanol 90%	5209A-02303	1
Caelo	Ethanol 90%	14122302	4
Caelo	Ethanol 90%	14208901	3
Caelo	Ethanol 90%	14208702	2
Caelo	Ethanol 90%	21105102	1

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 90%	14208802	4
Caelo	Ethanol 90%	915Q-02303	1
Caelo	Ethanol 90%	1915L-02303	1
Caelo	Ethanol 90%	15010602	1
Caelo	Ethanol 90%	15014001	1
Caelo	Ethanol 90%	2515A-03042	1
Caelo	Ethanol 90%	15442601	4
Caelo	Ethanol 90%	1616902	1
Caelo	Ethanol 90%	14027303	2
Caelo	Ethanol 90%	14027501	2
Caelo	Ethanol 90%	14122101	2
Caelo	Ethanol 90%	18200101	1
Caelo	Ethanol 90%	17174002	2
Caelo	Ethanol 90%	13290401	2
Caelo	Ethanol 90%	12275402	1
Caelo	Ethanol 90%	16194702	7
Caelo	Ethanol 90%	17174103	1
Caelo	Ethanol 90%	17306301	8
Caelo	Ethanol 90%	15150704	4
Caelo	Ethanol 90%	12355501	2
Caelo	Ethanol 90%	13290301	2
Caelo	Ethanol 90%	17048002	6
Caelo	Ethanol 90%	15010504	1
Caelo	Ethanol 90%	14208801	5
Caelo	Ethanol 90%	18306401	4
Caelo	Ethanol 90%	14052801	3
Caelo	Ethanol 90%	19043701	1
Caelo	Ethanol 90%	1714102	1
Caelo	Ethanol 90%	806890	1
Caelo	Ethanol 90%	1806301	1
Caelo	Ethanol 90%	15442502	2
Caelo	Ethanol 90%	15442701	1
Caelo	Ethanol 90%	17047902	3
Caelo	Ethanol 90%	17174001	1
Caelo	Ethanol 90%	17306202	3
Caelo	Ethanol 90%	10250602	1
Caelo	Ethanol 90%	713E-02303	1
Caelo	Ethanol 90%	14060201	5
Caelo	Ethanol 90%	Defektur	1
Caelo	Ethanol 90%	15442704	2
Caelo	Ethanol 90%	16106804	1
Caelo	Ethanol 90%	16314403	1
Caelo	Ethanol 90%	17306205	6
Caelo	Ethanol 90%	12355401	2
Caelo	Ethanol 90%	12275301	1
Caelo	Ethanol 90%	14060301	3
Caelo	Ethanol 90%	14122401	4
Caelo	Ethanol 90%	14060302	1
Caelo	Ethanol 90%	11329402	1
Caelo	Ethanol 90%	13290203	1
Caelo	Ethanol 90%	15073201	3
Caelo	Ethanol 90%	18306301	4
Caelo	Ethanol 90%	13399606	2
Caelo	Ethanol 90%	13290402	3
Caelo	Ethanol 90%	12A250315	1
Caelo	Ethanol 90%	15328401	3
Caelo	Ethanol 90%	17306002	5
Caelo	Ethanol 90%	17306003	5
Caelo	Ethanol 90%	17306203	1
Caelo	Ethanol 90%	14027401	4

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 90%	15080301	4
Caelo	Ethanol 90%	17306101	6
Caelo	Ethanol 90%	13019703	1
Caelo	Ethanol 90%	18306402	6
Caelo	Ethanol 90%	15219302	2
Caelo	Ethanol 90%	15442801	3
Caelo	Ethanol 90%	18089901	2
Caelo	Ethanol 90%	14052701	2
Caelo	Ethanol 90%	14122303	1
Caelo	Ethanol 90%	15010501	3
Caelo	Ethanol 90%	15010503	1
Caelo	Ethanol 90%	15150705	1
Caelo	Ethanol 90%	16194403	4
Caelo	Ethanol 90%	17047802	4
Caelo	Ethanol 90%	17048001	5
Caelo	Ethanol 90%	17306302	10
Caelo	Ethanol 90%	17306004	1
Caelo	Ethanol 90%	18089801	3
Caelo	Ethanol 90%	13290201	4
Caelo	Ethanol 90%	814E-03042	1
Caelo	Ethanol 90%	80933148	1
Caelo	Ethanol 90%	5214E-02303	1
Caelo	Ethanol 90%	17048003	1
Caelo	Ethanol 90%	18090001	3
Caelo	Ethanol 90%	13399803	2
Caelo	Ethanol 90%	13399701	2
Caelo	Ethanol 90%	13399601	1
Caesar & Loretz	Ethanol 90%	16194501	1
Caesar & Loretz GmbH	Ethanol 90%	18306202	1
Caesar & Loretz GmbH, 4...	Ethanol 90%	12068301	1
Caesar & Loretz GmbH, 4...	Ethanol 90%	12275402	1
Caesar & Loretz GmbH, 4...	Ethanol 90%	13290202	1
Caesar & Loretz GmbH/P...	Ethanol 90%	18306201	1
Cealo	Ethanol 90%	18306301	1
Defektur	Ethanol 90%	2115A-03042	1
Defektur	Ethanol 90%	3015M-03042	1
Defektur	Ethanol 90%	5015I-03042	1
Defektur	Ethanol 90%	1816A-03042	1
Defektur	Ethanol 90%	60616/50Hk	1
Defektur	Ethanol 90%	3216N-03042	1
Defektur	Ethanol 90%	4916E-03042	1
Defektur	Ethanol 90%	26112012D01	1
Defektur	Ethanol 90%	4714E-03042	1
DEFEKTUR Schwanen-Apoth...	Ethanol 90%	170620-1	1
Delta	Ethanol 90%	17048003	1
Eigen	Ethanol 90%	817Q-03042	1
Eigen Apotheke	Ethanol 90%	3417E-03042	1
Eigen/Apotärze	Ethanol 90%	4818Q-02303	1
Eigen/Neue Apotheke	Ethanol 90%	4315I-02303	2
eigene	Ethanol 90%	518U-02303	1
eigene	Ethanol 90%	4918A-02303	1
eigene	Ethanol 90%	5218Q-02302	1
eigene	Ethanol 90%	1419A-02303	1
eigene	Ethanol 90%	4219M-02303	1
eigene	Ethanol 90%	4319A-02303	1
eigene	Ethanol 90%	120Q-02303	1
eigene Herstellung	Ethanol 90%	SP9025	1
Eigene Herstellung	Ethanol 90%	4317A-02303	1
Eigene Herstellung	Ethanol 90%	SP9090	1
Eigene Herstellung	Ethanol 90%	SPV9024	1

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Supplier	Substance	Batch	Spectra
Eigenherstellung	Ethanol 90%	115Q-07057	1
Eigenherstellung	Ethanol 90%	1515I-02303	1
Eigenherstellung	Ethanol 90%	4211215	1
Eigenherstellung	Ethanol 90%	416A-02303	1
Eigenherstellung	Ethanol 90%	1716Q-02303	1
Eigenherstellung	Ethanol 90%	3416E-02303	1
Eigenherstellung	Ethanol 90%	217I-02303	1
Eigenherstellung	Ethanol 90%	3917E-02303	1
Eigenherstellung	Ethanol 90%	4161112	1
Eigenherstellung	Ethanol 90%	1312I-07057	1
Eigenherstellung	Ethanol 90%	1613A-07057	1
Eigenherstellung	Ethanol 90%	4313Q-07057	1
Eigenherstellung	Ethanol 90%	4733	1
Eigenherstellung	Ethanol 90%	4713Q-07057	1
Eigenherstellung	Ethanol 90%	514E-07057	1
Eigenherstellung	Ethanol 90%	2614I-02303	1
Eigenherstellung	Ethanol 90%	3416E-07057	1
Eigenherstellung	Ethanol 90%	4414A-07057	1
Eigenherstellung Hubert...	Ethanol 90%	2014072222DF	1
Engel/Engel	Ethanol 90%	4415A-07014	1
Euro OTC	Ethanol 90%	17174002	1
Fagron	Ethanol 90%	15442602	1
Fagron	Ethanol 90%	17306003	2
Fagron	Ethanol 90%	17306302	1
Fagron	Ethanol 90%	270614P1	1
Fagron	Ethanol 90%	14027303	1
Fagron	Ethanol 90%	16314201	3
Caelo	Ethanol 90%	812201517047901	1
Gehe	Ethanol 90%	16106901	1
Gehe	Ethanol 90%	3118I-02303	1
Gehe	Ethanol 90%	12068201	1
GEHE	Ethanol 90%	28A110917	1
GEHE	Ethanol 90%	18200101	1
GEHE	Ethanol 90%	18090001	1
Gehe / Apomix	Ethanol 90%	31a041017	1
Gehe / Apomix	Ethanol 90%	5A160718	1
GEHE 29.04.2014	Ethanol 90%	14027502	2
Caelo	Ethanol 90%	1260117	1
Germania Apo	Ethanol 90%	219060	1
Gutenberg-Apotheke	Ethanol 90%	Defektur	1
Gutenberg-Apotheke	Ethanol 90%	140324001	1
Gütte/Phönix	Ethanol 90%	20112013-M	1
Hedinger	Ethanol 90%	716020Be	1
Herstellung	Ethanol 90%	110416P1	1
Hirsch	Ethanol 90%	5013Q-02303	2
Hirsch	Ethanol 90%	11233	1
HirschApotheke	Ethanol 90%	10151-02303	1
Hochhaus-Apotheke	Ethanol 90%	4514A-03042	1
Hochhaus-Apotheke	Ethanol 90%	2616Q-03042	1
Kastner	Ethanol 90%	1314I-03042	1
Kastner (eigen)	Ethanol 90%	1215I-02303	1
Kastner (eigen)	Ethanol 90%	3114E-03042	1
Kruppa	Ethanol 90%	818H3	1
KWST / KWST	Ethanol 90%	4118E-02303	1
Libellen Apotheke	Ethanol 90%	1515Q-02303	1
Löwen-Apotheke	Ethanol 90%	1218Q-03042	1
Markt Apotheke	Ethanol 90%	4619M-02303	1
Martinus-Apotheke	Ethanol 90%	E-130216-1D	1
Martinus-Apotheke	Ethanol 90%	E-160416-1D	1
Martinus-Apotheke	Ethanol 90%	E-220716-1P	1

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Supplier	Substance	Batch	Spectra
Martinus-Apotheke	Ethanol 90%	E-021116-3D	1
Martinus-Apotheke	Ethanol 90%	E-030117-1Praxis	1
Martinus-Apotheke	Ethanol 90%	A-160913-2D	1
Martinus-Apotheke	Ethanol 90%	E-080114-1D	1
Martinus-Apotheke	Ethanol 90%	E-040414-1D	1
Martinus-Apotheke	Ethanol 90%	E-211014-1D	1
Martinus-Apothke	Ethanol 90%	E-170215-1D	1
Nachprüfung	Ethanol 90%	913Q-03042	1
Noweda	Ethanol 90%	15219302	1
Noweda	Ethanol 90%	15328301	1
Noweda	Ethanol 90%	15442602	1
Noweda	Ethanol 90%	15442603	1
Noweda	Ethanol 90%	16314302	1
Noweda	Ethanol 90%	13290203	1
Noweda	Ethanol 90%	10A170314	1
Caelo	Ethanol 90%	15073202	2
Phoenix	Ethanol 90%	13019703	1
Phoenix	Ethanol 90%	13399802	1
Caelo	Ethanol 90%	19098201	3
Caelo	Ethanol 90%	17047803	3
Phonix	Ethanol 90%	14052601	1
Phönix	Ethanol 90%	1694702	1
Phönix	Ethanol 90%	17306002	1
Phönix	Ethanol 90%	13399604	1
Phönix/Beiersdorf	Ethanol 90%	18089901	1
Phönix/Cealo	Ethanol 90%	18090001	1
pkh	Ethanol 90%	2a110319	1
PKH	Ethanol 90%	23A180615	1
PKH GmbH/ Alliance Heal...	Ethanol 90%	11A150517	2
PKH Halle	Ethanol 90%	9A270416	1
PKH Halle/Sanacorp	Ethanol 90%	1A040418	1
Post-Apotheke	Ethanol 90%	1414A-02303	1
Post-Apotheke 15.01.2014	Ethanol 90%	15012014	1
Römer-Apotheke	Ethanol 90%	150428003	1
Römer-Apotheke	Ethanol 90%	4213E-03042	1
Römer-Apotheke	Ethanol 90%	1914E-03042	1
Römer-Apotheke	Ethanol 90%	36141-03042	1
Rondell Apotheke	Ethanol 90%	4615E-02303	1
Rondell Apotheke	Ethanol 90%	4615E-03042	1
Rondell Apotheke	Ethanol 90%	4615E-07209	1
Rondell Apotheke	Ethanol 90%	4814E-02303	1
Rondell-Apotheke	Ethanol 90%	3913Q-03042	1
Rosenapotheke	Ethanol 90%	2417E-07094	1
Sanacorp	Ethanol 90%	16194501	1
Sanacorp	Ethanol 90%	16194601	1
Sanacorp	Ethanol 90%	1618E-02303	1
Sanacorp 24.11.14 EK 63...	Ethanol 90%	14122101	1
Caelo	Ethanol 90%	AKD6	1
Solling-Apo	Ethanol 90%	181213001	1
Caelo	Ethanol 90%	13399802	1
Stern	Ethanol 90%	150622004	1
Taoasis	Ethanol 90%	VE4038-127890	1
Taoasis	Ethanol 90%	VE40438-127890	1
Tsiripidou	Ethanol 90%	180324	1
VDL 09.05.14	Ethanol 90%	13399801	1
Caelo	Ethanol 90%	17047901	7
Wolf Apotheke/Defaktur	Ethanol 90%	80615/50Kr	1
Wolf-Apotheke / Defaktur	Ethanol 90%	70428/50Hk	1
Wolf-Apotheke-Defaktur	Ethanol 90%	80711/50Hk	1
Zentrum-Apotheke	Ethanol 90%	514I-03042	1

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Supplier	Substance	Batch	Spectra
Alte Apo Defektur	Ethanol 90%		1
Apomix/Noweda	Ethanol 90%		1
Berkel AHK	Ethanol 90%		1
Caelo	Ethanol 90%	14052802	2
Caelo	Ethanol 90%		2
	Ethanol 90%	Hergestelltt070514	1
phönix	Ethanol 90%		1
Tsiripidou (Fortuna Apo...	Ethanol 90%		1
Wolf Apotheke	Ethanol 90%		3

- 137 631 spectra from 703 *Apo-Ident* customers from a total of 34 946 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Ethanol 90%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Ethanol 90%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	400	0	68 994
Type C	0	720	2	137 539

The substance/substance group *Ethanol 90%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 98.5000 %)
Type C	100.0000 % (> 99.6440 %)	99.7230 % (> 99.3075 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Ethanol 90%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol	50.42	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Ethanol 90%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31056	31056	0.00	111.30
31392	31056	11.82	98.52
33102	33102	0.00	89.87
34512	31056	1.87	110.96

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Ethanol 96%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31488-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ethanol 96%; Ethanolum 96%

Special notes

When selecting the *Ethanol 96%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Ethanol 96%	5	1	466

Second-stage model

For differentiation of the substance/substance group *Ethanol 96%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Ethanol 96%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Ethanol 96%	182621	34330	40	20181119*
Caelo	Ethanol 96%	190302	34457	40	20190206*
Laborchemie A...	Ethanol 96%	21001382	31564	60	20100725
Laborchemie A...	Ethanol 96%	24001427	33852	40	20170801
Merck	Ethanol 96%	K45197671406	31488	60	1503676

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 5 reference samples from the substance/substance group *Ethanol 96%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56119 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Ethanol 96%*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Laborchemie Apolda	Ethanol 96%	25000305	34123	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 939 spectra from 306 *Apo-Ident* customers from 475 batches from the substance/substance group *Ethanol 96%*.
- Among them are spectra of independent samples from 455 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
.....	Ethanol 96%	22001720	1
/Phönix	Ethanol 96%	140604	1
A.H.D.	Ethanol 96%	20000305	1
Agralko	Ethanol 96%	2015010901	1
Agralko	Ethanol 96%	1062015	1
AgrAlko	Ethanol 96%	A2014000328	2
AgrAlko	Ethanol 96%	410-1405	1
AHC/Laborchemie Apolda	Ethanol 96%	24000161	1
AHD 03.12.14 EK 85,21	Ethanol 96%	21002075	1
AHK GmbH	Ethanol 96%	18/02/09	1
AHK GmbH	Ethanol 96%	18/08/14	1
Alfred Quadflieg, Gelse...	Ethanol 96%	K16/08/03	1
Alkoholvertrieb Süd Dr. ...	Ethanol 96%	39552016/28012016	1
Alkohol Vertrieb Süd	Ethanol 96%	121952017/21082017	1
Alkoholvertrieb Bernd M...	Ethanol 96%	3074201709012017	1
Alkoholvertrieb Dr. Ber...	Ethanol 96%	15132014/02122013	1
Alkoholvertrieb Dr. Ber...	Ethanol 96%	41010414052992014	1
Alkoholvertrieb süd	Ethanol 96%	53472018/0032018	1
Alkoholvertrieb süd	Ethanol 96%	71192018/23042018	1
Alkoholvertrieb Süd	Ethanol 96%	5643/VALU38679/23	1
Alkoholvertrieb Süd	Ethanol 96%	9012016/05112015	1
Alkoholvertrieb Süd	Ethanol 96%	80452016/01062016	1
Alkoholvertrieb Süd	Ethanol 96%	116702016/05092016	1
Alkoholvertrieb Süd	Ethanol 96%	6282017/24102016	1
Alkoholvertrieb Süd	Ethanol 96%	18122017/25112016	1
Alkoholvertrieb Süd	Ethanol 96%	100122017/07072017	1
Alkoholvertrieb Süd	Ethanol 96%	121952017/21082017	1
Alkoholvertrieb Süd	Ethanol 96%	138512107/28092017	1
Alkoholvertrieb Süd	Ethanol 96%	3297636/11062014	1
Alkoholvertrieb Süd	Ethanol 96%	410-104-1405/2909201	1
Alkoholvertrieb Süd GmbH	Ethanol 96%	136842018/01102018	1
Alkoholvertrieb Süd GmbH	Ethanol 96%	2/0713	1
Alkoholvertrieb Süd GmbH	Ethanol 96%	1313081029/26082013	1
Alkoholvertrieb Süd GmbH	Ethanol 96%	keine	1
Alkoholvertrieb Süd Gmb...	Ethanol 96%	6282017/24102016	2
Alkoholvertrieb Süd Gmb...	Ethanol 96%	30742017/09012017	1
Alkoholvertrieb Süd Gmb...	Ethanol 96%	124412018/28082018	1

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Supplier	Substance	Batch	Spectra
Alkoholvertrieb Süd Gmb. . .	Ethanol 96%	1313081029/26082013	1
Alkoholvertrieb Süd/DPD	Ethanol 96%	41010315061020072015	1
Alkoholvertrieb Süd/Gehe	Ethanol 96%	3297636/11062014	1
Alkoholvertrieb Sued	Ethanol 96%	87872017/29052017	1
All. Healthc. / Laborph. . .	Ethanol 96%	22000616	1
All.Heal./laborchemie A. . .	Ethanol 96%	21001053	1
All.Heal./laborchemie A. . .	Ethanol 96%	21001561	1
Allchem/Phönix	Ethanol 96%	15266298	1
alliance Health. 23.10.14	Ethanol 96%	21001379	1
AllianceHealthcare	Ethanol 96%	22001291	1
AllianceHealthcare	Ethanol 96%	23000997	1
anzag	Ethanol 96%	25439	1
Anzag	Ethanol 96%	25000305	1
Anzag	Ethanol 96%	19000121	1
Anzag/Apolda	Ethanol 96%	24001494	1
Anzag/Hedinger	Ethanol 96%	23000749	1
Anzag/Heyl	Ethanol 96%	25000305	1
Apolda	Ethanol 96%	23001368	1
Apolda	Ethanol 96%	21002268	1
Apolda	Ethanol 96%	22001718	1
Apolda	Ethanol 96%	22002230	1
Apolda / Alliance Healt. . .	Ethanol 96%	24000927	1
Apolda / Anzag	Ethanol 96%	22001717	1
Apolda / Gehe	Ethanol 96%	23001357	1
Apolda / Gehe	Ethanol 96%	20000065	1
Apolda / Gehe	Ethanol 96%	20000974	1
Apolda / Sanacorp	Ethanol 96%	22001985	1
Apolda / Sanacorp	Ethanol 96%	20002191	1
Apolda /Noweda	Ethanol 96%	24002163	1
Apolda Gmbh	Ethanol 96%	24001427	1
Apolda GmbH	Ethanol 96%	22001948	1
Apolda GmbH	Ethanol 96%	24002163	1
Apolda GmbH	Ethanol 96%	19001936	1
Apolda GmbH	Ethanol 96%	20000305	1
Apolda GmbH	Ethanol 96%	21001379	2
Apolda GmbH	Ethanol 96%	100050	1
Apolda GmbH	Ethanol 96%	21001382	1
Apolda GmbH	Ethanol 96%	22001717	1
Apolda GmbH/Gehe	Ethanol 96%	22000616	1
Apolda gmbH/N	Ethanol 96%	21002064	1
Apolda gmbH/N	Ethanol 96%	22000999	1
Apolda GmbH/N/PZN:10137. . .	Ethanol 96%	20000975	1
Apolda Laborchemie	Ethanol 96%	19002599	1
Apolda Laborchemie	Ethanol 96%	20001887	1
Apolda, direkt best.	Ethanol 96%	21001560	1
Apolda, Gehe	Ethanol 96%	20001887	1
Apolda, Gehe	Ethanol 96%	20002192	1
Apolda, Noweda	Ethanol 96%	20001212	1
Apolda, Phönix	Ethanol 96%	20000307	1
Apolda/ Alliance	Ethanol 96%	25000305	1
Apolda/ Alliance Health. . .	Ethanol 96%	23000175	1
Apolda/ Gehe	Ethanol 96%	24001427	1
Apolda/ Sanacorp	Ethanol 96%	21001560	1
Apolda/ Sanacorp	Ethanol 96%	21001380	1
Apolda/ Sanacorp	Ethanol 96%	21002239	1
Apolda/ Sanacorp	Ethanol 96%	22000090	1
Apolda/ Sanacorp	Ethanol 96%	21000154	2
Apolda/Ebert	Ethanol 96%	24000920	1
Apolda/Gehe	Ethanol 96%	24000186	1
Apolda/Gehe	Ethanol 96%	24001427	1

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Supplier	Substance	Batch	Spectra
Apolda/Gehe	Ethanol 96%	24002163	1
Apolda/Gehe	Ethanol 96%	25001980	1
Apolda/Gehe	Ethanol 96%	20002193	1
Apolda/Heyl/Noweda	Ethanol 96%	22001985	3
Apolda/Heyl/Noweda	Ethanol 96%	23000749	1
Apolda/Heyl/Noweda	Ethanol 96%	23001368	1
Apolda/Noweda	Ethanol 96%	24000163	1
Apolda/Noweda	Ethanol 96%	23001368	1
Apolda/Noweda	Ethanol 96%	24001427	1
Apolda/Phoenix	Ethanol 96%	22000616	1
Apolda/Phoenix	Ethanol 96%	21000197	1
Apolda/Phönix	Ethanol 96%	21002269	1
Apolda/Phönix	Ethanol 96%	22000096	1
Apolda/Phönix	Ethanol 96%	22000616	1
Apolda/Phönix	Ethanol 96%	22001291	1
Apolda/Phönix	Ethanol 96%	3613M-02304	1
Apolda/Sana	Ethanol 96%	24001427	1
Apolda/Sanacorp	Ethanol 96%	22000090	1
Apolda/Sanacorp	Ethanol 96%	24002163	1
Apolda/Sanacorp	Ethanol 96%	26000285	1
Apolda/Spangro	Ethanol 96%	22002231	1
Apolda/Spangro	Ethanol 96%	24001494	1
Apolda/VDL	Ethanol 96%	20001830	1
Applichem	Ethanol 96%	220113PML01	1
Applichem/Diagonal	Ethanol 96%	70214PJK05	1
bergchemie	Ethanol 96%	14-12-10	1
bergchemie	Ethanol 96%	14-06-04	1
bergchemie	Ethanol 96%	UN1170	1
Bergchemie	Ethanol 96%	14-10-16	1
Bergchemie	Ethanol 96%	15-5-07	1
Bergchemie	Ethanol 96%	15-05-07	1
Bergchemie	Ethanol 96%	15/06/10	1
Bergchemie	Ethanol 96%	15-10-09	1
Bergchemie	Ethanol 96%	16/01/06	2
Bergchemie	Ethanol 96%	16/02/02	1
Bergchemie	Ethanol 96%	aaaaaa	1
Bergchemie	Ethanol 96%	16/08/03	1
Bergchemie	Ethanol 96%	9-03-07	1
Bergchemie	Ethanol 96%	13/03/06	1
Bergchemie	Ethanol 96%	13/11/27	1
Bergchemie	Ethanol 96%	14-06-04	1
Bergchemie	Ethanol 96%	5/0810	1
Bergchemie	Ethanol 96%	14-08-12	2
Bergchemie/Bergchemie	Ethanol 96%	17-05-19	2
Berkel	Ethanol 96%	1410T31310715	1
Berkel	Ethanol 96%	1410T31051115	1
Berkel	Ethanol 96%	1410T31141015	1
Berkel	Ethanol 96%	220217/824	1
Berkel	Ethanol 96%	17/04/05	1
Berkel	Ethanol 96%	140T31030517	1
Berkel	Ethanol 96%	1410T31191113	1
Berkel	Ethanol 96%	1410T31260814	1
BERKEL	Ethanol 96%	1410U	1
Berkel AHK	Ethanol 96%	220217/824	1
Berkel AHG	Ethanol 96%	80318/931	1
Berkel AHK	Ethanol 96%	14/11/13	1
Berkel AHK	Ethanol 96%	14/01/30	1
Berkel AHK	Ethanol 96%	151125	1
Berkel AHK	Ethanol 96%	1410T31280116	1
Berkel AHK	Ethanol 96%	VE37799	1

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Supplier	Substance	Batch	Spectra
Berkel AHK	Ethanol 96%	120516/746	1
Berkel AHK	Ethanol 96%	60919/1La	1
Berkel AHK	Ethanol 96%	111016/786	2
Berkel AHK	Ethanol 96%	17/01/11	1
Berkel AHK	Ethanol 96%	310317/835	1
Berkel AHK	Ethanol 96%	310317/834	1
Berkel AHK	Ethanol 96%	40517/843	1
Berkel AHK	Ethanol 96%	101017/884	1
Berkel AHK	Ethanol 96%	17/09/07-1	1
Berkel AHK	Ethanol 96%	80318/931	1
Berkel AHK	Ethanol 96%	180327	1
Berkel AHK	Ethanol 96%	VE46375	1
Berkel AHK	Ethanol 96%	2906211085	1
Berkel AHK	Ethanol 96%	VE28587	1
Berkel AHK	Ethanol 96%	1410T31141212	1
Berkel AHK	Ethanol 96%	1410T31080113	1
Berkel AHK	Ethanol 96%	1410T311060513	1
Berkel AHK	Ethanol 96%	1410T31040613	1
Berkel AHK	Ethanol 96%	3613Q2304	1
Berkel AHK	Ethanol 96%	13/09/05	1
Berkel AHK	Ethanol 96%	1410T31191113	1
Berkel AHK	Ethanol 96%	13/11/08	1
Berkel AHK	Ethanol 96%	1410T31181213	1
Berkel AHK	Ethanol 96%	200214/567	1
Berkel AHK	Ethanol 96%	260411/145	2
Berkel AHK	Ethanol 96%	210714/598	1
Berkel AHK	Ethanol 96%	1410T31050914	1
Berkel AHK	Ethanol 96%	1137111/08	1
Berkel AHK	Ethanol 96%	91214/632	1
Berkel AHK	Ethanol 96%	14/09/17	1
Berkel AHK	Ethanol 96%	15/07/23	2
BERKEL AHK	Ethanol 96%	170712/334	4
Berkel AHK /TEREOS	Ethanol 96%	190515/669	1
Berkel AHK Alkoholhandel	Ethanol 96%	VE32323	1
Berkel AHK Alkoholhandel	Ethanol 96%	VE32507	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE37799	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE39460	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE40783	1
Berkel AHK Alkoholhande...	Ethanol 96%	40517/843	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE41728	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE42914	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE44224	1
Berkel AHK Alkoholhande...	Ethanol 96%	VE45584	1
Berkel AHK Berlin	Ethanol 96%	80318/931	1
Berkel AHK/MTG Sped.	Ethanol 96%	1410T31040319	1
Berkel AHK/MTG Sped.	Ethanol 96%	1410T31170619	1
Berkel AHK/MTG Sped.	Ethanol 96%	1410T31080819	1
Berkel AKK	Ethanol 96%	190220	1
Berkel/Alliance Healthc...	Ethanol 96%	231018/994	1
Berkel/Anzag	Ethanol 96%	101017/884	1
Berkel/Anzag	Ethanol 96%	241117/897	1
Berkel/Ebert	Ethanol 96%	1410T31271115	1
BerkelAHK	Ethanol 96%	1410T31271115	1
BerkelAHK	Ethanol 96%	16/11/23	1
BerkelAHK	Ethanol 96%	1410T31060717	1
BfB	Ethanol 96%	1/2/3/4	1
BfB	Ethanol 96%	10065927	1
BFB	Ethanol 96%	keinevorhanden	1
Bioenergi Icking GmbH	Ethanol 96%	N781601635	8
Bioenergi Icking GmbH	Ethanol 96%	N781704668	4

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Supplier	Substance	Batch	Spectra
Bioenergi Icking GmbH	Ethanol 96%	N781602528	3
Bioenergi Icking GmbH	Ethanol 96%	N781062528	1
Bioenergie Icking	Ethanol 96%	201102170016	1
Bionorica	Ethanol 96%	22001720	1
BMV Branntwein	Ethanol 96%	Ch19	1
Brand GmbH Alkoholvertr...	Ethanol 96%	24052013/60	1
Branntweinmonopol	Ethanol 96%	613Et0H96	1
Brantweinmonopolstelle	Ethanol 96%	40517/843	1
Brantweinmonopolstelle	Ethanol 96%	110717/861	1
Brantweinmonopolstelle	Ethanol 96%	150518/949	1
Brantweinmonopolstelle	Ethanol 96%	261018/996	1
Brantweinmonopolstelle	Ethanol 96%	50319/035	1
Brüggeman Alkohol	Ethanol 96%	7815040634	1
Brüggemann	Ethanol 96%	7815040634	1
Brüggemann	Ethanol 96%	7816041610	1
Brüggemann	Ethanol 96%	7814110456	1
Brüggemann	Ethanol 96%	7815030598	1
Brüggemann	Ethanol 96%	7815080789	3
Brüggemann	Ethanol 96%	7815110957	1
Brüggemann	Ethanol 96%	N781601257	1
Brüggemann	Ethanol 96%	V781704599(4)	1
Brüggemann	Ethanol 96%	V781704599(3)	1
Brüggemann	Ethanol 96%	V781704599(1)	1
Brüggemann	Ethanol 96%	V781704599(2)	1
Brüggemann	Ethanol 96%	N781704589	1
Brüggemann	Ethanol 96%	n781704927	1
Brüggemann	Ethanol 96%	N781705545	1
Brüggemann	Ethanol 96%	N781809235	1
Brüggemann	Ethanol 96%	7813050119	1
Brüggemann	Ethanol 96%	7813110228	1
Brüggemann	Ethanol 96%	1514020991	1
Brüggemann	Ethanol 96%	7814060362	1
Brüggemann	Ethanol 96%	1514041040	1
Brüggemann Alcohol	Ethanol 96%	7815060735	2
Brüggemann Alcohol	Ethanol 96%	N781601503	1
Brüggemann Alcohol	Ethanol 96%	7814070382	1
Brüggemann Alcohol	Ethanol 96%	7814120470	1
Brüggemann Alcohol Wite...	Ethanol 96%	N841700370	6
Brüggemann Alcohol/Heil...	Ethanol 96%	7816123659	3
Brüggemann Wittenberg	Ethanol 96%	7815030598	1
Brüggemann Wittenberg	Ethanol 96%	N781809140	1
Brüggemann/ Delicom	Ethanol 96%	N781601155	1
BrüggemannAlcohol Witte...	Ethanol 96%	N781703809	5
BrüggemannAlcohol Witte...	Ethanol 96%	N781704731	4
Brüggemann/Alkohol	Ethanol 96%	7814020283	1
Brüggemann/Alkohol	Ethanol 96%	7814060362	1
brüggmann	Ethanol 96%	60100575563	1
Bundes...	Ethanol 96%	8042014	1
Bundesm.Brandwein	Ethanol 96%	140710	1
Bundesmonopolstelle für...	Ethanol 96%	xxxx	1
Bundesmonopolverw.	Ethanol 96%	20130903	1
Bundesmonopolverwaltung...	Ethanol 96%	2032012GI	1
Caelo	Ethanol 96%	220000086	1
Caelo	Ethanol 96%	K46109471	1
Caelo	Ethanol 96%	20150908	1
Caelo	Ethanol 96%	2394894	2
Caelo	Ethanol 96%	20001583	1
Caelo	Ethanol 96%	23000749	1
Caelo	Ethanol 96%	23001357	1
Caelo	Ethanol 96%	23001368	3

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 96%	1410T31290518	1
Caelo	Ethanol 96%	18191701	4
Caelo	Ethanol 96%	18191702	2
Caelo	Ethanol 96%	5678	1
Caelo	Ethanol 96%	12345	1
Caelo	Ethanol 96%	7813010053	2
Caelo	Ethanol 96%	915A-03041	1
Caelo	Ethanol 96%	1/12	1
Caelo	Ethanol 96%	1929501	1
Caelo	Ethanol 96%	19129501	3
Caelo	Ethanol 96%	20001887	1
Caelo	Ethanol 96%	90309001/PR	1
Caelo	Ethanol 96%	18181401	9
Caelo	Ethanol 96%	410300518106	1
Caelo	Ethanol 96%	19030201	4
Caelo	Ethanol 96%	23000480	1
Caelo	Ethanol 96%	19002599	1
Caelo	Ethanol 96%	22001985	2
Caelo	Ethanol 96%	24000856	1
Caelo	Ethanol 96%	25001144	1
Caelo	Ethanol 96%	22000096	1
Caelo	Ethanol 96%	21002269	1
Caelo	Ethanol 96%	120117/505/032	3
Caelo	Ethanol 96%	24002163	1
Caelo	Ethanol 96%	23000998	1
Caelo	Ethanol 96%	170718/505/048	2
Caelo	Ethanol 96%	18181402	6
Caelo	Ethanol 96%	22000641	1
Caelo	Ethanol 96%	22000999	1
Caelo	Ethanol 96%	24000863	2
Caelo	Ethanol 96%	20982018/05122017	1
Caelo	Ethanol 96%	21001964	1
Caelo	Ethanol 96%	21002244	1
Caelo	Ethanol 96%	25000305	1
Caesar & Loretz GmbH	Ethanol 96%	18191702	1
Caesar & Loretz GmbH/Fi...	Ethanol 96%	18191701	1
Caesar & Loretz GmbH/Sana	Ethanol 96%	19030201	1
DHL	Ethanol 96%	11062013	1
Direkt	Ethanol 96%	20190404	1
eal	Ethanol 96%	20150108	1
Eal Euro-Alkohol	Ethanol 96%	20140100	1
Eckerts Wacholder Brenn...	Ethanol 96%	1718A03041	1
Euro OTC	Ethanol 96%	27042017	1
Euro Alkohol GmbH	Ethanol 96%	20150108	1
Euro Alkohol GmbH	Ethanol 96%	20170160	1
Euro Alkohol Schmittmann	Ethanol 96%	11031708	1
Euro OTC	Ethanol 96%	18191702	1
Euro OTC	Ethanol 96%	18001042	1
Euro OTC	Ethanol 96%	24000186	1
euro-alkohol/schmittmann	Ethanol 96%	20170160	1
Fa. Karl Kost Koblenz	Ethanol 96%	410041115082	1
Fa. Karl Kost Koblenz	Ethanol 96%	410040216085	1
Fagron	Ethanol 96%	19001836	1
Fagron	Ethanol 96%	23002116	1
Fagron	Ethanol 96%	22001718	2
Fagron	Ethanol 96%	1410T31200516	1
Fagron	Ethanol 96%	22001291	1
Fiebig	Ethanol 96%	12020161/1	1
Finteler Apotheke	Ethanol 96%	170407	1
Gehe	Ethanol 96%	23000175	1

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Supplier	Substance	Batch	Spectra
Gehe	Ethanol 96%	23001968	1
Gehe	Ethanol 96%	DE00001237810	1
Gehe	Ethanol 96%	LieferungMai2013	1
GEHE	Ethanol 96%	25000353	1
GEHE	Ethanol 96%	18181401	1
GEHE	Ethanol 96%	26000283	1
GEHE	Ethanol 96%	26001268	1
Gehe am 18.02.2014	Ethanol 96%	20002191	1
Gehe Laborchemie Apolda...	Ethanol 96%	19000689	1
Gehe/ApoldaGmbH	Ethanol 96%	24002163	1
Caelo	Ethanol 96%	22000392	1
Caelo	Ethanol 96%	23000998/1050816	1
Gehe/Dr. Wollff	Ethanol 96%	21002237	2
Gehe/Laborchemie Apolda	Ethanol 96%	20000973	1
Gehe-Apolda	Ethanol 96%	2000/1895	1
Gehe-Apolda	Ethanol 96%	20001885	1
Gutenberg-Apotheke	Ethanol 96%	904214	1
hedinger	Ethanol 96%	25001980	1
Hedinger	Ethanol 96%	22001720	1
Hedinger / Anzag	Ethanol 96%	24000161	1
Hessische Spezialitäten...	Ethanol 96%	410_108_1501	1
hetterich	Ethanol 96%	3574702	1
heyl	Ethanol 96%	22001291	1
heyl	Ethanol 96%	24002163	1
heyl	Ethanol 96%	25000305	1
heyl	Ethanol 96%	25001144	1
heyl	Ethanol 96%	25001980	2
Heyl	Ethanol 96%	22000394	1
Heyl	Ethanol 96%	22000392	1
Heyl	Ethanol 96%	22001948	1
Heyl	Ethanol 96%	23000189	1
Heyl	Ethanol 96%	23000188	1
Heyl	Ethanol 96%	22001292	1
Heyl	Ethanol 96%	23001368	2
Heyl	Ethanol 96%	23000750	1
Heyl	Ethanol 96%	24000856	2
Heyl	Ethanol 96%	25000305	1
Heyl / AHD	Ethanol 96%	20001830	1
Heyl / Noweda	Ethanol 96%	23001368	1
Heyl / Sanacorp	Ethanol 96%	21001379	1
Heyl / Sanacorp	Ethanol 96%	21001373	1
Heyl Laborchemie Apolda...	Ethanol 96%	23002116	1
Heyl(Laborchemie Apolda...	Ethanol 96%	21002064	1
heyl/ Noweda	Ethanol 96%	23001968	2
heyl/ Noweda	Ethanol 96%	24002259	1
heyl/ Noweda	Ethanol 96%	25001955	1
Heyl/ Phoenix	Ethanol 96%	24002163	4
Heyl/ Phoenix	Ethanol 96%	23001368	1
Heyl/Alliance	Ethanol 96%	25001980	1
Heyl/Gehe	Ethanol 96%	22001717	1
Heyl/Gehe	Ethanol 96%	22001948	1
Heyl/Gehe	Ethanol 96%	24000863	1
Heyl/Gehe	Ethanol 96%	25001144	1
Heyl/Noweda	Ethanol 96%	22000326	1
Heyl/Noweda	Ethanol 96%	23000749	1
Heyl/Noweda	Ethanol 96%	23002116	2
Heyl/Phönix	Ethanol 96%	23001368	1
Heyl/Sanacorp	Ethanol 96%	25001144	1
Heyl/Sanacorp	Ethanol 96%	25001980	1
Hoffmann	Ethanol 96%	20160007	1

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Supplier	Substance	Batch	Spectra
Hoffmann	Ethanol 96%	123456	1
Hoffmann	Ethanol 96%	28081201	1
Hoffmann	Ethanol 96%	E-200412-1	2
Hoffmann	Ethanol 96%	16061405	1
Hoffmann/ Martinus-Apot...	Ethanol 96%	E-060815-1	1
Hoffmann/ Noweda	Ethanol 96%	E-231213-1	2
Hoffmann/Schmittmann	Ethanol 96%	20150108	1
Hofmann	Ethanol 96%	20150278	1
Hofmann,Branntweinmonopol	Ethanol 96%	20140162	1
Hofmann/Schmittmann	Ethanol 96%	20160007	1
Hubertus Apotheke	Ethanol 96%	23001968	1
K.J. Kost/Krieger	Ethanol 96%	410220114066	1
Kammer/Kirsch	Ethanol 96%	V131702621	1
Kammer-Kirsch	Ethanol 96%	120216	1
Karl Josef Kost	Ethanol 96%	410191018111	1
Karl JosefKost	Ethanol 96%	410181217102	1
Karl-Josef KG	Ethanol 96%	410110117094	1
Karl-Josef Kost	Ethanol 96%	410040216085	1
Karl-Josef Kost	Ethanol 96%	410181217102	1
Karl-Josef Kost Alkohol...	Ethanol 96%	41004115082	1
Karl-Josef Kost Alkohol...	Ethanol 96%	410190516087	1
Kassner & Sasse	Ethanol 96%	16/02/02	1
Kassner & Sasse	Ethanol 96%	12/11/23	1
Kehr	Ethanol 96%	24000186	1
Klenk	Ethanol 96%	10059387-15102	1
kost	Ethanol 96%	410031212052	1
Kost Alkohole	Ethanol 96%	410050718107	1
Kost/13.12.13	Ethanol 96%	410051213065	3
Kost/kost/sophien	Ethanol 96%	410051213065	2
Kost/kost/sophien	Ethanol 96%	4065280513	1
Kost/Krieger/04.07.13	Ethanol 96%	410040713061	2
Kost/Krieger/05.12.13	Ethanol 96%	410111113064	2
Kost/Krieger/12.08.13	Ethanol 96%	410130313059	2
Kost/Krieger/18.03.14	Ethanol 96%	410220114066	1
Kost/Krieger/18.10.13	Ethanol 96%	410081013063	2
Kost/Krieger/26.06.13	Ethanol 96%	410140513060	1
Kost/sophien	Ethanol 96%	410010414067	1
Kottkamp	Ethanol 96%	71026022	1
Kottkamp Alkoholver.	Ethanol 96%	120117/505/032	1
Kottkamp Alkoholvertr.	Ethanol 96%	230414	1
Kottkamp Alkoholvertrieb	Ethanol 96%	90318/505/044	1
Kottkamp Alkoholvertrieb	Ethanol 96%	71118/505/051	3
Kottkamp Alkoholvertrieb	Ethanol 96%	180213	1
Kottkamp Alkoholvertrie...	Ethanol 96%	1512155050519	1
Kottkamp Alkoholvertrie...	Ethanol 96%	211114/505/008	1
Kottkamp Alkoholvertrie...	Ethanol 96%	160714/505/004	1
Kottkamp Alkoholvertrie...	Ethanol 96%	1200117/505/032	1
Kottkamp Alkoholvertrie...	Ethanol 96%	120117/505/32	1
Kottkamp Alkoholvertrie...	Ethanol 96%	220817/505/038	1
Kottkamp Alkoholvertrie...	Ethanol 96%	201017/505/040	3
Kottkamp Alkoholvertrie...	Ethanol 96%	21117/505/041	1
Kottkamp Alkoholvertrie...	Ethanol 96%	221117/505/042	1
Kottkamp Alkoholvertrie...	Ethanol 96%	70218/505/043	2
Kottkamp Alkoholvertrie...	Ethanol 96%	200918/505/050	2
kottkamp,gehe	Ethanol 96%	130513	1
kottkamp/Anzag	Ethanol 96%	61015/505/017	1
Kottkamp/Anzag	Ethanol 96%	130116/505/020	1
Kottkamp/Direkt	Ethanol 96%	4915A-03041	1
Kottkamp/Gehe	Ethanol 96%	121213	1
Kottkamp/Phönix	Ethanol 96%	151215/505/019	1

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Supplier	Substance	Batch	Spectra
Kraul und Wilkening	Ethanol 96%	281217/74282/008	1
Kraul&Wilkening u.Stell...	Ethanol 96%	11/18	1
Kraul&Wilkening u.Stell...	Ethanol 96%	3/19	1
Krieger / Kost / 27.08.13	Ethanol 96%	410090813062	2
KWST	Ethanol 96%	281217/74282/008	1
KWST	Ethanol 96%	240519/74282/023	1
KWST / KWST	Ethanol 96%	190618/74282/012	3
KWST / KWST	Ethanol 96%	1410197/74282/026	1
KWST/dpd	Ethanol 96%	231017/505/005	1
Kwst/Walther CMP	Ethanol 96%	290814	1
Labochemie/ Phönix	Ethanol 96%	24002163	1
Laborch. Apolda	Ethanol 96%	18001881	1
Laborch. Apolda/ Noweda	Ethanol 96%	21002237	1
Laborch. Apolda/ Noweda	Ethanol 96%	22001291	1
Laborch. Apolda/ Noweda	Ethanol 96%	22001718	1
Laborch. Apolda/ Noweda	Ethanol 96%	23000997	1
Laborchemie	Ethanol 96%	21002244	1
Laborchemie	Ethanol 96%	24000856	1
Laborchemie	Ethanol 96%	21000152	1
Laborchemie / Alliance...	Ethanol 96%	26000283	1
Laborchemie / Anzag	Ethanol 96%	25001144	2
Laborchemie / Noweda	Ethanol 96%	20001830	1
Laborchemie / Sanacorp	Ethanol 96%	22001717	1
Laborchemie Apold GmbH	Ethanol 96%	21002269	1
Laborchemie Apold GmbH	Ethanol 96%	22001948	1
Laborchemie Apold GmbH	Ethanol 96%	23001968	1
Laborchemie Apolda	Ethanol 96%	21002075	3
Laborchemie Apolda	Ethanol 96%	21002244	2
Laborchemie Apolda	Ethanol 96%	22000394	1
Laborchemie Apolda	Ethanol 96%	22000616	1
Laborchemie Apolda	Ethanol 96%	22000999	1
Laborchemie Apolda	Ethanol 96%	22001385	1
Laborchemie Apolda	Ethanol 96%	23000997	2
Laborchemie Apolda	Ethanol 96%	23001368	1
Laborchemie Apolda	Ethanol 96%	23000188	1
Laborchemie Apolda	Ethanol 96%	24000161	1
Laborchemie Apolda	Ethanol 96%	24000188	1
Laborchemie Apolda	Ethanol 96%	23002116	1
Laborchemie Apolda	Ethanol 96%	24000186	1
Laborchemie Apolda	Ethanol 96%	24002163	3
Laborchemie Apolda	Ethanol 96%	25001144	2
Laborchemie Apolda	Ethanol 96%	25000361	1
Laborchemie Apolda	Ethanol 96%	25001138	1
Laborchemie Apolda	Ethanol 96%	26000285	1
Laborchemie Apolda	Ethanol 96%	19001519	2
Laborchemie Apolda	Ethanol 96%	20000071	1
Laborchemie Apolda	Ethanol 96%	20001199	1
Laborchemie Apolda	Ethanol 96%	20001886	2
Laborchemie Apolda	Ethanol 96%	20001885	1
Laborchemie Apolda	Ethanol 96%	20000065	1
Laborchemie Apolda	Ethanol 96%	20002191	1
Laborchemie Apolda	Ethanol 96%	17041401	1
Laborchemie Apolda	Ethanol 96%	21000152	2
Laborchemie Apolda	Ethanol 96%	21000197	1
Laborchemie Apolda	Ethanol 96%	21001054	1
Laborchemie Apolda	Ethanol 96%	22001720	1
Laborchemie APOLDA	Ethanol 96%	23000780	1
Laborchemie APOLDA	Ethanol 96%	23000998	1
Laborchemie APOLDA	Ethanol 96%	25000361	1
Laborchemie APOLDA	Ethanol 96%	21002269	1

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Supplier	Substance	Batch	Spectra
Laborchemie Apolda ,Gehe	Ethanol 96%	21002075	1
Laborchemie Apolda ,Gehe	Ethanol 96%	22000641	1
Laborchemie Apolda ,Gehe	Ethanol 96%	24002263	1
laborchemie apolda gmbh	Ethanol 96%	23001368	1
Laborchemie Apolda GmbH	Ethanol 96%	22000394	1
Laborchemie Apolda GmbH	Ethanol 96%	21002269	1
Laborchemie Apolda GmbH	Ethanol 96%	21002268	1
Laborchemie Apolda GmbH	Ethanol 96%	22001985	1
Laborchemie Apolda GmbH	Ethanol 96%	23000188	3
Laborchemie Apolda GmbH	Ethanol 96%	22002231	1
Laborchemie Apolda GmbH	Ethanol 96%	21001736	1
Laborchemie Apolda GmbH	Ethanol 96%	23001368	1
Laborchemie Apolda GmbH	Ethanol 96%	23000749	1
Laborchemie Apolda GmbH	Ethanol 96%	23001357	1
Laborchemie Apolda GmbH	Ethanol 96%	24000856	2
Laborchemie Apolda GmbH	Ethanol 96%	24000186	1
Laborchemie Apolda GmbH	Ethanol 96%	25000305	2
Laborchemie Apolda GmbH	Ethanol 96%	25000361	1
Laborchemie Apolda GmbH	Ethanol 96%	25001144	1
Laborchemie Apolda GmbH	Ethanol 96%	19001937	1
Laborchemie APOLDA GmbH	Ethanol 96%	22001291	1
Laborchemie APOLDA GmbH	Ethanol 96%	22000616	1
Laborchemie APOLDA GmbH	Ethanol 96%	23000997	1
Laborchemie APOLDA GmbH	Ethanol 96%	23002116	1
Laborchemie APOLDA GmbH	Ethanol 96%	25000361	1
Laborchemie APOLDA GmbH	Ethanol 96%	25001980	1
Laborchemie APOLDA GmbH	Ethanol 96%	21001561	1
LABORCHEMIE APOLDA GmbH	Ethanol 96%	24002259	1
Laborchemie Apolda GmbH...	Ethanol 96%	25000305	1
Laborchemie Apolda GmbH...	Ethanol 96%	29000309	1
Laborchemie Apolda GmbH...	Ethanol 96%	24001427	1
LABORCHEMIE APOLDA GmbH...	Ethanol 96%	23001968	1
Laborchemie Apolda GmbH...	Ethanol 96%	220030	1
Laborchemie Apolda GmbH...	Ethanol 96%	23000749	1
Laborchemie Apolda GmbH...	Ethanol 96%	24001427	1
Laborchemie Apolda GMBH...	Ethanol 96%	21002244	1
Laborchemie Apolda GmbH...	Ethanol 96%	23001368	1
Laborchemie Apolda GmbH...	Ethanol 96%	22000616	1
laborchemie apolda gmbh...	Ethanol 96%	25001144	1
Laborchemie Apolda GmbH...	Ethanol 96%	23001357	1
LABORCHEMIE APOLDA GmbH...	Ethanol 96%	25000361	2
LABORCHEMIE APOLDA GmbH...	Ethanol 96%	25001955	1
LABORCHEMIE APOLDA GmbH...	Ethanol 96%	26000283	1
Laborchemie Apolda GmbH...	Ethanol 96%	24001427	1
Laborchemie Apolda GMBH...	Ethanol 96%	22001985	1
Laborchemie Apolda GMBH...	Ethanol 96%	25000305	1
Laborchemie APOLDA gmbH...	Ethanol 96%	24000863	1
Laborchemie APOLDA GmbH...	Ethanol 96%	25000305	1
Laborchemie APOLDA GmbH...	Ethanol 96%	21002237	1
Laborchemie Apolda GmbH...	Ethanol 96%	23000749	3
Laborchemie Apolda GmbH...	Ethanol 96%	23002116	1
Laborchemie Apolda GmbH...	Ethanol 96%	23001368	1
Laborchemie Apolda GmbH...	Ethanol 96%	24001427	1
Laborchemie Apolda Heyl	Ethanol 96%	20001885	1
Laborchemie Apolda Heyl...	Ethanol 96%	24000186	1
Laborchemie Apolda Heyl...	Ethanol 96%	20001887	1
Laborchemie Apolda über...	Ethanol 96%	21001964	1
Laborchemie Apolda über...	Ethanol 96%	22002230	1
Laborchemie Apolda über...	Ethanol 96%	23000997	1
Laborchemie Apolda/ All...	Ethanol 96%	24000187	1

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Supplier	Substance	Batch	Spectra
Laborchemie Apolda/ All. . .	Ethanol 96%	23001368	1
Laborchemie Apolda/ All. . .	Ethanol 96%	24001427	1
Laborchemie Apolda/ Now. . .	Ethanol 96%	23000750	6
Laborchemie Apolda/ Now. . .	Ethanol 96%	23001785	4
Laborchemie APOLDA/ Now. . .	Ethanol 96%	20001574	1
Laborchemie Apolda/ San. . .	Ethanol 96%	22002231	1
Laborchemie Apolda/AHD	Ethanol 96%	25001980	1
Laborchemie Apolda/Alli. . .	Ethanol 96%	22001291	1
Laborchemie Apolda/Alli. . .	Ethanol 96%	22000392	1
Caelo	Ethanol 96%	22001718	1
Laborchemie Apolda/Gehe	Ethanol 96%	22000394	2
Laborchemie Apolda/Gehe	Ethanol 96%	23001357	1
Laborchemie Apolda/Gehe	Ethanol 96%	24002163	1
Laborchemie Apolda/Gehe. . .	Ethanol 96%	25000305	1
Laborchemie Apolda/Jenn. . .	Ethanol 96%	20002191	1
Laborchemie Apolda/Jenn. . .	Ethanol 96%	12345	4
Laborchemie Apolda/Noweda	Ethanol 96%	22000086	1
Laborchemie Apolda/Noweda	Ethanol 96%	23000997	1
Laborchemie Apolda/Noweda	Ethanol 96%	24000102	1
Laborchemie Apolda/Noweda	Ethanol 96%	24001427	2
Laborchemie Apolda/Noweda	Ethanol 96%	25000305	2
Laborchemie Apolda/Noweda	Ethanol 96%	20000974	1
Laborchemie Apolda/Phoe. . .	Ethanol 96%	21001736	1
Laborchemie Apolda/Phoe. . .	Ethanol 96%	22001948	2
Laborchemie Apolda/Phönix	Ethanol 96%	22001291	1
Laborchemie Apolda/Phönix	Ethanol 96%	22000392	1
Laborchemie Apolda/Phönix	Ethanol 96%	21002268	1
Laborchemie Apolda/Phönix	Ethanol 96%	23001368	1
Laborchemie Apolda/Phönix	Ethanol 96%	21000152	1
LABORCHEMIE APOLDA/PHÖNIX	Ethanol 96%	23001968	1
Laborchemie Apolda/Sana. . .	Ethanol 96%	22000999	1
Laborchemie Apolda/Span. . .	Ethanol 96%	25000361	1
Laborchemie Apoldo GmbH	Ethanol 96%	22002231	1
Laborchemie Apolida GmbH. . .	Ethanol 96%	23001368	1
Laborchemie/Gehe	Ethanol 96%	22000603	3
Laborchemie/Gehe	Ethanol 96%	23001368	1
Laborchemie/Gehe	Ethanol 96%	24001427	1
Laborchemie/Gehe	Ethanol 96%	24000920	2
Laborchemie/Gehe	Ethanol 96%	25000305	2
Laborchemie/Gehe	Ethanol 96%	20000071	1
Laborchemie/Gehe	Ethanol 96%	20000305	3
LABORCHEMIE/Gehe	Ethanol 96%	23000750	1
LABORCHEMIE/Gehe	Ethanol 96%	24000856	1
LABORCHEMIE/Gehe	Ethanol 96%	24000163	1
LABORCHEMIE/Noweda	Ethanol 96%	19001836	1
Laborchemie/Noweda	Ethanol 96%	24000034	1
Laborchemie/Noweda	Ethanol 96%	24000186	1
Laborchemie/Noweda	Ethanol 96%	24000856	1
Laborchemie/Noweda	Ethanol 96%	25001980	1
Laborchemie/Noweda	Ethanol 96%	22000161	1
LaborChemie/Noweda	Ethanol 96%	23000997	1
Laborchemie/Sanacorp	Ethanol 96%	22000616	1
LaborchemieApolda/Phönix	Ethanol 96%	21000152	1
LaborchemieApolda/Sanac. . .	Ethanol 96%	21001053	1
Lamotte/PX	Ethanol 96%	200201121	1
Merck	Ethanol 96%	K45475971	1
Merck	Ethanol 96%	137K16157910	1
Merck	Ethanol 96%	K43729871232	3
Merck	Ethanol 96%	K44538471324	1
Merck	Ethanol 96%	45056971	1

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Supplier	Substance	Batch	Spectra
Merck	Ethanol 96%	Index-No603-002-00-5	1
Merck	Ethanol 96%	K47002671535	1
Merck	Ethanol 96%	K45475971416	3
Merck	Ethanol 96%	K46405471507	2
Miller	Ethanol 96%	1413040904/16042013	1
Miller Alkoholvertrieb ...	Ethanol 96%	20982018/05122017	1
Miller Alkoholvertrieb ...	Ethanol 96%	410-103-150508/26052	1
Monopolstelle Jenne	Ethanol 96%	J150114	1
Mundo	Ethanol 96%	1410T31150615	1
Mundo OHG	Ethanol 96%	1410T31141015	1
Mundo OHG	Ethanol 96%	1410T31160316	1
Mundo OHG	Ethanol 96%	1410T31260716	1
Mundo OHG	Ethanol 96%	1410T31281216	1
Mundo OHG	Ethanol 96%	1410T31090617	1
Mundo OHG	Ethanol 96%	1410T31241018	1
Mundo OHG	Ethanol 96%	1410T31060513	1
Mundo OHG	Ethanol 96%	1410T31120813	1
Mundo OHG	Ethanol 96%	1410T31191113	1
mandoOHG	Ethanol 96%	1410T31260218	1
Noweda	Ethanol 96%	24000856	1
Noweda	Ethanol 96%	19001935	1
Noweda	Ethanol 96%	1202124	2
Noweda	Ethanol 96%	19002422	1
Noweda	Ethanol 96%	19000663	1
Noweda	Ethanol 96%	21000197	1
Noweda / Aploda	Ethanol 96%	21000197	1
Noweda / Apolda	Ethanol 96%	20000974	1
Noweda 04.08.15	Ethanol 96%	22000616	1
Noweda/Labochemie	Ethanol 96%	20001566	1
Noweda/Laborchem. Apolda	Ethanol 96%	23001055	4
Noweda/laborchemie Apolda	Ethanol 96%	21002237	1
Phoenix	Ethanol 96%	21001561	1
Phoenix	Ethanol 96%	200000973	1
Phoenix Goettin	Ethanol 96%	21002269	1
Phoenix/ Laborchemie Ap...	Ethanol 96%	25000305	1
Phönix	Ethanol 96%	18122017/25112016	1
Phönix	Ethanol 96%	24002163	1
Phönix / Heyl	Ethanol 96%	24000856	1
Phönix 06.2.15	Ethanol 96%	21002075	1
Phönix/ Apolda	Ethanol 96%	24001427	1
Phönix/berkel	Ethanol 96%	130208	1
Caelo	Ethanol 96%	19030202	1
Phönix/Cealo	Ethanol 96%	18181401	1
Fagron	Ethanol 96%	22000096	1
Phönix/Heyl	Ethanol 96%	24000863	1
Post-Apotheke	Ethanol 96%	111a-02304	1
PVL	Ethanol 96%	1204131	1
Rondell Apotheke	Ethanol 96%	410040216085	1
Sanacop	Ethanol 96%	23000780	1
sanacorp	Ethanol 96%	K40787471	1
Sanacorp	Ethanol 96%	21002268	1
Sanacorp	Ethanol 96%	24001427	1
Sanacorp	Ethanol 96%	25001138	1
Sanacorp	Ethanol 96%	20001830	1
Sanacorp	Ethanol 96%	20001574	1
Caelo	Ethanol 96%	AKD7	1
SAV LP	Ethanol 96%	601826	1
Schmittmann	Ethanol 96%	20150108	1
Schmittmann Gmbh	Ethanol 96%	20160426	1
Schmittmann Gmbh	Ethanol 96%	20130105	1

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Supplier	Substance	Batch	Spectra
Schmittmann GmbH	Ethanol 96%	2041503	1
Schmittmann GmbH	Ethanol 96%	20140100	1
Schmittmann/Hoffmann	Ethanol 96%	20020112-1	1
Senge& Butz GmbH WE: 0...	Ethanol 96%	41209	1
Sonnen-Apotheke Wefensl...	Ethanol 96%	VE42671-1530	1
Sonnenberg/Zentrum	Ethanol 96%	4711E-03041	1
sophien arzneimittel	Ethanol 96%	410191018111	1
Sophien-AM / K.J.Kost	Ethanol 96%	410041115082	1
Spangro/Laborchemie Apo...	Ethanol 96%	20001583	1
spinnrad	Ethanol 96%	815310072	1
Spinnrad	Ethanol 96%	1017310124	1
Spinnrad	Ethanol 96%	317310072	1
Spinnrad	Ethanol 96%	713310072	1
Taoasis	Ethanol 96%	VE36425-122428	1
Taoasis	Ethanol 96%	122428	1
Taoasis	Ethanol 96%	VE40497-128163	2
Taoasis	Ethanol 96%	VE42394-1530	1
TAOASIS	Ethanol 96%	VE39261-125696	1
Taoasis/K	Ethanol 96%	VE30892-112552	1
Taoasis / G	Ethanol 96%	VE31397-114015	1
Tereos 20131470D	Ethanol 96%	1410T31040613	1
Tereos,Origny/ Kassner&...	Ethanol 96%	17/02/08	1
Tereos/ Berkel AHK Alko...	Ethanol 96%	90119/018	1
Tereos/Berkel AHK	Ethanol 96%	31115/705	1
Tereos/Berkel AHK	Ethanol 96%	101017/884	1
Tereos/BERKEL AHK	Ethanol 96%	1410T31060717	1
Tereos/BERKEL AHK	Ethanol 96%	1410T31291117	1
VDL	Ethanol 96%	K43005871151	1
Caelo	Ethanol 96%	K43619871227	1
VWR	Ethanol 96%	16E034127	1
W. Hoffmann/Noweda	Ethanol 96%	20120106	1
Werner Hoffmann	Ethanol 96%	7081503	1
Werner Hoffmann	Ethanol 96%	20130033	1
Werner Hofmann	Ethanol 96%	15071707	1
Werner Hofmann	Ethanol 96%	20170160	2
Werner Hofmann	Ethanol 96%	5031809	1
Werner Hofmann	Ethanol 96%	29061804	1
Werner Hofmann	Ethanol 96%	18/02/09	1
Werner Hofmann	Ethanol 96%	5121821	1
Werner Hofmann	Ethanol 96%	8021304	1
Werner Hofmann	Ethanol 96%	20120106	1
Werner Hofmann	Ethanol 96%	30091302	1
Werner Hofmann	Ethanol 96%	111111	1
Werner Hofmann	Ethanol 96%	20150278	1
Werner Hofmann/Werner H...	Ethanol 96%	20150278	1
Agraralkohol AG München	Ethanol 96%		1
Bergchemie	Ethanol 96%		1
Berkel	Ethanol 96%		1
BfB-Betrieb München	Ethanol 96%		1
BMV Branntwein	Ethanol 96%		5
Bundesmonopolverwaltung...	Ethanol 96%		5
Caelo	Ethanol 96%		12
eal Euro-Alkohol	Ethanol 96%		1
Fagron	Ethanol 96%		1
Fiebig	Ethanol 96%		2
Gehe Kassel	Ethanol 96%		1
Heyl / Sanacorp	Ethanol 96%		1
Hofmann,Branntweinmonopol	Ethanol 96%		1
Kammer Kirschner	Ethanol 96%		1
Laborchemie Apolda	Ethanol 96%	24001427	2

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Supplier	Substance	Batch	Spectra
Merck	Ethanol 96%		1
Mundo	Ethanol 96%		1
NACHPRÜFUNG Charge 2210...	Ethanol 96%		1
Euro OTC	Ethanol 96%		1
Sanacorp	Ethanol 96%		1
Sonnen-Apotheke Wefensl...	Ethanol 96%		1
Werner Hoffmann	Ethanol 96%		1
	Ethanol 96%		1

- 137 414 spectra from 703 *Apo-Ident* customers from a total of 34 828 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Ethanol 96%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Ethanol 96%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	40	0	69 394
Type C	0	930	9	137 378

The substance/substance group *Ethanol 96%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9655 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6440 %)	99.0415 % (> 98.7220 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Ethanol 96%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Coal tar spirit SR	18.95	—
Dexpanthenol	52.40	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Ethanol 96%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31488	31488	0.00	52.84
31564	31488	4.87	49.68
33852	34457	3.90	50.42
34330	34330	0.00	50.63
34457	34457	0.00	50.59

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Ethyl acetate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30719-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ethyl acetate; Aether aceticus

Special notes

When selecting the *Ethyl acetate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Ethyl acetate	3	2	13

Second-stage model

For differentiation of the substance/substance group *Ethyl acetate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Ethyl acetate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Ethyl acetate	11357003	30719	40	1402681
Caelo	Ethyl acetate	13366102	31385	40	20131107
Caelo	Ethyl acetate	180804	34075	40	20180320*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 3 reference samples from the substance/substance group *Ethyl acetate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 239 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Ethyl acetate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ethyl acetate	15362301	32568	40
Caelo	Ethyl acetate	15362303	33215	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 17 spectra from 16 *Apo-Ident* customers from 14 batches from the substance/substance group *Ethyl acetate*.
- Among them are spectra of independent samples from 13 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Ethyl acetate	12357601	1
Caelo	Ethyl acetate	10286201	1
Caelo	Ethyl acetate	9081304	1
Caelo	Ethyl acetate	12357604	1
Caelo	Ethyl acetate	18080401	1
Caelo	Ethyl acetate	15362304	1
Caelo	Ethyl acetate	15362301	1
Caelo	Ethyl acetate	18039501	2
Caelo	Ethyl acetate	16943801	1
Caelo	Ethyl acetate	18080402	1
Caelo	Ethyl acetate	15182404	1
Caelo	Ethyl acetate	13366101	1
Caelo	Ethyl acetate	15182402	2
Caelo	Ethyl acetate	11357003	2

- 138 336 spectra from 703 *Apo-Ident* customers from a total of 35 281 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Ethyl acetate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Ethyl acetate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	80	0	69 394
Type C	0	17	0	138 336

The substance/substance group *Ethyl acetate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6457 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Ethyl acetate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Acetone	51.26	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Ethyl acetate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30719	30719	0.00	45.81
31385	34075	7.29	41.20
34075	34075	0.00	44.92

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Eucalyptus oil / Rosmary oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30875-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Eucalyptus oil / Rosmary oil; Eucalyptus oil; Oleum eucalypti; Oleum rosmarini; Rosemary oil

Special notes

When selecting the *Eucalyptus oil / Rosmary oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Eucalyptus oil	11	9	212
Rosemary oil	5	3	110

Second-stage model

For differentiation of the substance/substance group *Eucalyptus oil* / *Rosemary oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Eucalyptus oil* / *Rosemary oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Eucalyptus oil	279796	31110	40	73399
Bombastus	Eucalyptus oil	18005784	34523	40	127858
Caelo	Eucalyptus oil	13106314	31284	40	AR-15-FG-000909-01
Caelo	Eucalyptus oil	14039604	31285	40	1412280
Caelo	Eucalyptus oil	14039609	31298	40	20140214
Caelo	Eucalyptus oil	14121904	31314	40	AR-15-FG-004302-01
Caelo	Eucalyptus oil	14039626	31864	60	20140211
Caelo	Eucalyptus oil	15316504	31865	60	20150925
Euro OTC	Eucalyptus oil	1406028-01	31527	60	20140716
Euro OTC	Eucalyptus oil	1511015	31823	60	20151214*
Fagron	Eucalyptus oil	16C15-B05-331849	33277	40	20160411
Caelo	Rosemary oil	162769	32686	40	20160930*
Caelo	Rosemary oil	191803	34614	40	20190703*
Euro OTC	Rosemary oil	1303016-01	31311	40	1502125
Euro OTC	Rosemary oil	1511016	31822	60	20151214*
Fagron	Rosemary oil	12E08-N05	30875	40	1502124

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 740 spectra of 16 reference samples from the substance/substance group *Eucalyptus oil* / *Rosemary oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 16 different batches.
- 55 619 spectra from a total of 1100 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Type B spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 480 spectra of 12 reference samples from the substance/substance group *Eucalyptus oil* / *Rosemary oil*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Eucalyptus oil	11104312	30859	40
Caelo	Eucalyptus oil	163513	33084	40
Caelo	Eucalyptus oil	192026	34649	40
Caelo	Eucalyptus oil	192938	34723	40
Euro OTC	Eucalyptus oil	1608042	32773	40
Euro OTC	Eucalyptus oil	1703030	33237	40
Euro OTC	Eucalyptus oil	1801002	33928	40
Euro OTC	Eucalyptus oil	1806016	34189	40
Euro OTC	Eucalyptus oil	1903030	34496	40
Euro OTC	Rosemary oil	1608043	32774	40
Euro OTC	Rosemary oil	1803038	34088	40
Euro OTC	Rosemary oil	1903001	34420	40

- 68994 spectra from a total of 1490 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 776 spectra from 255 *Apo-Ident* customers from 334 batches from the substance/substance group *Eucalyptus oil* / *Rosemary oil*.
- Among them are spectra of independent samples from 321 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
14039625	Eucalyptus oil	14039625	1
AHD	Eucalyptus oil	307667	1
AHD 03.12.2013	Eucalyptus oil	282165	1
ahd/lamotte	Eucalyptus oil	14039604	1
Alliance Health Care	Eucalyptus oil	291534	1
Allianz Healthcare	Eucalyptus oil	15400202	1
Anzag	Eucalyptus oil	273707	1
Bergland / Gehe	Eucalyptus oil	K301874	1
Bergland / Gehe	Eucalyptus oil	K302509	1
Bomastus direkt	Eucalyptus oil	293624	1
Bombastus	Eucalyptus oil	279798	1
Bombastus	Eucalyptus oil	269495	1

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Supplier	Substance	Batch	Spectra
Bombastus	Eucalyptus oil	278619	2
Bombastus	Eucalyptus oil	283384	1
Bombastus	Eucalyptus oil	284861	1
Bombastus	Eucalyptus oil	286454	1
Bombastus	Eucalyptus oil	288085	3
Bombastus	Eucalyptus oil	294687	1
Bombastus	Eucalyptus oil	295573	1
Bombastus	Eucalyptus oil	300063	4
Bombastus	Eucalyptus oil	299561	1
Bombastus	Eucalyptus oil	300881	2
Bombastus	Eucalyptus oil	302670	1
Bombastus	Eucalyptus oil	304517	2
Bombastus	Eucalyptus oil	308260	1
Bombastus	Eucalyptus oil	17000947	3
Bombastus	Eucalyptus oil	91(18005784)	1
Bombastus	Eucalyptus oil	92(19001869)	1
Bombastus	Eucalyptus oil	285615	2
Bombastus	Eucalyptus oil	306025	2
Bombastus	Eucalyptus oil	270004	1
Bombastus	Eucalyptus oil	291597	2
Bombastus	Eucalyptus oil	303327	1
Bombastus	Eucalyptus oil	180057843214	1
Bombastus	Eucalyptus oil	301205	1
Bombastus	Eucalyptus oil	275646	2
Bombastus	Eucalyptus oil	276113	1
Bombastus	Eucalyptus oil	293175	1
Bombastus	Eucalyptus oil	294460	1
Bombastus	Eucalyptus oil	298985	4
Bombastus	Eucalyptus oil	307667	6
Bombastus	Eucalyptus oil	308248	2
Bombastus	Eucalyptus oil	286740	2
Bombastus	Eucalyptus oil	91101	1
Bombastus	Eucalyptus oil	292317	1
Bombastus	Eucalyptus oil	294181	1
Bombastus	Eucalyptus oil	296325	3
Bombastus	Eucalyptus oil	17000944	4
Bombastus	Eucalyptus oil	90(307667)	1
Bombastus	Eucalyptus oil	290094	1
Bombastus	Eucalyptus oil	293087	3
Bombastus	Eucalyptus oil	296079	2
Bombastus	Eucalyptus oil	299699	2
Bombastus	Eucalyptus oil	17001384	1
Bombastus	Eucalyptus oil	285362	2
Bombastus	Eucalyptus oil	308151	2
Bombastus	Eucalyptus oil	293227	3
Bombastus	Eucalyptus oil	277671	1
Bombastus	Eucalyptus oil	281667	2
Bombastus	Eucalyptus oil	261706	1
Bombastus	Eucalyptus oil	273707	1
Bombastus	Eucalyptus oil	307668	2
Bombastus	Eucalyptus oil	18000176	1
Bombastus	Eucalyptus oil	298889	1
Bombastu-Werke AG/Gehe	Eucalyptus oil	282165	1
Bombastu-Werke AG/Gehe	Eucalyptus oil	283991	1
Caelo	Eucalyptus oil	13106413	1
Caelo	Eucalyptus oil	10051816	1
Caelo	Eucalyptus oil	11324112	8
Caelo	Eucalyptus oil	2112I-01978	1
Caelo	Eucalyptus oil	12103605	1
Caelo	Eucalyptus oil	7011302	1

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Supplier	Substance	Batch	Spectra
Caelo	Eucalyptus oil	513I-01978	1
Caelo	Eucalyptus oil	11104312	1
Caelo	Eucalyptus oil	12103607	4
Caelo	Eucalyptus oil	11102507	2
Caelo	Eucalyptus oil	11324108	1
Caelo	Eucalyptus oil	276113	1
Caelo	Eucalyptus oil	12114112	5
Caelo	Eucalyptus oil	12114107	2
Caelo	Eucalyptus oil	12103611	4
Caelo	Eucalyptus oil	13106401	4
Caelo	Eucalyptus oil	13106403	3
Caelo	Eucalyptus oil	4136096	2
Caelo	Eucalyptus oil	12103612	1
Caelo	Eucalyptus oil	13106304	1
Caelo	Eucalyptus oil	1439603	1
Caelo	Eucalyptus oil	13106412	3
Caelo	Eucalyptus oil	14039603	1
Caelo	Eucalyptus oil	14039601	2
Caelo	Eucalyptus oil	14039610	1
Caelo	Eucalyptus oil	14039618	2
Caelo	Eucalyptus oil	14121905	1
Caelo	Eucalyptus oil	14039622	2
Caelo	Eucalyptus oil	15316502	6
Caelo	Eucalyptus oil	13106326	3
Caelo	Eucalyptus oil	15011704	1
Caelo	Eucalyptus oil	15063301	4
Caelo	Eucalyptus oil	28071502	1
Caelo	Eucalyptus oil	13106316	1
Caelo	Eucalyptus oil	15063312	9
Caelo	Eucalyptus oil	15063309	14
Caelo	Eucalyptus oil	15316501	7
Caelo	Eucalyptus oil	15400202	15
Caelo	Eucalyptus oil	15316507	1
Caelo	Eucalyptus oil	15400203	3
Caelo	Eucalyptus oil	15400211	3
Caelo	Eucalyptus oil	16235505	7
Caelo	Eucalyptus oil	16351301	6
Caelo	Eucalyptus oil	24061708	1
Caelo	Eucalyptus oil	16235508	1
Caelo	Eucalyptus oil	170303001	1
Caelo	Eucalyptus oil	17198802	4
Caelo	Eucalyptus oil	16351314	1
Caelo	Eucalyptus oil	9061815	1
Caelo	Eucalyptus oil	17337707	1
Caelo	Eucalyptus oil	17337710	1
Caelo	Eucalyptus oil	18171704	2
Caelo	Eucalyptus oil	18027409	1
Caelo	Eucalyptus oil	18225801	1
Caelo	Eucalyptus oil	18171702	2
Caelo	Eucalyptus oil	18225401	1
Caelo	Eucalyptus oil	15316514	1
Caelo	Eucalyptus oil	293087	1
Caelo	Eucalyptus oil	11324107	5
Caelo	Eucalyptus oil	14039602	1
Caelo	Eucalyptus oil	14039612	1
Caelo	Eucalyptus oil	12114111	1
Caelo	Eucalyptus oil	14039625	5
Caelo	Eucalyptus oil	15011701	5
Caelo	Eucalyptus oil	15316512	5
Caelo	Eucalyptus oil	13106411	3

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Supplier	Substance	Batch	Spectra
Caelo	Eucalyptus oil	296079	1
Caelo	Eucalyptus oil	10318506	1
Caelo	Eucalyptus oil	3012E-01978	1
Caelo	Eucalyptus oil	1214E-01978	1
Caelo	Eucalyptus oil	1515Q-01978	1
Caelo	Eucalyptus oil	916M-01978	1
Caelo	Eucalyptus oil	270421	1
Caelo	Eucalyptus oil	290094	1
Caelo	Eucalyptus oil	17337701	2
Caelo	Eucalyptus oil	13106402	2
Caelo	Eucalyptus oil	303327	1
Caelo	Eucalyptus oil	15326512	1
Caelo	Eucalyptus oil	1608042	2
Caelo	Eucalyptus oil	15400210	11
Caelo	Eucalyptus oil	16351313	4
Caelo	Eucalyptus oil	16351312	20
Caelo	Eucalyptus oil	9351601	1
Caelo	Eucalyptus oil	15011703	1
Caelo	Eucalyptus oil	15063303	1
Caelo	Eucalyptus oil	16351302	2
Caelo	Eucalyptus oil	297732	1
Caelo	Eucalyptus oil	13106301	1
Caelo	Eucalyptus oil	14039627	2
Caelo	Eucalyptus oil	14039630	1
Caelo	Eucalyptus oil	15063302	1
Caelo	Eucalyptus oil	15011702	1
Caelo	Eucalyptus oil	18171701	10
Caelo	Eucalyptus oil	18171707	5
Caesar & Loretz GmbH	Eucalyptus oil	18225402	1
Caesar & Loretz GmbH D-...	Eucalyptus oil	11102507	1
Celo	Eucalyptus oil	15400202	1
Celoa vdL	Eucalyptus oil	14039609	2
Euro OTC	Eucalyptus oil	1211028-01	2
Euro OTC	Eucalyptus oil	1211028-02	2
Euro OTC	Eucalyptus oil	1202030-01	1
Euro OTC	Eucalyptus oil	12D05-N03	1
Euro OTC	Eucalyptus oil	1511015-01	2
Euro OTC	Eucalyptus oil	1511015_01	1
Euro OTC	Eucalyptus oil	180100201	1
Euro OTC	Eucalyptus oil	278619	1
Euro OTC	Eucalyptus oil	1806016-01	3
Fagro/Gehe	Eucalyptus oil	14/20-B02-302706	1
Fagron	Eucalyptus oil	12B23-N08	8
Fagron	Eucalyptus oil	11/27-N03	1
Fagron	Eucalyptus oil	12G25-N11	4
Fagron	Eucalyptus oil	14E09-B06-294681	1
Fagron	Eucalyptus oil	14A17-B40	3
Fagron	Eucalyptus oil	14A17-B40-291551	1
Fagron	Eucalyptus oil	15B03-B02-304362	3
Fagron	Eucalyptus oil	15B03-B03-304361	1
Fagron	Eucalyptus oil	14B03-B02-304361	1
Fagron	Eucalyptus oil	16C15-B05-322992	2
Fagron	Eucalyptus oil	15B03-Bo2-30462	1
Fagron	Eucalyptus oil	11K23-N05	2
Fagron	Eucalyptus oil	11102506	1
Fagron	Eucalyptus oil	16C15-B05-327603	1
Fagron	Eucalyptus oil	11D11-N02	1
Fagron	Eucalyptus oil	13E15-N04	3
Caelo	Eucalyptus oil	15011701	1
Frey & Lau GmbH/Phoenix	Eucalyptus oil	12G25-N11	1

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Supplier	Substance	Batch	Spectra
Gatt-Koller	Eucalyptus oil	1702449	1
Gatt-Koller	Eucalyptus oil	1803744	1
Gehe 20.02.15	Eucalyptus oil	1406028-02	1
Caelo	Eucalyptus oil	301115	1
Caelo	Eucalyptus oil	15063309/1100516	1
Ichthyol-Gesellschaft	Eucalyptus oil	1610280E/15316504	2
Kögl	Eucalyptus oil	153305164716	1
Kögl	Eucalyptus oil	20172254	2
L10	Eucalyptus oil	18027411	1
L10/Bambastus	Eucalyptus oil	303336	1
L11	Eucalyptus oil	18027405	1
L12	Eucalyptus oil	15316513	1
L12	Eucalyptus oil	16351309	1
L12	Eucalyptus oil	16235509	1
L12	Eucalyptus oil	18225403	2
Noveda	Eucalyptus oil	13106402	1
Noweda	Eucalyptus oil	16351312	1
Bombastus	Eucalyptus oil	306637	4
Caelo	Eucalyptus oil	1608042-01	1
Caelo	Eucalyptus oil	292087	1
Euro OTC	Eucalyptus oil	1608042-01	3
Phoenix	Eucalyptus oil	16235502	1
Phoenix WE:27.01.2017 ...	Eucalyptus oil	15400210	1
phönix	Eucalyptus oil	14E09-B06-294681	1
Phönix	Eucalyptus oil	273707	1
Phönix	Eucalyptus oil	14A17-B40	1
Phönix	Eucalyptus oil	14A17-B40-291551	1
Phönix	Eucalyptus oil	1801002-01	1
Bombastus	Eucalyptus oil	300798	1
Caelo	Eucalyptus oil	15316505	1
Caelo	Eucalyptus oil	18171714	2
Fagron	Eucalyptus oil	14e09-b06-294679	1
Fagron	Eucalyptus oil	18171701	1
PVL	Eucalyptus oil	1260813	1
sana 05.12.14 5,25	Eucalyptus oil	14039609	1
Sanacorp	Eucalyptus oil	48/AKD3	1
Sanacorp	Eucalyptus oil	15400202	1
Sanacorp	Eucalyptus oil	16351301	1
Sanacorp	Eucalyptus oil	16351309	1
Sanacorp	Eucalyptus oil	16351313	3
Sanacorp	Eucalyptus oil	16235508	1
Sanacorp	Eucalyptus oil	17337707	1
Sanacorp	Eucalyptus oil	18171702	2
Sanacorp	Eucalyptus oil	18171701	1
Sanacorp	Eucalyptus oil	11324112	1
Caelo	Eucalyptus oil	16351309	7
Taoasis	Eucalyptus oil	502745-108325	1
Taoasis	Eucalyptus oil	521399-108557	1
Taoasis	Eucalyptus oil	53970-110969	1
Taoasis	Eucalyptus oil	527885-109905	1
Taoasis	Eucalyptus oil	557095-114030	1
Taoasis	Eucalyptus oil	543495-112704	1
Taoasis	Eucalyptus oil	8745-115428	1
Taoasis	Eucalyptus oil	8745-116747	1
Taoasis GmbH	Eucalyptus oil	33364-110969	1
VDL;5,40EUR;11.04.15	Eucalyptus oil	14039625	1
AHD , 03.09.13	Rosemary oil	12246515	2
Anzag 05.11.12 ek:7,37	Rosemary oil	11287211	1
Anzag 12.03.13 ek: 7,37EUR	Rosemary oil	12246508	1
Bergland/Sanacorp	Rosemary oil	C301101-3448311132	1

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Supplier	Substance	Batch	Spectra
Bombastus	Rosemary oil	278907	4
Bombastus	Rosemary oil	275963	1
Bombastus	Rosemary oil	285668	1
Bombastus	Rosemary oil	289392	2
Bombastus	Rosemary oil	2872889	1
Bombastus	Rosemary oil	296037	1
Bombastus	Rosemary oil	306506	4
Bombastus	Rosemary oil	298408	1
Bombastus	Rosemary oil	273724	3
Bombastus	Rosemary oil	301180	1
Bombastus	Rosemary oil	281945	1
Bombastus	Rosemary oil	282541	1
Bombastus	Rosemary oil	288951	1
Bombastus	Rosemary oil	295093	1
Bombastus	Rosemary oil	304472	1
Bombastus	Rosemary oil	305785	1
Caelo	Rosemary oil	3091206	1
Caelo	Rosemary oil	11287211	6
Caelo	Rosemary oil	1209034-01	2
Caelo	Rosemary oil	28051309	1
Caelo	Rosemary oil	12246515	3
Caelo	Rosemary oil	4101301	1
Caelo	Rosemary oil	11031402	1
Caelo	Rosemary oil	18091402	1
Caelo	Rosemary oil	296036	1
Caelo	Rosemary oil	31031502	1
Caelo	Rosemary oil	15316703	1
Caelo	Rosemary oil	15442001	3
Caelo	Rosemary oil	15442017	6
Caelo	Rosemary oil	15442018	1
Caelo	Rosemary oil	1608043-01	2
Caelo	Rosemary oil	15442019	1
Caelo	Rosemary oil	24061709	1
Caelo	Rosemary oil	16276907	1
Caelo	Rosemary oil	16276908	4
Caelo	Rosemary oil	382H25	1
Caelo	Rosemary oil	9061816	1
Caelo	Rosemary oil	17326703	2
Caelo	Rosemary oil	16276917	1
Caelo	Rosemary oil	17326716	2
Caelo	Rosemary oil	28111813	1
Caelo	Rosemary oil	18252002	3
Caelo	Rosemary oil	18252001	1
Caelo	Rosemary oil	17012014	1
Caelo	Rosemary oil	273098	1
Caelo	Rosemary oil	12246520	3
Caelo	Rosemary oil	13I19-B04-293599	1
Caelo	Rosemary oil	13/19-B04-293577	3
Caelo	Rosemary oil	150422	1
Caelo	Rosemary oil	11287208	3
Caelo	Rosemary oil	12246501	5
Caelo	Rosemary oil	12246508	5
Caelo	Rosemary oil	57(17326713)	1
Caelo	Rosemary oil	58(18252007)	1
Caelo	Rosemary oil	14092911	4
Caelo	Rosemary oil	56(16276908)	1
Caelo	Rosemary oil	17326713	1
Caelo	Rosemary oil	10374817	2
Caelo	Rosemary oil	2613M-02012	1
Caelo	Rosemary oil	2715E-02012	1

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Supplier	Substance	Batch	Spectra
Caelo	Rosemary oil	16276904	1
Caelo	Rosemary oil	279984	1
Caelo	Rosemary oil	12246517	2
Caelo	Rosemary oil	14092910	5
Caelo	Rosemary oil	15316706	1
Caelo	Rosemary oil	16276903-20170704Ma1	1
Caelo	Rosemary oil	1511016-01	1
Caelo	Rosemary oil	14092904	3
Caelo	Rosemary oil	15316704	4
Caelo	Rosemary oil	17326702	9
Caesar & Loretz GmbH	Rosemary oil	18252002	1
Euro OTC	Rosemary oil	130801401	2
Euro OTC	Rosemary oil	1202025-01	2
Euro OTC	Rosemary oil	1404037-01	1
Euro OTC	Rosemary oil	1511016-02	1
Euro OTC	Rosemary oil	1511016-01	1
Euro OTC	Rosemary oil	1209034-01	1
Euro OTC	Rosemary oil	1404037-02	1
Euro OTC	Rosemary oil	290203901	1
Fagron	Rosemary oil	11K21-N05	3
Fagron	Rosemary oil	693655-N12	1
Fagron	Rosemary oil	13A28-N03	3
Fagron	Rosemary oil	13I19B04	1
Fagron	Rosemary oil	13/19-B04-308855	2
Fagron	Rosemary oil	13I19-B04-293577	2
Fagron	Rosemary oil	13B18-N01	3
Fagron	Rosemary oil	13/19-B04-287289	1
Fagron	Rosemary oil	13I19-B04	3
Fagron	Rosemary oil	1608043-01	1
Fagron	Rosemary oil	16L22B84329543	1
fargo	Rosemary oil	13A28-N03	2
Fiebig	Rosemary oil	15442018	1
Frey & Lau GmbH/Phoenix	Rosemary oil	13/19-B04-293575	1
Frey+Lau	Rosemary oil	905855	1
Gatt-Koller	Rosemary oil	1802349	1
Gehe	Rosemary oil	301180	1
Caelo	Rosemary oil	275963	1
Caelo	Rosemary oil	16276910	4
Herba	Rosemary oil	5131011122331026	1
Kögl	Rosemary oil	985929	3
Caelo	Rosemary oil	16276903	2
L12	Rosemary oil	17326702	1
Noweda	Rosemary oil	10374817	1
Noweda	Rosemary oil	11287211	1
Noweda/Phoenix/ Taoasis	Rosemary oil	3231031-117639	1
Phoenix/ Taoasis	Rosemary oil	3231016	1
Phönix	Rosemary oil	282665	1
Phönix	Rosemary oil	131119-B04	1
Fagron	Rosemary oil	13/19-B04-293577	9
Primavera/Phoenix	Rosemary oil	207J26	1
PVL	Rosemary oil	491212	1
rosma	Rosemary oil	17000647	1
Sanacorp	Rosemary oil	306506	2
Sanacorp	Rosemary oil	17000647	1
Sanacorp	Rosemary oil	18001783	1
Sanacorp, 21.02.17, 8,73EUR	Rosemary oil	15442017	1
Taoasis	Rosemary oil	121217-110772	1
Taoasis	Rosemary oil	130313-111912	1
Taoasis	Rosemary oil	3231031-117639	1
Taoasis	Rosemary oil	26057-118014	1

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Supplier	Substance	Batch	Spectra
Taoasis GmbH	Rosemary oil	7028-105285	1
Taoasis GmbH	Rosemary oil	130815-113178	1
Taoasis GmbH	Rosemary oil	3231016-115522	1
Taoasis/Noweda	Rosemary oil	3231015-118416	1
Taoasis/Noweda	Rosemary oil	1921019-121067	1
ACM	Eucalyptus oil		1
Bombastus	Eucalyptus oil	18005784	2
Caelo	Eucalyptus oil		1
Caelo	Eucalyptus oil	14039609	15
Caelo	Eucalyptus oil	14121904	5
Caelo	Eucalyptus oil	14039626	6
Caelo	Eucalyptus oil	15316504	12
Euro OTC	Eucalyptus oil	1406028-01	1
Caelo	Eucalyptus oil	14039604	1
phönix	Eucalyptus oil		2
VDL 26.04.14 Preis 5,25	Eucalyptus oil		1
Euro OTC	Rosemary oil	1303016-01	1
Fagron	Rosemary oil	12E08-N05	3
noweda	Rosemary oil		1

- 137 577 spectra from 703 *Apo-Ident* customers from a total of 34 966 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Eucalyptus oil* / *Rosmary oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Eucalyptus oil* / *Rosmary oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	740	0	55 619
Type B	0	480	0	68 994
Type C	0	767	9	137 577

The substance/substance group *Eucalyptus oil* / *Rosmary oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.1892 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.7500 %)
Type C	100.0000 % (> 99.6452 %)	98.8402 % (> 98.4536 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Eucalyptus oil / Rosmary oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Myrtle oil	26.25	—
Turpentine oil	27.46	—
Sage oil	34.22	—
Cypress oil	37.25	—
Juniper wood oil	38.10	—
Cajeput (essentiel oil)	42.93	—
Spruce needle oil	44.99	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Eucalyptus oil / Rosmary oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31284	31284	0.00	39.53
31314	31314	0.00	37.25
31865	31314	6.29	40.48
30875	30875	0.00	41.13
31311	31311	0.00	40.14
31822	31822	0.00	40.43
32686	32686	0.00	37.13
34614	34614	0.00	39.25
31110	31285	4.89	40.63
31285	31285	0.00	39.10
31298	31285	1.55	38.87
31527	31823	3.36	38.74
31823	31823	0.00	40.76
31864	31823	2.30	40.52
33277	31823	12.05	37.35
34523	31823	2.58	39.62

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Eugenol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31286-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Eugenol; Eugenolum

Special notes

When selecting the *Eugenol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Eugenol	4	1	8

Second-stage model

For differentiation of the substance/substance group *Eugenol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Eugenol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Eugenol	13401501	31286	40	1407436
Caelo	Eugenol	13401506	31397	40	20131213
Caelo	Eugenol	173534	33896	40	20180126*
Fagron	Eugenol	16I12-B05-336284	34481	40	20161010

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Eugenol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Eugenol*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Eugenol	15H11-B03-322946	32731	40
Fagron	Eugenol	15H11-B03-322946	33220	40

- 69 394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 11 spectra from 10 *Apo-Ident* customers from 8 batches from the substance/substance group *Eugenol*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Eugenol	17353403	1
Caelo	Eugenol	14165403	1
Caelo	Eugenol	18147002	2
Caelo	Eugenol	15255904	2
Caelo	Eugenol	16034701	1
Caelo	Eugenol	14165401	1
Caelo	Eugenol	15255901	2
Fagron	Eugenol	13H14-B40-286617	1

- 138 342 spectra from 703 *Apo-Ident* customers from a total of 35 287 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Eugenol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Eugenol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	11	0	138 342

The substance/substance group *Eugenol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6460 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Eugenol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Clove oil	38.97	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Eugenol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31286	31286	0.00	32.29
31397	31286	1.62	34.03
33896	33896	0.00	32.96
34481	31286	3.18	34.05

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Fennel oil, bitter**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30398-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Fennel oil, bitter; Oleum foeniculi amari

Special notes

When selecting the *Fennel oil, bitter* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Fennel oil, bitter	4	3	23

Second-stage model

For differentiation of the substance/substance group *Fennel oil, bitter* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Fennel oil, bitter*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Fennel oil, bitter	295236	32922	40	1704221
Bombastus	Fennel oil, bitter	18003219	34520	40	125095
Caelo	Fennel oil, bitter	14190402	31706	60	20140625
Caelo	Fennel oil, bitter	15160103	31805	60	1703170

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 4 reference samples from the substance/substance group *Fennel oil, bitter*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Fennel oil, bitter*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Fennel oil, bitter	16008606	32961	40
Caelo	Fennel oil, bitter	171809	33680	40
Caelo	Fennel oil, bitter	191763	34650	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 47 spectra from 32 *Apo-Ident* customers from 24 batches from the substance/substance group *Fennel oil, bitter*.
- Among them are spectra of independent samples from 23 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Fennel oil, bitter	12370312	1
Bombastus	Fennel oil, bitter	278909	2
Bombastus	Fennel oil, bitter	274253	1
Bombastus	Fennel oil, bitter	285544	1
Bombastus	Fennel oil, bitter	281715	1
Bombastus	Fennel oil, bitter	291598	1
Bombastus	Fennel oil, bitter	289232	1
Caelo	Fennel oil, bitter	12370303	1
Caelo	Fennel oil, bitter	12061412	1
Caelo	Fennel oil, bitter	24101403	1
Caelo	Fennel oil, bitter	17180901	1
Caelo	Fennel oil, bitter	268017	1
Caelo	Fennel oil, bitter	11079207	1
Caelo	Fennel oil, bitter	12370306	4
Caelo	Fennel oil, bitter	12218103	1
Caelo	Fennel oil, bitter	12218104	4
Caelo	Fennel oil, bitter	15160101	2
Caelo	Fennel oil, bitter	15160106	2
Caelo	Fennel oil, bitter	16008601	2
Caelo	Fennel oil, bitter	17337601	4
Caelo	Fennel oil, bitter	16008606	5
Celo / Kehr	Fennel oil, bitter	12370314	1
Gehe	Fennel oil, bitter	291598	1
Gehe	Fennel oil, bitter	16008601	1
Sanacorp	Fennel oil, bitter	278909	1
Sanacorp	Fennel oil, bitter	16008606	1
Sanacorp	Fennel oil, bitter	17337601	1
Caelo	Fennel oil, bitter	17337606	1
Caelo	Fennel oil, bitter	14190402	2

- 138 306 spectra from 703 *Apo-Ident* customers from a total of 35 271 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Fennel oil, bitter* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Fennel oil, bitter* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	120	0	69 354
Type C	0	46	1	138 306

The substance/substance group *Fennel oil, bitter* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6454 %)	97.8723 % (> 91.4894 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Fennel oil, bitter* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Star anise oil	28.83	—
Anise oil	43.26	—
Wormwood oil	79.56	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Fennel oil, bitter* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31706	31805	1.70	61.45
31805	31805	0.00	61.17
32922	32922	0.00	46.78
34520	32922	12.12	44.54

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Gel Cordes®
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30632-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Gel Cordes®

Special notes

When selecting the *Gel Cordes®* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Gel Cordes®	3	2	24

Second-stage model

For differentiation of the substance/substance group *Gel Cordes*[®] the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Gel Cordes*[®]:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Ichthyol	Gel Cordes [®]	12A035	30632	40	1405096
Ichthyol	Gel Cordes [®]	15A099	31876	60	20150624
Ichthyol	Gel Cordes [®]	15A099	32910	40	20150624
Ichthyol	Gel Cordes [®]	15A099	32911	40	20150624
Ichthyol	Gel Cordes [®]	18A086	34677	40	20181101

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Gel Cordes*[®]. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 139 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Gel Cordes*[®].
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Gel Cordes [®]	13A007	31083	40
Ichthyol	Gel Cordes [®]	17A047	33987	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 94 spectra from 26 *Apo-Ident* customers from 28 batches from the substance/substance group *Gel Cordes[®]*.
- Among them are spectra of independent samples from 24 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
1xAnzag 2xJenne Ivthyol	Gel Cordes [®]	31(17A047)	1
AHD	Gel Cordes [®]	16A169	1
Caelo	Gel Cordes [®]	42(17A237)	1
Caelo	Gel Cordes [®]	32(17A047)	1
Caelo	Gel Cordes [®]	13A007	2
Caelo	Gel Cordes [®]	17A047	1
Caeolo	Gel Cordes [®]	14A017	1
Ichthol/ gehe 12.09.16	Gel Cordes [®]	15a099	1
Ichthyol	Gel Cordes [®]	16A169	12
Ichthyol	Gel Cordes [®]	17A047	2
Ichthyol /Anzag	Gel Cordes [®]	37(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	36(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	38(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	40(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	39(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	43(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	44(17A237)	1
Ichthyol /Anzag	Gel Cordes [®]	45(18A086)	1
Ichthyol /Anzag	Gel Cordes [®]	46(18A086)	1
Ichthyol /Anzag	Gel Cordes [®]	47(18A086)	1
Ichthyol /Anzag	Gel Cordes [®]	48(18A084)	1
Ichthyol Gesellschaft	Gel Cordes [®]	17A047	1
Ichthyol/AHD	Gel Cordes [®]	30(17A047)	1
Ichthyol/AHD	Gel Cordes [®]	33(17A237)	1
Ichthyol/AHD	Gel Cordes [®]	34(17A237)	1
Ichthyol/AHD	Gel Cordes [®]	35(17A237)	1
Ichthyol/Alliance Healt...	Gel Cordes [®]	15A099	3
Ichthyol/Anzag	Gel Cordes [®]	12A035	2
Ichthyol/Gehe	Gel Cordes [®]	15A099	1
Ichthyol/Gehe	Gel Cordes [®]	18A086	1
Ichthyol/Phönix	Gel Cordes [®]	17A047	3
Ichthyol/Phönix	Gel Cordes [®]	17A237	1
Ichthyol/Sanacorp	Gel Cordes [®]	14A017	1
Ichthyol/Sanacorp	Gel Cordes [®]	16A169	1
Ichthyol/Sanacorp	Gel Cordes [®]	17A047	1
Ichthyol/Spangro	Gel Cordes [®]	16A169	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Gel Cordes [®]	13A007	1
Ichthyol-Gesellschaft/ ...	Gel Cordes [®]	17A237	3
Ichthyol-Gesellschaft/N...	Gel Cordes [®]	15A099	2
Ichthyol-Gesellschaft	Gel Cordes [®]	15A099	1
Ivthyol/Phoenix	Gel Cordes [®]	17A047	1
Noweda/Ichthyol-Gesells...	Gel Cordes [®]	15A099	1
PHÖNIX	Gel Cordes [®]	17A237	2
Spangro/Ichthyol-Gesell...	Gel Cordes [®]	14A017	3
Wolf Apotheke	Gel Cordes [®]	41(17A237)	1
Ichthyol	Gel Cordes [®]	15A099	25

- 138 259 spectra from 703 *Apo-Ident* customers from a total of 35 267 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Gel Cordes*[®] can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Gel Cordes*[®] and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 394
Type C	0	94	0	138 259

The substance/substance group *Gel Cordes*[®] can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 93.6170 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Gel Cordes*[®] in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Base cream, diluted	27.99	—
Glycolic acid 70%	37.42	—
Hydrophilic cream, non-ionic without p...	42.43	—
Anionic hydrophilic cream SR (NRF p.27)	43.52	—
Non-ionic hydrous liniment SR/DAC (NRF...	43.92	—
Lotio Cordes®	45.59	—
Anionic hydrophlic cream without prese...	48.93	—
Sodium lactate solution 50%	49.36	—
Liquorice juice purified, diluted	51.29	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Gel Cordes®* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30632	30632	0.00	41.89
31876	30632	15.85	41.17
32910	30632	10.53	41.33
32911	30632	11.92	41.23
34677	30632	20.62	41.14

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Geranium oil, genuine**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30468-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Geranium oil, genuine; Oleum geranii verum

Special notes

When selecting the *Geranium oil, genuine* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Geranium oil, genuine	4	2	8

Second-stage model

For differentiation of the substance/substance group *Geranium oil, genuine* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Geranium oil, genuine*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Geranium oil, ge...	12354109	31193	40	1403533
Caelo	Geranium oil, ge...	15172205	31789	60	20150608
Caelo	Geranium oil, ge...	171503	33316	40	20170523*
Caelo	Geranium oil, ge...	190160	34646	40	20190117*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Geranium oil, genuine*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Geranium oil, genuine*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Geranium oil, genuine	16070404	33438	40
Caelo	Geranium oil, genuine	180259	34053	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 9 spectra from 8 *Apo-Ident* customers from 8 batches from the substance/substance group *Geranium oil, genuine*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Geranium oil, genuine	11275605	1
Caelo	Geranium oil, genuine	35434343	1
Caelo	Geranium oil, genuine	153670202	1
Caelo	Geranium oil, genuine	15370201	1
Caelo	Geranium oil, genuine	18025903	1
Caelo	Geranium oil, genuine	16070403	1
Caelo	Geranium oil, genuine	18025902	2
Caelo	Geranium oil, genuine	17150301	1

- 138 344 spectra from 703 *Apo-Ident* customers from a total of 35 287 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Geranium oil, genuine* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Geranium oil, genuine* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	9	0	138 344

The substance/substance group *Geranium oil, genuine* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6462 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Geranium oil, genuine* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Rose oil (genuine / artificial)	28.89	—
Citronella oil	52.15	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Geranium oil, genuine* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34646	34646	0.00	51.44
31193	31193	0.00	49.70
31789	33316	3.22	49.17
33316	33316	0.00	50.17

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Glucose syrup
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30934-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Glucose syrup; Glucose syrup GE 40%; Glucosum liquidum

Special notes

When selecting the *Glucose syrup* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Glucose syrup	3	1	4

Second-stage model

For differentiation of the substance/substance group *Glucose syrup* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Glucose syrup*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Glucose syrup	12I18-N11	30934	40	1403229
Fagron	Glucose syrup	14G16-T01-018036	31603	60	20150120
Fagron	Glucose syrup	14G16-T01-018036	32272	40	20150120
Fagron	Glucose syrup	16I02-T07-039136	33632	40	20161222

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Glucose syrup*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56179 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Glucose syrup*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Glucose syrup	16B02-T11-029595	32273	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 9 spectra from 8 *Apo-Ident* customers from 6 batches from the substance/substance group *Glucose syrup*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Glucose syrup	16I02-T07-039136	1
Fagron	Glucose syrup	13D23-N02	1
Fagron	Glucose syrup	13G03-N01	1
Fagron	Glucose syrup	10J25-T52-013485	1
Fagron	Glucose syrup	16B02-T11-029595	1
Phönix	Glucose syrup	13D23-N02	1
Fagron	Glucose syrup	16I02-T07-039136	2
Fagron	Glucose syrup	14G16-T01-018036	1

- 138 344 spectra from 703 *Apo-Ident* customers from a total of 35 289 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Glucose syrup* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Glucose syrup* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	40	0	69 434
Type C	0	9	0	138 344

The substance/substance group *Glucose syrup* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6462 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Glucose syrup* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Honey	21.34	—
Marshmallow syrup (conserved)	22.60	—
Ribwort plantain syrup (conserved)	25.34	—
Ipecacuanha syrup (NRF 19.1)	25.54	—
Sugar syrup DAB	29.61	—
Raspberry syrup (conserved)	31.68	—
Sorbitol solution 70% (non-crystallizi...	33.86	—
Fennel honey (conserved)	35.19	—
Rose honey	36.45	—
Glycerine ointment (conserved)	43.65	—
Cherry syrup (conserved)	46.25	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Glucose syrup* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30934	30934	0.00	30.23
31603	30934	6.48	32.53
32272	30934	7.84	30.09
33632	30934	3.02	27.88

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical

variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Glycerine ointment (conserved)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30986-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Glycerine ointment (conserved); Unguentum glycerini (konserviert)

Special notes

When selecting the *Glycerine ointment (conserved)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Glycerine ointment (conserved)	4	2	8

Second-stage model

For differentiation of the substance/substance group *Glycerine ointment (conserved)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Glycerine ointment (conserved)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Glycerine ointme...	12288201	30986	40	20121017
Caelo	Glycerine ointme...	14031701	31296	40	1410452
Caelo	Glycerine ointme...	16192001	32589	40	20160627
Caelo	Glycerine ointme...	18286201	34685	40	20181108

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Glycerine ointment (conserved)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Glycerine ointment (conserved)*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerine ointment (conserved)	17049101	33240	40
Caelo	Glycerine ointment (conserved)	18095401	34206	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 27 spectra from 10 *Apo-Ident* customers from 10 batches from the substance/substance group *Glycerine ointment (conserved)*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Glycerine ointment (conserved)	14183401	5
Caelo	Glycerine ointment (conserved)	16192002	1
Caelo	Glycerine ointment (conserved)	17048101	1
Caelo	Glycerine ointment (conserved)	18095401	4
Caelo	Glycerine ointment (conserved)	15025101	3
Caelo	Glycerine ointment (conserved)	16021501	3
Caelo	Glycerine ointment (conserved)	17049101	5
Caelo	Glycerine ointment (conserved)	13250102	2
Caelo	Glycerine ointment (conserved)	14031701	1
Caelo	Glycerine ointment (conserved)	16192001	2

- 138 326 spectra from 703 *Apo-Ident* customers from a total of 35 286 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Glycerine ointment (conserved)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Glycerine ointment (conserved)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	27	0	138 326

The substance/substance group *Glycerine ointment (conserved)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6455 %)	100.0000 % (> 77.7778 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Glycerine ointment (conserved)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Rose honey	32.23	—
Honey	32.85	—
Glucose syrup	38.40	—
Glycerol 85%	48.02	—
Ipecacuanha syrup (NRF 19.1)	55.18	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Glycerine ointment (conserved)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30986	31296	10.75	28.48
31296	31296	0.00	29.25
32589	31296	9.53	26.41
34685	31296	9.67	28.85

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Glycerol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30189-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Glycerol; Glycerolum

Special notes

When selecting the *Glycerol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Glycerol	6	3	82

Second-stage model

For differentiation of the substance/substance group *Glycerol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Glycerol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Glycerol	12111504	30871	40	20120418
Caelo	Glycerol	13127603	31152	40	1405278
Caelo	Glycerol	13370502	31352	60	20131115
Caelo	Glycerol	162308	32325	40	20160809*
Caelo	Glycerol	162308	32693	40	20160809*
Caelo	Glycerol	171857	33703	40	20170724*
Caelo	Glycerol	171857	33708	40	20170724*
Caelo	Glycerol	191371	34636	40	20190612*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 340 spectra of 8 reference samples from the substance/substance group *Glycerol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 6 different batches.
- 56 019 spectra from a total of 1110 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Glycerol*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerol	180984	34064	40
Caelo	Glycerol	183222	34327	40
Caelo	Glycerol	192428	34730	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 675 spectra from 268 *Apo-Ident* customers from 86 batches from the substance/substance group *Glycerol*.
- Among them are spectra of independent samples from 82 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ALH	Glycerol	15406504	1
Anzag	Glycerol	13127610	2
apomix/ Phoenix	Glycerol	13127608	1
Beiersdorf AG	Glycerol	15406501	1
Bombastus	Glycerol	18098405	1
Caelo	Glycerol	2061201	1
Caelo	Glycerol	18126605	21
Caelo	Glycerol	11305102	3
Caelo	Glycerol	11118104	1
Caelo	Glycerol	1004211590	1
Caelo	Glycerol	510211590	1
Caelo	Glycerol	12111503	4
Caelo	Glycerol	1211503	1
Caelo	Glycerol	13002902	1
Caelo	Glycerol	13002903	8
Caelo	Glycerol	12111505	1
Caelo	Glycerol	11061303	1
Caelo	Glycerol	2713M1590	1
Caelo	Glycerol	1300291	1
Caelo	Glycerol	1317604	1
Caelo	Glycerol	13002907	1
Caelo	Glycerol	17041403	1
Caelo	Glycerol	13370501	2
Caelo	Glycerol	13370503	15
Caelo	Glycerol	133370507	1
Caelo	Glycerol	13111403	1
Caelo	Glycerol	14074303	4
Caelo	Glycerol	1474303	1
Caelo	Glycerol	4031501	1
Caelo	Glycerol	1473403	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol	14373404	3
Caelo	Glycerol	14373401	2
Caelo	Glycerol	18081504	1
Caelo	Glycerol	1473409	1
Caelo	Glycerol	14373413	27
Caelo	Glycerol	14373412	3
Caelo	Glycerol	15406504	13
Caelo	Glycerol	15406502	19
Caelo	Glycerol	1546502	1
Caelo	Glycerol	733514373412	1
Caelo	Glycerol	16023503	8
Caelo	Glycerol	1623504	1
Caelo	Glycerol	1546501	1
Caelo	Glycerol	16230802	4
Caelo	Glycerol	1623506	1
Caelo	Glycerol	16320804	1
Caelo	Glycerol	17037504	16
Caelo	Glycerol	1620804	1
Caelo	Glycerol	17037503	21
Caelo	Glycerol	17185704	1
Caelo	Glycerol	17189703	1
Caelo	Glycerol	17185702	1
Caelo	Glycerol	17185703	27
Caelo	Glycerol	16230805	1
Caelo	Glycerol	18098406	2
Caelo	Glycerol	19091803	1
Caelo	Glycerol	18126607	8
Caelo	Glycerol	15283603	1
Caelo	Glycerol	18096405	1
Caelo	Glycerol	13127604	10
Caelo	Glycerol	14074302	18
Caelo	Glycerol	13127610	2
Caelo	Glycerol	19137101	3
Caelo	Glycerol	13002904	4
Caelo	Glycerol	13370507	1
Caelo	Glycerol	14373403	20
Caelo	Glycerol	2114Q1590	1
Caelo	Glycerol	18098405	31
Caelo	Glycerol	1826605	1
Caelo	Glycerol	12014304	13
Caelo	Glycerol	11217403	1
Caelo	Glycerol	143709	1
Caelo	Glycerol	16023504	24
Caelo	Glycerol	15406503	32
Caelo	Glycerol	18126602	27
Caelo	Glycerol	15406501	20
Caelo	Glycerol	16023506	31
Caelo	Glycerol	16023508	14
Caelo	Glycerol	16230804	48
Caelo	Glycerol	13127607	2
Caesar & Lorenz	Glycerol	13002904	1
Caesar & Lorenz GmbH	Glycerol	17292803	1
Caesar & Loretz GmbH	Glycerol	14373403	1
Caesar & Loretz GmbH	Glycerol	15406502	1
Caesar & Loretz GmbH	Glycerol	16230804	1
Caesar & Loretz GmbH	Glycerol	18126607	1
Caesar & Loretz GmbH	Glycerol	18322202	1
Caesar & Loretz GmbH	Glycerol	18126605	1
Caesar & Loretz GmbH Hi...	Glycerol	13127608	1
Caesar & Loretz GmbH Hi...	Glycerol	14074302	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH Hi...	Glycerol	16023506	1
Caesar/Lorenz	Glycerol	13002904	2
Cealo	Glycerol	18126602	1
Cealo / Gehe	Glycerol	18098405	1
Dr. K. Hollborm & Söhne	Glycerol	1106	1
Euro OTC	Glycerol	16023506	1
Euro OTC	Glycerol	18098405	1
Euro OTC	Glycerol	16023503	1
Fagron	Glycerol	13002904	1
Fagron	Glycerol	14373409	2
Fagron	Glycerol	14074302	1
Fiebig	Glycerol	18322206	1
Gehe	Glycerol	12014304	1
Gehe	Glycerol	12111504	2
Gehe	Glycerol	13002904	1
Gehe	Glycerol	13127603	2
Gehe	Glycerol	18322202	1
GEHE	Glycerol	16023506	1
GEHE	Glycerol	18098405	1
GEHE	Glycerol	18126602	1
Gehe 16.12.14	Glycerol	13370503	1
Caelo	Glycerol	14373409	18
Caelo	Glycerol	17292803	12
Caelo	Glycerol	11305101	1
Ichthyol/Sanacorp	Glycerol	13002902	2
INTR/Phönix	Glycerol	16023506	1
L12	Glycerol	18098405	1
Noweda	Glycerol	14373403	1
Noweda	Glycerol	14373413	1
Noweda	Glycerol	16230804	1
Phoenix	Glycerol	16023504	2
Caelo	Glycerol	13127608	3
Phönix	Glycerol	13002904	2
Phönix	Glycerol	13127604	1
Phönix	Glycerol	13127610	1
Phönix	Glycerol	18126602	1
Euro OTC	Glycerol	15406503	1
Phönix 22.08.12	Glycerol	11305102	1
Phönix/EuRho	Glycerol	12111503	1
Sanacorp	Glycerol	17292803	2
Caelo	Glycerol	18322202	5
Caelo	Glycerol		1
Caelo	Glycerol	12111504	3
Caelo	Glycerol	13127603	15
Caelo	Glycerol	13370502	9

- 137678 spectra from 703 *Apo-Ident* customers from a total of 35 211 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Glycerol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Glycerol* and it was evaluated how

many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	340	0	56 019
Type B	0	120	0	69 354
Type C	0	673	2	137 678

The substance/substance group *Glycerol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.2353 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.7037 % (> 99.2593 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Glycerol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Glycerol 85%	94.63	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Glycerol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30871	31152	3.97	78.83
31152	31152	0.00	80.75
31352	31152	4.51	74.12
32325	32325	0.00	104.70

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32693	32693	0.00	130.90
33703	33703	0.00	107.11
33708	33708	0.00	116.41
34636	34636	0.00	106.50

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Glycerol 85%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30886-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Glycerol 85%; Glycerolum 85%

Special notes

When selecting the *Glycerol 85%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Glycerol 85%	9	22	618

Second-stage model

For differentiation of the substance/substance group *Glycerol 85%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Glycerol 85%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Glycerol 85%	12216606	30886	80	20120731
Caelo	Glycerol 85%	13356404	31360	60	20131112
Caelo	Glycerol 85%	13406202	31377	40	20131219
Caelo	Glycerol 85%	17197706	34031	40	AR-18-FG-009772-02
Euro OTC	Glycerol 85%	1409035-01	31588	60	AR-15-FG-007030-02
Euro OTC	Glycerol 85%	1506036	31719	60	0000010478
Euro OTC	Glycerol 85%	1509023	31737	60	20151005*
Euro OTC	Glycerol 85%	1601059	31956	60	20160225*
Fagron	Glycerol 85%	12H16-N04	30980	80	20120905

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 540 spectra of 9 reference samples from the substance/substance group *Glycerol 85%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 9 different batches.
- 55819 spectra from a total of 1107 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1040 spectra of 26 reference samples from the substance/substance group *Glycerol 85%*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 22 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerol 85%	160637	32203	40
Caelo	Glycerol 85%	162153	32326	40
Caelo	Glycerol 85%	162189	32328	40
Caelo	Glycerol 85%	162978	32694	40
Caelo	Glycerol 85%	163550	33097	40
Caelo	Glycerol 85%	163472	33098	40
Caelo	Glycerol 85%	171577	33320	40
Caelo	Glycerol 85%	172155	33704	40
Caelo	Glycerol 85%	171977	33705	40
Caelo	Glycerol 85%	183270	34326	40
Caelo	Glycerol 85%	190112	34460	40
Caelo	Glycerol 85%	191883	34619	40
Euro OTC	Glycerol 85%	1607037	32703	40
Euro OTC	Glycerol 85%	1610032	32828	40
Euro OTC	Glycerol 85%	1703003	33449	40
Euro OTC	Glycerol 85%	1708022	33661	40
Euro OTC	Glycerol 85%	1801025	33996	40
Euro OTC	Glycerol 85%	1804017	34091	40
Euro OTC	Glycerol 85%	1808009	34218	40
Euro OTC	Glycerol 85%	1901041	34426	40
Euro OTC	Glycerol 85%	1906019	34656	40
Euro OTC	Glycerol 85%	1910011	34748	40
Caelo	Glycerol 85%	160637	32314	40
Caelo	Glycerol 85%	171977	33706	40
Caelo	Glycerol 85%	171577	33709	40
Caelo	Glycerol 85%	183270	34745	40

- 68434 spectra from a total of 1480 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 3086 spectra from 580 *Apo-Ident* customers from 627 batches from the substance/substance group *Glycerol 85%*.
- Among them are spectra of independent samples from 617 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
040607	Glycerol 85%	40607	1
2959	Glycerol 85%	2959	1
A.H. 18.06.13 ek: 6,78EUR	Glycerol 85%	12273604	1
AEP/ Fischar	Glycerol 85%	5067011	1
AHD	Glycerol 85%	13406202	1
AHD	Glycerol 85%	14306203	1
AHD	Glycerol 85%	40642	1

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Supplier	Substance	Batch	Spectra
AHD	Glycerol 85%	40647	1
AHD / Hedinger	Glycerol 85%	40557	1
AHD / Hedinger	Glycerol 85%	40607	1
AHD/ Fischar	Glycerol 85%	5067081	1
AHD/Fischar	Glycerol 85%	5067091	1
Ahd/PharmachemPößneck	Glycerol 85%	13248201	1
ALH	Glycerol 85%	40599	1
Bombastus	Glycerol 85%	5065101	1
Allianc. Healthc./Fischar	Glycerol 85%	5064091	1
Alliance Health 24.06.2...	Glycerol 85%	5538401	1
Alliance Healthcare	Glycerol 85%	13144605	1
Alliance Healthcare	Glycerol 85%	5066061	1
Bombastus	Glycerol 85%	19000628	1
Alliance Healthcare/Fis...	Glycerol 85%	5063011	1
Alte Apotheke	Glycerol 85%	40599	2
Anzag	Glycerol 85%	40467	1
Anzag	Glycerol 85%	40471	1
Anzag	Glycerol 85%	40475	2
Anzag	Glycerol 85%	1306016-02	1
Anzag	Glycerol 85%	40579	1
Anzag	Glycerol 85%	40599	1
Anzag	Glycerol 85%	40607	2
Anzag	Glycerol 85%	40620	2
Anzag 20.12.2012	Glycerol 85%	40467	2
Anzag,7,17 Euro,16.1014	Glycerol 85%	13356405	1
Anzag,7,62EUR; 27.0415	Glycerol 85%	14306204	1
Anzag/	Glycerol 85%	12108201	1
Anzag/ Fischar	Glycerol 85%	5068021	2
Anzag/ Hedinger	Glycerol 85%	40478	1
Anzag/ Hedinger	Glycerol 85%	40495	2
apo ident	Glycerol 85%	1801025-01	1
Au.HedingerGmbH&CoKG/Al...	Glycerol 85%	40626	1
Aug. Hedinger	Glycerol 85%	40566	2
Aug. Hedinger	Glycerol 85%	40586	1
Aug. Hedinger	Glycerol 85%	40607	1
Aug. Hedinger GmbH & Co	Glycerol 85%	40519	1
aug. hedinger GmbH & Co...	Glycerol 85%	40579	1
August Hedinger	Glycerol 85%	40557	1
BambynekFiebig	Glycerol 85%	18000211	1
BambynekFiebig	Glycerol 85%	18004342	1
Bartel	Glycerol 85%	40475	1
Bartel	Glycerol 85%	40584	1
Bartel/Sanacorp	Glycerol 85%	40515	1
Bombastus	Glycerol 85%	5067091	1
Bombastus	Glycerol 85%	272305	6
Bombastus	Glycerol 85%	287120	3
Bombastus	Glycerol 85%	289295	5
Bombastus	Glycerol 85%	291085	3
Bombastus	Glycerol 85%	290715	3
Bombastus	Glycerol 85%	15146303	1
Bombastus	Glycerol 85%	296480	3
Bombastus	Glycerol 85%	298593	7
Bombastus	Glycerol 85%	300393	1
Bombastus	Glycerol 85%	300394	5
Bombastus	Glycerol 85%	301818	3
Bombastus	Glycerol 85%	305201	6
Bombastus	Glycerol 85%	306830	10
Bombastus	Glycerol 85%	306829	8
Bombastus	Glycerol 85%	6474	1
Bombastus	Glycerol 85%	308738	3

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Supplier	Substance	Batch	Spectra
Bombastus	Glycerol 85%	1708022-01	4
Bombastus	Glycerol 85%	18000212	1
Bombastus	Glycerol 85%	18004342	4
Bombastus	Glycerol 85%	28111803	1
Bombastus	Glycerol 85%	18005463	8
Bombastus	Glycerol 85%	296481	6
Bombastus	Glycerol 85%	19000627	3
Bombastus	Glycerol 85%	19004186	1
Bombastus	Glycerol 85%	302751	2
Bombastus	Glycerol 85%	301817	5
Bombastus	Glycerol 85%	282731	5
Bombastus	Glycerol 85%	2823731	1
Bombastus	Glycerol 85%	295501	6
Bombastus	Glycerol 85%	279852	4
Bombastus	Glycerol 85%	284401	1
Bombastus	Glycerol 85%	287890	2
Bombastus	Glycerol 85%	289296	2
Bombastus	Glycerol 85%	292791	16
Bombastus	Glycerol 85%	18005462	4
Bombastus	Glycerol 85%	284400	5
Bombastus	Glycerol 85%	18000211	1
Bombastus	Glycerol 85%	298594	2
Bombastus	Glycerol 85%	310593	7
Bombastus	Glycerol 85%	295502	1
Bombastus	Glycerol 85%	308737	3
Bombastus	Glycerol 85%	310592	6
Bombastus	Glycerol 85%	276850	2
Bombastus	Glycerol 85%	278655	1
Bombastus	Glycerol 85%	280855	1
Bombastus	Glycerol 85%	260914PAS01	1
Bombastus	Glycerol 85%	40215PJK01	1
Bombastus	Glycerol 85%	291086	5
Bombastus	Glycerol 85%	301816	6
Bombastus	Glycerol 85%	18004343	3
Bombastus	Glycerol 85%	297034	2
Bombastus	Glycerol 85%	302750	2
Bombastus	Glycerol 85%	305199	1
Bombastus	Glycerol 85%	294927	4
Bombastus	Glycerol 85%	298592	3
Bombastus	Glycerol 85%	105698	1
Bombastus	Glycerol 85%	305200	6
Bombastus	Glycerol 85%	40635	1
Bombastus	Glycerol 85%	18001896	1
Bombastus	Glycerol 85%	266584	1
Bombastus	Glycerol 85%	275075	2
Bombastus	Glycerol 85%	276852	3
Bombastus	Glycerol 85%	2812731	1
Bombastus	Glycerol 85%	300395	5
Bombastus	Glycerol 85%	302749	7
Bombastus	Glycerol 85%	1502010-01	1
Caelo	Glycerol 85%	12069604	1
Caelo	Glycerol 85%	13060007	4
Caelo	Glycerol 85%	13396407	1
Caelo	Glycerol 85%	40529	1
Caelo	Glycerol 85%	112117302	1
Caelo	Glycerol 85%	11217302	1
Caelo	Glycerol 85%	2405211589	1
Caelo	Glycerol 85%	20061210	1
Caelo	Glycerol 85%	607211589	1
Caelo	Glycerol 85%	11217303	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	12108201	18
Caelo	Glycerol 85%	23081201	1
Caelo	Glycerol 85%	123142	2
Caelo	Glycerol 85%	3121202	1
Caelo	Glycerol 85%	12216601	6
Caelo	Glycerol 85%	12216603	15
Caelo	Glycerol 85%	20211212-2	1
Caelo	Glycerol 85%	213E-01589	1
Caelo	Glycerol 85%	4711A-01589	1
Caelo	Glycerol 85%	12069601	1
Caelo	Glycerol 85%	613Q-01589	1
Caelo	Glycerol 85%	12069603	1
Caelo	Glycerol 85%	19021301	1
Caelo	Glycerol 85%	1113E-01589	1
Caelo	Glycerol 85%	5062012	4
Caelo	Glycerol 85%	12273604	22
Caelo	Glycerol 85%	12278507	3
Caelo	Glycerol 85%	13060002	2
Caelo	Glycerol 85%	13039202	6
Caelo	Glycerol 85%	2413Q01589	1
Caelo	Glycerol 85%	12278501	1
Caelo	Glycerol 85%	13039203	19
Caelo	Glycerol 85%	12108206	1
Caelo	Glycerol 85%	5x13039203	1
Caelo	Glycerol 85%	5x12273604	1
Caelo	Glycerol 85%	123464	2
Caelo	Glycerol 85%	13060006	2
Caelo	Glycerol 85%	70913Gly	1
Caelo	Glycerol 85%	14101304	1
Caelo	Glycerol 85%	13144604	6
Caelo	Glycerol 85%	13144605	18
Caelo	Glycerol 85%	13248201	12
Caelo	Glycerol 85%	40483	1
Caelo	Glycerol 85%	40507	1
Caelo	Glycerol 85%	13276204	11
Caelo	Glycerol 85%	1327603	1
Caelo	Glycerol 85%	13276201	1
Caelo	Glycerol 85%	16121301	1
Caelo	Glycerol 85%	24021402	1
Caelo	Glycerol 85%	40515	1
Caelo	Glycerol 85%	13406203	1
Caelo	Glycerol 85%	13276024	1
Caelo	Glycerol 85%	17061404	1
Caelo	Glycerol 85%	13276208	3
Caelo	Glycerol 85%	11355301	1
Caelo	Glycerol 85%	13406204	6
Caelo	Glycerol 85%	13356406	11
Caelo	Glycerol 85%	13406205	4
Caelo	Glycerol 85%	14149404	10
Caelo	Glycerol 85%	24101401	1
Caelo	Glycerol 85%	13205003	1
Caelo	Glycerol 85%	14148104	3
Caelo	Glycerol 85%	14194911	1
Caelo	Glycerol 85%	8121402	1
Caelo	Glycerol 85%	14149410	19
Caelo	Glycerol 85%	1409035-01	2
Caelo	Glycerol 85%	1418103	1
Caelo	Glycerol 85%	14249301	4
Caelo	Glycerol 85%	14148106	1
Caelo	Glycerol 85%	40542	3

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	14306202	1
Caelo	Glycerol 85%	14306205	8
Caelo	Glycerol 85%	5051501	1
Caelo	Glycerol 85%	13356402	1
Caelo	Glycerol 85%	15050102	6
Caelo	Glycerol 85%	40556	1
Caelo	Glycerol 85%	40566	2
Caelo	Glycerol 85%	15115005	2
Caelo	Glycerol 85%	15292202	13
Caelo	Glycerol 85%	1529202	1
Caelo	Glycerol 85%	15292204	23
Caelo	Glycerol 85%	15146303	1
Caelo	Glycerol 85%	15146305	4
Caelo	Glycerol 85%	15146304	2
Caelo	Glycerol 85%	15283505	1
Caelo	Glycerol 85%	15379201	6
Caelo	Glycerol 85%	1509023-01	1
Caelo	Glycerol 85%	15379208	2
Caelo	Glycerol 85%	465911	1
Caelo	Glycerol 85%	15283506	3
Caelo	Glycerol 85%	15378201	1
Caelo	Glycerol 85%	15404502	1
Caelo	Glycerol 85%	15404504	7
Caelo	Glycerol 85%	16063701	27
Caelo	Glycerol 85%	15378209	2
Caelo	Glycerol 85%	16063702	21
Caelo	Glycerol 85%	16963701	1
Caelo	Glycerol 85%	160637025	1
Caelo	Glycerol 85%	16218901	12
Caelo	Glycerol 85%	160215301	1
Caelo	Glycerol 85%	40598	1
Caelo	Glycerol 85%	16215302	17
Caelo	Glycerol 85%	5066081	2
Caelo	Glycerol 85%	1215302	1
Caelo	Glycerol 85%	40607	2
Caelo	Glycerol 85%	16215308	1
Caelo	Glycerol 85%	1610032-01	6
Caelo	Glycerol 85%	16218906	6
Caelo	Glycerol 85%	40612	2
Caelo	Glycerol 85%	16297802	1
Caelo	Glycerol 85%	161006201	1
Caelo	Glycerol 85%	14061701	1
Caelo	Glycerol 85%	15071703	1
Caelo	Glycerol 85%	16347206	5
Caelo	Glycerol 85%	1621806	1
Caelo	Glycerol 85%	1703003-01	5
Caelo	Glycerol 85%	1715772	1
Caelo	Glycerol 85%	16355005	1
Caelo	Glycerol 85%	5067061	1
Caelo	Glycerol 85%	4121702	1
Caelo	Glycerol 85%	16347209	4
Caelo	Glycerol 85%	17197701	4
Caelo	Glycerol 85%	16347208	10
Caelo	Glycerol 85%	19021809	1
Caelo	Glycerol 85%	17328201	1
Caelo	Glycerol 85%	17322101	21
Caelo	Glycerol 85%	30041804	1
Caelo	Glycerol 85%	23051813	1
Caelo	Glycerol 85%	17328202	1
Caelo	Glycerol 85%	17322104	25

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	17322108	3
Caelo	Glycerol 85%	1738202	1
Caelo	Glycerol 85%	30081805	1
Caelo	Glycerol 85%	17322105	4
Caelo	Glycerol 85%	18020005	3
Caelo	Glycerol 85%	15121803	1
Caelo	Glycerol 85%	18153706	1
Caelo	Glycerol 85%	18253401	1
Caelo	Glycerol 85%	19011208	2
Caelo	Glycerol 85%	1802002	2
Caelo	Glycerol 85%	18000211	1
Caelo	Glycerol 85%	1804017-01	3
Caelo	Glycerol 85%	1808009-01	1
Caelo	Glycerol 85%	12278508	3
Caelo	Glycerol 85%	305200	3
Caelo	Glycerol 85%	12216602	5
Caelo	Glycerol 85%	2714M-01589	1
Caelo	Glycerol 85%	1801025-01	1
Caelo	Glycerol 85%	170822-01	1
Caelo	Glycerol 85%	15378203	16
Caelo	Glycerol 85%	171121G/17157702	1
Caelo	Glycerol 85%	40652	1
Caelo	Glycerol 85%	40655	4
Caelo	Glycerol 85%	5065081	1
Caelo	Glycerol 85%	19011203	4
Caelo	Glycerol 85%	135406204	1
Caelo	Glycerol 85%	5064021	2
Caelo	Glycerol 85%	16297808	1
Caelo	Glycerol 85%	18327003	1
Caelo	Glycerol 85%	5065061	1
Caelo	Glycerol 85%	153782021Flasche	1
Caelo	Glycerol 85%	153782032Flasche	1
Caelo	Glycerol 85%	19011209	1
Caelo	Glycerol 85%	12278502	1
Caelo	Glycerol 85%	5062121	1
Caelo	Glycerol 85%	5062111	1
Caelo	Glycerol 85%	1309202	1
Caelo	Glycerol 85%	13039204	22
Caelo	Glycerol 85%	163472202-20171106Ma	1
Caelo	Glycerol 85%	18020002-G20190115Ma	1
Caelo	Glycerol 85%	13356405	12
Caelo	Glycerol 85%	18327004	1
Caelo	Glycerol 85%	17157707	1
Caelo	Glycerol 85%	BE-08675/37460	1
Caelo	Glycerol 85%	14373412	1
Caelo	Glycerol 85%	13276206	1
Caelo	Glycerol 85%	15050101	2
Caelo	Glycerol 85%	13060001	4
Caelo	Glycerol 85%	40524	1
Caelo	Glycerol 85%	15292203	15
Caelo	Glycerol 85%	16218907	1
Caelo	Glycerol 85%	18020002	15
Caelo	Glycerol 85%	1607037-01	1
Caelo	Glycerol 85%	13144606	6
Caelo	Glycerol 85%	18253406	1
Caelo	Glycerol 85%	19011201	7
Caelo	Glycerol 85%	1419411	1
Caelo	Glycerol 85%	15292201	16
Caelo	Glycerol 85%	11324202	2
Caelo	Glycerol 85%	12216604	3

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	14149411	11
Caelo	Glycerol 85%	15379207	3
Caelo	Glycerol 85%	18240901	6
Caelo	Glycerol 85%	18005463	1
Caelo	Glycerol 85%	15049801	2
Caelo	Glycerol 85%	13276202	1
Caelo	Glycerol 85%	5015Q-01589	1
Caelo	Glycerol 85%	P136/14	1
Caelo	Glycerol 85%	1213E-01589	1
Caelo	Glycerol 85%	5068012	1
Caelo	Glycerol 85%	11324208	1
Caelo	Glycerol 85%	13144607	21
Caelo	Glycerol 85%	13248204	2
Caelo	Glycerol 85%	14148103	5
Caelo	Glycerol 85%	15404505	4
Caelo	Glycerol 85%	16063706	2
Caelo	Glycerol 85%	16063707	2
Caelo	Glycerol 85%	1607037	1
Caelo	Glycerol 85%	1601059	1
Caelo	Glycerol 85%	16297806	42
Caelo	Glycerol 85%	16297809	1
Caelo	Glycerol 85%	16355001	3
Caelo	Glycerol 85%	17157702	34
Caelo	Glycerol 85%	17322107	8
Caelo	Glycerol 85%	40646	1
Caelo	Glycerol 85%	1733322107	1
Caelo	Glycerol 85%	18253404	12
Caelo	Glycerol 85%	19124401	1
Caelo	Glycerol 85%	5062052	1
Caelo	Glycerol 85%	16347202	8
Caelo	Glycerol 85%	17215501	33
Caelo	Glycerol 85%	1309203	1
Caelo	Glycerol 85%	13276205	21
Caelo	Glycerol 85%	1404024-01	1
Caelo	Glycerol 85%	14148105	1
Caelo	Glycerol 85%	5064091	1
Caelo	Glycerol 85%	15036902	9
Caelo	Glycerol 85%	15036904	13
Caelo	Glycerol 85%	1506036-01	1
Caelo	Glycerol 85%	15283503	1
Caelo	Glycerol 85%	1601059-01	9
Caelo	Glycerol 85%	16297803	13
Caelo	Glycerol 85%	16215310	4
Caelo	Glycerol 85%	5066111	4
Caelo	Glycerol 85%	161003201	2
Caelo	Glycerol 85%	181108186	1
Caelo	Glycerol 85%	181108185	1
Caelo	Glycerol 85%	17215502	3
Caelo	Glycerol 85%	17157911	1
Caelo	Glycerol 85%	506012	1
Caelo	Glycerol 85%	1309204	1
Caelo	Glycerol 85%	13356403	3
Caelo	Glycerol 85%	15036905	2
Caelo	Glycerol 85%	15036901	1
Caelo	Glycerol 85%	1528503	1
Caelo	Glycerol 85%	1514604	1
Caelo	Glycerol 85%	15283504	1
Caelo	Glycerol 85%	1292201	1
Caelo	Glycerol 85%	15378210	1
Caelo	Glycerol 85%	153782019	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	1625303	1
Caelo	Glycerol 85%	40626	1
Caelo	Glycerol 85%	15146301	6
Caelo	Glycerol 85%	12069605	1
Caelo	Glycerol 85%	13276203	17
Caelo	Glycerol 85%	15036903	13
Caelo	Glycerol 85%	300395	1
Caelo	Glycerol 85%	169215903	1
Caelo	Glycerol 85%	16355002	16
Caelo	Glycerol 85%	5067031	1
Caelo	Glycerol 85%	40618	1
Caelo	Glycerol 85%	1708022-01	4
Caelo	Glycerol 85%	14149403	6
Caelo	Glycerol 85%	14306204	12
Caelo	Glycerol 85%	1529201	1
Caelo	Glycerol 85%	15378202	12
Caelo	Glycerol 85%	40599	1
Caelo	Glycerol 85%	15404503	1
Caelo	Glycerol 85%	16347205	1
Caelo	Glycerol 85%	17197705	1
Caelo	Glycerol 85%	18253402	8
Caelo	Glycerol 85%	16215303	29
Caelo	Glycerol 85%	18153702	17
Caelo	Glycerol 85%	2013A-01589	1
Caeol/Phoenix	Glycerol 85%	15292203	1
Caeolo/Gehe	Glycerol 85%	16297802	3
Caesar & Loretz GmbH	Glycerol 85%	12108201	1
Caesar & Loretz GmbH	Glycerol 85%	12216603	1
Caesar & Loretz GmbH	Glycerol 85%	13144606	1
Caesar & Loretz GmbH	Glycerol 85%	18240903	1
Caesar & Loretz GmbH	Glycerol 85%	19011201	1
Caesar & Loretz GmbH	Glycerol 85%	19011203	2
Caesar & Loretz GmbH Hi...	Glycerol 85%	13144607	1
Caesar & Loretz GmbH Hi...	Glycerol 85%	15292204	1
Caesar & Loretz GmbH Hi...	Glycerol 85%	16063702	1
Caesar & Loretz GmbH/Ph...	Glycerol 85%	19011201	1
Caesar & Loretz/Noweda	Glycerol 85%	15379208	1
Caesar und Loretz GmbH	Glycerol 85%	17157702	1
Caesar&Loretz	Glycerol 85%	16218906	2
Caesar&Loretz GmbH	Glycerol 85%	13406202	2
Caesar/Noweda	Glycerol 85%	2611I-01589	1
Caleo	Glycerol 85%	15036903	1
Caleo/Phönix	Glycerol 85%	16355002	2
calo	Glycerol 85%	17322101	1
Cealo	Glycerol 85%	13276205	1
Cordes/Noweda	Glycerol 85%	1627803	1
Delta	Glycerol 85%	310593	1
Eigenherstellung	Glycerol 85%	295501	1
eurho	Glycerol 85%	287120	1
eurho	Glycerol 85%	1703003-01	3
eurho	Glycerol 85%	1801025-01	4
EuRho	Glycerol 85%	1301025-01	2
EuRho	Glycerol 85%	1506036-01	1
EuRho	Glycerol 85%	1708022-01	1
EuRho	Glycerol 85%	1804017-01	1
EuRho / Phoenix	Glycerol 85%	1610032-01	1
EuRho/Phönix	Glycerol 85%	1509023-01	2
Euro	Glycerol 85%	1601059-01	1
Euro	Glycerol 85%	1610032-01	2
Euro /Anzag	Glycerol 85%	1808009-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Glycerol 85%	140502101	2
Euro OTC	Glycerol 85%	140903501	1
Euro OTC	Glycerol 85%	302749	2
Euro OTC	Glycerol 85%	16215302	1
Euro OTC	Glycerol 85%	161003201	1
Euro OTC	Glycerol 85%	16297806	1
Euro OTC	Glycerol 85%	5068012	1
Euro OTC	Glycerol 85%	18000211	1
Euro OTC	Glycerol 85%	1808009-02	9
Euro OTC	Glycerol 85%	1509023-01	21
Euro OTC	Glycerol 85%	BE-08467/36621	1
Euro OTC	Glycerol 85%	170509G/1607037-01	1
Euro OTC	Glycerol 85%	7406HH7011	2
Euro OTC	Glycerol 85%	161002-01	1
Euro OTC	Glycerol 85%	1506036-01	19
Euro OTC	Glycerol 85%	1610032-1	1
Euro OTC	Glycerol 85%	1306016-01	3
Euro OTC	Glycerol 85%	20122013A	1
Euro OTC	Glycerol 85%	40524	1
Euro OTC	Glycerol 85%	10112014D	1
Euro OTC	Glycerol 85%	10022015C	1
Euro OTC	Glycerol 85%	150902	1
Euro OTC	Glycerol 85%	151690	3
Euro OTC	Glycerol 85%	160703701	3
Euro OTC	Glycerol 85%	160105	1
Euro OTC	Glycerol 85%	1610032-01	38
Euro OTC	Glycerol 85%	1804017-01	18
Euro OTC	Glycerol 85%	1901041-01	5
Euro OTC	Glycerol 85%	1301025-02	2
Euro OTC	Glycerol 85%	1502010-01	16
Euro OTC	Glycerol 85%	160703	1
Euro OTC	Glycerol 85%	1906019-01	1
Euro OTC	Glycerol 85%	1108032-01	5
Euro OTC	Glycerol 85%	1108032	1
Euro OTC	Glycerol 85%	1201038-01	6
Euro OTC	Glycerol 85%	1210047-01	8
Euro OTC	Glycerol 85%	1301025-01	8
Euro OTC	Glycerol 85%	1306016-02	7
Euro OTC	Glycerol 85%	120103801	1
Euro OTC	Glycerol 85%	1808009-01	7
Euro OTC	Glycerol 85%	1703003	2
Euro OTC	Glycerol 85%	1201038-01	1
Euro OTC	Glycerol 85%	1703003-01	47
Euro OTC	Glycerol 85%	1703001-01	1
Euro OTC	Glycerol 85%	1804017	1
Euro OTC	Glycerol 85%	GG61870088	1
Euro OTC	Glycerol 85%	180800901	1
Euro OTC	Glycerol 85%	18080092	1
Euro OTC	Glycerol 85%	170300301	3
Euro OTC	Glycerol 85%	180102501	6
Euro OTC	Glycerol 85%	180401701	2
Euro OTC	Glycerol 85%	1906018-01	1
Euro OTC	Glycerol 85%	1405021-01	4
Euro OTC	Glycerol 85%	1601059-01	37
Euro OTC	Glycerol 85%	1801025-01	21
Euro OTC	Glycerol 85%	1403006-01	8
euro//Noweda	Glycerol 85%	18253402	1
Euro/Gehe	Glycerol 85%	1509023-01	1
Euro/Noweda	Glycerol 85%	1607037-01	1
Euro/Noweda	Glycerol 85%	1610032-01	1

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Supplier	Substance	Batch	Spectra
Euro/Noweda	Glycerol 85%	180102501	1
Euro OTC	Glycerol 85%	14380504	1
Euro OTC	Glycerol 85%	1607037	1
Euro OTC	Glycerol 85%	1401009	1
Euro OTC	Glycerol 85%	1868009-02	1
Euro OTC	Glycerol 85%	1708022-01	28
Euro OTC	Glycerol 85%	160105901	2
Euro OTC	Glycerol 85%	1607037-01	27
EuroOZC/ AHD	Glycerol 85%	1906019-01	1
EuroOZC/ Noweda	Glycerol 85%	1804017-01	1
Europharm/Otto	Glycerol 85%	1108032-01	1
Fagron	Glycerol 85%	13060006	1
Fagron	Glycerol 85%	1203C003	1
Fagron	Glycerol 85%	12H17-N01	2
Fagron	Glycerol 85%	12G11-N02	1
Fagron	Glycerol 85%	12J05-N01	1
Fagron	Glycerol 85%	13C28-N02	6
Fagron	Glycerol 85%	13C-N02	1
Fagron	Glycerol 85%	13E24-N11	2
Fagron	Glycerol 85%	13D11-N05	1
Fagron	Glycerol 85%	13J01-B01-285777	1
Fagron	Glycerol 85%	14A10-B01-291982	1
Fagron	Glycerol 85%	14A10-B01-291983	1
Fagron	Glycerol 85%	13J29-B01-285782	1
Fagron	Glycerol 85%	14D25-B02-295895	1
Fagron	Glycerol 85%	14H11-B05-298257	2
Fagron	Glycerol 85%	5763701	1
Fagron	Glycerol 85%	15036903	1
Fagron	Glycerol 85%	15E18-B02-309484	1
Fagron	Glycerol 85%	1529220	1
Fagron	Glycerol 85%	18B05-B03	1
Fagron	Glycerol 85%	13I12-B03-285611	1
Fagron	Glycerol 85%	11L06-N02	4
Fagron	Glycerol 85%	12J04-N09	2
Fagron	Glycerol 85%	13c28-n02	2
Fagron	Glycerol 85%	5065101	1
Fagron	Glycerol 85%	1209C001	1
Fagron	Glycerol 85%	13J01-B01	1
Fagron	Glycerol 85%	250214PJK01	1
Fagron	Glycerol 85%	12J04-N02	1
Fagron	Glycerol 85%	13J29-B01	1
Fagron	Glycerol 85%	13J20-B01-285782	1
Fagron	Glycerol 85%	3111	1
Fagron	Glycerol 85%	56-81-5	1
Fagron	Glycerol 85%	5065111	2
Fagron	Glycerol 85%	12L04-N09	1
Fagron	Glycerol 85%	1312B03285613	1
Fagron	Glycerol 85%	13J01-B01-285781	2
Fagron	Glycerol 85%	14D25-B02-293384	1
Fagron	Glycerol 85%	15292201	1
Fagron	Glycerol 85%	18020001	1
fischar	Glycerol 85%	5065061	2
fischar	Glycerol 85%	5067081	1
fischar	Glycerol 85%	5067061	1
fischar	Glycerol 85%	5068021	2
fischar	Glycerol 85%	5068101	1
Fischar	Glycerol 85%	5062051	3
Fischar	Glycerol 85%	5061101	1
Fischar	Glycerol 85%	5062111	4
Fischar	Glycerol 85%	5062121	2

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Supplier	Substance	Batch	Spectra
Fischar	Glycerol 85%	5063011	3
Fischar	Glycerol 85%	5063052	1
Fischar	Glycerol 85%	5063051	1
Fischar	Glycerol 85%	5063091	1
Fischar	Glycerol 85%	5064021	1
Fischar	Glycerol 85%	506407	1
Fischar	Glycerol 85%	5065011	3
Fischar	Glycerol 85%	5064091	1
Fischar	Glycerol 85%	5055031	1
Fischar	Glycerol 85%	5063092	1
Fischar	Glycerol 85%	5065012	3
Fischar	Glycerol 85%	5065031	2
Fischar	Glycerol 85%	5065061	5
Fischar	Glycerol 85%	1075061	1
Fischar	Glycerol 85%	5065081	2
Fischar	Glycerol 85%	5065111	1
Fischar	Glycerol 85%	5066011	2
Fischar	Glycerol 85%	5066021	4
Fischar	Glycerol 85%	5065101	1
Fischar	Glycerol 85%	5066031	3
Fischar	Glycerol 85%	5066071	1
Fischar	Glycerol 85%	5066081	3
Fischar	Glycerol 85%	5066101	5
Fischar	Glycerol 85%	5066111	1
Fischar	Glycerol 85%	5067031	1
Fischar	Glycerol 85%	5067061	2
Fischar	Glycerol 85%	5067091	3
Fischar	Glycerol 85%	1077081	1
Fischar	Glycerol 85%	1802006B	1
Fischar	Glycerol 85%	5068012	3
Fischar	Glycerol 85%	5068021	2
Fischar	Glycerol 85%	5068011	1
Fischar	Glycerol 85%	5068081	1
Fischar	Glycerol 85%	5068031	4
Fischar	Glycerol 85%	5068101	2
Fischar	Glycerol 85%	5068121	1
Fischar / Alliance Hea...	Glycerol 85%	5065111	1
Fischar / Gehe	Glycerol 85%	5068012	3
fischar / Noweda	Glycerol 85%	5068081	1
Fischar / Noweda	Glycerol 85%	50655081	1
Fischar / Phönix	Glycerol 85%	5065031	2
Fischar / Phönix	Glycerol 85%	5066031	1
fischar gmbh	Glycerol 85%	5063012	1
fischar gmbh	Glycerol 85%	5064021	1
fischar gmbh	Glycerol 85%	5064011	1
Fischar GmbH	Glycerol 85%	1076071	2
Fischar GmbH	Glycerol 85%	1077111	1
Fischar GmbH	Glycerol 85%	5068012	1
Fischar GmbH	Glycerol 85%	5068031	1
Fischar GmbH	Glycerol 85%	5068081	1
Fischar GmbH	Glycerol 85%	5068121	1
Fischar GmbH/AHD	Glycerol 85%	5064091	1
Fischar GmbH/Krieger	Glycerol 85%	5065111	1
Fischar GmbH/Krieger	Glycerol 85%	5066021	1
Fischar GmbH/Krieger	Glycerol 85%	5066111	1
Fischar/ AHD	Glycerol 85%	5066081	1
Fischar/ AHD	Glycerol 85%	5068021	1
Fischar/ Gehe	Glycerol 85%	1076011	1
Fischar/ Now	Glycerol 85%	5065011	1
Fischar/ Now	Glycerol 85%	5065111	2

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Supplier	Substance	Batch	Spectra
Fischar/ Now	Glycerol 85%	5066031	1
Fischar/ Now	Glycerol 85%	5066071	4
Fischar/ Noweda	Glycerol 85%	5066011	1
Fischar/ Phönix	Glycerol 85%	5065101	2
Fischar/ Phönix	Glycerol 85%	5066081	1
Fischar/ Phönix	Glycerol 85%	5069051	1
Fischar/AEP	Glycerol 85%	5065111	3
Fischar/AEP	Glycerol 85%	5067081	1
Fischar/AHD	Glycerol 85%	5065081	1
Fischar/AHD	Glycerol 85%	5065061	1
Fischar/AHD	Glycerol 85%	5065031	1
Fischar/AHD	Glycerol 85%	5067091	1
Fischar/AHD	Glycerol 85%	5068012	1
Fischar/Alliance	Glycerol 85%	5068071	1
Fischar/Anzag	Glycerol 85%	5062111	1
Fischar/Anzag	Glycerol 85%	5063012	1
Fischar/E	Glycerol 85%	5062011	1
fishar/gehe	Glycerol 85%	5067021	1
fishar/gehe	Glycerol 85%	5067111	2
Fischar/Gehe	Glycerol 85%	5066031	1
Fischar/Gehe	Glycerol 85%	5065081	1
Fischar/Gehe	Glycerol 85%	5066111	1
Fischar/Gehe	Glycerol 85%	1077011	2
Fischar/Gehe	Glycerol 85%	5067061	1
Fischar/Gehe	Glycerol 85%	5068031	1
Fischar/Gehe	Glycerol 85%	5068121	1
Fischar/Kehr	Glycerol 85%	5068021	1
Fischar/Kehr	Glycerol 85%	5068101	1
fishar/noweda	Glycerol 85%	5066081	2
fishar/Noweda	Glycerol 85%	5064091	1
fishar/Noweda	Glycerol 85%	5067011	1
Fischar/Noweda	Glycerol 85%	5066071	1
Fischar/Noweda	Glycerol 85%	5067021	1
Fischar/Noweda	Glycerol 85%	5067061	1
Fischar/Noweda	Glycerol 85%	5066101	1
Fischar/Noweda	Glycerol 85%	5068012	1
Fischar/Noweda	Glycerol 85%	5068011	1
Fischar/Phoenix	Glycerol 85%	5066081	1
fishar/Phönix	Glycerol 85%	50666061	1
fishar/Phönix	Glycerol 85%	5066071	1
fishar/Phönix	Glycerol 85%	5067111	1
Fischar/Phönix	Glycerol 85%	5062051	1
Fischar/Phönix	Glycerol 85%	5064071	1
Fischar/Phönix	Glycerol 85%	5065031	2
Fischar/Phönix	Glycerol 85%	5066011	1
Fischar/Phönix	Glycerol 85%	5066111	1
Fischar/Phönix	Glycerol 85%	5068101	2
Fischar/V.d.L.	Glycerol 85%	5062111	1
Fischar/V.d.L.	Glycerol 85%	5064071	1
Fischar-Allianz	Glycerol 85%	5068121	2
fishbar	Glycerol 85%	5064091	1
Fischbar/Anzag	Glycerol 85%	5064011	3
Fischer	Glycerol 85%	5063091	1
Fischer	Glycerol 85%	1075012	1
Fischer	Glycerol 85%	5065101	1
Fischer	Glycerol 85%	5066021	1
Fischer	Glycerol 85%	5066061	2
Fischer	Glycerol 85%	50660631	1
Fischer	Glycerol 85%	5066071	1
Fischer	Glycerol 85%	5065111	1

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Supplier	Substance	Batch	Spectra
Fischer	Glycerol 85%	5067031	1
Fischer / Phoenix Leipz...	Glycerol 85%	5065081	1
Fischer GmbH / Phoenix ...	Glycerol 85%	5068012	1
fischer, Gehe	Glycerol 85%	5062051	1
Fischer/ Noweda	Glycerol 85%	1076111	1
Fischer/ Noweda	Glycerol 85%	1610032-01	1
fischer/ Phoenix / 02.1...	Glycerol 85%	5066071	1
Fischer/Noweda	Glycerol 85%	5065011	1
Fishar	Glycerol 85%	5066021	1
Fishar / Phönix	Glycerol 85%	5064011	1
Gatt-Koller	Glycerol 85%	1802637	1
Gatt-Koller	Glycerol 85%	1804132	1
Gehe	Glycerol 85%	11355301	1
Gehe	Glycerol 85%	1001017-01	1
Gehe	Glycerol 85%	5226901	1
Gehe	Glycerol 85%	1201038-01	1
Gehe	Glycerol 85%	5062051	1
Gehe	Glycerol 85%	276850	2
Gehe	Glycerol 85%	1210047-01	1
Gehe	Glycerol 85%	40491	2
Gehe	Glycerol 85%	1301025-01	1
Gehe	Glycerol 85%	5062121	1
Gehe	Glycerol 85%	5063012	1
Gehe	Glycerol 85%	284401	1
Gehe	Glycerol 85%	13356405	1
Gehe	Glycerol 85%	14149404	1
Gehe	Glycerol 85%	1502010-01	1
Gehe	Glycerol 85%	15292201	1
Gehe	Glycerol 85%	40607	1
GEHE	Glycerol 85%	12216606	1
GEHE	Glycerol 85%	16215301	1
GEHE	Glycerol 85%	40635	1
GEHE	Glycerol 85%	17322104	1
GEHE	Glycerol 85%	40646	1
GEHE	Glycerol 85%	40647	1
GEHE	Glycerol 85%	40652	2
GEHE	Glycerol 85%	40667	1
GEHE	Glycerol 85%	40670	1
Caelo	Glycerol 85%	5063111	1
Gehe - Hedinger	Glycerol 85%	40618	1
Caelo	Glycerol 85%	16347203	3
Caelo	Glycerol 85%	18020001	3
Gehe / Fischar	Glycerol 85%	1077081	1
Gehe am 05.04.2014	Glycerol 85%	13276205	2
Gehe,06.05.15	Glycerol 85%	14306205	1
Bombastus	Glycerol 85%	1607037-01	1
Bombastus	Glycerol 85%	17157703	1
Caelo	Glycerol 85%	5065111	1
Caelo	Glycerol 85%	1290317	1
Gehe/fischar	Glycerol 85%	5065101	1
Gehe/Fischar	Glycerol 85%	5066071	1
Gehe/Hedinger	Glycerol 85%	40599	2
Gehe/Hedinger	Glycerol 85%	40607	1
Gehe/Hedinger	Glycerol 85%	40620	1
Gehe-Hedinger	Glycerol 85%	40522	1
Geo-Chem/sanacorp	Glycerol 85%	12216606	1
Hanry Lanotte/Phönix	Glycerol 85%	8001116001	1
Heddinger/Sanacorp	Glycerol 85%	40475	1
hedinger	Glycerol 85%	40483	1
hedinger	Glycerol 85%	40494	1

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Supplier	Substance	Batch	Spectra
Hedinger	Glycerol 85%	40538	1
Hedinger	Glycerol 85%	40652	1
Hedinger	Glycerol 85%	40452	1
Hedinger	Glycerol 85%	40447	1
Hedinger	Glycerol 85%	40471	2
Hedinger	Glycerol 85%	40464	2
Hedinger	Glycerol 85%	40478	1
Hedinger	Glycerol 85%	40473	1
Hedinger	Glycerol 85%	40486	2
Hedinger	Glycerol 85%	40483	2
Hedinger	Glycerol 85%	40481	1
Hedinger	Glycerol 85%	40497	2
Hedinger	Glycerol 85%	40499	3
Hedinger	Glycerol 85%	40506	2
Hedinger	Glycerol 85%	40507	1
Hedinger	Glycerol 85%	40519	3
Hedinger	Glycerol 85%	40502	1
Hedinger	Glycerol 85%	40522	1
Hedinger	Glycerol 85%	40528	1
Hedinger	Glycerol 85%	40531	2
Hedinger	Glycerol 85%	40529	3
Hedinger	Glycerol 85%	40531-1	3
Hedinger	Glycerol 85%	40524	1
Hedinger	Glycerol 85%	40538	3
Hedinger	Glycerol 85%	40540	1
Hedinger	Glycerol 85%	40548	2
Hedinger	Glycerol 85%	40541	1
Hedinger	Glycerol 85%	40556	2
Hedinger	Glycerol 85%	40542	1
Hedinger	Glycerol 85%	40578	1
Hedinger	Glycerol 85%	25082015B	1
Hedinger	Glycerol 85%	40546	1
Hedinger	Glycerol 85%	40557	3
Hedinger	Glycerol 85%	40566	2
Hedinger	Glycerol 85%	40559	2
Hedinger	Glycerol 85%	40567	3
Hedinger	Glycerol 85%	40576	6
Hedinger	Glycerol 85%	40579	3
Hedinger	Glycerol 85%	40584	2
Hedinger	Glycerol 85%	40583	3
Hedinger	Glycerol 85%	40586	3
Hedinger	Glycerol 85%	40596	1
Hedinger	Glycerol 85%	40598	3
Hedinger	Glycerol 85%	40599	9
Hedinger	Glycerol 85%	40607	5
Hedinger	Glycerol 85%	40612	5
Hedinger	Glycerol 85%	40620	4
Hedinger	Glycerol 85%	40618	2
Hedinger	Glycerol 85%	406205369	1
Hedinger	Glycerol 85%	40628	6
Hedinger	Glycerol 85%	40626	4
Hedinger	Glycerol 85%	40632	1
Hedinger	Glycerol 85%	40635	3
Hedinger	Glycerol 85%	40647	1
Hedinger	Glycerol 85%	40644	2
Hedinger	Glycerol 85%	40646	2
Hedinger	Glycerol 85%	40652	3
Hedinger	Glycerol 85%	40655	1
Hedinger	Glycerol 85%	40664	1
Hedinger	Glycerol 85%	40665	2

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Supplier	Substance	Batch	Spectra
HEDINGER	Glycerol 85%	40475	1
HEDINGER	Glycerol 85%	40467	1
HEDINGER	Glycerol 85%	40491	1
HEDINGER	Glycerol 85%	40497	1
HEDINGER	Glycerol 85%	40501	1
Hedinger / Alliance	Glycerol 85%	40506	2
Hedinger / Gehe	Glycerol 85%	40515	1
Hedinger / Gehe	Glycerol 85%	40612	1
Hedinger / Gehe	Glycerol 85%	40635	2
Hedinger / Gehe	Glycerol 85%	40644	1
Hedinger / Noweda	Glycerol 85%	40671	1
Hedinger / Phönix	Glycerol 85%	40667	1
Hedinger / Sanacorp	Glycerol 85%	40451	1
Hedinger AHD	Glycerol 85%	40618	1
Hedinger AHD	Glycerol 85%	40646	1
Hedinger Gehe	Glycerol 85%	40519	1
Hedinger Gehe	Glycerol 85%	40646	1
Hedinger GmbH	Glycerol 85%	40548	1
Hedinger GmbH	Glycerol 85%	40626	3
Hedinger Jenne	Glycerol 85%	40462	1
Hedinger Jenne	Glycerol 85%	40501	1
Hedinger Phönix	Glycerol 85%	40471	1
Hedinger Phönix	Glycerol 85%	40475	1
Hedinger Phönix	Glycerol 85%	40480	2
Hedinger Phönix	Glycerol 85%	40495	1
Hedinger Phönix	Glycerol 85%	40507	1
Hedinger Phönix	Glycerol 85%	40542	1
Hedinger Phönix	Glycerol 85%	40548	1
Hedinger Phönix	Glycerol 85%	40607	1
Hedinger Phönix	Glycerol 85%	40618	2
Hedinger Phönix	Glycerol 85%	40626	1
Hedinger Phönix	Glycerol 85%	40632	2
Hedinger Phönix	Glycerol 85%	40649	1
Hedinger Phönix	Glycerol 85%	40647	2
Hedinger/ AHD	Glycerol 85%	40620	1
Hedinger/ Anzag	Glycerol 85%	40491	1
Hedinger/ Anzag	Glycerol 85%	40632	1
Hedinger/ Anzag	Glycerol 85%	166(040632)	1
Hedinger/ Anzag	Glycerol 85%	167(040665)	1
Hedinger/ Gehe	Glycerol 85%	40566	1
Hedinger/ Noweda	Glycerol 85%	40515	1
Hedinger/ Noweda	Glycerol 85%	40574	1
Hedinger/ Phoenix	Glycerol 85%	40628	1
Hedinger/ Sanacorp	Glycerol 85%	40479	1
Hedinger/ Sanacorp	Glycerol 85%	40480	1
Hedinger/ Sanacorp	Glycerol 85%	40499	1
Hedinger/ Sanacorp	Glycerol 85%	40501	1
Hedinger/ Sanacorp	Glycerol 85%	40531-1	1
Hedinger/ Sanacorp	Glycerol 85%	40538	1
Hedinger/ Sanacorp	Glycerol 85%	40546	2
Hedinger/ Sanacorp	Glycerol 85%	40559	1
Hedinger/ Sanacorp	Glycerol 85%	40567	1
Hedinger/ Sanacorp	Glycerol 85%	40584	2
Hedinger/ Sanacorp	Glycerol 85%	40599	2
Hedinger/ Sanacorp	Glycerol 85%	40612	1
Hedinger/AHD	Glycerol 85%	40586	1
Hedinger/AHD	Glycerol 85%	164(040620)	1
Hedinger/AHD	Glycerol 85%	165(0406209)	1
Hedinger/AHD	Glycerol 85%	40652	1
Hedinger/AHD	Glycerol 85%	40671	1

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Supplier	Substance	Batch	Spectra
Hedinger/Alliance	Glycerol 85%	40626	1
hedinger/anzag	Glycerol 85%	5538401	1
Hedinger/Anzag	Glycerol 85%	40483	2
Hedinger/Ebert	Glycerol 85%	40483	1
Hedinger/Ebert	Glycerol 85%	40612	1
Hedinger/Ebert	Glycerol 85%	40628	1
Hedinger/Ebert	Glycerol 85%	40642	1
Hedinger/Ebert	Glycerol 85%	40652	1
hedinger/Gehe	Glycerol 85%	40501	1
hedinger/Gehe	Glycerol 85%	40529	1
Hedinger/Gehe	Glycerol 85%	40473	1
Hedinger/Gehe	Glycerol 85%	4091	1
Hedinger/Gehe	Glycerol 85%	40491	1
Hedinger/Gehe	Glycerol 85%	40483	1
Hedinger/Gehe	Glycerol 85%	40497	2
Hedinger/Gehe	Glycerol 85%	3112Q-01589	1
Hedinger/Gehe	Glycerol 85%	40519	1
Hedinger/Gehe	Glycerol 85%	40524	1
Hedinger/Gehe	Glycerol 85%	4052B	1
Hedinger/Gehe	Glycerol 85%	40540	2
Hedinger/Gehe	Glycerol 85%	40548	1
Hedinger/Gehe	Glycerol 85%	40557	1
Hedinger/Gehe	Glycerol 85%	40559	1
Hedinger/Gehe	Glycerol 85%	40566	1
Hedinger/Gehe	Glycerol 85%	40576	1
Hedinger/Gehe	Glycerol 85%	40584	3
Hedinger/Gehe	Glycerol 85%	40586	1
Hedinger/Gehe	Glycerol 85%	40599	1
Hedinger/Gehe	Glycerol 85%	40620	1
Hedinger/Gehe	Glycerol 85%	40628	1
Hedinger/Gehe	Glycerol 85%	40629	1
Hedinger/Gehe	Glycerol 85%	40635	1
Hedinger/Gehe	Glycerol 85%	40647	2
Hedinger/Gehe	Glycerol 85%	40670	1
Hedinger/Holdermann 18...	Glycerol 85%	40452	1
Hedinger/Noweda	Glycerol 85%	40478	1
Hedinger/Noweda	Glycerol 85%	40522	1
Hedinger/Noweda	Glycerol 85%	40515	1
Hedinger/Noweda	Glycerol 85%	40538	2
Hedinger/Noweda	Glycerol 85%	40542	1
Hedinger/Noweda	Glycerol 85%	40557	1
Hedinger/Noweda	Glycerol 85%	40559	1
Hedinger/Noweda	Glycerol 85%	40574	1
Hedinger/Noweda	Glycerol 85%	40583	1
Hedinger/Noweda	Glycerol 85%	40567	1
Hedinger/Noweda	Glycerol 85%	40579	2
Hedinger/Noweda	Glycerol 85%	40599	1
Hedinger/Noweda	Glycerol 85%	40607	2
Hedinger/Noweda	Glycerol 85%	40612	2
Hedinger/Noweda	Glycerol 85%	40618	4
Hedinger/Noweda	Glycerol 85%	40620	1
Hedinger/Noweda	Glycerol 85%	40626	1
Hedinger/Phoenix	Glycerol 85%	40515	1
Hedinger/Phoenix	Glycerol 85%	40546	1
Hedinger/Phoenix	Glycerol 85%	40542	1
Hedinger/Phoenix	Glycerol 85%	40579	1
Hedinger/Phoenix	Glycerol 85%	40559	1
Hedinger/Phoenix	Glycerol 85%	40596	1
Hedinger/Phönix	Glycerol 85%	40483	2
Hedinger/Phönix	Glycerol 85%	40481	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phönix	Glycerol 85%	40531-1	1
Hedinger/Phönix	Glycerol 85%	40546	1
Hedinger/Phönix	Glycerol 85%	40559	1
Hedinger/Phönix	Glycerol 85%	40567	1
Hedinger/Phönix	Glycerol 85%	40576	1
Hedinger/Phönix	Glycerol 85%	40583	1
Hedinger/Phönix	Glycerol 85%	40598	1
Hedinger/Phönix	Glycerol 85%	40599	2
Hedinger/Phönix	Glycerol 85%	40612	1
Hedinger/Phönix	Glycerol 85%	40620	1
Hedinger/Phönix	Glycerol 85%	40628	3
Hedinger/Phönix	Glycerol 85%	40629	3
Hedinger/Phönix	Glycerol 85%	40626	1
Hedinger/Phönix	Glycerol 85%	40652	1
Hedinger/Phönix	Glycerol 85%	1808009-01	1
Hedinger/PX	Glycerol 85%	40547	1
Hedinger/Sanacorp	Glycerol 85%	40499-3354319071	1
Hedinger/Sanacorp	Glycerol 85%	40501	1
Hedinger/Sanacorp	Glycerol 85%	40507	1
Hedinger/Sanacorp	Glycerol 85%	40548	2
Hedinger/Sanacorp	Glycerol 85%	61016B	1
Hedinger/Sanacorp	Glycerol 85%	40566	1
Hedinger/Sanacorp	Glycerol 85%	40559	1
Hedinger/Sanacorp	Glycerol 85%	40557	1
Hedinger/Sanacorp	Glycerol 85%	40576	1
Hedinger/Sanacorp	Glycerol 85%	40579	1
Hedinger/Sanacorp	Glycerol 85%	40628	2
Hedinger/Sanacorp	Glycerol 85%	40629	1
Hedinger/Sanacorp	Glycerol 85%	40635	2
Hedinger/Sanacorp	Glycerol 85%	40647	2
Hedinger/Sanacorp	Glycerol 85%	40652	2
Hedinger/VDL	Glycerol 85%	40599	1
Heedinger/Noweda	Glycerol 85%	40576	1
heidringer	Glycerol 85%	40559	1
Hendiger/Sanacorp	Glycerol 85%	40599	1
Henry	Glycerol 85%	123304	1
Henry Lamotte	Glycerol 85%	5226901	2
Henry Lamotte	Glycerol 85%	123142	1
Henry Lamotte	Glycerol 85%	123304	1
Henry Lamotte	Glycerol 85%	5538401	2
Henry Lamotte	Glycerol 85%	5603001	1
Henry Lamotte	Glycerol 85%	124654	1
Henry Lamotte	Glycerol 85%	15292204	1
Henry Lamotte	Glycerol 85%	8002208001	1
Henry Lamotte	Glycerol 85%	1703003-01	1
Henry Lamotte GmbH Bremen	Glycerol 85%	5142501	1
Henry Lamotte Oils GmbH	Glycerol 85%	125545	1
Henry Lamotte oils GmbH...	Glycerol 85%	8002208001	2
Henry Lamotte Oils/ Gehe	Glycerol 85%	1801025-01	1
Henry Lamotte Olis GmbH	Glycerol 85%	5603001	1
Henry Lamotte Phönix	Glycerol 85%	123142	1
Henry Lamotte/ Alliance...	Glycerol 85%	8002720001	1
Henry Lamotte/Jenne	Glycerol 85%	123464	1
Henry Lamotte/Phoenix	Glycerol 85%	17215501	1
Hepart	Glycerol 85%	15036903	2
HirschApotheke	Glycerol 85%	40541	1
hochhaus-Apotheke	Glycerol 85%	5066111	1
Jenne	Glycerol 85%	40599	1
Jenne/Lamotte	Glycerol 85%	5603001	1
Bombastus	Glycerol 85%	266037	1

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Supplier	Substance	Batch	Spectra
Bombastus	Glycerol 85%	269070	1
Bombastus	Glycerol 85%	275076	1
Bombastus	Glycerol 85%	285366	4
Bombastus	Glycerol 85%	293387	4
Caelo	Glycerol 85%	271511	1
Caelo	Glycerol 85%	140113PML02	1
Kehr / Fischar	Glycerol 85%	5061071	1
Kehr / Lamotte	Glycerol 85%	290114PML04	1
Kögl	Glycerol 85%	20302170917	1
Kögl	Glycerol 85%	258607172917	1
Kögl	Glycerol 85%	105004171417	2
Kögl	Glycerol 85%	1700476	1
Kögl	Glycerol 85%	1800130	1
Kögl	Glycerol 85%	1800839	1
Kögl	Glycerol 85%	1802181	1
L10	Glycerol 85%	17197701	3
L10	Glycerol 85%	18020001	3
L12	Glycerol 85%	16347203	4
L12	Glycerol 85%	16347209	2
Caelo	Glycerol 85%	16218902	7
L30	Glycerol 85%	18020005	2
Caelo	Glycerol 85%	18327001	1
Laborchemie APOLDA	Glycerol 85%	14149410	1
Lamotte	Glycerol 85%	5142501	1
Lamotte	Glycerol 85%	5360201	5
Lamotte	Glycerol 85%	5424901	4
Lamotte	Glycerol 85%	5424101	2
Lamotte	Glycerol 85%	5487801	2
Lamotte	Glycerol 85%	123304	1
Lamotte	Glycerol 85%	5512001	2
Lamotte	Glycerol 85%	5538401	2
Lamotte	Glycerol 85%	5603001	7
Lamotte	Glycerol 85%	5603002	1
Lamotte Noweda	Glycerol 85%	8002720001	1
Lamotte Noweda	Glycerol 85%	1000007843	1
Lamotte//AHD	Glycerol 85%	125545	1
Lamotte/AHD	Glycerol 85%	8001116001	1
Lamotte/AHD	Glycerol 85%	8002208001	1
Lamotte/AHD	Glycerol 85%	8003194001	1
Lamotte/AHD	Glycerol 85%	1000007843	1
Lamotte/Alliance	Glycerol 85%	5603001	1
Lamotte/Krieger/27.11.13	Glycerol 85%	5538401	3
Lamotte/Noweda	Glycerol 85%	123464	1
Lamotte/Noweda	Glycerol 85%	5538401	1
LAMOTTE/NOWEDA	Glycerol 85%	5538401	2
lamotte/phönix	Glycerol 85%	5538401	2
Leyh Pharma GmbH	Glycerol 85%	BE-08675/37460	1
Midas	Glycerol 85%	40618	1
Midas	Glycerol 85%	40632	1
Nauto	Glycerol 85%	16218906	1
Nokun	Glycerol 85%	5067061	1
noweda	Glycerol 85%	13276202	1
noweda	Glycerol 85%	13356403	1
Noweda	Glycerol 85%	40464	1
Noweda	Glycerol 85%	12108201	1
Noweda	Glycerol 85%	5226901	1
Noweda	Glycerol 85%	272305	1
Noweda	Glycerol 85%	40475	1
Noweda	Glycerol 85%	5062121	2
Noweda	Glycerol 85%	278655	1

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Supplier	Substance	Batch	Spectra
Noweda	Glycerol 85%	1506036-01	1
Noweda	Glycerol 85%	5066071	1
Noweda	Glycerol 85%	5067061	1
Noweda / Hedinger	Glycerol 85%	40626	1
Noweda/ Fischar	Glycerol 85%	5065011	1
Noweda/ Fischar	Glycerol 85%	5065061	2
Caelo	Glycerol 85%	15292205	18
Caelo	Glycerol 85%	14149406	12
Caelo	Glycerol 85%	1629706	1
Euro OTC	Glycerol 85%	1405021-02	7
Euro OTC	Glycerol 85%	1401009-01	7
Noweda/Fischar	Glycerol 85%	5064021	1
Noweda/Fischar	Glycerol 85%	5067061	1
Noweda/Hedinger	Glycerol 85%	40499	1
Noweda/Hedinger	Glycerol 85%	40509	1
Noweda/Hedinger	Glycerol 85%	40574	2
Noweda/Ichthyol	Glycerol 85%	5064071	1
Noweda/Otto Fischar GmbH	Glycerol 85%	5066071	1
otto fischar	Glycerol 85%	1075111	1
otto Fischar	Glycerol 85%	5065111	1
Otto Fischar	Glycerol 85%	5062011	2
Otto Fischar	Glycerol 85%	5062051	1
Otto Fischar	Glycerol 85%	5060121	1
Otto Fischar	Glycerol 85%	5064021	1
Otto Fischar	Glycerol 85%	5065012	1
Otto Fischar	Glycerol 85%	1075061	1
Otto Fischar	Glycerol 85%	10751111	1
Otto Fischar	Glycerol 85%	5066031	1
Otto Fischar	Glycerol 85%	5066081	2
Otto Fischar	Glycerol 85%	1076021	1
Otto Fischar	Glycerol 85%	5067011	1
Otto Fischar	Glycerol 85%	5066111	1
Otto Fischar	Glycerol 85%	5066061	1
Otto Fischar	Glycerol 85%	5067061	1
Otto Fischar	Glycerol 85%	5068012	1
Otto Fischar	Glycerol 85%	5068031	3
Otto Fischar GmbH	Glycerol 85%	5062121	2
Otto Fischar GmbH	Glycerol 85%	5062051	1
Otto Fischar GmbH	Glycerol 85%	5062052	2
Otto Fischar GmbH	Glycerol 85%	5064021	1
Otto Fischar GmbH	Glycerol 85%	5066061	1
Otto Fischar GmbH	Glycerol 85%	15092017-MW-A	1
Otto Fischar GmbH	Glycerol 85%	1077011	1
Otto Fischar GmbH	Glycerol 85%	506711	1
Otto Fischar GmbH & Co...	Glycerol 85%	5065012	1
Otto Fischar GmbH & Co...	Glycerol 85%	5065061	1
Otto Fischar GmbH & Co...	Glycerol 85%	5066071	1
Otto Fischar GmbH & Co...	Glycerol 85%	1077011	1
Otto Fischar GmbH & Co...	Glycerol 85%	5067111	1
Otto Fischar GmbH & Co...	Glycerol 85%	50068031	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5065031	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066021	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066061	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066111	3
Otto Fischar GmbH & Co.KG	Glycerol 85%	5067061	1
Otto Fischar GmbH / All...	Glycerol 85%	5067031	1
Otto Fischar GmbH / All...	Glycerol 85%	5067061	1
Otto Fischar GmbH / All...	Glycerol 85%	5067081	1
Otto Fischar GmbH / All...	Glycerol 85%	5067111	1
Otto Fischar GmbH / All...	Glycerol 85%	5068081	1

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Supplier	Substance	Batch	Spectra
Otto Fischar GmbH / Gehe	Glycerol 85%	1076021	1
Otto Fischar GmbH / Gehe	Glycerol 85%	5066071	1
Otto Fischar GmbH / Pho...	Glycerol 85%	5068081	2
Otto Fischar GmbH/ Noweda	Glycerol 85%	5066011	4
Otto Fischar GmbH/ Sana...	Glycerol 85%	5067091	1
Otto Fischar GmbH/ Sana...	Glycerol 85%	5068012	1
Otto Fischar GmbH/ Sana...	Glycerol 85%	5068081	1
Otto Fischar GmbH/ Sana...	Glycerol 85%	5068101	1
Otto Fischar GmbH/Gehe	Glycerol 85%	5066011	1
Otto Fischar GmbH/Phönix	Glycerol 85%	5069011	1
Otto Fischar/ Noweda	Glycerol 85%	5069059	1
Otto Fischar/AHD	Glycerol 85%	5068012	1
Otto Fischar/Gehe	Glycerol 85%	5063012	1
Otto Fischar/Gehe	Glycerol 85%	5067011	1
Otto Fischar/Gehe	Glycerol 85%	5068031	1
Otto Fischar/Phoenix	Glycerol 85%	5063011	1
otto fischer	Glycerol 85%	23081604	1
Otto Fischer	Glycerol 85%	5064011	1
Otto Fischer	Glycerol 85%	5065081	1
Otto Fischer	Glycerol 85%	5067011	1
Otto Fischer	Glycerol 85%	5067111	1
Otto Fischer	Glycerol 85%	5068021	1
Otto Fischer GmbH	Glycerol 85%	5062121	1
Otto Fischer GmbH	Glycerol 85%	5066031	1
Otto Fischer GmbH	Glycerol 85%	5068031	1
otto fischer gmbh/ Phoe...	Glycerol 85%	5068031	3
otto fischer gmbh/ Phoe...	Glycerol 85%	5067111	1
Otto Fischer/Gehe	Glycerol 85%	5066101	1
Otto Fischer/Krieger	Glycerol 85%	5066061	1
Otto Fuchar GmbH & Co. KG	Glycerol 85%	5067081	1
Paul W. Beyvers GmbH	Glycerol 85%	17001	1
Paul W. Beyvers GmbH/ A...	Glycerol 85%	17003	1
Perrigo/Phönix	Glycerol 85%	284401	1
Ph.Eur.7.0	Glycerol 85%	14148106	1
Pharmachem/ Phönix	Glycerol 85%	1607037-01	2
Phoenix	Glycerol 85%	12273604	1
Phoenix	Glycerol 85%	13039203	2
Phoenix	Glycerol 85%	13144607	2
Phoenix	Glycerol 85%	1405021-01	1
Phoenix	Glycerol 85%	15036903	1
Phoenix	Glycerol 85%	40586	1
Phoenix	Glycerol 85%	40596	1
Phoenix	Glycerol 85%	310592	1
Phoenix	Glycerol 85%	5068031	1
PHOENIX am 14.01.2014	Glycerol 85%	13060007	1
Phoenix Leipzig / 23.06...	Glycerol 85%	5066101	1
Phoenix Leipzig 18.08.17	Glycerol 85%	5067031	1
Caelo	Glycerol 85%	40481	1
Phoenix/ Otto Fischer G...	Glycerol 85%	5067081	1
phönix	Glycerol 85%	40586	1
phönix	Glycerol 85%	40598	1
phönix	Glycerol 85%	16218907	1
phönix	Glycerol 85%	40612	1
Phönix	Glycerol 85%	12108201	2
Phönix	Glycerol 85%	13039203	1
Phönix	Glycerol 85%	40481	1
Phönix	Glycerol 85%	5063011	1
Phönix	Glycerol 85%	12273604	1
Phönix	Glycerol 85%	40501	1
Phönix	Glycerol 85%	40507	1

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Supplier	Substance	Batch	Spectra
Phönix	Glycerol 85%	13356406	1
Phönix	Glycerol 85%	14149403	1
Phönix	Glycerol 85%	40596	1
Phönix	Glycerol 85%	40599	1
Phönix	Glycerol 85%	5066081	1
Phönix	Glycerol 85%	40628	1
PHÖNIX	Glycerol 85%	40626	3
PHÖNIX	Glycerol 85%	40632	1
PHÖNIX	Glycerol 85%	40660	1
Phönix Hedinger	Glycerol 85%	40620	1
Caelo	Glycerol 85%	15404511	1
Phönix / Lamotte	Glycerol 85%	8002720001	1
Phönix 14.01.2014	Glycerol 85%	13060001	1
Phönix Gotha	Glycerol 85%	275075	1
Phönix Gotha	Glycerol 85%	15146301	1
Caelo	Glycerol 85%	171577020	1
Phönix/ Fischar	Glycerol 85%	5067031	1
Phönix/ Fischar	Glycerol 85%	5068101	1
Caelo	Glycerol 85%	18153705	2
Caelo	Glycerol 85%	1405021	1
Fagron	Glycerol 85%	14306202	2
Phönix/Fischar	Glycerol 85%	5067091	1
Rondell Apotheke	Glycerol 85%	40576	1
Sana	Glycerol 85%	40647	1
Sanacorp	Glycerol 85%	15036903	1
Sanacorp	Glycerol 85%	15292204	1
sanacorp	Glycerol 85%	14149411	1
Sanacorp	Glycerol 85%	273719	1
Sanacorp	Glycerol 85%	12273604	3
Sanacorp	Glycerol 85%	278655	1
Sanacorp	Glycerol 85%	40480	1
Sanacorp	Glycerol 85%	40495	1
Sanacorp	Glycerol 85%	280855	2
Sanacorp	Glycerol 85%	13039204	1
Sanacorp	Glycerol 85%	40506	1
Sanacorp	Glycerol 85%	72/AKD1	1
Sanacorp	Glycerol 85%	13276205	1
Sanacorp	Glycerol 85%	14149410	2
Sanacorp	Glycerol 85%	15036902	1
Sanacorp	Glycerol 85%	78/AKD7	1
Sanacorp	Glycerol 85%	15292205	2
Sanacorp	Glycerol 85%	79/AKD12	1
Sanacorp	Glycerol 85%	17157702	2
Sanacorp	Glycerol 85%	17215501	1
Sanacorp	Glycerol 85%	173222104	1
Sanacorp	Glycerol 85%	17322104	1
Sanacorp	Glycerol 85%	18153702	1
Sanacorp	Glycerol 85%	1804017-01	1
Sanacorp	Glycerol 85%	40652	1
Sanacorp 09.12.15	Glycerol 85%	152902202	1
Caelo	Glycerol 85%	14149404	1
Bombastus	Glycerol 85%	18001893	2
sanacorp, 7,66EUR, 17.09....	Glycerol 85%	16063701	1
Sanacorp/ Heddinge	Glycerol 85%	4071	1
Sanacorp/ Heddinge	Glycerol 85%	400473	1
Sanacorp/ Heddinge	Glycerol 85%	40502	1
Caelo	Glycerol 85%	11324201	3
Caelo	Glycerol 85%	2/AKD52	1
Caelo	Glycerol 85%	73/AKD2	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	16215301	14
Sanacorp/Fischar	Glycerol 85%	1076021	1
Sanacorp/Fischar	Glycerol 85%	5067061	1
spinnrad	Glycerol 85%	914409013	1
Spinnrad	Glycerol 85%	713048084	1
Stumpf / Hedinger	Glycerol 85%	40557	1
Caelo	Glycerol 85%	14306203	15
Stumpf/Hedinger	Glycerol 85%	40531	1
Stumpf/Hedinger	Glycerol 85%	40576	1
Taoasis	Glycerol 85%	40628	2
Taoasis	Glycerol 85%	40647	1
Taoasis	Glycerol 85%	40655	1
Taoasis/Sanacorp	Glycerol 85%	17197702	1
Test	Glycerol 85%	Test	1
VDL;16.3.16;7,57EUR	Glycerol 85%	15292205	1
WE:23.03.2016 Sanacorp	Glycerol 85%	15292205	1
	Glycerol 85%	13356404	1
Alliance Health 27.11.2...	Glycerol 85%		1
Caelo	Glycerol 85%	12216606	12
Caelo	Glycerol 85%	13356404	10
Caelo	Glycerol 85%	13406202	6
Caelo	Glycerol 85%		4
Caelo	Glycerol 85%	17197706	5
Euro OTC	Glycerol 85%	1409035-01	19
Fischar/Phönix	Glycerol 85%		1
Henry Lamotte	Glycerol 85%		1
Herbeta / Noweda	Glycerol 85%		2
Herbeta Arzneimittel	Glycerol 85%		2
Herbeta Arzneimittel Be...	Glycerol 85%		1
Herbeta Berlin	Glycerol 85%		1
noweda	Glycerol 85%		1
Otto	Glycerol 85%		1
Sanacorp	Glycerol 85%		1

- 135 267 spectra from 702 *Apo-Ident* customers from a total of 34 684 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Glycerol 85%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Glycerol 85%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	540	0	55 819
Type B	0	1040	0	68 434
Type C	0	3068	18	135 267

The substance/substance group *Glycerol 85%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.8889 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.4231 %)
Type C	100.0000 % (> 99.6452 %)	99.4167 % (> 99.3195 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Glycerol 85%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Glycerine ointment (conserved)	32.48	—
Rose honey	50.82	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Glycerol 85%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30886	31737	2.15	49.14
30980	31956	1.66	50.06
31360	31956	1.39	49.31
31377	31737	1.26	50.93
31588	31588	0.00	49.08
31719	31719	0.00	50.83
31737	31737	0.00	51.34
31956	31956	0.00	50.59
34031	34031	0.00	49.26

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all

substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Glycolic acid 70%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30491-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Glycolic acid 70%; Acidum glycolicum 70%

Special notes

When selecting the *Glycolic acid 70%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Glycolic acid 70%	3	1	15

Second-stage model

For differentiation of the substance/substance group *Glycolic acid 70%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Glycolic acid 70%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Euro OTC	Glycolic acid 70%	1406006-01	31620	60	20140708
Euro OTC	Glycolic acid 70%	1406006-01	31647	60	20140708
Euro OTC	Glycolic acid 70%	1604050	32281	40	20160510*
Euro OTC	Glycolic acid 70%	1604050-03	34184	40	20180315

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 4 reference samples from the substance/substance group *Glycolic acid 70%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56159 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Glycolic acid 70%*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Glycolic acid 70%	1604050-01	33225	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 26 spectra from 17 *Apo-Ident* customers from 16 batches from the substance/substance group *Glycolic acid 70%*.
- Among them are spectra of independent samples from 15 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Glycolic acid 70%	121002201	1
Caelo	Glycolic acid 70%	18912183	1
Euro OTC	Glycolic acid 70%	1604050-01	6
Euro OTC	Glycolic acid 70%	16040501-01	1
Euro OTC	Glycolic acid 70%	3079344	1
Euro OTC	Glycolic acid 70%	160405002	1
Euro OTC	Glycolic acid 70%	164050-01	1
Euro OTC	Glycolic acid 70%	1109027-01	1
Euro OTC	Glycolic acid 70%	1210022-01	2
Euro OTC	Glycolic acid 70%	1401014-01	1
Euro OTC	Glycolic acid 70%	160405001	2
Euro OTC	Glycolic acid 70%	160405003	2
Euro OTC	Glycolic acid 70%	1604050-02	3
Merck	Glycolic acid 70%	S7410686	1
Phoenix	Glycolic acid 70%	1205037-01	1
Euro OTC	Glycolic acid 70%	1604050-03	1

- 138 327 spectra from 703 *Apo-Ident* customers from a total of 35 279 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Glycolic acid 70%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Glycolic acid 70%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	40	0	69 434
Type C	0	26	0	138 327

The substance/substance group *Glycolic acid 70%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6455 %)	100.0000 % (> 76.9231 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Glycolic acid 70%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Anionic hydrophilic cream SR (NRF p.27)	92.06	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Glycolic acid 70%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31620	32281	1.60	76.26
31647	32281	4.13	72.84
32281	32281	0.00	76.30
34184	32281	8.36	72.94

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by

laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Guaiazulene 25%, water-soluble**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30857-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Guaiazulene 25%, water-soluble

Special notes

When selecting the *Guaiazulene 25%, water-soluble* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Guaiazulene 25%, water-soluble	4	2	44

Second-stage model

For differentiation of the substance/substance group *Guaiazulene 25%, water-soluble* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Guaiazulene 25%, water-soluble*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Guaiazulene 25%,...	12246703	30857	40	20120831
Caelo	Guaiazulene 25%,...	13334401	31157	40	1411565
Caelo	Guaiazulene 25%,...	14130601	31462	60	20140423
Caelo	Guaiazulene 25%,...	190157	34455	40	20190131*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Guaiazulene 25%, water-soluble*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Guaiazulene 25%, water-soluble*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Guaiazulene 25%, water-soluble	161905	32321	40
Caelo	Guaiazulene 25%, water-soluble	173365	34100	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 186 spectra from 103 *Apo-Ident* customers from 48 batches from the substance/substance group *Guaiazulene 25%, water-soluble*.
- Among them are spectra of independent samples from 44 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alliance Healthcare	Guaiazulene 25%, water-soluble	13044901	1
anzag	Guaiazulene 25%, water-soluble	14G24-B03-301884	1
Caelo	Guaiazulene 25%, water-soluble	11303702	1
Caelo	Guaiazulene 25%, water-soluble	11303703	1
Caelo	Guaiazulene 25%, water-soluble	12246704	6
Caelo	Guaiazulene 25%, water-soluble	12158701	1
Caelo	Guaiazulene 25%, water-soluble	12G31-N03	1
Caelo	Guaiazulene 25%, water-soluble	13334406	4
Caelo	Guaiazulene 25%, water-soluble	17041405	1
Caelo	Guaiazulene 25%, water-soluble	14252104	6
Caelo	Guaiazulene 25%, water-soluble	154022302	1
Caelo	Guaiazulene 25%, water-soluble	2011905	1
Caelo	Guaiazulene 25%, water-soluble	12246701	2
Caelo	Guaiazulene 25%, water-soluble	17021503	3
Caelo	Guaiazulene 25%, water-soluble	15402306	6
Caelo	Guaiazulene 25%, water-soluble	15075501	10
Caelo	Guaiazulene 25%, water-soluble	13044906	4
Caelo	Guaiazulene 25%, water-soluble	1514U-03150	1
Caelo	Guaiazulene 25%, water-soluble	1515M-03150	1
Caelo	Guaiazulene 25%, water-soluble	516Q-03150	1
Caelo	Guaiazulene 25%, water-soluble	13044904	6
Caelo	Guaiazulene 25%, water-soluble	14130605	6
Caelo	Guaiazulene 25%, water-soluble	15075503	11
Caelo	Guaiazulene 25%, water-soluble	16190504	7
Caelo	Guaiazulene 25%, water-soluble	17021508	2
Caelo	Guaiazulene 25%, water-soluble	17336503	7
Caelo	Guaiazulene 25%, water-soluble	13044901	7
Caelo	Guaiazulene 25%, water-soluble	15402302	9
Caelo	Guaiazulene 25%, water-soluble	17336510	1
Caelo	Guaiazulene 25%, water-soluble	13334407	4
Caelo	Guaiazulene 25%, water-soluble	17336504	4
Caelo	Guaiazulene 25%, water-soluble	17192601	8
Caelo	Guaiazulene 25%, water-soluble	14252102	5
Caelo	Guaiazulene 25%, water-soluble	16190502	11
Caelo	Guaiazulene 25%, water-soluble	19015703	1
Caesar & Loretz GmbH Hi...	Guaiazulene 25%, water-soluble	15402306	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Guaiazulene 25%, water-soluble	13334406	1
Euro OTC	Guaiazulene 25%, water-soluble	17192601	1
Fagron	Guaiazulene 25%, water-soluble	11H30-N03	1
Fagron	Guaiazulene 25%, water-soluble	12G31-N03	1
Fagron	Guaiazulene 25%, water-soluble	14G24B03	1
Fagron	Guaiazulene 25%, water-soluble	17021503	1
Fagron	Guaiazulene 25%, water-soluble	14B12-B07-292053	1
Fagron	Guaiazulene 25%, water-soluble	13g31-n03	1
Fagron	Guaiazulene 25%, water-soluble	152716-0001	1
Fagron	Guaiazulene 25%, water-soluble	513936	1
gehe	Guaiazulene 25%, water-soluble	17021503	1
Gehe	Guaiazulene 25%, water-soluble	13334406	1
Gehe	Guaiazulene 25%, water-soluble	13334401	1
Gehe	Guaiazulene 25%, water-soluble	17021503	1
Caelo	Guaiazulene 25%, water-soluble	18176704	1
Noweda	Guaiazulene 25%, water-soluble	13044901	1
Noweda	Guaiazulene 25%, water-soluble	17021508	1
Phoenix	Guaiazulene 25%, water-soluble	17021503	1
sanacorp	Guaiazulene 25%, water-soluble	14G24-B03	1
Sanacorp	Guaiazulene 25%, water-soluble	12246701	2
Sanacorp	Guaiazulene 25%, water-soluble	4/AKD2	1
Caelo	Guaiazulene 25%, water-soluble	12019802	1
	Guaiazulene 25%, water-soluble	14B12-B07-292053	1
Caelo	Guaiazulene 25%, water-soluble	13334401	6
Caelo	Guaiazulene 25%, water-soluble	12246703	3
Caelo	Guaiazulene 25%, water-soluble	14130601	9
Caelo	Guaiazulene 25%, water-soluble		1

- 138 167 spectra from 703 *Apo-Ident* customers from a total of 35 249 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Guaiazulene 25%, water-soluble* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Guaiazulene 25%, water-soluble* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	176	10	138 167

The substance/substance group *Guaiazulene 25%, water-soluble* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	94.6237 % (> 93.0108 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Guaiiazulene 25%, water-soluble* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Pasta Cordes [®]	48.44	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Guaiiazulene 25%, water-soluble* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30857	31157	2.64	58.77
31157	31157	0.00	59.92
31462	31157	4.39	62.24
34455	34455	0.00	95.48

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Honeys**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30761-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Honeys; Honey; Mel; Mel rosatum; Rose honey

Special notes

When selecting the *Honeys* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Honey	4	3	31
Rose honey	3	1	16

Second-stage model

For differentiation of the substance/substance group *Honeys* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Honeys*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Honey	12132005	30761	40	1402562
Caelo	Honey	13269412	31341	40	20130913
Caelo	Honey	150791	32214	40	20150508*
Caelo	Honey	162659	32698	40	20161026*
Caelo	Rose honey	15406006	31957	60	20160120
Caelo	Rose honey	16104802	32988	40	1708304
Caelo	Rose honey	171208	33333	40	20170619*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 300 spectra of 7 reference samples from the substance/substance group *Honeys*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 7 different batches.
- 56 059 spectra from a total of 1109 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 240 spectra of 6 reference samples from the substance/substance group *Honeys*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Honey	11187911	30610	40
Caelo	Honey	171325	33718	40
Caelo	Honey	171332	33719	40
Caelo	Rose honey	181215	34050	40
Caelo	Honey	171325	33720	40
Caelo	Rose honey	171208	33721	40

- 69 234 spectra from a total of 1497 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 89 spectra from 30 *Apo-Ident* customers from 49 batches from the substance/substance group *Honeys*.
- Among them are spectra of independent samples from 47 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Honey	18026703	1
Caelo	Honey	12132007	1
Caelo	Honey	12132012	1
Caelo	Honey	13269413	1
Caelo	Honey	15417714	1
Caelo	Honey	17132502	2
Caelo	Honey	9011902	1
Caelo	Honey	16265901	1
Caelo	Honey	15079102	1
Caelo	Honey	L064168	1
Caelo	Honey	15079111	1
Caelo	Honey	L051150	1
Caelo	Honey	18026703	1
Caelo	Honey	12382406	1
Caelo	Honey	13269405	2
Caesar & Loretz GmbH	Honey	18173504	2
Caesar & Loretz GmbH, 4...	Honey	12132011	2
Caesar & Loretz GmbH, 4...	Honey	12382405	3
Caesar & Loretz GmbH, 4...	Honey	12382410	2
Caesar & Loretz GmbH, 4...	Honey	13269401	3
Caesar & Loretz GmbH, 4...	Honey	13269404	1
Caelo	Honey	15417703	1
Caelo	Honey	18026702	3
L12	Honey	16265909	3
L12	Honey	18173501	2
Caelo	Honey	15417707	4
L30	Honey	15417714	4
L30	Honey	17133201	2
L30	Honey	17132502	1
L30	Honey	3024337	1
Midas	Honey	16265906	1
Noweda	Honey	15079102	1

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Supplier	Substance	Batch	Spectra
Noweda	Honey	16265911	1
Noweda/Apomix	Honey	13269401	1
Caelo	Honey	13269403	4
Caelo	Honey	15079103	1
Phönix	Honey	13269403	1
PHÖNIX	Honey	16265901	1
Caelo	Rose honey	11258901	1
Caelo	Rose honey	4811M-02884	1
Caelo	Rose honey	12105302	1
Caelo	Rose honey	12105305	2
Caelo	Rose honey	12315005	1
Caelo	Rose honey	13170902	1
Caelo	Rose honey	14125603	1
Caelo	Rose honey	5091401	1
Caelo	Rose honey	13170906	1
Caelo	Rose honey	14125605	1
Caelo	Rose honey	15100801	2
Caelo	Rose honey	15406004	2
Caelo	Rose honey	15100803	1
Caelo	Rose honey	17120803	1
Caelo	Rose honey	14125607	1
Caelo	Rose honey	13170904	1
Ebert & Jacobi 02.08.16	Rose honey	15406006	1
Caelo	Honey	13269412	3
Caelo	Rose honey	15406006	4

- 138 264 spectra from 703 *Apo-Ident* customers from a total of 35 246 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Honeys* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Honeys* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	300	0	56 059
Type B	0	240	0	69 234
Type C	0	89	0	138 263

The substance/substance group *Honeys* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.5000 %)
Type C	100.0000 % (> 99.6446 %)	100.0000 % (> 93.2584 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Honeys* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Fennel honey (conserved)	17.03	—
Glycerine ointment (conserved)	21.98	—
Sorbitol solution 70% (non-crystallizi...	25.55	—
Glucose syrup	31.39	—
Cherry syrup (conserved)	47.49	—
Raspberry syrup (conserved)	47.65	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Honeys* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30761	30761	0.00	29.33
31341	30761	7.46	17.03
32214	32214	0.00	34.80
32698	32698	0.00	20.87
31957	32988	2.48	27.09
32988	32988	0.00	26.42
33333	33333	0.00	26.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Hydrophilic base emulsion (NRF p.25)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30709-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Hydrophilic base emulsion (NRF p.25); Emulsio basalis hydrophilica

Special notes

When selecting the *Hydrophilic base emulsion (NRF p.25)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Hydrophilic base emulsion (NRF p.25)	14	12	222

Second-stage model

For differentiation of the substance/substance group *Hydrophilic base emulsion (NRF p.25)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Hydrophilic base...	12173002	30709	40	20120628
Caelo	Hydrophilic base...	13305501	31176	40	1403535
Caelo	Hydrophilic base...	14063502	31340	20	20140307
Caelo	Hydrophilic base...	161156	32290	40	20160415*
Caelo	Hydrophilic base...	161155	32291	40	20160415*
Caelo	Hydrophilic base...	161154	32292	40	20160415*
Caelo	Hydrophilic base...	170444	33154	40	20170217*
Caelo	Hydrophilic base...	170443	33155	40	20170217*
Caelo	Hydrophilic base...	163400	33156	40	20161215*
Caelo	Hydrophilic base...	163398	33157	40	20161215*
Caelo	Hydrophilic base...	183112	34536	40	20181220*
Caelo	Hydrophilic base...	183113	34537	40	20181220*
Caelo	Hydrophilic base...	190281	34538	40	20190306*
Caelo	Hydrophilic base...	190282	34539	40	20190306*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 540 spectra of 14 reference samples from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 14 different batches.
- 55 819 spectra from a total of 1102 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 500 spectra of 13 reference samples from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydrophilic base emulsion (N...	163399	33158	40
Caelo	Hydrophilic base emulsion (N...	171184	33412	40
Caelo	Hydrophilic base emulsion (N...	171247	33413	40
Caelo	Hydrophilic base emulsion (N...	171182	33414	40
Caelo	Hydrophilic base emulsion (N...	171183	33415	40
Caelo	Hydrophilic base emulsion (N...	171702	33573	40
Caelo	Hydrophilic base emulsion (N...	171703	33574	40
Caelo	Hydrophilic base emulsion (N...	173421	33971	40
Caelo	Hydrophilic base emulsion (N...	180316	34133	40
Caelo	Hydrophilic base emulsion (N...	181075	34134	40
Caelo	Hydrophilic base emulsion (N...	181806	34248	40
Caelo	Hydrophilic base emulsion (N...	182588	34313	40
Caelo	Hydrophilic base emulsion (N...	14063502	31340 [†]	20

- 68974 spectra from a total of 1489 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH. Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1773 spectra from 328 *Apo-Ident* customers from 227 batches from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*.
- Among them are spectra of independent samples from 221 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
06,15	Hydrophilic base emulsion (N...	13394302	1
AHC 15.08.13 EK4,56	Hydrophilic base emulsion (N...	13107703	1
AHD	Hydrophilic base emulsion (N...	14063502	2
aliance healthcare 5.12...	Hydrophilic base emulsion (N...	13305501	1
Allianc. Health. /ca	Hydrophilic base emulsion (N...	16264202	1
Alliance health	Hydrophilic base emulsion (N...	14360201	2
Alliance Health 23.01.2...	Hydrophilic base emulsion (N...	13394302	2
Allianz Healthcare	Hydrophilic base emulsion (N...	16340001	1

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[†]These spectra were recorded from material of the same package as the corresponding calibration spectra (*Type A*). Hence, these spectra are not independent and are not of *Type B*.

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Supplier	Substance	Batch	Spectra
Anzag	Hydrophilic base emulsion (N...	16115602	1
Anzag	Hydrophilic base emulsion (N...	17044401	1
Anzag	Hydrophilic base emulsion (N...	17170301	1
Anzag	Hydrophilic base emulsion (N...	18258801	1
Anzag 03.04.13 ek: 4,56EUR	Hydrophilic base emulsion (N...	13039701	4
Anzag 19.12.12 ek:4,33	Hydrophilic base emulsion (N...	12310102	3
Anzag 27.11.12 ek:4,33	Hydrophilic base emulsion (N...	12230301	1
Caelo	Hydrophilic base emulsion (N...	15439901	8
Bayvers	Hydrophilic base emulsion (N...	17124702	2
Bombastus	Hydrophilic base emulsion (N...	1288103	1
Bombastus	Hydrophilic base emulsion (N...	15337601	4
Bombastus	Hydrophilic base emulsion (N...	1825801	1
Caello/Phönix	Hydrophilic base emulsion (N...	16249302	6
Caelo	Hydrophilic base emulsion (N...	14238702	4
Caelo	Hydrophilic base emulsion (N...	18107604	3
Caelo	Hydrophilic base emulsion (N...	10071203	1
Caelo	Hydrophilic base emulsion (N...	12128401	5
Caelo	Hydrophilic base emulsion (N...	12072002	2
Caelo	Hydrophilic base emulsion (N...	1218401	1
Caelo	Hydrophilic base emulsion (N...	19091204	1
Caelo	Hydrophilic base emulsion (N...	1213003	1
Caelo	Hydrophilic base emulsion (N...	23101202	1
Caelo	Hydrophilic base emulsion (N...	12230302	4
Caelo	Hydrophilic base emulsion (N...	28111203	1
Caelo	Hydrophilic base emulsion (N...	12230301	8
Caelo	Hydrophilic base emulsion (N...	12230203	5
Caelo	Hydrophilic base emulsion (N...	28121206	1
Caelo	Hydrophilic base emulsion (N...	12310101	11
Caelo	Hydrophilic base emulsion (N...	26031302	1
Caelo	Hydrophilic base emulsion (N...	20031306	1
Caelo	Hydrophilic base emulsion (N...	11274001	1
Caelo	Hydrophilic base emulsion (N...	13076803	19
Caelo	Hydrophilic base emulsion (N...	12288103	2
Caelo	Hydrophilic base emulsion (N...	30041304	1
Caelo	Hydrophilic base emulsion (N...	10051303	1
Caelo	Hydrophilic base emulsion (N...	6051304	1
Caelo	Hydrophilic base emulsion (N...	13076801	17
Caelo	Hydrophilic base emulsion (N...	12295002	1
Caelo	Hydrophilic base emulsion (N...	13076702	12
Caelo	Hydrophilic base emulsion (N...	15061302	1
Caelo	Hydrophilic base emulsion (N...	11274003	1
Caelo	Hydrophilic base emulsion (N...	1306801	1
Caelo	Hydrophilic base emulsion (N...	13107703	18
Caelo	Hydrophilic base emulsion (N...	9081301	1
Caelo	Hydrophilic base emulsion (N...	10082013A	1
Caelo	Hydrophilic base emulsion (N...	13195901	20
Caelo	Hydrophilic base emulsion (N...	2101304	1
Caelo	Hydrophilic base emulsion (N...	18111307	1
Caelo	Hydrophilic base emulsion (N...	12121308	1
Caelo	Hydrophilic base emulsion (N...	24011403	1
Caelo	Hydrophilic base emulsion (N...	30011504	1
Caelo	Hydrophilic base emulsion (N...	21031403	1
Caelo	Hydrophilic base emulsion (N...	29041406	1
Caelo	Hydrophilic base emulsion (N...	14063503	1
Caelo	Hydrophilic base emulsion (N...	20061407	1
Caelo	Hydrophilic base emulsion (N...	13394303	1
Caelo	Hydrophilic base emulsion (N...	14140901	12
Caelo	Hydrophilic base emulsion (N...	15081402	1
Caelo	Hydrophilic base emulsion (N...	14238802	6
Caelo	Hydrophilic base emulsion (N...	14238901	30

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	1428901	2
Caelo	Hydrophilic base emulsion (N...	29101402	1
Caelo	Hydrophilic base emulsion (N...	14351202	7
Caelo	Hydrophilic base emulsion (N...	23011503	1
Caelo	Hydrophilic base emulsion (N...	1507702	1
Caelo	Hydrophilic base emulsion (N...	1507002	1
Caelo	Hydrophilic base emulsion (N...	14360301	29
Caelo	Hydrophilic base emulsion (N...	11031504	1
Caelo	Hydrophilic base emulsion (N...	22042015A	1
Caelo	Hydrophilic base emulsion (N...	29041502	1
Caelo	Hydrophilic base emulsion (N...	15077101	27
Caelo	Hydrophilic base emulsion (N...	30051501	1
Caelo	Hydrophilic base emulsion (N...	2061501	1
Caelo	Hydrophilic base emulsion (N...	23062015D	1
Caelo	Hydrophilic base emulsion (N...	23071507	1
Caelo	Hydrophilic base emulsion (N...	15209801	22
Caelo	Hydrophilic base emulsion (N...	18081512	1
Caelo	Hydrophilic base emulsion (N...	15337801	24
Caelo	Hydrophilic base emulsion (N...	15337601	7
Caelo	Hydrophilic base emulsion (N...	152009902	1
Caelo	Hydrophilic base emulsion (N...	15337301	25
Caelo	Hydrophilic base emulsion (N...	1537301	1
Caelo	Hydrophilic base emulsion (N...	15440101	24
Caelo	Hydrophilic base emulsion (N...	16115602	41
Caelo	Hydrophilic base emulsion (N...	1071602	1
Caelo	Hydrophilic base emulsion (N...	16115302	13
Caelo	Hydrophilic base emulsion (N...	15442001	1
Caelo	Hydrophilic base emulsion (N...	16249301	13
Caelo	Hydrophilic base emulsion (N...	16264202	7
Caelo	Hydrophilic base emulsion (N...	15255816	1
Caelo	Hydrophilic base emulsion (N...	16244101	1
Caelo	Hydrophilic base emulsion (N...	16264201	5
Caelo	Hydrophilic base emulsion (N...	16339901	46
Caelo	Hydrophilic base emulsion (N...	16325801	1
Caelo	Hydrophilic base emulsion (N...	1624101	1
Caelo	Hydrophilic base emulsion (N...	1634002	1
Caelo	Hydrophilic base emulsion (N...	21031704	1
Caelo	Hydrophilic base emulsion (N...	17044301	2
Caelo	Hydrophilic base emulsion (N...	16340001	5
Caelo	Hydrophilic base emulsion (N...	19041711	1
Caelo	Hydrophilic base emulsion (N...	16340002	4
Caelo	Hydrophilic base emulsion (N...	17118401	10
Caelo	Hydrophilic base emulsion (N...	17061705	1
Caelo	Hydrophilic base emulsion (N...	162640101	1
Caelo	Hydrophilic base emulsion (N...	17124702	16
Caelo	Hydrophilic base emulsion (N...	3140817	1
Caelo	Hydrophilic base emulsion (N...	21081705	1
Caelo	Hydrophilic base emulsion (N...	16091701	1
Caelo	Hydrophilic base emulsion (N...	17170101	7
Caelo	Hydrophilic base emulsion (N...	6121702	1
Caelo	Hydrophilic base emulsion (N...	17342203	4
Caelo	Hydrophilic base emulsion (N...	19021803	1
Caelo	Hydrophilic base emulsion (N...	17226903	17
Caelo	Hydrophilic base emulsion (N...	17342202	17
Caelo	Hydrophilic base emulsion (N...	25041803	1
Caelo	Hydrophilic base emulsion (N...	18031601	10
Caelo	Hydrophilic base emulsion (N...	23051803	1
Caelo	Hydrophilic base emulsion (N...	9061831	1
Caelo	Hydrophilic base emulsion (N...	18107602	9
Caelo	Hydrophilic base emulsion (N...	30081803	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	12091802	1
Caelo	Hydrophilic base emulsion (N...	28111808	1
Caelo	Hydrophilic base emulsion (N...	18180702	5
Caelo	Hydrophilic base emulsion (N...	18180601	11
Caelo	Hydrophilic base emulsion (N...	18258801	13
Caelo	Hydrophilic base emulsion (N...	18311202	4
Caelo	Hydrophilic base emulsion (N...	19028101	10
Caelo	Hydrophilic base emulsion (N...	19140102	3
Caelo	Hydrophilic base emulsion (N...	19181001	4
Caelo	Hydrophilic base emulsion (N...	16115401	6
Caelo	Hydrophilic base emulsion (N...	162433201	1
Caelo	Hydrophilic base emulsion (N...	14141003	2
Caelo	Hydrophilic base emulsion (N...	14238101	1
Caelo	Hydrophilic base emulsion (N...	14063601	26
Caelo	Hydrophilic base emulsion (N...	18258901	6
Caelo	Hydrophilic base emulsion (N...	15440102	3
Caelo	Hydrophilic base emulsion (N...	17124701	3
Caelo	Hydrophilic base emulsion (N...	12071901	4
Caelo	Hydrophilic base emulsion (N...	16071701	1
Caelo	Hydrophilic base emulsion (N...	13397601	45
Caelo	Hydrophilic base emulsion (N...	15077002	10
Caelo	Hydrophilic base emulsion (N...	13305401	31
Caelo	Hydrophilic base emulsion (N...	17226801	37
Caelo	Hydrophilic base emulsion (N...	19028201	5
Caelo	Hydrophilic base emulsion (N...	19140101	4
Caelo	Hydrophilic base emulsion (N...	161115401	1
Caelo	Hydrophilic base emulsion (N...	18107501	27
Caelo	Hydrophilic base emulsion (N...	18311301	3
Caelo	Hydrophilic base emulsion (N...	13107702	1
Caelo	Hydrophilic base emulsion (N...	152100001	1
Caelo	Hydrophilic base emulsion (N...	154401014	1
Caelo	Hydrophilic base emulsion (N...	18031802	12
Caelo	Hydrophilic base emulsion (N...	13195801	10
Caelo	Hydrophilic base emulsion (N...	14239103	7
Caelo	Hydrophilic base emulsion (N...	17170201	7
Caelo	Hydrophilic base emulsion (N...	1463502	1
Caelo	Hydrophilic base emulsion (N...	15209901	11
Caelo	Hydrophilic base emulsion (N...	17118301	22
Caelo	Hydrophilic base emulsion (N...	17342101	34
Caelo	Hydrophilic base emulsion (N...	18180701	11
Caelo	Hydrophilic base emulsion (N...	13039701	15
Caelo	Hydrophilic base emulsion (N...	13076802	1
Caelo	Hydrophilic base emulsion (N...	13394304	11
Caelo	Hydrophilic base emulsion (N...	14360403	5
Caelo	Hydrophilic base emulsion (N...	1514U-03325	1
Caelo	Hydrophilic base emulsion (N...	914E-03325	1
Caelo	Hydrophilic base emulsion (N...	15076803	7
Caelo	Hydrophilic base emulsion (N...	1515J-03325	1
Caelo	Hydrophilic base emulsion (N...	15439801	28
Caelo	Hydrophilic base emulsion (N...	14238801	15
Caelo	Hydrophilic base emulsion (N...	153337801	1
Caelo	Hydrophilic base emulsion (N...	17124703	4
Caelo	Hydrophilic base emulsion (N...	18107603	10
Caelo	Hydrophilic base emulsion (N...	18311302	12
Caelo	Hydrophilic base emulsion (N...	1831102	1
Caelo	Hydrophilic base emulsion (N...	13305601	10
Caelo	Hydrophilic base emulsion (N...	15440001	27
Caelo	Hydrophilic base emulsion (N...	12173003	1
Caelo	Hydrophilic base emulsion (N...	12310102	16
Caelo	Hydrophilic base emulsion (N...	14360401	2

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	14238701	11
Caelo	Hydrophilic base emulsion (N...	16249202	5
Caelo	Hydrophilic base emulsion (N...	17227001	9
Caelo	Hydrophilic base emulsion (N...	18107701	7
Caelo	Hydrophilic base emulsion (N...	10831701	1
Caelo	Hydrophilic base emulsion (N...	15440002	8
Caelo	Hydrophilic base emulsion (N...	16115303	11
Caelo	Hydrophilic base emulsion (N...	13305503	5
Caelo	Hydrophilic base emulsion (N...	17342301	7
Caelo	Hydrophilic base emulsion (N...	18259001	6
Caelo	Hydrophilic base emulsion (N...	17124701-20170818Ma9	1
Caelo	Hydrophilic base emulsion (N...	15210001	15
Caelo	Hydrophilic base emulsion (N...	16264203	1
Caelo	Hydrophilic base emulsion (N...	15029901	1
Caelo	Hydrophilic base emulsion (N...	15337701	11
Caelo	Hydrophilic base emulsion (N...	16249201	17
Caelo	Hydrophilic base emulsion (N...	17170301	35
Caelo	Hydrophilic base emulsion (N...	19140201	1
Caelo	Hydrophilic base emulsion (N...	16264101	31
Caelo	Hydrophilic base emulsion (N...	14360202	4
Caelo	Hydrophilic base emulsion (N...	15077003	5
Caelo	Hydrophilic base emulsion (N...	13039702	2
Caelo	Hydrophilic base emulsion (N...	13195902	4
Caelo	Hydrophilic base emulsion (N...	13394402	4
Caelo	Hydrophilic base emulsion (N...	14063702	10
Caelo	Hydrophilic base emulsion (N...	15076901	12
Caelo	Hydrophilic base emulsion (N...	15337602	5
Caelo	Hydrophilic base emulsion (N...	6115401	1
Caelo	Hydrophilic base emulsion (N...	16249302	6
Caelo	Hydrophilic base emulsion (N...	16339801	12
Caeo/Noweda	Hydrophilic base emulsion (N...	15440001	1
Caesar & Lorenz	Hydrophilic base emulsion (N...	13195901	1
Caesar & Lorenz	Hydrophilic base emulsion (N...	14238901	1
Caesar & Lorenz GmbH	Hydrophilic base emulsion (N...	17342101	1
caesar & loretz	Hydrophilic base emulsion (N...	16115302	1
Caesar & Loretz	Hydrophilic base emulsion (N...	13195801	1
caesar & Loretz GmbH	Hydrophilic base emulsion (N...	13394304	2
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	15077002	1
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	18258901	1
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	18311302	4
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	18258801	3
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	18180601	2
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	19028101	1
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	15439801	1
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	16115602	1
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	16151602	1
Caesar & Loretz GmbH, 4...	Hydrophilic base emulsion (N...	12310101	1
Caesar & Loretz GmbH, 4...	Hydrophilic base emulsion (N...	13107703	1
Caesar & Loretz GmbH/Gehe	Hydrophilic base emulsion (N...	19028202	1
Caesar & Loretz GmbH/Mi...	Hydrophilic base emulsion (N...	19028101	1
Caesar & Loretz/AHD	Hydrophilic base emulsion (N...	16249201	1
Caesar&Loretz GmbH	Hydrophilic base emulsion (N...	15439801	1
Caesar&Loretz GmbH	Hydrophilic base emulsion (N...	15337301	1
Caesar&Loretz GmbH	Hydrophilic base emulsion (N...	18180601	1
Caesar&Loretz GmbH/ All...	Hydrophilic base emulsion (N...	16264202	1
Caesar&Loretz GmbH/ Gehe	Hydrophilic base emulsion (N...	15439801	1
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	13195901	1
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	13397601	1
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	15077101	2
Caesar&lorenz,AHC	Hydrophilic base emulsion (N...	14063601	1

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Supplier	Substance	Batch	Spectra
Caesar/Lorenz	Hydrophilic base emulsion (N...	13076702	1
Caesar/Noweda	Hydrophilic base emulsion (N...	12071901	1
Caesar/Noweda	Hydrophilic base emulsion (N...	5011E-03325	1
Caesar/Noweda	Hydrophilic base emulsion (N...	15440101	1
Cealo	Hydrophilic base emulsion (N...	15077101	3
Cealo	Hydrophilic base emulsion (N...	17170201	1
cealo/noveda	Hydrophilic base emulsion (N...	15209901	1
Cealo/Sana	Hydrophilic base emulsion (N...	18031601	1
Ebert 12.09.2016	Hydrophilic base emulsion (N...	16115602	1
Eigen/Defektur	Hydrophilic base emulsion (N...	15337602	1
Eigene Herstellung	Hydrophilic base emulsion (N...	13305601	1
EuRho/Sanac	Hydrophilic base emulsion (N...	13305601	3
Euro OTC	Hydrophilic base emulsion (N...	16115602	1
Euro OTC	Hydrophilic base emulsion (N...	16249302	2
euro//Noweda	Hydrophilic base emulsion (N...	18258801	1
Fagron	Hydrophilic base emulsion (N...	13305401	5
Fagron	Hydrophilic base emulsion (N...	16115302	1
Fagron	Hydrophilic base emulsion (N...	16264101	1
Fagron	Hydrophilic base emulsion (N...	13195901	1
Fagron	Hydrophilic base emulsion (N...	15439801	2
Fiebig ek:4,26EUR 18.09.12	Hydrophilic base emulsion (N...	12173003	1
Gehe	Hydrophilic base emulsion (N...	13195801	1
Gehe	Hydrophilic base emulsion (N...	13397601	2
GEHE	Hydrophilic base emulsion (N...	18107501	1
GEHE 10.03.2014	Hydrophilic base emulsion (N...	14063502	2
Gehe 21-01-2019	Hydrophilic base emulsion (N...	18180601	1
Gehe am 6.03.2014	Hydrophilic base emulsion (N...	13195801	1
Caelo	Hydrophilic base emulsion (N...	1310773	2
Caelo	Hydrophilic base emulsion (N...	13196001	11
Caelo	Hydrophilic base emulsion (N...	16264101/1310117	1
Henry Lamotte Oils Gmbh...	Hydrophilic base emulsion (N...	13397601	1
Herstellung	Hydrophilic base emulsion (N...	13305501	2
Hubertus Apotheke	Hydrophilic base emulsion (N...	15209901	1
Caelo	Hydrophilic base emulsion (N...	18031701	37
Lamotte	Hydrophilic base emulsion (N...	16264102	1
lamotte phönix	Hydrophilic base emulsion (N...	18107602	1
Maros	Hydrophilic base emulsion (N...	5006613	1
Noweda	Hydrophilic base emulsion (N...	12230301	1
Noweda	Hydrophilic base emulsion (N...	13076801	1
Noweda	Hydrophilic base emulsion (N...	15209801	1
Noweda	Hydrophilic base emulsion (N...	1626402	1
Noweda	Hydrophilic base emulsion (N...	17118401	1
Noweda	Hydrophilic base emulsion (N...	18107501	1
Caelo	Hydrophilic base emulsion (N...	14141004	13
Caelo	Hydrophilic base emulsion (N...	14360201	11
Caelo	Hydrophilic base emulsion (N...	13394302	10
Phoenix	Hydrophilic base emulsion (N...	13397601	1
Phoenix	Hydrophilic base emulsion (N...	13195901	1
Phoenix	Hydrophilic base emulsion (N...	14063502	1
Phoenix	Hydrophilic base emulsion (N...	14063701	1
Phoenix	Hydrophilic base emulsion (N...	16249302	1
Phoenix	Hydrophilic base emulsion (N...	17118301	1
Phoenix	Hydrophilic base emulsion (N...	17170301	1
PHOENIX 03.06.2014	Hydrophilic base emulsion (N...	14063701	1
PHOENIX am 27.01.2014	Hydrophilic base emulsion (N...	13305401	1
Euro OTC	Hydrophilic base emulsion (N...	14063702	2
Phonix	Hydrophilic base emulsion (N...	14063601	1
phönix	Hydrophilic base emulsion (N...	16339901	1
phönix	Hydrophilic base emulsion (N...	17044401	2
Phönix	Hydrophilic base emulsion (N...	13039701	1

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Supplier	Substance	Batch	Spectra
Phönix	Hydrophilic base emulsion (N...	13076803	1
Phönix	Hydrophilic base emulsion (N...	17342202	1
PHÖNIX	Hydrophilic base emulsion (N...	17342101	1
Caelo	Hydrophilic base emulsion (N...	17044401	25
Caelo	Hydrophilic base emulsion (N...	1704401	1
Caelo	Hydrophilic base emulsion (N...	13730153	1
Caelo	Hydrophilic base emulsion (N...	1710301	1
Phönix Gotha	Hydrophilic base emulsion (N...	13195801	1
Phönix/Phönix	Hydrophilic base emulsion (N...	17118301	1
sanacorp	Hydrophilic base emulsion (N...	15210001	2
Sanacorp	Hydrophilic base emulsion (N...	12128401	2
Sanacorp	Hydrophilic base emulsion (N...	12230203	1
Sanacorp	Hydrophilic base emulsion (N...	13039702	1
Sanacorp	Hydrophilic base emulsion (N...	13195901	1
Sanacorp	Hydrophilic base emulsion (N...	13305401	5
Sanacorp	Hydrophilic base emulsion (N...	13397601	2
Sanacorp	Hydrophilic base emulsion (N...	14063601	3
Sanacorp	Hydrophilic base emulsion (N...	14141004	1
Sanacorp	Hydrophilic base emulsion (N...	14360301	2
Sanacorp	Hydrophilic base emulsion (N...	14238901	1
Sanacorp	Hydrophilic base emulsion (N...	15337301	2
Sanacorp	Hydrophilic base emulsion (N...	17124701	1
Sanacorp	Hydrophilic base emulsion (N...	17227001	1
Sanacorp	Hydrophilic base emulsion (N...	18031702	1
Sanacorp	Hydrophilic base emulsion (N...	18107602	1
SANACORP	Hydrophilic base emulsion (N...	19028101	1
Caelo	Hydrophilic base emulsion (N...	14239002	3
Caelo	Hydrophilic base emulsion (N...	15209902	8
Euro OTC	Hydrophilic base emulsion (N...	13196001	1
Fagron	Hydrophilic base emulsion (N...	17118401	1
wepa/Sanaco	Hydrophilic base emulsion (N...	16115303	1
Caelo	Hydrophilic base emulsion (N...	12173002	5
Caelo	Hydrophilic base emulsion (N...		3
Caelo	Hydrophilic base emulsion (N...	13305501	5
Caelo	Hydrophilic base emulsion (N...	14063502	10
Sanacorp	Hydrophilic base emulsion (N...		1

- 136 580 spectra from 703 *Apo-Ident* customers from a total of 35 079 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Hydrophilic base emulsion (NRF p.25)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Hydrophilic base emulsion (NRF p.25)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	540	0	55 819
Type B	0	496	4	68 974
Type C	0	1679	94	136 580

The substance/substance group *Hydrophilic base emulsion (NRF p.25)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.8889 %)
Type B	100.0000 % (> 99.9653 %)	99.2000 % (> 98.6000 %)
Type C	100.0000 % (> 99.6452 %)	94.6983 % (> 94.5290 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Hydrophilic base emulsion (NRF p.25)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Non-ionic hydrous liniment SR/DAC (NRF...	19.93	—
Hydrated liniment SR/DAC (NRF p.40)	27.25	—
Polyhexanide solution 20%	29.67	—
Dextrorotary lactic acid 20%	30.13	—
Chest elixir	30.24	—
Gel basis Audur®	30.93	—
Hydrophilic cream, non-ionic SR (NRF p...	32.29	—
Liquorice juice purified, diluted	36.19	—
Hydrophilic cream, non-ionic without p...	39.23	—
Lotio Cordes®	39.55	—
Condurango wine	39.65	—
Anionic hydrophilic cream SR (NRF p.27)	42.62	—
Aluminium acetotartrate solution	45.12	—
Acetic acid 30%	46.83	—
Fortified wine	47.69	—
Glycolic acid 70%	48.73	—
Chlorhexidine digluconate solution 20%	49.12	—
Sodium lactate solution 50%	49.43	—
Anionic hydrophlic cream without prese...	51.23	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Hydrophilic base emulsion (NRF p.25)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33155	33155	0.00	27.73
33156	33156	0.00	27.72
32291	32291	0.00	32.41
31176	31176	0.00	28.69
32292	32292	0.00	32.80
30709	33157	4.32	30.91
34536	34536	0.00	29.55
34537	34537	0.00	29.58
34538	34538	0.00	28.18
34539	34539	0.00	28.65
33154	33154	0.00	28.46
33157	33157	0.00	27.14
31340	32290	4.43	28.36
32290	32290	0.00	31.29

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Hydrophilic ointments
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30631-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Hydrophilic ointments; Anionic hydrophilic cream DAB; Anionic hydrophilic cream SR (NRF p.27); Anionic hydrophilic cream with propylene glycol; Anionic hydrophilic cream without preservatives; Base cream, diluted; Base cream, hydrophobic DAC; Cremor basalis hydrophobicus; Hydrophilic cream, non-ionic SR (NRF p.26); Hydrophilic cream, non-ionic without preservatives SR; Skin care ointment W/L SR; Skin care ointment W/L SR (without preservatives); Transdermal base cream; Unguentum emulsificans aquosum cum propylenglycolum; Unguentum emulsificans aquosum DAB; Unguentum emulsificans aquosum N sine conservante SR; Unguentum emulsificans aquosum N SR (NRF S. 26); Unguentum emulsificans aquosum sine conservante; Unguentum emulsificans aquosum SR (NRF S. 27); Wolff® base half-fat cream

Special notes

When selecting the *Hydrophilic ointments* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Anionic hydrophilic cream DAB	13	83	1408
Anionic hydrophilic cream SR (NRF p.27)	15	17	821
Anionic hydrophilic cream with propylene glycol	11	33	220
Anionic hydrophilic cream without preservatives	3	2	58
Base cream, diluted	3	2	2
Base cream, hydrophobic DAC	12	25	482
Hydrophilic cream, non-ionic SR (NRF p.26)	8	20	666
Hydrophilic cream, non-ionic without preservatives SR	6	2	119
Skin care ointment W/L SR	3	2	39
Skin care ointment W/L SR (without preservatives)	4	2	12
Transdermal base cream	2	2	25
Wolff [®] base half-fat cream	5	2	100

Second-stage model

For differentiation of the substance/substance group *Hydrophilic ointments* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Hydrophilic ointments*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Anionic hydrophi...	14138901	31440	40	AR-15-FG-008131-01
Caelo	Anionic hydrophi...	154004	32022	60	20151117*
Caelo	Anionic hydrophi...	154005	32023	60	20151118*
Caelo	Anionic hydrophi...	154007	32024	60	20151124*
Caelo	Anionic hydrophi...	154009	32025	60	20151130*
Caelo	Anionic hydrophi...	154012	32026	60	20151130*
Caelo	Anionic hydrophi...	154012	32027	60	20151130*
Caelo	Anionic hydrophi...	154013	32028	60	20151120*
Caelo	Anionic hydrophi...	154014	32029	60	20151124*
Caelo	Anionic hydrophi...	154015	32030	60	20151117*
Caelo	Anionic hydrophi...	154317	32031	60	20151215*
Caelo	Anionic hydrophi...	154317	32032	60	20151215*
Caelo	Anionic hydrophi...	153971	32038	60	20151113*
Caelo	Anionic hydrophi...	153971	32039	60	20151113*
Caelo	Anionic hydrophi...	153573	32052	60	20151015*
Caelo	Anionic hydrophi...	153573	32053	60	20151015*
Caelo	Anionic hydrophi...	161525	32435	40	20160518*
Caelo	Anionic hydrophi...	161525	32436	40	20160518*
apomix	Anionic hydrophi...	25A210812	30895	60	20120821
apomix	Anionic hydrophi...	04A050219	34507	40	20190205
Bombastus	Anionic hydrophi...	280574	31054	40	1405103
Bombastus	Anionic hydrophi...	19000650	34506	40	20190205
Caelo	Anionic hydrophi...	14063303	31450	40	20140512
Caelo	Anionic hydrophi...	161075	32115	40	20160406*
Caelo	Anionic hydrophi...	161075	32116	40	20160406*
Caelo	Anionic hydrophi...	153295	32123	40	20150924*
Caelo	Anionic hydrophi...	153296	32124	40	20150924*
Caelo	Anionic hydrophi...	153865	32125	40	20151211*
Caelo	Anionic hydrophi...	153866	32126	40	20151211*

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Anionic hydrophi...	160196	32127	40	20160127*
Caelo	Anionic hydrophi...	160198	32128	40	20160127*
Caelo	Anionic hydrophi...	161267	32225	40	20160504*
Caelo	Anionic hydrophi...	162155	32386	40	20160728*
Caelo	Anionic hydrophi...	162156	32387	40	20160728*
Caelo	Anionic hydrophi...	12221002	30880	50	20120911
Caelo	Anionic hydrophi...	13343401	31231	40	1403496
Caelo	Anionic hydrophi...	13244401	31241	30	20130726
Caelo	Anionic hydrophi...	14030701	31470	40	20140204
Caelo	Anionic hydrophi...	15048501	31741	60	9128
Caelo	Anionic hydrophi...	160673	32129	40	20160310*
Caelo	Anionic hydrophi...	160673	32130	40	20160310*
Caelo	Anionic hydrophi...	160673	32131	40	20160310*
Caelo	Anionic hydrophi...	160673	32132	40	20160310*
Caelo	Anionic hydrophi...	160677	32141	40	20160310*
Caelo	Anionic hydrophi...	160677	32142	40	20160310*
Caelo	Anionic hydrophi...	161916	32620	40	20160630*
Caelo	Anionic hydrophi...	161917	32621	40	20160630*
Caelo	Anionic hydrophi...	162901	32882	40	20161018*
Caelo	Anionic hydrophi...	171023	33354	40	20170419*
apomix	Anionic hydrophi...	11B020914	31537	60	1411614
apomix	Anionic hydrophi...	05B200415	31661	70	20150422
apomix	Anionic hydrophi...	08B200819	34681	40	20190820
Caelo	Base cream, dilu...	14242803	31515	60	20140813*
Caelo	Base cream, dilu...	181758	34267	40	20180716*
Caelo	Base cream, dilu...	191056	34544	40	20190426*
Caelo	Base cream, hydr...	12151602	30758	40	20120612
Caelo	Base cream, hydr...	12308102	30931	40	20121031
Caelo	Base cream, hydr...	13085601	31002	40	20130404
Caelo	Base cream, hydr...	14028101	31478	40	AR-15-FG-009038-01
Caelo	Base cream, hydr...	15221202	31799	60	1605111
Caelo	Base cream, hydr...	154212	31906	60	20151211*
Caelo	Base cream, hydr...	154213	31907	60	20151211*
Caelo	Base cream, hydr...	171920	33595	40	20170710*
Fagron	Base cream, hydr...	17C06-T08-042287	33964	40	20170425
Fagron	Base cream, hydr...	18L18-T09-062847	34598	40	20190213
Pharmachem	Base cream, hydr...	150404	31644	60	20150306
Pharmachem	Base cream, hydr...	160825	32303	40	20160517
apomix	Hydrophilic crea...	12A160419	34525	40	20190416
Bombastus	Hydrophilic crea...	00273130	30769	40	1405255
Bombastus	Hydrophilic crea...	288882	31568	60	20140722
Caelo	Hydrophilic crea...	14127002	31477	40	20140512
Caelo	Hydrophilic crea...	14304902	31591	60	20141013
Caelo	Hydrophilic crea...	153656	31996	40	20151211*
Fagron	Hydrophilic crea...	14E07-M04	31593	60	20140513
Fagron	Hydrophilic crea...	15A110619	34508	40	20190612
apomix	Hydrophilic crea...	21B141013	31188	40	1405386
apomix	Hydrophilic crea...	14B240614	31500	20	1411613
apomix	Hydrophilic crea...	14B240614	31516	60	20140624
apomix	Hydrophilic crea...	22B061114	31565	60	20141106
apomix	Hydrophilic crea...	01B120115	31599	60	20150114
apomix	Hydrophilic crea...	25B081215	31962	60	20151209
apomix	Hydrophilic crea...	13B090919	34683	40	20190909
apomix	Skin care ointme...	88B111212	31040	40	20121211
apomix	Skin care ointme...	10A050214	31503	60	1412041
Pharmachem	Skin care ointme...	170117	33295	40	20180131
apomix	Skin care ointme...	01B110113	31039	40	1403321
apomix	Skin care ointme...	31B020714	31600	60	20140702
apomix	Skin care ointme...	24B200617	33641	40	20170620
apomix	Skin care ointme...	35A040919	34680	40	20190904

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Transdermal base...	12H17-T02-000281	31008	40	1406052
Fagron	Transdermal base...	12H17-T02-000281	31042	40	20130110
Fagron	Transdermal base...	15A28-T10-018922	32346	40	20150804
Dr. Wolff	Wolff [®] base half...	230200	30631	40	20120210
Dr. Wolff	Wolff [®] base half...	236420	30837	40	1410330
Dr. Wolff	Wolff [®] base half...	331551	31086	40	20130221
Dr. Wolff	Wolff [®] base half...	432611	31487	40	20140410
Dr. Wolff	Wolff [®] base half...	810800	34689	40	20190103

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 4530 spectra of 97 reference samples from the substance/substance group *Hydrophilic ointments*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 85 different batches.
- 51 829 spectra from a total of 1031 batches from further 207 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 11 783 spectra of 281 reference samples from the substance/substance group *Hydrophilic ointments*.
- Among them are spectra of independent samples from 192 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream DAB	154321	32033	60
Caelo	Anionic hydrophilic cream DAB	153529	32035	60
Caelo	Anionic hydrophilic cream DAB	153530	32036	60
Caelo	Anionic hydrophilic cream DAB	153970	32037	60

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*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream DAB	153972	32040	60
Caelo	Anionic hydrophilic cream DAB	153973	32041	60
Caelo	Anionic hydrophilic cream DAB	153575	32042	60
Caelo	Anionic hydrophilic cream DAB	153969	32043	60
Caelo	Anionic hydrophilic cream DAB	154281	32045	60
Caelo	Anionic hydrophilic cream DAB	154282	32046	45
Caelo	Anionic hydrophilic cream DAB	153531	32048	45
Caelo	Anionic hydrophilic cream DAB	153571	32049	60
Caelo	Anionic hydrophilic cream DAB	153572	32050	60
Caelo	Anionic hydrophilic cream DAB	153574	32051	60
Caelo	Anionic hydrophilic cream DAB	154284	32055	60
Caelo	Anionic hydrophilic cream DAB	153194	32057	60
Caelo	Anionic hydrophilic cream DAB	154285	32059	60
Caelo	Anionic hydrophilic cream DAB	154283	32061	60
Caelo	Anionic hydrophilic cream DAB	153968	32063	60
Caelo	Anionic hydrophilic cream DAB	160578	32145	40
Caelo	Anionic hydrophilic cream DAB	161031	32146	40
Caelo	Anionic hydrophilic cream DAB	161033	32148	40
Caelo	Anionic hydrophilic cream DAB	161510	32218	40
Caelo	Anionic hydrophilic cream DAB	161507	32220	40
Caelo	Anionic hydrophilic cream DAB	161508	32222	40
Caelo	Anionic hydrophilic cream DAB	161506	32426	40
Caelo	Anionic hydrophilic cream DAB	161798	32431	40
Caelo	Anionic hydrophilic cream DAB	161529	32437	40
Caelo	Anionic hydrophilic cream DAB	161526	32440	40
Caelo	Anionic hydrophilic cream DAB	161527	32444	40
Caelo	Anionic hydrophilic cream DAB	161528	32447	40
Caelo	Anionic hydrophilic cream DAB	161560	32450	40
Caelo	Anionic hydrophilic cream DAB	161561	32451	40
Caelo	Anionic hydrophilic cream DAB	161563	32452	40
Caelo	Anionic hydrophilic cream DAB	161564	32453	40
Caelo	Anionic hydrophilic cream DAB	161589	32644	40
Caelo	Anionic hydrophilic cream DAB	161796	32645	40
Caelo	Anionic hydrophilic cream DAB	161797	32647	40
Caelo	Anionic hydrophilic cream DAB	161800	32648	40
Caelo	Anionic hydrophilic cream DAB	162500	32649	40
Caelo	Anionic hydrophilic cream DAB	162501	32651	40
Caelo	Anionic hydrophilic cream DAB	162502	32653	40
Caelo	Anionic hydrophilic cream DAB	162589	32654	40
Caelo	Anionic hydrophilic cream DAB	162590	32656	40
Caelo	Anionic hydrophilic cream DAB	162591	32658	40
Caelo	Anionic hydrophilic cream DAB	162592	32661	40
Caelo	Anionic hydrophilic cream DAB	162593	32663	40
Caelo	Anionic hydrophilic cream DAB	162594	32667	40
Caelo	Anionic hydrophilic cream DAB	162596	32669	40
Caelo	Anionic hydrophilic cream DAB	162597	32672	40
Caelo	Anionic hydrophilic cream DAB	162599	32674	40
Caelo	Anionic hydrophilic cream DAB	162600	32676	40
Caelo	Anionic hydrophilic cream DAB	162645	32678	40
Caelo	Anionic hydrophilic cream DAB	162643	32875	40
Caelo	Anionic hydrophilic cream DAB	162644	32876	40
Caelo	Anionic hydrophilic cream DAB	162646	32877	40
Caelo	Anionic hydrophilic cream DAB	162647	32878	40
Caelo	Anionic hydrophilic cream DAB	162598	32879	40
Caelo	Anionic hydrophilic cream DAB	163172	32880	40
Caelo	Anionic hydrophilic cream DAB	163226	32881	40
Caelo	Anionic hydrophilic cream DAB	170451	33122	40
Caelo	Anionic hydrophilic cream DAB	170452	33123	40
Caelo	Anionic hydrophilic cream DAB	163281	33170	40
Caelo	Anionic hydrophilic cream DAB	163282	33171	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream DAB	163283	33172	40
Caelo	Anionic hydrophilic cream DAB	163284	33173	40
Caelo	Anionic hydrophilic cream DAB	170453	33174	40
Caelo	Anionic hydrophilic cream DAB	170454	33175	40
Caelo	Anionic hydrophilic cream DAB	171421	33581	40
Caelo	Anionic hydrophilic cream DAB	171422	33582	40
Caelo	Anionic hydrophilic cream DAB	171423	33583	40
Caelo	Anionic hydrophilic cream DAB	171424	33584	40
Caelo	Anionic hydrophilic cream DAB	171427	33585	40
Caelo	Anionic hydrophilic cream DAB	171430	33586	40
Caelo	Anionic hydrophilic cream DAB	171431	33587	40
Caelo	Anionic hydrophilic cream DAB	171432	33588	40
Caelo	Anionic hydrophilic cream DAB	171433	33589	40
Caelo	Anionic hydrophilic cream DAB	171434	33590	40
Caelo	Anionic hydrophilic cream DAB	171435	33591	40
Caelo	Anionic hydrophilic cream DAB	171436	33592	40
Caelo	Anionic hydrophilic cream DAB	171437	33593	40
Caelo	Anionic hydrophilic cream DAB	171438	33594	40
Caelo	Anionic hydrophilic cream DAB	182434	34264	40
Caelo	Anionic hydrophilic cream SR...	162157	32388	40
Caelo	Anionic hydrophilic cream SR...	162586	32550	40
Caelo	Anionic hydrophilic cream SR...	162587	32551	40
Caelo	Anionic hydrophilic cream SR...	170419	33125	40
Caelo	Anionic hydrophilic cream SR...	170418	33139	40
Caelo	Anionic hydrophilic cream SR...	171258	33338	40
Caelo	Anionic hydrophilic cream SR...	171442	33339	40
Caelo	Anionic hydrophilic cream SR...	172117	33552	40
Caelo	Anionic hydrophilic cream SR...	172118	33553	40
Caelo	Anionic hydrophilic cream SR...	172568	33768	40
Caelo	Anionic hydrophilic cream SR...	172569	33769	40
Caelo	Anionic hydrophilic cream SR...	172944	34021	40
Caelo	Anionic hydrophilic cream SR...	173195	34022	40
Caelo	Anionic hydrophilic cream SR...	181023	34152	40
Caelo	Anionic hydrophilic cream SR...	181475	34153	40
Caelo	Anionic hydrophilic cream SR...	180411	34162	40
Caelo	Anionic hydrophilic cream SR...	182181	34260	40
Caelo	Anionic hydrophilic cream wi...	12117002	30577	40
Caelo	Anionic hydrophilic cream wi...	160674	32133	40
Caelo	Anionic hydrophilic cream wi...	160675	32137	40
Caelo	Anionic hydrophilic cream wi...	160676	32139	40
Caelo	Anionic hydrophilic cream wi...	160678	32143	40
Caelo	Anionic hydrophilic cream wi...	160679	32144	40
Caelo	Anionic hydrophilic cream wi...	161918	32422	40
Caelo	Anionic hydrophilic cream wi...	161919	32424	40
Caelo	Anionic hydrophilic cream wi...	161915	32619	40
Caelo	Anionic hydrophilic cream wi...	162902	32883	40
Caelo	Anionic hydrophilic cream wi...	162903	32884	40
Caelo	Anionic hydrophilic cream wi...	162904	32885	40
Caelo	Anionic hydrophilic cream wi...	162905	32886	40
Caelo	Anionic hydrophilic cream wi...	170302	33128	40
Caelo	Anionic hydrophilic cream wi...	170303	33129	40
Caelo	Anionic hydrophilic cream wi...	170299	33136	40
Caelo	Anionic hydrophilic cream wi...	170300	33137	40
Caelo	Anionic hydrophilic cream wi...	170301	33138	40
Caelo	Anionic hydrophilic cream wi...	171021	33350	40
Caelo	Anionic hydrophilic cream wi...	171024	33351	40
Caelo	Anionic hydrophilic cream wi...	171020	33353	40
Caelo	Anionic hydrophilic cream wi...	171022	33355	40
Caelo	Anionic hydrophilic cream wi...	171565	33557	40
Caelo	Anionic hydrophilic cream wi...	171566	33558	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream wi...	171854	33559	40
Caelo	Anionic hydrophilic cream wi...	172621	33755	40
Caelo	Anionic hydrophilic cream wi...	172619	33756	40
Caelo	Anionic hydrophilic cream wi...	172622	33757	40
Caelo	Anionic hydrophilic cream wi...	173353	34028	40
Caelo	Anionic hydrophilic cream wi...	180414	34140	40
Caelo	Anionic hydrophilic cream wi...	181808	34262	40
Caelo	Anionic hydrophilic cream wi...	182973	34316	40
Caelo	Anionic hydrophilic cream wi...	182483	34350	40
apomix	Anionic hydrophilic cream wit...	05B310517	33516	40
apomix	Anionic hydrophilic cream wit...	01B080118	33947	40
Caelo	Base cream, diluted	182407	34268	40
Caelo	Base cream, diluted	191057	34543	40
Caelo	Base cream, hydrophobic DAC	12025003	30467	20
Caelo	Base cream, hydrophobic DAC	154214	31908	60
Caelo	Base cream, hydrophobic DAC	160748	32149	40
Caelo	Base cream, hydrophobic DAC	160749	32151	40
Caelo	Base cream, hydrophobic DAC	160751	32153	40
Caelo	Base cream, hydrophobic DAC	160750	32155	40
Caelo	Base cream, hydrophobic DAC	160752	32156	40
Caelo	Base cream, hydrophobic DAC	161654	32370	41
Caelo	Base cream, hydrophobic DAC	161655	32372	41
Caelo	Base cream, hydrophobic DAC	161656	32374	41
Caelo	Base cream, hydrophobic DAC	161657	32376	41
Caelo	Base cream, hydrophobic DAC	161742	32378	41
Caelo	Base cream, hydrophobic DAC	162937	32855	40
Caelo	Base cream, hydrophobic DAC	162938	32856	40
Caelo	Base cream, hydrophobic DAC	162939	32857	40
Caelo	Base cream, hydrophobic DAC	170732	33127	40
Caelo	Base cream, hydrophobic DAC	171504	33373	40
Caelo	Base cream, hydrophobic DAC	171505	33374	40
Caelo	Base cream, hydrophobic DAC	171130	33375	40
Caelo	Base cream, hydrophobic DAC	171129	33376	40
Caelo	Base cream, hydrophobic DAC	172552	34023	40
Caelo	Base cream, hydrophobic DAC	180512	34163	40
Caelo	Base cream, hydrophobic DAC	181739	34164	40
Caelo	Base cream, hydrophobic DAC	182398	34269	40
Caelo	Base cream, hydrophobic DAC	182867	34306	40
Caelo	Hydrophilic cream, non-ionic...	160175	31994	60
Caelo	Hydrophilic cream, non-ionic...	153258	31995	60
Caelo	Hydrophilic cream, non-ionic...	161141	32119	40
Caelo	Hydrophilic cream, non-ionic...	161142	32121	40
Caelo	Hydrophilic cream, non-ionic...	161694	32382	40
Caelo	Hydrophilic cream, non-ionic...	161695	32384	40
Caelo	Hydrophilic cream, non-ionic...	162220	32584	40
Caelo	Hydrophilic cream, non-ionic...	162221	32596	40
Caelo	Hydrophilic cream, non-ionic...	162579	32602	40
Caelo	Hydrophilic cream, non-ionic...	170097	33187	40
Caelo	Hydrophilic cream, non-ionic...	171134	33378	40
Caelo	Hydrophilic cream, non-ionic...	171140	33379	40
Caelo	Hydrophilic cream, non-ionic...	172126	33551	40
Caelo	Hydrophilic cream, non-ionic...	172610	33754	40
Caelo	Hydrophilic cream, non-ionic...	173139	34019	40
Caelo	Hydrophilic cream, non-ionic...	172940	34020	40
Caelo	Hydrophilic cream, non-ionic...	180503	34144	40
Caelo	Hydrophilic cream, non-ionic...	181752	34145	40
Caelo	Hydrophilic cream, non-ionic...	182180	34272	40
Caelo	Hydrophilic cream, non-ionic...	182595	34310	40
apomix	Hydrophilic cream, non-ionic...	07B030417	33283	40
apomix	Hydrophilic cream, non-ionic...	16B230817	33643	40

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Supplier	Substance	Batch	Sample ID	Spectra
apomix	Skin care ointment W/L SR	31A130717	33627	40
Pharmachem	Skin care ointment W/L SR	180117	33294	40
apomix	Skin care ointment W/L SR (w...	14B060417	33264	40
apomix	Skin care ointment W/L SR (w...	37A021117	33792	40
Fagron	Transdermal base cream	1609813	33479	40
Fagron	Transdermal base cream	1802650/2	34204	40
Dr. Wolff	Wolff® base half-fat cream	702500	33484	40
Dr. Wolff	Wolff® base half-fat cream	701451	33485	40
Caelo	Anionic hydrophilic cream DAB	154321	32034	60
Caelo	Anionic hydrophilic cream DAB	153969	32044	60
Caelo	Anionic hydrophilic cream DAB	154282	32047	45
Caelo	Anionic hydrophilic cream DAB	153575	32054	60
Caelo	Anionic hydrophilic cream DAB	154284	32056	60
Caelo	Anionic hydrophilic cream DAB	154281	32058	60
Caelo	Anionic hydrophilic cream DAB	154285	32060	60
Caelo	Anionic hydrophilic cream DAB	154283	32062	60
Caelo	Anionic hydrophilic cream DAB	161031	32147	40
Caelo	Anionic hydrophilic cream DAB	161510	32219	40
Caelo	Anionic hydrophilic cream DAB	161507	32221	40
Caelo	Anionic hydrophilic cream DAB	161506	32427	40
Caelo	Anionic hydrophilic cream DAB	161506	32428	40
Caelo	Anionic hydrophilic cream DAB	161510	32429	40
Caelo	Anionic hydrophilic cream DAB	161510	32430	40
Caelo	Anionic hydrophilic cream DAB	161798	32432	40
Caelo	Anionic hydrophilic cream DAB	161798	32433	40
Caelo	Anionic hydrophilic cream DAB	161798	32434	40
Caelo	Anionic hydrophilic cream DAB	161529	32438	40
Caelo	Anionic hydrophilic cream DAB	161529	32439	40
Caelo	Anionic hydrophilic cream DAB	161526	32441	40
Caelo	Anionic hydrophilic cream DAB	161526	32442	40
Caelo	Anionic hydrophilic cream DAB	161526	32443	40
Caelo	Anionic hydrophilic cream DAB	161527	32445	40
Caelo	Anionic hydrophilic cream DAB	161527	32446	40
Caelo	Anionic hydrophilic cream DAB	161528	32448	40
Caelo	Anionic hydrophilic cream DAB	161528	32449	40
Caelo	Anionic hydrophilic cream DAB	161561	32642	40
Caelo	Anionic hydrophilic cream DAB	161563	32643	40
Caelo	Anionic hydrophilic cream DAB	161796	32646	40
Caelo	Anionic hydrophilic cream DAB	162500	32650	40
Caelo	Anionic hydrophilic cream DAB	162501	32652	40
Caelo	Anionic hydrophilic cream DAB	162589	32655	40
Caelo	Anionic hydrophilic cream DAB	162590	32657	40
Caelo	Anionic hydrophilic cream DAB	162591	32659	40
Caelo	Anionic hydrophilic cream DAB	162591	32660	40
Caelo	Anionic hydrophilic cream DAB	162592	32662	40
Caelo	Anionic hydrophilic cream DAB	162593	32664	40
Caelo	Anionic hydrophilic cream DAB	162593	32665	40
Caelo	Anionic hydrophilic cream DAB	162593	32666	40
Caelo	Anionic hydrophilic cream DAB	162594	32668	40
Caelo	Anionic hydrophilic cream DAB	162596	32670	40
Caelo	Anionic hydrophilic cream DAB	162596	32671	40
Caelo	Anionic hydrophilic cream DAB	162597	32673	40
Caelo	Anionic hydrophilic cream DAB	162599	32675	40
Caelo	Anionic hydrophilic cream DAB	162600	32677	40
Caelo	Anionic hydrophilic cream SR...	162587	32552	40
Caelo	Anionic hydrophilic cream SR...	162587	32553	40
Caelo	Anionic hydrophilic cream wi...	160674	32134	40
Caelo	Anionic hydrophilic cream wi...	160674	32135	40
Caelo	Anionic hydrophilic cream wi...	160674	32136	40
Caelo	Anionic hydrophilic cream wi...	160675	32138	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream wi...	160676	32140	40
Caelo	Anionic hydrophilic cream wi...	161918	32423	40
Caelo	Anionic hydrophilic cream wi...	161919	32425	40
Caelo	Anionic hydrophilic cream wi...	161918	32622	40
Caelo	Anionic hydrophilic cream wi...	161919	32623	40
Caelo	Anionic hydrophilic cream wi...	170302	33352	40
Caelo	Anionic hydrophilic cream wi...	170299	33356	40
apomix	Anionic hydrophilic cream wit...	05B310517	33517	40
Caelo	Base cream, hydrophobic DAC	160748	32150	40
Caelo	Base cream, hydrophobic DAC	160749	32152	40
Caelo	Base cream, hydrophobic DAC	160751	32154	40
Caelo	Base cream, hydrophobic DAC	160750	32226	40
Caelo	Base cream, hydrophobic DAC	161654	32371	41
Caelo	Base cream, hydrophobic DAC	161655	32373	41
Caelo	Base cream, hydrophobic DAC	161656	32375	40
Caelo	Base cream, hydrophobic DAC	161657	32377	41
Caelo	Base cream, hydrophobic DAC	161654	32491	40
Caelo	Base cream, hydrophobic DAC	161655	32492	40
Caelo	Base cream, hydrophobic DAC	161742	32508	40
Caelo	Base cream, hydrophobic DAC	161656	32509	40
Caelo	Base cream, hydrophobic DAC	161657	32510	40
Caelo	Base cream, hydrophobic DAC	171504	33377	40
Caelo	Hydrophilic cream, non-ionic...	161141	32120	40
Caelo	Hydrophilic cream, non-ionic...	161142	32122	40
Caelo	Hydrophilic cream, non-ionic...	161694	32383	40
Caelo	Hydrophilic cream, non-ionic...	161695	32385	40
Caelo	Hydrophilic cream, non-ionic...	161694	32582	40
Caelo	Hydrophilic cream, non-ionic...	161695	32583	40
Caelo	Hydrophilic cream, non-ionic...	162220	32585	40
Caelo	Hydrophilic cream, non-ionic...	162220	32594	40
Caelo	Hydrophilic cream, non-ionic...	162220	32595	40
Caelo	Hydrophilic cream, non-ionic...	162221	32597	40
Caelo	Hydrophilic cream, non-ionic...	162221	32598	40
Caelo	Hydrophilic cream, non-ionic...	162221	32599	40
Caelo	Hydrophilic cream, non-ionic...	162221	32600	40
Caelo	Hydrophilic cream, non-ionic...	162221	32601	40
Caelo	Hydrophilic cream, non-ionic...	162579	32603	40

- 57 691 spectra from a total of 1310 batches from further 349 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 15 324 spectra from 651 *Apo-Ident* customers from 3918 batches from the substance/substance group *Hydrophilic ointments*.
- Among them are spectra of independent samples from 3817 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
20.12.2016 Sanacorp 6,00EUR	Anionic hydrophilic cream DAB	16259701	1
Caelo	Anionic hydrophilic cream DAB	16259301	23
AHC 28.05.13 EK2,95	Anionic hydrophilic cream DAB	13036301	1
AHD	Anionic hydrophilic cream DAB	15401301	2
AHD	Anionic hydrophilic cream DAB	16180101	1
AHD	Anionic hydrophilic cream DAB	16259201	1
AHD	Anionic hydrophilic cream DAB	17083801	5
AHD	Anionic hydrophilic cream DAB	16168802	1
AHD	Anionic hydrophilic cream DAB	170838601	1
AHD	Anionic hydrophilic cream DAB	17143601	1
AHD	Anionic hydrophilic cream DAB	17143801	1
AHD	Anionic hydrophilic cream DAB	17200701	2
AHD	Anionic hydrophilic cream DAB	17270301	2
AHD	Anionic hydrophilic cream DAB	18160301	3
AHD	Anionic hydrophilic cream DAB	1816301	1
AHD	Anionic hydrophilic cream DAB	18243401	1
AHD	Anionic hydrophilic cream DAB	18297901	2
AHD 05.03.15 3,33	Anionic hydrophilic cream DAB	14264001	1
AHD 09.03.2017 EK: 5,94	Anionic hydrophilic cream DAB	16328001	1
AHD, 31.10.2013	Anionic hydrophilic cream DAB	13313201	1
AHD,15.04.2013	Anionic hydrophilic cream DAB	12314701	1
Caelo	Anionic hydrophilic cream DAB	16158802	3
ahd/lamotte	Anionic hydrophilic cream DAB	14118401	1
AHDE 12.09.2014	Anionic hydrophilic cream DAB	14144301	1
AHDE 22.05.2015	Anionic hydrophilic cream DAB	14366801	4
Caelo	Anionic hydrophilic cream DAB	17142201	6
AIH	Anionic hydrophilic cream DAB	16258901	1
Alliance health	Anionic hydrophilic cream DAB	14233001	1
Alliance Healthcare	Anionic hydrophilic cream DAB	13363401	1
Caelo	Anionic hydrophilic cream DAB	15357501	2
Alliance21.01.15	Anionic hydrophilic cream DAB	14233101	1
Allianz	Anionic hydrophilic cream DAB	17299601	1
Allianz	Anionic hydrophilic cream DAB	17299801	1
Allianz	Anionic hydrophilic cream DAB	17299401	1
Allianz Healthcare	Anionic hydrophilic cream DAB	16328001	1
Allianz Healthcare	Anionic hydrophilic cream DAB	16328401	1
Alte Apotheke	Anionic hydrophilic cream DAB	16158501	1
Anzag	Anionic hydrophilic cream DAB	12204601	2
Anzag	Anionic hydrophilic cream DAB	12218501	1
Anzag	Anionic hydrophilic cream DAB	271710	1
Anzag	Anionic hydrophilic cream DAB	12314101	1
Anzag	Anionic hydrophilic cream DAB	15352901	1
Anzag	Anionic hydrophilic cream DAB	297911	2
Anzag	Anionic hydrophilic cream DAB	16158701	4
Anzag	Anionic hydrophilic cream DAB	16259801	1
Anzag	Anionic hydrophilic cream DAB	17083802	2
Anzag	Anionic hydrophilic cream DAB	17084201	2
Anzag	Anionic hydrophilic cream DAB	17142501	1
Anzag	Anionic hydrophilic cream DAB	17142601	1
Anzag	Anionic hydrophilic cream DAB	17142901	1
Anzag	Anionic hydrophilic cream DAB	17142102	1
Anzag 25.01.2013	Anionic hydrophilic cream DAB	12266101	1
Anzag 27.03.2015	Anionic hydrophilic cream DAB	14264301	1
Caelo	Anionic hydrophilic cream DAB	14062201	8
Caelo	Anionic hydrophilic cream DAB	12083702	1
Caelo	Anionic hydrophilic cream DAB	11253501	1
apomix	Anionic hydrophilic cream DAB	4B110319	3
apomix/ Noweda	Anionic hydrophilic cream DAB	12B141116	1
apomix/Noweda	Anionic hydrophilic cream DAB	170841901	1
Bambustus/Noweda	Anionic hydrophilic cream DAB	297662	5

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Supplier	Substance	Batch	Spectra
Bären Apotheke	Anionic hydrophilic cream DAB	17045301	1
Bionorica ethics/Phoenix	Anionic hydrophilic cream DAB	18010702	1
Bobastus/ Phönix 21.03.19	Anionic hydrophilic cream DAB	18004838	1
Bobmastus	Anionic hydrophilic cream DAB	291657	1
Bomba	Anionic hydrophilic cream DAB	283478	1
Bomba/AHD	Anionic hydrophilic cream DAB	280410	1
Bomba/Phönix	Anionic hydrophilic cream DAB	308408	1
Bombastus	Anionic hydrophilic cream DAB	290144	2
Bombastus	Anionic hydrophilic cream DAB	294545	4
Bombastus	Anionic hydrophilic cream DAB	291732	1
Bombastus	Anionic hydrophilic cream DAB	294549	2
Bombastus	Anionic hydrophilic cream DAB	295400	7
Bombastus	Anionic hydrophilic cream DAB	297672	2
Bombastus	Anionic hydrophilic cream DAB	18002364	5
Bombastus	Anionic hydrophilic cream DAB	267442	1
Bombastus	Anionic hydrophilic cream DAB	269513	2
Bombastus	Anionic hydrophilic cream DAB	271014	2
Bombastus	Anionic hydrophilic cream DAB	269517	1
Bombastus	Anionic hydrophilic cream DAB	269441	1
Bombastus	Anionic hydrophilic cream DAB	271011	1
Bombastus	Anionic hydrophilic cream DAB	271008	2
Bombastus	Anionic hydrophilic cream DAB	271009	1
Bombastus	Anionic hydrophilic cream DAB	274593	1
Bombastus	Anionic hydrophilic cream DAB	6861306	1
Bombastus	Anionic hydrophilic cream DAB	270947	1
Bombastus	Anionic hydrophilic cream DAB	274695/273533	1
Bombastus	Anionic hydrophilic cream DAB	273534	1
Bombastus	Anionic hydrophilic cream DAB	276315	3
Bombastus	Anionic hydrophilic cream DAB	274697	3
Bombastus	Anionic hydrophilic cream DAB	274594	1
Bombastus	Anionic hydrophilic cream DAB	274592	1
Bombastus	Anionic hydrophilic cream DAB	274595	2
Bombastus	Anionic hydrophilic cream DAB	276318	1
Bombastus	Anionic hydrophilic cream DAB	274597	1
Bombastus	Anionic hydrophilic cream DAB	277297	2
Bombastus	Anionic hydrophilic cream DAB	277462	2
Bombastus	Anionic hydrophilic cream DAB	277461	3
Bombastus	Anionic hydrophilic cream DAB	273532	1
Bombastus	Anionic hydrophilic cream DAB	278846	1
Bombastus	Anionic hydrophilic cream DAB	276433	1
Bombastus	Anionic hydrophilic cream DAB	280289	4
Bombastus	Anionic hydrophilic cream DAB	278852	2
Bombastus	Anionic hydrophilic cream DAB	280294	1
Bombastus	Anionic hydrophilic cream DAB	279056	2
Bombastus	Anionic hydrophilic cream DAB	277295	1
Bombastus	Anionic hydrophilic cream DAB	277458	2
Bombastus	Anionic hydrophilic cream DAB	280416	1
Bombastus	Anionic hydrophilic cream DAB	278849	1
Bombastus	Anionic hydrophilic cream DAB	281999	1
Bombastus	Anionic hydrophilic cream DAB	279059	1
Bombastus	Anionic hydrophilic cream DAB	278853	1
Bombastus	Anionic hydrophilic cream DAB	273539	1
Bombastus	Anionic hydrophilic cream DAB	282006	5
Bombastus	Anionic hydrophilic cream DAB	280417	2
Bombastus	Anionic hydrophilic cream DAB	282113	2
Bombastus	Anionic hydrophilic cream DAB	282112	1
Bombastus	Anionic hydrophilic cream DAB	283411	4
Bombastus	Anionic hydrophilic cream DAB	283412	1
Bombastus	Anionic hydrophilic cream DAB	280418	2
Bombastus	Anionic hydrophilic cream DAB	283413	2

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	280291	1
Bombastus	Anionic hydrophilic cream DAB	282003	1
Bombastus	Anionic hydrophilic cream DAB	285593	1
Bombastus	Anionic hydrophilic cream DAB	283482	2
Bombastus	Anionic hydrophilic cream DAB	285589	1
Bombastus	Anionic hydrophilic cream DAB	282109	1
Bombastus	Anionic hydrophilic cream DAB	285595	1
Bombastus	Anionic hydrophilic cream DAB	286495	2
Bombastus	Anionic hydrophilic cream DAB	280413	1
Bombastus	Anionic hydrophilic cream DAB	285597	1
Bombastus	Anionic hydrophilic cream DAB	287559	2
Bombastus	Anionic hydrophilic cream DAB	287563	1
Bombastus	Anionic hydrophilic cream DAB	287564	2
Bombastus	Anionic hydrophilic cream DAB	287436	2
Bombastus	Anionic hydrophilic cream DAB	287565	1
Bombastus	Anionic hydrophilic cream DAB	288570	1
Bombastus	Anionic hydrophilic cream DAB	288720	1
Bombastus	Anionic hydrophilic cream DAB	288655	2
Bombastus	Anionic hydrophilic cream DAB	288574	3
Bombastus	Anionic hydrophilic cream DAB	290150	1
Bombastus	Anionic hydrophilic cream DAB	291657	1
Bombastus	Anionic hydrophilic cream DAB	290080	2
Bombastus	Anionic hydrophilic cream DAB	291655	1
Bombastus	Anionic hydrophilic cream DAB	290075	1
Bombastus	Anionic hydrophilic cream DAB	290145	2
Bombastus	Anionic hydrophilic cream DAB	287433	1
Bombastus	Anionic hydrophilic cream DAB	291824	6
Bombastus	Anionic hydrophilic cream DAB	291729	1
Bombastus	Anionic hydrophilic cream DAB	290078	1
Bombastus	Anionic hydrophilic cream DAB	288573	1
Bombastus	Anionic hydrophilic cream DAB	291832	2
Bombastus	Anionic hydrophilic cream DAB	293445	1
Bombastus	Anionic hydrophilic cream DAB	60080602	2
Bombastus	Anionic hydrophilic cream DAB	294546	2
Bombastus	Anionic hydrophilic cream DAB	293446	1
Bombastus	Anionic hydrophilic cream DAB	295514	2
Bombastus	Anionic hydrophilic cream DAB	296705	5
Bombastus	Anionic hydrophilic cream DAB	2946450	1
Bombastus	Anionic hydrophilic cream DAB	296786	2
Bombastus	Anionic hydrophilic cream DAB	296782	1
Bombastus	Anionic hydrophilic cream DAB	297676	2
Bombastus	Anionic hydrophilic cream DAB	302465	1
Bombastus	Anionic hydrophilic cream DAB	308407	2
Bombastus	Anionic hydrophilic cream DAB	295399	2
Bombastus	Anionic hydrophilic cream DAB	294643	5
Bombastus	Anionic hydrophilic cream DAB	295515	2
Bombastus	Anionic hydrophilic cream DAB	295516	5
Bombastus	Anionic hydrophilic cream DAB	294644	5
Bombastus	Anionic hydrophilic cream DAB	296785	1
Bombastus	Anionic hydrophilic cream DAB	297671	3
Bombastus	Anionic hydrophilic cream DAB	295517	8
Bombastus	Anionic hydrophilic cream DAB	297680	5
Bombastus	Anionic hydrophilic cream DAB	297668	6
Bombastus	Anionic hydrophilic cream DAB	297673	1
Bombastus	Anionic hydrophilic cream DAB	297677	2
Bombastus	Anionic hydrophilic cream DAB	2955126	1
Bombastus	Anionic hydrophilic cream DAB	300353	4
Bombastus	Anionic hydrophilic cream DAB	299256	4
Bombastus	Anionic hydrophilic cream DAB	300365	7
Bombastus	Anionic hydrophilic cream DAB	300360	3

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	300362	1
Bombastus	Anionic hydrophilic cream DAB	301270	2
Bombastus	Anionic hydrophilic cream DAB	300364	3
Bombastus	Anionic hydrophilic cream DAB	301356	2
Bombastus	Anionic hydrophilic cream DAB	301271	4
Bombastus	Anionic hydrophilic cream DAB	301358	2
Bombastus	Anionic hydrophilic cream DAB	296784	2
Bombastus	Anionic hydrophilic cream DAB	302463	7
Bombastus	Anionic hydrophilic cream DAB	301272	2
Bombastus	Anionic hydrophilic cream DAB	302469	1
Bombastus	Anionic hydrophilic cream DAB	302470	2
Bombastus	Anionic hydrophilic cream DAB	302457	1
Bombastus	Anionic hydrophilic cream DAB	304093	2
Bombastus	Anionic hydrophilic cream DAB	304095	1
Bombastus	Anionic hydrophilic cream DAB	304098	13
Bombastus	Anionic hydrophilic cream DAB	302459	1
Bombastus	Anionic hydrophilic cream DAB	302467	2
Bombastus	Anionic hydrophilic cream DAB	304100	3
Bombastus	Anionic hydrophilic cream DAB	304099	3
Bombastus	Anionic hydrophilic cream DAB	302461	3
Bombastus	Anionic hydrophilic cream DAB	302468	1
Bombastus	Anionic hydrophilic cream DAB	302471	2
Bombastus	Anionic hydrophilic cream DAB	304097	5
Bombastus	Anionic hydrophilic cream DAB	305379	5
Bombastus	Anionic hydrophilic cream DAB	305371	1
Bombastus	Anionic hydrophilic cream DAB	302460	3
Bombastus	Anionic hydrophilic cream DAB	305381	3
Bombastus	Anionic hydrophilic cream DAB	307028	3
Bombastus	Anionic hydrophilic cream DAB	307027	5
Bombastus	Anionic hydrophilic cream DAB	403099	1
Bombastus	Anionic hydrophilic cream DAB	307032	1
Bombastus	Anionic hydrophilic cream DAB	307035	1
Bombastus	Anionic hydrophilic cream DAB	307030	9
Bombastus	Anionic hydrophilic cream DAB	307037	2
Bombastus	Anionic hydrophilic cream DAB	60080601	2
Bombastus	Anionic hydrophilic cream DAB	307038	1
Bombastus	Anionic hydrophilic cream DAB	308402	5
Bombastus	Anionic hydrophilic cream DAB	307330	4
Bombastus	Anionic hydrophilic cream DAB	310265	1
Bombastus	Anionic hydrophilic cream DAB	310221	10
Bombastus	Anionic hydrophilic cream DAB	310266	5
Bombastus	Anionic hydrophilic cream DAB	310271	3
Bombastus	Anionic hydrophilic cream DAB	310267	2
Bombastus	Anionic hydrophilic cream DAB	310273	7
Bombastus	Anionic hydrophilic cream DAB	311054	4
Bombastus	Anionic hydrophilic cream DAB	308480	1
Bombastus	Anionic hydrophilic cream DAB	311127	2
Bombastus	Anionic hydrophilic cream DAB	17001305	2
Bombastus	Anionic hydrophilic cream DAB	311133	7
Bombastus	Anionic hydrophilic cream DAB	311131	7
Bombastus	Anionic hydrophilic cream DAB	17001310	4
Bombastus	Anionic hydrophilic cream DAB	18000249	2
Bombastus	Anionic hydrophilic cream DAB	17001304	1
Bombastus	Anionic hydrophilic cream DAB	18000248	5
Bombastus	Anionic hydrophilic cream DAB	17001311	1
Bombastus	Anionic hydrophilic cream DAB	18000244	1
Bombastus	Anionic hydrophilic cream DAB	18000252	7
Bombastus	Anionic hydrophilic cream DAB	18000255	6
Bombastus	Anionic hydrophilic cream DAB	18000243	1
Bombastus	Anionic hydrophilic cream DAB	18001551	5

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	18000256	2
Bombastus	Anionic hydrophilic cream DAB	18001552	2
Bombastus	Anionic hydrophilic cream DAB	18001547	1
Bombastus	Anionic hydrophilic cream DAB	18001553	1
Bombastus	Anionic hydrophilic cream DAB	18001557	6
Bombastus	Anionic hydrophilic cream DAB	18002354	1
Bombastus	Anionic hydrophilic cream DAB	18002360	2
Bombastus	Anionic hydrophilic cream DAB	18002355	1
Bombastus	Anionic hydrophilic cream DAB	18003576	2
Bombastus	Anionic hydrophilic cream DAB	18006022	2
Bombastus	Anionic hydrophilic cream DAB	18006015	1
Bombastus	Anionic hydrophilic cream DAB	18004841	3
Bombastus	Anionic hydrophilic cream DAB	18006021	1
Bombastus	Anionic hydrophilic cream DAB	19000890	1
Bombastus	Anionic hydrophilic cream DAB	18006020	1
Bombastus	Anionic hydrophilic cream DAB	18003578	1
Bombastus	Anionic hydrophilic cream DAB	270950	1
Bombastus	Anionic hydrophilic cream DAB	305375	3
Bombastus	Anionic hydrophilic cream DAB	305386	3
Bombastus	Anionic hydrophilic cream DAB	310270	4
Bombastus	Anionic hydrophilic cream DAB	18001549	3
Bombastus	Anionic hydrophilic cream DAB	18003587	2
Bombastus	Anionic hydrophilic cream DAB	18005153	2
Bombastus	Anionic hydrophilic cream DAB	18006026	3
Bombastus	Anionic hydrophilic cream DAB	282001	1
Bombastus	Anionic hydrophilic cream DAB	296700	4
Bombastus	Anionic hydrophilic cream DAB	19002205	2
Bombastus	Anionic hydrophilic cream DAB	270824	3
Bombastus	Anionic hydrophilic cream DAB	273538	1
Bombastus	Anionic hydrophilic cream DAB	274698	1
Bombastus	Anionic hydrophilic cream DAB	274765	2
Bombastus	Anionic hydrophilic cream DAB	277298	2
Bombastus	Anionic hydrophilic cream DAB	279055	7
Bombastus	Anionic hydrophilic cream DAB	282110	5
Bombastus	Anionic hydrophilic cream DAB	283477	2
Bombastus	Anionic hydrophilic cream DAB	286502	3
Bombastus	Anionic hydrophilic cream DAB	287557	6
Bombastus	Anionic hydrophilic cream DAB	286505	2
Bombastus	Anionic hydrophilic cream DAB	288652	1
Bombastus	Anionic hydrophilic cream DAB	288575	1
Bombastus	Anionic hydrophilic cream DAB	308393	1
Bombastus	Anionic hydrophilic cream DAB	291823	6
Bombastus	Anionic hydrophilic cream DAB	293358	1
Bombastus	Anionic hydrophilic cream DAB	280288	2
Bombastus	Anionic hydrophilic cream DAB	305384	1
Bombastus	Anionic hydrophilic cream DAB	297679	7
Bombastus	Anionic hydrophilic cream DAB	17045101	1
Bombastus	Anionic hydrophilic cream DAB	282115	1
Bombastus	Anionic hydrophilic cream DAB	290146	4
Bombastus	Anionic hydrophilic cream DAB	18004840	1
Bombastus	Anionic hydrophilic cream DAB	308400	2
Bombastus	Anionic hydrophilic cream DAB	18001554	7
Bombastus	Anionic hydrophilic cream DAB	19003980	1
Bombastus	Anionic hydrophilic cream DAB	19002193	1
Bombastus	Anionic hydrophilic cream DAB	295518	7
Bombastus	Anionic hydrophilic cream DAB	18001556	1
Bombastus	Anionic hydrophilic cream DAB	274596	1
Bombastus	Anionic hydrophilic cream DAB	270804	1
Bombastus	Anionic hydrophilic cream DAB	18002361	4
Bombastus	Anionic hydrophilic cream DAB	19002202	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	19002197	1
Bombastus	Anionic hydrophilic cream DAB	285592	1
Bombastus	Anionic hydrophilic cream DAB	297675	6
Bombastus	Anionic hydrophilic cream DAB	300357	2
Bombastus	Anionic hydrophilic cream DAB	301268	2
Bombastus	Anionic hydrophilic cream DAB	320461	1
Bombastus	Anionic hydrophilic cream DAB	302462	5
Bombastus	Anionic hydrophilic cream DAB	304102	2
Bombastus	Anionic hydrophilic cream DAB	307029	9
Bombastus	Anionic hydrophilic cream DAB	305378	3
Bombastus	Anionic hydrophilic cream DAB	308401	1
Bombastus	Anionic hydrophilic cream DAB	305385	4
Bombastus	Anionic hydrophilic cream DAB	17001316	6
Bombastus	Anionic hydrophilic cream DAB	310272	1
Bombastus	Anionic hydrophilic cream DAB	17001307	6
Bombastus	Anionic hydrophilic cream DAB	18001558	2
Bombastus	Anionic hydrophilic cream DAB	17001315	1
Bombastus	Anionic hydrophilic cream DAB	18001561	1
Bombastus	Anionic hydrophilic cream DAB	17001312	2
Bombastus	Anionic hydrophilic cream DAB	277459	2
Bombastus	Anionic hydrophilic cream DAB	282107	1
Bombastus	Anionic hydrophilic cream DAB	282111	2
Bombastus	Anionic hydrophilic cream DAB	287560	1
Bombastus	Anionic hydrophilic cream DAB	285591	1
Bombastus	Anionic hydrophilic cream DAB	290149	3
Bombastus	Anionic hydrophilic cream DAB	294551	1
Bombastus	Anionic hydrophilic cream DAB	307036	6
Bombastus	Anionic hydrophilic cream DAB	311130	2
Bombastus	Anionic hydrophilic cream DAB	18003582	3
Bombastus	Anionic hydrophilic cream DAB	18159901	1
Bombastus	Anionic hydrophilic cream DAB	18006018	3
Bombastus	Anionic hydrophilic cream DAB	18006025	2
Bombastus	Anionic hydrophilic cream DAB	19002204	3
Bombastus	Anionic hydrophilic cream DAB	19002207	1
Bombastus	Anionic hydrophilic cream DAB	294649	5
Bombastus	Anionic hydrophilic cream DAB	19002198	3
Bombastus	Anionic hydrophilic cream DAB	301353	4
Bombastus	Anionic hydrophilic cream DAB	276320	2
Bombastus	Anionic hydrophilic cream DAB	19002196	1
Bombastus	Anionic hydrophilic cream DAB	19002208	1
Bombastus	Anionic hydrophilic cream DAB	274695	2
Bombastus	Anionic hydrophilic cream DAB	301352	5
Bombastus	Anionic hydrophilic cream DAB	311125	2
Bombastus	Anionic hydrophilic cream DAB	305377	2
Bombastus	Anionic hydrophilic cream DAB	286499	3
Bombastus	Anionic hydrophilic cream DAB	283480	3
Bombastus	Anionic hydrophilic cream DAB	282005	1
Bombastus	Anionic hydrophilic cream DAB	305383	1
Bombastus	Anionic hydrophilic cream DAB	294647	3
Bombastus	Anionic hydrophilic cream DAB	18001560	1
Bombastus	Anionic hydrophilic cream DAB	302464	3
Bombastus	Anionic hydrophilic cream DAB	277292	1
Bombastus	Anionic hydrophilic cream DAB	281998	1
Bombastus	Anionic hydrophilic cream DAB	283474	1
Bombastus	Anionic hydrophilic cream DAB	311134	11
Bombastus	Anionic hydrophilic cream DAB	18001550	1
Bombastus	Anionic hydrophilic cream DAB	18002357	1
Bombastus	Anionic hydrophilic cream DAB	18002359	3
Bombastus	Anionic hydrophilic cream DAB	286498	2
Bombastus	Anionic hydrophilic cream DAB	304090	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	18001559	2
Bombastus	Anionic hydrophilic cream DAB	18003584	3
Bombastus	Anionic hydrophilic cream DAB	18002362	1
Bombastus	Anionic hydrophilic cream DAB	19000616	1
Bombastus	Anionic hydrophilic cream DAB	19000620	2
Bombastus	Anionic hydrophilic cream DAB	293441	5
Bombastus	Anionic hydrophilic cream DAB	296781	1
Bombastus	Anionic hydrophilic cream DAB	305374	2
Bombastus	Anionic hydrophilic cream DAB	276316	1
Bombastus	Anionic hydrophilic cream DAB	277457	6
Bombastus	Anionic hydrophilic cream DAB	282114	4
Bombastus	Anionic hydrophilic cream DAB	295512	7
Bombastus	Anionic hydrophilic cream DAB	296704	1
Bombastus	Anionic hydrophilic cream DAB	297666	1
Bombastus	Anionic hydrophilic cream DAB	301351	4
Bombastus	Anionic hydrophilic cream DAB	305376	1
Bombastus	Anionic hydrophilic cream DAB	308403	2
Bombastus	Anionic hydrophilic cream DAB	310269	1
Bombastus	Anionic hydrophilic cream DAB	300356	3
Bombastus	Anionic hydrophilic cream DAB	308406	1
Bombastus	Anionic hydrophilic cream DAB	18001555	6
Bombastus	Anionic hydrophilic cream DAB	18003585	4
Bombastus	Anionic hydrophilic cream DAB	18004836	8
Bombastus	Anionic hydrophilic cream DAB	18006017	1
Bombastus	Anionic hydrophilic cream DAB	308405	2
Bombastus	Anionic hydrophilic cream DAB	311132	5
Bombastus	Anionic hydrophilic cream DAB	290220	2
Bombastus	Anionic hydrophilic cream DAB	291825	3
Bombastus	Anionic hydrophilic cream DAB	293448	3
Bombastus	Anionic hydrophilic cream DAB	279057	1
Bombastus	Anionic hydrophilic cream DAB	277293	5
Bombastus	Anionic hydrophilic cream DAB	277455	2
Bombastus	Anionic hydrophilic cream DAB	283476	1
Bombastus	Anionic hydrophilic cream DAB	283478	1
Bombastus	Anionic hydrophilic cream DAB	285594	2
Bombastus	Anionic hydrophilic cream DAB	287562	4
Bombastus	Anionic hydrophilic cream DAB	288656	2
Bombastus	Anionic hydrophilic cream DAB	290079	1
Bombastus	Anionic hydrophilic cream DAB	291731	1
Bombastus	Anionic hydrophilic cream DAB	293440	5
Bombastus	Anionic hydrophilic cream DAB	294642	1
Bombastus	Anionic hydrophilic cream DAB	295397	2
Bombastus	Anionic hydrophilic cream DAB	296699	3
Bombastus	Anionic hydrophilic cream DAB	296702	6
Bombastus	Anionic hydrophilic cream DAB	301266	1
Bombastus	Anionic hydrophilic cream DAB	302453	4
Bombastus	Anionic hydrophilic cream DAB	302454	4
Bombastus	Anionic hydrophilic cream DAB	305370	5
Bombastus	Anionic hydrophilic cream DAB	305373	2
Bombastus	Anionic hydrophilic cream DAB	305369	1
Bombastus	Anionic hydrophilic cream DAB	301355	1
Bombastus	Anionic hydrophilic cream DAB	307025	2
Bombastus	Anionic hydrophilic cream DAB	311118	4
Bombastus	Anionic hydrophilic cream DAB	310217	3
Bombastus	Anionic hydrophilic cream DAB	17001302	4
Bombastus	Anionic hydrophilic cream DAB	19000621	1
Bombastus	Anionic hydrophilic cream DAB	283410	3
Bombastus	Anionic hydrophilic cream DAB	18004838	1
Bombastus	Anionic hydrophilic cream DAB	18006024	2
Bombastus	Anionic hydrophilic cream DAB	304105	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	293437	2
Bombastus	Anionic hydrophilic cream DAB	300363	1
Bombastus	Anionic hydrophilic cream DAB	300355	2
Bombastus	Anionic hydrophilic cream DAB	301357	4
Bombastus	Anionic hydrophilic cream DAB	283483	1
Bombastus	Anionic hydrophilic cream DAB	287435	1
Bombastus	Anionic hydrophilic cream DAB	295511	5
Bombastus	Anionic hydrophilic cream DAB	297663	1
Bombastus	Anionic hydrophilic cream DAB	300350	3
Bombastus	Anionic hydrophilic cream DAB	300351	4
Bombastus	Anionic hydrophilic cream DAB	297667	1
Bombastus	Anionic hydrophilic cream DAB	300348	3
Bombastus	Anionic hydrophilic cream DAB	301349	3
Bombastus	Anionic hydrophilic cream DAB	301350	6
Bombastus	Anionic hydrophilic cream DAB	300361	1
Bombastus	Anionic hydrophilic cream DAB	302452	3
Bombastus	Anionic hydrophilic cream DAB	302456	3
Bombastus	Anionic hydrophilic cream DAB	301267	5
Bombastus	Anionic hydrophilic cream DAB	305368	5
Bombastus	Anionic hydrophilic cream DAB	305638	1
Bombastus	Anionic hydrophilic cream DAB	304101	4
Bombastus	Anionic hydrophilic cream DAB	308399	1
Bombastus	Anionic hydrophilic cream DAB	311123	4
Bombastus	Anionic hydrophilic cream DAB	17001308	3
Bombastus	Anionic hydrophilic cream DAB	18002363	3
Bombastus	Anionic hydrophilic cream DAB	18006014	1
Bombastus	Anionic hydrophilic cream DAB	307024	1
Bombastus	Anionic hydrophilic cream DAB	273407	1
Bombastus	Anionic hydrophilic cream DAB	282002	1
Bombastus	Anionic hydrophilic cream DAB	283481	5
Bombastus	Anionic hydrophilic cream DAB	287432	2
Bombastus	Anionic hydrophilic cream DAB	288657	1
Bombastus	Anionic hydrophilic cream DAB	291656	4
Bombastus	Anionic hydrophilic cream DAB	293357	1
Bombastus	Anionic hydrophilic cream DAB	295403	1
Bombastus	Anionic hydrophilic cream DAB	296708	3
Bombastus	Anionic hydrophilic cream DAB	307031	3
Bombastus	Anionic hydrophilic cream DAB	308398	6
Bombastus	Anionic hydrophilic cream DAB	311128	3
Bombastus	Anionic hydrophilic cream DAB	18000253	2
Bombastus	Anionic hydrophilic cream DAB	18004835	2
Bombastus	Anionic hydrophilic cream DAB	17001309	1
Bombastus	Anionic hydrophilic cream DAB	295396	1
Bombastus	Anionic hydrophilic cream DAB	295401	2
Bombastus	Anionic hydrophilic cream DAB	295404	2
Bombastus	Anionic hydrophilic cream DAB	300349	2
Bombastus	Anionic hydrophilic cream DAB	301354	2
Bombastus	Anionic hydrophilic cream DAB	16250001	1
Bombastus	Anionic hydrophilic cream DAB	304094	1
Bombastus	Anionic hydrophilic cream DAB	305380	2
Bombastus	Anionic hydrophilic cream DAB	311124	2
Bombastus	Anionic hydrophilic cream DAB	17001313	3
Bombastus	Anionic hydrophilic cream DAB	18003580	3
Bombastus	Anionic hydrophilic cream DAB	18003588	3
Bombastus	Anionic hydrophilic cream DAB	19000622	1
Bombastus	Anionic hydrophilic cream DAB	280290	1
Bombastus	Anionic hydrophilic cream DAB	282004	3
Bombastus	Anionic hydrophilic cream DAB	285596	2
Bombastus	Anionic hydrophilic cream DAB	291659	2
Bombastus	Anionic hydrophilic cream DAB	293359	4

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	293447	3
Bombastus	Anionic hydrophilic cream DAB	293361	1
Bombastus	Anionic hydrophilic cream DAB	294646	2
Bombastus	Anionic hydrophilic cream DAB	296783	4
Bombastus	Anionic hydrophilic cream DAB	296707	3
Bombastus	Anionic hydrophilic cream DAB	296787	6
Bombastus	Anionic hydrophilic cream DAB	297669	5
Bombastus	Anionic hydrophilic cream DAB	300358	6
Bombastus	Anionic hydrophilic cream DAB	301269	7
Bombastus	Anionic hydrophilic cream DAB	302466	3
Bombastus	Anionic hydrophilic cream DAB	305067	3
Bombastus	Anionic hydrophilic cream DAB	307039	4
Bombastus	Anionic hydrophilic cream DAB	307332	1
Bombastus	Anionic hydrophilic cream DAB	308404	1
Bombastus	Anionic hydrophilic cream DAB	18001562	8
Bombastus	Anionic hydrophilic cream DAB	19003988	1
Bombastus	Anionic hydrophilic cream DAB	308408	3
Bombastus	Anionic hydrophilic cream DAB	288721	2
Bombastus	Anionic hydrophilic cream DAB	294547	2
Bombastus	Anionic hydrophilic cream DAB	1800256	1
Bombastus	Anionic hydrophilic cream DAB	19003975	1
Bombastus	Anionic hydrophilic cream DAB	277465	2
Bombastus	Anionic hydrophilic cream DAB	263981	5
Bombastus	Anionic hydrophilic cream DAB	266175	1
Bombastus	Anionic hydrophilic cream DAB	262772	1
Bombastus	Anionic hydrophilic cream DAB	267436	1
Bombastus	Anionic hydrophilic cream DAB	270711	2
Bombastus	Anionic hydrophilic cream DAB	290218	2
Bombastus	Anionic hydrophilic cream DAB	294650	8
Bombastus	Anionic hydrophilic cream DAB	294648	1
Bombastus	Anionic hydrophilic cream DAB	294641	1
Bombastus	Anionic hydrophilic cream DAB	296703	8
Bombastus	Anionic hydrophilic cream DAB	17088901	1
Bombastus	Anionic hydrophilic cream DAB	311129	2
Bombastus	Anionic hydrophilic cream DAB	18000257	10
Bombastus	Anionic hydrophilic cream DAB	18004842	6
Bombastus	Anionic hydrophilic cream DAB	19000623	1
Bombastus	Anionic hydrophilic cream DAB	19003989	1
Bombastus	Anionic hydrophilic cream DAB	19000624	4
Bombastus	Anionic hydrophilic cream DAB	288659	3
Bombastus	Anionic hydrophilic cream DAB	291658	4
Bombastus	Anionic hydrophilic cream DAB	288658	2
Bombastus	Anionic hydrophilic cream DAB	291822	2
Bombastus	Anionic hydrophilic cream DAB	296706	2
Bombastus	Anionic hydrophilic cream DAB	18002356	3
Bombastuts/Gehe	Anionic hydrophilic cream DAB	308397	4
Bombastuts/Noweda	Anionic hydrophilic cream DAB	307023	2
Bombstus/San	Anionic hydrophilic cream DAB	308403	1
Caele	Anionic hydrophilic cream DAB	9002601	1
Caelo	Anionic hydrophilic cream DAB	11331601	1
Caelo	Anionic hydrophilic cream DAB	654879	1
Caelo	Anionic hydrophilic cream DAB	3321	1
Caelo	Anionic hydrophilic cream DAB	12265401	3
Caelo	Anionic hydrophilic cream DAB	13168901	6
Caelo	Anionic hydrophilic cream DAB	13277401	9
Caelo	Anionic hydrophilic cream DAB	13314101	9
Caelo	Anionic hydrophilic cream DAB	13346501	5
Caelo	Anionic hydrophilic cream DAB	14185501	5
Caelo	Anionic hydrophilic cream DAB	14341501	5
Caelo	Anionic hydrophilic cream DAB	15200101	8

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	15200301	8
Caelo	Anionic hydrophilic cream DAB	15258901	5
Caelo	Anionic hydrophilic cream DAB	15428102	4
Caelo	Anionic hydrophilic cream DAB	11120201	1
Caelo	Anionic hydrophilic cream DAB	11258201	1
Caelo	Anionic hydrophilic cream DAB	11229001	2
Caelo	Anionic hydrophilic cream DAB	11331501	2
Caelo	Anionic hydrophilic cream DAB	11332001	1
Caelo	Anionic hydrophilic cream DAB	11311501	1
Caelo	Anionic hydrophilic cream DAB	12010201	1
Caelo	Anionic hydrophilic cream DAB	2704212540	1
Caelo	Anionic hydrophilic cream DAB	11332101	1
Caelo	Anionic hydrophilic cream DAB	11332401	1
Caelo	Anionic hydrophilic cream DAB	12010901	1
Caelo	Anionic hydrophilic cream DAB	2405212540	1
Caelo	Anionic hydrophilic cream DAB	12012201	1
Caelo	Anionic hydrophilic cream DAB	12099001	2
Caelo	Anionic hydrophilic cream DAB	12099201	3
Caelo	Anionic hydrophilic cream DAB	12100101	1
Caelo	Anionic hydrophilic cream DAB	12100201	1
Caelo	Anionic hydrophilic cream DAB	12187901	4
Caelo	Anionic hydrophilic cream DAB	12100901	5
Caelo	Anionic hydrophilic cream DAB	12010601	1
Caelo	Anionic hydrophilic cream DAB	12084101	3
Caelo	Anionic hydrophilic cream DAB	22091202	1
Caelo	Anionic hydrophilic cream DAB	12100501	1
Caelo	Anionic hydrophilic cream DAB	12101201	1
Caelo	Anionic hydrophilic cream DAB	12100601	5
Caelo	Anionic hydrophilic cream DAB	1119387	1
Caelo	Anionic hydrophilic cream DAB	12128502	3
Caelo	Anionic hydrophilic cream DAB	12218401	2
Caelo	Anionic hydrophilic cream DAB	12187801	2
Caelo	Anionic hydrophilic cream DAB	12204601	1
Caelo	Anionic hydrophilic cream DAB	12195401	2
Caelo	Anionic hydrophilic cream DAB	12010501	1
Caelo	Anionic hydrophilic cream DAB	12264401	1
Caelo	Anionic hydrophilic cream DAB	12217901	1
Caelo	Anionic hydrophilic cream DAB	12218501	1
Caelo	Anionic hydrophilic cream DAB	12264502	1
Caelo	Anionic hydrophilic cream DAB	112212540	1
Caelo	Anionic hydrophilic cream DAB	12265201	6
Caelo	Anionic hydrophilic cream DAB	12188001	1
Caelo	Anionic hydrophilic cream DAB	12245503	1
Caelo	Anionic hydrophilic cream DAB	2112212540	1
Caelo	Anionic hydrophilic cream DAB	12266101	5
Caelo	Anionic hydrophilic cream DAB	12265801	2
Caelo	Anionic hydrophilic cream DAB	20301012-3	1
Caelo	Anionic hydrophilic cream DAB	12265701	3
Caelo	Anionic hydrophilic cream DAB	12264701	2
Caelo	Anionic hydrophilic cream DAB	15011301	1
Caelo	Anionic hydrophilic cream DAB	1601312540	2
Caelo	Anionic hydrophilic cream DAB	12265001	4
Caelo	Anionic hydrophilic cream DAB	12265901	1
Caelo	Anionic hydrophilic cream DAB	413I-02540	1
Caelo	Anionic hydrophilic cream DAB	12245401	3
Caelo	Anionic hydrophilic cream DAB	12265601	1
Caelo	Anionic hydrophilic cream DAB	12313601	4
Caelo	Anionic hydrophilic cream DAB	12313901	9
Caelo	Anionic hydrophilic cream DAB	20021311	1
Caelo	Anionic hydrophilic cream DAB	4131I-02540	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	12313202	8
Caelo	Anionic hydrophilic cream DAB	12314101	9
Caelo	Anionic hydrophilic cream DAB	1303312540	1
Caelo	Anionic hydrophilic cream DAB	12314301	5
Caelo	Anionic hydrophilic cream DAB	2103312540	1
Caelo	Anionic hydrophilic cream DAB	28031319	1
Caelo	Anionic hydrophilic cream DAB	204312540	1
Caelo	Anionic hydrophilic cream DAB	12314501	3
Caelo	Anionic hydrophilic cream DAB	12204301	1
Caelo	Anionic hydrophilic cream DAB	12314701	9
Caelo	Anionic hydrophilic cream DAB	12264601	1
Caelo	Anionic hydrophilic cream DAB	12188101	1
Caelo	Anionic hydrophilic cream DAB	1218501	1
Caelo	Anionic hydrophilic cream DAB	8051301	1
Caelo	Anionic hydrophilic cream DAB	1913Q-02540	1
Caelo	Anionic hydrophilic cream DAB	1913R-02540	1
Caelo	Anionic hydrophilic cream DAB	12314901	5
Caelo	Anionic hydrophilic cream DAB	13036001	5
Caelo	Anionic hydrophilic cream DAB	13038301	5
Caelo	Anionic hydrophilic cream DAB	13128701	12
Caelo	Anionic hydrophilic cream DAB	1061302	1
Caelo	Anionic hydrophilic cream DAB	3061302	1
Caelo	Anionic hydrophilic cream DAB	U-310513-1	1
Caelo	Anionic hydrophilic cream DAB	U-030513-1	1
Caelo	Anionic hydrophilic cream DAB	13036302	1
Caelo	Anionic hydrophilic cream DAB	2413Q02540	1
Caelo	Anionic hydrophilic cream DAB	13154202	1
Caelo	Anionic hydrophilic cream DAB	13154301	6
Caelo	Anionic hydrophilic cream DAB	13164901	3
Caelo	Anionic hydrophilic cream DAB	13165001	9
Caelo	Anionic hydrophilic cream DAB	13165701	9
Caelo	Anionic hydrophilic cream DAB	13154101	4
Caelo	Anionic hydrophilic cream DAB	13168501	6
Caelo	Anionic hydrophilic cream DAB	13168301	5
Caelo	Anionic hydrophilic cream DAB	13166001	3
Caelo	Anionic hydrophilic cream DAB	13169001	6
Caelo	Anionic hydrophilic cream DAB	13168401	9
Caelo	Anionic hydrophilic cream DAB	131168901	1
Caelo	Anionic hydrophilic cream DAB	12081301	1
Caelo	Anionic hydrophilic cream DAB	13168201	2
Caelo	Anionic hydrophilic cream DAB	13154401	1
Caelo	Anionic hydrophilic cream DAB	277461	1
Caelo	Anionic hydrophilic cream DAB	30081303	1
Caelo	Anionic hydrophilic cream DAB	13168601	13
Caelo	Anionic hydrophilic cream DAB	10092013A	1
Caelo	Anionic hydrophilic cream DAB	13271001	3
Caelo	Anionic hydrophilic cream DAB	13265401	6
Caelo	Anionic hydrophilic cream DAB	13169301	7
Caelo	Anionic hydrophilic cream DAB	27091305	1
Caelo	Anionic hydrophilic cream DAB	13167701	2
Caelo	Anionic hydrophilic cream DAB	13265501	7
Caelo	Anionic hydrophilic cream DAB	13265701	1
Caelo	Anionic hydrophilic cream DAB	13280101	19
Caelo	Anionic hydrophilic cream DAB	19101301	1
Caelo	Anionic hydrophilic cream DAB	13313201	7
Caelo	Anionic hydrophilic cream DAB	13313001	4
Caelo	Anionic hydrophilic cream DAB	13167901	1
Caelo	Anionic hydrophilic cream DAB	13280001	3
Caelo	Anionic hydrophilic cream DAB	13265602	4
Caelo	Anionic hydrophilic cream DAB	8111301	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	13313301	4
Caelo	Anionic hydrophilic cream DAB	13275601	2
Caelo	Anionic hydrophilic cream DAB	13280201	12
Caelo	Anionic hydrophilic cream DAB	1331401	1
Caelo	Anionic hydrophilic cream DAB	13313401	5
Caelo	Anionic hydrophilic cream DAB	13277501	1
Caelo	Anionic hydrophilic cream DAB	13313701	6
Caelo	Anionic hydrophilic cream DAB	6121304	1
Caelo	Anionic hydrophilic cream DAB	CH13314001	1
Caelo	Anionic hydrophilic cream DAB	13346001	4
Caelo	Anionic hydrophilic cream DAB	13314601	2
Caelo	Anionic hydrophilic cream DAB	13314401	9
Caelo	Anionic hydrophilic cream DAB	13346601	8
Caelo	Anionic hydrophilic cream DAB	6021406	1
Caelo	Anionic hydrophilic cream DAB	6021405	1
Caelo	Anionic hydrophilic cream DAB	13363401	2
Caelo	Anionic hydrophilic cream DAB	13315001	7
Caelo	Anionic hydrophilic cream DAB	13068504	1
Caelo	Anionic hydrophilic cream DAB	13364001	13
Caelo	Anionic hydrophilic cream DAB	24021401	1
Caelo	Anionic hydrophilic cream DAB	13275501	1
Caelo	Anionic hydrophilic cream DAB	1119720	1
Caelo	Anionic hydrophilic cream DAB	13364301	4
Caelo	Anionic hydrophilic cream DAB	14042501	2
Caelo	Anionic hydrophilic cream DAB	13364101	4
Caelo	Anionic hydrophilic cream DAB	14062101	6
Caelo	Anionic hydrophilic cream DAB	133312901	1
Caelo	Anionic hydrophilic cream DAB	14062601	10
Caelo	Anionic hydrophilic cream DAB	14062401	4
Caelo	Anionic hydrophilic cream DAB	14016801	4
Caelo	Anionic hydrophilic cream DAB	1418101	2
Caelo	Anionic hydrophilic cream DAB	14118201	10
Caelo	Anionic hydrophilic cream DAB	14016601	1
Caelo	Anionic hydrophilic cream DAB	14138801	5
Caelo	Anionic hydrophilic cream DAB	14070801	1
Caelo	Anionic hydrophilic cream DAB	14146301	3
Caelo	Anionic hydrophilic cream DAB	14062801	2
Caelo	Anionic hydrophilic cream DAB	14144601	1
Caelo	Anionic hydrophilic cream DAB	14144501	4
Caelo	Anionic hydrophilic cream DAB	12081405	1
Caelo	Anionic hydrophilic cream DAB	14186702	6
Caelo	Anionic hydrophilic cream DAB	14024901	1
Caelo	Anionic hydrophilic cream DAB	14144301	13
Caelo	Anionic hydrophilic cream DAB	14185601	8
Caelo	Anionic hydrophilic cream DAB	141460201	1
Caelo	Anionic hydrophilic cream DAB	30091403	1
Caelo	Anionic hydrophilic cream DAB	14233101	11
Caelo	Anionic hydrophilic cream DAB	14185801	5
Caelo	Anionic hydrophilic cream DAB	14068601	1
Caelo	Anionic hydrophilic cream DAB	14185702	1
Caelo	Anionic hydrophilic cream DAB	14232901	5
Caelo	Anionic hydrophilic cream DAB	14233601	7
Caelo	Anionic hydrophilic cream DAB	14233301	5
Caelo	Anionic hydrophilic cream DAB	14185901	4
Caelo	Anionic hydrophilic cream DAB	17112014B	1
Caelo	Anionic hydrophilic cream DAB	14186001	1
Caelo	Anionic hydrophilic cream DAB	2111401	1
Caelo	Anionic hydrophilic cream DAB	14233501	2
Caelo	Anionic hydrophilic cream DAB	14264201	7
Caelo	Anionic hydrophilic cream DAB	14186101	5

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14295001	9
Caelo	Anionic hydrophilic cream DAB	14286001	3
Caelo	Anionic hydrophilic cream DAB	14286201	9
Caelo	Anionic hydrophilic cream DAB	14264301	5
Caelo	Anionic hydrophilic cream DAB	14285501	3
Caelo	Anionic hydrophilic cream DAB	1423301	2
Caelo	Anionic hydrophilic cream DAB	14233201	7
Caelo	Anionic hydrophilic cream DAB	14146601	1
Caelo	Anionic hydrophilic cream DAB	14294701	5
Caelo	Anionic hydrophilic cream DAB	5031508	1
Caelo	Anionic hydrophilic cream DAB	14341701	8
Caelo	Anionic hydrophilic cream DAB	14342002	2
Caelo	Anionic hydrophilic cream DAB	14232801	1
Caelo	Anionic hydrophilic cream DAB	9041505	1
Caelo	Anionic hydrophilic cream DAB	14367001	12
Caelo	Anionic hydrophilic cream DAB	14367401	12
Caelo	Anionic hydrophilic cream DAB	14342301	2
Caelo	Anionic hydrophilic cream DAB	27041512	1
Caelo	Anionic hydrophilic cream DAB	15001201	10
Caelo	Anionic hydrophilic cream DAB	15001101	6
Caelo	Anionic hydrophilic cream DAB	4051506	1
Caelo	Anionic hydrophilic cream DAB	293437	1
Caelo	Anionic hydrophilic cream DAB	14341901	1
Caelo	Anionic hydrophilic cream DAB	14342701	3
Caelo	Anionic hydrophilic cream DAB	6061501	1
Caelo	Anionic hydrophilic cream DAB	15001401	8
Caelo	Anionic hydrophilic cream DAB	15027201	5
Caelo	Anionic hydrophilic cream DAB	14285701	1
Caelo	Anionic hydrophilic cream DAB	15034301	8
Caelo	Anionic hydrophilic cream DAB	15200001	5
Caelo	Anionic hydrophilic cream DAB	16071506	1
Caelo	Anionic hydrophilic cream DAB	15199801	3
Caelo	Anionic hydrophilic cream DAB	15034501	2
Caelo	Anionic hydrophilic cream DAB	15200501	4
Caelo	Anionic hydrophilic cream DAB	15039001	9
Caelo	Anionic hydrophilic cream DAB	15267001	3
Caelo	Anionic hydrophilic cream DAB	15266901	3
Caelo	Anionic hydrophilic cream DAB	15315501	3
Caelo	Anionic hydrophilic cream DAB	15397201	5
Caelo	Anionic hydrophilic cream DAB	15353201	6
Caelo	Anionic hydrophilic cream DAB	15357301	3
Caelo	Anionic hydrophilic cream DAB	15397301	10
Caelo	Anionic hydrophilic cream DAB	15400701	7
Caelo	Anionic hydrophilic cream DAB	15432001	6
Caelo	Anionic hydrophilic cream DAB	16150601	2
Caelo	Anionic hydrophilic cream DAB	16180101	3
Caelo	Anionic hydrophilic cream DAB	15315701	7
Caelo	Anionic hydrophilic cream DAB	15319201	6
Caelo	Anionic hydrophilic cream DAB	Testmessung	1
Caelo	Anionic hydrophilic cream DAB	14341801	1
Caelo	Anionic hydrophilic cream DAB	15319501	7
Caelo	Anionic hydrophilic cream DAB	15400501	2
Caelo	Anionic hydrophilic cream DAB	15401001	5
Caelo	Anionic hydrophilic cream DAB	15400601	1
Caelo	Anionic hydrophilic cream DAB	15353101	1
Caelo	Anionic hydrophilic cream DAB	15400401	6
Caelo	Anionic hydrophilic cream DAB	15396901	3
Caelo	Anionic hydrophilic cream DAB	15357101	1
Caelo	Anionic hydrophilic cream DAB	297680	1
Caelo	Anionic hydrophilic cream DAB	16046201	11

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	16046601	8
Caelo	Anionic hydrophilic cream DAB	16046901	11
Caelo	Anionic hydrophilic cream DAB	16047001	12
Caelo	Anionic hydrophilic cream DAB	16046701	4
Caelo	Anionic hydrophilic cream DAB	16058001	11
Caelo	Anionic hydrophilic cream DAB	15431801	3
Caelo	Anionic hydrophilic cream DAB	16103501	4
Caelo	Anionic hydrophilic cream DAB	16103101	12
Caelo	Anionic hydrophilic cream DAB	57601	1
Caelo	Anionic hydrophilic cream DAB	297669	1
Caelo	Anionic hydrophilic cream DAB	12345	2
Caelo	Anionic hydrophilic cream DAB	14285902	1
Caelo	Anionic hydrophilic cream DAB	12886	1
Caelo	Anionic hydrophilic cream DAB	16047101	3
Caelo	Anionic hydrophilic cream DAB	1259487	1
Caelo	Anionic hydrophilic cream DAB	16057901	2
Caelo	Anionic hydrophilic cream DAB	16057201	8
Caelo	Anionic hydrophilic cream DAB	16103301	12
Caelo	Anionic hydrophilic cream DAB	16150801	16
Caelo	Anionic hydrophilic cream DAB	16150901	13
Caelo	Anionic hydrophilic cream DAB	16152501	4
Caelo	Anionic hydrophilic cream DAB	Mh090716Lo1	1
Caelo	Anionic hydrophilic cream DAB	16057301	16
Caelo	Anionic hydrophilic cream DAB	8816-250-345	1
Caelo	Anionic hydrophilic cream DAB	16156001	11
Caelo	Anionic hydrophilic cream DAB	16158701	18
Caelo	Anionic hydrophilic cream DAB	16158803	5
Caelo	Anionic hydrophilic cream DAB	160914UEA	1
Caelo	Anionic hydrophilic cream DAB	1679601	1
Caelo	Anionic hydrophilic cream DAB	15401601	1
Caelo	Anionic hydrophilic cream DAB	16152901	3
Caelo	Anionic hydrophilic cream DAB	161101UEA/16156401	1
Caelo	Anionic hydrophilic cream DAB	16156301	2
Caelo	Anionic hydrophilic cream DAB	16259302	4
Caelo	Anionic hydrophilic cream DAB	16259601	10
Caelo	Anionic hydrophilic cream DAB	16258601	10
Caelo	Anionic hydrophilic cream DAB	16264301	13
Caelo	Anionic hydrophilic cream DAB	16259001	6
Caelo	Anionic hydrophilic cream DAB	6259601	1
Caelo	Anionic hydrophilic cream DAB	17045101	8
Caelo	Anionic hydrophilic cream DAB	16264501	11
Caelo	Anionic hydrophilic cream DAB	16317201	7
Caelo	Anionic hydrophilic cream DAB	16322801	23
Caelo	Anionic hydrophilic cream DAB	16260001	14
Caelo	Anionic hydrophilic cream DAB	1625901	1
Caelo	Anionic hydrophilic cream DAB	16259201	3
Caelo	Anionic hydrophilic cream DAB	16328001	6
Caelo	Anionic hydrophilic cream DAB	16322701	3
Caelo	Anionic hydrophilic cream DAB	16328201	14
Caelo	Anionic hydrophilic cream DAB	163170001	1
Caelo	Anionic hydrophilic cream DAB	16317001	4
Caelo	Anionic hydrophilic cream DAB	1234	3
Caelo	Anionic hydrophilic cream DAB	305378	2
Caelo	Anionic hydrophilic cream DAB	6051701	1
Caelo	Anionic hydrophilic cream DAB	16322501	5
Caelo	Anionic hydrophilic cream DAB	16322401	16
Caelo	Anionic hydrophilic cream DAB	16259101	2
Caelo	Anionic hydrophilic cream DAB	17045301/5268	1
Caelo	Anionic hydrophilic cream DAB	17045201	7
Caelo	Anionic hydrophilic cream DAB	3061702	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	170453015285	1
Caelo	Anionic hydrophilic cream DAB	17045401	11
Caelo	Anionic hydrophilic cream DAB	163322601	1
Caelo	Anionic hydrophilic cream DAB	17061703	1
Caelo	Anionic hydrophilic cream DAB	17088701	7
Caelo	Anionic hydrophilic cream DAB	10071706	1
Caelo	Anionic hydrophilic cream DAB	11170717	1
Caelo	Anionic hydrophilic cream DAB	170838025326	1
Caelo	Anionic hydrophilic cream DAB	17084001	5
Caelo	Anionic hydrophilic cream DAB	17142501	10
Caelo	Anionic hydrophilic cream DAB	17142601	13
Caelo	Anionic hydrophilic cream DAB	17143101	4
Caelo	Anionic hydrophilic cream DAB	171426015334	1
Caelo	Anionic hydrophilic cream DAB	17030301	41
Caelo	Anionic hydrophilic cream DAB	17143802	18
Caelo	Anionic hydrophilic cream DAB	17143701	8
Caelo	Anionic hydrophilic cream DAB	17088601	1
Caelo	Anionic hydrophilic cream DAB	171426015363	1
Caelo	Anionic hydrophilic cream DAB	16328301	1
Caelo	Anionic hydrophilic cream DAB	17142701	6
Caelo	Anionic hydrophilic cream DAB	1742701	1
Caelo	Anionic hydrophilic cream DAB	17142102	4
Caelo	Anionic hydrophilic cream DAB	17125802	4
Caelo	Anionic hydrophilic cream DAB	17143801	3
Caelo	Anionic hydrophilic cream DAB	17143301	10
Caelo	Anionic hydrophilic cream DAB	17142301	4
Caelo	Anionic hydrophilic cream DAB	311134	2
Caelo	Anionic hydrophilic cream DAB	171428015414	1
Caelo	Anionic hydrophilic cream DAB	17201701	15
Caelo	Anionic hydrophilic cream DAB	13121718	1
Caelo	Anionic hydrophilic cream DAB	17143601	9
Caelo	Anionic hydrophilic cream DAB	17200703	4
Caelo	Anionic hydrophilic cream DAB	17142401	7
Caelo	Anionic hydrophilic cream DAB	17200801	5
Caelo	Anionic hydrophilic cream DAB	17201501	11
Caelo	Anionic hydrophilic cream DAB	17201001	5
Caelo	Anionic hydrophilic cream DAB	17201201	9
Caelo	Anionic hydrophilic cream DAB	17201601	10
Caelo	Anionic hydrophilic cream DAB	305374	1
Caelo	Anionic hydrophilic cream DAB	17001310	1
Caelo	Anionic hydrophilic cream DAB	19021812	1
Caelo	Anionic hydrophilic cream DAB	17200701	9
Caelo	Anionic hydrophilic cream DAB	17201901	12
Caelo	Anionic hydrophilic cream DAB	172015015495	1
Caelo	Anionic hydrophilic cream DAB	18000257	1
Caelo	Anionic hydrophilic cream DAB	17202301	7
Caelo	Anionic hydrophilic cream DAB	172016015530	1
Caelo	Anionic hydrophilic cream DAB	18066701	23
Caelo	Anionic hydrophilic cream DAB	17269601	6
Caelo	Anionic hydrophilic cream DAB	17298901	6
Caelo	Anionic hydrophilic cream DAB	23051808	1
Caelo	Anionic hydrophilic cream DAB	23051810	1
Caelo	Anionic hydrophilic cream DAB	17299101	10
Caelo	Anionic hydrophilic cream DAB	6061805	1
Caelo	Anionic hydrophilic cream DAB	17270102	1
Caelo	Anionic hydrophilic cream DAB	23061814	1
Caelo	Anionic hydrophilic cream DAB	17299501	13
Caelo	Anionic hydrophilic cream DAB	17299401	2
Caelo	Anionic hydrophilic cream DAB	17299801	17
Caelo	Anionic hydrophilic cream DAB	18010401	25

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	17001315	1
Caelo	Anionic hydrophilic cream DAB	18010501	4
Caelo	Anionic hydrophilic cream DAB	18010302	4
Caelo	Anionic hydrophilic cream DAB	18002356	1
Caelo	Anionic hydrophilic cream DAB	1800401	1
Caelo	Anionic hydrophilic cream DAB	18010701	3
Caelo	Anionic hydrophilic cream DAB	18116801	12
Caelo	Anionic hydrophilic cream DAB	180110001	1
Caelo	Anionic hydrophilic cream DAB	18139501	11
Caelo	Anionic hydrophilic cream DAB	18066802	1
Caelo	Anionic hydrophilic cream DAB	18168801	11
Caelo	Anionic hydrophilic cream DAB	18160101	13
Caelo	Anionic hydrophilic cream DAB	18003588	3
Caelo	Anionic hydrophilic cream DAB	18160301	3
Caelo	Anionic hydrophilic cream DAB	18169101	8
Caelo	Anionic hydrophilic cream DAB	18169201	2
Caelo	Anionic hydrophilic cream DAB	18117001	2
Caelo	Anionic hydrophilic cream DAB	18169301	7
Caelo	Anionic hydrophilic cream DAB	18168901	2
Caelo	Anionic hydrophilic cream DAB	17269801	1
Caelo	Anionic hydrophilic cream DAB	18139001	1
Caelo	Anionic hydrophilic cream DAB	18004835	1
Caelo	Anionic hydrophilic cream DAB	18160201	1
Caelo	Anionic hydrophilic cream DAB	18160001	3
Caelo	Anionic hydrophilic cream DAB	18298401	10
Caelo	Anionic hydrophilic cream DAB	18140001	1
Caelo	Anionic hydrophilic cream DAB	18243001	3
Caelo	Anionic hydrophilic cream DAB	18299001	3
Caelo	Anionic hydrophilic cream DAB	18298301	5
Caelo	Anionic hydrophilic cream DAB	18004842	1
Caelo	Anionic hydrophilic cream DAB	18298001	3
Caelo	Anionic hydrophilic cream DAB	19002502	3
Caelo	Anionic hydrophilic cream DAB	18298701	5
Caelo	Anionic hydrophilic cream DAB	19071501	1
Caelo	Anionic hydrophilic cream DAB	302461	2
Caelo	Anionic hydrophilic cream DAB	19161601	1
Caelo	Anionic hydrophilic cream DAB	18010601	2
Caelo	Anionic hydrophilic cream DAB	11180201	1
Caelo	Anionic hydrophilic cream DAB	1234569	1
Caelo	Anionic hydrophilic cream DAB	153552901	1
Caelo	Anionic hydrophilic cream DAB	15401302	4
Caelo	Anionic hydrophilic cream DAB	17200901	2
Caelo	Anionic hydrophilic cream DAB	18116901	3
Caelo	Anionic hydrophilic cream DAB	15432101	7
Caelo	Anionic hydrophilic cream DAB	17045501	10
Caelo	Anionic hydrophilic cream DAB	17201401	15
Caelo	Anionic hydrophilic cream DAB	302456	1
Caelo	Anionic hydrophilic cream DAB	17001312	2
Caelo	Anionic hydrophilic cream DAB	13167801	2
Caelo	Anionic hydrophilic cream DAB	14016701	9
Caelo	Anionic hydrophilic cream DAB	14042201	1
Caelo	Anionic hydrophilic cream DAB	290145	1
Caelo	Anionic hydrophilic cream DAB	15200401	2
Caelo	Anionic hydrophilic cream DAB	15401201	4
Caelo	Anionic hydrophilic cream DAB	16250001	22
Caelo	Anionic hydrophilic cream DAB	17142901	10
Caelo	Anionic hydrophilic cream DAB	17299701	11
Caelo	Anionic hydrophilic cream DAB	17141901-20180112Ma5	1
Caelo	Anionic hydrophilic cream DAB	17200701-20180404Ma7	1
Caelo	Anionic hydrophilic cream DAB	15428501	5

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	16322402	2
Caelo	Anionic hydrophilic cream DAB	1234301	1
Caelo	Anionic hydrophilic cream DAB	13070601	6
Caelo	Anionic hydrophilic cream DAB	13035902	4
Caelo	Anionic hydrophilic cream DAB	14233401	10
Caelo	Anionic hydrophilic cream DAB	15267601	3
Caelo	Anionic hydrophilic cream DAB	15428401	4
Caelo	Anionic hydrophilic cream DAB	16057601	5
Caelo	Anionic hydrophilic cream DAB	16179702	8
Caelo	Anionic hydrophilic cream DAB	170612UEA/16264501	1
Caelo	Anionic hydrophilic cream DAB	170817UEA/17088801	1
Caelo	Anionic hydrophilic cream DAB	171107UEA/17143001	1
Caelo	Anionic hydrophilic cream DAB	304017200702	1
Caelo	Anionic hydrophilic cream DAB	18243501	7
Caelo	Anionic hydrophilic cream DAB	15267801	9
Caelo	Anionic hydrophilic cream DAB	15267201	7
Caelo	Anionic hydrophilic cream DAB	15315601	3
Caelo	Anionic hydrophilic cream DAB	15428201	9
Caelo	Anionic hydrophilic cream DAB	300365	1
Caelo	Anionic hydrophilic cream DAB	17248501	8
Caelo	Anionic hydrophilic cream DAB	18139401	3
Caelo	Anionic hydrophilic cream DAB	18169401	9
Caelo	Anionic hydrophilic cream DAB	18298901	10
Caelo	Anionic hydrophilic cream DAB	3965/V07/15	1
Caelo	Anionic hydrophilic cream DAB	3960/V07/15	1
Caelo	Anionic hydrophilic cream DAB	14295101	3
Caelo	Anionic hydrophilic cream DAB	294645	1
Caelo	Anionic hydrophilic cream DAB	161431	1
Caelo	Anionic hydrophilic cream DAB	304096	2
Caelo	Anionic hydrophilic cream DAB	16259801	12
Caelo	Anionic hydrophilic cream DAB	19072501	2
Caelo	Anionic hydrophilic cream DAB	11332501	1
Caelo	Anionic hydrophilic cream DAB	12245601	1
Caelo	Anionic hydrophilic cream DAB	13154201	2
Caelo	Anionic hydrophilic cream DAB	13167601	2
Caelo	Anionic hydrophilic cream DAB	9/AKD13	1
Caelo	Anionic hydrophilic cream DAB	304098	2
Caelo	Anionic hydrophilic cream DAB	17143201	10
Caelo	Anionic hydrophilic cream DAB	17202001	15
Caelo	Anionic hydrophilic cream DAB	18298801	8
Caelo	Anionic hydrophilic cream DAB	17269901	5
Caelo	Anionic hydrophilic cream DAB	18159901	1
Caelo	Anionic hydrophilic cream DAB	18243101	1
Caelo	Anionic hydrophilic cream DAB	1336301	2
Caelo	Anionic hydrophilic cream DAB	15267401	14
Caelo	Anionic hydrophilic cream DAB	171420101	1
Caelo	Anionic hydrophilic cream DAB	108/AKD16	1
Caelo	Anionic hydrophilic cream DAB	12245701	2
Caelo	Anionic hydrophilic cream DAB	14233001	4
Caelo	Anionic hydrophilic cream DAB	13167501	12
Caelo	Anionic hydrophilic cream DAB	18000252	1
Caelo	Anionic hydrophilic cream DAB	307028	1
Caelo	Anionic hydrophilic cream DAB	13165901	4
Caelo	Anionic hydrophilic cream DAB	170411AHC/16264501	1
Caelo	Anionic hydrophilic cream DAB	12313301	3
Caelo	Anionic hydrophilic cream DAB	13071304	1
Caelo	Anionic hydrophilic cream DAB	13165101	3
Caelo	Anionic hydrophilic cream DAB	13169201	5
Caelo	Anionic hydrophilic cream DAB	13270701	4
Caelo	Anionic hydrophilic cream DAB	13312901	4

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	13346101	4
Caelo	Anionic hydrophilic cream DAB	14062301	8
Caelo	Anionic hydrophilic cream DAB	1824340202	1
Caelo	Anionic hydrophilic cream DAB	13036301	5
Caelo	Anionic hydrophilic cream DAB	14062901	9
Caelo	Anionic hydrophilic cream DAB	160470001	1
Caelo	Anionic hydrophilic cream DAB	17248601	6
Caelo	Anionic hydrophilic cream DAB	14341601	7
Caelo	Anionic hydrophilic cream DAB	15199901	6
Caelo	Anionic hydrophilic cream DAB	13363301	6
Caelo	Anionic hydrophilic cream DAB	12217801	5
Caelo	Anionic hydrophilic cream DAB	12265301	4
Caelo	Anionic hydrophilic cream DAB	12264801	2
Caelo	Anionic hydrophilic cream DAB	13070502	4
Caelo	Anionic hydrophilic cream DAB	16259301-20170704Ma2	1
Caelo	Anionic hydrophilic cream DAB	13165801	6
Caelo	Anionic hydrophilic cream DAB	14139001	2
Caelo	Anionic hydrophilic cream DAB	17084201	11
Caelo	Anionic hydrophilic cream DAB	16156101	9
Caelo	Anionic hydrophilic cream DAB	53(01119683)	1
Caelo	Anionic hydrophilic cream DAB	54(18298401)	1
Caelo	Anionic hydrophilic cream DAB	1632401	1
Caelo	Anionic hydrophilic cream DAB	17084101	32
Caelo	Anionic hydrophilic cream DAB	16103201	2
Caelo	Anionic hydrophilic cream DAB	17088501	4
Caelo	Anionic hydrophilic cream DAB	17269701	1
Caelo	Anionic hydrophilic cream DAB	14342601	5
Caelo	Anionic hydrophilic cream DAB	15027101	6
Caelo	Anionic hydrophilic cream DAB	18298201	5
Caelo	Anionic hydrophilic cream DAB	13168101	1
Caelo	Anionic hydrophilic cream DAB	14016901	1
Caelo	Anionic hydrophilic cream DAB	12195301	1
Caelo	Anionic hydrophilic cream DAB	1313314401	1
Caelo	Anionic hydrophilic cream DAB	13363701	1
Caelo	Anionic hydrophilic cream DAB	14264302	1
Caelo	Anionic hydrophilic cream DAB	14366801	20
Caelo	Anionic hydrophilic cream DAB	15034201	9
Caelo	Anionic hydrophilic cream DAB	1423201	1
Caelo	Anionic hydrophilic cream DAB	15401701	6
Caelo	Anionic hydrophilic cream DAB	18011201	2
Caelo	Anionic hydrophilic cream DAB	13271101	3
Caelo	Anionic hydrophilic cream DAB	18297901	2
Caelo	Anionic hydrophilic cream DAB	18010702	6
Caelo	Anionic hydrophilic cream DAB	18168701	9
Caelo	Anionic hydrophilic cream DAB	18296301	1
Caelo	Anionic hydrophilic cream DAB	19072601	5
Caelo	Anionic hydrophilic cream DAB	12218701	1
Caelo	Anionic hydrophilic cream DAB	12264901	1
Caelo	Anionic hydrophilic cream DAB	16220201	1
Caelo	Anionic hydrophilic cream DAB	304105	1
Caelo	Anionic hydrophilic cream DAB	18010801	5
Caelo	Anionic hydrophilic cream DAB	19206001	1
Caelo	Anionic hydrophilic cream DAB	15319301	6
Caelo	Anionic hydrophilic cream DAB	172999101	1
Caelo	Anionic hydrophilic cream DAB	113313001	1
Caelo	Anionic hydrophilic cream DAB	15401401	18
Caelo	Anionic hydrophilic cream DAB	15431702	16
Caelo	Anionic hydrophilic cream DAB	16046801	3
Caelo	Anionic hydrophilic cream DAB	16057501	11
Caelo	Anionic hydrophilic cream DAB	162500001	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	18010901	16
Caelo	Anionic hydrophilic cream DAB	18243201	1
Caelo	Anionic hydrophilic cream DAB	18006018	2
Caelo	Anionic hydrophilic cream DAB	17088801	5
Caelo	Anionic hydrophilic cream DAB	17299201	14
Caelo	Anionic hydrophilic cream DAB	14146201	5
Caelo	Anionic hydrophilic cream DAB	282005	1
Caelo	Anionic hydrophilic cream DAB	12245801	2
Caelo	Anionic hydrophilic cream DAB	13070301	5
Caelo	Anionic hydrophilic cream DAB	13169101	4
Caelo	Anionic hydrophilic cream DAB	13168701	5
Caelo	Anionic hydrophilic cream DAB	13313101	3
Caelo	Anionic hydrophilic cream DAB	14016602	2
Caelo	Anionic hydrophilic cream DAB	14144401	6
Caelo	Anionic hydrophilic cream DAB	1315Q-02540	1
Caelo	Anionic hydrophilic cream DAB	16103401	10
Caelo	Anionic hydrophilic cream DAB	16179801	14
Caelo	Anionic hydrophilic cream DAB	123test	1
Caelo	Anionic hydrophilic cream DAB	12099301	1
Caelo	Anionic hydrophilic cream DAB	14186501	16
Caelo	Anionic hydrophilic cream DAB	17248701	5
Caelo	Anionic hydrophilic cream DAB	294649	2
Caelo	Anionic hydrophilic cream DAB	16249902	4
Caelo	Anionic hydrophilic cream DAB	16150701	5
Caelo	Anionic hydrophilic cream DAB	17270501	17
Caelo	Anionic hydrophilic cream DAB	11311101	1
Caelo	Anionic hydrophilic cream DAB	pzn01119720	1
Caelo	Anionic hydrophilic cream DAB	14138701	3
Caelo	Anionic hydrophilic cream DAB	12218201	2
Caelo	Anionic hydrophilic cream DAB	12266201	2
Caelo	Anionic hydrophilic cream DAB	13072501	4
Caelo	Anionic hydrophilic cream DAB	278848	3
Caelo	Anionic hydrophilic cream DAB	3313U-02540	1
Caelo	Anionic hydrophilic cream DAB	13165601	1
Caelo	Anionic hydrophilic cream DAB	13265301	7
Caelo	Anionic hydrophilic cream DAB	314Q2540	1
Caelo	Anionic hydrophilic cream DAB	13363601	13
Caelo	Anionic hydrophilic cream DAB	13363201	10
Caelo	Anionic hydrophilic cream DAB	13314801	1
Caelo	Anionic hydrophilic cream DAB	13409501	2
Caelo	Anionic hydrophilic cream DAB	14062501	6
Caelo	Anionic hydrophilic cream DAB	2414E2540	1
Caelo	Anionic hydrophilic cream DAB	14118501	9
Caelo	Anionic hydrophilic cream DAB	14185301	9
Caelo	Anionic hydrophilic cream DAB	1485401	1
Caelo	Anionic hydrophilic cream DAB	14185401	5
Caelo	Anionic hydrophilic cream DAB	287562	1
Caelo	Anionic hydrophilic cream DAB	1418601	1
Caelo	Anionic hydrophilic cream DAB	14285801	5
Caelo	Anionic hydrophilic cream DAB	14285601	6
Caelo	Anionic hydrophilic cream DAB	14286101	6
Caelo	Anionic hydrophilic cream DAB	15026901	4
Caelo	Anionic hydrophilic cream DAB	15267101	3
Caelo	Anionic hydrophilic cream DAB	15259001	8
Caelo	Anionic hydrophilic cream DAB	15319101	3
Caelo	Anionic hydrophilic cream DAB	1260216	1
Caelo	Anionic hydrophilic cream DAB	16156401	18
Caelo	Anionic hydrophilic cream DAB	16180001	13
Caelo	Anionic hydrophilic cream DAB	16158601	1
Caelo	Anionic hydrophilic cream DAB	16359901	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	16328401	12
Caelo	Anionic hydrophilic cream DAB	1270417	1
Caelo	Anionic hydrophilic cream DAB	17083801	3
Caelo	Anionic hydrophilic cream DAB	1200717/17084201	1
Caelo	Anionic hydrophilic cream DAB	17088901	9
Caelo	Anionic hydrophilic cream DAB	17141901	29
Caelo	Anionic hydrophilic cream DAB	18066803	3
Caelo	Anionic hydrophilic cream DAB	17298801	7
Caelo	Anionic hydrophilic cream DAB	18117201	10
Caelo	Anionic hydrophilic cream DAB	18298601	6
Caelo	Anionic hydrophilic cream DAB	18299101	5
Caelo	Anionic hydrophilic cream DAB	19072101	1
Caelo	Anionic hydrophilic cream DAB	19072701	3
Caelo	Anionic hydrophilic cream DAB	12098801	1
Caelo	Anionic hydrophilic cream DAB	12100401	2
Caelo	Anionic hydrophilic cream DAB	12218001	2
Caelo	Anionic hydrophilic cream DAB	12218801	3
Caelo	Anionic hydrophilic cream DAB	12313701	8
Caelo	Anionic hydrophilic cream DAB	4513E2540	1
Caelo	Anionic hydrophilic cream DAB	4513U2540	1
Caelo	Anionic hydrophilic cream DAB	13313601	5
Caelo	Anionic hydrophilic cream DAB	714M2540	1
Caelo	Anionic hydrophilic cream DAB	1114U2540	1
Caelo	Anionic hydrophilic cream DAB	1814E2540	1
Caelo	Anionic hydrophilic cream DAB	14138902	5
Caelo	Anionic hydrophilic cream DAB	17143001	13
Caelo	Anionic hydrophilic cream DAB	15200601	4
Caelo	Anionic hydrophilic cream DAB	13128601	6
Caelo	Anionic hydrophilic cream DAB	14017001	2
Caelo	Anionic hydrophilic cream DAB	1535101	1
Caelo	Anionic hydrophilic cream DAB	16152801	12
Caelo	Anionic hydrophilic cream DAB	15431701	10
Caelo	Anionic hydrophilic cream DAB	13313901	10
Caelo	Anionic hydrophilic cream DAB	14118301	5
Caelo	Anionic hydrophilic cream DAB	14186601	8
Caelo	Anionic hydrophilic cream DAB	15027301	3
Caelo	Anionic hydrophilic cream DAB	51(17143601)	1
Caelo	Anionic hydrophilic cream DAB	52(17299201)	1
Caelo	Anionic hydrophilic cream DAB	52(17299101)	1
Caelo	Anionic hydrophilic cream DAB	18297902	12
Caelo	Anionic hydrophilic cream DAB	55(19002802)	1
Caelo	Anionic hydrophilic cream DAB	56(19072901)	1
Caelo	Anionic hydrophilic cream DAB	17201301	6
Caelo	Anionic hydrophilic cream DAB	18243301	14
Caelo	Anionic hydrophilic cream DAB	11253201	1
Caelo	Anionic hydrophilic cream DAB	1659801	1
Caelo	Anionic hydrophilic cream DAB	17201909	1
Caelo	Anionic hydrophilic cream DAB	14264101	4
Caelo	Anionic hydrophilic cream DAB	12195601	7
Caelo	Anionic hydrophilic cream DAB	276319	1
Caelo	Anionic hydrophilic cream DAB	12314404	1
Caelo	Anionic hydrophilic cream DAB	270943	2
Caelo	Anionic hydrophilic cream DAB	276409	1
Caelo	Anionic hydrophilic cream DAB	11326701	3
Caelo	Anionic hydrophilic cream DAB	12195201	8
Caelo	Anionic hydrophilic cream DAB	13167401	2
Caelo	Anionic hydrophilic cream DAB	13310001	1
Caelo	Anionic hydrophilic cream DAB	14118101	16
Caelo	Anionic hydrophilic cream DAB	14185201	3
Caelo	Anionic hydrophilic cream DAB	14263901	5

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14264001	9
Caelo	Anionic hydrophilic cream DAB	14294301	4
Caelo	Anionic hydrophilic cream DAB	14294501	2
Caelo	Anionic hydrophilic cream DAB	14342801	13
Caelo	Anionic hydrophilic cream DAB	295400	1
Caelo	Anionic hydrophilic cream DAB	15315801	2
Caelo	Anionic hydrophilic cream DAB	15315901	3
Caelo	Anionic hydrophilic cream DAB	15401501	2
Caelo	Anionic hydrophilic cream DAB	16179302	1
Caelo	Anionic hydrophilic cream DAB	1542801	1
Caelo	Anionic hydrophilic cream DAB	1615640	1
Caelo	Anionic hydrophilic cream DAB	16158501	3
Caelo	Anionic hydrophilic cream DAB	16259401	12
Caelo	Anionic hydrophilic cream DAB	16264601	7
Caelo	Anionic hydrophilic cream DAB	16264701	12
Caelo	Anionic hydrophilic cream DAB	170503AHC/16264501	1
Caelo	Anionic hydrophilic cream DAB	1624701	1
Caelo	Anionic hydrophilic cream DAB	17083802	5
Caelo	Anionic hydrophilic cream DAB	170729182	1
Caelo	Anionic hydrophilic cream DAB	305372	1
Caelo	Anionic hydrophilic cream DAB	170919UEA/17143001	1
Caelo	Anionic hydrophilic cream DAB	17143401	5
Caelo	Anionic hydrophilic cream DAB	171229UEA/17123001	1
Caelo	Anionic hydrophilic cream DAB	17200702	1
Caelo	Anionic hydrophilic cream DAB	123456	1
Caelo	Anionic hydrophilic cream DAB	180220UEA/17200801	1
Caelo	Anionic hydrophilic cream DAB	172031301	1
Caelo	Anionic hydrophilic cream DAB	17201101	1
Caelo	Anionic hydrophilic cream DAB	1724601	1
Caelo	Anionic hydrophilic cream DAB	311128	1
Caelo	Anionic hydrophilic cream DAB	18066601	4
Caelo	Anionic hydrophilic cream DAB	18040401	1
Caelo	Anionic hydrophilic cream DAB	18210702	1
Caelo	Anionic hydrophilic cream DAB	18011011	1
Caelo	Anionic hydrophilic cream DAB	18139901	2
Caelo	Anionic hydrophilic cream DAB	18002360	1
Caelo	Anionic hydrophilic cream DAB	19002901	6
Caelo	Anionic hydrophilic cream DAB	19072301	1
Caelo	Anionic hydrophilic cream DAB	15400901	6
Caelo	Anionic hydrophilic cream DAB	12187701	3
Caelo	Anionic hydrophilic cream DAB	12265501	3
Caelo	Anionic hydrophilic cream DAB	13314001	7
Caelo	Anionic hydrophilic cream DAB	14061801	9
Caelo	Anionic hydrophilic cream DAB	12314601	8
Caelo	Anionic hydrophilic cream DAB	3713A02540	1
Caelo	Anionic hydrophilic cream DAB	1231401	1
Caelo	Anionic hydrophilic cream DAB	4313I-02540	1
Caelo	Anionic hydrophilic cream DAB	14233202	9
Caelo	Anionic hydrophilic cream DAB	291732	2
Caelo	Anionic hydrophilic cream DAB	15034401	5
Caelo	Anionic hydrophilic cream DAB	15027001	29
Caelo	Anionic hydrophilic cream DAB	15200202	1
Caelo	Anionic hydrophilic cream DAB	15396801	3
Caelo	Anionic hydrophilic cream DAB	15397101	4
Caelo	Anionic hydrophilic cream DAB	297672	1
Caelo	Anionic hydrophilic cream DAB	16057701	7
Caelo	Anionic hydrophilic cream DAB	16156201	3
Caelo	Anionic hydrophilic cream DAB	17045301	13
Caelo	Anionic hydrophilic cream DAB	17143501	8
Caelo	Anionic hydrophilic cream DAB	17143510	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	17201102	7
Caelo	Anionic hydrophilic cream DAB	17201801	11
Caelo	Anionic hydrophilic cream DAB	17202101	9
Caelo	Anionic hydrophilic cream DAB	17299301	10
Caelo	Anionic hydrophilic cream DAB	18011001	14
Caelo	Anionic hydrophilic cream DAB	18168501	6
Caelo	Anionic hydrophilic cream DAB	19072401	4
Caelo	Anionic hydrophilic cream DAB	19072801	3
Caelo	Anionic hydrophilic cream DAB	14144701	3
Caelo	Anionic hydrophilic cream DAB	13346201	2
Caelo	Anionic hydrophilic cream DAB	19002703	1
Caelo	Anionic hydrophilic cream DAB	12100701	2
Caelo	Anionic hydrophilic cream DAB	12195501	1
Caelo	Anionic hydrophilic cream DAB	12265101	1
Caelo	Anionic hydrophilic cream DAB	12314401	10
Caelo	Anionic hydrophilic cream DAB	278851	1
Caelo	Anionic hydrophilic cream DAB	14042401	1
Caelo	Anionic hydrophilic cream DAB	14042601	1
Caelo	Anionic hydrophilic cream DAB	1423901	1
Caelo	Anionic hydrophilic cream DAB	14294801	2
Caelo	Anionic hydrophilic cream DAB	14342101	8
Caelo	Anionic hydrophilic cream DAB	1434301	1
Caelo	Anionic hydrophilic cream DAB	14374801	3
Caelo	Anionic hydrophilic cream DAB	15034601	4
Caelo	Anionic hydrophilic cream DAB	1500141	3
Caelo	Anionic hydrophilic cream DAB	16046501	6
Caelo	Anionic hydrophilic cream DAB	15267301	6
Caelo	Anionic hydrophilic cream DAB	15200201	5
Caelo	Anionic hydrophilic cream DAB	16046301	3
Caelo	Anionic hydrophilic cream DAB	15401301	3
Caelo	Anionic hydrophilic cream DAB	300353	1
Caelo	Anionic hydrophilic cream DAB	16179601	16
Caelo	Anionic hydrophilic cream DAB	16259701	14
Caelo	Anionic hydrophilic cream DAB	16259901	12
Caelo	Anionic hydrophilic cream DAB	16200201	1
Caelo	Anionic hydrophilic cream DAB	302453	1
Caelo	Anionic hydrophilic cream DAB	163228801	1
Caelo	Anionic hydrophilic cream DAB	17030001	9
Caelo	Anionic hydrophilic cream DAB	16322601	2
Caelo	Anionic hydrophilic cream DAB	297674	1
Caelo	Anionic hydrophilic cream DAB	17101501	15
Caelo	Anionic hydrophilic cream DAB	17142801	11
Caelo	Anionic hydrophilic cream DAB	17142101	1
Caelo	Anionic hydrophilic cream DAB	17270301	9
Caelo	Anionic hydrophilic cream DAB	17270001	33
Caelo	Anionic hydrophilic cream DAB	18010402	3
Caelo	Anionic hydrophilic cream DAB	17298802	4
Caelo	Anionic hydrophilic cream DAB	18066703	4
Caelo	Anionic hydrophilic cream DAB	18168601	5
Caelo	Anionic hydrophilic cream DAB	183139501	1
Caelo	Anionic hydrophilic cream DAB	18243402	17
Caelo	Anionic hydrophilic cream DAB	18243401	3
Caelo	Anionic hydrophilic cream DAB	18298101	4
Caelo	Anionic hydrophilic cream DAB	19072001	12
Caelo	Anionic hydrophilic cream DAB	18298502	1
Caelo	Anionic hydrophilic cream DAB	17294101	1
Caelo	Anionic hydrophilic cream DAB	17201701/5578	1
Caelo	Anionic hydrophilic cream DAB	172991015608	1
Caelo	Anionic hydrophilic cream DAB	172993015638	1
Caelo	Anionic hydrophilic cream DAB	180107025721	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	180107025746	1
Caelo	Anionic hydrophilic cream DAB	180111015761	1
Caelo	Anionic hydrophilic cream DAB	12204501	2
Caelo	Anionic hydrophilic cream DAB	12316001	1
Caelo	Anionic hydrophilic cream DAB	12314001	1
Caelo	Anionic hydrophilic cream DAB	12313501	6
Caelo	Anionic hydrophilic cream DAB	12314801	6
Caelo	Anionic hydrophilic cream DAB	12245501	1
Caelo	Anionic hydrophilic cream DAB	13168801	4
Caelo	Anionic hydrophilic cream DAB	13167501-3423310192	1
Caelo	Anionic hydrophilic cream DAB	13167501-3439311151	1
Caelo	Anionic hydrophilic cream DAB	1331402	1
Caelo	Anionic hydrophilic cream DAB	13313501	4
Caelo	Anionic hydrophilic cream DAB	13312801	4
Caelo	Anionic hydrophilic cream DAB	13314302	3
Caelo	Anionic hydrophilic cream DAB	13280201-3452311172	1
Caelo	Anionic hydrophilic cream DAB	13346701	1
Caelo	Anionic hydrophilic cream DAB	13346301	10
Caelo	Anionic hydrophilic cream DAB	13244402	9
Caelo	Anionic hydrophilic cream DAB	13314901	1
Caelo	Anionic hydrophilic cream DAB	13364201	5
Caelo	Anionic hydrophilic cream DAB	13314701	2
Caelo	Anionic hydrophilic cream DAB	14118401	11
Caelo	Anionic hydrophilic cream DAB	14062701	2
Caelo	Anionic hydrophilic cream DAB	14146501	2
Caelo	Anionic hydrophilic cream DAB	14366301	5
Caelo	Anionic hydrophilic cream DAB	14342901	2
Caelo	Anionic hydrophilic cream DAB	14342201	5
Caelo	Anionic hydrophilic cream DAB	14294201	15
Caelo	Anionic hydrophilic cream DAB	14342501	5
Caelo	Anionic hydrophilic cream DAB	15001301	10
Caelo	Anionic hydrophilic cream DAB	15259301	1
Caelo	Anionic hydrophilic cream DAB	15267701	3
Caelo	Anionic hydrophilic cream DAB	AKD10	1
Caelo	Anionic hydrophilic cream DAB	15357201	3
Caelo	Anionic hydrophilic cream DAB	15428301	7
Caelo	Anionic hydrophilic cream DAB	15431901	2
Caelo	Anionic hydrophilic cream DAB	1541702	1
Caelo	Anionic hydrophilic cream DAB	1610341	1
Caelo	Anionic hydrophilic cream DAB	16058101	2
Caelo	Anionic hydrophilic cream DAB	9/AKD15	1
Caelo	Anionic hydrophilic cream DAB	16057801	1
Caelo	Anionic hydrophilic cream DAB	16264401	4
Caelo	Anionic hydrophilic cream DAB	16250102	3
Caelo	Anionic hydrophilic cream DAB	16258901	3
Caelo	Anionic hydrophilic cream DAB	17248401	6
Caelo	Anionic hydrophilic cream DAB	18011101	6
Caelo	Anionic hydrophilic cream DAB	18242901	2
Caelo	Anionic hydrophilic cream DAB	19002801	5
Caelo	Anionic hydrophilic cream DAB	19003001	3
Caelo	Anionic hydrophilic cream DAB	19071903	2
Caelo	Anionic hydrophilic cream DAB	15027002	2
Caelo	Anionic hydrophilic cream DAB	16152701	12
Caelo	Anionic hydrophilic cream DAB	16328101	10
Caelo	Anionic hydrophilic cream DAB	18169501	3
Caelo	Anionic hydrophilic cream DAB	13168001	5
Caelo	Anionic hydrophilic cream DAB	3413M-02540	1
Caelo	Anionic hydrophilic cream DAB	16250201	12
Caelo	Anionic hydrophilic cream DAB	18160402	1
Caelo	Anionic hydrophilic cream DAB	13070401	2

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Supplier	Substance	Batch	Spectra
Caeo/ Phoenix	Anionic hydrophilic cream DAB	19072401	1
Caeolo/Krieger	Anionic hydrophilic cream DAB	17143501	1
Caesar & Loretz	Anionic hydrophilic cream DAB	13313301	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	12101101	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	12313501	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14016901	2
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	13409401	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14062401	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14185801	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14232801	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14294201	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	15027301	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	15400601	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18243501	2
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18299001	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18243301	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18297902	2
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18298201	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18298101	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18004840	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18298701	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	19002802	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18243402	2
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	19072601	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	19072801	1
Caesar & Loretz GmbH / ...	Anionic hydrophilic cream DAB	18243301	1
Caesar & Loretz GmbH / ...	Anionic hydrophilic cream DAB	18298301	1
Caesar & Loretz GmbH 40...	Anionic hydrophilic cream DAB	11253201	1
Caesar & Loretz GmbH D-...	Anionic hydrophilic cream DAB	11326701	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	13346401	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	280291	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	15432001	2
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	11311101	3
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12100601	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12195201	2
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12264501	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12313202	2
Caesar & Loretz GmbH/Mi...	Anionic hydrophilic cream DAB	19072001	1
Caesar & Loretz GmbH/Ph...	Anionic hydrophilic cream DAB	18299101	1
Caesar & Loretz/ Noweda	Anionic hydrophilic cream DAB	17299201	1
Caesar & Loretz/AHD	Anionic hydrophilic cream DAB	15319101	1
Caesar & Loretz/AHD	Anionic hydrophilic cream DAB	17202001	1
Caesar & Loretz/Noweda	Anionic hydrophilic cream DAB	16158901	1
Caesar & Loretz/Noweda	Anionic hydrophilic cream DAB	17088901	1
Caesar&Loretz GmbH	Anionic hydrophilic cream DAB	15357401	1
Caesar&lorenz,Anzag	Anionic hydrophilic cream DAB	15258901	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	11320801	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	12010501	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	12314201	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	13128701	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	13363601	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	13364301	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14118201	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14139001	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14285601	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14294801	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14233601	1
caesar&lorenz,Phönix	Anionic hydrophilic cream DAB	15034301	1
Caesar&lorenz,phönix	Anionic hydrophilic cream DAB	14186702	1
caleo	Anionic hydrophilic cream DAB	17141901	2

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Supplier	Substance	Batch	Spectra
calo	Anionic hydrophilic cream DAB	17269701	1
Calo/Sanacorp	Anionic hydrophilic cream DAB	16259302	1
Cealo/Anzag	Anionic hydrophilic cream DAB	15200401	1
Cealo/Sanacorp	Anionic hydrophilic cream DAB	13275501	1
Cealo/Sanacorp	Anionic hydrophilic cream DAB	13364201	1
Celo	Anionic hydrophilic cream DAB	16250001	4
DAB	Anionic hydrophilic cream DAB	270951	1
DAB 2008	Anionic hydrophilic cream DAB	12099901	1
DAB 2008	Anionic hydrophilic cream DAB	14264001	1
Ebert-Jacobi	Anionic hydrophilic cream DAB	16259201	1
eigene Herstellung	Anionic hydrophilic cream DAB	2/270114	1
eigene Herstellung	Anionic hydrophilic cream DAB	100214-4	1
Eimermacher	Anionic hydrophilic cream DAB	308406	1
Euro OTC	Anionic hydrophilic cream DAB	15401302	1
Euro OTC	Anionic hydrophilic cream DAB	260416v2	1
Euro OTC	Anionic hydrophilic cream DAB	16046701	1
Euro OTC	Anionic hydrophilic cream DAB	16158901	1
Euro OTC	Anionic hydrophilic cream DAB	16103401	1
Euro OTC	Anionic hydrophilic cream DAB	17142101	1
Euro OTC	Anionic hydrophilic cream DAB	17000489	1
Euro OTC	Anionic hydrophilic cream DAB	310266	1
Euro OTC	Anionic hydrophilic cream DAB	311124	1
Euro OTC	Anionic hydrophilic cream DAB	17001307	1
Euro OTC	Anionic hydrophilic cream DAB	18168501	1
Euro OTC	Anionic hydrophilic cream DAB	17202301	2
Euro OTC	Anionic hydrophilic cream DAB	16057401	1
Euro OTC	Anionic hydrophilic cream DAB	237563	1
Euro OTC	Anionic hydrophilic cream DAB	17299101	1
Euro OTC	Anionic hydrophilic cream DAB	305372	1
Euro OTC	Anionic hydrophilic cream DAB	17001311	1
Euro OTC	Anionic hydrophilic cream DAB	17202101	1
Euro OTC	Anionic hydrophilic cream DAB	16046901	1
Euro OTC	Anionic hydrophilic cream DAB	17270401	1
Euro OTC	Anionic hydrophilic cream DAB	300352	1
Euro OTC	Anionic hydrophilic cream DAB	288658	1
Fagron	Anionic hydrophilic cream DAB	12265501	1
Fagron	Anionic hydrophilic cream DAB	13168501	2
Fagron	Anionic hydrophilic cream DAB	14016602	1
Fagron	Anionic hydrophilic cream DAB	17142501	3
Fagron	Anionic hydrophilic cream DAB	17270001	1
Fagron	Anionic hydrophilic cream DAB	18001549	1
Fagron	Anionic hydrophilic cream DAB	17299201	1
Fagron	Anionic hydrophilic cream DAB	14186601	1
Fagron	Anionic hydrophilic cream DAB	16158803	2
Fagron	Anionic hydrophilic cream DAB	17270401	3
Fagron	Anionic hydrophilic cream DAB	17269801	1
Fagron	Anionic hydrophilic cream DAB	15267401	2
Fagron	Anionic hydrophilic cream DAB	16103501	1
Fagron	Anionic hydrophilic cream DAB	18001559	1
Fagron	Anionic hydrophilic cream DAB	12313202	1
Fagron	Anionic hydrophilic cream DAB	14232801	1
Fagron	Anionic hydrophilic cream DAB	300353	1
Fagron	Anionic hydrophilic cream DAB	17045401	1
Fagron	Anionic hydrophilic cream DAB	16046701	1
Fagron	Anionic hydrophilic cream DAB	17335701	1
Fagron	Anionic hydrophilic cream DAB	18002357	1
Fagron	Anionic hydrophilic cream DAB	18010401	1
Fagron	Anionic hydrophilic cream DAB	16047301	1
Fargon	Anionic hydrophilic cream DAB	15319201	1
Fargon/Gehe	Anionic hydrophilic cream DAB	17270102	1

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Supplier	Substance	Batch	Spectra
Fiebig	Anionic hydrophilic cream DAB	269445	1
Fiebig	Anionic hydrophilic cream DAB	17045401	1
Fiebig	Anionic hydrophilic cream DAB	17201801	1
Fiebig	Anionic hydrophilic cream DAB	18169001	1
Fiebig	Anionic hydrophilic cream DAB	18169501	1
Fiebig	Anionic hydrophilic cream DAB	18243402	1
Finteler Apotheke	Anionic hydrophilic cream DAB	16322402	1
Finteler Apotheke	Anionic hydrophilic cream DAB	17088901	1
Fischer/Gehe	Anionic hydrophilic cream DAB	15315601	1
Fishar	Anionic hydrophilic cream DAB	16057201	1
Gehe	Anionic hydrophilic cream DAB	262935	1
Gehe	Anionic hydrophilic cream DAB	11311202	1
Gehe	Anionic hydrophilic cream DAB	12026001	1
Gehe	Anionic hydrophilic cream DAB	11219901	1
Gehe	Anionic hydrophilic cream DAB	270949	1
Gehe	Anionic hydrophilic cream DAB	274765	1
Gehe	Anionic hydrophilic cream DAB	12265001	1
Gehe	Anionic hydrophilic cream DAB	12313401	1
Gehe	Anionic hydrophilic cream DAB	13038201	1
Gehe	Anionic hydrophilic cream DAB	279057	1
Gehe	Anionic hydrophilic cream DAB	13154201	2
Gehe	Anionic hydrophilic cream DAB	13165701	1
Gehe	Anionic hydrophilic cream DAB	282001	1
Gehe	Anionic hydrophilic cream DAB	280418	1
Gehe	Anionic hydrophilic cream DAB	13280201	1
Gehe	Anionic hydrophilic cream DAB	282111	2
Gehe	Anionic hydrophilic cream DAB	14042201	1
Gehe	Anionic hydrophilic cream DAB	14062501	1
Gehe	Anionic hydrophilic cream DAB	14232901	1
Gehe	Anionic hydrophilic cream DAB	288653	1
Gehe	Anionic hydrophilic cream DAB	290080	1
Gehe	Anionic hydrophilic cream DAB	14341901	1
Gehe	Anionic hydrophilic cream DAB	15027301	1
Gehe	Anionic hydrophilic cream DAB	14342201	1
Gehe	Anionic hydrophilic cream DAB	15431801	1
Gehe	Anionic hydrophilic cream DAB	16179601	1
Gehe	Anionic hydrophilic cream DAB	16150702	1
Gehe	Anionic hydrophilic cream DAB	15431702	1
Gehe	Anionic hydrophilic cream DAB	16250001	1
Gehe	Anionic hydrophilic cream DAB	16250201	1
Gehe	Anionic hydrophilic cream DAB	16249902	1
Gehe	Anionic hydrophilic cream DAB	17143301	1
Gehe	Anionic hydrophilic cream DAB	311129	1
Gehe	Anionic hydrophilic cream DAB	18004837	2
Gehe	Anionic hydrophilic cream DAB	18028021	1
GEHE	Anionic hydrophilic cream DAB	12314101	1
GEHE	Anionic hydrophilic cream DAB	311134	1
GEHE	Anionic hydrophilic cream DAB	17270001	1
GEHE	Anionic hydrophilic cream DAB	18066901	1
Caelo	Anionic hydrophilic cream DAB	1331501	1
Caelo	Anionic hydrophilic cream DAB	15401101	7
Gehe 01.08.14	Anionic hydrophilic cream DAB	14062501	1
Gehe 07.12.18	Anionic hydrophilic cream DAB	18169001	1
GEHE 22.03.2014	Anionic hydrophilic cream DAB	14062301	1
Gehe am 21.02.14	Anionic hydrophilic cream DAB	13364401	1
Gehe/ 28.12.12 Bambastus	Anionic hydrophilic cream DAB	274594	1
Bombastus	Anionic hydrophilic cream DAB	307034	1
Bombastus	Anionic hydrophilic cream DAB	308392	1
Bombastus	Anionic hydrophilic cream DAB	308396	3
Bombastus	Anionic hydrophilic cream DAB	311121	5

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	311122	6
Bombastus	Anionic hydrophilic cream DAB	310218	1
Gehe/Bombasus	Anionic hydrophilic cream DAB	18002364	1
Caelo	Anionic hydrophilic cream DAB	12264501	5
Caelo	Anionic hydrophilic cream DAB	14295201	4
Caelo	Anionic hydrophilic cream DAB	14366802	1
Caelo	Anionic hydrophilic cream DAB	16057401	8
Caelo	Anionic hydrophilic cream DAB	16150702	11
Caelo	Anionic hydrophilic cream DAB	1211116	1
Caelo	Anionic hydrophilic cream DAB	15250201	1
Caelo	Anionic hydrophilic cream DAB	16259901/1200117	1
Caelo	Anionic hydrophilic cream DAB	16249901	2
Caelo	Anionic hydrophilic cream DAB	106102017/17142701	1
Caelo	Anionic hydrophilic cream DAB	17143301/1271117	1
Caelo	Anionic hydrophilic cream DAB	18066901	4
Caelo	Anionic hydrophilic cream DAB	18117102	2
Euro OTC	Anionic hydrophilic cream DAB	16150801	1
Caelo	Anionic hydrophilic cream DAB	15357401	9
GEpepharm GmbH	Anionic hydrophilic cream DAB	17045101	1
gepepharm/Gehe	Anionic hydrophilic cream DAB	16250001	1
Th. Geyer	Anionic hydrophilic cream DAB	18243402	1
Hedinger	Anionic hydrophilic cream DAB	12264501	1
Henry Lamotte	Anionic hydrophilic cream DAB	16259701	1
Henry Lamotte Oils GmbH	Anionic hydrophilic cream DAB	14341901	1
Hirsch	Anionic hydrophilic cream DAB	12314701	1
Hochhaus-Apotheke	Anionic hydrophilic cream DAB	16250001	2
Ichthyol/Phönix	Anionic hydrophilic cream DAB	16150702	1
Jenne	Anionic hydrophilic cream DAB	18010901	1
Kehr	Anionic hydrophilic cream DAB	17045101	1
Kehr	Anionic hydrophilic cream DAB	17045501	1
Kehr	Anionic hydrophilic cream DAB	17084201	1
Kehr	Anionic hydrophilic cream DAB	17088801	1
Kehr	Anionic hydrophilic cream DAB	311121	1
Kehr	Anionic hydrophilic cream DAB	18001559	1
Kehr	Anionic hydrophilic cream DAB	18003576	1
Caelo	Anionic hydrophilic cream DAB	16158901	16
Klenk	Anionic hydrophilic cream DAB	16103301	2
Klenk	Anionic hydrophilic cream DAB	311124	1
Krieger	Anionic hydrophilic cream DAB	17270401	1
Kurpark Apo Defektur	Anionic hydrophilic cream DAB	17045301	1
L10	Anionic hydrophilic cream DAB	17143401	1
Lamotte	Anionic hydrophilic cream DAB	17299101	1
lamotte/gehe	Anionic hydrophilic cream DAB	15200001	1
Midas	Anionic hydrophilic cream DAB	16259601	1
Midas	Anionic hydrophilic cream DAB	18010401	1
Midas	Anionic hydrophilic cream DAB	17298801	1
Midas	Anionic hydrophilic cream DAB	18116801	3
Caelo	Anionic hydrophilic cream DAB	16179901	8
Noweda	Anionic hydrophilic cream DAB	12217801	1
Noweda	Anionic hydrophilic cream DAB	1218701	1
Noweda	Anionic hydrophilic cream DAB	12265701	1
Noweda	Anionic hydrophilic cream DAB	12314801	1
Noweda	Anionic hydrophilic cream DAB	13002705	1
Noweda	Anionic hydrophilic cream DAB	12313202	1
Noweda	Anionic hydrophilic cream DAB	13035902	1
Noweda	Anionic hydrophilic cream DAB	13070301	1
Noweda	Anionic hydrophilic cream DAB	13154301	1
Noweda	Anionic hydrophilic cream DAB	13168601	1
Noweda	Anionic hydrophilic cream DAB	13167401	1
Noweda	Anionic hydrophilic cream DAB	13280101	1

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Supplier	Substance	Batch	Spectra
Noweda	Anionic hydrophilic cream DAB	13270801	1
Noweda	Anionic hydrophilic cream DAB	13364001	2
Noweda	Anionic hydrophilic cream DAB	14062701	1
Noweda	Anionic hydrophilic cream DAB	290147	2
Noweda	Anionic hydrophilic cream DAB	15400501	1
Noweda	Anionic hydrophilic cream DAB	15428401	1
Noweda	Anionic hydrophilic cream DAB	16156401	2
Noweda	Anionic hydrophilic cream DAB	16259001	1
Noweda	Anionic hydrophilic cream DAB	17088901	1
Noweda	Anionic hydrophilic cream DAB	17084101	2
Noweda	Anionic hydrophilic cream DAB	17143101	1
Noweda	Anionic hydrophilic cream DAB	16317201	1
Noweda	Anionic hydrophilic cream DAB	17143001	3
Noweda	Anionic hydrophilic cream DAB	17143401	1
Noweda	Anionic hydrophilic cream DAB	17201501	1
Noweda	Anionic hydrophilic cream DAB	17270302	1
Noweda	Anionic hydrophilic cream DAB	17202101	1
Noweda	Anionic hydrophilic cream DAB	17269801	1
Noweda	Anionic hydrophilic cream DAB	17270401	1
Bombastus	Anionic hydrophilic cream DAB	14342501	2
Caelo	Anionic hydrophilic cream DAB	14267401	1
Bombastus	Anionic hydrophilic cream DAB	18002358	1
Bombastus	Anionic hydrophilic cream DAB	310222	4
Noweda/ Infecto Pharm	Anionic hydrophilic cream DAB	16264701	1
Bombastus	Anionic hydrophilic cream DAB	291650	1
Bombastus	Anionic hydrophilic cream DAB	304089	6
Caelo	Anionic hydrophilic cream DAB	13314201	11
Caelo	Anionic hydrophilic cream DAB	14342001	1
Otto Fischar GmbH	Anionic hydrophilic cream DAB	17201601	2
Caelo	Anionic hydrophilic cream DAB	14186801	6
Caelo	Anionic hydrophilic cream DAB	14185701	1
Pharmachem	Anionic hydrophilic cream DAB	304104	1
Phoenix	Anionic hydrophilic cream DAB	270705	1
Phoenix	Anionic hydrophilic cream DAB	12011001	1
Phoenix	Anionic hydrophilic cream DAB	12313301	1
Phoenix	Anionic hydrophilic cream DAB	13038201	1
Phoenix	Anionic hydrophilic cream DAB	13314901	1
Phoenix	Anionic hydrophilic cream DAB	13364201	1
Phoenix	Anionic hydrophilic cream DAB	14016602	1
Phoenix	Anionic hydrophilic cream DAB	286498	1
Phoenix	Anionic hydrophilic cream DAB	14118201	1
Phoenix	Anionic hydrophilic cream DAB	14139001	1
Phoenix	Anionic hydrophilic cream DAB	16322801	1
Phoenix	Anionic hydrophilic cream DAB	17054201	1
Phoenix	Anionic hydrophilic cream DAB	17143701	1
Phoenix	Anionic hydrophilic cream DAB	17143301	1
Phoenix	Anionic hydrophilic cream DAB	17201102	1
Phoenix	Anionic hydrophilic cream DAB	17202301	1
Phoenix	Anionic hydrophilic cream DAB	17299101	1
Phoenix	Anionic hydrophilic cream DAB	18010901	1
Phoenix	Anionic hydrophilic cream DAB	17298901	1
Phoenix 09.01.2014	Anionic hydrophilic cream DAB	13313501	1
Phoenix 11.07.2014	Anionic hydrophilic cream DAB	14139001	2
Phoenix 14.01.2015 Ek: ...	Anionic hydrophilic cream DAB	14295101	1
PHOENIX 22.05.2014	Anionic hydrophilic cream DAB	14061801	1
Phoenix 24.01.2014	Anionic hydrophilic cream DAB	13346101	1
Phoenix 26.11.13	Anionic hydrophilic cream DAB	13265501	1
Phoenix 29.08.2014 5,78	Anionic hydrophilic cream DAB	14186601	1
Phoenix Goettin	Anionic hydrophilic cream DAB	293439	1
Bombastus	Anionic hydrophilic cream DAB	274696	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	12314201	4
Phoenix/Beiersdorf	Anionic hydrophilic cream DAB	17143201	2
Bombastus	Anionic hydrophilic cream DAB	277463	1
Caelo	Anionic hydrophilic cream DAB	281999	1
Caelo	Anionic hydrophilic cream DAB	1415034401	1
Caelo	Anionic hydrophilic cream DAB	17208001	1
Caelo	Anionic hydrophilic cream DAB	18169001	7
phoenix/noveda	Anionic hydrophilic cream DAB	15267501	1
Phonix	Anionic hydrophilic cream DAB	18168501	1
phönix	Anionic hydrophilic cream DAB	15267401	1
Phönix	Anionic hydrophilic cream DAB	270703	1
Phönix	Anionic hydrophilic cream DAB	12314101	1
Phönix	Anionic hydrophilic cream DAB	1231451	1
Phönix	Anionic hydrophilic cream DAB	276433	1
Phönix	Anionic hydrophilic cream DAB	13164901	1
Phönix	Anionic hydrophilic cream DAB	279056	1
Phönix	Anionic hydrophilic cream DAB	13036001	1
Phönix	Anionic hydrophilic cream DAB	13265602	1
Phönix	Anionic hydrophilic cream DAB	282005	2
Phönix	Anionic hydrophilic cream DAB	13346301	1
Phönix	Anionic hydrophilic cream DAB	288572	1
Phönix	Anionic hydrophilic cream DAB	14233401	1
Phönix	Anionic hydrophilic cream DAB	14264301	1
Phönix	Anionic hydrophilic cream DAB	16103301	1
Phönix	Anionic hydrophilic cream DAB	16328001	1
Phönix	Anionic hydrophilic cream DAB	17143601	1
Phönix	Anionic hydrophilic cream DAB	17001305	1
Bombastus	Anionic hydrophilic cream DAB	6080602	1
Bombastus	Anionic hydrophilic cream DAB	18003583	2
Caelo	Anionic hydrophilic cream DAB	12218301	2
Caelo	Anionic hydrophilic cream DAB	12218601	2
Caelo	Anionic hydrophilic cream DAB	13364401	5
Caelo	Anionic hydrophilic cream DAB	14255401	1
Caelo	Anionic hydrophilic cream DAB	17142002	1
Caelo	Anionic hydrophilic cream DAB	17143802/2220917	1
Caelo	Anionic hydrophilic cream DAB	2220218/17319502	1
Caelo	Anionic hydrophilic cream DAB	17270401	10
Fagron	Anionic hydrophilic cream DAB	300358	1
Rabenapotheke	Anionic hydrophilic cream DAB	290146	1
Raben-Apotheke Mildenau	Anionic hydrophilic cream DAB	283410	1
Sana 08.10.14 EK 5,76	Anionic hydrophilic cream DAB	14232901	1
Sana 11.02.15 EK 5,75	Anionic hydrophilic cream DAB	14294902	1
Sana 20.11.14 EK 5,76	Anionic hydrophilic cream DAB	14233101	1
Sana 23.03.16 Ek 5,73	Anionic hydrophilic cream DAB	15428401	1
sanacorp	Anionic hydrophilic cream DAB	286501	1
sanacorp	Anionic hydrophilic cream DAB	288655	1
sanacorp	Anionic hydrophilic cream DAB	14233101	1
sanacorp	Anionic hydrophilic cream DAB	14341601	1
Sanacorp	Anionic hydrophilic cream DAB	12187901	4
Sanacorp	Anionic hydrophilic cream DAB	12245701	1
Sanacorp	Anionic hydrophilic cream DAB	12264401	1
Sanacorp	Anionic hydrophilic cream DAB	12218501	2
Sanacorp	Anionic hydrophilic cream DAB	12265301	1
Sanacorp	Anionic hydrophilic cream DAB	12314301	1
Sanacorp	Anionic hydrophilic cream DAB	12314401	1
Sanacorp	Anionic hydrophilic cream DAB	13154301	1
Sanacorp	Anionic hydrophilic cream DAB	13154101	1
Sanacorp	Anionic hydrophilic cream DAB	13168701	1
Sanacorp	Anionic hydrophilic cream DAB	13168001	1
Sanacorp	Anionic hydrophilic cream DAB	13313201	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Anionic hydrophilic cream DAB	13313101	1
Sanacorp	Anionic hydrophilic cream DAB	13167501	1
Sanacorp	Anionic hydrophilic cream DAB	13280201	1
Sanacorp	Anionic hydrophilic cream DAB	142/AKD52	1
Sanacorp	Anionic hydrophilic cream DAB	14186702	1
Sanacorp	Anionic hydrophilic cream DAB	14285601	1
Sanacorp	Anionic hydrophilic cream DAB	104/AKD3	1
Sanacorp	Anionic hydrophilic cream DAB	104/AKD4	1
Sanacorp	Anionic hydrophilic cream DAB	288573	1
Sanacorp	Anionic hydrophilic cream DAB	15034401	1
Sanacorp	Anionic hydrophilic cream DAB	15199901	1
Sanacorp	Anionic hydrophilic cream DAB	15401201	1
Sanacorp	Anionic hydrophilic cream DAB	AKD11	1
Sanacorp	Anionic hydrophilic cream DAB	106/AKD12	1
Sanacorp	Anionic hydrophilic cream DAB	16152701	1
Sanacorp	Anionic hydrophilic cream DAB	16264501	1
Sanacorp	Anionic hydrophilic cream DAB	16258901	1
Sanacorp	Anionic hydrophilic cream DAB	17084201	1
Sanacorp	Anionic hydrophilic cream DAB	17143101	1
Sanacorp	Anionic hydrophilic cream DAB	17143501	1
Sanacorp	Anionic hydrophilic cream DAB	17143201	1
Sanacorp	Anionic hydrophilic cream DAB	17201102	1
Sanacorp	Anionic hydrophilic cream DAB	17201401	1
Sanacorp	Anionic hydrophilic cream DAB	17200703	1
Sanacorp	Anionic hydrophilic cream DAB	17201801	1
Sanacorp	Anionic hydrophilic cream DAB	17202101	2
Sanacorp	Anionic hydrophilic cream DAB	17270001	2
Sanacorp	Anionic hydrophilic cream DAB	17270102	1
Sanacorp	Anionic hydrophilic cream DAB	18117201	1
Sanacorp	Anionic hydrophilic cream DAB	18116801	1
Sanacorp	Anionic hydrophilic cream DAB	18169501	1
Sanacorp	Anionic hydrophilic cream DAB	18242901	1
Sanacorp	Anionic hydrophilic cream DAB	19072001	1
Caelo	Anionic hydrophilic cream DAB	14146401	3
Caelo	Anionic hydrophilic cream DAB	14294902	2
Caelo	Anionic hydrophilic cream DAB	14294601	2
Caelo	Anionic hydrophilic cream DAB	15259101	6
Caelo	Anionic hydrophilic cream DAB	15352901	10
Caelo	Anionic hydrophilic cream DAB	13035901	1
Caelo	Anionic hydrophilic cream DAB	18160202	3
Sanacorp 11.07.14 EK 5,76	Anionic hydrophilic cream DAB	141118401	1
Sanacorp 19.12.14 EK 5,76	Anionic hydrophilic cream DAB	14285601	1
Sanacorp 21.01.16	Anionic hydrophilic cream DAB	15400901	1
Sanacorp 25.02.2014 Ek ...	Anionic hydrophilic cream DAB	13364201	2
Sanacorp 28.11 Ek.5,85	Anionic hydrophilic cream DAB	16180001	1
Sanacorp, 16.03.17, 6,00EUR	Anionic hydrophilic cream DAB	16264501	1
Bombastus	Anionic hydrophilic cream DAB	270704	1
Bombastus	Anionic hydrophilic cream DAB	274600	2
Caelo	Anionic hydrophilic cream DAB	11321101	1
Caelo	Anionic hydrophilic cream DAB	12010801	1
Caelo	Anionic hydrophilic cream DAB	12011302	2
Caelo	Anionic hydrophilic cream DAB	12083802	1
Caelo	Anionic hydrophilic cream DAB	12099101	1
Caelo	Anionic hydrophilic cream DAB	142/AKD51	1
Caelo	Anionic hydrophilic cream DAB	104/AKD2	1
Caelo	Anionic hydrophilic cream DAB	16150703	2
Caelo	Anionic hydrophilic cream DAB	17299601	15
Fagron	Anionic hydrophilic cream DAB	17045501	1
Spangro	Anionic hydrophilic cream DAB	18066701	2
THC Rezeptur-Set	Anionic hydrophilic cream DAB	17084101	2

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Supplier	Substance	Batch	Spectra
VDL;2.7.14	Anionic hydrophilic cream DAB	14118401	1
WE:16.04.2016 Sanacor...	Anionic hydrophilic cream DAB	14342901	1
wepa/Sanaco	Anionic hydrophilic cream DAB	16103301	1
Wolff/AHD	Anionic hydrophilic cream DAB	282107	1
Aallianc. Healthc. / Ap...	Anionic hydrophilic cream SR...	12A030517	1
Bombastus	Anionic hydrophilic cream SR...	303736	6
Bombastus	Anionic hydrophilic cream SR...	306440	7
AHD	Anionic hydrophilic cream SR...	281866	1
AHD	Anionic hydrophilic cream SR...	14244702	1
AHD	Anionic hydrophilic cream SR...	14301501	1
AHD	Anionic hydrophilic cream SR...	292976	1
AHD	Anionic hydrophilic cream SR...	292977	1
AHD	Anionic hydrophilic cream SR...	296409	1
AHD	Anionic hydrophilic cream SR...	19021401	1
Bombastus	Anionic hydrophilic cream SR...	295167	5
Bombastus	Anionic hydrophilic cream SR...	300957	8
Euro OTC	Anionic hydrophilic cream SR...	16332001	2
Caelo	Anionic hydrophilic cream SR...	162115501	1
All. Healthc. / Apomix	Anionic hydrophilic cream SR...	6050215	1
All..Healthc./Apomix	Anionic hydrophilic cream SR...	30A020713	1
All..Healthc./Apomix	Anionic hydrophilic cream SR...	18A260514	1
All.Healthc. /Apomix	Anionic hydrophilic cream SR...	6A050215	1
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	41A151215a	1
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	34A130916	1
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	5A200217	3
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	39A231115	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	41A151215	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	23A130616	2
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	22A090616	2
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	38A111016	2
Allianc. Healthc. /Apomix	Anionic hydrophilic cream SR...	34A131015	2
Allianc. Healthc. /Apomix	Anionic hydrophilic cream SR...	18A040516	2
Alliance Healthcare	Anionic hydrophilic cream SR...	302199	1
Bombastus	Anionic hydrophilic cream SR...	307334	7
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	28A250613	2
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	19A030614	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	31A230914	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	35A031114	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	41A101214	1
Bombastus	Anionic hydrophilic cream SR...	19003575	2
Caelo	Anionic hydrophilic cream SR...	34A060813	2
Allianz	Anionic hydrophilic cream SR...	18001478	1
Alte Apotheke	Anionic hydrophilic cream SR...	303735	1
AMH Niemann	Anionic hydrophilic cream SR...	1A080113	1
AMH Niemann / E	Anionic hydrophilic cream SR...	4A030214	1
AMH Niemann / E	Anionic hydrophilic cream SR...	20A020615	1
AMH Niemann / E	Anionic hydrophilic cream SR...	16A050515	1
AMH Niemann / E	Anionic hydrophilic cream SR...	1A050116	1
AMH Niemann / E	Anionic hydrophilic cream SR...	6A270218	1
AMH Niemann / E	Anionic hydrophilic cream SR...	14A29058	1
AMH Niemann / E	Anionic hydrophilic cream SR...	17A190618	1
AMH Niemann / E	Anionic hydrophilic cream SR...	22A040718	1
AMH Niemann / E	Anionic hydrophilic cream SR...	12A070519	1
AMH Niemann / G	Anionic hydrophilic cream SR...	2A130114	1
AMH Niemann / G	Anionic hydrophilic cream SR...	11A010414	1
AMH Niemann / G	Anionic hydrophilic cream SR...	31A230914	1
AMH Niemann / G	Anionic hydrophilic cream SR...	29A020914	1
AMH Niemann / G	Anionic hydrophilic cream SR...	41A101214	1
AMH Niemann / G	Anionic hydrophilic cream SR...	3A200115	1
AMH Niemann / G	Anionic hydrophilic cream SR...	10A050315	1

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Supplier	Substance	Batch	Spectra
AMH Niemann / G	Anionic hydrophilic cream SR...	12A310315	1
AMH Niemann / G	Anionic hydrophilic cream SR...	33A230915	1
AMH Niemann / G	Anionic hydrophilic cream SR...	14A300316	3
AMH Niemann / G	Anionic hydrophilic cream SR...	13A111016	1
AMH Niemann / G	Anionic hydrophilic cream SR...	9A210317	1
AMH Niemann / G	Anionic hydrophilic cream SR...	12A030517	1
AMH Niemann / G	Anionic hydrophilic cream SR...	21A220617	1
AMH Niemann / G	Anionic hydrophilic cream SR...	11A110418	1
AMH Niemann / G	Anionic hydrophilic cream SR...	13A191118	1
AMH Niemann / K	Anionic hydrophilic cream SR...	13A220316	1
AMH Niemann / K	Anionic hydrophilic cream SR...	22A090616	1
AMH Niemann / K	Anionic hydrophilic cream SR...	3A310117	1
AMH Niemann / K	Anionic hydrophilic cream SR...	36A041218	1
AMH Niemann / K	Anionic hydrophilic cream SR...	5A110219	1
AMH Niemann GmbH & Co K...	Anionic hydrophilic cream SR...	7A270213	2
AMH Niemann GmbH & Co. KG	Anionic hydrophilic cream SR...	30A0207123	1
AMH Niemann GmbH&Co.KG	Anionic hydrophilic cream SR...	15A040413	1
AMH Niemann Kehr	Anionic hydrophilic cream SR...	30A160816	2
AMH Niemann/E	Anionic hydrophilic cream SR...	1A080113	3
AMH Niemann/E	Anionic hydrophilic cream SR...	42A141013	1
AMH Niemann/E	Anionic hydrophilic cream SR...	45A141113	1
AMH Niemann/E	Anionic hydrophilic cream SR...	31A091012	1
AMH Niemann/G	Anionic hydrophilic cream SR...	38A271112	1
AMH Niemann/G	Anionic hydrophilic cream SR...	44A051113	1
AMH Niemann/G	Anionic hydrophilic cream SR...	18A180612	1
AMH Niemann/G	Anionic hydrophilic cream SR...	24A070812	1
AMH Niemann/G	Anionic hydrophilic cream SR...	36A031115	1
AMH Niemann/K	Anionic hydrophilic cream SR...	36A270813	1
anzag	Anionic hydrophilic cream SR...	285899	1
Anzag	Anionic hydrophilic cream SR...	286979	1
Anzag	Anionic hydrophilic cream SR...	295232	1
Anzag	Anionic hydrophilic cream SR...	6A260116	1
Anzag	Anionic hydrophilic cream SR...	3A120116	2
Anzag	Anionic hydrophilic cream SR...	300563	1
Anzag	Anionic hydrophilic cream SR...	305067	1
Anzag	Anionic hydrophilic cream SR...	308217	1
Anzag	Anionic hydrophilic cream SR...	17000164	1
Anzag ek: 5,17EUR 08.04.13	Anionic hydrophilic cream SR...	277636	3
Anzag/apomix/07.01.15	Anionic hydrophilic cream SR...	35A031114	1
Anzag/apomix/31.01.2014	Anionic hydrophilic cream SR...	51A171213	1
Bombastus	Anionic hydrophilic cream SR...	281745	1
Bombastus	Anionic hydrophilic cream SR...	290526	1
Caelo	Anionic hydrophilic cream SR...	18002226	2
apomi	Anionic hydrophilic cream SR...	24A100718	1
apomix	Anionic hydrophilic cream SR...	35A081112	1
apomix	Anionic hydrophilic cream SR...	5A300113	1
apomix	Anionic hydrophilic cream SR...	16A240413	3
apomix	Anionic hydrophilic cream SR...	31A030713	1
apomix	Anionic hydrophilic cream SR...	28A190814	1
apomix	Anionic hydrophilic cream SR...	8A290311	1
apomix	Anionic hydrophilic cream SR...	18A180612	1
apomix	Anionic hydrophilic cream SR...	30A160914	1
apomix	Anionic hydrophilic cream SR...	29A020914	1
apomix	Anionic hydrophilic cream SR...	2A050116	1
apomix	Anionic hydrophilic cream SR...	36A031115	1
apomix	Anionic hydrophilic cream SR...	23A130616	1
apomix	Anionic hydrophilic cream SR...	16A060416	1
apomix	Anionic hydrophilic cream SR...	36A140916	1
apomix	Anionic hydrophilic cream SR...	24A280616	1
apomix	Anionic hydrophilic cream SR...	12A080316	1

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Supplier	Substance	Batch	Spectra
apomix	Anionic hydrophilic cream SR...	30A160816	1
apomix	Anionic hydrophilic cream SR...	36A140616	1
apomix	Anionic hydrophilic cream SR...	33A060916	1
apomix	Anionic hydrophilic cream SR...	27A130716	1
apomix	Anionic hydrophilic cream SR...	3A310117	2
apomix	Anionic hydrophilic cream SR...	19A200617	1
apomix	Anionic hydrophilic cream SR...	31A041017	1
apomix	Anionic hydrophilic cream SR...	3A090118	1
apomix	Anionic hydrophilic cream SR...	21A030718	1
apomix	Anionic hydrophilic cream SR...	25A110718	1
apomix	Anionic hydrophilic cream SR...	17A190618	1
apomix	Anionic hydrophilic cream SR...	34A191118	2
Apomix	Anionic hydrophilic cream SR...	29A240912	1
Apomix	Anionic hydrophilic cream SR...	3A150113	1
Apomix	Anionic hydrophilic cream SR...	26A220812	1
Apomix	Anionic hydrophilic cream SR...	15A040413	1
Apomix	Anionic hydrophilic cream SR...	17A240413	1
Apomix	Anionic hydrophilic cream SR...	19A070513	1
Apomix	Anionic hydrophilic cream SR...	32A160713	1
Apomix	Anionic hydrophilic cream SR...	25A050613	1
Apomix	Anionic hydrophilic cream SR...	31A030713	1
Apomix	Anionic hydrophilic cream SR...	34A060813	1
Apomix	Anionic hydrophilic cream SR...	33A220713	1
Apomix	Anionic hydrophilic cream SR...	41A021013	1
Apomix	Anionic hydrophilic cream SR...	44A051113	1
Apomix	Anionic hydrophilic cream SR...	48A031213	1
Apomix	Anionic hydrophilic cream SR...	12A080414	1
Apomix	Anionic hydrophilic cream SR...	14A070514	3
Apomix	Anionic hydrophilic cream SR...	10A010414	1
Apomix	Anionic hydrophilic cream SR...	28A190814	1
Apomix	Anionic hydrophilic cream SR...	29A020914	1
Apomix	Anionic hydrophilic cream SR...	39A011214	2
Apomix	Anionic hydrophilic cream SR...	16A060611	1
Apomix	Anionic hydrophilic cream SR...	27A210911	1
Apomix	Anionic hydrophilic cream SR...	5A200212	1
Apomix	Anionic hydrophilic cream SR...	18A180612	1
Apomix	Anionic hydrophilic cream SR...	4546279	1
Apomix	Anionic hydrophilic cream SR...	42A171214	2
Apomix	Anionic hydrophilic cream SR...	33A230915	1
Apomix	Anionic hydrophilic cream SR...	8A090216	1
Apomix	Anionic hydrophilic cream SR...	1A050116	1
Apomix	Anionic hydrophilic cream SR...	11A010316	2
Apomix	Anionic hydrophilic cream SR...	18A040516	1
Apomix	Anionic hydrophilic cream SR...	13A220316	1
Apomix	Anionic hydrophilic cream SR...	23A130616	2
Apomix	Anionic hydrophilic cream SR...	21a80616	1
Apomix	Anionic hydrophilic cream SR...	28A260716	2
Apomix	Anionic hydrophilic cream SR...	21A080616	1
Apomix	Anionic hydrophilic cream SR...	22A090616	1
Apomix	Anionic hydrophilic cream SR...	35A140916	1
Apomix	Anionic hydrophilic cream SR...	33A060916	1
Apomix	Anionic hydrophilic cream SR...	41A281116	2
Apomix	Anionic hydrophilic cream SR...	40A151116	2
Apomix	Anionic hydrophilic cream SR...	1A020117	1
Apomix	Anionic hydrophilic cream SR...	26A130716	1
Apomix	Anionic hydrophilic cream SR...	29A160816	1
Apomix	Anionic hydrophilic cream SR...	7A140317	1
Apomix	Anionic hydrophilic cream SR...	2A030117	1
Apomix	Anionic hydrophilic cream SR...	11A190417	2
Apomix	Anionic hydrophilic cream SR...	42A291116	1

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Supplier	Substance	Batch	Spectra
Apomix	Anionic hydrophilic cream SR...	13A030517	1
Apomix	Anionic hydrophilic cream SR...	18A140617	1
Apomix	Anionic hydrophilic cream SR...	22A040717	1
Apomix	Anionic hydrophilic cream SR...	17A130617	2
Apomix	Anionic hydrophilic cream SR...	21A220617	4
Apomix	Anionic hydrophilic cream SR...	34A201117	1
Apomix	Anionic hydrophilic cream SR...	35A211117	1
Apomix	Anionic hydrophilic cream SR...	3A090118	2
Apomix	Anionic hydrophilic cream SR...	5A050218	1
Apomix	Anionic hydrophilic cream SR...	33A171017	2
Apomix	Anionic hydrophilic cream SR...	36A051217	1
Apomix	Anionic hydrophilic cream SR...	37A061217	1
Apomix	Anionic hydrophilic cream SR...	7A280218	1
Apomix	Anionic hydrophilic cream SR...	9A210318	1
Apomix	Anionic hydrophilic cream SR...	19A200618	2
Apomix	Anionic hydrophilic cream SR...	11A110418	3
Apomix	Anionic hydrophilic cream SR...	23A040718	1
Apomix	Anionic hydrophilic cream SR...	16A300518	2
Apomix	Anionic hydrophilic cream SR...	16A110718	1
Apomix	Anionic hydrophilic cream SR...	30A140818	1
Apomix	Anionic hydrophilic cream SR...	29A140818	2
Apomix	Anionic hydrophilic cream SR...	33A051118	3
Apomix	Anionic hydrophilic cream SR...	26A110718	1
Apomix	Anionic hydrophilic cream SR...	14A290518	1
Apomix	Anionic hydrophilic cream SR...	6A260219	1
ApoMix	Anionic hydrophilic cream SR...	25A210812	1
Apomix / Alliance Healt...	Anionic hydrophilic cream SR...	25A240717	1
Apomix / Alliance Healt...	Anionic hydrophilic cream SR...	37A061217	1
Apomix / Alliance Healt...	Anionic hydrophilic cream SR...	4A160118	1
Apomix / Alliance Healt...	Anionic hydrophilic cream SR...	36A041218	1
apomix / Noweda	Anionic hydrophilic cream SR...	36A051217	1
apomix / Phoenix / 14.0...	Anionic hydrophilic cream SR...	19a180516	1
apomix / Phoenix / 29.0...	Anionic hydrophilic cream SR...	15A050416	1
apomix / Phoenix 13.04.18	Anionic hydrophilic cream SR...	36a051217	1
apomix / Phoenix 19.02...	Anionic hydrophilic cream SR...	32a101017	1
apomix / Phoenix 20.08...	Anionic hydrophilic cream SR...	23A040718	4
apomix / Phoenix Leipzig	Anionic hydrophilic cream SR...	15A300518	1
apomix / Phoenix Leipzi...	Anionic hydrophilic cream SR...	30A250815	1
apomix / Phoenix Leipzi...	Anionic hydrophilic cream SR...	34a061015	1
apomix / Phönix	Anionic hydrophilic cream SR...	35A041218	1
apomix / Phönix	Anionic hydrophilic cream SR...	32A021018	1
Apomix / Phönix	Anionic hydrophilic cream SR...	3A280114	1
Apomix / Noweda	Anionic hydrophilic cream SR...	29a160816	1
Apomix / Noweda	Anionic hydrophilic cream SR...	4A130217	1
Apomix GEHE	Anionic hydrophilic cream SR...	35A211117	1
Apomix GEHE	Anionic hydrophilic cream SR...	11A110418	1
Apomix GEHE	Anionic hydrophilic cream SR...	34A191118	1
Apomix, Phoenix 20.10.2...	Anionic hydrophilic cream SR...	26A020817	1
apomix, Phoenix 26.10.2...	Anionic hydrophilic cream SR...	26a020817	1
apomix, phoenix 28.05.2...	Anionic hydrophilic cream SR...	8a200318	1
apomix, Phönix, 09.01.2...	Anionic hydrophilic cream SR...	29a070917	1
apomix, Phönix, 23.11..2...	Anionic hydrophilic cream SR...	17a10617	1
apomix.de	Anionic hydrophilic cream SR...	8A270213	1
apomix/ AHD 04.08.17	Anionic hydrophilic cream SR...	16A310517	1
apomix/ AHD 06.06.17	Anionic hydrophilic cream SR...	4A130217	1
apomix/ AHD 09.03.17	Anionic hydrophilic cream SR...	2A030117	1
apomix/ AHD 17.11.2018	Anionic hydrophilic cream SR...	27A310718	1
apomix/ AHD 25.06.2018	Anionic hydrophilic cream SR...	7A280218	1
Apomix/ Gehe	Anionic hydrophilic cream SR...	21A030718	1
Apomix/ Gehe	Anionic hydrophilic cream SR...	28A070818	1

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Supplier	Substance	Batch	Spectra
Apomix/ Gehe	Anionic hydrophilic cream SR...	25A110718	1
apomix/ GEHE 29.01.2019	Anionic hydrophilic cream SR...	21A030718	1
apomix/ Noweda	Anionic hydrophilic cream SR...	5A200116	1
apomix/ Noweda	Anionic hydrophilic cream SR...	16A060416	1
apomix/ Phoenix	Anionic hydrophilic cream SR...	20A200618	3
apomix/ Phoenix / 02.11...	Anionic hydrophilic cream SR...	12a080316	2
apomix/ Phoenix / 15.09...	Anionic hydrophilic cream SR...	11a010316	1
apomix/ Phoenix Leipzig...	Anionic hydrophilic cream SR...	2a030117	1
apomix/AHD	Anionic hydrophilic cream SR...	32A150915	1
apomix/AHD	Anionic hydrophilic cream SR...	24A280616	1
apomix/AHD	Anionic hydrophilic cream SR...	23A040718	1
Apomix/AHD	Anionic hydrophilic cream SR...	17A030516	1
Apomix/Alliance Healthc...	Anionic hydrophilic cream SR...	15A040413	1
Apomix/Alliance Healthc...	Anionic hydrophilic cream SR...	26A110718	2
Apomix/Alliance Healthc...	Anionic hydrophilic cream SR...	22A040718	5
apomix/E	Anionic hydrophilic cream SR...	13A190313	1
apomix/Gehe	Anionic hydrophilic cream SR...	18A260514	2
apomix/Gehe	Anionic hydrophilic cream SR...	19A030614	1
apomix/Gehe	Anionic hydrophilic cream SR...	31A230914	2
apomix/Gehe	Anionic hydrophilic cream SR...	41A101214	1
Apomix/Gehe	Anionic hydrophilic cream SR...	19A260515	2
Apomix/Gehe	Anionic hydrophilic cream SR...	28A040815	1
Apomix/Gehe	Anionic hydrophilic cream SR...	33A060916	2
Apomix/Gehe	Anionic hydrophilic cream SR...	2A030117	3
Apomix/Gehe	Anionic hydrophilic cream SR...	2A280217	1
Apomix/Gehe	Anionic hydrophilic cream SR...	4A130217	1
Apomix/Gehe	Anionic hydrophilic cream SR...	16A310517	1
Apomix/Gehe	Anionic hydrophilic cream SR...	36A051217	2
Apomix/Gehe	Anionic hydrophilic cream SR...	33A171017	1
Apomix/Gehe	Anionic hydrophilic cream SR...	11A110418	1
Apomix/Gehe	Anionic hydrophilic cream SR...	9A210318	1
Apomix/Gehe	Anionic hydrophilic cream SR...	29A140818	1
apomix/GEHE/10.07.2013	Anionic hydrophilic cream SR...	15A040413	1
apomix/GEHE/17.04.2013	Anionic hydrophilic cream SR...	8A270213	1
apomix/GEHE/28.05.14	Anionic hydrophilic cream SR...	11A010414	1
apomix/Holdermann	Anionic hydrophilic cream SR...	26A130716	1
apomix/Holdermann	Anionic hydrophilic cream SR...	10A280317	1
apomix/Jenne	Anionic hydrophilic cream SR...	32A021018	2
apomix/Jenne	Anionic hydrophilic cream SR...	13A030619	1
Apomix/Kehr	Anionic hydrophilic cream SR...	5A050215	1
Apomix/Kehr	Anionic hydrophilic cream SR...	19A180516	1
Apomix/Kehr	Anionic hydrophilic cream SR...	6A280217	1
apomix/Noweda	Anionic hydrophilic cream SR...	29A070917	1
Apomix/Noweda	Anionic hydrophilic cream SR...	8A260314	1
Apomix/Noweda	Anionic hydrophilic cream SR...	13A080414	1
Apomix/Noweda	Anionic hydrophilic cream SR...	15A120514	1
Apomix/Noweda	Anionic hydrophilic cream SR...	18A260514	1
Apomix/Noweda	Anionic hydrophilic cream SR...	21A180614	1
Apomix/Noweda	Anionic hydrophilic cream SR...	33A141014	1
Apomix/Noweda	Anionic hydrophilic cream SR...	42A171214	1
Apomix/Noweda	Anionic hydrophilic cream SR...	4A270115	1
Apomix/Noweda	Anionic hydrophilic cream SR...	12A310315	1
Apomix/Noweda	Anionic hydrophilic cream SR...	20A020615	2
Apomix/Noweda	Anionic hydrophilic cream SR...	37A17115	1
Apomix/Noweda	Anionic hydrophilic cream SR...	3A120116	2
Apomix/Noweda	Anionic hydrophilic cream SR...	18A040516	1
Apomix/Noweda	Anionic hydrophilic cream SR...	15A060416	1
Apomix/Noweda	Anionic hydrophilic cream SR...	35A140916	1
Apomix/Noweda	Anionic hydrophilic cream SR...	8A140317	1
Apomix/Noweda	Anionic hydrophilic cream SR...	11A190417	1

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Supplier	Substance	Batch	Spectra
Apomix/Noweda	Anionic hydrophilic cream SR...	13A030517	2
Apomix/Noweda	Anionic hydrophilic cream SR...	14A150517	2
Apomix/Noweda	Anionic hydrophilic cream SR...	19A200617	1
Apomix/Noweda	Anionic hydrophilic cream SR...	27A220817	3
Apomix/Noweda	Anionic hydrophilic cream SR...	29A070917	1
Apomix/Noweda	Anionic hydrophilic cream SR...	33A171017	1
Apomix/Noweda	Anionic hydrophilic cream SR...	36A051217	1
Apomix/Noweda	Anionic hydrophilic cream SR...	7A280218	2
Apomix/Noweda	Anionic hydrophilic cream SR...	10A260318	1
Apomix/Noweda	Anionic hydrophilic cream SR...	8A200318	2
Apomix/Noweda	Anionic hydrophilic cream SR...	15A300518	1
Apomix/Noweda	Anionic hydrophilic cream SR...	18A190618	1
Apomix/Noweda	Anionic hydrophilic cream SR...	25A110718	1
Apomix/Noweda	Anionic hydrophilic cream SR...	35A041218	1
Apomix/NOWEDA	Anionic hydrophilic cream SR...	18001479	1
APOMIX/Noweda	Anionic hydrophilic cream SR...	7a090216	1
apomix/Noweda /801632	Anionic hydrophilic cream SR...	7a280218	1
apomix/Noweda Stapel 64...	Anionic hydrophilic cream SR...	13A030609	1
apomix/Phoenix	Anionic hydrophilic cream SR...	11A020419	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	33A220713	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	17A030516	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	36A140916	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	2A030117	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	23A050717	2
Apomix/Phoenix	Anionic hydrophilic cream SR...	7A200318	7
Apomix/Phoenix	Anionic hydrophilic cream SR...	19A200618	4
Apomix/Phoenix	Anionic hydrophilic cream SR...	11A110418	4
Apomix/Phoenix	Anionic hydrophilic cream SR...	28A070818	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	31A021018	17
Apomix/Phoenix	Anionic hydrophilic cream SR...	11A020419	3
Apomix/Phoenix	Anionic hydrophilic cream SR...	12A070519	1
Apomix/Phoenix Leipzig ...	Anionic hydrophilic cream SR...	11A190417	1
apomix/Phoenix Leipzig ...	Anionic hydrophilic cream SR...	19a200617	1
apomix/Phoenix/12.01.2017	Anionic hydrophilic cream SR...	33a060916	1
apomix/Phoenix/27.01.2017	Anionic hydrophilic cream SR...	37a270916	2
apomix/Phönix	Anionic hydrophilic cream SR...	12A3103215	1
apomix/Phönix	Anionic hydrophilic cream SR...	12A310315	1
apomix/Phönix	Anionic hydrophilic cream SR...	28A040815	2
apomix/Phönix	Anionic hydrophilic cream SR...	37A171115	1
apomix/Phönix	Anionic hydrophilic cream SR...	11A010316	1
apomix/Phönix	Anionic hydrophilic cream SR...	25A290616	1
apomix/Phönix	Anionic hydrophilic cream SR...	34A130916	1
apomix/Phönix	Anionic hydrophilic cream SR...	40A151116	1
apomix/Phönix	Anionic hydrophilic cream SR...	3A310117	1
apomix/Phönix	Anionic hydrophilic cream SR...	9A210317	1
Apomix/Phönix	Anionic hydrophilic cream SR...	21A180614	1
Apomix/Phönix	Anionic hydrophilic cream SR...	28A040815	1
Apomix/Phönix	Anionic hydrophilic cream SR...	38A171115	1
Apomix/Phönix	Anionic hydrophilic cream SR...	26A130716	2
Apomix/Phönix	Anionic hydrophilic cream SR...	10A280317	1
Apomix/Phönix	Anionic hydrophilic cream SR...	22A040717	1
Apomix/Phönix	Anionic hydrophilic cream SR...	22A020817	1
Apomix/Phönix	Anionic hydrophilic cream SR...	28A230817	1
Apomix/Phönix	Anionic hydrophilic cream SR...	7A200318	1
APOMIX/Phönix	Anionic hydrophilic cream SR...	22A040718	1
APOMIX/Phönix	Anionic hydrophilic cream SR...	1A070119	1
Apomix/Phönix 25.10.2017	Anionic hydrophilic cream SR...	25A240717	1
apomix/Sanacorp	Anionic hydrophilic cream SR...	33A171017	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	17A030516	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	41A281116	1

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Supplier	Substance	Batch	Spectra
Apomix/Sanacorp	Anionic hydrophilic cream SR...	11A190417	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	19A200617	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	14A290518	1
Beyavers	Anionic hydrophilic cream SR...	20A200618	1
Bomastus	Anionic hydrophilic cream SR...	288308	1
Bombast/Phoenix	Anionic hydrophilic cream SR...	293104	1
Bombastus	Anionic hydrophilic cream SR...	18002226	9
Bombastus	Anionic hydrophilic cream SR...	18006276	1
Bombastus	Anionic hydrophilic cream SR...	19000642	1
Bombastus	Anionic hydrophilic cream SR...	19000645	1
Bombastus	Anionic hydrophilic cream SR...	264643	1
Bombastus	Anionic hydrophilic cream SR...	271702	1
Bombastus	Anionic hydrophilic cream SR...	272513	1
Bombastus	Anionic hydrophilic cream SR...	273694	1
Bombastus	Anionic hydrophilic cream SR...	5012E-03327	1
Bombastus	Anionic hydrophilic cream SR...	274378	3
Bombastus	Anionic hydrophilic cream SR...	276074	7
Bombastus	Anionic hydrophilic cream SR...	276075	2
Bombastus	Anionic hydrophilic cream SR...	275927	3
Bombastus	Anionic hydrophilic cream SR...	276073	5
Bombastus	Anionic hydrophilic cream SR...	274505	1
Bombastus	Anionic hydrophilic cream SR...	274504	2
Bombastus	Anionic hydrophilic cream SR...	274379	1
Bombastus	Anionic hydrophilic cream SR...	277566	2
Bombastus	Anionic hydrophilic cream SR...	274373	1
Bombastus	Anionic hydrophilic cream SR...	279199	3
Bombastus	Anionic hydrophilic cream SR...	279198	2
Bombastus	Anionic hydrophilic cream SR...	277567	2
Bombastus	Anionic hydrophilic cream SR...	279201	4
Bombastus	Anionic hydrophilic cream SR...	279324	3
Bombastus	Anionic hydrophilic cream SR...	280570	2
Bombastus	Anionic hydrophilic cream SR...	281738	7
Bombastus	Anionic hydrophilic cream SR...	12121201	1
Bombastus	Anionic hydrophilic cream SR...	283282	3
Bombastus	Anionic hydrophilic cream SR...	283281	3
Bombastus	Anionic hydrophilic cream SR...	15121201	1
Bombastus	Anionic hydrophilic cream SR...	284082	4
Bombastus	Anionic hydrophilic cream SR...	285895	3
Bombastus	Anionic hydrophilic cream SR...	285897	3
Bombastus	Anionic hydrophilic cream SR...	286978	1
Bombastus	Anionic hydrophilic cream SR...	288230	2
Bombastus	Anionic hydrophilic cream SR...	286980	7
Bombastus	Anionic hydrophilic cream SR...	286974	1
Bombastus	Anionic hydrophilic cream SR...	288227	1
Bombastus	Anionic hydrophilic cream SR...	288233	3
Bombastus	Anionic hydrophilic cream SR...	289327	4
Bombastus	Anionic hydrophilic cream SR...	288234	2
Bombastus	Anionic hydrophilic cream SR...	289330	2
Bombastus	Anionic hydrophilic cream SR...	290528	2
Bombastus	Anionic hydrophilic cream SR...	290522	1
Bombastus	Anionic hydrophilic cream SR...	295232	9
Bombastus	Anionic hydrophilic cream SR...	80616-09	1
Bombastus	Anionic hydrophilic cream SR...	308218	4
Bombastus	Anionic hydrophilic cream SR...	263823	1
Bombastus	Anionic hydrophilic cream SR...	261013	2
Bombastus	Anionic hydrophilic cream SR...	269227	2
Bombastus	Anionic hydrophilic cream SR...	269230	1
Bombastus	Anionic hydrophilic cream SR...	269235	1
Bombastus	Anionic hydrophilic cream SR...	271699	1
Bombastus	Anionic hydrophilic cream SR...	271837	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	272510	1
Bombastus	Anionic hydrophilic cream SR...	272516	1
Bombastus	Anionic hydrophilic cream SR...	289332	5
Bombastus	Anionic hydrophilic cream SR...	288228	1
Bombastus	Anionic hydrophilic cream SR...	290527	3
Bombastus	Anionic hydrophilic cream SR...	289331	2
Bombastus	Anionic hydrophilic cream SR...	289328	2
Bombastus	Anionic hydrophilic cream SR...	289324	1
Bombastus	Anionic hydrophilic cream SR...	291522	3
Bombastus	Anionic hydrophilic cream SR...	291524	3
Bombastus	Anionic hydrophilic cream SR...	290523	2
Bombastus	Anionic hydrophilic cream SR...	291527	3
Bombastus	Anionic hydrophilic cream SR...	291525	3
Bombastus	Anionic hydrophilic cream SR...	292971	1
Bombastus	Anionic hydrophilic cream SR...	292979	3
Bombastus	Anionic hydrophilic cream SR...	293104	5
Bombastus	Anionic hydrophilic cream SR...	293133	3
Bombastus	Anionic hydrophilic cream SR...	293102	2
Bombastus	Anionic hydrophilic cream SR...	292973	1
Bombastus	Anionic hydrophilic cream SR...	293103	2
Bombastus	Anionic hydrophilic cream SR...	295171	3
Bombastus	Anionic hydrophilic cream SR...	296409	3
Bombastus	Anionic hydrophilic cream SR...	98245	1
Bombastus	Anionic hydrophilic cream SR...	297823	4
Bombastus	Anionic hydrophilic cream SR...	296415	3
Bombastus	Anionic hydrophilic cream SR...	295165	1
Bombastus	Anionic hydrophilic cream SR...	297913	8
Bombastus	Anionic hydrophilic cream SR...	297821	7
Bombastus	Anionic hydrophilic cream SR...	297910	3
Bombastus	Anionic hydrophilic cream SR...	300561	3
Bombastus	Anionic hydrophilic cream SR...	300950	4
Bombastus	Anionic hydrophilic cream SR...	300562	3
Bombastus	Anionic hydrophilic cream SR...	300953	3
Bombastus	Anionic hydrophilic cream SR...	300951	5
Bombastus	Anionic hydrophilic cream SR...	300955	2
Bombastus	Anionic hydrophilic cream SR...	302196	2
Bombastus	Anionic hydrophilic cream SR...	303729	1
Bombastus	Anionic hydrophilic cream SR...	303731	6
Bombastus	Anionic hydrophilic cream SR...	302200	4
Bombastus	Anionic hydrophilic cream SR...	303734	3
Bombastus	Anionic hydrophilic cream SR...	303726	1
Bombastus	Anionic hydrophilic cream SR...	307324	1
Bombastus	Anionic hydrophilic cream SR...	306436	2
Bombastus	Anionic hydrophilic cream SR...	307329	6
Bombastus	Anionic hydrophilic cream SR...	306438	1
Bombastus	Anionic hydrophilic cream SR...	307323	1
Bombastus	Anionic hydrophilic cream SR...	307331	3
Bombastus	Anionic hydrophilic cream SR...	306437	1
Bombastus	Anionic hydrophilic cream SR...	307328	1
Bombastus	Anionic hydrophilic cream SR...	307327	3
Bombastus	Anionic hydrophilic cream SR...	308221	3
Bombastus	Anionic hydrophilic cream SR...	307326	2
Bombastus	Anionic hydrophilic cream SR...	17000166	4
Bombastus	Anionic hydrophilic cream SR...	17000164	5
Bombastus	Anionic hydrophilic cream SR...	17001699	6
Bombastus	Anionic hydrophilic cream SR...	311051	2
Bombastus	Anionic hydrophilic cream SR...	17001702	3
Bombastus	Anionic hydrophilic cream SR...	17001703	3
Bombastus	Anionic hydrophilic cream SR...	17001696	2
Bombastus	Anionic hydrophilic cream SR...	18001475	5

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	18001472	2
Bombastus	Anionic hydrophilic cream SR...	18001479	2
Bombastus	Anionic hydrophilic cream SR...	18002224	1
Bombastus	Anionic hydrophilic cream SR...	17001701	1
Bombastus	Anionic hydrophilic cream SR...	18003782	1
Bombastus	Anionic hydrophilic cream SR...	18003784	7
Bombastus	Anionic hydrophilic cream SR...	18002227	2
Bombastus	Anionic hydrophilic cream SR...	18005154	1
Bombastus	Anionic hydrophilic cream SR...	18006632	6
Bombastus	Anionic hydrophilic cream SR...	18006626	1
Bombastus	Anionic hydrophilic cream SR...	19000649	1
Bombastus	Anionic hydrophilic cream SR...	19004874	1
Bombastus	Anionic hydrophilic cream SR...	19003576	1
Bombastus	Anionic hydrophilic cream SR...	292980	2
Bombastus	Anionic hydrophilic cream SR...	264644	1
Bombastus	Anionic hydrophilic cream SR...	273693	1
Bombastus	Anionic hydrophilic cream SR...	269234	1
Bombastus	Anionic hydrophilic cream SR...	308210	1
Bombastus	Anionic hydrophilic cream SR...	308220	2
Bombastus	Anionic hydrophilic cream SR...	310012	2
Bombastus	Anionic hydrophilic cream SR...	18001474	8
Bombastus	Anionic hydrophilic cream SR...	18002222	1
Bombastus	Anionic hydrophilic cream SR...	18003780	1
Bombastus	Anionic hydrophilic cream SR...	277565	3
Bombastus	Anionic hydrophilic cream SR...	292976	5
Bombastus	Anionic hydrophilic cream SR...	18001480	1
Bombastus	Anionic hydrophilic cream SR...	18003788	9
Bombastus	Anionic hydrophilic cream SR...	18006287	7
Bombastus	Anionic hydrophilic cream SR...	281809	4
Bombastus	Anionic hydrophilic cream SR...	283283	3
Bombastus	Anionic hydrophilic cream SR...	82440	1
Bombastus	Anionic hydrophilic cream SR...	285893	2
Bombastus	Anionic hydrophilic cream SR...	288308	5
Bombastus	Anionic hydrophilic cream SR...	3073333	1
Bombastus	Anionic hydrophilic cream SR...	17001704	4
Bombastus	Anionic hydrophilic cream SR...	18001481	2
Bombastus	Anionic hydrophilic cream SR...	18002223	1
Bombastus	Anionic hydrophilic cream SR...	18001484	1
Bombastus	Anionic hydrophilic cream SR...	18006631	1
Bombastus	Anionic hydrophilic cream SR...	18006630	1
Bombastus	Anionic hydrophilic cream SR...	19000647	2
Bombastus	Anionic hydrophilic cream SR...	19000648	2
Bombastus	Anionic hydrophilic cream SR...	1900252	1
Bombastus	Anionic hydrophilic cream SR...	19003570	1
Bombastus	Anionic hydrophilic cream SR...	19003573	2
Bombastus	Anionic hydrophilic cream SR...	19003571	1
Bombastus	Anionic hydrophilic cream SR...	291528	4
Bombastus	Anionic hydrophilic cream SR...	290525	1
Bombastus	Anionic hydrophilic cream SR...	302191	1
Bombastus	Anionic hydrophilic cream SR...	309912	2
Bombastus	Anionic hydrophilic cream SR...	283279	2
Bombastus	Anionic hydrophilic cream SR...	296406	1
Bombastus	Anionic hydrophilic cream SR...	300560	1
Bombastus	Anionic hydrophilic cream SR...	307322	1
Bombastus	Anionic hydrophilic cream SR...	17101502	1
Bombastus	Anionic hydrophilic cream SR...	19003750	1
Bombastus	Anionic hydrophilic cream SR...	18006282	1
Bombastus	Anionic hydrophilic cream SR...	17001700	3
Bombastus	Anionic hydrophilic cream SR...	302199	4
Bombastus	Anionic hydrophilic cream SR...	307333	4

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	296414	9
Bombastus	Anionic hydrophilic cream SR...	300564	16
Bombastus	Anionic hydrophilic cream SR...	277568	3
Bombastus	Anionic hydrophilic cream SR...	279326	10
Bombastus	Anionic hydrophilic cream SR...	281767	6
Bombastus	Anionic hydrophilic cream SR...	283285	4
Bombastus	Anionic hydrophilic cream SR...	285894	2
Bombastus	Anionic hydrophilic cream SR...	300956	14
Bombastus	Anionic hydrophilic cream SR...	311055	4
Bombastus	Anionic hydrophilic cream SR...	311052	2
Bombastus	Anionic hydrophilic cream SR...	281742	4
Bombastus	Anionic hydrophilic cream SR...	285896	3
Bombastus	Anionic hydrophilic cream SR...	286973	1
Bombastus	Anionic hydrophilic cream SR...	290524	1
Bombastus	Anionic hydrophilic cream SR...	292978	4
Bombastus	Anionic hydrophilic cream SR...	150820UEA	1
Bombastus	Anionic hydrophilic cream SR...	170103CAH/303735	1
Bombastus	Anionic hydrophilic cream SR...	170313CAH/303736	1
Bombastus	Anionic hydrophilic cream SR...	306434	1
Bombastus	Anionic hydrophilic cream SR...	308214	1
Bombastus	Anionic hydrophilic cream SR...	292975	2
Bombastus	Anionic hydrophilic cream SR...	297909	1
Bombastus	Anionic hydrophilic cream SR...	300947	1
Bombastus	Anionic hydrophilic cream SR...	302192	1
Bombastus	Anionic hydrophilic cream SR...	302193	2
Bombastus	Anionic hydrophilic cream SR...	308213	1
Bombastus	Anionic hydrophilic cream SR...	5B020419	1
Bombastus	Anionic hydrophilic cream SR...	281740	5
Bombastus	Anionic hydrophilic cream SR...	280741	7
Bombastus	Anionic hydrophilic cream SR...	269231	1
Bombastus	Anionic hydrophilic cream SR...	273695	2
Bombastus	Anionic hydrophilic cream SR...	295169	4
Bombastus	Anionic hydrophilic cream SR...	299253	4
Bombastus	Anionic hydrophilic cream SR...	293135	7
Bombastus	Anionic hydrophilic cream SR...	295170	2
Bombastus	Anionic hydrophilic cream SR...	281744	5
Bombastus	Anionic hydrophilic cream SR...	17000162	8
Bombastus	Anionic hydrophilic cream SR...	17000165	3
Bombastus	Anionic hydrophilic cream SR...	19000651	4
Bombastus	Anionic hydrophilic cream SR...	286971	1
Bombastus	Anionic hydrophilic cream SR...	289323	1
Bombastus	Anionic hydrophilic cream SR...	18001477	2
Bombastus	Anionic hydrophilic cream SR...	18002255	1
Bombastus	Anionic hydrophilic cream SR...	18005158	1
Bombastus	Anionic hydrophilic cream SR...	275926	2
Bombastus	Anionic hydrophilic cream SR...	277560	2
Bombastus	Anionic hydrophilic cream SR...	279195	2
Bombastus	Anionic hydrophilic cream SR...	280571	1
Bombastus	Anionic hydrophilic cream SR...	284077	1
Bombastus	Anionic hydrophilic cream SR...	285892	1
Bombastus	Anionic hydrophilic cream SR...	289322	1
Bombastus	Anionic hydrophilic cream SR...	272511	2
Bombastus	Anionic hydrophilic cream SR...	307332/1(intern)	1
Bombastus	Anionic hydrophilic cream SR...	307332/2(intern)	1
Bombastus	Anionic hydrophilic cream SR...	18003781	4
Bombastus	Anionic hydrophilic cream SR...	18005157	2
Bombastus	Anionic hydrophilic cream SR...	229317	1
Bombastus	Anionic hydrophilic cream SR...	280576	8
Bombastus	Anionic hydrophilic cream SR...	291529	6
Bombastus	Anionic hydrophilic cream SR...	279325	10

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	284080	3
Bombastus	Anionic hydrophilic cream SR...	299255	4
Bombastus	Anionic hydrophilic cream SR...	286975	3
Bombastus	Anionic hydrophilic cream SR...	295172	1
Bombastus	Anionic hydrophilic cream SR...	296410	3
Bombastus	Anionic hydrophilic cream SR...	300954	1
Bombastus	Anionic hydrophilic cream SR...	303732	4
Bombastus	Anionic hydrophilic cream SR...	18003786	4
Bombastus	Anionic hydrophilic cream SR...	18006279	2
Bombastus	Anionic hydrophilic cream SR...	18006281	1
Bombastus	Anionic hydrophilic cream SR...	309911	1
Bombastus	Anionic hydrophilic cream SR...	280575	1
Bombastus	Anionic hydrophilic cream SR...	3213I-03327	1
Bombastus	Anionic hydrophilic cream SR...	295166	6
Bombastus	Anionic hydrophilic cream SR...	297820	2
Bombastus	Anionic hydrophilic cream SR...	2215M-03327	1
Bombastus	Anionic hydrophilic cream SR...	17001706	2
Bombastus	Anionic hydrophilic cream SR...	18003783	3
Bombastus	Anionic hydrophilic cream SR...	2x297819	1
Bombastus	Anionic hydrophilic cream SR...	305065	4
Bombastus	Anionic hydrophilic cream SR...	308217	4
Bombastus	Anionic hydrophilic cream SR...	18001483	5
Bombastus	Anionic hydrophilic cream SR...	288307	4
Bombastus	Anionic hydrophilic cream SR...	274381	4
Bombastus	Anionic hydrophilic cream SR...	277569	3
Bombastus	Anionic hydrophilic cream SR...	279202	1
Bombastus	Anionic hydrophilic cream SR...	284081	5
Bombastus	Anionic hydrophilic cream SR...	283286	2
Bombastus	Anionic hydrophilic cream SR...	288235	3
Bombastus	Anionic hydrophilic cream SR...	271701	2
Bombastus	Anionic hydrophilic cream SR...	291523	7
Bombastus	Anionic hydrophilic cream SR...	295233	3
Bombastus	Anionic hydrophilic cream SR...	297908	2
Bombastus	Anionic hydrophilic cream SR...	300946	1
Bombastus	Anionic hydrophilic cream SR...	18006280	1
Bombastus	Anionic hydrophilic cream SR...	19002552	2
Bombastus	Anionic hydrophilic cream SR...	18001471	1
Bombastus	Anionic hydrophilic cream SR...	302190	1
Bombastus	Anionic hydrophilic cream SR...	285898	10
Bombastus	Anionic hydrophilic cream SR...	293134	2
Bombastus	Anionic hydrophilic cream SR...	296413	2
Bombastus	Anionic hydrophilic cream SR...	297817	1
Bombastus	Anionic hydrophilic cream SR...	297819	1
Bombastus	Anionic hydrophilic cream SR...	303733	5
Bombastus	Anionic hydrophilic cream SR...	305064	6
Bombastus	Anionic hydrophilic cream SR...	305066	3
Bombastus	Anionic hydrophilic cream SR...	311053	1
Bombastus	Anionic hydrophilic cream SR...	17000163	3
Bombastus	Anionic hydrophilic cream SR...	280568	2
Bombastus	Anionic hydrophilic cream SR...	300952	1
Bombastus	Anionic hydrophilic cream SR...	18003787	1
Bombastus	Anionic hydrophilic cream SR...	18006628	1
Bombastus	Anionic hydrophilic cream SR...	60089211	3
Bombastus	Anionic hydrophilic cream SR...	18A070513	1
Bombastus	Anionic hydrophilic cream SR...	285899	4
Bombastus	Anionic hydrophilic cream SR...	291526	2
Bombastus	Anionic hydrophilic cream SR...	290530	7
Bombastus	Anionic hydrophilic cream SR...	29926	1
Bombastus	Anionic hydrophilic cream SR...	305063	1
Bombastus	Anionic hydrophilic cream SR...	305062	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	310873	2
Bombastus	Anionic hydrophilic cream SR...	18005156	1
Bombastus	Anionic hydrophilic cream SR...	19002550	2
Bombastus	Anionic hydrophilic cream SR...	279323	3
Bombastus	Anionic hydrophilic cream SR...	281739	6
Bombastus	Anionic hydrophilic cream SR...	281743	2
Bombastus	Anionic hydrophilic cream SR...	284083	4
Bombastus	Anionic hydrophilic cream SR...	286979	12
Bombastus	Anionic hydrophilic cream SR...	286977	2
Bombastus	Anionic hydrophilic cream SR...	288231	4
Bombastus	Anionic hydrophilic cream SR...	91770	1
Bombastus	Anionic hydrophilic cream SR...	292977	5
Bombastus	Anionic hydrophilic cream SR...	296412	3
Bombastus	Anionic hydrophilic cream SR...	303728	4
Bombastus	Anionic hydrophilic cream SR...	306435	9
Bombastus	Anionic hydrophilic cream SR...	306439	2
Bombastus	Anionic hydrophilic cream SR...	17000160	1
Bombastus	Anionic hydrophilic cream SR...	18001473	1
Bombastus	Anionic hydrophilic cream SR...	19002554	2
Bombastus	Anionic hydrophilic cream SR...	274377	1
Bombastus	Anionic hydrophilic cream SR...	279200	2
Bombastus	Anionic hydrophilic cream SR...	302194	5
Bombastus	Anionic hydrophilic cream SR...	305068	11
Bombastus	Anionic hydrophilic cream SR...	18001476	5
Bombastus	Anionic hydrophilic cream SR...	18001478	2
Bombastus	Anionic hydrophilic cream SR...	18002225	1
Bombastus	Anionic hydrophilic cream SR...	272514	1
Bombastus	Anionic hydrophilic cream SR...	285890	2
Bombastus	Anionic hydrophilic cream SR...	258517	1
Bombastus	Anionic hydrophilic cream SR...	266051	2
Bombastus	Anionic hydrophilic cream SR...	261009	1
Bombastus	Anionic hydrophilic cream SR...	264751	3
Bombastus	Anionic hydrophilic cream SR...	267642	2
Bombastus	Anionic hydrophilic cream SR...	269225	1
Bombastus	Anionic hydrophilic cream SR...	269236	2
Bombastus	Anionic hydrophilic cream SR...	296411	2
Bombastus	Anionic hydrophilic cream SR...	297912	4
Bombastus	Anionic hydrophilic cream SR...	297822	4
Bombastus	Anionic hydrophilic cream SR...	299254	3
Bombastus	Anionic hydrophilic cream SR...	300563	3
Bombastus	Anionic hydrophilic cream SR...	302195	4
Bombastus	Anionic hydrophilic cream SR...	305069	9
Bombastus	Anionic hydrophilic cream SR...	18001482	4
Bombastus	Anionic hydrophilic cream SR...	18005159	6
Bombastus	Anionic hydrophilic cream SR...	284078	1
Bombastus	Anionic hydrophilic cream SR...	284079	1
Bombastus	Anionic hydrophilic cream SR...	286972	1
Bombastus	Anionic hydrophilic cream SR...	289325	2
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	281866	2
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	283286	1
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	286979	1
cae	Anionic hydrophilic cream SR...	14182101	1
Caeanlo	Anionic hydrophilic cream SR...	16215501	2
Caelo	Anionic hydrophilic cream SR...	20061205	1
Caelo	Anionic hydrophilic cream SR...	3101212540	1
Caelo	Anionic hydrophilic cream SR...	1101212540	1
Caelo	Anionic hydrophilic cream SR...	1603212540	1
Caelo	Anionic hydrophilic cream SR...	2906212540	1
Caelo	Anionic hydrophilic cream SR...	13071202	1
Caelo	Anionic hydrophilic cream SR...	21081201	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream SR...	1109212540	1
Caelo	Anionic hydrophilic cream SR...	9101202	1
Caelo	Anionic hydrophilic cream SR...	1310212540	1
Caelo	Anionic hydrophilic cream SR...	18121202	1
Caelo	Anionic hydrophilic cream SR...	9011304	1
Caelo	Anionic hydrophilic cream SR...	23041307	1
Caelo	Anionic hydrophilic cream SR...	31071301	1
Caelo	Anionic hydrophilic cream SR...	11101301	1
Caelo	Anionic hydrophilic cream SR...	15111306	1
Caelo	Anionic hydrophilic cream SR...	15011413	1
Caelo	Anionic hydrophilic cream SR...	25021413	1
Caelo	Anionic hydrophilic cream SR...	14041403	1
Caelo	Anionic hydrophilic cream SR...	13270103	2
Caelo	Anionic hydrophilic cream SR...	4061406	1
Caelo	Anionic hydrophilic cream SR...	2091403	1
Caelo	Anionic hydrophilic cream SR...	14244701	6
Caelo	Anionic hydrophilic cream SR...	286979	1
Caelo	Anionic hydrophilic cream SR...	14182104	1
Caelo	Anionic hydrophilic cream SR...	23121411	1
Caelo	Anionic hydrophilic cream SR...	30011503	1
Caelo	Anionic hydrophilic cream SR...	15069404	1
Caelo	Anionic hydrophilic cream SR...	8061203	1
Caelo	Anionic hydrophilic cream SR...	22061205	1
Caelo	Anionic hydrophilic cream SR...	21111202	1
Caelo	Anionic hydrophilic cream SR...	274377	2
Caelo	Anionic hydrophilic cream SR...	14336201	1
Caelo	Anionic hydrophilic cream SR...	15014801	4
Caelo	Anionic hydrophilic cream SR...	6061502	1
Caelo	Anionic hydrophilic cream SR...	15134602	2
Caelo	Anionic hydrophilic cream SR...	15172901	5
Caelo	Anionic hydrophilic cream SR...	15205502	2
Caelo	Anionic hydrophilic cream SR...	297912	1
Caelo	Anionic hydrophilic cream SR...	16107502	9
Caelo	Anionic hydrophilic cream SR...	300956	1
Caelo	Anionic hydrophilic cream SR...	16107503	2
Caelo	Anionic hydrophilic cream SR...	16107501	17
Caelo	Anionic hydrophilic cream SR...	16126701	1
Caelo	Anionic hydrophilic cream SR...	18A040516	1
Caelo	Anionic hydrophilic cream SR...	299255	1
Caelo	Anionic hydrophilic cream SR...	16215501	11
Caelo	Anionic hydrophilic cream SR...	16047301	1
Caelo	Anionic hydrophilic cream SR...	16215701	1
Caelo	Anionic hydrophilic cream SR...	302199	1
Caelo	Anionic hydrophilic cream SR...	16215601	7
Caelo	Anionic hydrophilic cream SR...	16289402	6
Caelo	Anionic hydrophilic cream SR...	23021706	1
Caelo	Anionic hydrophilic cream SR...	17041902	7
Caelo	Anionic hydrophilic cream SR...	17041901	4
Caelo	Anionic hydrophilic cream SR...	307328	1
Caelo	Anionic hydrophilic cream SR...	306439	1
Caelo	Anionic hydrophilic cream SR...	17008901	8
Caelo	Anionic hydrophilic cream SR...	21041720	1
Caelo	Anionic hydrophilic cream SR...	170419015272	1
Caelo	Anionic hydrophilic cream SR...	17101504	1
Caelo	Anionic hydrophilic cream SR...	308211	1
Caelo	Anionic hydrophilic cream SR...	17153802	1
Caelo	Anionic hydrophilic cream SR...	311055	1
Caelo	Anionic hydrophilic cream SR...	17000489	1
Caelo	Anionic hydrophilic cream SR...	171015015466	1
Caelo	Anionic hydrophilic cream SR...	17294401	3

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream SR...	17319502	2
Caelo	Anionic hydrophilic cream SR...	17294501	4
Caelo	Anionic hydrophilic cream SR...	17319503	1
Caelo	Anionic hydrophilic cream SR...	17294402	1
Caelo	Anionic hydrophilic cream SR...	18041104	30
Caelo	Anionic hydrophilic cream SR...	18041105	2
Caelo	Anionic hydrophilic cream SR...	172944015562	1
Caelo	Anionic hydrophilic cream SR...	18067801	29
Caelo	Anionic hydrophilic cream SR...	18001482	2
Caelo	Anionic hydrophilic cream SR...	14051805	1
Caelo	Anionic hydrophilic cream SR...	18001473	1
Caelo	Anionic hydrophilic cream SR...	18001483	1
Caelo	Anionic hydrophilic cream SR...	18003778	1
Caelo	Anionic hydrophilic cream SR...	18001472	1
Caelo	Anionic hydrophilic cream SR...	18274102	1
Caelo	Anionic hydrophilic cream SR...	19021402	5
Caelo	Anionic hydrophilic cream SR...	19021401	4
Caelo	Anionic hydrophilic cream SR...	296408	1
Caelo	Anionic hydrophilic cream SR...	14182101	2
Caelo	Anionic hydrophilic cream SR...	24A100718	1
Caelo	Anionic hydrophilic cream SR...	19093002	3
Caelo	Anionic hydrophilic cream SR...	293135	1
Caelo	Anionic hydrophilic cream SR...	17101502	11
Caelo	Anionic hydrophilic cream SR...	33A171017	1
Caelo	Anionic hydrophilic cream SR...	18176103	8
Caelo	Anionic hydrophilic cream SR...	19240002	1
Caelo	Anionic hydrophilic cream SR...	277565	1
Caelo	Anionic hydrophilic cream SR...	295232	1
Caelo	Anionic hydrophilic cream SR...	17001705	1
Caelo	Anionic hydrophilic cream SR...	307327	1
Caelo	Anionic hydrophilic cream SR...	276077	1
Caelo	Anionic hydrophilic cream SR...	15069403	1
Caelo	Anionic hydrophilic cream SR...	288310	3
Caelo	Anionic hydrophilic cream SR...	17184201	5
Caelo	Anionic hydrophilic cream SR...	18302501	4
Caelo	Anionic hydrophilic cream SR...	18006283	1
Caelo	Anionic hydrophilic cream SR...	19021404	1
Caelo	Anionic hydrophilic cream SR...	18218103	2
Caelo	Anionic hydrophilic cream SR...	17256901	15
Caelo	Anionic hydrophilic cream SR...	18218102	7
Caelo	Anionic hydrophilic cream SR...	15386602	2
Caelo	Anionic hydrophilic cream SR...	18001475	1
Caelo	Anionic hydrophilic cream SR...	180678015614	1
Caelo	Anionic hydrophilic cream SR...	180678015671	1
Caelo	Anionic hydrophilic cream SR...	281739	3
Caelo	Anionic hydrophilic cream SR...	160107502	1
Caelo	Anionic hydrophilic cream SR...	302196	2
Caelo	Anionic hydrophilic cream SR...	1847502	1
Caelo	Anionic hydrophilic cream SR...	293104	2
Caelo	Anionic hydrophilic cream SR...	20A080513	1
Caelo	Anionic hydrophilic cream SR...	22A160615	2
Caelo	Anionic hydrophilic cream SR...	288307	2
Caelo	Anionic hydrophilic cream SR...	15268001	1
Caelo	Anionic hydrophilic cream SR...	1291015	1
Caelo	Anionic hydrophilic cream SR...	1070717/17101501	1
Caelo	Anionic hydrophilic cream SR...	17211702	8
Caelo	Anionic hydrophilic cream SR...	18147501	6
Caelo	Anionic hydrophilic cream SR...	19093001	4
Caelo	Anionic hydrophilic cream SR...	31A230914	1
Caelo	Anionic hydrophilic cream SR...	286976	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream SR...	300957	1
Caelo	Anionic hydrophilic cream SR...	15329601	8
Caelo	Anionic hydrophilic cream SR...	15386502	4
Caelo	Anionic hydrophilic cream SR...	16019601	4
Caelo	Anionic hydrophilic cream SR...	16258701	12
Caelo	Anionic hydrophilic cream SR...	16332101	7
Caelo	Anionic hydrophilic cream SR...	309912	1
Caelo	Anionic hydrophilic cream SR...	17169301	10
Caelo	Anionic hydrophilic cream SR...	17211701	3
Caelo	Anionic hydrophilic cream SR...	18003781	1
Caelo	Anionic hydrophilic cream SR...	28072014A	1
Caelo	Anionic hydrophilic cream SR...	289331	1
Caelo	Anionic hydrophilic cream SR...	288235	1
Caelo	Anionic hydrophilic cream SR...	305069	1
Caelo	Anionic hydrophilic cream SR...	17000166	1
Caelo	Anionic hydrophilic cream SR...	18147502	14
Caelo	Anionic hydrophilic cream SR...	307334	1
Caelo	Anionic hydrophilic cream SR...	289332	1
Caelo	Anionic hydrophilic cream SR...	293103	1
Caelo	Anionic hydrophilic cream SR...	8A140317	1
Caelo	Anionic hydrophilic cream SR...	15205501	3
Caelo	Anionic hydrophilic cream SR...	15329501	10
Caeolo	Anionic hydrophilic cream SR...	16046301	1
Caesar & Loretz GmbH	Anionic hydrophilic cream SR...	289329	1
Caesar & Loretz GmbH	Anionic hydrophilic cream SR...	18218102	2
Caesar & Loretz GmbH	Anionic hydrophilic cream SR...	18302501	4
Caesar & Loretz GmbH	Anionic hydrophilic cream SR...	19093001	1
Caesar & Loretz GmbH, P...	Anionic hydrophilic cream SR...	17142801	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	15386602	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	16019601	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	16107502	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	18176103	1
Caesar&Loretz GmbH,26.0...	Anionic hydrophilic cream SR...	17045401	1
Caesar&Loretz GmbH,Phön...	Anionic hydrophilic cream SR...	16046501	1
Caesar&Loretz GmbH,PHön...	Anionic hydrophilic cream SR...	17088801	1
Caesar&lorenz,phönix,11...	Anionic hydrophilic cream SR...	16103101	3
Caesar&LoretzGmbH,11,03...	Anionic hydrophilic cream SR...	16322701	1
Cealo	Anionic hydrophilic cream SR...	285899	1
Cealo	Anionic hydrophilic cream SR...	10A280317	1
Cealo	Anionic hydrophilic cream SR...	10A150517	1
Cealo/AHD	Anionic hydrophilic cream SR...	16107501	1
Defektur	Anionic hydrophilic cream SR...	271711	1
Dr. Wolff	Anionic hydrophilic cream SR...	290528	1
Caelo	Anionic hydrophilic cream SR...	302200	2
Caelo	Anionic hydrophilic cream SR...	17041701	1
Eigene Herstellung	Anionic hydrophilic cream SR...	2014030214	1
Eigenherstellung	Anionic hydrophilic cream SR...	3812E-07664	1
Eigenherstellung	Anionic hydrophilic cream SR...	4012Q-07664	1
EuRho/Noweda	Anionic hydrophilic cream SR...	18001681	1
Euro OTC	Anionic hydrophilic cream SR...	300563	1
Euro OTC	Anionic hydrophilic cream SR...	308212	1
Euro OTC	Anionic hydrophilic cream SR...	17000161	1
Euro OTC	Anionic hydrophilic cream SR...	17001695	2
Euro OTC	Anionic hydrophilic cream SR...	1A070119	1
Euro OTC	Anionic hydrophilic cream SR...	306433	1
Euro OTC	Anionic hydrophilic cream SR...	286838	1
Euro OTC	Anionic hydrophilic cream SR...	296410	2
Euro OTC	Anionic hydrophilic cream SR...	276074	1
Euro OTC	Anionic hydrophilic cream SR...	286975	1
Fagron	Anionic hydrophilic cream SR...	291529	1

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Supplier	Substance	Batch	Spectra
Fagron	Anionic hydrophilic cream SR...	302382	1
Fagron	Anionic hydrophilic cream SR...	305069	1
Fagron	Anionic hydrophilic cream SR...	307334	1
Fagron	Anionic hydrophilic cream SR...	17001698	1
Fagron	Anionic hydrophilic cream SR...	308220	1
Fagron	Anionic hydrophilic cream SR...	2A030118	1
Fagron	Anionic hydrophilic cream SR...	18041104	2
Fagron	Anionic hydrophilic cream SR...	32A150915	1
Fagron	Anionic hydrophilic cream SR...	6A280217	1
Fagron	Anionic hydrophilic cream SR...	15172901	1
Fiebi 23.11.12 ek:4,70	Anionic hydrophilic cream SR...	274504	2
Galderma/Gehe	Anionic hydrophilic cream SR...	18006282	1
Gehe	Anionic hydrophilic cream SR...	267647	1
Gehe	Anionic hydrophilic cream SR...	271701	1
Gehe	Anionic hydrophilic cream SR...	269235	1
Gehe	Anionic hydrophilic cream SR...	273694	1
Gehe	Anionic hydrophilic cream SR...	277565	1
Gehe	Anionic hydrophilic cream SR...	280574	1
Gehe	Anionic hydrophilic cream SR...	280575	1
Gehe	Anionic hydrophilic cream SR...	271838	1
Gehe	Anionic hydrophilic cream SR...	15014804	1
Gehe	Anionic hydrophilic cream SR...	306440	1
Gehe	Anionic hydrophilic cream SR...	303736	1
Gehe	Anionic hydrophilic cream SR...	307334	3
Gehe	Anionic hydrophilic cream SR...	17000163	1
GEHE	Anionic hydrophilic cream SR...	18041104	1
GEHE	Anionic hydrophilic cream SR...	18067803	1
GEHE	Anionic hydrophilic cream SR...	18147502	3
GEHE	Anionic hydrophilic cream SR...	18302501	1
Gehe 10.03.15	Anionic hydrophilic cream SR...	42A171214	1
Bombastus	Anionic hydrophilic cream SR...	300956-20160615Ma4	1
Caelo	Anionic hydrophilic cream SR...	307332	1
Gehe, 9,99EUR, 29.08.2016	Anionic hydrophilic cream SR...	299255	1
Gehe/02.09.14/apomix	Anionic hydrophilic cream SR...	23A240614	1
GEHE/AMH/22.05.2012	Anionic hydrophilic cream SR...	5A200212	1
Gehe/apomix	Anionic hydrophilic cream SR...	12A080414	1
Gehe/apomix	Anionic hydrophilic cream SR...	13A220316	1
Gehe/Apomix	Anionic hydrophilic cream SR...	48A031213	1
Gehe/Apomix	Anionic hydrophilic cream SR...	4A030214	2
Gehe/Apomix	Anionic hydrophilic cream SR...	16A130514	1
GEHE/apomix/01.03.2012	Anionic hydrophilic cream SR...	33A291111	1
GEHE/apomix/05.07.2012	Anionic hydrophilic cream SR...	16A050612	1
Gehe/apomix/17.12.2014	Anionic hydrophilic cream SR...	26A060814	1
Gehe/apomix/18.09.13	Anionic hydrophilic cream SR...	30A020713	2
Gehe/apomix/23.09.14	Anionic hydrophilic cream SR...	19A030614	1
Bombastus	Anionic hydrophilic cream SR...	308219	3
Bombastus	Anionic hydrophilic cream SR...	17001707	3
Caelo	Anionic hydrophilic cream SR...	11A010414	1
Caelo	Anionic hydrophilic cream SR...	1290916	1
Euro OTC	Anionic hydrophilic cream SR...	302199	1
Gutenberg-Apotheke	Anionic hydrophilic cream SR...	285890	1
Henry Lamotte / Noweda	Anionic hydrophilic cream SR...	303735	2
hochhaus-Apotheke	Anionic hydrophilic cream SR...	3016E-03195	1
Ichthyol Gesellschaft	Anionic hydrophilic cream SR...	17294501	1
Kehr	Anionic hydrophilic cream SR...	308218	1
Kehr	Anionic hydrophilic cream SR...	311053	1
Kehr	Anionic hydrophilic cream SR...	17000165	1
Kehr	Anionic hydrophilic cream SR...	18002223	1
Kehr	Anionic hydrophilic cream SR...	18003785	1
Kehr	Anionic hydrophilic cream SR...	18005157	1

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Supplier	Substance	Batch	Spectra
Krieger	Anionic hydrophilic cream SR...	17299701	1
L12	Anionic hydrophilic cream SR...	17101501	1
L12	Anionic hydrophilic cream SR...	18147501	1
Neidhardt	Anionic hydrophilic cream SR...	25A140714	1
Noweda	Anionic hydrophilic cream SR...	279326	1
Noweda	Anionic hydrophilic cream SR...	280572	1
Noweda	Anionic hydrophilic cream SR...	280741	2
Noweda	Anionic hydrophilic cream SR...	17A120515	1
Noweda	Anionic hydrophilic cream SR...	273695	1
Noweda	Anionic hydrophilic cream SR...	276074	1
Noweda	Anionic hydrophilic cream SR...	15329601	1
Noweda	Anionic hydrophilic cream SR...	15386502	1
Noweda	Anionic hydrophilic cream SR...	38A171115	1
Noweda	Anionic hydrophilic cream SR...	22A040717	1
Noweda 6892383 /apomix	Anionic hydrophilic cream SR...	18A160719	1
Caelo	Anionic hydrophilic cream SR...	277637	1
Bombastus	Anionic hydrophilic cream SR...	244379	1
Noweda/apomix	Anionic hydrophilic cream SR...	21A090615	1
Noweda/Apomix	Anionic hydrophilic cream SR...	31A14014	1
Noweda/Apomix	Anionic hydrophilic cream SR...	25A290616	1
Bombastus	Anionic hydrophilic cream SR...	277563	2
Bombastus	Anionic hydrophilic cream SR...	280572	1
Bombastus	Anionic hydrophilic cream SR...	311050	1
Caelo	Anionic hydrophilic cream SR...	14301501	5
Caelo	Anionic hydrophilic cream SR...	18041106	1
Fagron	Anionic hydrophilic cream SR...	291528	1
Pharmachem	Anionic hydrophilic cream SR...	150716	1
Pharmachem	Anionic hydrophilic cream SR...	300317	2
Pharmachem	Anionic hydrophilic cream SR...	240118	3
Pharmachem GmbH/Phönix	Anionic hydrophilic cream SR...	260712	3
Pharmachem Pößneck GmbH...	Anionic hydrophilic cream SR...	240915	5
Pharmachem Pößneck GmbH...	Anionic hydrophilic cream SR...	300317	2
Pharmachem/Noweda	Anionic hydrophilic cream SR...	150716	1
Pharmachem/Phoenix	Anionic hydrophilic cream SR...	300317	3
Pharmachem/Phoenix	Anionic hydrophilic cream SR...	240118	2
Pharmachem/Phoenix	Anionic hydrophilic cream SR...	220219	1
Pharmachem/Phönix	Anionic hydrophilic cream SR...	290413	1
Pharmachem/Phönix	Anionic hydrophilic cream SR...	110913	1
Pharmachem/Phönix	Anionic hydrophilic cream SR...	130814	1
Pharmachemie	Anionic hydrophilic cream SR...	240915	1
Pharmachemie Pößneck	Anionic hydrophilic cream SR...	150716	2
Pharmachemie Pößneck	Anionic hydrophilic cream SR...	303017	1
Pharmachemie Pößneck	Anionic hydrophilic cream SR...	300317	1
Phoenix	Anionic hydrophilic cream SR...	18A260514	1
Phoenix	Anionic hydrophilic cream SR...	16188903	1
Phoenix	Anionic hydrophilic cream SR...	17270401	1
Phoenix (PKH Halle)	Anionic hydrophilic cream SR...	33A151012	1
Phoenix (PKH Halle)	Anionic hydrophilic cream SR...	30A021012	1
Phoenix Leipzig 14.08.17	Anionic hydrophilic cream SR...	19A200617	1
Bombastus	Anionic hydrophilic cream SR...	277636	3
Bombastus	Anionic hydrophilic cream SR...	288310	4
Caelo	Anionic hydrophilic cream SR...	18107001	2
phönix	Anionic hydrophilic cream SR...	7a090216	1
phönix	Anionic hydrophilic cream SR...	16158802	1
phönix	Anionic hydrophilic cream SR...	3a310117	1
phönix	Anionic hydrophilic cream SR...	4a130217	1
phönix	Anionic hydrophilic cream SR...	10a280317	1
phönix	Anionic hydrophilic cream SR...	14a150517	1
Phönix	Anionic hydrophilic cream SR...	272515	3
Phönix	Anionic hydrophilic cream SR...	284083	1

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Supplier	Substance	Batch	Spectra
Phönix	Anionic hydrophilic cream SR...	36a140916	1
Phönix	Anionic hydrophilic cream SR...	38a111016	1
Phönix	Anionic hydrophilic cream SR...	305066	1
Phönix	Anionic hydrophilic cream SR...	305064	1
Phönix	Anionic hydrophilic cream SR...	305069	1
Phönix	Anionic hydrophilic cream SR...	18A140617	1
Phönix Gotha	Anionic hydrophilic cream SR...	241111	1
Bombastus	Anionic hydrophilic cream SR...	17001708	1
PKH / Phoenix	Anionic hydrophilic cream SR...	15A210415	1
PKH Apomix/Anzag	Anionic hydrophilic cream SR...	38A171115	1
pkh Gehe 28:06:18	Anionic hydrophilic cream SR...	16A300518	1
PKH GmbH	Anionic hydrophilic cream SR...	2A030117	1
PKH GmbH	Anionic hydrophilic cream SR...	7A280218	1
PKH GmbH Halle / Gehe	Anionic hydrophilic cream SR...	30A140818	1
PKH GmbH/ Phönix	Anionic hydrophilic cream SR...	14A030413	1
PKH Halle	Anionic hydrophilic cream SR...	13A010415	1
PKH Halle	Anionic hydrophilic cream SR...	4A160118	1
PKH Halle (apomix) / AH...	Anionic hydrophilic cream SR...	32A101017	1
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	16A240413	2
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	5A170214	1
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	17A200514	1
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	40A091214	1
PKH Halle /Gehe	Anionic hydrophilic cream SR...	30A140818	1
PKH Halle/Kehr	Anionic hydrophilic cream SR...	9A170216	1
PKH Halle/Kehr	Anionic hydrophilic cream SR...	24A280616	1
PKH/Gehe	Anionic hydrophilic cream SR...	16A060416	1
Pönix/AMH	Anionic hydrophilic cream SR...	11A070313	1
Rabenapotheke	Anionic hydrophilic cream SR...	39A011214	1
Raben-Apotheke Mildenau	Anionic hydrophilic cream SR...	11A010414	1
Raben-Apotheke Mildenau	Anionic hydrophilic cream SR...	19A030614	1
sanacorp	Anionic hydrophilic cream SR...	15319101	1
Sanacorp	Anionic hydrophilic cream SR...	273693	1
Sanacorp	Anionic hydrophilic cream SR...	274505	1
Sanacorp	Anionic hydrophilic cream SR...	277566	1
Sanacorp	Anionic hydrophilic cream SR...	277569	1
Sanacorp	Anionic hydrophilic cream SR...	277637	2
Sanacorp	Anionic hydrophilic cream SR...	279202	1
Sanacorp	Anionic hydrophilic cream SR...	281742	1
Sanacorp	Anionic hydrophilic cream SR...	281809	1
Sanacorp	Anionic hydrophilic cream SR...	283284	1
Sanacorp	Anionic hydrophilic cream SR...	283283	1
Sanacorp	Anionic hydrophilic cream SR...	290413	2
Sanacorp	Anionic hydrophilic cream SR...	274376	1
Sanacorp	Anionic hydrophilic cream SR...	290530	1
Sanacorp	Anionic hydrophilic cream SR...	17001708	6
Sanacorp	Anionic hydrophilic cream SR...	18001483	1
Sanacorp	Anionic hydrophilic cream SR...	18002227	2
Sanacorp	Anionic hydrophilic cream SR...	18005159	1
Sanacorp	Anionic hydrophilic cream SR...	19021402	1
SANACORP	Anionic hydrophilic cream SR...	19093001	1
Caelo	Anionic hydrophilic cream SR...	7A2702213	1
Caelo	Anionic hydrophilic cream SR...	2013111213	1
Bombastus	Anionic hydrophilic cream SR...	17006166	1
Bombastus	Anionic hydrophilic cream SR...	18003785	2
Bombastus	Anionic hydrophilic cream SR...	281866	9
Bombastus	Anionic hydrophilic cream SR...	19003569	1
Caelo	Anionic hydrophilic cream SR...	277636	1
Caelo	Anionic hydrophilic cream SR...	16019801	5
Sanacorp;21.04.15;9,31EUR	Anionic hydrophilic cream SR...	292977	1
Caelo	Anionic hydrophilic cream SR...	14336203	3

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream SR...	15069501	2
Caelo	Anionic hydrophilic cream SR...	15014804	1
Caelo	Anionic hydrophilic cream SR...	15268002	1
Taoasis/Sanacorp	Anionic hydrophilic cream SR...	311127	2
VDL;02.12.14;5,32EUR	Anionic hydrophilic cream SR...	288310	1
aelo	Anionic hydrophilic cream wi...	14214101	1
Caelo	Anionic hydrophilic cream wi...	1324401	1
Caelo	Anionic hydrophilic cream wi...	13344301	1
Caelo	Anionic hydrophilic cream wi...	17030310	1
Caelo	Anionic hydrophilic cream wi...	17335501	10
Allianz Healthcare	Anionic hydrophilic cream wi...	17030301	1
Apo Ident/ Noweda	Anionic hydrophilic cream wi...	18109801	3
Bombastus	Anionic hydrophilic cream wi...	14030701	1
Bombastus	Anionic hydrophilic cream wi...	17030101	2
Caeanelo	Anionic hydrophilic cream wi...	16067601	1
cael	Anionic hydrophilic cream wi...	17262201	1
Caelo	Anionic hydrophilic cream wi...	3125902	1
Caelo	Anionic hydrophilic cream wi...	18181001	7
Caelo	Anionic hydrophilic cream wi...	18248301	3
Caelo	Anionic hydrophilic cream wi...	112210016	1
Caelo	Anionic hydrophilic cream wi...	1213M-07009	1
Caelo	Anionic hydrophilic cream wi...	1222102	1
Caelo	Anionic hydrophilic cream wi...	12352702	4
Caelo	Anionic hydrophilic cream wi...	13072302	8
Caelo	Anionic hydrophilic cream wi...	12301302	5
Caelo	Anionic hydrophilic cream wi...	13125903	1
Caelo	Anionic hydrophilic cream wi...	13125901	10
Caelo	Anionic hydrophilic cream wi...	13125902	3
Caelo	Anionic hydrophilic cream wi...	2913M25401	1
Caelo	Anionic hydrophilic cream wi...	13172201	1
Caelo	Anionic hydrophilic cream wi...	13172203	4
Caelo	Anionic hydrophilic cream wi...	9771644	3
Caelo	Anionic hydrophilic cream wi...	13244302	2
Caelo	Anionic hydrophilic cream wi...	7011403	1
Caelo	Anionic hydrophilic cream wi...	13343301	11
Caelo	Anionic hydrophilic cream wi...	CHB13343401	1
Caelo	Anionic hydrophilic cream wi...	14030501	8
Caelo	Anionic hydrophilic cream wi...	14146101	12
Caelo	Anionic hydrophilic cream wi...	14146002	15
Caelo	Anionic hydrophilic cream wi...	14214201	32
Caelo	Anionic hydrophilic cream wi...	14214202	6
Caelo	Anionic hydrophilic cream wi...	14334301	25
Caelo	Anionic hydrophilic cream wi...	15132801	8
Caelo	Anionic hydrophilic cream wi...	15272902	6
Caelo	Anionic hydrophilic cream wi...	27031504	1
Caelo	Anionic hydrophilic cream wi...	20071504	1
Caelo	Anionic hydrophilic cream wi...	15132901	3
Caelo	Anionic hydrophilic cream wi...	1527301	1
Caelo	Anionic hydrophilic cream wi...	1545401	1
Caelo	Anionic hydrophilic cream wi...	15405302	7
Caelo	Anionic hydrophilic cream wi...	1540521	1
Caelo	Anionic hydrophilic cream wi...	16067901	6
Caelo	Anionic hydrophilic cream wi...	16191501	7
Caelo	Anionic hydrophilic cream wi...	16191601	36
Caelo	Anionic hydrophilic cream wi...	16191801	6
Caelo	Anionic hydrophilic cream wi...	16191901	9
Caelo	Anionic hydrophilic cream wi...	16290401	13
Caelo	Anionic hydrophilic cream wi...	16290302	4
Caelo	Anionic hydrophilic cream wi...	162906301	1
Caelo	Anionic hydrophilic cream wi...	16332001	11

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream wi...	17102401	14
Caelo	Anionic hydrophilic cream wi...	17102101	6
Caelo	Anionic hydrophilic cream wi...	170299015309	1
Caelo	Anionic hydrophilic cream wi...	15071702	1
Caelo	Anionic hydrophilic cream wi...	17102201	17
Caelo	Anionic hydrophilic cream wi...	17156601	9
Caelo	Anionic hydrophilic cream wi...	17262101	33
Caelo	Anionic hydrophilic cream wi...	17262002	5
Caelo	Anionic hydrophilic cream wi...	17262102	1
Caelo	Anionic hydrophilic cream wi...	19021814	1
Caelo	Anionic hydrophilic cream wi...	17335401	20
Caelo	Anionic hydrophilic cream wi...	17335402	1
Caelo	Anionic hydrophilic cream wi...	17335601	8
Caelo	Anionic hydrophilic cream wi...	23051807	1
Caelo	Anionic hydrophilic cream wi...	17335701	11
Caelo	Anionic hydrophilic cream wi...	18041401	20
Caelo	Anionic hydrophilic cream wi...	18041601	13
Caelo	Anionic hydrophilic cream wi...	18109702	5
Caelo	Anionic hydrophilic cream wi...	13101803	1
Caelo	Anionic hydrophilic cream wi...	18180902	7
Caelo	Anionic hydrophilic cream wi...	18108901	1
Caelo	Anionic hydrophilic cream wi...	18248202	5
Caelo	Anionic hydrophilic cream wi...	26011908	1
Caelo	Anionic hydrophilic cream wi...	18320802	9
Caelo	Anionic hydrophilic cream wi...	18320901	5
Caelo	Anionic hydrophilic cream wi...	19027601	5
Caelo	Anionic hydrophilic cream wi...	13172202	7
Caelo	Anionic hydrophilic cream wi...	17262201	7
Caelo	Anionic hydrophilic cream wi...	1703031	1
Caelo	Anionic hydrophilic cream wi...	18297501	16
Caelo	Anionic hydrophilic cream wi...	12344401	1
Caelo	Anionic hydrophilic cream wi...	17185401	7
Caelo	Anionic hydrophilic cream wi...	16290301	28
Caelo	Anionic hydrophilic cream wi...	17030202	5
Caelo	Anionic hydrophilic cream wi...	14030601	5
Caelo	Anionic hydrophilic cream wi...	15048502	12
Caelo	Anionic hydrophilic cream wi...	15048301	15
Caelo	Anionic hydrophilic cream wi...	54/AKD12	1
Caelo	Anionic hydrophilic cream wi...	15273001	26
Caelo	Anionic hydrophilic cream wi...	64/AKD16	1
Caelo	Anionic hydrophilic cream wi...	13244301	4
Caelo	Anionic hydrophilic cream wi...	172622101	1
Caelo	Anionic hydrophilic cream wi...	17339401	1
Caelo	Anionic hydrophilic cream wi...	1416101	1
Caelo	Anionic hydrophilic cream wi...	16067701	16
Caelo	Anionic hydrophilic cream wi...	15273201	15
Caelo	Anionic hydrophilic cream wi...	18109801	37
Caelo	Anionic hydrophilic cream wi...	13072303	2
Caelo	Anionic hydrophilic cream wi...	16290101	12
Caelo	Anionic hydrophilic cream wi...	17262001	2
Caelo	Anionic hydrophilic cream wi...	16067601	36
Caelo	Anionic hydrophilic cream wi...	14030401	9
Caelo	Anionic hydrophilic cream wi...	16067801	10
Caelo	Anionic hydrophilic cream wi...	12352703	2
Caelo	Anionic hydrophilic cream wi...	17102301	12
Caelo	Anionic hydrophilic cream wi...	18180901	15
Caelo	Anionic hydrophilic cream wi...	14334501	18
Caelo	Anionic hydrophilic cream wi...	1180216	1
Caelo	Anionic hydrophilic cream wi...	16290201	7
Caelo	Anionic hydrophilic cream wi...	1120617/17102101	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream wi...	17156602	6
Caelo	Anionic hydrophilic cream wi...	18297401	6
Caelo	Anionic hydrophilic cream wi...	19093901	5
Caelo	Anionic hydrophilic cream wi...	19027501	3
Caelo	Anionic hydrophilic cream wi...	19192201	1
Caelo	Anionic hydrophilic cream wi...	2114M25401	1
Caelo	Anionic hydrophilic cream wi...	2514U25401	1
Caelo	Anionic hydrophilic cream wi...	15132902	15
Caelo	Anionic hydrophilic cream wi...	16191701	9
Caelo	Anionic hydrophilic cream wi...	17030101	15
Caelo	Anionic hydrophilic cream wi...	17156501	4
Caelo	Anionic hydrophilic cream wi...	1512901	1
Caelo	Anionic hydrophilic cream wi...	16290501	8
Caelo	Anionic hydrophilic cream wi...	13343402	7
Caelo	Anionic hydrophilic cream wi...	141146101	1
Caelo	Anionic hydrophilic cream wi...	14214101	8
Caelo	Anionic hydrophilic cream wi...	14334502	6
Caelo	Anionic hydrophilic cream wi...	15405201	6
Caelo	Anionic hydrophilic cream wi...	15405401	22
Caelo	Anionic hydrophilic cream wi...	16067401	12
Caelo	Anionic hydrophilic cream wi...	13067601	1
Caelo	Anionic hydrophilic cream wi...	1625961	1
Caelo	Anionic hydrophilic cream wi...	170612187	1
Caelo	Anionic hydrophilic cream wi...	17102001	6
Caelo	Anionic hydrophilic cream wi...	170318182	1
Caelo	Anionic hydrophilic cream wi...	1756501	1
Caelo	Anionic hydrophilic cream wi...	181102184	1
Caelo	Anionic hydrophilic cream wi...	17261901	9
Caelo	Anionic hydrophilic cream wi...	17335301	3
Caelo	Anionic hydrophilic cream wi...	18109601	3
Caelo	Anionic hydrophilic cream wi...	18109701	2
Caelo	Anionic hydrophilic cream wi...	18248101	19
Caelo	Anionic hydrophilic cream wi...	18248201	1
Caelo	Anionic hydrophilic cream wi...	18041402	9
Caelo	Anionic hydrophilic cream wi...	184248101	1
Caelo	Anionic hydrophilic cream wi...	13244201	9
Caelo	Anionic hydrophilic cream wi...	14030702	4
Caelo	Anionic hydrophilic cream wi...	14334201	12
Caelo	Anionic hydrophilic cream wi...	1548301	2
Caelo	Anionic hydrophilic cream wi...	1513301	3
Caelo	Anionic hydrophilic cream wi...	17029902	9
Caelo	Anionic hydrophilic cream wi...	1227-11-629	1
Caelo	Anionic hydrophilic cream wi...	18297301	5
Caelo	Anionic hydrophilic cream wi...	18320801	2
Caelo	Anionic hydrophilic cream wi...	19093701	6
Caelo	Anionic hydrophilic cream wi...	16067501	8
Caelo	Anionic hydrophilic cream wi...	13072401	5
Caelo	Anionic hydrophilic cream wi...	13244401-3471312131	1
Caelo	Anionic hydrophilic cream wi...	14146003	6
Caelo	Anionic hydrophilic cream wi...	14214001	4
Caelo	Anionic hydrophilic cream wi...	15048401	6
Caelo	Anionic hydrophilic cream wi...	15133001	13
Caelo	Anionic hydrophilic cream wi...	15273301	13
Caelo	Anionic hydrophilic cream wi...	15272901	3
Caelo	Anionic hydrophilic cream wi...	15273101	15
Caelo	Anionic hydrophilic cream wi...	45/AKD7	1
Caelo	Anionic hydrophilic cream wi...	16067301	5
Caelo	Anionic hydrophilic cream wi...	56/AKD15	1
Caelo	Anionic hydrophilic cream wi...	17232101	1
Caelo	Anionic hydrophilic cream wi...	18041501	4

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream wi...	19093801	5
Caeol/AHD	Anionic hydrophilic cream wi...	15405301	1
Caeol/Phoenix	Anionic hydrophilic cream wi...	16067601	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18109701	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18109901	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18248101	2
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18297301	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18297501	2
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18320901	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	18320802	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	19027501	1
Caesar & Loretz GmbH	Anionic hydrophilic cream wi...	19093701	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream wi...	B1334301	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13072302	3
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	12352702	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13125901	2
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13244401	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13244201	1
Caesar & Loretz GmbH/G	Anionic hydrophilic cream wi...	18297501	1
Caesar & Loretz GmbH/Ph...	Anionic hydrophilic cream wi...	19027502	1
Caesar & Loretz GmbH/Ph...	Anionic hydrophilic cream wi...	18248101	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream wi...	14030701	1
Cealo	Anionic hydrophilic cream wi...	13165001	1
Cealo	Anionic hydrophilic cream wi...	14214201	1
Cealo	Anionic hydrophilic cream wi...	17262202	1
EuRho	Anionic hydrophilic cream wi...	17262101	1
Euro OTC	Anionic hydrophilic cream wi...	15273101	1
Euro OTC	Anionic hydrophilic cream wi...	16191601	1
Euro OTC	Anionic hydrophilic cream wi...	17262101	1
Euro OTC	Anionic hydrophilic cream wi...	17102301	3
Euro OTC	Anionic hydrophilic cream wi...	17262201	1
Euro OTC	Anionic hydrophilic cream wi...	14030701	1
euro//Noweda	Anionic hydrophilic cream wi...	18041501	1
Euro OTC	Anionic hydrophilic cream wi...	14334501	1
Euro OTC	Anionic hydrophilic cream wi...	16290301	1
Fagron	Anionic hydrophilic cream wi...	17262101	1
Fagron	Anionic hydrophilic cream wi...	17335401	1
Fagron	Anionic hydrophilic cream wi...	18041401	1
Fagron	Anionic hydrophilic cream wi...	16191901	1
Gehe	Anionic hydrophilic cream wi...	1307302	1
Gehe	Anionic hydrophilic cream wi...	13244401	1
Gehe	Anionic hydrophilic cream wi...	15405301	1
Gehe	Anionic hydrophilic cream wi...	16067301	1
Gehe	Anionic hydrophilic cream wi...	16067401	1
Gehe	Anionic hydrophilic cream wi...	16191501	1
Gehe	Anionic hydrophilic cream wi...	17262001	1
GEHE	Anionic hydrophilic cream wi...	12301302	1
GEHE	Anionic hydrophilic cream wi...	13072303	1
GEHE	Anionic hydrophilic cream wi...	17156501	1
GEHE	Anionic hydrophilic cream wi...	18109601	1
GEHE	Anionic hydrophilic cream wi...	17261901	2
GEHE	Anionic hydrophilic cream wi...	19027401	1
GEHE	Anionic hydrophilic cream wi...	18320801	1
Ichthyol / Gehe	Anionic hydrophilic cream wi...	17335601	2
Kehr	Anionic hydrophilic cream wi...	17030301	1
Kehr	Anionic hydrophilic cream wi...	17156601	1
Caelo	Anionic hydrophilic cream wi...	17029901	23
L10	Anionic hydrophilic cream wi...	16290101	2
L10	Anionic hydrophilic cream wi...	17261901	5
L10	Anionic hydrophilic cream wi...	18041501	1

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Supplier	Substance	Batch	Spectra
L10	Anionic hydrophilic cream wi...	18180801	3
L11	Anionic hydrophilic cream wi...	16067401	1
L12	Anionic hydrophilic cream wi...	16290201	1
L12	Anionic hydrophilic cream wi...	17102001	2
L12	Anionic hydrophilic cream wi...	17030202	1
L12	Anionic hydrophilic cream wi...	18109601	2
Martinus-Apotheke	Anionic hydrophilic cream wi...	16067801	1
Noweda	Anionic hydrophilic cream wi...	13072302	1
Noweda	Anionic hydrophilic cream wi...	13072401	1
Noweda	Anionic hydrophilic cream wi...	13172203	1
Noweda	Anionic hydrophilic cream wi...	13343301	1
Noweda	Anionic hydrophilic cream wi...	13343402	1
Noweda	Anionic hydrophilic cream wi...	16290501	1
Noweda	Anionic hydrophilic cream wi...	17102101	1
Noweda	Anionic hydrophilic cream wi...	16191601	1
Noweda	Anionic hydrophilic cream wi...	17030301	1
Noweda	Anionic hydrophilic cream wi...	17156601	1
Noweda	Anionic hydrophilic cream wi...	17262101	1
Caelo	Anionic hydrophilic cream wi...	18189901	1
Caelo	Anionic hydrophilic cream wi...	12216501	1
Phoenix	Anionic hydrophilic cream wi...	14146001	2
Phoenix	Anionic hydrophilic cream wi...	14030702	1
Phoenix	Anionic hydrophilic cream wi...	17029901	1
Phönix	Anionic hydrophilic cream wi...	13172203	1
Phönix	Anionic hydrophilic cream wi...	13072302	1
Caelo	Anionic hydrophilic cream wi...	18109901	7
Caelo	Anionic hydrophilic cream wi...	18180802	7
Caelo	Anionic hydrophilic cream wi...	18248102	1
Caelo	Anionic hydrophilic cream wi...	1334302	1
Caelo	Anionic hydrophilic cream wi...	1324402	1
Phönix/gepepharm	Anionic hydrophilic cream wi...	13244201	2
Rondell Apotheke	Anionic hydrophilic cream wi...	15273301	1
Sanacorp	Anionic hydrophilic cream wi...	24AKD1	1
Sanacorp	Anionic hydrophilic cream wi...	14214301	3
Sanacorp	Anionic hydrophilic cream wi...	14334401	1
Sanacorp	Anionic hydrophilic cream wi...	39/AKD4	1
Sanacorp	Anionic hydrophilic cream wi...	41/AKD6	1
Sanacorp	Anionic hydrophilic cream wi...	50/AKD12	1
Sanacorp	Anionic hydrophilic cream wi...	16067901	1
Sanacorp	Anionic hydrophilic cream wi...	17030301	1
Caelo	Anionic hydrophilic cream wi...	15405301	10
Sanacorp WE 23.02.17 -1...	Anionic hydrophilic cream wi...	16290501	1
sanacorp, 5,75EUR, 12.09...	Anionic hydrophilic cream wi...	16191601	2
Caelo	Anionic hydrophilic cream wi...	12221003	3
Caelo	Anionic hydrophilic cream wi...	12283001	1
Caelo	Anionic hydrophilic cream wi...	12352701	5
Caelo	Anionic hydrophilic cream wi...	12301301	2
Caelo	Anionic hydrophilic cream wi...	13072301	2
Caelo	Anionic hydrophilic cream wi...	130723301	1
Caelo	Anionic hydrophilic cream wi...	13343501	9
Caelo	Anionic hydrophilic cream wi...	18/AKD1511	1
Caelo	Anionic hydrophilic cream wi...	14214301	6
Caelo	Anionic hydrophilic cream wi...	32/AKD2	1
Caelo	Anionic hydrophilic cream wi...	15132701	5
THC Rezeptur-Set	Anionic hydrophilic cream wi...	17102101	1
vdI	Anionic hydrophilic cream wi...	12221002	1
AMH Niemann / G	Anionic hydrophlic cream wit...	10B060814	1
AMH Niemann / G	Anionic hydrophlic cream wit...	4B100314	1
AMH Niemann / G	Anionic hydrophlic cream wit...	6B060514	1
AMH Niemann / G	Anionic hydrophlic cream wit...	7B080615	1

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Supplier	Substance	Batch	Spectra
AMH Niemann / G	Anionic hydrophlic cream wit...	6B190516	1
AMH Niemann / G	Anionic hydrophlic cream wit...	4B220518	1
AMH Niemann GmbH&Co.KG	Anionic hydrophlic cream wit...	3B020315	1
AMH Niemann/G	Anionic hydrophlic cream wit...	10B160712	1
AMH Niemann/G	Anionic hydrophlic cream wit...	1B070114	1
AMH Niemann/K	Anionic hydrophlic cream wit...	17B271212	1
AMH Niemann/K	Anionic hydrophlic cream wit...	14B161213	1
AMW Niemann GmbH & Co. KG	Anionic hydrophlic cream wit...	9B150816	1
apomix	Anionic hydrophlic cream wit...	7B210616	1
apomix	Anionic hydrophlic cream wit...	1B080118	1
Apomix	Anionic hydrophlic cream wit...	2B250213	1
Apomix	Anionic hydrophlic cream wit...	6B220513	1
Apomix	Anionic hydrophlic cream wit...	12B040912	1
Apomix	Anionic hydrophlic cream wit...	7B180613	1
Apomix	Anionic hydrophlic cream wit...	8B100614	1
Apomix	Anionic hydrophlic cream wit...	12B220914	2
Apomix	Anionic hydrophlic cream wit...	6B04515	1
Apomix	Anionic hydrophlic cream wit...	6B040515	1
Apomix	Anionic hydrophlic cream wit...	8B170615	1
Apomix	Anionic hydrophlic cream wit...	3B170216	1
Apomix	Anionic hydrophlic cream wit...	10B060916	1
Apomix	Anionic hydrophlic cream wit...	12B141116	1
Apomix	Anionic hydrophlic cream wit...	13B141216	2
Apomix	Anionic hydrophlic cream wit...	1B160117	1
Apomix	Anionic hydrophlic cream wit...	4B020517	1
Apomix	Anionic hydrophlic cream wit...	9B181017	1
Apomix/AHD	Anionic hydrophlic cream wit...	3B170216	1
Apomix/AHD	Anionic hydrophlic cream wit...	1B080118	1
Apomix/AHD	Anionic hydrophlic cream wit...	7B040918	1
Apomix/AHD	Anionic hydrophlic cream wit...	8B121118	1
apomix/Noweda	Anionic hydrophlic cream wit...	6B060514	1
apomix/Noweda	Anionic hydrophlic cream wit...	2B250116	1
Apomix/Noweda	Anionic hydrophlic cream wit...	5B070414	1
Apomix/Noweda	Anionic hydrophlic cream wit...	9B220714	1
Apomix/Noweda	Anionic hydrophlic cream wit...	3B240214	1
Apomix/Noweda	Anionic hydrophlic cream wit...	15B291214	1
Apomix/Noweda	Anionic hydrophlic cream wit...	9B130715	1
Apomix/Noweda	Anionic hydrophlic cream wit...	12B212015	1
APOMIX/Noweda	Anionic hydrophlic cream wit...	4B210316	1
apomix/Phönix	Anionic hydrophlic cream wit...	4B250315	1
apomix/Phönix	Anionic hydrophlic cream wit...	13B161115	1
apomix/Phönix	Anionic hydrophlic cream wit...	1B160117	1
Apomix/Phönix	Anionic hydrophlic cream wit...	2B220218	1
Bombastus	Anionic hydrophlic cream wit...	285829	1
Caelo	Anionic hydrophlic cream wit...	7B040918	1
Gehe	Anionic hydrophlic cream wit...	2B100214	1
Bombastus	Anionic hydrophlic cream wit...	302197	1
Noweda	Anionic hydrophlic cream wit...	6B040515	1
PKH Halle	Anionic hydrophlic cream wit...	4B210316	1
PKH Halle	Anionic hydrophlic cream wit...	13B141216	1
PKH Halle	Anionic hydrophlic cream wit...	2B060317	2
PKH Halle/AHD	Anionic hydrophlic cream wit...	4B220518	2
Sonnen-Apotheke Wefensl...	Anionic hydrophlic cream wit...	1B080118	1
Caelo	Base cream, diluted	18106601	2
Caelo	Base cream, diluted	19105602	1
13.11.18 PHARMACHEM/GEHE	Base cream, hydrophobic DAC	181196	1
AH 24.02.15	Base cream, hydrophobic DAC	14335502	1
AHD	Base cream, hydrophobic DAC	14145401	1
AHD	Base cream, hydrophobic DAC	18G31-t09-058735	1
AHD / Pharmachem Pößneck	Base cream, hydrophobic DAC	160814	1

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Supplier	Substance	Batch	Spectra
AHD / Pharmachem Pöckneck	Base cream, hydrophobic DAC	160138	1
AHD / Pharmachem Pöckneck	Base cream, hydrophobic DAC	162169	1
AHD / Pharmachem Pöckneck	Base cream, hydrophobic DAC	151257	1
AHD / Pharmachem Pöckneck	Base cream, hydrophobic DAC	171128	2
Caelo	Base cream, hydrophobic DAC	160575101	1
AHD, 02.04.2013	Base cream, hydrophobic DAC	12308102	1
AHD/ Pharmachem	Base cream, hydrophobic DAC	152210	2
AHD/ Pharmachem	Base cream, hydrophobic DAC	160137	3
AHD/ Pharmachem	Base cream, hydrophobic DAC	163238	2
AHD/Pharmachem	Base cream, hydrophobic DAC	150404	1
AHD/Pharmachem	Base cream, hydrophobic DAC	152210	1
AHD/Pharmachem	Base cream, hydrophobic DAC	153625	4
AHD/Pharmachem	Base cream, hydrophobic DAC	153626	1
AHD/Pharmachem	Base cream, hydrophobic DAC	162170	1
AHD/Pharmachem GmbH	Base cream, hydrophobic DAC	153627	1
AHD/Pharmachem.	Base cream, hydrophobic DAC	170008	1
Ahd/PharmachemPöckneck	Base cream, hydrophobic DAC	21013	1
Allianc. Health. / Phar...	Base cream, hydrophobic DAC	170010	1
Alliance	Base cream, hydrophobic DAC	170010	2
Alliance/Pharmachem	Base cream, hydrophobic DAC	181196	1
Allianz	Base cream, hydrophobic DAC	180756	1
Alte Apotheke	Base cream, hydrophobic DAC	16165701	1
Caelo	Base cream, hydrophobic DAC	308508	1
Anzag	Base cream, hydrophobic DAC	151257	1
Anzag	Base cream, hydrophobic DAC	160136	1
Anzag	Base cream, hydrophobic DAC	171127	2
Anzag /Pharmachem	Base cream, hydrophobic DAC	160825	1
Anzag 07.05.13 ek:12,66EUR	Base cream, hydrophobic DAC	12229302	1
Anzag 30.10.12 ek:12,68EUR	Base cream, hydrophobic DAC	12151601	1
Anzag/Bambastus	Base cream, hydrophobic DAC	305079	1
Bombastus	Base cream, hydrophobic DAC	271092	3
Anzag/Pharmachem	Base cream, hydrophobic DAC	120712	2
apomix/ Anzag	Base cream, hydrophobic DAC	307766	1
Berkel AHK	Base cream, hydrophobic DAC	14145401	1
Bombastus	Base cream, hydrophobic DAC	269276	1
Bombastus	Base cream, hydrophobic DAC	271091	1
Bombastus	Base cream, hydrophobic DAC	271093	1
Bombastus	Base cream, hydrophobic DAC	276085	1
Bombastus	Base cream, hydrophobic DAC	279147	2
Bombastus	Base cream, hydrophobic DAC	277696	1
Bombastus	Base cream, hydrophobic DAC	279148	3
Bombastus	Base cream, hydrophobic DAC	280811	2
Bombastus	Base cream, hydrophobic DAC	282163	1
Bombastus	Base cream, hydrophobic DAC	282162	2
Bombastus	Base cream, hydrophobic DAC	285437	2
Bombastus	Base cream, hydrophobic DAC	286515	1
Bombastus	Base cream, hydrophobic DAC	284173	1
Bombastus	Base cream, hydrophobic DAC	286514	2
Bombastus	Base cream, hydrophobic DAC	288499	4
Bombastus	Base cream, hydrophobic DAC	60080401	3
Bombastus	Base cream, hydrophobic DAC	289720	2
Bombastus	Base cream, hydrophobic DAC	289718	1
Bombastus	Base cream, hydrophobic DAC	289717	1
Bombastus	Base cream, hydrophobic DAC	291593	3
Bombastus	Base cream, hydrophobic DAC	293162	3
Bombastus	Base cream, hydrophobic DAC	291590	4
Bombastus	Base cream, hydrophobic DAC	293167	1
Bombastus	Base cream, hydrophobic DAC	293163	5
Bombastus	Base cream, hydrophobic DAC	293168	4
Bombastus	Base cream, hydrophobic DAC	294685	6

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream, hydrophobic DAC	297044	1
Bombastus	Base cream, hydrophobic DAC	294686	3
Bombastus	Base cream, hydrophobic DAC	297047	6
Bombastus	Base cream, hydrophobic DAC	15221301	1
Bombastus	Base cream, hydrophobic DAC	293161	1
Bombastus	Base cream, hydrophobic DAC	289721	1
Bombastus	Base cream, hydrophobic DAC	297045	1
Bombastus	Base cream, hydrophobic DAC	298354	2
Bombastus	Base cream, hydrophobic DAC	300417	5
Bombastus	Base cream, hydrophobic DAC	301455	2
Bombastus	Base cream, hydrophobic DAC	300352	2
Bombastus	Base cream, hydrophobic DAC	302131	3
Bombastus	Base cream, hydrophobic DAC	162168	1
Bombastus	Base cream, hydrophobic DAC	305083	8
Bombastus	Base cream, hydrophobic DAC	160136	1
Bombastus	Base cream, hydrophobic DAC	303374	1
Bombastus	Base cream, hydrophobic DAC	305080	1
Bombastus	Base cream, hydrophobic DAC	307771	8
Bombastus	Base cream, hydrophobic DAC	171126	2
Bombastus	Base cream, hydrophobic DAC	308507	1
Bombastus	Base cream, hydrophobic DAC	171128	1
Bombastus	Base cream, hydrophobic DAC	310826	3
Bombastus	Base cream, hydrophobic DAC	180515	1
Bombastus	Base cream, hydrophobic DAC	18002001	5
Bombastus	Base cream, hydrophobic DAC	18001998	2
Bombastus	Base cream, hydrophobic DAC	18001994	2
Bombastus	Base cream, hydrophobic DAC	18005487	6
Bombastus	Base cream, hydrophobic DAC	18002828	2
Bombastus	Base cream, hydrophobic DAC	18005484	1
Bombastus	Base cream, hydrophobic DAC	307768	3
Bombastus	Base cream, hydrophobic DAC	310827	10
Bombastus	Base cream, hydrophobic DAC	19001125	1
Bombastus	Base cream, hydrophobic DAC	18002829	1
Bombastus	Base cream, hydrophobic DAC	307770	3
Bombastus	Base cream, hydrophobic DAC	18005488	2
Bombastus	Base cream, hydrophobic DAC	286516	6
Bombastus	Base cream, hydrophobic DAC	308508	5
Bombastus	Base cream, hydrophobic DAC	308509	2
Bombastus	Base cream, hydrophobic DAC	310824	1
Bombastus	Base cream, hydrophobic DAC	19002280	1
Bombastus	Base cream, hydrophobic DAC	160814	1
Bombastus	Base cream, hydrophobic DAC	297046	5
Bombastus	Base cream, hydrophobic DAC	143093	1
Bombastus	Base cream, hydrophobic DAC	284170	1
Bombastus	Base cream, hydrophobic DAC	282161	1
Bombastus	Base cream, hydrophobic DAC	284171	1
Bombastus	Base cream, hydrophobic DAC	307769	3
Bombastus	Base cream, hydrophobic DAC	60080402	1
Bombastus	Base cream, hydrophobic DAC	310828	3
Bombastus	Base cream, hydrophobic DAC	17001096	1
Bombastus	Base cream, hydrophobic DAC	17001094	1
Bombastus	Base cream, hydrophobic DAC	18001999	3
Bombastus	Base cream, hydrophobic DAC	271095	1
Bombastus	Base cream, hydrophobic DAC	307766	2
Bombastus	Base cream, hydrophobic DAC	18001992	1
Bombastus	Base cream, hydrophobic DAC	18002824	1
Bombastus	Base cream, hydrophobic DAC	18002826	1
Bombastus	Base cream, hydrophobic DAC	298353	5
Bombastus	Base cream, hydrophobic DAC	302133	1
Bombastus	Base cream, hydrophobic DAC	306395	3

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream, hydrophobic DAC	18001993	2
Bombastus	Base cream, hydrophobic DAC	18002827	3
Bombastus	Base cream, hydrophobic DAC	19001126	4
Bombastus	Base cream, hydrophobic DAC	308504	1
Bombastus	Base cream, hydrophobic DAC	297043	2
Bombastus	Base cream, hydrophobic DAC	305081	1
Bombastus	Base cream, hydrophobic DAC	18051001	1
Bombastus	Base cream, hydrophobic DAC	18002831	2
Bombastus	Base cream, hydrophobic DAC	17001095	1
Bombastus	Base cream, hydrophobic DAC	285434	1
Bombastus	Base cream, hydrophobic DAC	279145	2
Bombastus	Base cream, hydrophobic DAC	288497	4
Bombastus	Base cream, hydrophobic DAC	285435	2
Bombastus	Base cream, hydrophobic DAC	307767	1
Bombastus	Base cream, hydrophobic DAC	298351	1
Bombastus	Base cream, hydrophobic DAC	303376	5
Bombastus	Base cream, hydrophobic DAC	303377	2
Bombastus	Base cream, hydrophobic DAC	306397	7
Bombastus	Base cream, hydrophobic DAC	163237	1
Bombastus	Base cream, hydrophobic DAC	276087	1
Bombastus	Base cream, hydrophobic DAC	307765	2
Bombastus	Base cream, hydrophobic DAC	305082	1
Bombastus	Base cream, hydrophobic DAC	310825	1
Bombastus	Base cream, hydrophobic DAC	301457	6
Bombastus	Base cream, hydrophobic DAC	171815	1
Bombastus	Base cream, hydrophobic DAC	18002830	5
Bombastus	Base cream, hydrophobic DAC	19001127	1
Bombastus	Base cream, hydrophobic DAC	19002281	1
Bombastus	Base cream, hydrophobic DAC	310823	6
Bombastus	Base cream, hydrophobic DAC	308506	1
Bombastus	Base cream, hydrophobic DAC	308505	1
Bombastus	Base cream, hydrophobic DAC	18001997	3
Bombastus	Base cream, hydrophobic DAC	12229302	1
Bombastus	Base cream, hydrophobic DAC	298350	1
Bombastus	Base cream, hydrophobic DAC	18001995	2
Bombastus	Base cream, hydrophobic DAC	18002000	7
Bombastus	Base cream, hydrophobic DAC	18002825	1
Bombstus/San	Base cream, hydrophobic DAC	162168	1
Cael/Sanacorp	Base cream, hydrophobic DAC	15421302	1
Caelo	Base cream, hydrophobic DAC	11289204	1
Caelo	Base cream, hydrophobic DAC	11038802	2
Caelo	Base cream, hydrophobic DAC	113401301	1
Caelo	Base cream, hydrophobic DAC	11341301	2
Caelo	Base cream, hydrophobic DAC	11153902	1
Caelo	Base cream, hydrophobic DAC	12064705	6
Caelo	Base cream, hydrophobic DAC	12025003	1
Caelo	Base cream, hydrophobic DAC	12064704	5
Caelo	Base cream, hydrophobic DAC	12064047	1
Caelo	Base cream, hydrophobic DAC	12151601	9
Caelo	Base cream, hydrophobic DAC	2111201	1
Caelo	Base cream, hydrophobic DAC	12217603	6
Caelo	Base cream, hydrophobic DAC	1215601	1
Caelo	Base cream, hydrophobic DAC	12308201	6
Caelo	Base cream, hydrophobic DAC	12229304	1
Caelo	Base cream, hydrophobic DAC	123082011	1
Caelo	Base cream, hydrophobic DAC	12308202	2
Caelo	Base cream, hydrophobic DAC	13019302	6
Caelo	Base cream, hydrophobic DAC	13072602	5
Caelo	Base cream, hydrophobic DAC	13175901	15
Caelo	Base cream, hydrophobic DAC	230713	3

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	13085702	1
Caelo	Base cream, hydrophobic DAC	13275303	5
Caelo	Base cream, hydrophobic DAC	21122013B	1
Caelo	Base cream, hydrophobic DAC	14000701	19
Caelo	Base cream, hydrophobic DAC	410211-1-P	1
Caelo	Base cream, hydrophobic DAC	14028002	2
Caelo	Base cream, hydrophobic DAC	13H13-T06-006165	1
Caelo	Base cream, hydrophobic DAC	282163	1
Caelo	Base cream, hydrophobic DAC	1406140	1
Caelo	Base cream, hydrophobic DAC	14145401	24
Caelo	Base cream, hydrophobic DAC	14145301	19
Caelo	Base cream, hydrophobic DAC	14145202	4
Caelo	Base cream, hydrophobic DAC	1414501	2
Caelo	Base cream, hydrophobic DAC	14215701	9
Caelo	Base cream, hydrophobic DAC	13012015A	1
Caelo	Base cream, hydrophobic DAC	14335501	13
Caelo	Base cream, hydrophobic DAC	10022015F	1
Caelo	Base cream, hydrophobic DAC	230115/2	1
Caelo	Base cream, hydrophobic DAC	10032015B	1
Caelo	Base cream, hydrophobic DAC	18031505	1
Caelo	Base cream, hydrophobic DAC	15048701	13
Caelo	Base cream, hydrophobic DAC	15001003	2
Caelo	Base cream, hydrophobic DAC	15132502	6
Caelo	Base cream, hydrophobic DAC	15221301	20
Caelo	Base cream, hydrophobic DAC	15421201	31
Caelo	Base cream, hydrophobic DAC	293162	1
Caelo	Base cream, hydrophobic DAC	26011603	1
Caelo	Base cream, hydrophobic DAC	20160222	1
Caelo	Base cream, hydrophobic DAC	16074802	18
Caelo	Base cream, hydrophobic DAC	160136	2
Caelo	Base cream, hydrophobic DAC	16074901	21
Caelo	Base cream, hydrophobic DAC	16075003	4
Caelo	Base cream, hydrophobic DAC	123588	1
Caelo	Base cream, hydrophobic DAC	46074802	1
Caelo	Base cream, hydrophobic DAC	16174201	14
Caelo	Base cream, hydrophobic DAC	16165502	4
Caelo	Base cream, hydrophobic DAC	16654403	1
Caelo	Base cream, hydrophobic DAC	303376	3
Caelo	Base cream, hydrophobic DAC	16293701	31
Caelo	Base cream, hydrophobic DAC	23021712	1
Caelo	Base cream, hydrophobic DAC	16293601	6
Caelo	Base cream, hydrophobic DAC	16330301	19
Caelo	Base cream, hydrophobic DAC	1615500	1
Caelo	Base cream, hydrophobic DAC	170008	2
Caelo	Base cream, hydrophobic DAC	16293901	12
Caelo	Base cream, hydrophobic DAC	17073202	21
Caelo	Base cream, hydrophobic DAC	16330203	12
Caelo	Base cream, hydrophobic DAC	171126	1
Caelo	Base cream, hydrophobic DAC	171128	2
Caelo	Base cream, hydrophobic DAC	17073103	4
Caelo	Base cream, hydrophobic DAC	17112903	10
Caelo	Base cream, hydrophobic DAC	17113001	2
Caelo	Base cream, hydrophobic DAC	171127	2
Caelo	Base cream, hydrophobic DAC	172194	2
Caelo	Base cream, hydrophobic DAC	17001093	1
Caelo	Base cream, hydrophobic DAC	180515	2
Caelo	Base cream, hydrophobic DAC	26051807	1
Caelo	Base cream, hydrophobic DAC	18100801	28
Caelo	Base cream, hydrophobic DAC	18061805	1
Caelo	Base cream, hydrophobic DAC	18551001	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	30081812	1
Caelo	Base cream, hydrophobic DAC	18100902	2
Caelo	Base cream, hydrophobic DAC	18173903	12
Caelo	Base cream, hydrophobic DAC	18002831	1
Caelo	Base cream, hydrophobic DAC	18002002	1
Caelo	Base cream, hydrophobic DAC	18C23-T04-054141	1
Caelo	Base cream, hydrophobic DAC	18286702	12
Caelo	Base cream, hydrophobic DAC	19002001	4
Caelo	Base cream, hydrophobic DAC	18005488	1
Caelo	Base cream, hydrophobic DAC	19002002	7
Caelo	Base cream, hydrophobic DAC	19058301	5
Caelo	Base cream, hydrophobic DAC	11222003	1
Caelo	Base cream, hydrophobic DAC	13085504	3
Caelo	Base cream, hydrophobic DAC	18002828	1
Caelo	Base cream, hydrophobic DAC	301457	1
Caelo	Base cream, hydrophobic DAC	16293902	9
Caelo	Base cream, hydrophobic DAC	171816	1
Caelo	Base cream, hydrophobic DAC	13176002	2
Caelo	Base cream, hydrophobic DAC	1233	1
Caelo	Base cream, hydrophobic DAC	163237	1
Caelo	Base cream, hydrophobic DAC	171117HB/17150401	1
Caelo	Base cream, hydrophobic DAC	171219HB/17150401	1
Caelo	Base cream, hydrophobic DAC	182220	1
Caelo	Base cream, hydrophobic DAC	16165501	38
Caelo	Base cream, hydrophobic DAC	19058402	7
Caelo	Base cream, hydrophobic DAC	12229302	7
Caelo	Base cream, hydrophobic DAC	15044702	6
Caelo	Base cream, hydrophobic DAC	16074803	5
Caelo	Base cream, hydrophobic DAC	16330302	2
Caelo	Base cream, hydrophobic DAC	190637	1
Caelo	Base cream, hydrophobic DAC	1400701	1
Caelo	Base cream, hydrophobic DAC	160130	3
Caelo	Base cream, hydrophobic DAC	180755	4
Caelo	Base cream, hydrophobic DAC	16165403	25
Caelo	Base cream, hydrophobic DAC	13127502	2
Caelo	Base cream, hydrophobic DAC	13086701	1
Caelo	Base cream, hydrophobic DAC	13085701	21
Caelo	Base cream, hydrophobic DAC	13274902	2
Caelo	Base cream, hydrophobic DAC	13386401	12
Caelo	Base cream, hydrophobic DAC	294686	3
Caelo	Base cream, hydrophobic DAC	15048702	3
Caelo	Base cream, hydrophobic DAC	14207002	3
Caelo	Base cream, hydrophobic DAC	14277401	1
Caelo	Base cream, hydrophobic DAC	13019303	14
Caelo	Base cream, hydrophobic DAC	13019304	3
Caelo	Base cream, hydrophobic DAC	16(18173902)	1
Caelo	Base cream, hydrophobic DAC	17(19058401)	1
Caelo	Base cream, hydrophobic DAC	293163	1
Caelo	Base cream, hydrophobic DAC	180756	1
Caelo	Base cream, hydrophobic DAC	17150501	13
Caelo	Base cream, hydrophobic DAC	17255202	9
Caelo	Base cream, hydrophobic DAC	18242603	2
Caelo	Base cream, hydrophobic DAC	14L18-T21-018124	2
Caelo	Base cream, hydrophobic DAC	15/13-T01-026887	1
Caelo	Base cream, hydrophobic DAC	13275301	11
Caelo	Base cream, hydrophobic DAC	1615501	1
Caelo	Base cream, hydrophobic DAC	16330201	13
Caelo	Base cream, hydrophobic DAC	19145603	3
Caelo	Base cream, hydrophobic DAC	19145602	1
Caelo	Base cream, hydrophobic DAC	150405	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	1018A-03497	1
Caelo	Base cream, hydrophobic DAC	18119901	12
Caelo	Base cream, hydrophobic DAC	286516	1
Caelo	Base cream, hydrophobic DAC	4004319	1
Caelo	Base cream, hydrophobic DAC	17C06-T08-042287	1
Caelo	Base cream, hydrophobic DAC	308507	1
Caelo	Base cream, hydrophobic DAC	17097709	1
Caelo	Base cream, hydrophobic DAC	180860	2
Caelo	Base cream, hydrophobic DAC	18242502	1
Caelo	Base cream, hydrophobic DAC	13175902	8
Caelo	Base cream, hydrophobic DAC	13B04-T17-001037	2
Caelo	Base cream, hydrophobic DAC	12064703	1
Caelo	Base cream, hydrophobic DAC	12025002	2
Caelo	Base cream, hydrophobic DAC	170009	2
Caelo	Base cream, hydrophobic DAC	15046401	11
Caelo	Base cream, hydrophobic DAC	16074801	12
Caelo	Base cream, hydrophobic DAC	17255301	20
Caelo	Base cream, hydrophobic DAC	14061601	5
Caelo	Base cream, hydrophobic DAC	289720	1
Caelo	Base cream, hydrophobic DAC	15030702	1
Caelo	Base cream, hydrophobic DAC	15132503	3
Caelo	Base cream, hydrophobic DAC	15240801	1
Caelo	Base cream, hydrophobic DAC	15421303	1
Caelo	Base cream, hydrophobic DAC	16075101	9
Caelo	Base cream, hydrophobic DAC	16075201	12
Caelo	Base cream, hydrophobic DAC	162170	3
Caelo	Base cream, hydrophobic DAC	17073201	6
Caelo	Base cream, hydrophobic DAC	18193301	1
Caelo	Base cream, hydrophobic DAC	15221401	5
Caelo	Base cream, hydrophobic DAC	15111401	5
Caelo	Base cream, hydrophobic DAC	18(19058401)	1
Caelo	Base cream, hydrophobic DAC	17255201	10
Caelo	Base cream, hydrophobic DAC	18051101	33
Caelo	Base cream, hydrophobic DAC	19115901	3
Caelo	Base cream, hydrophobic DAC	11222002	1
Caelo	Base cream, hydrophobic DAC	14028102	10
Caelo	Base cream, hydrophobic DAC	162168	2
Caelo	Base cream, hydrophobic DAC	302134	1
Caelo	Base cream, hydrophobic DAC	17150401	19
Caelo	Base cream, hydrophobic DAC	1715050	1
Caelo	Base cream, hydrophobic DAC	180308HB/17255301	1
Caelo	Base cream, hydrophobic DAC	17255402	2
Caelo	Base cream, hydrophobic DAC	181194	3
Caelo	Base cream, hydrophobic DAC	18212501	1
Caelo	Base cream, hydrophobic DAC	5013q-03497	1
Caelo	Base cream, hydrophobic DAC	153627	1
Caelo	Base cream, hydrophobic DAC	13275302	7
Caelo	Base cream, hydrophobic DAC	14335502	11
Caelo	Base cream, hydrophobic DAC	15001001	9
Caelo	Base cream, hydrophobic DAC	151259	3
Caelo	Base cream, hydrophobic DAC	1522301	1
Caelo	Base cream, hydrophobic DAC	4004302	2
Caelo	Base cream, hydrophobic DAC	171815	1
Caelo	Base cream, hydrophobic DAC	181198	1
Caelo	Base cream, hydrophobic DAC	19032002	1
Caelo	Base cream, hydrophobic DAC	142154	2
Caelo	Base cream, hydrophobic DAC	1615403	1
Caelo	Base cream, hydrophobic DAC	303377	1
Caelo	Base cream, hydrophobic DAC	17150402	2
Caelo	Base cream, hydrophobic DAC	18051401	10

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	18051301	5
Caelo	Base cream, hydrophobic DAC	18242501	11
Caelo	Base cream, hydrophobic DAC	18286701	10
Caelo	Base cream, hydrophobic DAC	1824601	1
Caelo	Base cream, hydrophobic DAC	18G31-T09-058736	2
Caelo	Base cream, hydrophobic DAC	19204801	1
Caelo	Base cream, hydrophobic DAC	19058401	3
Caelo	Base cream, hydrophobic DAC	18100901	6
Caelo	Base cream, hydrophobic DAC	13085602	7
Caelo	Base cream, hydrophobic DAC	13176003	11
Caelo	Base cream, hydrophobic DAC	13386403	3
Caelo	Base cream, hydrophobic DAC	14000601	7
Caelo	Base cream, hydrophobic DAC	140885	1
Caelo	Base cream, hydrophobic DAC	14379902	4
Caelo	Base cream, hydrophobic DAC	1435501	1
Caelo	Base cream, hydrophobic DAC	1513502	1
Caelo	Base cream, hydrophobic DAC	9AKD15	1
Caelo	Base cream, hydrophobic DAC	16165701	10
Caelo	Base cream, hydrophobic DAC	17255302	5
Caelo	Base cream, hydrophobic DAC	17192002	1
Caelo	Base cream, hydrophobic DAC	18173902	12
Caelo	Base cream, hydrophobic DAC	18174101	6
Caelo	Base cream, hydrophobic DAC	18286802	4
Caelo	Base cream, hydrophobic DAC	19058501	3
Caecolo/Krieger	Base cream, hydrophobic DAC	16330301	1
Caesar & Lorenz	Base cream, hydrophobic DAC	14061501	1
Caesar & Lorenz	Base cream, hydrophobic DAC	14028002	1
Caesar & Loretz	Base cream, hydrophobic DAC	16075201	1
caesar & Loretz GmbH	Base cream, hydrophobic DAC	14061601	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	13275302	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	13386401	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14000701	3
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14061501	3
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14335501	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15048701	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15046401	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15111402	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15221401	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15421201	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16074901	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16174201	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16330203	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	17112903	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	18242501	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	18286702	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	18242603	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	19058501	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	19002002	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	19058401	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	19145603	1
Caesar & Loretz GmbH Hi...	Base cream, hydrophobic DAC	115421302	1
Caesar & Loretz GmbH, 4...	Base cream, hydrophobic DAC	11289203	1
Caesar & Loretz GmbH, 4...	Base cream, hydrophobic DAC	13019303	1
Caesar & Loretz/AHD	Base cream, hydrophobic DAC	16074901	1
Caesar & Loretz/Noweda	Base cream, hydrophobic DAC	16074802	1
Caesar&Loretz GmbH	Base cream, hydrophobic DAC	15221301	1
Caesar&Loretz GmbH /Anzag	Base cream, hydrophobic DAC	15221301	1
caesar&Loretz GmbH,Phön...	Base cream, hydrophobic DAC	16165701	1
Caesar&Loretz GmbH/Anzag	Base cream, hydrophobic DAC	14145301	1
Caesar&lorenz,Phoenix	Base cream, hydrophobic DAC	13386401	1

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Supplier	Substance	Batch	Spectra
Caesar&loretz,Phoenix	Base cream, hydrophobic DAC	14335502	1
Caesar&loretz,Phoenix	Base cream, hydrophobic DAC	15001002	1
Caesar/Noweda	Base cream, hydrophobic DAC	15001002	1
Caleo	Base cream, hydrophobic DAC	17150402	1
calo	Base cream, hydrophobic DAC	13072602	3
cealo	Base cream, hydrophobic DAC	13274902	1
Cealo/GEHE	Base cream, hydrophobic DAC	18051101	1
Ebert u. Jacobi 16.0...	Base cream, hydrophobic DAC	160130	1
Ebert/Pharmachem	Base cream, hydrophobic DAC	170008	1
Euro OTC	Base cream, hydrophobic DAC	16293901	2
Euro OTC	Base cream, hydrophobic DAC	17255401	1
Euro OTC	Base cream, hydrophobic DAC	17150401	1
Euro OTC	Base cream, hydrophobic DAC	171816	1
Euro OTC	Base cream, hydrophobic DAC	16165501	1
Fagron	Base cream, hydrophobic DAC	12G026-0001	1
Fagron	Base cream, hydrophobic DAC	513A-03497	1
Fagron	Base cream, hydrophobic DAC	12G09-T03	2
Fagron	Base cream, hydrophobic DAC	12D10-T02	1
Fagron	Base cream, hydrophobic DAC	12J24-T01	5
Fagron	Base cream, hydrophobic DAC	13E13-T01-003619	6
Fagron	Base cream, hydrophobic DAC	13E13T01003619	1
Fagron	Base cream, hydrophobic DAC	13E13-T01-003620	1
Fagron	Base cream, hydrophobic DAC	13H13-T06-006165	5
Fagron	Base cream, hydrophobic DAC	13H13T06	1
Fagron	Base cream, hydrophobic DAC	14A06T08009038	1
Fagron	Base cream, hydrophobic DAC	14A06-T08-009037	6
Fagron	Base cream, hydrophobic DAC	14E06-T13-012209	1
Fagron	Base cream, hydrophobic DAC	14H04-T05	1
Fagron	Base cream, hydrophobic DAC	14L18-T21-018127	1
Fagron	Base cream, hydrophobic DAC	14H04-T05-014482	6
Fagron	Base cream, hydrophobic DAC	14L18-T21-018124	4
Fagron	Base cream, hydrophobic DAC	14L18-T21-018125	1
Fagron	Base cream, hydrophobic DAC	15D03-T05-021168	1
Fagron	Base cream, hydrophobic DAC	15J13-T01-026888	1
Fagron	Base cream, hydrophobic DAC	15/13-T01-026887	3
Fagron	Base cream, hydrophobic DAC	15J13-T01-036887	1
Fagron	Base cream, hydrophobic DAC	15J13-T02-026891	1
Fagron	Base cream, hydrophobic DAC	26887	1
Fagron	Base cream, hydrophobic DAC	16E03-T02-032869	2
Fagron	Base cream, hydrophobic DAC	16E03-T02-032868	7
Fagron	Base cream, hydrophobic DAC	16F27-T22-034684	3
Fagron	Base cream, hydrophobic DAC	16B10-T01-030202	1
Fagron	Base cream, hydrophobic DAC	17D19-T03-043551	2
Fagron	Base cream, hydrophobic DAC	171817	1
Fagron	Base cream, hydrophobic DAC	17C06	1
Fagron	Base cream, hydrophobic DAC	17C06-T08-04228	1
Fagron	Base cream, hydrophobic DAC	17B03-T01-041253	1
Fagron	Base cream, hydrophobic DAC	18C23-T04-054141	3
Fagron	Base cream, hydrophobic DAC	18C23-T04	2
Fagron	Base cream, hydrophobic DAC	18G31-T09_058735	1
Fagron	Base cream, hydrophobic DAC	14118-T21-018124	1
Fagron	Base cream, hydrophobic DAC	16E03T02032868	1
Fagron	Base cream, hydrophobic DAC	18L18-T09-062848	1
Fagron	Base cream, hydrophobic DAC	13H13-T06	2
Fagron	Base cream, hydrophobic DAC	13T13-T06-006166	1
Fagron	Base cream, hydrophobic DAC	18G31-T09	2
Fagron	Base cream, hydrophobic DAC	18D12-T01-054746	1
Fagron	Base cream, hydrophobic DAC	13B04-T17-001040	1
Fagron	Base cream, hydrophobic DAC	13B04-T17-001037	4
Fagron	Base cream, hydrophobic DAC	13E13-T06-006	2

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Supplier	Substance	Batch	Spectra
Fagron	Base cream, hydrophobic DAC	14A06-T07-009033	3
Fagron	Base cream, hydrophobic DAC	16E03T02-032868	1
Fagron	Base cream, hydrophobic DAC	18C23-T04-054142	3
Fagron	Base cream, hydrophobic DAC	18A09-T01-051635	1
Fagron	Base cream, hydrophobic DAC	16293601	1
Fagron	Base cream, hydrophobic DAC	17c06-t08-042287	1
Fagron	Base cream, hydrophobic DAC	18G31-T09-058736	2
Fagron	Base cream, hydrophobic DAC	17C06-T08-04287	1
Fagron	Base cream, hydrophobic DAC	18G31-T09-058735	5
Fagron	Base cream, hydrophobic DAC	15J13-T01-026887	5
Fagron	Base cream, hydrophobic DAC	18A09-T01-051636	1
Fagron	Base cream, hydrophobic DAC	17Co6-To8-o42287	2
Fagron	Base cream, hydrophobic DAC	17Co6-To8-042287	2
Faoron/anzag	Base cream, hydrophobic DAC	14A06-t08-009037	1
Faoron/Anzag	Base cream, hydrophobic DAC	14A06-T08-009037	4
Fiebig	Base cream, hydrophobic DAC	18051101	2
Fiebig	Base cream, hydrophobic DAC	18173902	1
Gehe	Base cream, hydrophobic DAC	13019304	1
Gehe	Base cream, hydrophobic DAC	12308102	1
Gehe	Base cream, hydrophobic DAC	13175902	1
Gehe	Base cream, hydrophobic DAC	13386402	1
Gehe	Base cream, hydrophobic DAC	13175901	1
Gehe	Base cream, hydrophobic DAC	289721	1
Gehe	Base cream, hydrophobic DAC	17150401	1
Gehe	Base cream, hydrophobic DAC	17255202	2
Gehe	Base cream, hydrophobic DAC	172194	1
GEHE	Base cream, hydrophobic DAC	303373	1
GEHE	Base cream, hydrophobic DAC	17073202	1
GEHE	Base cream, hydrophobic DAC	310824	1
GEHE	Base cream, hydrophobic DAC	18051101	1
GEHE	Base cream, hydrophobic DAC	18051401	1
GEHE	Base cream, hydrophobic DAC	18051301	1
GEHE	Base cream, hydrophobic DAC	18051103	1
GEHE	Base cream, hydrophobic DAC	18119901	2
GEHE	Base cream, hydrophobic DAC	18174101	1
GEHE	Base cream, hydrophobic DAC	18286802	1
GEHE	Base cream, hydrophobic DAC	19115901	2
Caelo	Base cream, hydrophobic DAC	15421401	13
GEHE 08.12.2014	Base cream, hydrophobic DAC	14145301	1
Gehe 10.03.15	Base cream, hydrophobic DAC	143094	2
Gehe,27.0415	Base cream, hydrophobic DAC	15001003	2
Gehe/apomix/17.12.2014	Base cream, hydrophobic DAC	289719	1
Bombastus	Base cream, hydrophobic DAC	306396	2
Bombastus	Base cream, hydrophobic DAC	264854	1
Bombastus	Base cream, hydrophobic DAC	280809	1
Caelo	Base cream, hydrophobic DAC	15001002	10
Caelo	Base cream, hydrophobic DAC	14335601	4
Caelo	Base cream, hydrophobic DAC	14145402	1
Caelo	Base cream, hydrophobic DAC	15046402	6
Caelo	Base cream, hydrophobic DAC	15421302	10
Caelo	Base cream, hydrophobic DAC	16293701/1020317	1
Caelo	Base cream, hydrophobic DAC	1290318	1
Gehe/Pharmachem	Base cream, hydrophobic DAC	160137	1
Gehe/Pharmachem	Base cream, hydrophobic DAC	172194	2
Gehe/Pharmachem	Base cream, hydrophobic DAC	180755	1
Caelo	Base cream, hydrophobic DAC	15111403	3
Gehe-Pharmachem	Base cream, hydrophobic DAC	160136	1
Gehe-Pharmachem	Base cream, hydrophobic DAC	162168	1
Henry Lamotte Oils GmbH...	Base cream, hydrophobic DAC	171126	1
Hepart	Base cream, hydrophobic DAC	18002830	1

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Supplier	Substance	Batch	Spectra
Hirsch	Base cream, hydrophobic DAC	12J24-T01	2
Ichthyol Gesellschaft	Base cream, hydrophobic DAC	18100801	2
Kehr	Base cream, hydrophobic DAC	310825	1
Kehr	Base cream, hydrophobic DAC	18002826	1
Kehr	Base cream, hydrophobic DAC	18002827	1
Kehr / Pharmachem	Base cream, hydrophobic DAC	141489	1
Caelo	Base cream, hydrophobic DAC	18051001	27
Caelo	Base cream, hydrophobic DAC	18242601	9
medphano/Phönix	Base cream, hydrophobic DAC	6510115	4
Midas Göttingen	Base cream, hydrophobic DAC	16293901	1
Nachprüfung 3083	Base cream, hydrophobic DAC	141318	1
Noweda	Base cream, hydrophobic DAC	11289203	1
Noweda	Base cream, hydrophobic DAC	12025002	1
Noweda	Base cream, hydrophobic DAC	110413	2
Noweda	Base cream, hydrophobic DAC	14028101	1
Noweda	Base cream, hydrophobic DAC	15221301	4
Noweda	Base cream, hydrophobic DAC	152209	1
Noweda	Base cream, hydrophobic DAC	16074901	2
Noweda	Base cream, hydrophobic DAC	16165403	1
Noweda	Base cream, hydrophobic DAC	16293701	1
Noweda	Base cream, hydrophobic DAC	17073202	1
Noweda	Base cream, hydrophobic DAC	17112903	1
Noweda	Base cream, hydrophobic DAC	17073103	1
Noweda	Base cream, hydrophobic DAC	17255301	2
Noweda	Base cream, hydrophobic DAC	180515	1
Noweda	Base cream, hydrophobic DAC	18100801	1
Noweda	Base cream, hydrophobic DAC	182220	1
Noweda/ Ichtyol	Base cream, hydrophobic DAC	12151601	2
Caelo	Base cream, hydrophobic DAC	14061402	5
Caelo	Base cream, hydrophobic DAC	14120903	3
Fagron	Base cream, hydrophobic DAC	14215701	2
Noweda/Pharmachem	Base cream, hydrophobic DAC	142154	1
Noweda/Pharmachem	Base cream, hydrophobic DAC	160137	1
Noweda/Pharmachem	Base cream, hydrophobic DAC	180756	1
Noweda/Pharmachem0	Base cream, hydrophobic DAC	143094	1
Euro OTC	Base cream, hydrophobic DAC	300415	1
Phamachem GmbH	Base cream, hydrophobic DAC	120712	2
Pharamachem/Alliance He...	Base cream, hydrophobic DAC	142154	1
Pharamachem/Alliance He...	Base cream, hydrophobic DAC	151258	1
pharma pößneck	Base cream, hydrophobic DAC	190206	1
pharma/phönix	Base cream, hydrophobic DAC	143094	1
Pharma/Phönix	Base cream, hydrophobic DAC	153627	1
Pharma/Phönix	Base cream, hydrophobic DAC	160136	2
Pharma/Phönix	Base cream, hydrophobic DAC	162168	1
Pharmacem	Base cream, hydrophobic DAC	172194	1
PharmacheGehe	Base cream, hydrophobic DAC	162167	3
pharmachem	Base cream, hydrophobic DAC	110413	1
pharmachem	Base cream, hydrophobic DAC	231213	1
pharmachem	Base cream, hydrophobic DAC	140886	1
pharmachem	Base cream, hydrophobic DAC	151258	2
pharmachem	Base cream, hydrophobic DAC	160130	1
pharmachem	Base cream, hydrophobic DAC	160136	1
pharmachem	Base cream, hydrophobic DAC	160825	1
pharmachem	Base cream, hydrophobic DAC	162170	1
pharmachem	Base cream, hydrophobic DAC	162168	1
pharmachem	Base cream, hydrophobic DAC	180515	2
pharmachem	Base cream, hydrophobic DAC	190209	1
Pharmachem	Base cream, hydrophobic DAC	131211	1
Pharmachem	Base cream, hydrophobic DAC	261112	1
Pharmachem	Base cream, hydrophobic DAC	110413	7

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Supplier	Substance	Batch	Spectra
Pharmachem	Base cream, hydrophobic DAC	230713	1
Pharmachem	Base cream, hydrophobic DAC	21013	1
Pharmachem	Base cream, hydrophobic DAC	231213	2
Pharmachem	Base cream, hydrophobic DAC	140885	1
Pharmachem	Base cream, hydrophobic DAC	140886	2
Pharmachem	Base cream, hydrophobic DAC	141317	2
Pharmachem	Base cream, hydrophobic DAC	142154	6
Pharmachem	Base cream, hydrophobic DAC	142155	2
Pharmachem	Base cream, hydrophobic DAC	143094	7
Pharmachem	Base cream, hydrophobic DAC	143093	6
Pharmachem	Base cream, hydrophobic DAC	141489	1
Pharmachem	Base cream, hydrophobic DAC	151257	5
Pharmachem	Base cream, hydrophobic DAC	151259	5
Pharmachem	Base cream, hydrophobic DAC	152211	3
Pharmachem	Base cream, hydrophobic DAC	152210	2
Pharmachem	Base cream, hydrophobic DAC	152209	4
Pharmachem	Base cream, hydrophobic DAC	151258	3
Pharmachem	Base cream, hydrophobic DAC	153627	10
Pharmachem	Base cream, hydrophobic DAC	153625	8
Pharmachem	Base cream, hydrophobic DAC	153626	5
Pharmachem	Base cream, hydrophobic DAC	160136	9
Pharmachem	Base cream, hydrophobic DAC	160130	6
Pharmachem	Base cream, hydrophobic DAC	160137	2
Pharmachem	Base cream, hydrophobic DAC	160138	2
Pharmachem	Base cream, hydrophobic DAC	160826	4
Pharmachem	Base cream, hydrophobic DAC	160814	1
Pharmachem	Base cream, hydrophobic DAC	162167	4
Pharmachem	Base cream, hydrophobic DAC	7676	1
Pharmachem	Base cream, hydrophobic DAC	162169	6
Pharmachem	Base cream, hydrophobic DAC	162170	5
Pharmachem	Base cream, hydrophobic DAC	163237	4
Pharmachem	Base cream, hydrophobic DAC	162168	6
Pharmachem	Base cream, hydrophobic DAC	170008	3
Pharmachem	Base cream, hydrophobic DAC	163238	3
Pharmachem	Base cream, hydrophobic DAC	170010	2
Pharmachem	Base cream, hydrophobic DAC	170009	4
Pharmachem	Base cream, hydrophobic DAC	171128	7
Pharmachem	Base cream, hydrophobic DAC	171127	3
Pharmachem	Base cream, hydrophobic DAC	2x171816	1
Pharmachem	Base cream, hydrophobic DAC	171816	1
Pharmachem	Base cream, hydrophobic DAC	171817	5
Pharmachem	Base cream, hydrophobic DAC	171B16	1
Pharmachem	Base cream, hydrophobic DAC	171815	6
Pharmachem	Base cream, hydrophobic DAC	172195	7
Pharmachem	Base cream, hydrophobic DAC	171817 (2x)	2
Pharmachem	Base cream, hydrophobic DAC	172194	4
Pharmachem	Base cream, hydrophobic DAC	172196	5
Pharmachem	Base cream, hydrophobic DAC	1721195	1
Pharmachem	Base cream, hydrophobic DAC	1721945506	1
Pharmachem	Base cream, hydrophobic DAC	180515	6
Pharmachem	Base cream, hydrophobic DAC	180517	4
Pharmachem	Base cream, hydrophobic DAC	180755	6
Pharmachem	Base cream, hydrophobic DAC	17196	1
Pharmachem	Base cream, hydrophobic DAC	180756	4
Pharmachem	Base cream, hydrophobic DAC	180860	2
Pharmachem	Base cream, hydrophobic DAC	180757	1
Pharmachem	Base cream, hydrophobic DAC	2x180757	1
Pharmachem	Base cream, hydrophobic DAC	181198	3
Pharmachem	Base cream, hydrophobic DAC	181194	2
Pharmachem	Base cream, hydrophobic DAC	181196	1

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Supplier	Substance	Batch	Spectra
Pharmachem	Base cream, hydrophobic DAC	182220	1
Pharmachem	Base cream, hydrophobic DAC	181197	1
Pharmachem	Base cream, hydrophobic DAC	182170	1
Pharmachem	Base cream, hydrophobic DAC	190206	3
Pharmachem	Base cream, hydrophobic DAC	182221	1
Pharmachem	Base cream, hydrophobic DAC	190207	1
PharmaChem	Base cream, hydrophobic DAC	110413	1
PharmaChem	Base cream, hydrophobic DAC	141318	2
PHARMACHEM / 20	Base cream, hydrophobic DAC	140885	1
Pharmachem / AHD	Base cream, hydrophobic DAC	170009	1
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	162168	2
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	170010	2
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	171817	1
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	172194	1
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	180757	1
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	182221	2
Pharmachem / Alliance H...	Base cream, hydrophobic DAC	190206	1
Pharmachem / Anzag	Base cream, hydrophobic DAC	230713	2
Pharmachem / Gehe	Base cream, hydrophobic DAC	171817	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	172195	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	172196	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	180754	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	180860	3
Pharmachem / Gehe	Base cream, hydrophobic DAC	181196	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	182220	2
Pharmachem / Gehe	Base cream, hydrophobic DAC	182170	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	171816	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	180517	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	180757	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	180860	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	181196	2
Pharmachem / Noweda	Base cream, hydrophobic DAC	190209	2
Pharmachem / Noweda	Base cream, hydrophobic DAC	190637	1
Pharmachem / Noweda	Base cream, hydrophobic DAC	190639	1
Pharmachem / Sanacorp	Base cream, hydrophobic DAC	172196	1
Pharmachem / Phönix	Base cream, hydrophobic DAC	152209	1
Pharmachem / Phönix	Base cream, hydrophobic DAC	153627	1
Pharmachem / Phönix	Base cream, hydrophobic DAC	153626	1
Pharmachem Anzag	Base cream, hydrophobic DAC	141318	1
Pharmachem Anzag	Base cream, hydrophobic DAC	151257	1
Pharmachem Anzag	Base cream, hydrophobic DAC	162168	1
Pharmachem Anzag	Base cream, hydrophobic DAC	163238	1
Pharmachem Anzag	Base cream, hydrophobic DAC	171128	1
pharmachem gmbh	Base cream, hydrophobic DAC	181197	1
Pharmachem GmbH	Base cream, hydrophobic DAC	120712	1
Pharmachem GmbH	Base cream, hydrophobic DAC	261112	3
Pharmachem GmbH	Base cream, hydrophobic DAC	240113	2
Pharmachem GmbH	Base cream, hydrophobic DAC	140885	1
Pharmachem GmbH	Base cream, hydrophobic DAC	140886	1
Pharmachem GmbH	Base cream, hydrophobic DAC	151259	1
Pharmachem GmbH	Base cream, hydrophobic DAC	160826	1
Pharmachem GmbH	Base cream, hydrophobic DAC	162169	1
Pharmachem GmbH	Base cream, hydrophobic DAC	162168	1
Pharmachem GmbH	Base cream, hydrophobic DAC	171128	1
Pharmachem GmbH	Base cream, hydrophobic DAC	17009	1
Pharmachem GmbH	Base cream, hydrophobic DAC	172194	2
Pharmachem GmbH	Base cream, hydrophobic DAC	180515	3
Pharmachem GmbH	Base cream, hydrophobic DAC	181196	1
Pharmachem GmbH	Base cream, hydrophobic DAC	181198	5
Pharmachem GmbH	Base cream, hydrophobic DAC	180756	1

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Supplier	Substance	Batch	Spectra
Pharmachem GmbH	Base cream, hydrophobic DAC	181194	1
Pharmachem GmbH	Base cream, hydrophobic DAC	182221	1
Pharmachem GmbH	Base cream, hydrophobic DAC	181197	2
Pharmachem GmbH	Base cream, hydrophobic DAC	190206	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	160825	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	162168	2
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	170010	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	170009	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	172194	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	180755	1
Pharmachem GmbH & Co. K. . .	Base cream, hydrophobic DAC	17185	1
Pharmachem GmbH & Co.KG	Base cream, hydrophobic DAC	160130	1
Pharmachem GmbH & Co.KG	Base cream, hydrophobic DAC	162168	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	21013	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	140886	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	140318	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	143093	2
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	153627	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	160136	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	1600825	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	160814	1
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	230713	1
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	150405	1
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	152209	1
Pharmachem GmbH / Phönix	Base cream, hydrophobic DAC	181198	1
Pharmachem GmbH Pößneck	Base cream, hydrophobic DAC	160825	1
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	160130	1
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	162168	1
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	172194	1
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	171815	1
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	181198	2
Pharmachem GmbH u.Co.KG	Base cream, hydrophobic DAC	180756	1
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	21013	1
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	141489	1
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	160825	3
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	180754	1
Pharmachem GmbH&Co.KG/N. . .	Base cream, hydrophobic DAC	172194	1
Pharmachem GmbH&Co.KG/N. . .	Base cream, hydrophobic DAC	181198	1
Pharmachem GmbH/AHD	Base cream, hydrophobic DAC	171815	1
Pharmachem GmbH/Noweda	Base cream, hydrophobic DAC	150405	1
Pharmachem GmbH/Phönix	Base cream, hydrophobic DAC	171127	1
Pharmachem GmbH/Phönix	Base cream, hydrophobic DAC	190640	1
Pharmachem Noweda	Base cream, hydrophobic DAC	162168	1
Pharmachem Pößneck/ Now. . .	Base cream, hydrophobic DAC	141318	1
pharmachem pößneck	Base cream, hydrophobic DAC	160130	1
pharmachem pößneck	Base cream, hydrophobic DAC	171127	3
pharmachem Pößneck	Base cream, hydrophobic DAC	143119	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	110413	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	160825	2
Pharmachem Pößneck	Base cream, hydrophobic DAC	162169	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	163238	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	170010	2
Pharmachem Pößneck	Base cream, hydrophobic DAC	171816	2
Pharmachem Pößneck	Base cream, hydrophobic DAC	171817	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	172195	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	172196	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	180517	2
Pharmachem Pößneck	Base cream, hydrophobic DAC	180816	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	180757	1
Pharmachem Pößneck	Base cream, hydrophobic DAC	181194	1

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Supplier	Substance	Batch	Spectra
Pharmachem Pöšneck	Base cream, hydrophobic DAC	181196	2
Pharmachem Pöšneck	Base cream, hydrophobic DAC	182220	1
Pharmachem Pöšneck	Base cream, hydrophobic DAC	190209	1
Pharmachem Pöšneck 004	Base cream, hydrophobic DAC	261112	1
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	172194	1
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	180756	2
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	170008	1
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	171815	1
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	171127	2
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	180754	1
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	180755	2
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	181194	2
Pharmachem Pöšneck GmbH...	Base cream, hydrophobic DAC	181196	1
Pharmachem Pöšneck/AHD	Base cream, hydrophobic DAC	180757	2
Pharmachem Pöšneck/AHD	Base cream, hydrophobic DAC	181194	1
Pharmachem Pöšneck/GEHE	Base cream, hydrophobic DAC	180515	1
Pharmachem Pöšneck/Phoe...	Base cream, hydrophobic DAC	153627	1
Pharmachem Pöšneck/Phoe...	Base cream, hydrophobic DAC	170010	1
Pharmachem Pöšneck/Phönix	Base cream, hydrophobic DAC	160825	1
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	143093	2
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	151257	1
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	152210	1
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	153625	1
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	153626	1
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	160137	2
Pharmachem Pöšneck/Sana...	Base cream, hydrophobic DAC	160826	2
Pharmachem/ /Sanacorp	Base cream, hydrophobic DAC	140885	1
Pharmachem/ Alliance He...	Base cream, hydrophobic DAC	152209	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	153627	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	163238	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	171817	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	180757	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	181197	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	152210	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	150404	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	160814	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	160826	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	162169	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	141489	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	142154	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	143094	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	151259	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	152209	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	160136	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	162167	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	162169	1
Pharmachem/ Phönix	Base cream, hydrophobic DAC	160130	1
Pharmachem/ Phönix	Base cream, hydrophobic DAC	170009	2
Pharmachem/ Phönix	Base cream, hydrophobic DAC	170010	2
Pharmachem/ Phönix	Base cream, hydrophobic DAC	171127	1
Pharmachem/ Phönix	Base cream, hydrophobic DAC	171815	1
Pharmachem/ Phönix	Base cream, hydrophobic DAC	172194	1
Pharmachem/ Sanacorp	Base cream, hydrophobic DAC	140886	1
Pharmachem/ Sanacorp	Base cream, hydrophobic DAC	182221	1
Pharmachem/30	Base cream, hydrophobic DAC	21013	1
Pharmachem/30	Base cream, hydrophobic DAC	141317	2
Pharmachem/AHD	Base cream, hydrophobic DAC	26112	1
Pharmachem/AHD	Base cream, hydrophobic DAC	261112	1
Pharmachem/AHD	Base cream, hydrophobic DAC	110413	2
Pharmachem/AHD	Base cream, hydrophobic DAC	230713	1

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Supplier	Substance	Batch	Spectra
Pharmachem/AHD	Base cream, hydrophobic DAC	231213	2
Pharmachem/AHD	Base cream, hydrophobic DAC	150405	1
Pharmachem/AHD	Base cream, hydrophobic DAC	171127	4
Pharmachem/AHD	Base cream, hydrophobic DAC	172194	1
Pharmachem/AHD	Base cream, hydrophobic DAC	172195	1
Pharmachem/AHD	Base cream, hydrophobic DAC	180757	4
Pharmachem/AHD	Base cream, hydrophobic DAC	180754	1
Pharmachem/AHD	Base cream, hydrophobic DAC	181198	2
Pharmachem/AHD	Base cream, hydrophobic DAC	181196	1
Pharmachem/AHD	Base cream, hydrophobic DAC	182220	2
Pharmachem/AHD	Base cream, hydrophobic DAC	181197	1
Pharmachem/AHD	Base cream, hydrophobic DAC	190638	1
Pharmachem/AHD	Base cream, hydrophobic DAC	190207	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	160138	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	162168	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	162170	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	170008	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	172194	3
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	172195	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	180756	1
Pharmachem/Anzag	Base cream, hydrophobic DAC	152209	3
Pharmachem/Anzag	Base cream, hydrophobic DAC	160136	1
Pharmachem/Anzag	Base cream, hydrophobic DAC	180756	1
Pharmachem/Anzag	Base cream, hydrophobic DAC	181198	1
Pharmachem/Anzag	Base cream, hydrophobic DAC	171127	2
Pharmachem/Anzag	Base cream, hydrophobic DAC	190206	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	120712	2
Pharmachem/Gehe	Base cream, hydrophobic DAC	240113	2
Pharmachem/Gehe	Base cream, hydrophobic DAC	21013	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	231213	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	141318	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	141489	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	151259	5
Pharmachem/Gehe	Base cream, hydrophobic DAC	152209	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	152211	3
Pharmachem/Gehe	Base cream, hydrophobic DAC	153625	2
Pharmachem/Gehe	Base cream, hydrophobic DAC	160825	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	170008	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	172196	3
Pharmachem/Gehe	Base cream, hydrophobic DAC	180517	2
Pharmachem/Gehe	Base cream, hydrophobic DAC	180756	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	180860	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	190209	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	190639	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	191487	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	191489	1
Pharmachem/GEHE	Base cream, hydrophobic DAC	141489	1
Pharmachem/GEHE	Base cream, hydrophobic DAC	172194	4
Pharmachem/Gehe 27.09.18	Base cream, hydrophobic DAC	181194	3
Pharmachem/Gehe 31.12.18	Base cream, hydrophobic DAC	181197	3
Pharmachem/Jenne	Base cream, hydrophobic DAC	180755	1
Pharmachem/Kehr	Base cream, hydrophobic DAC	153627	1
Pharmachem/Kehr	Base cream, hydrophobic DAC	162168	1
Pharmachem/Kehr	Base cream, hydrophobic DAC	182220	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	230713	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	231213	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	142154	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	143093	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	143094	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	160136	1

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Supplier	Substance	Batch	Spectra
Pharmachem/Noweda	Base cream, hydrophobic DAC	160825	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	162168	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	163237	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	170010	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	171127	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	171816	3
Pharmachem/Noweda	Base cream, hydrophobic DAC	172196	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	172194	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	171815	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	180755	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	181194	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	181196	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	181197	1
Pharmachem/NOWEDA	Base cream, hydrophobic DAC	180755	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	240113	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	162168	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	172196	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180517	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180754	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180860	2
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180756	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	181198	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	181196	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	231213	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	160136	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	160814	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	163238	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	170008	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	171815	2
Pharmachem/Phönix	Base cream, hydrophobic DAC	171817	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	171185	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	172194	3
Pharmachem/Phönix	Base cream, hydrophobic DAC	172196	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	180756	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	180757	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	181194	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	181197	2
Pharmachem/Phönix	Base cream, hydrophobic DAC	190209	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	143094	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	151259	2
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	15221	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	160814	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	170010	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	171127	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	172195	5
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	172196	3
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180517	2
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180757	7
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180755	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	190206	1
pharmachem/spangro	Base cream, hydrophobic DAC	142154	1
Pharmachem;	Base cream, hydrophobic DAC	160136	1
PharmachemGmbH/Noweda	Base cream, hydrophobic DAC	18002831	1
pharmachen	Base cream, hydrophobic DAC	240113	1
Pharmachen	Base cream, hydrophobic DAC	21013	1
Pharmachen	Base cream, hydrophobic DAC	240113	1
Pharmachen	Base cream, hydrophobic DAC	231213	1
Pharmachen	Base cream, hydrophobic DAC	140885	1
Pharmachen	Base cream, hydrophobic DAC	141318	1
Pharmachen	Base cream, hydrophobic DAC	142154	3

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Supplier	Substance	Batch	Spectra
Pharmachen	Base cream, hydrophobic DAC	143094	1
Pharmachen	Base cream, hydrophobic DAC	151258	2
Pharmachen	Base cream, hydrophobic DAC	152209	1
Pharmachen	Base cream, hydrophobic DAC	160130	1
Pharmachen	Base cream, hydrophobic DAC	162168	1
Pharmachen	Base cream, hydrophobic DAC	162170	1
Pharmachen	Base cream, hydrophobic DAC	171127	1
Pharmachen	Base cream, hydrophobic DAC	180755	1
Pharmachen	Base cream, hydrophobic DAC	182220	2
Pharmachen	Base cream, hydrophobic DAC	181197	1
Pharmachen Gmbh	Base cream, hydrophobic DAC	152209	1
Pharmachen GmbH	Base cream, hydrophobic DAC	160136	1
Pharmachen GmbH	Base cream, hydrophobic DAC	171817	1
Pharmachen GmbH	Base cream, hydrophobic DAC	171815	1
Pharmachen GmbH	Base cream, hydrophobic DAC	172195	1
Pharmachen GmbH/ Sanacorp	Base cream, hydrophobic DAC	180755	1
Pharmachen GmbH/Allianc...	Base cream, hydrophobic DAC	162169	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	21013	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	141318	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	143094	3
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	151258	2
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	153625	2
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	160130	2
Pharmachen Pößneck	Base cream, hydrophobic DAC	261112	1
Pharmachen Pößneck	Base cream, hydrophobic DAC	150405	2
Pharmachen Pößneck	Base cream, hydrophobic DAC	151258	1
Pharmachen Pößneck	Base cream, hydrophobic DAC	162167	1
Pharmachen/gehe	Base cream, hydrophobic DAC	162170	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	160826	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	170010	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	171815	4
Pharmachen/Gehe	Base cream, hydrophobic DAC	172194	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	180515	2
Pharmachen/Gehe	Base cream, hydrophobic DAC	180755	3
Pharmachen/Gehe	Base cream, hydrophobic DAC	190638	1
Pharmachen/Noweda	Base cream, hydrophobic DAC	171126	3
PharmaChin/ Anzag	Base cream, hydrophobic DAC	230713	1
Pharmamachem/ AHD	Base cream, hydrophobic DAC	180515	1
Pharmamachem/ AHD	Base cream, hydrophobic DAC	180860	1
Pharmamachem/ AHD	Base cream, hydrophobic DAC	181194	1
Pharmamachem/ AHD	Base cream, hydrophobic DAC	181197	1
Pharmamachem/ AHD	Base cream, hydrophobic DAC	190639	1
Pharmchem/Sanacorp	Base cream, hydrophobic DAC	162169	1
PhCHEM/Phönix	Base cream, hydrophobic DAC	162170	2
Phoenix	Base cream, hydrophobic DAC	13175902	1
Phoenix	Base cream, hydrophobic DAC	14028101	1
Phoenix	Base cream, hydrophobic DAC	14061501	2
Phoenix	Base cream, hydrophobic DAC	14145401	2
Phoenix	Base cream, hydrophobic DAC	15001001	1
Phoenix	Base cream, hydrophobic DAC	16075101	2
Phoenix	Base cream, hydrophobic DAC	16174201	1
Phoenix	Base cream, hydrophobic DAC	18051001	1
PHOENIX 11.09.2014	Base cream, hydrophobic DAC	14061501	1
Caelo	Base cream, hydrophobic DAC	12308103	1
Caelo	Base cream, hydrophobic DAC	14061501	19
Caelo	Base cream, hydrophobic DAC	170010	1
Phoenix/Cealo	Base cream, hydrophobic DAC	172194	1
Phoenix/Pharmachem	Base cream, hydrophobic DAC	110413	1
phönix	Base cream, hydrophobic DAC	2/AKD12	1
phönix	Base cream, hydrophobic DAC	160136	1

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Supplier	Substance	Batch	Spectra
phönix	Base cream, hydrophobic DAC	160825	1
Phönix	Base cream, hydrophobic DAC	13085701	1
Phönix	Base cream, hydrophobic DAC	13386402	2
Phönix	Base cream, hydrophobic DAC	14000701	1
Phönix	Base cream, hydrophobic DAC	14061501	1
Phönix	Base cream, hydrophobic DAC	14145301	1
Phönix	Base cream, hydrophobic DAC	16293901	1
Phönix	Base cream, hydrophobic DAC	18005488	1
PHÖNIX	Base cream, hydrophobic DAC	16165701	1
Bombastus	Base cream, hydrophobic DAC	170009	1
Phönix 01.06.15	Base cream, hydrophobic DAC	15048701	2
Phönix Gotha	Base cream, hydrophobic DAC	276087	2
Phönix Gotha	Base cream, hydrophobic DAC	277696	1
Caelo	Base cream, hydrophobic DAC	17150401/2041217	1
Pöckneck Pharma / Gehe	Base cream, hydrophobic DAC	162169	1
Pöckneck/Gehe	Base cream, hydrophobic DAC	153626	1
Pöckneck/Gehe	Base cream, hydrophobic DAC	170008	1
Pöckneck/Gehe	Base cream, hydrophobic DAC	181197	2
Pöckneck Pharma / Gehe	Base cream, hydrophobic DAC	151258	1
Pöckneck Pharma / Gehe	Base cream, hydrophobic DAC	152210	2
Pröckneck	Base cream, hydrophobic DAC	142154	2
Raben-Apotheke Mildenau	Base cream, hydrophobic DAC	14061501	4
Sanacorp	Base cream, hydrophobic DAC	12151602	1
Sanacorp	Base cream, hydrophobic DAC	12308102	2
Sanacorp	Base cream, hydrophobic DAC	12229304	1
Sanacorp	Base cream, hydrophobic DAC	13019303	1
Sanacorp	Base cream, hydrophobic DAC	13085701	1
Sanacorp	Base cream, hydrophobic DAC	13175902	2
Sanacorp	Base cream, hydrophobic DAC	13175901	3
Sanacorp	Base cream, hydrophobic DAC	13275301	2
Sanacorp	Base cream, hydrophobic DAC	13275302	2
Sanacorp	Base cream, hydrophobic DAC	140885	1
Sanacorp	Base cream, hydrophobic DAC	4/AKD3	1
Sanacorp	Base cream, hydrophobic DAC	15421201	3
Sanacorp	Base cream, hydrophobic DAC	16293701	1
Sanacorp	Base cream, hydrophobic DAC	16330301	1
Sanacorp	Base cream, hydrophobic DAC	17073201	1
Sanacorp	Base cream, hydrophobic DAC	17255201	1
Sanacorp	Base cream, hydrophobic DAC	18051101	1
Caelo	Base cream, hydrophobic DAC	1309302	1
Caelo	Base cream, hydrophobic DAC	15111402	15
Caelo	Base cream, hydrophobic DAC	5421201	1
Sanacorp W.E: 26.01.18 ...	Base cream, hydrophobic DAC	17150401	1
Sanacorp WE 25.02.17 -1...	Base cream, hydrophobic DAC	16293701	1
Caelo	Base cream, hydrophobic DAC	286515	1
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	131211	2
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	90512	3
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	261112	2
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	231213	2
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	142155	1
Caelo	Base cream, hydrophobic DAC	11341402	2
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	171816	1
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	171817	1
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	172195	2
siehe Protokoll	Base cream, hydrophobic DAC	305080	1
Taoasis	Base cream, hydrophobic DAC	120214-2023	1
Taoasis	Base cream, hydrophobic DAC	120601-2137	1
Taoasis	Base cream, hydrophobic DAC	120719-2199	1
Taoasis	Base cream, hydrophobic DAC	121205-2276	1
Taoasis	Base cream, hydrophobic DAC	121205-2299	1

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Supplier	Substance	Batch	Spectra
Taoasis	Base cream, hydrophobic DAC	130312-3053	1
Taoasis	Base cream, hydrophobic DAC	130124-3021	1
Taoasis	Base cream, hydrophobic DAC	130719-3198	1
WE:06.04.2016 Phönix ...	Base cream, hydrophobic DAC	15421201	1
Bombastus	Hydrophilic cream, non-ionic...	300760	2
Bombastus	Hydrophilic cream, non-ionic...	310516	3
AHD	Hydrophilic cream, non-ionic...	14A300418	1
Bombastus	Hydrophilic cream, non-ionic...	301622	5
Bombastus	Hydrophilic cream, non-ionic...	309905	1
AHD 08.09.14 EK 5,31	Hydrophilic cream, non-ionic...	287711	1
Bombastus	Hydrophilic cream, non-ionic...	297305	7
Bombastus	Hydrophilic cream, non-ionic...	305143	4
AHD/apomix/23.07.14	Hydrophilic cream, non-ionic...	36A140514	1
Bombastus	Hydrophilic cream, non-ionic...	118005877	1
All..Healthc./Apomix	Hydrophilic cream, non-ionic...	12A040313	1
Bombastus	Hydrophilic cream, non-ionic...	294310	2
Allianc. Health. / Apomix	Hydrophilic cream, non-ionic...	48A181115	1
Allianc. Health. / Apomix	Hydrophilic cream, non-ionic...	36A261016	1
Allianc. Health. /Apomix	Hydrophilic cream, non-ionic...	25A300516	1
Allianc. Health. /Apomix	Hydrophilic cream, non-ionic...	7A310316	1
Alliance	Hydrophilic cream, non-ionic...	90714	1
Alliance Healthcare	Hydrophilic cream, non-ionic...	1A030113	2
Alliance Healthcare	Hydrophilic cream, non-ionic...	301627	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	33A240713	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	55A181213	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	38A050614	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	50A101114	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	42A070714	1
AMH Niemann / apomix	Hydrophilic cream, non-ionic...	43a140714	1
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	27A150513	1
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	35A070813	1
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	34A210916	1
AMH Niemann GmbH & Co. ...	Hydrophilic cream, non-ionic...	35A251016	4
AMH Niemann/G	Hydrophilic cream, non-ionic...	15A140512	1
AMH Niemann/G	Hydrophilic cream, non-ionic...	20A090413	1
AMH Niemann/K	Hydrophilic cream, non-ionic...	10A190312	1
Anzag	Hydrophilic cream, non-ionic...	114761	1
Anzag	Hydrophilic cream, non-ionic...	286330	2
Anzag	Hydrophilic cream, non-ionic...	294311	1
Bombastus	Hydrophilic cream, non-ionic...	274212	2
Bombastus	Hydrophilic cream, non-ionic...	274103	2
Bombastus	Hydrophilic cream, non-ionic...	288793	1
Euro OTC	Hydrophilic cream, non-ionic...	18175301	1
ANZAG/apomix/22.10.2013	Hydrophilic cream, non-ionic...	30A030613	2
Anzag/apomix/26.03.14	Hydrophilic cream, non-ionic...	40A281013	1
Bombastus	Hydrophilic cream, non-ionic...	18001332	6
Caelo	Hydrophilic cream, non-ionic...	47A071014	1
apomix	Hydrophilic cream, non-ionic...	30A170912	1
apomix	Hydrophilic cream, non-ionic...	2A140113	1
apomix	Hydrophilic cream, non-ionic...	9A060213	1
apomix	Hydrophilic cream, non-ionic...	3A240413	1
apomix	Hydrophilic cream, non-ionic...	27A150513	1
apomix	Hydrophilic cream, non-ionic...	52a081214	1
apomix	Hydrophilic cream, non-ionic...	2A090215	1
apomix	Hydrophilic cream, non-ionic...	17A100315	1
apomix	Hydrophilic cream, non-ionic...	19A300315	1
apomix	Hydrophilic cream, non-ionic...	20A280415	1
apomix	Hydrophilic cream, non-ionic...	32A220915	1
apomix	Hydrophilic cream, non-ionic...	28A060815	1
apomix	Hydrophilic cream, non-ionic...	3A030216	1

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Supplier	Substance	Batch	Spectra
apomix	Hydrophilic cream, non-ionic...	30A020816	1
apomix	Hydrophilic cream, non-ionic...	11A190417	1
apomix	Hydrophilic cream, non-ionic...	18A100717	1
apomix	Hydrophilic cream, non-ionic...	5B190218	1
apomix	Hydrophilic cream, non-ionic...	17A030518	1
apomix	Hydrophilic cream, non-ionic...	3A240118	1
apomix	Hydrophilic cream, non-ionic...	24A270618	1
apomix	Hydrophilic cream, non-ionic...	4A030119	1
Apomix	Hydrophilic cream, non-ionic...	1A030112	1
Apomix	Hydrophilic cream, non-ionic...	33A051211	1
Apomix	Hydrophilic cream, non-ionic...	16A300512	2
Apomix	Hydrophilic cream, non-ionic...	18A070612	1
Apomix	Hydrophilic cream, non-ionic...	42A191212	1
Apomix	Hydrophilic cream, non-ionic...	38A051112	1
Apomix	Hydrophilic cream, non-ionic...	31A170912	1
Apomix	Hydrophilic cream, non-ionic...	2A140113	1
Apomix	Hydrophilic cream, non-ionic...	1A030113	1
Apomix	Hydrophilic cream, non-ionic...	39A131112	1
Apomix	Hydrophilic cream, non-ionic...	12A040313	2
Apomix	Hydrophilic cream, non-ionic...	11A040313	1
Apomix	Hydrophilic cream, non-ionic...	36B270513	1
Apomix	Hydrophilic cream, non-ionic...	32A090713	2
Apomix	Hydrophilic cream, non-ionic...	30A030613	1
Apomix	Hydrophilic cream, non-ionic...	54A021213	1
Apomix	Hydrophilic cream, non-ionic...	40A281013	1
Apomix	Hydrophilic cream, non-ionic...	1A080113	1
Apomix	Hydrophilic cream, non-ionic...	7A020414	1
Apomix	Hydrophilic cream, non-ionic...	53A191113	1
Apomix	Hydrophilic cream, non-ionic...	36A140514a	1
Apomix	Hydrophilic cream, non-ionic...	38A050614	1
Apomix	Hydrophilic cream, non-ionic...	40A160614	1
Apomix	Hydrophilic cream, non-ionic...	48A081014	1
Apomix	Hydrophilic cream, non-ionic...	51A261114	1
Apomix	Hydrophilic cream, non-ionic...	50A101114	1
Apomix	Hydrophilic cream, non-ionic...	1A210115	1
Apomix	Hydrophilic cream, non-ionic...	49A241115	1
Apomix	Hydrophilic cream, non-ionic...	1A200116	2
Apomix	Hydrophilic cream, non-ionic...	5A080316	1
Apomix	Hydrophilic cream, non-ionic...	23A280416	2
Apomix	Hydrophilic cream, non-ionic...	32A010916	1
Apomix	Hydrophilic cream, non-ionic...	17009601	2
Apomix	Hydrophilic cream, non-ionic...	8A120416	1
Apomix	Hydrophilic cream, non-ionic...	7A140217	1
Apomix	Hydrophilic cream, non-ionic...	37A071216	1
Apomix	Hydrophilic cream, non-ionic...	9A210317	2
Apomix	Hydrophilic cream, non-ionic...	37A241017	1
Apomix	Hydrophilic cream, non-ionic...	18A100717	1
Apomix	Hydrophilic cream, non-ionic...	2A040118	1
Apomix	Hydrophilic cream, non-ionic...	17A030518	1
Apomix	Hydrophilic cream, non-ionic...	25A270618	4
Apomix	Hydrophilic cream, non-ionic...	35B101218	1
Apomix / AHD	Hydrophilic cream, non-ionic...	53A021213	1
Apomix / Alliance Healt...	Hydrophilic cream, non-ionic...	9A210317	1
Apomix / Alliance Healt...	Hydrophilic cream, non-ionic...	2A040118	2
apomix / Anzag	Hydrophilic cream, non-ionic...	32A250414	1
apomix / Anzag	Hydrophilic cream, non-ionic...	36A140514	1
apomix / Anzag	Hydrophilic cream, non-ionic...	51A261114	1
apomix / Anzag	Hydrophilic cream, non-ionic...	3A030216	1
apomix / Anzag	Hydrophilic cream, non-ionic...	26A210616	1
apomix / Anzag	Hydrophilic cream, non-ionic...	29A020816	2

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Supplier	Substance	Batch	Spectra
apomix / Anzag	Hydrophilic cream, non-ionic...	35A251016	1
Apomix / Gehe	Hydrophilic cream, non-ionic...	5B310817	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	33A240713	1
Apomix / Phoenix	Hydrophilic cream, non-ionic...	26A270618	1
apomix / Phoenix / 02.0...	Hydrophilic cream, non-ionic...	50a161215	1
apomix / Phoenix 19.02...	Hydrophilic cream, non-ionic...	40a071217	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	7-A140217	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	1a200116	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	36A261016	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	41a141015	2
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	28A060815	1
Apomix / Phönix	Hydrophilic cream, non-ionic...	11A040313	1
Apomix / Phönix	Hydrophilic cream, non-ionic...	32A090713	1
Apomix / Phönix	Hydrophilic cream, non-ionic...	35A070813	1
Apomix / Phönix	Hydrophilic cream, non-ionic...	4A250214	2
Apomix / Phönix	Hydrophilic cream, non-ionic...	7A020414	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	2A090215	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	19A300315	2
Apomix /Noweda	Hydrophilic cream, non-ionic...	7a310316	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	8A120416	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	28A220616	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	36A261016	1
apomix AMH Niemann GmbH...	Hydrophilic cream, non-ionic...	7A310316	1
apomix AMH Niemann GmbH...	Hydrophilic cream, non-ionic...	30A020816	2
apomix AMH Niemann GmbH...	Hydrophilic cream, non-ionic...	34A210916	1
Apomix Anzag	Hydrophilic cream, non-ionic...	33A240713	1
apomix, phoenix 28.05.2...	Hydrophilic cream, non-ionic...	6a130318	1
apomix,Phönix, 07.12.2017	Hydrophilic cream, non-ionic...	35a270917	1
Apomix/ AHD	Hydrophilic cream, non-ionic...	12A2500417	1
apomix/ AHD 18.06.2018	Hydrophilic cream, non-ionic...	3A240118	1
apomix/ AHD 22.10.2018	Hydrophilic cream, non-ionic...	8A230418	1
apomix/ Phoenix	Hydrophilic cream, non-ionic...	25A270618	1
apomix/ Phoenix / 09.11...	Hydrophilic cream, non-ionic...	30a020816	2
apomix/ Phoenix / 26.10...	Hydrophilic cream, non-ionic...	32a010916	1
apomix/ Phoenix / 30.08...	Hydrophilic cream, non-ionic...	8a120416	1
apomix/ Phoenix 07.02.2...	Hydrophilic cream, non-ionic...	37a241017	1
apomix/ Phoenix Leipzig	Hydrophilic cream, non-ionic...	27A220715	1
apomix/ Phoenix Leipzig...	Hydrophilic cream, non-ionic...	7A140217	1
apomix/ Phoenix Leipzig...	Hydrophilic cream, non-ionic...	2a160117	1
Apomix/ Sanacorp	Hydrophilic cream, non-ionic...	9A210317	1
Apomix/AHD	Hydrophilic cream, non-ionic...	18A100717	1
Apomix/AHD	Hydrophilic cream, non-ionic...	8A230418	1
APOMIX/AHD	Hydrophilic cream, non-ionic...	35A130514	1
Apomix/AHD/24.06.14	Hydrophilic cream, non-ionic...	32A250414	1
Apomix/Alliance Healthc...	Hydrophilic cream, non-ionic...	12A040313	1
Apomix/Alliance Healthc...	Hydrophilic cream, non-ionic...	8/14	1
apomix/Anzag	Hydrophilic cream, non-ionic...	40A281013	2
apomix/Anzag	Hydrophilic cream, non-ionic...	4A240215	1
apomix/Anzag	Hydrophilic cream, non-ionic...	1a200116	1
apomix/Anzag	Hydrophilic cream, non-ionic...	9a210317	1
Apomix/Anzag	Hydrophilic cream, non-ionic...	3A090215	1
Apomix/Anzag	Hydrophilic cream, non-ionic...	26A080715	1
Apomix/Anzag	Hydrophilic cream, non-ionic...	47A281015	1
apomix/Gehe	Hydrophilic cream, non-ionic...	51A261114	1
apomix/Gehe	Hydrophilic cream, non-ionic...	24A270618	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	18A220518	1
apomix/GEHE/02.07.2013	Hydrophilic cream, non-ionic...	40A261112	1
apomix/GEHE/22.05.2013	Hydrophilic cream, non-ionic...	2A140113	1
apomix/Holdermann	Hydrophilic cream, non-ionic...	32A250414	2
apomix/Holdermann	Hydrophilic cream, non-ionic...	43A140714	1

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Supplier	Substance	Batch	Spectra
Apomix/Kehr	Hydrophilic cream, non-ionic...	2A090215	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	48A181115	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	8A120416	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	32A210916	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	36A261016	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	7A140217	1
apomix/Noweda	Hydrophilic cream, non-ionic...	1A210115	1
apomix/Noweda	Hydrophilic cream, non-ionic...	7A310316	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	54A021213	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	7A020414	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	39A160614	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	2A090215	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	4A240215	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	50A161215	1
Apomix/NOWEDA	Hydrophilic cream, non-ionic...	19A300315	1
Apomix/NOWEDA	Hydrophilic cream, non-ionic...	17002160	1
Apomix/NOWEDA	Hydrophilic cream, non-ionic...	29B010818	1
APOMIX/Noweda	Hydrophilic cream, non-ionic...	4a230216	1
apomix/Phoenix Leipzig ...	Hydrophilic cream, non-ionic...	12a250417	1
Apomix/Phoenix Leipzig ...	Hydrophilic cream, non-ionic...	12A250417	1
apomix/Phönix	Hydrophilic cream, non-ionic...	3A090215	1
apomix/Phönix	Hydrophilic cream, non-ionic...	19A300315	1
apomix/Phönix	Hydrophilic cream, non-ionic...	23A100615	1
apomix/Phönix	Hydrophilic cream, non-ionic...	47A281015	1
apomix/Phönix	Hydrophilic cream, non-ionic...	5A080316	3
apomix/Phönix	Hydrophilic cream, non-ionic...	26A210616	1
apomix/Phönix	Hydrophilic cream, non-ionic...	7A140217	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	53A191113	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	36A140514	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	40A160614	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	48A081014	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	52A081214	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	19A300315	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	26A080715	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	29A110815	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	32A220915	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	47A281015	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	47A2801015	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	37A071216	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	14A220517	1
Beiersdorf/Kehr	Hydrophilic cream, non-ionic...	294407	1
Bombast./Phönix	Hydrophilic cream, non-ionic...	18005880	1
Bombastu/Alliance Healt...	Hydrophilic cream, non-ionic...	309908	1
Bombastu/Noweda	Hydrophilic cream, non-ionic...	18001334	1
Bombastu/Noweda	Hydrophilic cream, non-ionic...	18004212	2
Bombastus	Hydrophilic cream, non-ionic...	265335	1
Bombastus	Hydrophilic cream, non-ionic...	268354	1
Bombastus	Hydrophilic cream, non-ionic...	267185	2
Bombastus	Hydrophilic cream, non-ionic...	271521	2
Bombastus	Hydrophilic cream, non-ionic...	96914	1
Bombastus	Hydrophilic cream, non-ionic...	273130	4
Bombastus	Hydrophilic cream, non-ionic...	269712	1
Bombastus	Hydrophilic cream, non-ionic...	273132	1
Bombastus	Hydrophilic cream, non-ionic...	274223	5
Bombastus	Hydrophilic cream, non-ionic...	274217	1
Bombastus	Hydrophilic cream, non-ionic...	268347	1
Bombastus	Hydrophilic cream, non-ionic...	274211	2
Bombastus	Hydrophilic cream, non-ionic...	273126	1
Bombastus	Hydrophilic cream, non-ionic...	276252	5
Bombastus	Hydrophilic cream, non-ionic...	274216	3

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	274102	1
Bombastus	Hydrophilic cream, non-ionic...	271520	1
Bombastus	Hydrophilic cream, non-ionic...	277871	1
Bombastus	Hydrophilic cream, non-ionic...	277637	7
Bombastus	Hydrophilic cream, non-ionic...	278027	3
Bombastus	Hydrophilic cream, non-ionic...	276725	2
Bombastus	Hydrophilic cream, non-ionic...	279655	2
Bombastus	Hydrophilic cream, non-ionic...	278028	3
Bombastus	Hydrophilic cream, non-ionic...	282212	3
Bombastus	Hydrophilic cream, non-ionic...	282216	8
Bombastus	Hydrophilic cream, non-ionic...	282213	3
Bombastus	Hydrophilic cream, non-ionic...	281737	3
Bombastus	Hydrophilic cream, non-ionic...	283637	2
Bombastus	Hydrophilic cream, non-ionic...	282215	2
Bombastus	Hydrophilic cream, non-ionic...	284899	6
Bombastus	Hydrophilic cream, non-ionic...	279660	1
Bombastus	Hydrophilic cream, non-ionic...	286326	7
Bombastus	Hydrophilic cream, non-ionic...	287711	9
Bombastus	Hydrophilic cream, non-ionic...	284897	1
Bombastus	Hydrophilic cream, non-ionic...	286329	1
Bombastus	Hydrophilic cream, non-ionic...	274214	1
Bombastus	Hydrophilic cream, non-ionic...	286325	1
Bombastus	Hydrophilic cream, non-ionic...	287763	3
Bombastus	Hydrophilic cream, non-ionic...	288796	1
Bombastus	Hydrophilic cream, non-ionic...	287761	4
Bombastus	Hydrophilic cream, non-ionic...	291388	9
Bombastus	Hydrophilic cream, non-ionic...	292452	2
Bombastus	Hydrophilic cream, non-ionic...	292806	3
Bombastus	Hydrophilic cream, non-ionic...	292809	2
Bombastus	Hydrophilic cream, non-ionic...	292739	2
Bombastus	Hydrophilic cream, non-ionic...	292736	1
Bombastus	Hydrophilic cream, non-ionic...	292814	8
Bombastus	Hydrophilic cream, non-ionic...	292738	1
Bombastus	Hydrophilic cream, non-ionic...	292970	1
Bombastus	Hydrophilic cream, non-ionic...	292811	5
Bombastus	Hydrophilic cream, non-ionic...	292812	3
Bombastus	Hydrophilic cream, non-ionic...	294407	5
Bombastus	Hydrophilic cream, non-ionic...	294408	3
Bombastus	Hydrophilic cream, non-ionic...	294340	1
Bombastus	Hydrophilic cream, non-ionic...	295648	3
Bombastus	Hydrophilic cream, non-ionic...	294313	1
Bombastus	Hydrophilic cream, non-ionic...	295657	10
Bombastus	Hydrophilic cream, non-ionic...	294305	1
Bombastus	Hydrophilic cream, non-ionic...	295650	2
Bombastus	Hydrophilic cream, non-ionic...	295644	1
Bombastus	Hydrophilic cream, non-ionic...	297298	1
Bombastus	Hydrophilic cream, non-ionic...	297299	1
Bombastus	Hydrophilic cream, non-ionic...	297303	3
Bombastus	Hydrophilic cream, non-ionic...	297302	1
Bombastus	Hydrophilic cream, non-ionic...	295651	2
Bombastus	Hydrophilic cream, non-ionic...	297309	11
Bombastus	Hydrophilic cream, non-ionic...	297372	7
Bombastus	Hydrophilic cream, non-ionic...	297374	3
Bombastus	Hydrophilic cream, non-ionic...	298978	1
Bombastus	Hydrophilic cream, non-ionic...	300766	11
Bombastus	Hydrophilic cream, non-ionic...	300763	5
Bombastus	Hydrophilic cream, non-ionic...	297300	1
Bombastus	Hydrophilic cream, non-ionic...	301627	12
Bombastus	Hydrophilic cream, non-ionic...	29739	1
Bombastus	Hydrophilic cream, non-ionic...	295591	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	302687	5
Bombastus	Hydrophilic cream, non-ionic...	300758	1
Bombastus	Hydrophilic cream, non-ionic...	302691	7
Bombastus	Hydrophilic cream, non-ionic...	301624	4
Bombastus	Hydrophilic cream, non-ionic...	30162	1
Bombastus	Hydrophilic cream, non-ionic...	302690	6
Bombastus	Hydrophilic cream, non-ionic...	229352	2
Bombastus	Hydrophilic cream, non-ionic...	302686	3
Bombastus	Hydrophilic cream, non-ionic...	301625	1
Bombastus	Hydrophilic cream, non-ionic...	304776	6
Bombastus	Hydrophilic cream, non-ionic...	303764	4
Bombastus	Hydrophilic cream, non-ionic...	60089511	1
Bombastus	Hydrophilic cream, non-ionic...	105019	1
Bombastus	Hydrophilic cream, non-ionic...	2293552	1
Bombastus	Hydrophilic cream, non-ionic...	306129	5
Bombastus	Hydrophilic cream, non-ionic...	306128	4
Bombastus	Hydrophilic cream, non-ionic...	306126	8
Bombastus	Hydrophilic cream, non-ionic...	309902	2
Bombastus	Hydrophilic cream, non-ionic...	307523	1
Bombastus	Hydrophilic cream, non-ionic...	307528	3
Bombastus	Hydrophilic cream, non-ionic...	310515	5
Bombastus	Hydrophilic cream, non-ionic...	310518	7
Bombastus	Hydrophilic cream, non-ionic...	310519	2
Bombastus	Hydrophilic cream, non-ionic...	17000742	4
Bombastus	Hydrophilic cream, non-ionic...	17000741	4
Bombastus	Hydrophilic cream, non-ionic...	17000749	8
Bombastus	Hydrophilic cream, non-ionic...	17000740	1
Bombastus	Hydrophilic cream, non-ionic...	18003131	1
Bombastus	Hydrophilic cream, non-ionic...	18001333	3
Bombastus	Hydrophilic cream, non-ionic...	18002064	6
Bombastus	Hydrophilic cream, non-ionic...	18001331	3
Bombastus	Hydrophilic cream, non-ionic...	18004211	7
Bombastus	Hydrophilic cream, non-ionic...	18004212	3
Bombastus	Hydrophilic cream, non-ionic...	19000222	4
Bombastus	Hydrophilic cream, non-ionic...	19000218	3
Bombastus	Hydrophilic cream, non-ionic...	19002037	1
Bombastus	Hydrophilic cream, non-ionic...	295652	2
Bombastus	Hydrophilic cream, non-ionic...	292810	1
Bombastus	Hydrophilic cream, non-ionic...	307527	4
Bombastus	Hydrophilic cream, non-ionic...	310517	7
Bombastus	Hydrophilic cream, non-ionic...	19000219	4
Bombastus	Hydrophilic cream, non-ionic...	306130	7
Bombastus	Hydrophilic cream, non-ionic...	17000745	9
Bombastus	Hydrophilic cream, non-ionic...	295654	4
Bombastus	Hydrophilic cream, non-ionic...	297304	3
Bombastus	Hydrophilic cream, non-ionic...	304778	6
Bombastus	Hydrophilic cream, non-ionic...	19002041	2
Bombastus	Hydrophilic cream, non-ionic...	295653	1
Bombastus	Hydrophilic cream, non-ionic...	297371	3
Bombastus	Hydrophilic cream, non-ionic...	17000746	5
Bombastus	Hydrophilic cream, non-ionic...	18002061	4
Bombastus	Hydrophilic cream, non-ionic...	18004208	5
Bombastus	Hydrophilic cream, non-ionic...	18005876	3
Bombastus	Hydrophilic cream, non-ionic...	19000221	1
Bombastus	Hydrophilic cream, non-ionic...	1900218	1
Bombastus	Hydrophilic cream, non-ionic...	307530	4
Bombastus	Hydrophilic cream, non-ionic...	291387	1
Bombastus	Hydrophilic cream, non-ionic...	276593	1
Bombastus	Hydrophilic cream, non-ionic...	292737	1
Bombastus	Hydrophilic cream, non-ionic...	292740	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	294390	2
Bombastus	Hydrophilic cream, non-ionic...	298979	1
Bombastus	Hydrophilic cream, non-ionic...	306123	1
Bombastus	Hydrophilic cream, non-ionic...	310514	1
Bombastus	Hydrophilic cream, non-ionic...	278025	4
Bombastus	Hydrophilic cream, non-ionic...	18001327	5
Bombastus	Hydrophilic cream, non-ionic...	17000748	1
Bombastus	Hydrophilic cream, non-ionic...	18005874	2
Bombastus	Hydrophilic cream, non-ionic...	18005875	1
Bombastus	Hydrophilic cream, non-ionic...	286323	1
Bombastus	Hydrophilic cream, non-ionic...	289942	5
Bombastus	Hydrophilic cream, non-ionic...	292804	6
Bombastus	Hydrophilic cream, non-ionic...	297310	2
Bombastus	Hydrophilic cream, non-ionic...	281774	1
Bombastus	Hydrophilic cream, non-ionic...	276595	1
Bombastus	Hydrophilic cream, non-ionic...	300756	3
Bombastus	Hydrophilic cream, non-ionic...	310513	1
Bombastus	Hydrophilic cream, non-ionic...	277878	9
Bombastus	Hydrophilic cream, non-ionic...	280993	3
Bombastus	Hydrophilic cream, non-ionic...	304773	8
Bombastus	Hydrophilic cream, non-ionic...	272472	1
Bombastus	Hydrophilic cream, non-ionic...	276597	2
Bombastus	Hydrophilic cream, non-ionic...	274213	1
Bombastus	Hydrophilic cream, non-ionic...	99320	2
Bombastus	Hydrophilic cream, non-ionic...	307531	14
Bombastus	Hydrophilic cream, non-ionic...	283639	1
Bombastus	Hydrophilic cream, non-ionic...	286328	3
Bombastus	Hydrophilic cream, non-ionic...	284898	2
Bombastus	Hydrophilic cream, non-ionic...	277877	1
Bombastus	Hydrophilic cream, non-ionic...	287710	2
Bombastus	Hydrophilic cream, non-ionic...	160824UEASR	1
Bombastus	Hydrophilic cream, non-ionic...	306124	5
Bombastus	Hydrophilic cream, non-ionic...	307524	1
Bombastus	Hydrophilic cream, non-ionic...	18005880	3
Bombastus	Hydrophilic cream, non-ionic...	283694	4
Bombastus	Hydrophilic cream, non-ionic...	300764	5
Bombastus	Hydrophilic cream, non-ionic...	283634	1
Bombastus	Hydrophilic cream, non-ionic...	294311	3
Bombastus	Hydrophilic cream, non-ionic...	295649	3
Bombastus	Hydrophilic cream, non-ionic...	298981	8
Bombastus	Hydrophilic cream, non-ionic...	274219	1
Bombastus	Hydrophilic cream, non-ionic...	278026	3
Bombastus	Hydrophilic cream, non-ionic...	280987	2
Bombastus	Hydrophilic cream, non-ionic...	283692	2
Bombastus	Hydrophilic cream, non-ionic...	286330	2
Bombastus	Hydrophilic cream, non-ionic...	287716	1
Bombastus	Hydrophilic cream, non-ionic...	2886797	1
Bombastus	Hydrophilic cream, non-ionic...	291385	4
Bombastus	Hydrophilic cream, non-ionic...	271397	1
Bombastus	Hydrophilic cream, non-ionic...	277873	4
Bombastus	Hydrophilic cream, non-ionic...	280986	2
Bombastus	Hydrophilic cream, non-ionic...	283635	2
Bombastus	Hydrophilic cream, non-ionic...	289937	1
Bombastus	Hydrophilic cream, non-ionic...	292808	1
Bombastus	Hydrophilic cream, non-ionic...	18004210	3
Bombastus	Hydrophilic cream, non-ionic...	302764	1
Bombastus	Hydrophilic cream, non-ionic...	298982	3
Bombastus	Hydrophilic cream, non-ionic...	283695	6
Bombastus	Hydrophilic cream, non-ionic...	287717	1
Bombastus	Hydrophilic cream, non-ionic...	289941	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	301626	6
Bombastus	Hydrophilic cream, non-ionic...	277881	1
Bombastus	Hydrophilic cream, non-ionic...	82216	1
Bombastus	Hydrophilic cream, non-ionic...	284895	5
Bombastus	Hydrophilic cream, non-ionic...	279656	1
Bombastus	Hydrophilic cream, non-ionic...	17002160	3
Bombastus	Hydrophilic cream, non-ionic...	18004207	3
Bombastus	Hydrophilic cream, non-ionic...	302688	8
Bombastus	Hydrophilic cream, non-ionic...	304779	2
Bombastus	Hydrophilic cream, non-ionic...	307526	3
Bombastus	Hydrophilic cream, non-ionic...	17002159	5
Bombastus	Hydrophilic cream, non-ionic...	18001328	8
Bombastus	Hydrophilic cream, non-ionic...	18001330	3
Bombastus	Hydrophilic cream, non-ionic...	18004209	5
Bombastus	Hydrophilic cream, non-ionic...	19003825	2
Bombastus	Hydrophilic cream, non-ionic...	294406	7
Bombastus	Hydrophilic cream, non-ionic...	288795	4
Bombastus	Hydrophilic cream, non-ionic...	287762	2
Bombastus	Hydrophilic cream, non-ionic...	291384	3
Bombastus	Hydrophilic cream, non-ionic...	292807	6
Bombastus	Hydrophilic cream, non-ionic...	297370	1
Bombastus	Hydrophilic cream, non-ionic...	298983	4
Bombastus	Hydrophilic cream, non-ionic...	304774	10
Bombastus	Hydrophilic cream, non-ionic...	291382	1
Bombastus	Hydrophilic cream, non-ionic...	291386	4
Bombastus	Hydrophilic cream, non-ionic...	2x295649	1
Bombastus	Hydrophilic cream, non-ionic...	3x297305	1
Bombastus	Hydrophilic cream, non-ionic...	300764x2	1
Bombastus	Hydrophilic cream, non-ionic...	301623	6
Bombastus	Hydrophilic cream, non-ionic...	309903	5
Bombastus	Hydrophilic cream, non-ionic...	309904	7
Bombastus	Hydrophilic cream, non-ionic...	18005878	4
Bombastus	Hydrophilic cream, non-ionic...	307529	2
Bombastus	Hydrophilic cream, non-ionic...	1700750	1
Bombastus	Hydrophilic cream, non-ionic...	273128	1
Bombastus	Hydrophilic cream, non-ionic...	302685	2
Bombastus	Hydrophilic cream, non-ionic...	18002062	2
Bombastus	Hydrophilic cream, non-ionic...	18005881	1
Bombastus	Hydrophilic cream, non-ionic...	300762	2
Bombastus	Hydrophilic cream, non-ionic...	18002063	13
Bombastus	Hydrophilic cream, non-ionic...	284891	3
Bombastus	Hydrophilic cream, non-ionic...	289940	2
Bombastus	Hydrophilic cream, non-ionic...	300759	3
Bombastus	Hydrophilic cream, non-ionic...	279991	1
Bombastus	Hydrophilic cream, non-ionic...	283636	5
Bombastus	Hydrophilic cream, non-ionic...	297911	5
Bombastus	Hydrophilic cream, non-ionic...	301621	2
Bombastus	Hydrophilic cream, non-ionic...	302684	3
Bombastus	Hydrophilic cream, non-ionic...	278029	1
Bombastus	Hydrophilic cream, non-ionic...	280984	1
Bombastus	Hydrophilic cream, non-ionic...	300761	4
Bombastus	Hydrophilic cream, non-ionic...	303735	10
Bombastus	Hydrophilic cream, non-ionic...	306127	4
Bombastus	Hydrophilic cream, non-ionic...	306131	14
Bombastus	Hydrophilic cream, non-ionic...	304771	1
Bombastus	Hydrophilic cream, non-ionic...	17000743	9
Bombastus	Hydrophilic cream, non-ionic...	17000747	3
Bombastus	Hydrophilic cream, non-ionic...	18002059	5
Bombastus	Hydrophilic cream, non-ionic...	18005879	2
Bombastus	Hydrophilic cream, non-ionic...	276599	2

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	287715	3
Bombastus	Hydrophilic cream, non-ionic...	289944	1
Bombastus	Hydrophilic cream, non-ionic...	283693	1
Bombastus	Hydrophilic cream, non-ionic...	295655	8
Bombastus	Hydrophilic cream, non-ionic...	295656	2
Bombastus	Hydrophilic cream, non-ionic...	297373	4
Bombastus	Hydrophilic cream, non-ionic...	302689	2
Bombastus	Hydrophilic cream, non-ionic...	309908	15
Bombastus	Hydrophilic cream, non-ionic...	17000744	5
Bombastus	Hydrophilic cream, non-ionic...	1901327	1
Bombastus	Hydrophilic cream, non-ionic...	18001324	1
Bombastus	Hydrophilic cream, non-ionic...	1900217	1
Bombastus	Hydrophilic cream, non-ionic...	18004523	1
Bombastus	Hydrophilic cream, non-ionic...	17000738	1
Bombastus	Hydrophilic cream, non-ionic...	17000739	4
Bombastus	Hydrophilic cream, non-ionic...	17002158	1
Bombastus	Hydrophilic cream, non-ionic...	18001326	1
Bombastus	Hydrophilic cream, non-ionic...	18002057	1
Bombastus	Hydrophilic cream, non-ionic...	18004204	1
Bombastus	Hydrophilic cream, non-ionic...	19000217	3
Bombastus	Hydrophilic cream, non-ionic...	19003821	1
Bombastus	Hydrophilic cream, non-ionic...	268349	1
Bombastus	Hydrophilic cream, non-ionic...	271473	1
Bombastus	Hydrophilic cream, non-ionic...	276598	2
Bombastus	Hydrophilic cream, non-ionic...	274222	1
Bombastus	Hydrophilic cream, non-ionic...	300035	4
Bombastus	Hydrophilic cream, non-ionic...	298984	3
Bombastus	Hydrophilic cream, non-ionic...	310520	15
Bombastus	Hydrophilic cream, non-ionic...	17000750	17
Bombastus	Hydrophilic cream, non-ionic...	18001329	4
Bombastus	Hydrophilic cream, non-ionic...	2A040118	1
Bombastus	Hydrophilic cream, non-ionic...	18005877	4
Bombastus	Hydrophilic cream, non-ionic...	18005882	7
Bombastus	Hydrophilic cream, non-ionic...	19000220	1
Bombastus	Hydrophilic cream, non-ionic...	19002039	2
Bombastus	Hydrophilic cream, non-ionic...	283638	2
Bombastus	Hydrophilic cream, non-ionic...	287713	6
Bombastus	Hydrophilic cream, non-ionic...	286838	3
Bombastus	Hydrophilic cream, non-ionic...	297308	11
Bombastus	Hydrophilic cream, non-ionic...	309907	6
Bombastus	Hydrophilic cream, non-ionic...	60089512	1
Bombastus	Hydrophilic cream, non-ionic...	288797	1
Bombastus	Hydrophilic cream, non-ionic...	284896	2
Bombastus	Hydrophilic cream, non-ionic...	287712	2
Bombastus	Hydrophilic cream, non-ionic...	289943	4
Bombastus	Hydrophilic cream, non-ionic...	304775	7
Bombastus	Hydrophilic cream, non-ionic...	300765	1
Bombastus/Phönix	Hydrophilic cream, non-ionic...	302689	1
Bombostus / Noweda	Hydrophilic cream, non-ionic...	295647	1
Bombstus	Hydrophilic cream, non-ionic...	295654	1
Bombstus/San	Hydrophilic cream, non-ionic...	306131	1
Caelo	Hydrophilic cream, non-ionic...	16054101	4
Caelo	Hydrophilic cream, non-ionic...	17113403	12
Caelo	Hydrophilic cream, non-ionic...	277877	1
Caelo	Hydrophilic cream, non-ionic...	14063001	2
Caelo	Hydrophilic cream, non-ionic...	14137002	5
Caelo	Hydrophilic cream, non-ionic...	14221101	2
Caelo	Hydrophilic cream, non-ionic...	289942	1
Caelo	Hydrophilic cream, non-ionic...	14336001	2
Caelo	Hydrophilic cream, non-ionic...	10A140414	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic cream, non-ionic...	15325801	13
Caelo	Hydrophilic cream, non-ionic...	2115E-03195NP	1
Caelo	Hydrophilic cream, non-ionic...	16017501	7
Caelo	Hydrophilic cream, non-ionic...	300762	1
Caelo	Hydrophilic cream, non-ionic...	16169501	4
Caelo	Hydrophilic cream, non-ionic...	16222102	3
Caelo	Hydrophilic cream, non-ionic...	16257902	7
Caelo	Hydrophilic cream, non-ionic...	169222102	1
Caelo	Hydrophilic cream, non-ionic...	17009601	5
Caelo	Hydrophilic cream, non-ionic...	17009701	6
Caelo	Hydrophilic cream, non-ionic...	16231701	1
Caelo	Hydrophilic cream, non-ionic...	163210701	1
Caelo	Hydrophilic cream, non-ionic...	17144001	5
Caelo	Hydrophilic cream, non-ionic...	171015015313	1
Caelo	Hydrophilic cream, non-ionic...	129711-499	1
Caelo	Hydrophilic cream, non-ionic...	17168500	1
Caelo	Hydrophilic cream, non-ionic...	1794002	1
Caelo	Hydrophilic cream, non-ionic...	17313902	3
Caelo	Hydrophilic cream, non-ionic...	38A241017	1
Caelo	Hydrophilic cream, non-ionic...	22011801	1
Caelo	Hydrophilic cream, non-ionic...	23061812	1
Caelo	Hydrophilic cream, non-ionic...	18001334	1
Caelo	Hydrophilic cream, non-ionic...	1805401	1
Caelo	Hydrophilic cream, non-ionic...	20A200618	1
Caelo	Hydrophilic cream, non-ionic...	18175201	7
Caelo	Hydrophilic cream, non-ionic...	18218002	1
Caelo	Hydrophilic cream, non-ionic...	18259502	12
Caelo	Hydrophilic cream, non-ionic...	10A240418	1
Caelo	Hydrophilic cream, non-ionic...	18259501	10
Caelo	Hydrophilic cream, non-ionic...	1825901	1
Caelo	Hydrophilic cream, non-ionic...	19055601	4
Caelo	Hydrophilic cream, non-ionic...	36A140514	1
Caelo	Hydrophilic cream, non-ionic...	297374	2
Caelo	Hydrophilic cream, non-ionic...	306128	1
Caelo	Hydrophilic cream, non-ionic...	309903	1
Caelo	Hydrophilic cream, non-ionic...	310515	1
Caelo	Hydrophilic cream, non-ionic...	18001332	1
Caelo	Hydrophilic cream, non-ionic...	18004207	1
Caelo	Hydrophilic cream, non-ionic...	276596	1
Caelo	Hydrophilic cream, non-ionic...	18001330	2
Caelo	Hydrophilic cream, non-ionic...	292814	3
Caelo	Hydrophilic cream, non-ionic...	280991	1
Caelo	Hydrophilic cream, non-ionic...	307531	2
Caelo	Hydrophilic cream, non-ionic...	277878	1
Caelo	Hydrophilic cream, non-ionic...	18106903	1
Caelo	Hydrophilic cream, non-ionic...	15325702	3
Caelo	Hydrophilic cream, non-ionic...	295649	1
Caelo	Hydrophilic cream, non-ionic...	16114201	11
Caelo	Hydrophilic cream, non-ionic...	16114102	7
Caelo	Hydrophilic cream, non-ionic...	13k15-m09	1
Caelo	Hydrophilic cream, non-ionic...	18106901	5
Caelo	Hydrophilic cream, non-ionic...	15A200416	1
Caelo	Hydrophilic cream, non-ionic...	170909701	1
Caelo	Hydrophilic cream, non-ionic...	1744001	1
Caelo	Hydrophilic cream, non-ionic...	309906	1
Caelo	Hydrophilic cream, non-ionic...	181069015670	1
Caelo	Hydrophilic cream, non-ionic...	294310	2
Caelo	Hydrophilic cream, non-ionic...	289944	1
Caelo	Hydrophilic cream, non-ionic...	274223	1
Caelo	Hydrophilic cream, non-ionic...	283634	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic cream, non-ionic...	286327	1
Caelo	Hydrophilic cream, non-ionic...	15210303	6
Caelo	Hydrophilic cream, non-ionic...	201015	2
Caelo	Hydrophilic cream, non-ionic...	301627	3
Caelo	Hydrophilic cream, non-ionic...	16321701	18
Caelo	Hydrophilic cream, non-ionic...	309905	1
Caelo	Hydrophilic cream, non-ionic...	17212601	5
Caelo	Hydrophilic cream, non-ionic...	17261001	4
Caelo	Hydrophilic cream, non-ionic...	17261002	3
Caelo	Hydrophilic cream, non-ionic...	18050304	1
Caelo	Hydrophilic cream, non-ionic...	1700971	1
Caelo	Hydrophilic cream, non-ionic...	15325802	1
Caelo	Hydrophilic cream, non-ionic...	17183901	2
Caelo	Hydrophilic cream, non-ionic...	17313903	1
Caelo	Hydrophilic cream, non-ionic...	170427NHCSR	1
Caelo	Hydrophilic cream, non-ionic...	1212601	1
Caelo	Hydrophilic cream, non-ionic...	180306UEN/17313902	1
Caelo	Hydrophilic cream, non-ionic...	1700750	1
Caelo	Hydrophilic cream, non-ionic...	18050501	1
Caelo	Hydrophilic cream, non-ionic...	18175301	7
Caelo	Hydrophilic cream, non-ionic...	18004212	1
Caelo	Hydrophilic cream, non-ionic...	18218001	5
Caelo	Hydrophilic cream, non-ionic...	17212602	3
Caelo	Hydrophilic cream, non-ionic...	18106801	4
Caelo	Hydrophilic cream, non-ionic...	11A250418	1
Caelo	Hydrophilic cream, non-ionic...	3A030119	1
Caelo	Hydrophilic cream, non-ionic...	19176501	2
Caelo	Hydrophilic cream, non-ionic...	291388	1
Caelo	Hydrophilic cream, non-ionic...	15037703	8
Caelo	Hydrophilic cream, non-ionic...	16222001	11
Caelo	Hydrophilic cream, non-ionic...	18050303	5
Caelo	Hydrophilic cream, non-ionic...	19055602	2
Caelo	Hydrophilic cream, non-ionic...	10B280317	1
Caelo	Hydrophilic cream, non-ionic...	19000220	2
Caesar & Loretz GmbH	Hydrophilic cream, non-ionic...	18259501	1
Caesar & Loretz GmbH	Hydrophilic cream, non-ionic...	19055601	1
Caesar & Loretz GmbH Hi...	Hydrophilic cream, non-ionic...	282216	1
Caesar & Loretz/Noweda	Hydrophilic cream, non-ionic...	295648	1
Cealo/GEHE	Hydrophilic cream, non-ionic...	181775301	1
Ebert-Jacobi	Hydrophilic cream, non-ionic...	309904	1
Eigene	Hydrophilic cream, non-ionic...	R12/0313	1
Euro OTC	Hydrophilic cream, non-ionic...	292737	1
Euro OTC	Hydrophilic cream, non-ionic...	298983	3
Euro OTC	Hydrophilic cream, non-ionic...	17000743	3
Euro OTC	Hydrophilic cream, non-ionic...	310514	3
Euro OTC	Hydrophilic cream, non-ionic...	25A120712	3
Euro OTC	Hydrophilic cream, non-ionic...	291388	1
Euro OTC	Hydrophilic cream, non-ionic...	19002041	1
Euro OTC	Hydrophilic cream, non-ionic...	18002063	1
Euro OTC	Hydrophilic cream, non-ionic...	306131	1
Euro OTC	Hydrophilic cream, non-ionic...	17000742	1
EUro/AHD	Hydrophilic cream, non-ionic...	277577	1
EUro/AHD	Hydrophilic cream, non-ionic...	34A240713	1
Fagron	Hydrophilic cream, non-ionic...	13D05-M07	2
Fagron	Hydrophilic cream, non-ionic...	12A180416	2
Fagron	Hydrophilic cream, non-ionic...	17212603	1
Fagron	Hydrophilic cream, non-ionic...	24A110712	1
Fagron	Hydrophilic cream, non-ionic...	13A30-M01	1
Fagron	Hydrophilic cream, non-ionic...	13D18-M06	2
Fagron	Hydrophilic cream, non-ionic...	5A230113	1

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Supplier	Substance	Batch	Spectra
Fagron	Hydrophilic cream, non-ionic...	19A280313	1
Fagron	Hydrophilic cream, non-ionic...	412062-3-P	1
Fagron	Hydrophilic cream, non-ionic...	51A121113	2
Fagron	Hydrophilic cream, non-ionic...	14D28-M02	1
Fagron	Hydrophilic cream, non-ionic...	13A250313	1
Fagron	Hydrophilic cream, non-ionic...	14D28-Mo2	1
Fagron	Hydrophilic cream, non-ionic...	14D28-Mo9	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M04	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M05	1
Fagron	Hydrophilic cream, non-ionic...	14E07-M10	1
Fagron	Hydrophilic cream, non-ionic...	14E14-M06	1
Fagron	Hydrophilic cream, non-ionic...	45A201216	2
Fagron	Hydrophilic cream, non-ionic...	297372	1
Fagron	Hydrophilic cream, non-ionic...	11A180416	1
Fagron	Hydrophilic cream, non-ionic...	38A121216	2
Fagron	Hydrophilic cream, non-ionic...	6061701	1
Fagron	Hydrophilic cream, non-ionic...	4A170117	1
Fagron	Hydrophilic cream, non-ionic...	27A130917	2
Fagron	Hydrophilic cream, non-ionic...	18001329	1
Fagron	Hydrophilic cream, non-ionic...	13A260418	1
Fagron	Hydrophilic cream, non-ionic...	14A300418	1
Fagron	Hydrophilic cream, non-ionic...	13D05-M12	1
Fagron	Hydrophilic cream, non-ionic...	46A061113	1
Fagron	Hydrophilic cream, non-ionic...	13K12-M04	1
Fagron	Hydrophilic cream, non-ionic...	13K20-M09	1
Fagron	Hydrophilic cream, non-ionic...	13B06-M08	1
Fagron	Hydrophilic cream, non-ionic...	13D05-M08	1
Fagron	Hydrophilic cream, non-ionic...	33A180912	2
Fagron	Hydrophilic cream, non-ionic...	12J04-M06	1
Fagron	Hydrophilic cream, non-ionic...	13D18-M09	2
Fagron	Hydrophilic cream, non-ionic...	55A181213	1
Fagron	Hydrophilic cream, non-ionic...	43A191216	1
Fagron	Hydrophilic cream, non-ionic...	13D05M08	1
Fagron	Hydrophilic cream, non-ionic...	2A140114	2
Fagron	Hydrophilic cream, non-ionic...	48A071113	1
Fagron	Hydrophilic cream, non-ionic...	3A170117	1
Fagron	Hydrophilic cream, non-ionic...	28A130917	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M03	1
Fagron	Hydrophilic cream, non-ionic...	24A110917	1
Fagron	Hydrophilic cream, non-ionic...	40A131216	1
Fagron	Hydrophilic cream, non-ionic...	12A020315	1
Fagron	Hydrophilic cream, non-ionic...	13K20-M10	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M01	1
Fagron	Hydrophilic cream, non-ionic...	14d28-m01	1
Fagron	Hydrophilic cream, non-ionic...	13A180416	1
Fagron	Hydrophilic cream, non-ionic...	13D18-M10	2
Fagron	Hydrophilic cream, non-ionic...	13K12-M05	1
Fagron	Hydrophilic cream, non-ionic...	14E07	1
Fagron	Hydrophilic cream, non-ionic...	15A200416	3
Fagron	Hydrophilic cream, non-ionic...	24A060819	1
Fagron	Hydrophilic cream, non-ionic...	12/26-M06	1
Fagron	Hydrophilic cream, non-ionic...	3713U-03195	1
Fagron	Hydrophilic cream, non-ionic...	5214I-03195	1
Fagron	Hydrophilic cream, non-ionic...	4315A-03195	1
Fagron	Hydrophilic cream, non-ionic...	15A-200416	1
Fagron	Hydrophilic cream, non-ionic...	39131216	1
Fagron	Hydrophilic cream, non-ionic...	41A141216	2
Fagron	Hydrophilic cream, non-ionic...	13D05-M09	1
Fagron	Hydrophilic cream, non-ionic...	13K15-M07	1
Fagron	Hydrophilic cream, non-ionic...	14A190416	1

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Supplier	Substance	Batch	Spectra
Fagron	Hydrophilic cream, non-ionic...	16A120619	1
Fagron	Hydrophilic cream, non-ionic...	13K20-M11	1
Fiebig	Hydrophilic cream, non-ionic...	19002041	1
Fiebig	Hydrophilic cream, non-ionic...	19093001	1
Frago/Noweda	Hydrophilic cream, non-ionic...	46A201216	1
Gehe	Hydrophilic cream, non-ionic...	114761	1
Gehe	Hydrophilic cream, non-ionic...	120211	1
Gehe	Hydrophilic cream, non-ionic...	122131	1
Gehe	Hydrophilic cream, non-ionic...	121431	1
Gehe	Hydrophilic cream, non-ionic...	271521	1
Gehe	Hydrophilic cream, non-ionic...	274216	1
Gehe	Hydrophilic cream, non-ionic...	274215	1
Gehe	Hydrophilic cream, non-ionic...	125011	1
Gehe	Hydrophilic cream, non-ionic...	131451	1
Gehe	Hydrophilic cream, non-ionic...	133121	1
Gehe	Hydrophilic cream, non-ionic...	132331	1
Gehe	Hydrophilic cream, non-ionic...	280988	1
Gehe	Hydrophilic cream, non-ionic...	276599	1
Gehe	Hydrophilic cream, non-ionic...	280989	1
Gehe	Hydrophilic cream, non-ionic...	280992	1
Gehe	Hydrophilic cream, non-ionic...	282214	1
Gehe	Hydrophilic cream, non-ionic...	283637	1
Gehe	Hydrophilic cream, non-ionic...	288882	1
Gehe	Hydrophilic cream, non-ionic...	295653	1
Gehe	Hydrophilic cream, non-ionic...	306131	1
Gehe	Hydrophilic cream, non-ionic...	17000737	1
GEHE	Hydrophilic cream, non-ionic...	302685	1
GEHE	Hydrophilic cream, non-ionic...	306124	1
GEHE	Hydrophilic cream, non-ionic...	307521	1
GEHE	Hydrophilic cream, non-ionic...	17000738	1
GEHE	Hydrophilic cream, non-ionic...	17000749	1
Gehe 02.09.14	Hydrophilic cream, non-ionic...	287709	1
Caelo	Hydrophilic cream, non-ionic...	267186	1
Gehe/Apomix	Hydrophilic cream, non-ionic...	2A140114	2
Gehe/Apomix	Hydrophilic cream, non-ionic...	18A190315	1
GEHE/Apomix	Hydrophilic cream, non-ionic...	27A220715	2
Gehe/apomix/09.10.14	Hydrophilic cream, non-ionic...	7A020414	1
Gehe/Apomix/11.11.14	Hydrophilic cream, non-ionic...	4A250214	1
Gehe/apomix/11.12.14	Hydrophilic cream, non-ionic...	48A081014	1
GEHE/apomix/22.05.2012	Hydrophilic cream, non-ionic...	3A130212	1
GEHE/Apomix/25.03.2014	Hydrophilic cream, non-ionic...	1A140114	1
Bombastus	Hydrophilic cream, non-ionic...	279661	9
Bombastus	Hydrophilic cream, non-ionic...	304777	4
Caelo	Hydrophilic cream, non-ionic...	17168502	3
Gehe/Leyh	Hydrophilic cream, non-ionic...	150341	1
Hedinger	Hydrophilic cream, non-ionic...	286326	1
Hedinger	Hydrophilic cream, non-ionic...	17000742	1
Herbasinica	Hydrophilic cream, non-ionic...	284899	1
Holdermann	Hydrophilic cream, non-ionic...	287712	1
Ichthyol-Gesellschaft C...	Hydrophilic cream, non-ionic...	18002064	1
Kehr	Hydrophilic cream, non-ionic...	309908	1
Kehr	Hydrophilic cream, non-ionic...	309904	1
Kehr	Hydrophilic cream, non-ionic...	18106901	1
Kehr	Hydrophilic cream, non-ionic...	18175201	1
Bombastus	Hydrophilic cream, non-ionic...	170000744	1
Leyh Pharma	Hydrophilic cream, non-ionic...	134841	1
Leyh Pharma	Hydrophilic cream, non-ionic...	153041	2
Leyh Pharma	Hydrophilic cream, non-ionic...	172831	1
Leyh Pharma / Alliance ...	Hydrophilic cream, non-ionic...	155221	1
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	142311	1

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Supplier	Substance	Batch	Spectra
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	151711	1
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	162241	1
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	164441	1
LEYH PHARMA / Phönix Le...	Hydrophilic cream, non-ionic...	153621	1
LEYH PHARMA / Phönix Le...	Hydrophilic cream, non-ionic...	155221	1
Leyh Pharma GmbH	Hydrophilic cream, non-ionic...	180611	1
Leyh Pharma GmbH	Hydrophilic cream, non-ionic...	181721	1
Leyh Pharma GmbH/Anzag	Hydrophilic cream, non-ionic...	133121	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	133911	2
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	142311	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	144021	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	143011	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	150341	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	150751	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	155221	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	160651	1
Leyh Pharma/Anzag	Hydrophilic cream, non-ionic...	160651	1
Leyh Pharma/Gehe	Hydrophilic cream, non-ionic...	140551	1
Leyh Pharma/Kehr	Hydrophilic cream, non-ionic...	16017501	1
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	162241	1
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	163611	1
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	170951	1
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	172831	1
Leyh Pharma/Phoenix	Hydrophilic cream, non-ionic...	172051	1
Leyh Pharma/Phoenix	Hydrophilic cream, non-ionic...	180611	1
Leyh Pharma/Phoenix	Hydrophilic cream, non-ionic...	181721	1
Leyh Pharma/Phoenix	Hydrophilic cream, non-ionic...	191021	1
Leyh Pharma/Phönix	Hydrophilic cream, non-ionic...	143011	1
Leyh Pharma/Sanacorp	Hydrophilic cream, non-ionic...	172051	1
Leyh/Gehe	Hydrophilic cream, non-ionic...	143011	2
Midas	Hydrophilic cream, non-ionic...	17000745	1
Nachprüfung	Hydrophilic cream, non-ionic...	284899	1
Noweda	Hydrophilic cream, non-ionic...	291385	1
Noweda	Hydrophilic cream, non-ionic...	292805	1
Noweda	Hydrophilic cream, non-ionic...	294408	1
Noweda	Hydrophilic cream, non-ionic...	294390	2
Noweda	Hydrophilic cream, non-ionic...	294311	1
Noweda	Hydrophilic cream, non-ionic...	90714	1
Noweda	Hydrophilic cream, non-ionic...	297309	1
Noweda	Hydrophilic cream, non-ionic...	295648	1
Noweda	Hydrophilic cream, non-ionic...	300760	1
Noweda	Hydrophilic cream, non-ionic...	16321701	1
Noweda	Hydrophilic cream, non-ionic...	309908	1
Noweda	Hydrophilic cream, non-ionic...	17294002	1
Bombastus	Hydrophilic cream, non-ionic...	302683	1
Bombastus	Hydrophilic cream, non-ionic...	30683	1
Caelo	Hydrophilic cream, non-ionic...	15365601	3
Fagron	Hydrophilic cream, non-ionic...	13K15-M09	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M05	2
Pharmachem	Hydrophilic cream, non-ionic...	80611	1
Pharmachem	Hydrophilic cream, non-ionic...	170412	2
Pharmachem	Hydrophilic cream, non-ionic...	220713	3
Pharmachem	Hydrophilic cream, non-ionic...	90714	6
Pharmachem	Hydrophilic cream, non-ionic...	201015	1
Pharmachem	Hydrophilic cream, non-ionic...	240217	9
Pharmachem	Hydrophilic cream, non-ionic...	190918	2
Pharmachem / Anzag	Hydrophilic cream, non-ionic...	282212	2
Pharmachem / Gehe	Hydrophilic cream, non-ionic...	90714	1
Pharmachem / Phönix	Hydrophilic cream, non-ionic...	220713	1
Pharmachem GmbH	Hydrophilic cream, non-ionic...	50912	1

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Supplier	Substance	Batch	Spectra
Pharmachem GmbH	Hydrophilic cream, non-ionic...	220713	2
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	201015	5
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	240217	8
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	190918	1
Pharmachem GmbH&Co.KG	Hydrophilic cream, non-ionic...	90714	1
Pharmachem/Noweda	Hydrophilic cream, non-ionic...	240217	1
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	50912	4
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	90714	1
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	201015	3
Pharmachem/Phönix	Hydrophilic cream, non-ionic...	170412	1
Pharmachem/Phönix	Hydrophilic cream, non-ionic...	220713	12
Pharmachen GmbH	Hydrophilic cream, non-ionic...	201015	7
Phoenix	Hydrophilic cream, non-ionic...	300035	1
Bombastus	Hydrophilic cream, non-ionic...	284893	2
Fagron	Hydrophilic cream, non-ionic...	17261002	1
Phönix	Hydrophilic cream, non-ionic...	124511	1
Phönix	Hydrophilic cream, non-ionic...	278025	1
Phönix	Hydrophilic cream, non-ionic...	132331	1
Phönix	Hydrophilic cream, non-ionic...	17000749	1
Phönix	Hydrophilic cream, non-ionic...	18002064	1
Phönix	Hydrophilic cream, non-ionic...	18004212	1
Bombastus	Hydrophilic cream, non-ionic...	309906	1
Bombastus	Hydrophilic cream, non-ionic...	119400	1
Phönix Gotha	Hydrophilic cream, non-ionic...	122131	2
Phönix Gotha	Hydrophilic cream, non-ionic...	122841	4
Phönix Gotha	Hydrophilic cream, non-ionic...	123711	1
Phönix Gotha	Hydrophilic cream, non-ionic...	124511	5
Phönix Gotha	Hydrophilic cream, non-ionic...	125011	3
Phönix Gotha	Hydrophilic cream, non-ionic...	130651	3
Phönix Gotha	Hydrophilic cream, non-ionic...	13065	1
Phönix Gotha	Hydrophilic cream, non-ionic...	131451	2
Phönix Gotha	Hydrophilic cream, non-ionic...	132331	2
Phönix Gotha	Hydrophilic cream, non-ionic...	133121	3
Phönix Gotha	Hydrophilic cream, non-ionic...	13227701	1
Phönix Gotha	Hydrophilic cream, non-ionic...	133911	2
Phönix Gotha	Hydrophilic cream, non-ionic...	134841	2
Phönix Gotha	Hydrophilic cream, non-ionic...	140551	4
Phönix Gotha	Hydrophilic cream, non-ionic...	141521	2
Phönix Gotha	Hydrophilic cream, non-ionic...	142311	2
Phönix Gotha	Hydrophilic cream, non-ionic...	143011	3
Phönix Gotha	Hydrophilic cream, non-ionic...	144811	5
Phönix Gotha	Hydrophilic cream, non-ionic...	150341	1
Phönix Gotha	Hydrophilic cream, non-ionic...	150751	1
Phönix Gotha	Hydrophilic cream, non-ionic...	151711	2
Phönix Gotha	Hydrophilic cream, non-ionic...	153041	4
Phönix Gotha	Hydrophilic cream, non-ionic...	153621	1
Caelo	Hydrophilic cream, non-ionic...	17002159	1
Phönix/Leyh Pharma	Hydrophilic cream, non-ionic...	142311	1
PKH	Hydrophilic cream, non-ionic...	51A301215	1
PKH GmbH	Hydrophilic cream, non-ionic...	21A110515	1
PKH GmbH	Hydrophilic cream, non-ionic...	36A261016	1
PKH GmbH	Hydrophilic cream, non-ionic...	18A100717	1
PKH GmbH	Hydrophilic cream, non-ionic...	12A160419	1
PKH Halle	Hydrophilic cream, non-ionic...	4A250118	1
PKH Halle	Hydrophilic cream, non-ionic...	17A030518	1
PKH Halle/ Alliance H.	Hydrophilic cream, non-ionic...	33a240713	1
PKH Halle/ Alliance H.	Hydrophilic cream, non-ionic...	33A240713	2
PKH Halle/Noweda	Hydrophilic cream, non-ionic...	20A280415	1
PKH Halle/Sanacorp	Hydrophilic cream, non-ionic...	8A030414	1
PKH/Noweda	Hydrophilic cream, non-ionic...	27A220715	1

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Supplier	Substance	Batch	Spectra
Raben-Apotheke Mildenau	Hydrophilic cream, non-ionic...	37A270514	1
Reichelt	Hydrophilic cream, non-ionic...	229352	1
Sanacorp	Hydrophilic cream, non-ionic...	220713	4
Sanacorp	Hydrophilic cream, non-ionic...	15039001	1
SANACORP	Hydrophilic cream, non-ionic...	19055602	1
Caelo	Hydrophilic cream, non-ionic...	50A111113	1
Bombastus	Hydrophilic cream, non-ionic...	18002060	2
Bombastus	Hydrophilic cream, non-ionic...	269711	1
Bombastus	Hydrophilic cream, non-ionic...	269716	1
Bombastus	Hydrophilic cream, non-ionic...	269715	1
Bombastus	Hydrophilic cream, non-ionic...	271522	1
Bombastus	Hydrophilic cream, non-ionic...	273134	1
Bombastus	Hydrophilic cream, non-ionic...	288798	1
Bombastus	Hydrophilic cream, non-ionic...	289326	3
Caelo	Hydrophilic cream, non-ionic...	22A050917	1
Caelo	Hydrophilic cream, non-ionic...	17294002	4
SanacorpWE:01.12.2016 ...	Hydrophilic cream, non-ionic...	16222001	1
Tsiripidou	Hydrophilic cream, non-ionic...	17000748	1
AMH Niemann	Hydrophilic cream, non-ionic...	7B020413	2
AMH Niemann GmbH& Co. K...	Hydrophilic cream, non-ionic...	12B030613	1
AMH Niemann GmbH&Co KG	Hydrophilic cream, non-ionic...	2B130114	1
AMH-NiemannGmbH&CO,15.0...	Hydrophilic cream, non-ionic...	15B010817	1
Anzag/AMH/16.05.2012	Hydrophilic cream, non-ionic...	14B020212	1
apo	Hydrophilic cream, non-ionic...	4807013	1
apomix	Hydrophilic cream, non-ionic...	22B060812	1
apomix	Hydrophilic cream, non-ionic...	2B140113	1
apomix	Hydrophilic cream, non-ionic...	10B060514	1
apomix	Hydrophilic cream, non-ionic...	3B020215	1
apomix	Hydrophilic cream, non-ionic...	13B080615	1
apomix	Hydrophilic cream, non-ionic...	24B241115	1
apomix	Hydrophilic cream, non-ionic...	10B190516	1
apomix	Hydrophilic cream, non-ionic...	9B020516	1
apomix	Hydrophilic cream, non-ionic...	13B280616	2
apomix	Hydrophilic cream, non-ionic...	21B14116	1
apomix	Hydrophilic cream, non-ionic...	23B291117	1
apomix	Hydrophilic cream, non-ionic...	148200818	1
apomix	Hydrophilic cream, non-ionic...	17B011018	1
Apomix	Hydrophilic cream, non-ionic...	24B180912	1
Apomix	Hydrophilic cream, non-ionic...	18B190612	1
Apomix	Hydrophilic cream, non-ionic...	19B260612	1
Apomix	Hydrophilic cream, non-ionic...	27B221012	1
Apomix	Hydrophilic cream, non-ionic...	30B261112	1
Apomix	Hydrophilic cream, non-ionic...	33B271212	1
Apomix	Hydrophilic cream, non-ionic...	26B151012	1
Apomix	Hydrophilic cream, non-ionic...	4B070213	1
Apomix	Hydrophilic cream, non-ionic...	2B140113	2
Apomix	Hydrophilic cream, non-ionic...	28B221012	1
Apomix	Hydrophilic cream, non-ionic...	6B110313	2
Apomix	Hydrophilic cream, non-ionic...	5B250213	1
Apomix	Hydrophilic cream, non-ionic...	7B020413	1
Apomix	Hydrophilic cream, non-ionic...	8B150413	1
Apomix	Hydrophilic cream, non-ionic...	9B300413	3
Apomix	Hydrophilic cream, non-ionic...	10B220513	1
Apomix	Hydrophilic cream, non-ionic...	13B180613	1
Apomix	Hydrophilic cream, non-ionic...	16B290713	1
Apomix	Hydrophilic cream, non-ionic...	21B141013	1
Apomix	Hydrophilic cream, non-ionic...	19B100913	1
Apomix	Hydrophilic cream, non-ionic...	238141113	1
Apomix	Hydrophilic cream, non-ionic...	6B100314	1
Apomix	Hydrophilic cream, non-ionic...	8B070414	1

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Supplier	Substance	Batch	Spectra
Apomix	Hydrophilic cream, non-ionic...	12B210514	1
Apomix	Hydrophilic cream, non-ionic...	17B120814	2
Apomix	Hydrophilic cream, non-ionic...	6B020315	1
Apomix	Hydrophilic cream, non-ionic...	1B120115	1
Apomix	Hydrophilic cream, non-ionic...	11B110515	1
Apomix	Hydrophilic cream, non-ionic...	13B080615	2
Apomix	Hydrophilic cream, non-ionic...	18B240815	1
Apomix	Hydrophilic cream, non-ionic...	20B210915	1
Apomix	Hydrophilic cream, non-ionic...	1B070116	3
Apomix	Hydrophilic cream, non-ionic...	25B081215	1
Apomix	Hydrophilic cream, non-ionic...	4B170216	1
Apomix	Hydrophilic cream, non-ionic...	9B020516	3
Apomix	Hydrophilic cream, non-ionic...	11b300516	1
Apomix	Hydrophilic cream, non-ionic...	5B01816	1
Apomix	Hydrophilic cream, non-ionic...	10B190516	1
Apomix	Hydrophilic cream, non-ionic...	18B270916	2
Apomix	Hydrophilic cream, non-ionic...	16B290816	2
Apomix	Hydrophilic cream, non-ionic...	22B281116	1
Apomix	Hydrophilic cream, non-ionic...	24B121216	2
Apomix	Hydrophilic cream, non-ionic...	2B300117	2
Apomix	Hydrophilic cream, non-ionic...	4B210217	1
Apomix	Hydrophilic cream, non-ionic...	9B020517	1
Apomix	Hydrophilic cream, non-ionic...	15B010817	1
Apomix	Hydrophilic cream, non-ionic...	18B060917	2
Apomix	Hydrophilic cream, non-ionic...	22B201117	1
Apomix	Hydrophilic cream, non-ionic...	23B291117	1
Apomix	Hydrophilic cream, non-ionic...	21B08117	1
Apomix	Hydrophilic cream, non-ionic...	1B090118	1
Apomix	Hydrophilic cream, non-ionic...	5B280318	1
Apomix	Hydrophilic cream, non-ionic...	12B100718	2
Apomix	Hydrophilic cream, non-ionic...	17B011018	1
Apomix	Hydrophilic cream, non-ionic...	9B010719	1
Apomix / 11	Hydrophilic cream, non-ionic...	10B060514	1
Apomix / Gehe	Hydrophilic cream, non-ionic...	12A160419	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	3B020215	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	9B200415	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	23B101115	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	13B280617	2
Apomix / Noweda	Hydrophilic cream, non-ionic...	11B310517	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	5B150317	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	12B210514	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	6B020315	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	18B240815	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	17B040815	3
APOMIX /11	Hydrophilic cream, non-ionic...	1B070114	1
Apomix /Alliance	Hydrophilic cream, non-ionic...	22B281013	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	17b040815	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	21b141116	1
Apomix Alliance healthc...	Hydrophilic cream, non-ionic...	20B291118	1
Apomix Alliance Healthc...	Hydrophilic cream, non-ionic...	21B081117	3
apomix GmbH/Phönix	Hydrophilic cream, non-ionic...	7B020413	1
Apomix Noweda	Hydrophilic cream, non-ionic...	12B100718	1
Apomix Noweda	Hydrophilic cream, non-ionic...	16B040918	1
apomix noweder 23.10.2015	Hydrophilic cream, non-ionic...	18B240815	1
Apomix/ Gehe	Hydrophilic cream, non-ionic...	5B290216	1
Apomix/ Noweda	Hydrophilic cream, non-ionic...	3B020215	1
Apomix/ Phönix	Hydrophilic cream, non-ionic...	15B090713	1
Apomix/ Phönix	Hydrophilic cream, non-ionic...	15B070714	1
Apomix/ Sanacorp	Hydrophilic cream, non-ionic...	8B030417	1
Apomix/AHD	Hydrophilic cream, non-ionic...	12B100718	1

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Supplier	Substance	Batch	Spectra
Apomix/Anzag	Hydrophilic cream, non-ionic...	24B121216	1
apomix/Gehe	Hydrophilic cream, non-ionic...	2B300117	1
apomix/Gehe	Hydrophilic cream, non-ionic...	5B150317	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	3B020215	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	20B210915	1
Apomix/Gehe GUC	Hydrophilic cream, non-ionic...	11B220513	1
apomix/Holdermann	Hydrophilic cream, non-ionic...	15B290615	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	14B120716	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	21B141013	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	10B200415	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	10B160517	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	14B280617	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	5B280318	1
Apomix/NOWEDA	Hydrophilic cream, non-ionic...	13B310718	1
apomix/Phönix	Hydrophilic cream, non-ionic...	15B090713	2
apomix/Phönix	Hydrophilic cream, non-ionic...	8B070414	1
apomix/Phönix	Hydrophilic cream, non-ionic...	22B061114	1
Apomix/Phönix	Hydrophilic cream, non-ionic...	25B161213	1
Apomix/Phönix	Hydrophilic cream, non-ionic...	5B150317	1
Apomix/PKH Halle/Phönix	Hydrophilic cream, non-ionic...	13B310718	1
Apomix/Sana	Hydrophilic cream, non-ionic...	25B081215	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	8B060416	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	1B090118	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	8B290519	1
Bombastus	Hydrophilic cream, non-ionic...	12B130626	1
Bombastus	Hydrophilic cream, non-ionic...	307525	6
Bombastus	Hydrophilic cream, non-ionic...	18001334	9
Caelo	Hydrophilic cream, non-ionic...	14063003	1
Caelo	Hydrophilic cream, non-ionic...	18050401	7
Caelo	Hydrophilic cream, non-ionic...	15155904	5
Caelo	Hydrophilic cream, non-ionic...	18002063	1
Caelo	Hydrophilic cream, non-ionic...	21B141116	1
Caelo	Hydrophilic cream, non-ionic...	2B310118	1
caesar&lorenz GmbH	Hydrophilic cream, non-ionic...	18050401	2
Euro OTC	Hydrophilic cream, non-ionic...	13B310718	2
Euro OTC	Hydrophilic cream, non-ionic...	21B081117	1
Fagron	Hydrophilic cream, non-ionic...	15C04-M06	1
Gehe	Hydrophilic cream, non-ionic...	5B250213	1
Henry Lamotte	Hydrophilic cream, non-ionic...	22B281013	1
Holdermann	Hydrophilic cream, non-ionic...	1B140113	1
Noweda	Hydrophilic cream, non-ionic...	1B070116	1
Pharmachem	Hydrophilic cream, non-ionic...	6B150316	1
Phönix	Hydrophilic cream, non-ionic...	3B300117	1
Phönix	Hydrophilic cream, non-ionic...	1B090118	1
Phönix / apomix	Hydrophilic cream, non-ionic...	24B271217	2
Phönix Gotha	Hydrophilic cream, non-ionic...	20B260612	1
Phönix Gotha	Hydrophilic cream, non-ionic...	4B070213	1
Phönix Gotha	Hydrophilic cream, non-ionic...	20B230913	2
Phönix Gotha	Hydrophilic cream, non-ionic...	21B141014	1
Phönix Gotha	Hydrophilic cream, non-ionic...	10B200415	1
Phönix Gotha	Hydrophilic cream, non-ionic...	12B211015	1
Phönix/ Apomix	Hydrophilic cream, non-ionic...	2B160412	1
PKH GmbH	Hydrophilic cream, non-ionic...	12B1306161	1
PKH GmbH	Hydrophilic cream, non-ionic...	21B141116	2
PKH GmbH	Hydrophilic cream, non-ionic...	7B030417	1
PKH GmbH/ Alliance Heal...	Hydrophilic cream, non-ionic...	18B291018	1
PKH GmbH/ NOWEDA	Hydrophilic cream, non-ionic...	10B200415	1
PKH GmbH/Noweda	Hydrophilic cream, non-ionic...	7B030417	1
PKH Halle	Hydrophilic cream, non-ionic...	15B080816	1
PKH Halle	Hydrophilic cream, non-ionic...	11B310517	1

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Supplier	Substance	Batch	Spectra
PKH Halle/ Alliance Hea...	Hydrophilic cream, non-ionic...	4B120318	1
Rabenapotheke	Hydrophilic cream, non-ionic...	20B290914	2
Raben-Apotheke Mildena	Hydrophilic cream, non-ionic...	12B210514	1
Raben-Apotheke Mildena	Hydrophilic cream, non-ionic...	4B100214	1
Raben-Apotheke Mildena	Hydrophilic cream, non-ionic...	18B020914	2
Sanacorp/ apomix	Hydrophilic cream, non-ionic...	19B021017	1
Apomix	Skin care ointment W/L SR	9A260213	1
Apomix	Skin care ointment W/L SR	2A090114	1
Apomix	Skin care ointment W/L SR	211112	1
Apomix	Skin care ointment W/L SR	11A190214	1
Apomix	Skin care ointment W/L SR	1A080114	1
Apomix	Skin care ointment W/L SR	16A250314	2
Apomix	Skin care ointment W/L SR	21A230414	1
Apomix	Skin care ointment W/L SR	22A230414	1
apomix / Phönix	Skin care ointment W/L SR	11B270317	1
apomix/ Anzag	Skin care ointment W/L SR	3B020217	1
Apomix/Sanacorp	Skin care ointment W/L SR	27B220818	1
Caelo	Skin care ointment W/L SR	80115	1
Euro OTC	Skin care ointment W/L SR	300316	1
Noweda/Pharmachem	Skin care ointment W/L SR	270715	1
Noweda/Pharmachem	Skin care ointment W/L SR	120416	1
Pharmachem	Skin care ointment W/L SR	90216	1
Pharmachem	Skin care ointment W/L SR	20316	1
Pharmachem / Noweda	Skin care ointment W/L SR	170815	1
Pharmachem GmbH	Skin care ointment W/L SR	220118	1
Pharmachem GmbH Pößneck	Skin care ointment W/L SR	81117	1
Pharmachem Pößneck/Noweda	Skin care ointment W/L SR	111016	1
Pharmachem Pößneck	Skin care ointment W/L SR	100516	1
Pharmachem/ Noweda	Skin care ointment W/L SR	260814	1
Pharmachem/ Noweda	Skin care ointment W/L SR	180914	1
Pharmachem/ Sanacorp	Skin care ointment W/L SR	141015	1
Pharmachem/ Sanacorp	Skin care ointment W/L SR	170117	1
Pharmachem/Gehe	Skin care ointment W/L SR	100712	1
Pharmachem/Noweda	Skin care ointment W/L SR	110416	1
PharmaChem/Phönix	Skin care ointment W/L SR	50718	1
PharmaChem/Phönix	Skin care ointment W/L SR	220118	1
PharmaChem/Phönix	Skin care ointment W/L SR	151118	1
PharmaChem/Phönix	Skin care ointment W/L SR	170918	1
PharmaChem/Phönix	Skin care ointment W/L SR	170119	2
PharmaChem/Phönix	Skin care ointment W/L SR	110319	1
PharmaChem/Phönix	Skin care ointment W/L SR	120419	2
PharmaChem/Phönix	Skin care ointment W/L SR	180619	1
PharmaChem/Phönix	Skin care ointment W/L SR	290419	1
Pharmachem/Phönix 03.08...	Skin care ointment W/L SR	250418	1
Pharmachemie/Phönix 30...	Skin care ointment W/L SR	240418	2
Sanacorp	Skin care ointment W/L SR	27C220818	1
Sanacorp	Skin care ointment W/L SR	39B191218	1
apomix	Skin care ointment W/L SR (w...	31B130917	1
Apomix	Skin care ointment W/L SR (w...	9A0103318	1
Apomix	Skin care ointment W/L SR (w...	3A220118	1
Apomix	Skin care ointment W/L SR (w...	4A220118	1
Apomix	Skin care ointment W/L SR (w...	8A280218	1
Apomix	Skin care ointment W/L SR (w...	15A080518	1
Apomix	Skin care ointment W/L SR (w...	16A080518	1
apomix/ Anzag	Skin care ointment W/L SR (w...	63B230916	1
Apomix/ Sanacorp	Skin care ointment W/L SR (w...	41B200715	1
Apomix/ Sanacorp	Skin care ointment W/L SR (w...	15B220216	1
Apomix/ Sanacorp	Skin care ointment W/L SR (w...	41A281117	1
pkh gmbh	Skin care ointment W/L SR (w...	49b171014	1
Euro OTC	Transdermal base cream	1507997	1

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Supplier	Substance	Batch	Spectra
Caelo	Transdermal base cream	1609813	1
Caelo	Transdermal base cream	1709950/2	1
Euro OTC	Transdermal base cream	14J08-T12-016301	2
Fagron	Transdermal base cream	12F19-U15-273303	1
Fagron	Transdermal base cream	12H17-T02-005161	2
Fagron	Transdermal base cream	13G17-T03-010523	1
Fagron	Transdermal base cream	13G17-T03-005497	1
Fagron	Transdermal base cream	14B27-T01-010612	3
Fagron	Transdermal base cream	14C14-T03	1
Fagron	Transdermal base cream	14H19-T07-014889	1
Fagron	Transdermal base cream	14C14-T03-011060	1
Fagron	Transdermal base cream	15A28-T08-018919	1
Fagron	Transdermal base cream	14B27-To1-010612	1
Fagron	Transdermal base cream	15D28-T06-021940	1
Fagron	Transdermal base cream	15D28-T06-02194	1
Fagron	Transdermal base cream	1602049	1
Fagron	Transdermal base cream	4315I-07039	1
Fagron	Transdermal base cream	14B27-T010612	1
Fagron	Transdermal base cream	247191-0003	1
Fagron	Transdermal base cream	1802650/2	1
Fagron	Transdermal base cream	1504065	6
Fagron	Transdermal base cream	1507997	5
Fagron	Transdermal base cream	1607076	5
Fagron	Transdermal base cream	14K21-T03-017364	1
Fagron	Transdermal base cream	1802648/2	1
Fagron	Transdermal base cream	1709950/2	1
PHÖNIX	Transdermal base cream	1802650/2	2
AHD	Wolff [®] base half-fat cream	602290	1
AHD/ DR. Wolff	Wolff [®] base half-fat cream	609950	1
AHL	Wolff [®] base half-fat cream	608180	1
ALH	Wolff [®] base half-fat cream	602050	1
Alliance/Dr. Wolff	Wolff [®] base half-fat cream	501470	1
Anzag/ Dr. Wolff	Wolff [®] base half-fat cream	339140	1
Bombastus	Wolff [®] base half-fat cream	707370	1
Caelo	Wolff [®] base half-fat cream	235200	1
Caelo	Wolff [®] base half-fat cream	71120	1
Caelo	Wolff [®] base half-fat cream	31101811	1
Caelo	Wolff [®] base half-fat cream	15121805	1
Caelo	Wolff [®] base half-fat cream	805720	1
Caelo	Wolff [®] base half-fat cream	702500	3
Caelo	Wolff [®] base half-fat cream	711250	2
Caelo	Wolff [®] base half-fat cream	801140	1
Caelo	Wolff [®] base half-fat cream	501470	6
Caelo	Wolff [®] base half-fat cream	431240	2
Caelo	Wolff [®] base half-fat cream	333930	1
Caelo	Wolff [®] base half-fat cream	609950	1
Caelo	Wolff [®] base half-fat cream	602050	1
Caelo	Wolff [®] base half-fat cream	602290	1
Caelo	Wolff [®] base half-fat cream	707370	1
Caelo	Wolff [®] base half-fat cream	238560	1
Caelo	Wolff [®] base half-fat cream	333620	3
Caelo	Wolff [®] base half-fat cream	434360	3
Caelo	Wolff [®] base half-fat cream	511420	3
Caelo	Wolff [®] base half-fat cream	705760	1
Caelo	Wolff [®] base half-fat cream	506361	1
Caelo	Wolff [®] base half-fat cream	704050	3
Caesar & Loretz GmbH	Wolff [®] base half-fat cream	810800	2
Cealo/Phönix	Wolff [®] base half-fat cream	339140	1
Chiesi	Wolff [®] base half-fat cream	601880	1
Chiesi / Sanacorp/EK: 6...	Wolff [®] base half-fat cream	506360	1

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Supplier	Substance	Batch	Spectra
Chiesi GmbH	Wolff [®] base half-fat cream	703031	1
devesa/Phönix	Wolff [®] base half-fat cream	801140	6
Dr Wolff	Wolff [®] base half-fat cream	501470	2
Dr Wolff	Wolff [®] base half-fat cream	501080	1
Dr Wolff	Wolff [®] base half-fat cream	48882171377	1
Dr Wolff	Wolff [®] base half-fat cream	410400	1
Dr Wolff	Wolff [®] base half-fat cream	602050	1
Dr Wolff	Wolff [®] base half-fat cream	606050	3
Dr Wolff	Wolff [®] base half-fat cream	510400	1
Dr Wolff	Wolff [®] base half-fat cream	610991	1
Dr Wolff	Wolff [®] base half-fat cream	704220	1
Dr Wolff / Anzag	Wolff [®] base half-fat cream	608180	1
Dr Wolff / Phönix	Wolff [®] base half-fat cream	801140	1
Dr Wolff/ Gehe	Wolff [®] base half-fat cream	234791	1
Dr Wolff/ Gehe	Wolff [®] base half-fat cream	333930	1
Dr Wolff/ Sanacorp	Wolff [®] base half-fat cream	339140	1
Dr Wolff/Noweda	Wolff [®] base half-fat cream	511420	3
Dr. A. Wolff/Kehr	Wolff [®] base half-fat cream	438340	2
Dr. A.Wolff GmbH/Noweda	Wolff [®] base half-fat cream	608180	1
Dr. August Wolff	Wolff [®] base half-fat cream	332040	5
Dr. August Wolff	Wolff [®] base half-fat cream	333930	2
Dr. August Wolff	Wolff [®] base half-fat cream	602050	3
Dr. August Wolff	Wolff [®] base half-fat cream	609950	1
Dr. August Wolff	Wolff [®] base half-fat cream	7091713	1
Dr. August Wolff	Wolff [®] base half-fat cream	704050	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	511420	2
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	506360	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	510400	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	602050	2
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	606050	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	703031	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	701080	2
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	707500	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	805720	1
DR. August Wolff GmbH	Wolff [®] base half-fat cream	235200	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	606050	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	711250	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	170519WBC/610991	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	171113WBC/701451	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	180312WB/705760	1
Dr. August Wolff GmbH /...	Wolff [®] base half-fat cream	801470	1
Dr. August Wolff GmbH/...	Wolff [®] base half-fat cream	705760	2
Dr. August Wolff GmbH/S...	Wolff [®] base half-fat cream	506361	1
Dr. August Wolff/ Phönix	Wolff [®] base half-fat cream	807640	1
Dr. August Wolff/Phönix	Wolff [®] base half-fat cream	805720	1
Dr. August Wolff/Sanaco...	Wolff [®] base half-fat cream	337260	1
Dr. Wolf	Wolff [®] base half-fat cream	331551	1
Dr. Wolf/Phoenix	Wolff [®] base half-fat cream	704050	5
Dr. Wolff	Wolff [®] base half-fat cream	238560	3
Dr. Wolff	Wolff [®] base half-fat cream	238490	2
Dr. Wolff	Wolff [®] base half-fat cream	337260	4
Dr. Wolff	Wolff [®] base half-fat cream	333930	1
Dr. Wolff	Wolff [®] base half-fat cream	10112014F	1
Dr. Wolff	Wolff [®] base half-fat cream	431240	1
Dr. Wolff	Wolff [®] base half-fat cream	501470	4
Dr. Wolff	Wolff [®] base half-fat cream	501082	1
Dr. Wolff	Wolff [®] base half-fat cream	511420	1
Dr. Wolff	Wolff [®] base half-fat cream	501080	1
Dr. Wolff	Wolff [®] base half-fat cream	602050	2
Dr. Wolff	Wolff [®] base half-fat cream	510400	1

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Supplier	Substance	Batch	Spectra
Dr. Wolff	Wolff [®] base half-fat cream	605700	1
Dr. Wolff	Wolff [®] base half-fat cream	605551	2
Dr. Wolff	Wolff [®] base half-fat cream	4051701	1
Dr. Wolff	Wolff [®] base half-fat cream	10061711	1
Dr. Wolff	Wolff [®] base half-fat cream	608180	1
Dr. Wolff	Wolff [®] base half-fat cream	701451	1
Dr. Wolff	Wolff [®] base half-fat cream	23101701	1
Dr. Wolff	Wolff [®] base half-fat cream	11121703	1
Dr. Wolff	Wolff [®] base half-fat cream	12051807	1
Dr. Wolff	Wolff [®] base half-fat cream	1061803	1
Dr. Wolff	Wolff [®] base half-fat cream	711240	1
Dr. Wolff	Wolff [®] base half-fat cream	23071801	1
Dr. Wolff	Wolff [®] base half-fat cream	1091802	2
Dr. Wolff	Wolff [®] base half-fat cream	19011903	1
Dr. Wolff	Wolff [®] base half-fat cream	19011904	1
DR. WOLFF	Wolff [®] base half-fat cream	337260	1
DR. WOLFF	Wolff [®] base half-fat cream	609950	1
Dr. Wolff / Anzag	Wolff [®] base half-fat cream	601880	1
Dr. Wolff / Gehe	Wolff [®] base half-fat cream	801140	1
Dr. Wolff / Gehe	Wolff [®] base half-fat cream	901140	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	438160	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	510621	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	602290	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	605700	3
Dr. Wolff / OG	Wolff [®] base half-fat cream	608180	1
Dr. Wolff /Anzag	Wolff [®] base half-fat cream	232593	1
Dr. Wolff /Anzag	Wolff [®] base half-fat cream	432611	1
Dr. Wolff GmbH	Wolff [®] base half-fat cream	501080	1
Dr. Wolff GmbH	Wolff [®] base half-fat cream	506360	3
Dr. Wolff GmbH/ Allianc...	Wolff [®] base half-fat cream	506360	1
Dr. Wolff GmbH/ Allianc...	Wolff [®] base half-fat cream	810800	1
Dr. Wolff GmbH/Fiebig	Wolff [®] base half-fat cream	807580	1
Dr. Wolff GmbH/Phönix	Wolff [®] base half-fat cream	711250	1
Dr. Wolff/ Alliance	Wolff [®] base half-fat cream	511420	1
Dr. Wolff/ Alliance	Wolff [®] base half-fat cream	608180	1
Dr. Wolff/ Fiebig	Wolff [®] base half-fat cream	701080	1
Dr. Wolff/ Gehe	Wolff [®] base half-fat cream	430880	1
Dr. Wolff/ Sanacorp	Wolff [®] base half-fat cream	434360	1
Dr. Wolff/AHD	Wolff [®] base half-fat cream	332040	4
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	608180	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	707370	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	810201	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	805720	1
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	609950	2
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	702500	3
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	707370	2
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	332040	6
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	438340	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	506360	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	609950	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	702500	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	701080	1
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	805720	2
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	333620	4
Dr. Wolff/V.d.L.	Wolff [®] base half-fat cream	430880	4
DR. Wolff;VDL;20.4.16;4...	Wolff [®] base half-fat cream	511420	3
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	510621	1
Dr. Wolff	Wolff [®] base half-fat cream	510400	1
Dr.A. Wolff, Sanacorp	Wolff [®] base half-fat cream	511420	2
Dr.A.Wolff	Wolff [®] base half-fat cream	601880	1

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Supplier	Substance	Batch	Spectra
Dr.A.Wolff/Gehe	Wolff [®] base half-fat cream	602290	1
Dr.August Wolff	Wolff [®] base half-fat cream	38800	1
Dr.August Wolff	Wolff [®] base half-fat cream	333620	1
Dr.August Wolff	Wolff [®] base half-fat cream	430880	1
Dr.August Wolff	Wolff [®] base half-fat cream	434360	1
Dr.August Wolff	Wolff [®] base half-fat cream	511420	1
Dr.August Wolff	Wolff [®] base half-fat cream	605700	1
Dr.August Wolff /Anzag	Wolff [®] base half-fat cream	8(810800)	1
Dr.August Wolff/AHD	Wolff [®] base half-fat cream	707370	1
Dr.August Wolff/Gehe	Wolff [®] base half-fat cream	704050	2
Dr.August Wolff/Phönix	Wolff [®] base half-fat cream	602050	3
Dr.August-Wolff/Kehr	Wolff [®] base half-fat cream	711250	2
Dr.Wolff/Sanacorp	Wolff [®] base half-fat cream	711250	1
Dr.wolff	Wolff [®] base half-fat cream	432611	1
Dr.Wolff	Wolff [®] base half-fat cream	236320	1
Dr.Wolff	Wolff [®] base half-fat cream	238560	2
Dr.Wolff	Wolff [®] base half-fat cream	236420	1
Dr.Wolff	Wolff [®] base half-fat cream	332040	11
Dr.Wolff	Wolff [®] base half-fat cream	333620	5
Dr.Wolff	Wolff [®] base half-fat cream	333930	2
Dr.Wolff	Wolff [®] base half-fat cream	339140	1
Dr.Wolff	Wolff [®] base half-fat cream	337260	1
Dr.Wolff	Wolff [®] base half-fat cream	431240	2
Dr.Wolff	Wolff [®] base half-fat cream	438160	1
Dr.Wolff	Wolff [®] base half-fat cream	12081508	1
Dr.Wolff	Wolff [®] base half-fat cream	501080	1
Dr.Wolff	Wolff [®] base half-fat cream	510400	1
Dr.Wolff	Wolff [®] base half-fat cream	506360	1
Dr.Wolff	Wolff [®] base half-fat cream	606050	3
Dr.Wolff	Wolff [®] base half-fat cream	610991	2
Dr.Wolff	Wolff [®] base half-fat cream	608180	1
Dr.Wolff	Wolff [®] base half-fat cream	701451	2
Dr.Wolff	Wolff [®] base half-fat cream	609950-20170704Ma5	1
Dr.Wolff	Wolff [®] base half-fat cream	701080	6
Dr.Wolff	Wolff [®] base half-fat cream	704050	1
Dr.Wolff	Wolff [®] base half-fat cream	704220	1
Dr.Wolff	Wolff [®] base half-fat cream	707370	1
Dr.Wolff	Wolff [®] base half-fat cream	807640	1
Dr.Wolff / Gehe	Wolff [®] base half-fat cream	705760	2
Dr.Wolff /Gehe	Wolff [®] base half-fat cream	501870	1
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	432611	1
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	434581	1
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	438160	1
Dr.Wolff/ Anzag	Wolff [®] base half-fat cream	235200	1
Dr.Wolff/ Jenne	Wolff [®] base half-fat cream	905120	1
Dr.Wolff/ Phoenix	Wolff [®] base half-fat cream	501470	2
Dr.Wolff/AHD	Wolff [®] base half-fat cream	606050	1
Dr.Wolff/AHD	Wolff [®] base half-fat cream	704050	2
Dr.Wolff/AHD	Wolff [®] base half-fat cream	7(702500)	1
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	238660	1
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	506360	2
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	602050	3
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	705760	2
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	601140	1
Dr.Wolff/Kehr	Wolff [®] base half-fat cream	707370	1
Dr.Wolff/NOW	Wolff [®] base half-fat cream	432611	1
Dr.Wolff/NOW	Wolff [®] base half-fat cream	434581	1
Dr.Wolff/Noweda	Wolff [®] base half-fat cream	234791	2
Dr.Wolff/Noweda	Wolff [®] base half-fat cream	238660	1
Dr.Wolff/Noweda	Wolff [®] base half-fat cream	333930	2

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Supplier	Substance	Batch	Spectra
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	434360	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	170420WBC/605551	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	170616WBC/610991	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	170920WBC/610991	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	705760	1
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	6081800	1
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	704050	2
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	807640	1
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	901920	1
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	333620	1
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	434360	1
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	608180	3
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	704050	3
Dr. Wolff/Spangro	Wolff [®] base half-fat cream	807640	1
Euro OTC	Wolff [®] base half-fat cream	703031	3
Euro OTC	Wolff [®] base half-fat cream	711240	1
Euro OTC	Wolff [®] base half-fat cream	510400	1
Euro/Gehe	Wolff [®] base half-fat cream	431050	1
Fagron	Wolff [®] base half-fat cream	703031	1
Fagron	Wolff [®] base half-fat cream	236320	3
Fagron	Wolff [®] base half-fat cream	238560	2
Fiebig	Wolff [®] base half-fat cream	605551	2
Fiebig	Wolff [®] base half-fat cream	810201	1
Fiebig	Wolff [®] base half-fat cream	901140	1
Fiebig/ Wolff	Wolff [®] base half-fat cream	701451	1
Fiebig/DR.Wolff	Wolff [®] base half-fat cream	610991	3
Fiebig/DR.Wolff	Wolff [®] base half-fat cream	707500	1
Fiebig/DR.Wolff	Wolff [®] base half-fat cream	711240	4
gehe	Wolff [®] base half-fat cream	807640	1
Gehe	Wolff [®] base half-fat cream	331551	2
Gehe	Wolff [®] base half-fat cream	431050	1
GEHE	Wolff [®] base half-fat cream	801140	2
GEHE	Wolff [®] base half-fat cream	807640	4
GEHE	Wolff [®] base half-fat cream	901920	2
Gehe Chiesi	Wolff [®] base half-fat cream	506360-20160615Ma6	1
Gehe,Wolff Pharma	Wolff [®] base half-fat cream	506360-20160615Ma8	1
Caelo	Wolff [®] base half-fat cream	606050	1
Gehe/ Wolff	Wolff [®] base half-fat cream	510400	1
Caelo	Wolff [®] base half-fat cream	601880	1
Gehe/Dr.Wolff	Wolff [®] base half-fat cream	704050	1
Gehe/Dr.Wolff	Wolff [®] base half-fat cream	801140	1
Hedinger/Noweda	Wolff [®] base half-fat cream	430880	2
Hedinger/Sanacorp	Wolff [®] base half-fat cream	705760	1
Jenne	Wolff [®] base half-fat cream	801470	4
Kehr/Dr.August Wolff	Wolff [®] base half-fat cream	705760	3
Kehr/Dr.August Wolff	Wolff [®] base half-fat cream	801470	1
Klosterring	Wolff [®] base half-fat cream	804080	1
Krieger	Wolff [®] base half-fat cream	705760	1
Löwen City-Apotheke Bar...	Wolff [®] base half-fat cream	230200	1
Noweda/Dr. Wolff	Wolff [®] base half-fat cream	605700	1
Noweda/Wolff GmbH	Wolff [®] base half-fat cream	602290	1
Phoenix	Wolff [®] base half-fat cream	434360	1
Phoenix	Wolff [®] base half-fat cream	511420	1
Phoenix	Wolff [®] base half-fat cream	602050	3
Phoenix	Wolff [®] base half-fat cream	702500	1
Phoenix/Wolff	Wolff [®] base half-fat cream	333930	1
Phönix	Wolff [®] base half-fat cream	238560	1
Phönix	Wolff [®] base half-fat cream	333620	2
PHÖNIX	Wolff [®] base half-fat cream	704050	4
Phönix Gotha	Wolff [®] base half-fat cream	134990	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Wolff [®] base half-fat cream	332040	2
Phönix WE: 22.09.17 EK...	Wolff [®] base half-fat cream	702500	1
Euro OTC	Wolff [®] base half-fat cream	602290	2
PPL	Wolff [®] base half-fat cream	701451	1
PPL	Wolff [®] base half-fat cream	705760	7
PPL	Wolff [®] base half-fat cream	601880	1
Sanacorp	Wolff [®] base half-fat cream	235200	2
Sanacorp	Wolff [®] base half-fat cream	701080	1
Sanacorp	Wolff [®] base half-fat cream	609950	1
Sanacorp	Wolff [®] base half-fat cream	702500	2
Sanacorp	Wolff [®] base half-fat cream	707370	4
Sanacorp	Wolff [®] base half-fat cream	705760	2
Sanacorp	Wolff [®] base half-fat cream	711250	11
Sanacorp	Wolff [®] base half-fat cream	805720	7
Sanacorp	Wolff [®] base half-fat cream	801470	1
Sanacorp,	Wolff [®] base half-fat cream	608180	2
sanacorp, 43,56EUR , 10.0...	Wolff [®] base half-fat cream	602050	4
Sanacorp/Dr Wolf	Wolff [®] base half-fat cream	810800	1
Sanacorp/Dr.Wolff	Wolff [®] base half-fat cream	501082	1
Spirig/Anzag	Wolff [®] base half-fat cream	234791	1
Taoasis	Wolff [®] base half-fat cream	602050	1
VDL 05.05.14 Fa.Wolff	Wolff [®] base half-fat cream	339140	1
WE: Sanacorp 18.10.2016...	Wolff [®] base half-fat cream	601880	1
Woff GmbH	Wolff [®] base half-fat cream	501080	1
Wolf	Wolff [®] base half-fat cream	511420	1
Wolf/Phönix	Wolff [®] base half-fat cream	430880	2
wolff	Wolff [®] base half-fat cream	431050	1
wolff	Wolff [®] base half-fat cream	431240	1
wolff	Wolff [®] base half-fat cream	801140	2
wolff	Wolff [®] base half-fat cream	610991	1
Wolff	Wolff [®] base half-fat cream	238660	1
Wolff	Wolff [®] base half-fat cream	430880	1
Wolff	Wolff [®] base half-fat cream	431240	2
Wolff	Wolff [®] base half-fat cream	436750	3
Wolff	Wolff [®] base half-fat cream	501080	3
Wolff	Wolff [®] base half-fat cream	501870	2
Wolff	Wolff [®] base half-fat cream	506360	1
Wolff	Wolff [®] base half-fat cream	601880	1
Wolff	Wolff [®] base half-fat cream	602290	2
Wolff	Wolff [®] base half-fat cream	606050	3
Wolff	Wolff [®] base half-fat cream	707500	4
Wolff	Wolff [®] base half-fat cream	801140	1
Wolff	Wolff [®] base half-fat cream	704050	1
Wolff	Wolff [®] base half-fat cream	711240	2
Wolff vdl 02.07.14	Wolff [®] base half-fat cream	430880	3
Wolff Basis Creme	Wolff [®] base half-fat cream	602290	1
Wolff Basiscreme	Wolff [®] base half-fat cream	707370	1
Wolff GmbH	Wolff [®] base half-fat cream	238560	1
Wolff GmbH	Wolff [®] base half-fat cream	230870	1
Wolff GmbH / Noweda	Wolff [®] base half-fat cream	434360	3
Wolff GmbH / Noweda	Wolff [®] base half-fat cream	501470	1
wolff GmbH/AHD 21.09.2015	Wolff [®] base half-fat cream	438340	1
Wolff GmbH/Sanacorp	Wolff [®] base half-fat cream	339140	1
Wolff vdl 09.01.15	Wolff [®] base half-fat cream	434360	2
Wolff/ Anzag	Wolff [®] base half-fat cream	501470	1
Wolff/ Gehe	Wolff [®] base half-fat cream	434360	1
Wolff/ Phönix	Wolff [®] base half-fat cream	430880	2
Wolff/AHD	Wolff [®] base half-fat cream	331551	8
Wolff/AHD	Wolff [®] base half-fat cream	332040	5
Wolff/AHD	Wolff [®] base half-fat cream	510621	1

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Supplier	Substance	Batch	Spectra
Wolff/AHD	Wolff [®] base half-fat cream	701451	2
Wolff/AHD	Wolff [®] base half-fat cream	711250	1
Wolff/AHD	Wolff [®] base half-fat cream	810800	1
Wolff/Alliance	Wolff [®] base half-fat cream	430880	1
Wolff/Alliance	Wolff [®] base half-fat cream	436750	1
Wolff/Alliance	Wolff [®] base half-fat cream	511420	1
Wolff/Gehe	Wolff [®] base half-fat cream	236420	1
Wolff/Gehe	Wolff [®] base half-fat cream	609950-20171106Ma8	1
Wolff/Gehe	Wolff [®] base half-fat cream	609950-20171127Ma9	1
Wolff/Gehe	Wolff [®] base half-fat cream	705760-20171127Ma10	1
Wolff/Gehe	Wolff [®] base half-fat cream	711250-W20190115Ma12	1
Wolff/Gehe 8.11.17	Wolff [®] base half-fat cream	702500-20180619Ma9	1
Wolff/Gehe 707370-20180...	Wolff [®] base half-fat cream	707370-20180830Ma9	1
Wolff/Jenne	Wolff [®] base half-fat cream	705760	2
Wolff/Jenne	Wolff [®] base half-fat cream	801470	1
Wolff/Noweda	Wolff [®] base half-fat cream	511420	1
Wolff/Noweda	Wolff [®] base half-fat cream	702500	1
Wolff/Phoenix	Wolff [®] base half-fat cream	4715E-03719	1
Wolff/Phönix	Wolff [®] base half-fat cream	501470	1
Wolff/Phönix	Wolff [®] base half-fat cream	438160	1
Wolff/Phönix	Wolff [®] base half-fat cream	608180	5
Wolff/Phönix	Wolff [®] base half-fat cream	711240	1
Wolff/Phönix	Wolff [®] base half-fat cream	807640	9
Wolff/Phönix	Wolff [®] base half-fat cream	807580	1
Wolff/Phönix	Wolff [®] base half-fat cream	901920	3
Wolff/Sanacorp	Wolff [®] base half-fat cream	238560	1
Wolff/Sanacorp	Wolff [®] base half-fat cream	501470	1
Wolff/Sanacorp	Wolff [®] base half-fat cream	602050	3
Wolff/Spangro	Wolff [®] base half-fat cream	801140	1
wolff/AHD	Wolff [®] base half-fat cream	431240	1
	Anionic hydrophilic cream DAB	293437	1
AHD 12.5.14, Preis 6,00	Anionic hydrophilic cream DAB		1
Caelo	Anionic hydrophilic cream DAB		27
Caelo	Anionic hydrophilic cream DAB	14138901	5
Caelo	Anionic hydrophilic cream DAB	154009	1
	Anionic hydrophilic cream DAB	285597	1
	Anionic hydrophilic cream SR...	277637	2
	Anionic hydrophilic cream SR...	110913	1
Euro OTC	Anionic hydrophilic cream SR...		3
Bombastus	Anionic hydrophilic cream SR...	280574	4
Bombastus	Anionic hydrophilic cream SR...	19000650	3
Bombastus	Anionic hydrophilic cream SR...		2
Bombastus	Anionic hydrophilic cream SR...	288882	5
	Anionic hydrophilic cream SR...	14182102	1
Caelo	Anionic hydrophilic cream SR...	14063303	2
Caelo	Anionic hydrophilic cream wi...	12221002	5
Caelo	Anionic hydrophilic cream wi...	13244401	13
Caelo	Anionic hydrophilic cream wi...	13343401	21
Caelo	Anionic hydrophilic cream wi...	14030701	27
Caelo	Anionic hydrophilic cream wi...	15048501	15
Sanacorp	Anionic hydrophilic cream wi...		1
	Base cream, hydrophobic DAC	141318	1
Caelo	Base cream, hydrophobic DAC	15221202	20
	Base cream, hydrophobic DAC	16293901	1
	Base cream, hydrophobic DAC	12229302	2
Caelo	Base cream, hydrophobic DAC	12151602	6
Caelo	Base cream, hydrophobic DAC	12308102	4
Caelo	Base cream, hydrophobic DAC	13085601	12
Caelo	Base cream, hydrophobic DAC	14028101	22
Fagron	Base cream, hydrophobic DAC	17C06-T08-042287	8

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Supplier	Substance	Batch	Spectra
	Base cream, hydrophobic DAC	160825	1
Pharmachem	Base cream, hydrophobic DAC	150404	3
Pharmachem	Base cream, hydrophobic DAC	160825	9
Phönix / InfectoPharm	Base cream, hydrophobic DAC		1
Caelo	Hydrophilic cream, non-ionic...	14304902	7
Caesar & Loretz GmbH	Hydrophilic cream, non-ionic...		1
Phönix	Hydrophilic cream, non-ionic...		1
apomix	Hydrophilic cream, non-ionic...	25B081215	1
Fagron	Transdermal base cream	12H17-T02-000281	1
Fagron	Transdermal base cream	15A28-T10-018922	3
Dr. August Wolff GmbH &...	Wolff® base half-fat cream		1
Dr. August Wolff GmbH &...	Wolff® base half-fat cream		1
Dr. Wolff	Wolff® base half-fat cream	331551	2
Dr. Wolff	Wolff® base half-fat cream	432611	1
Dr. Wolff	Wolff® base half-fat cream		1
Dr. Wolff/Gehe	Wolff® base half-fat cream		1
VDL 28.04.2014;Preis:45...	Wolff® base half-fat cream		1
Wolff, Gehe	Wolff® base half-fat cream		2
Wolff/Gehe	Wolff® base half-fat cream		1

- 123 029 spectra from 701 *Apo-Ident* customers from a total of 31 438 batches from a further 328 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Hydrophilic ointments* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Hydrophilic ointments* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	4530	0	51 829
Type B	0	11 783	0	57 491
Type C	0	15 038	286	122 892

The substance/substance group *Hydrophilic ointments* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.8675 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.9491 %)
Type C	100.0000 % (> 99.6531 %)	98.1336 % (> 98.1141 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Hydrophilic ointments* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Non-ionic hydrophil ointment	19.70	—
Lanette [®] ointment (conserved)	22.04	—
Glycolic acid 70%	24.64	—
Psorisol base cream Audor [®]	29.13	—
Hydrated liniment SR/DAC (NRF p.40)	33.25	—
Non-ionic hydrous liniment SR/DAC (NRF...	37.68	—
Potash soap DAC	41.36	—
Sodium laureth sulfate solution 27%	46.08	—
Gel Cordes [®]	47.59	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Hydrophilic ointments* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34680	31039	7.45	29.51
31008	31008	0.00	21.19
31042	32032	9.01	23.00
32346	31008	5.47	21.72
31040	31503	4.94	27.85
31503	31503	0.00	30.09
33295	31503	5.32	27.26
32620	32620	0.00	37.97
32621	32621	0.00	23.45
32882	32882	0.00	38.45
30880	31741	6.50	28.27
31231	31231	0.00	31.78
31241	31741	3.31	34.07
31470	32131	2.32	32.58
30631	30837	8.52	33.59
31741	31741	0.00	31.27
30837	30837	0.00	32.73
32129	32129	0.00	33.87
34689	30837	11.59	30.79
32130	32130	0.00	24.56
32131	32131	0.00	33.04
32132	32132	0.00	30.23

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32141	32141	0.00	34.51
31487	30837	18.32	30.67
32142	32142	0.00	19.70
31568	30769	4.78	25.88
30769	30769	0.00	25.89
31477	31188	3.37	25.02
31593	31996	3.62	26.28
31996	31996	0.00	26.57
34508	31996	4.26	27.08
34525	31996	6.69	25.81
30758	31907	6.60	35.41
30931	31478	10.80	30.74
31002	31907	3.12	33.87
31478	31478	0.00	27.87
31644	31799	3.24	35.53
31799	31799	0.00	35.32
31591	32124	5.46	24.90
31906	31906	0.00	33.11
31907	31907	0.00	33.64
32303	31799	2.15	33.41
33595	33595	0.00	35.73
33354	33354	0.00	33.79
33964	31799	8.72	37.63
34598	31907	3.75	33.45
31515	31515	0.00	37.85
34267	34267	0.00	35.10
31188	31188	0.00	26.08
34544	34544	0.00	32.96
31500	31500	0.00	27.83
31516	32387	11.94	33.57
31565	31996	8.14	29.00
31599	31188	2.59	25.82
31962	32029	10.81	33.08
34683	31500	5.01	26.07
31086	30837	12.14	31.02
31440	31440	0.00	26.23
32022	32022	0.00	27.89
32023	32023	0.00	28.15
32024	32024	0.00	29.06
32025	32025	0.00	29.09
31537	31537	0.00	32.06
32026	32026	0.00	28.27
31661	32126	6.88	35.03
32027	32027	0.00	29.15
34681	32115	1.48	24.45
32028	32028	0.00	27.97
32029	32029	0.00	29.33
32030	32030	0.00	29.24
32031	32031	0.00	28.16
30895	32387	5.58	31.53
32032	32032	0.00	28.63

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31054	31054	0.00	29.86
32038	32038	0.00	29.43
31450	32115	3.19	24.44
32039	32039	0.00	22.04
32115	32115	0.00	24.52
32052	32052	0.00	27.44
32116	32116	0.00	24.48
32053	32053	0.00	27.49
32123	32123	0.00	26.50
32435	32435	0.00	27.51
32124	32124	0.00	25.93
32436	32436	0.00	28.10
32125	32125	0.00	25.25
32126	32126	0.00	26.52
32127	32127	0.00	25.49
32128	32128	0.00	25.40
32225	32225	0.00	24.96
32386	32386	0.00	25.56
32387	32387	0.00	26.76
34506	32115	2.56	26.26
34507	32115	2.02	26.18
31039	31039	0.00	28.22
31600	31039	6.89	29.55
33641	32053	10.20	30.09

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Hydroxyethyl salicylate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30638-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Hydroxyethyl salicylate; Hydroxyethylis salicylas

Special notes

When selecting the *Hydroxyethyl salicylate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Hydroxyethyl salicylate	3	3	5

Second-stage model

For differentiation of the substance/substance group *Hydroxyethyl salicylate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Hydroxyethyl salicylate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Hydroxyethyl sal...	12049001	30638	40	1402192
Caelo	Hydroxyethyl sal...	13285709	31339	40	20130918
Caelo	Hydroxyethyl sal...	191112	34651	40	20190606*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 3 reference samples from the substance/substance group *Hydroxyethyl salicylate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 239 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Hydroxyethyl salicylate*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydroxyethyl salicylate	16131002	32588	40
Caelo	Hydroxyethyl salicylate	16131009	33241	40
Caelo	Hydroxyethyl salicylate	172740	34226	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 6 spectra from 6 *Apo-Ident* customers from 5 batches from the substance/substance group *Hydroxyethyl salicylate*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Hydroxyethyl salicylate	2091302	1
Caelo	Hydroxyethyl salicylate	13285702	2
Caelo	Hydroxyethyl salicylate	15414906	1
Caelo	Hydroxyethyl salicylate	16131002	1
Caelo	Hydroxyethyl salicylate	16131011	1

- 138 347 spectra from 703 *Apo-Ident* customers from a total of 35 290 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Hydroxyethyl salicylate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Hydroxyethyl salicylate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	120	0	69 354
Type C	0	6	0	138 347

The substance/substance group *Hydroxyethyl salicylate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6467 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Hydroxyethyl salicylate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Benzyl alcohol	142.22	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Hydroxyethyl salicylate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30638	30638	0.00	213.43
31339	34651	7.94	226.21
34651	34651	0.00	214.32

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Isopropyl alcohol 100%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30759-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Isopropyl alcohol 100%; Alcohol isopropylicus 100%

Special notes

When selecting the *Isopropyl alcohol 100%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Isopropyl alcohol 100%	6	1	940

Second-stage model

For differentiation of the substance/substance group *Isopropyl alcohol 100%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Isopropyl alcohol 100%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Isopropyl alcoho...	4103112	31517	60	1505476
Caelo	Isopropyl alcoho...	12321002	30759	40	20121102
Caelo	Isopropyl alcoho...	13249425	31232	40	20130726
Caelo	Isopropyl alcoho...	14051031	31386	40	20140214
Hedinger	Isopropyl alcoho...	070835B	32817	40	20160712
Hedinger	Isopropyl alcoho...	070922B	33256	40	20170307

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 260 spectra of 6 reference samples from the substance/substance group *Isopropyl alcohol 100%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 6 different batches.
- 56099 spectra from a total of 1110 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Isopropyl alcohol 100%*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl alcohol 100%	17300401	33938	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2224 spectra from 471 *Apo-Ident* customers from 961 batches from the substance/substance group *Isopropyl alcohol 100%*.
- Among them are spectra of independent samples from 939 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
070879B	Isopropyl alcohol 100%	70879B	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	70614B	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	707158	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	708358	1
A. Hedinger / Noweda	Isopropyl alcohol 100%	706598	2
A. Hedinger/Kehr	Isopropyl alcohol 100%	709088	1
A.Hedinger / Kehr	Isopropyl alcohol 100%	70659B	1
AHD	Isopropyl alcohol 100%	70614B	1
AHD	Isopropyl alcohol 100%	70643B	1
AHD	Isopropyl alcohol 100%	70892B	1
AHD	Isopropyl alcohol 100%	70898B	1
AHD	Isopropyl alcohol 100%	70994B	1
AHD	Isopropyl alcohol 100%	7011148	1
AHD /Hedinger	Isopropyl alcohol 100%	70666B	1
AHD/Hedinger	Isopropyl alcohol 100%	70763B	1
Caelo	Isopropyl alcohol 100%	14369313	3
AHL	Isopropyl alcohol 100%	70835B	1
AHL	Isopropyl alcohol 100%	709558	1
Allianc. Health. / Hedi...	Isopropyl alcohol 100%	70762B	1
Allianc. Healthc. / Hed...	Isopropyl alcohol 100%	70730B	1
Allianc. Healthc. / Hed...	Isopropyl alcohol 100%	70837B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70536B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70577B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70578B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70627B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70680B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	701031B	1
Caelo	Isopropyl alcohol 100%	14219204	2
Allianz Healthcare	Isopropyl alcohol 100%	70896b	1
Anzag	Isopropyl alcohol 100%	70471B	1
Anzag	Isopropyl alcohol 100%	70459B	1
Anzag	Isopropyl alcohol 100%	70495B	1
Anzag	Isopropyl alcohol 100%	7059B	1
Anzag	Isopropyl alcohol 100%	70578B	2
Anzag	Isopropyl alcohol 100%	14717	1
Anzag	Isopropyl alcohol 100%	14716	1
Anzag	Isopropyl alcohol 100%	70720B	1

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Supplier	Substance	Batch	Spectra
Anzag	Isopropyl alcohol 100%	701020B	1
Anzag 08.02.2013	Isopropyl alcohol 100%	70500B	1
Caelo	Isopropyl alcohol 100%	12179311	1
Caelo	Isopropyl alcohol 100%	6324064	1
Anzag/Hedinger	Isopropyl alcohol 100%	70495B	1
Anzag/Hedinger	Isopropyl alcohol 100%	70562B	1
Anzag/Hedinger	Isopropyl alcohol 100%	70592B	1
Anzag/Hedinger	Isopropyl alcohol 100%	70835B	1
Anzag/Seeger	Isopropyl alcohol 100%	70527B	1
Apoth.E.Bartel	Isopropyl alcohol 100%	70545B	2
Audor Pharma	Isopropyl alcohol 100%	70720B	2
Aug. Hedinger GmbH & Co...	Isopropyl alcohol 100%	501114B	1
Aug. Hedinger GmbH & Co...	Isopropyl alcohol 100%	70768B	1
Aug. hedinger/N/PZN:074...	Isopropyl alcohol 100%	70659B	1
Aug.Hedinger/Anzag	Isopropyl alcohol 100%	7010318	1
Aug.Hedinger/Noweda	Isopropyl alcohol 100%	70488B	1
August Hedinger	Isopropyl alcohol 100%	70675B	1
August Hedinger/Sanacorp	Isopropyl alcohol 100%	701136B	1
Bahnhof-Apothek/Bahnhof...	Isopropyl alcohol 100%	701052B	1
Bartel/Gehe	Isopropyl alcohol 100%	70788B	2
Bergchemie	Isopropyl alcohol 100%	14134711	1
Bombastus	Isopropyl alcohol 100%	70767B	1
Bombastus	Isopropyl alcohol 100%	7474936	1
Cae	Isopropyl alcohol 100%	18178229	1
Caelo	Isopropyl alcohol 100%	7776	1
Caelo	Isopropyl alcohol 100%	543892	1
Caelo	Isopropyl alcohol 100%	7411	1
Caelo	Isopropyl alcohol 100%	13050904	1
Caelo	Isopropyl alcohol 100%	70541b	1
Caelo	Isopropyl alcohol 100%	13249435	3
Caelo	Isopropyl alcohol 100%	15300910	1
Caelo	Isopropyl alcohol 100%	14369312	2
Caelo	Isopropyl alcohol 100%	15057511	2
Caelo	Isopropyl alcohol 100%	70889B	1
Caelo	Isopropyl alcohol 100%	17189313	2
Caelo	Isopropyl alcohol 100%	15031801	1
Caelo	Isopropyl alcohol 100%	11371204	1
Caelo	Isopropyl alcohol 100%	11311602	1
Caelo	Isopropyl alcohol 100%	29051202	1
Caelo	Isopropyl alcohol 100%	25061201	1
Caelo	Isopropyl alcohol 100%	24071201	1
Caelo	Isopropyl alcohol 100%	6071201	1
Caelo	Isopropyl alcohol 100%	11371212	1
Caelo	Isopropyl alcohol 100%	6081204	1
Caelo	Isopropyl alcohol 100%	20081204	1
Caelo	Isopropyl alcohol 100%	4091201	1
Caelo	Isopropyl alcohol 100%	12179317	2
Caelo	Isopropyl alcohol 100%	22091203	1
Caelo	Isopropyl alcohol 100%	31101204	1
Caelo	Isopropyl alcohol 100%	22111204	1
Caelo	Isopropyl alcohol 100%	12254708	1
Caelo	Isopropyl alcohol 100%	12254727	2
Caelo	Isopropyl alcohol 100%	70492B	2
Caelo	Isopropyl alcohol 100%	12254703	1
Caelo	Isopropyl alcohol 100%	12254722	1
Caelo	Isopropyl alcohol 100%	22121201	1
Caelo	Isopropyl alcohol 100%	20060912-4	1
Caelo	Isopropyl alcohol 100%	12254729	1
Caelo	Isopropyl alcohol 100%	22011302	1
Caelo	Isopropyl alcohol 100%	2201201301	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	12254702	1
Caelo	Isopropyl alcohol 100%	11371217	1
Caelo	Isopropyl alcohol 100%	12321031	1
Caelo	Isopropyl alcohol 100%	12321030	2
Caelo	Isopropyl alcohol 100%	12254724	1
Caelo	Isopropyl alcohol 100%	713Q-01079	1
Caelo	Isopropyl alcohol 100%	12254719	1
Caelo	Isopropyl alcohol 100%	12379526	2
Caelo	Isopropyl alcohol 100%	21021311	1
Caelo	Isopropyl alcohol 100%	28021316	1
Caelo	Isopropyl alcohol 100%	12379504	1
Caelo	Isopropyl alcohol 100%	12379525	2
Caelo	Isopropyl alcohol 100%	5031303	1
Caelo	Isopropyl alcohol 100%	12379520	2
Caelo	Isopropyl alcohol 100%	18041306	1
Caelo	Isopropyl alcohol 100%	12379518	2
Caelo	Isopropyl alcohol 100%	10051302	1
Caelo	Isopropyl alcohol 100%	13050914	2
Caelo	Isopropyl alcohol 100%	13050925	2
Caelo	Isopropyl alcohol 100%	12379510	1
Caelo	Isopropyl alcohol 100%	6061320	1
Caelo	Isopropyl alcohol 100%	750520B	1
Caelo	Isopropyl alcohol 100%	13050928	1
Caelo	Isopropyl alcohol 100%	1071301	1
Caelo	Isopropyl alcohol 100%	13050917	2
Caelo	Isopropyl alcohol 100%	705408	1
Caelo	Isopropyl alcohol 100%	13071304	1
Caelo	Isopropyl alcohol 100%	13050927	1
Caelo	Isopropyl alcohol 100%	13050922	1
Caelo	Isopropyl alcohol 100%	13050929	1
Caelo	Isopropyl alcohol 100%	6081303	1
Caelo	Isopropyl alcohol 100%	28081302	1
Caelo	Isopropyl alcohol 100%	13148021	1
Caelo	Isopropyl alcohol 100%	12091305	1
Caelo	Isopropyl alcohol 100%	13249407	1
Caelo	Isopropyl alcohol 100%	13249429	2
Caelo	Isopropyl alcohol 100%	9101314	1
Caelo	Isopropyl alcohol 100%	13249404	1
Caelo	Isopropyl alcohol 100%	13050911	1
Caelo	Isopropyl alcohol 100%	13249420	1
Caelo	Isopropyl alcohol 100%	13249423	1
Caelo	Isopropyl alcohol 100%	13249427	1
Caelo	Isopropyl alcohol 100%	29101304	1
Caelo	Isopropyl alcohol 100%	705538	2
Caelo	Isopropyl alcohol 100%	13249416	1
Caelo	Isopropyl alcohol 100%	13249405	1
Caelo	Isopropyl alcohol 100%	13336911	1
Caelo	Isopropyl alcohol 100%	13336924	1
Caelo	Isopropyl alcohol 100%	30111303	1
Caelo	Isopropyl alcohol 100%	13249432	1
Caelo	Isopropyl alcohol 100%	10121304	1
Caelo	Isopropyl alcohol 100%	13336914	1
Caelo	Isopropyl alcohol 100%	13336938	3
Caelo	Isopropyl alcohol 100%	13336939	2
Caelo	Isopropyl alcohol 100%	2011403	1
Caelo	Isopropyl alcohol 100%	13397304	2
Caelo	Isopropyl alcohol 100%	8012014E	1
Caelo	Isopropyl alcohol 100%	13336941	2
Caelo	Isopropyl alcohol 100%	16011406	1
Caelo	Isopropyl alcohol 100%	13336945	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	30011401	1
Caelo	Isopropyl alcohol 100%	13397305	1
Caelo	Isopropyl alcohol 100%	13397316	2
Caelo	Isopropyl alcohol 100%	13021409	1
Caelo	Isopropyl alcohol 100%	13397312	2
Caelo	Isopropyl alcohol 100%	13336913	1
Caelo	Isopropyl alcohol 100%	13397323	1
Caelo	Isopropyl alcohol 100%	13397327	2
Caelo	Isopropyl alcohol 100%	4031405	1
Caelo	Isopropyl alcohol 100%	13397330	6
Caelo	Isopropyl alcohol 100%	13397303	1
Caelo	Isopropyl alcohol 100%	12041402	1
Caelo	Isopropyl alcohol 100%	7051401	1
Caelo	Isopropyl alcohol 100%	13336927	1
Caelo	Isopropyl alcohol 100%	14051012	2
Caelo	Isopropyl alcohol 100%	19051405	1
Caelo	Isopropyl alcohol 100%	4061401	1
Caelo	Isopropyl alcohol 100%	5061415	1
Caelo	Isopropyl alcohol 100%	6061402	1
Caelo	Isopropyl alcohol 100%	140510265	1
Caelo	Isopropyl alcohol 100%	14051019	1
Caelo	Isopropyl alcohol 100%	29071401	1
Caelo	Isopropyl alcohol 100%	14051036	1
Caelo	Isopropyl alcohol 100%	8082014C	1
Caelo	Isopropyl alcohol 100%	14219202	1
Caelo	Isopropyl alcohol 100%	11091401	1
Caelo	Isopropyl alcohol 100%	14219212	2
Caelo	Isopropyl alcohol 100%	27091401	1
Caelo	Isopropyl alcohol 100%	10101403	1
Caelo	Isopropyl alcohol 100%	70573B	1
Caelo	Isopropyl alcohol 100%	14219206	2
Caelo	Isopropyl alcohol 100%	14219215	2
Caelo	Isopropyl alcohol 100%	14219214	2
Caelo	Isopropyl alcohol 100%	15111401	1
Caelo	Isopropyl alcohol 100%	14219229	1
Caelo	Isopropyl alcohol 100%	21111402	1
Caelo	Isopropyl alcohol 100%	14219222	3
Caelo	Isopropyl alcohol 100%	14219218	1
Caelo	Isopropyl alcohol 100%	14278923	4
Caelo	Isopropyl alcohol 100%	13121401	1
Caelo	Isopropyl alcohol 100%	10011502	1
Caelo	Isopropyl alcohol 100%	29011505	1
Caelo	Isopropyl alcohol 100%	15057505	2
Caelo	Isopropyl alcohol 100%	14369370	1
Caelo	Isopropyl alcohol 100%	15057508	1
Caelo	Isopropyl alcohol 100%	70701B	1
Caelo	Isopropyl alcohol 100%	15171314	2
Caelo	Isopropyl alcohol 100%	15171315	1
Caelo	Isopropyl alcohol 100%	15171303	6
Caelo	Isopropyl alcohol 100%	15171333	2
Caelo	Isopropyl alcohol 100%	15300904	2
Caelo	Isopropyl alcohol 100%	15300918	1
Caelo	Isopropyl alcohol 100%	15300926	1
Caelo	Isopropyl alcohol 100%	15300930	1
Caelo	Isopropyl alcohol 100%	15398813	1
Caelo	Isopropyl alcohol 100%	15398806	3
Caelo	Isopropyl alcohol 100%	16039903	1
Caelo	Isopropyl alcohol 100%	16039913	1
Caelo	Isopropyl alcohol 100%	16039919	1
Caelo	Isopropyl alcohol 100%	16137322	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	16234002	1
Caelo	Isopropyl alcohol 100%	16137326	1
Caelo	Isopropyl alcohol 100%	16234001	3
Caelo	Isopropyl alcohol 100%	16234004	4
Caelo	Isopropyl alcohol 100%	16137334	1
Caelo	Isopropyl alcohol 100%	16234031	1
Caelo	Isopropyl alcohol 100%	17044001	1
Caelo	Isopropyl alcohol 100%	70957B	1
Caelo	Isopropyl alcohol 100%	21091702	1
Caelo	Isopropyl alcohol 100%	6101704	1
Caelo	Isopropyl alcohol 100%	19101702	1
Caelo	Isopropyl alcohol 100%	13407304	1
Caelo	Isopropyl alcohol 100%	14219233	1
Caelo	Isopropyl alcohol 100%	70663B	1
Caelo	Isopropyl alcohol 100%	25021501	1
Caelo	Isopropyl alcohol 100%	14369325	1
Caelo	Isopropyl alcohol 100%	14031501	1
Caelo	Isopropyl alcohol 100%	27031502	1
Caelo	Isopropyl alcohol 100%	14369326	2
Caelo	Isopropyl alcohol 100%	14369319	1
Caelo	Isopropyl alcohol 100%	30041508	1
Caelo	Isopropyl alcohol 100%	19051503	1
Caelo	Isopropyl alcohol 100%	10061507	1
Caelo	Isopropyl alcohol 100%	15057528	2
Caelo	Isopropyl alcohol 100%	15057503	1
Caelo	Isopropyl alcohol 100%	15171306	1
Caelo	Isopropyl alcohol 100%	15057520	1
Caelo	Isopropyl alcohol 100%	15171304	2
Caelo	Isopropyl alcohol 100%	15057514	1
Caelo	Isopropyl alcohol 100%	15171327	1
Caelo	Isopropyl alcohol 100%	14134721	1
Caelo	Isopropyl alcohol 100%	12081505	1
Caelo	Isopropyl alcohol 100%	31081501	1
Caelo	Isopropyl alcohol 100%	15171341	3
Caelo	Isopropyl alcohol 100%	14219216	1
Caelo	Isopropyl alcohol 100%	15171307	1
Caelo	Isopropyl alcohol 100%	15057513	1
Caelo	Isopropyl alcohol 100%	15300902	1
Caelo	Isopropyl alcohol 100%	70726B	1
Caelo	Isopropyl alcohol 100%	15171332	1
Caelo	Isopropyl alcohol 100%	15300923	1
Caelo	Isopropyl alcohol 100%	15398804	3
Caelo	Isopropyl alcohol 100%	15398826	1
Caelo	Isopropyl alcohol 100%	707998	1
Caelo	Isopropyl alcohol 100%	70768b	1
Caelo	Isopropyl alcohol 100%	883588	1
Caelo	Isopropyl alcohol 100%	16039907	2
Caelo	Isopropyl alcohol 100%	15398812	1
Caelo	Isopropyl alcohol 100%	16039906	2
Caelo	Isopropyl alcohol 100%	16039935	1
Caelo	Isopropyl alcohol 100%	707838	1
Caelo	Isopropyl alcohol 100%	16039936	2
Caelo	Isopropyl alcohol 100%	16137308	3
Caelo	Isopropyl alcohol 100%	16137302	4
Caelo	Isopropyl alcohol 100%	1603997	1
Caelo	Isopropyl alcohol 100%	70799B	1
Caelo	Isopropyl alcohol 100%	15398823	1
Caelo	Isopropyl alcohol 100%	16137304	3
Caelo	Isopropyl alcohol 100%	70609B	1
Caelo	Isopropyl alcohol 100%	16137311	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	16137329	3
Caelo	Isopropyl alcohol 100%	16137305	3
Caelo	Isopropyl alcohol 100%	16137332	2
Caelo	Isopropyl alcohol 100%	16234009	1
Caelo	Isopropyl alcohol 100%	6137305	1
Caelo	Isopropyl alcohol 100%	16137330	1
Caelo	Isopropyl alcohol 100%	16234023	1
Caelo	Isopropyl alcohol 100%	16137325/161123AI	1
Caelo	Isopropyl alcohol 100%	16234013	1
Caelo	Isopropyl alcohol 100%	16310609	2
Caelo	Isopropyl alcohol 100%	20011703	1
Caelo	Isopropyl alcohol 100%	16234018	1
Caelo	Isopropyl alcohol 100%	16310604	1
Caelo	Isopropyl alcohol 100%	16234011	1
Caelo	Isopropyl alcohol 100%	16310614	1
Caelo	Isopropyl alcohol 100%	16310623	2
Caelo	Isopropyl alcohol 100%	16310601	1
Caelo	Isopropyl alcohol 100%	14031701	1
Caelo	Isopropyl alcohol 100%	16310622	4
Caelo	Isopropyl alcohol 100%	9041704	1
Caelo	Isopropyl alcohol 100%	16310607	3
Caelo	Isopropyl alcohol 100%	16310611	1
Caelo	Isopropyl alcohol 100%	2051704	1
Caelo	Isopropyl alcohol 100%	26051704	1
Caelo	Isopropyl alcohol 100%	nichtvorhanden	1
Caelo	Isopropyl alcohol 100%	170440015277	1
Caelo	Isopropyl alcohol 100%	17061706	1
Caelo	Isopropyl alcohol 100%	17044029	1
Caelo	Isopropyl alcohol 100%	17044028	2
Caelo	Isopropyl alcohol 100%	3071718	1
Caelo	Isopropyl alcohol 100%	17044025	1
Caelo	Isopropyl alcohol 100%	27071712	1
Caelo	Isopropyl alcohol 100%	17044013	1
Caelo	Isopropyl alcohol 100%	17189301	2
Caelo	Isopropyl alcohol 100%	26081710	1
Caelo	Isopropyl alcohol 100%	70959B	2
Caelo	Isopropyl alcohol 100%	17044035	2
Caelo	Isopropyl alcohol 100%	17189316	1
Caelo	Isopropyl alcohol 100%	70959b	1
Caelo	Isopropyl alcohol 100%	17189317	2
Caelo	Isopropyl alcohol 100%	16234020	1
Caelo	Isopropyl alcohol 100%	17044023	1
Caelo	Isopropyl alcohol 100%	17189319	5
Caelo	Isopropyl alcohol 100%	15111740	1
Caelo	Isopropyl alcohol 100%	2121705	1
Caelo	Isopropyl alcohol 100%	1007031	1
Caelo	Isopropyl alcohol 100%	17189322	1
Caelo	Isopropyl alcohol 100%	27121702	1
Caelo	Isopropyl alcohol 100%	17300409	1
Caelo	Isopropyl alcohol 100%	17300405	1
Caelo	Isopropyl alcohol 100%	17300412	3
Caelo	Isopropyl alcohol 100%	13011808	1
Caelo	Isopropyl alcohol 100%	171893045391	1
Caelo	Isopropyl alcohol 100%	17189334	2
Caelo	Isopropyl alcohol 100%	19021807	1
Caelo	Isopropyl alcohol 100%	17300433	1
Caelo	Isopropyl alcohol 100%	1017410092	2
Caelo	Isopropyl alcohol 100%	17300431	2
Caelo	Isopropyl alcohol 100%	7041802	1
Caelo	Isopropyl alcohol 100%	18065402	3

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	18065414	2
Caelo	Isopropyl alcohol 100%	25041802	1
Caelo	Isopropyl alcohol 100%	17051802	1
Caelo	Isopropyl alcohol 100%	18065404	2
Caelo	Isopropyl alcohol 100%	25051802	1
Caelo	Isopropyl alcohol 100%	18065401	2
Caelo	Isopropyl alcohol 100%	18065408	1
Caelo	Isopropyl alcohol 100%	17300423	1
Caelo	Isopropyl alcohol 100%	16061804	1
Caelo	Isopropyl alcohol 100%	9061812	1
Caelo	Isopropyl alcohol 100%	701035B	1
Caelo	Isopropyl alcohol 100%	9071802	1
Caelo	Isopropyl alcohol 100%	17189333	1
Caelo	Isopropyl alcohol 100%	1865430	1
Caelo	Isopropyl alcohol 100%	701043B	2
Caelo	Isopropyl alcohol 100%	18065420	2
Caelo	Isopropyl alcohol 100%	18065432	2
Caelo	Isopropyl alcohol 100%	18065425	1
Caelo	Isopropyl alcohol 100%	16081810	1
Caelo	Isopropyl alcohol 100%	3091801	1
Caelo	Isopropyl alcohol 100%	13091802	1
Caelo	Isopropyl alcohol 100%	29091801	1
Caelo	Isopropyl alcohol 100%	13101801	1
Caelo	Isopropyl alcohol 100%	7111802	1
Caelo	Isopropyl alcohol 100%	18178220	1
Caelo	Isopropyl alcohol 100%	18178215	1
Caelo	Isopropyl alcohol 100%	28111806	1
Caelo	Isopropyl alcohol 100%	4121802	1
Caelo	Isopropyl alcohol 100%	18178235	1
Caelo	Isopropyl alcohol 100%	19121805	1
Caelo	Isopropyl alcohol 100%	18178217	2
Caelo	Isopropyl alcohol 100%	19121806	1
Caelo	Isopropyl alcohol 100%	18291712	1
Caelo	Isopropyl alcohol 100%	18178231	1
Caelo	Isopropyl alcohol 100%	18291705	2
Caelo	Isopropyl alcohol 100%	18291703	1
Caelo	Isopropyl alcohol 100%	18178226	2
Caelo	Isopropyl alcohol 100%	19059507	1
Caelo	Isopropyl alcohol 100%	14369311	1
Caelo	Isopropyl alcohol 100%	15171329	2
Caelo	Isopropyl alcohol 100%	14051016	1
Caelo	Isopropyl alcohol 100%	18065429	1
Caelo	Isopropyl alcohol 100%	14051017	1
Caelo	Isopropyl alcohol 100%	15057502	1
Caelo	Isopropyl alcohol 100%	12031106	1
Caelo	Isopropyl alcohol 100%	12112224	3
Caelo	Isopropyl alcohol 100%	17300418	1
Caelo	Isopropyl alcohol 100%	13148012	1
Caelo	Isopropyl alcohol 100%	14134716	3
Caelo	Isopropyl alcohol 100%	14219213	3
Caelo	Isopropyl alcohol 100%	13148019	3
Caelo	Isopropyl alcohol 100%	70584B	1
Caelo	Isopropyl alcohol 100%	14051018	1
Caelo	Isopropyl alcohol 100%	14134705	2
Caelo	Isopropyl alcohol 100%	14369303	1
Caelo	Isopropyl alcohol 100%	70598b	1
Caelo	Isopropyl alcohol 100%	14369306	1
Caelo	Isopropyl alcohol 100%	13148024	1
Caelo	Isopropyl alcohol 100%	13336943	2
Caelo	Isopropyl alcohol 100%	14051026	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	13336916	1
Caelo	Isopropyl alcohol 100%	70656B	1
Caelo	Isopropyl alcohol 100%	14278905	2
Caelo	Isopropyl alcohol 100%	16234005	2
Caelo	Isopropyl alcohol 100%	16039905	1
Caelo	Isopropyl alcohol 100%	12379515	2
Caelo	Isopropyl alcohol 100%	13148028	1
Caelo	Isopropyl alcohol 100%	13249414	2
Caelo	Isopropyl alcohol 100%	13249413	2
Caelo	Isopropyl alcohol 100%	13249424	1
Caelo	Isopropyl alcohol 100%	701031B	1
Caelo	Isopropyl alcohol 100%	12321016	1
Caelo	Isopropyl alcohol 100%	12379501	1
Caelo	Isopropyl alcohol 100%	13249430	1
Caelo	Isopropyl alcohol 100%	13050920	1
Caelo	Isopropyl alcohol 100%	15398828	1
Caelo	Isopropyl alcohol 100%	19059527	1
Caelo	Isopropyl alcohol 100%	18291702	1
Caelo	Isopropyl alcohol 100%	16039921	1
Caelo	Isopropyl alcohol 100%	1329423	1
Caelo	Isopropyl alcohol 100%	14219228	2
Caelo	Isopropyl alcohol 100%	15300921	1
Caelo	Isopropyl alcohol 100%	13249401	1
Caelo	Isopropyl alcohol 100%	16137303	1
Caelo	Isopropyl alcohol 100%	14219224	1
Caelo	Isopropyl alcohol 100%	14369317	2
Caelo	Isopropyl alcohol 100%	15498831	1
Caelo	Isopropyl alcohol 100%	12379502	2
Caelo	Isopropyl alcohol 100%	12321032	1
Caelo	Isopropyl alcohol 100%	13148004	1
Caelo	Isopropyl alcohol 100%	13249434	1
Caelo	Isopropyl alcohol 100%	15171301	1
Caelo	Isopropyl alcohol 100%	12321020	1
Caelo	Isopropyl alcohol 100%	14219209	1
Caelo	Isopropyl alcohol 100%	15171311	2
Caelo	Isopropyl alcohol 100%	708188	1
Caelo	Isopropyl alcohol 100%	70953B	1
Caelo	Isopropyl alcohol 100%	701071B	1
Caelo	Isopropyl alcohol 100%	1517308	1
Caelo	Isopropyl alcohol 100%	152(18065412)	1
Caelo	Isopropyl alcohol 100%	153(18291713)	1
Caelo	Isopropyl alcohol 100%	18178207	1
Caelo	Isopropyl alcohol 100%	16310610	3
Caelo	Isopropyl alcohol 100%	13249403	1
Caelo	Isopropyl alcohol 100%	13397311	1
Caelo	Isopropyl alcohol 100%	16039922	2
Caelo	Isopropyl alcohol 100%	12321022	1
Caelo	Isopropyl alcohol 100%	13249415	2
Caelo	Isopropyl alcohol 100%	70564B	1
Caelo	Isopropyl alcohol 100%	13397332	2
Caelo	Isopropyl alcohol 100%	16137307	1
Caelo	Isopropyl alcohol 100%	17189330	4
Caelo	Isopropyl alcohol 100%	18178224	1
Caelo	Isopropyl alcohol 100%	18178234	1
Caelo	Isopropyl alcohol 100%	14051022	1
Caelo	Isopropyl alcohol 100%	13148006	1
Caelo	Isopropyl alcohol 100%	70555B	1
Caelo	Isopropyl alcohol 100%	15057507	1
Caelo	Isopropyl alcohol 100%	70755B	2
Caelo	Isopropyl alcohol 100%	70748B	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	18291701	1
Caelo	Isopropyl alcohol 100%	12179321	1
Caelo	Isopropyl alcohol 100%	16137317	2
Caelo	Isopropyl alcohol 100%	180654035690	1
Caelo	Isopropyl alcohol 100%	14278926	4
Caelo	Isopropyl alcohol 100%	15057526	1
Caelo	Isopropyl alcohol 100%	15398803	2
Caelo	Isopropyl alcohol 100%	17044006	1
Caelo	Isopropyl alcohol 100%	14278914	1
Caelo	Isopropyl alcohol 100%	17189305	2
Caelo	Isopropyl alcohol 100%	17300424	1
Caelo	Isopropyl alcohol 100%	12112209	1
Caelo	Isopropyl alcohol 100%	14278909	1
Caelo	Isopropyl alcohol 100%	12254714	1
Caelo	Isopropyl alcohol 100%	13050902	1
Caelo	Isopropyl alcohol 100%	14051015	1
Caelo	Isopropyl alcohol 100%	14219227	3
Caelo	Isopropyl alcohol 100%	14369329	1
Caelo	Isopropyl alcohol 100%	15398808	1
Caelo	Isopropyl alcohol 100%	16310613	1
Caelo	Isopropyl alcohol 100%	70881B	1
Caelo	Isopropyl alcohol 100%	162334019	1
Caelo	Isopropyl alcohol 100%	17189303	2
Caelo	Isopropyl alcohol 100%	18065405	2
Caelo	Isopropyl alcohol 100%	16310602	1
Caelo	Isopropyl alcohol 100%	70994B	1
Caelo	Isopropyl alcohol 100%	18178203	1
Caelo	Isopropyl alcohol 100%	12379517	1
Caelo	Isopropyl alcohol 100%	16310626	1
Caelo	Isopropyl alcohol 100%	16310628	1
Caelo	Isopropyl alcohol 100%	14051004	1
Caelo	Isopropyl alcohol 100%	18178233	1
Caelo	Isopropyl alcohol 100%	12112220	1
Caelo	Isopropyl alcohol 100%	13050907	1
Caelo	Isopropyl alcohol 100%	15171328	2
Caelo	Isopropyl alcohol 100%	15171312	2
Caelo	Isopropyl alcohol 100%	16039915	1
Caelo	Isopropyl alcohol 100%	16234019	1
Caelo	Isopropyl alcohol 100%	7272262	1
Caelo	Isopropyl alcohol 100%	13148029	1
Caelo	Isopropyl alcohol 100%	13336922	1
Caelo	Isopropyl alcohol 100%	13336933	1
Caelo	Isopropyl alcohol 100%	13336934	1
Caelo	Isopropyl alcohol 100%	13397326	1
Caelo	Isopropyl alcohol 100%	14219211	1
Caelo	Isopropyl alcohol 100%	14134719	1
Caelo	Isopropyl alcohol 100%	70650B	1
Caelo	Isopropyl alcohol 100%	15171335	1
Caelo	Isopropyl alcohol 100%	70870B	2
Caelo	Isopropyl alcohol 100%	16234007	2
Caelo	Isopropyl alcohol 100%	17044002	1
Caelo	Isopropyl alcohol 100%	17044017	1
Caelo	Isopropyl alcohol 100%	17044027	2
Caelo	Isopropyl alcohol 100%	17189307	1
Caelo	Isopropyl alcohol 100%	701054B	1
Caelo	Isopropyl alcohol 100%	18178270	1
Caelo	Isopropyl alcohol 100%	19059528	1
Caelo	Isopropyl alcohol 100%	70439B	1
Caelo	Isopropyl alcohol 100%	13397318	2
Caelo	Isopropyl alcohol 100%	14051028	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	14219205	1
Caelo	Isopropyl alcohol 100%	14369301	5
Caelo	Isopropyl alcohol 100%	15057506	1
Caelo	Isopropyl alcohol 100%	18065419	1
Caelo	Isopropyl alcohol 100%	18065427	1
Caelo	Isopropyl alcohol 100%	17189304	1
Caelo	Isopropyl alcohol 100%	108073	1
Caelo	Isopropyl alcohol 100%	13249412	2
Caelo	Isopropyl alcohol 100%	70545B	1
Caelo	Isopropyl alcohol 100%	13336930	1
Caelo	Isopropyl alcohol 100%	15171331	1
Caelo	Isopropyl alcohol 100%	151(17189323)	1
Caelo	Isopropyl alcohol 100%	19059511	1
Caelo	Isopropyl alcohol 100%	70565B	1
Caelo	Isopropyl alcohol 100%	17300437	4
Caelo	Isopropyl alcohol 100%	70481B	2
Caelo	Isopropyl alcohol 100%	13249437	1
Caelo	Isopropyl alcohol 100%	13148015	3
Caelo	Isopropyl alcohol 100%	13336944	1
Caelo	Isopropyl alcohol 100%	14134706	1
Caelo	Isopropyl alcohol 100%	15057501	2
Caelo	Isopropyl alcohol 100%	14369334	1
Caelo	Isopropyl alcohol 100%	15171342	2
Caelo	Isopropyl alcohol 100%	15171305	1
Caelo	Isopropyl alcohol 100%	15398814	2
Caelo	Isopropyl alcohol 100%	16039901	3
Caelo	Isopropyl alcohol 100%	16039912	1
Caelo	Isopropyl alcohol 100%	70788B	1
Caelo	Isopropyl alcohol 100%	16039926	1
Caelo	Isopropyl alcohol 100%	16039931	1
Caelo	Isopropyl alcohol 100%	16137327	2
Caelo	Isopropyl alcohol 100%	70835B	2
Caelo	Isopropyl alcohol 100%	53380	1
Caelo	Isopropyl alcohol 100%	163234002	1
Caelo	Isopropyl alcohol 100%	16234025	2
Caelo	Isopropyl alcohol 100%	16234029	1
Caelo	Isopropyl alcohol 100%	16310612	2
Caelo	Isopropyl alcohol 100%	16234032	1
Caelo	Isopropyl alcohol 100%	16310634	1
Caelo	Isopropyl alcohol 100%	16310606	1
Caelo	Isopropyl alcohol 100%	17044008	2
Caelo	Isopropyl alcohol 100%	1630607	1
Caelo	Isopropyl alcohol 100%	1630606	1
Caelo	Isopropyl alcohol 100%	17044031	2
Caelo	Isopropyl alcohol 100%	17189308	1
Caelo	Isopropyl alcohol 100%	17189321	1
Caelo	Isopropyl alcohol 100%	180109AI/17189332	1
Caelo	Isopropyl alcohol 100%	17300408	1
Caelo	Isopropyl alcohol 100%	17189310	1
Caelo	Isopropyl alcohol 100%	70983B	1
Caelo	Isopropyl alcohol 100%	17300415	1
Caelo	Isopropyl alcohol 100%	17300432	1
Caelo	Isopropyl alcohol 100%	18065415	1
Caelo	Isopropyl alcohol 100%	27012017	1
Caelo	Isopropyl alcohol 100%	701006B	1
Caelo	Isopropyl alcohol 100%	18178239	1
Caelo	Isopropyl alcohol 100%	18291722	1
Caelo	Isopropyl alcohol 100%	18291724	1
Caelo	Isopropyl alcohol 100%	1329421	1
Caelo	Isopropyl alcohol 100%	14219220	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	14278927	2
Caelo	Isopropyl alcohol 100%	70638B	1
Caelo	Isopropyl alcohol 100%	70707B	1
Caelo	Isopropyl alcohol 100%	16039904	2
Caelo	Isopropyl alcohol 100%	16039902	1
Caelo	Isopropyl alcohol 100%	16137301	3
Caelo	Isopropyl alcohol 100%	701107B	1
Caelo	Isopropyl alcohol 100%	12179326	1
Caelo	Isopropyl alcohol 100%	13050901	1
Caelo	Isopropyl alcohol 100%	13336942	1
Caelo	Isopropyl alcohol 100%	70598B	1
Caelo	Isopropyl alcohol 100%	15057518	1
Caelo	Isopropyl alcohol 100%	70690B	1
Caelo	Isopropyl alcohol 100%	15300929	1
Caelo	Isopropyl alcohol 100%	16310605	2
Caelo	Isopropyl alcohol 100%	16234003	1
Caelo	Isopropyl alcohol 100%	16234026	1
Caelo	Isopropyl alcohol 100%	16234008	1
Caelo	Isopropyl alcohol 100%	17044030	5
Caelo	Isopropyl alcohol 100%	17044022	2
Caelo	Isopropyl alcohol 100%	17189302	1
Caelo	Isopropyl alcohol 100%	17189320	1
Caelo	Isopropyl alcohol 100%	19209805	1
Caelo	Isopropyl alcohol 100%	15300927	2
Caelo	Isopropyl alcohol 100%	180654025691	1
Caelo	Isopropyl alcohol 100%	70478B	1
Caelo	Isopropyl alcohol 100%	13050916	3
Caelo	Isopropyl alcohol 100%	13050913	2
Caelo	Isopropyl alcohol 100%	13148001	2
Caelo	Isopropyl alcohol 100%	70541B	2
Caelo	Isopropyl alcohol 100%	13148003	1
Caelo	Isopropyl alcohol 100%	13249406	1
Caelo	Isopropyl alcohol 100%	70553B	1
Caelo	Isopropyl alcohol 100%	13336915	1
Caelo	Isopropyl alcohol 100%	13336931	1
Caelo	Isopropyl alcohol 100%	132494	1
Caelo	Isopropyl alcohol 100%	13336912	2
Caelo	Isopropyl alcohol 100%	14051009	2
Caelo	Isopropyl alcohol 100%	13336921	1
Caelo	Isopropyl alcohol 100%	13397317	1
Caelo	Isopropyl alcohol 100%	14134710	1
Caelo	Isopropyl alcohol 100%	14051021	1
Caelo	Isopropyl alcohol 100%	14051013	1
Caelo	Isopropyl alcohol 100%	14134724	1
Caelo	Isopropyl alcohol 100%	70643B	2
Caelo	Isopropyl alcohol 100%	14278901	3
Caelo	Isopropyl alcohol 100%	14278921	1
Caelo	Isopropyl alcohol 100%	14278925	2
Caelo	Isopropyl alcohol 100%	70685B	2
Caelo	Isopropyl alcohol 100%	14278929	1
Caelo	Isopropyl alcohol 100%	14369316	2
Caelo	Isopropyl alcohol 100%	14369333	1
Caelo	Isopropyl alcohol 100%	14369310	1
Caelo	Isopropyl alcohol 100%	14369337	1
Caelo	Isopropyl alcohol 100%	15057524	1
Caelo	Isopropyl alcohol 100%	15057510	1
Caelo	Isopropyl alcohol 100%	15057515	1
Caelo	Isopropyl alcohol 100%	15171340	1
Caelo	Isopropyl alcohol 100%	70742B	1
Caelo	Isopropyl alcohol 100%	15300913	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	70739B	1
Caelo	Isopropyl alcohol 100%	15300915	1
Caelo	Isopropyl alcohol 100%	15398819	1
Caelo	Isopropyl alcohol 100%	15300912	1
Caelo	Isopropyl alcohol 100%	15398831	2
Caelo	Isopropyl alcohol 100%	15398827	2
Caelo	Isopropyl alcohol 100%	16039932	1
Caelo	Isopropyl alcohol 100%	16039930	1
Caelo	Isopropyl alcohol 100%	16137312	2
Caelo	Isopropyl alcohol 100%	16137325	2
Caelo	Isopropyl alcohol 100%	16137336	3
Caelo	Isopropyl alcohol 100%	16234010	4
Caelo	Isopropyl alcohol 100%	70858B	1
Caelo	Isopropyl alcohol 100%	17044003	1
Caelo	Isopropyl alcohol 100%	141/AKD16	1
Caelo	Isopropyl alcohol 100%	16310621	1
Caelo	Isopropyl alcohol 100%	18065406	1
Caelo	Isopropyl alcohol 100%	17300422	1
Caelo	Isopropyl alcohol 100%	18178225	2
Caelo	Isopropyl alcohol 100%	16234014	2
Caelo	Isopropyl alcohol 100%	12179307	3
Caelo	Isopropyl alcohol 100%	705988	1
Caelo	Isopropyl alcohol 100%	16234017	3
Caelo	Isopropyl alcohol 100%	16039923	2
Caelo	Isopropyl alcohol 100%	16039911	2
Caelo	Isopropyl alcohol 100%	15300917	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	18178231	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	18178226	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	19059503	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	18291726	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	19209826	1
Caesar & Loretz/Noweda	Isopropyl alcohol 100%	17044009	1
Caesar & Loretz GmbH	Isopropyl alcohol 100%	70503B	1
Caesar /phönix	Isopropyl alcohol 100%	16310603	1
Caesar&Loretz/Noweda	Isopropyl alcohol 100%	15398808	1
cealo	Isopropyl alcohol 100%	13336936	1
Cealo	Isopropyl alcohol 100%	19059526	1
Celo	Isopropyl alcohol 100%	16039925	1
Celo	Isopropyl alcohol 100%	16039937	1
Chem.Pharm.Labor.Dr.See...	Isopropyl alcohol 100%	70577B	1
Dr. Seeger GmbH /Noweda	Isopropyl alcohol 100%	70577B	2
Dr.Seeger GmbH	Isopropyl alcohol 100%	70475B	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70519B	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70527B	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70553B	2
Ebert & Jacobi 28.7.16	Isopropyl alcohol 100%	16137317	1
Eigen	Isopropyl alcohol 100%	70701B	1
Euro OTC	Isopropyl alcohol 100%	13249405	1
Euro OTC	Isopropyl alcohol 100%	70858B	1
Euro OTC	Isopropyl alcohol 100%	70771B	1
Euro OTC	Isopropyl alcohol 100%	18291704	1
Euro OTC	Isopropyl alcohol 100%	70578B	1
Fagron	Isopropyl alcohol 100%	70685B	1
Fagron	Isopropyl alcohol 100%	70936B	1
Fagron	Isopropyl alcohol 100%	13111701	1
Fagron	Isopropyl alcohol 100%	70541	1
Fagron	Isopropyl alcohol 100%	17189307	1
Fiebig 09.11.12 EK28,33	Isopropyl alcohol 100%	704758	1
fischar	Isopropyl alcohol 100%	3346271	1
Fischar	Isopropyl alcohol 100%	4100111	1

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Supplier	Substance	Batch	Spectra
Fischar	Isopropyl alcohol 100%	4102084	2
Fischar	Isopropyl alcohol 100%	70553B	1
Fischar	Isopropyl alcohol 100%	1005101	1
Fischar	Isopropyl alcohol 100%	4105042	1
Fischar	Isopropyl alcohol 100%	1007011	1
Fischar	Isopropyl alcohol 100%	4105104	1
Fischar	Isopropyl alcohol 100%	4108024	1
Fischar	Isopropyl alcohol 100%	1008011	1
Fischar	Isopropyl alcohol 100%	8081	1
Fischar/Phönix	Isopropyl alcohol 100%	4103112	1
Fischer/Phönix	Isopropyl alcohol 100%	4103014	1
Gatt-Koller	Isopropyl alcohol 100%	KNC0691J8	1
gehe	Isopropyl alcohol 100%	14219228	1
Gehe	Isopropyl alcohol 100%	70382B	1
Gehe	Isopropyl alcohol 100%	70448B	1
Gehe	Isopropyl alcohol 100%	704098	1
Gehe	Isopropyl alcohol 100%	12031105	1
Gehe	Isopropyl alcohol 100%	12254718	1
Gehe	Isopropyl alcohol 100%	13050927	1
Gehe	Isopropyl alcohol 100%	70507B	1
Gehe	Isopropyl alcohol 100%	70541B	1
Gehe	Isopropyl alcohol 100%	13249403	1
Gehe	Isopropyl alcohol 100%	70680B	1
Gehe	Isopropyl alcohol 100%	70685B	1
Gehe	Isopropyl alcohol 100%	70835B	1
Gehe	Isopropyl alcohol 100%	70892B	1
Gehe	Isopropyl alcohol 100%	17044002	1
Gehe	Isopropyl alcohol 100%	701035B	1
Gehe	Isopropyl alcohol 100%	701052B	1
GEHE	Isopropyl alcohol 100%	70461B	1
GEHE	Isopropyl alcohol 100%	70882B	1
GEHE	Isopropyl alcohol 100%	70896B	1
GEHE	Isopropyl alcohol 100%	17300433	1
GEHE	Isopropyl alcohol 100%	18065406	1
GEHE	Isopropyl alcohol 100%	70994B	1
GEHE	Isopropyl alcohol 100%	701043B	1
GEHE	Isopropyl alcohol 100%	701065B	1
GEHE	Isopropyl alcohol 100%	18291727	1
Gehe - Hedinger	Isopropyl alcohol 100%	70607B	1
GEHE 08.05.2014	Isopropyl alcohol 100%	70598B	1
Gehe am 07.03.14	Isopropyl alcohol 100%	70573B	1
Gehe am 17.12.2013	Isopropyl alcohol 100%	70578B	1
Caelo	Isopropyl alcohol 100%	18178202	1
Caelo	Isopropyl alcohol 100%	15171337	1
Caelo	Isopropyl alcohol 100%	12179310	1
Caelo	Isopropyl alcohol 100%	14134712	1
Caelo	Isopropyl alcohol 100%	16310633	3
Caelo	Isopropyl alcohol 100%	1100317	1
Euro OTC	Isopropyl alcohol 100%	70638	1
Gehe/Fischar	Isopropyl alcohol 100%	1005101	2
Gehe/Hedinger	Isopropyl alcohol 100%	70540B	1
Gehe/Hedinger	Isopropyl alcohol 100%	70802B	1
Gehe/Hedinger	Isopropyl alcohol 100%	709188	1
Gehe/Hedinger	Isopropyl alcohol 100%	701006B	1
Caelo	Isopropyl alcohol 100%	15398816	4
Gehe-Hedinger	Isopropyl alcohol 100%	70675B	1
Gutenberg-Apotheke	Isopropyl alcohol 100%	70607B	1
Haedinger/Sanacorp	Isopropyl alcohol 100%	701065B	3
Hediger/ Noweda	Isopropyl alcohol 100%	70675B	1
Hediger/Sanacorp	Isopropyl alcohol 100%	70736B	1

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Supplier	Substance	Batch	Spectra
Hedin/Spangro	Isopropyl alcohol 100%	70994B	1
Hediner/Noweda	Isopropyl alcohol 100%	70908B	1
Hediner/Noweda	Isopropyl alcohol 100%	70977B	1
Hediner/Noweda	Isopropyl alcohol 100%	701031B	1
hedinger	Isopropyl alcohol 100%	105208	1
hedinger	Isopropyl alcohol 100%	70584B	1
hedinger	Isopropyl alcohol 100%	70643B	1
hedinger	Isopropyl alcohol 100%	70663B	1
hedinger	Isopropyl alcohol 100%	70675B	1
hedinger	Isopropyl alcohol 100%	70818B	1
hedinger	Isopropyl alcohol 100%	701011b	1
hedinger	Isopropyl alcohol 100%	70881B	1
Hedinger	Isopropyl alcohol 100%	402211079	1
Hedinger	Isopropyl alcohol 100%	70439B	1
Hedinger	Isopropyl alcohol 100%	70447B	2
Hedinger	Isopropyl alcohol 100%	406211079	1
Hedinger	Isopropyl alcohol 100%	70444B	1
Hedinger	Isopropyl alcohol 100%	1207211079	1
Hedinger	Isopropyl alcohol 100%	70461B	3
Hedinger	Isopropyl alcohol 100%	70457B	1
Hedinger	Isopropyl alcohol 100%	70463B	1
Hedinger	Isopropyl alcohol 100%	70471B	2
Hedinger	Isopropyl alcohol 100%	704638	1
Hedinger	Isopropyl alcohol 100%	70478B	5
Hedinger	Isopropyl alcohol 100%	70465B	1
Hedinger	Isopropyl alcohol 100%	2x070461B	1
Hedinger	Isopropyl alcohol 100%	2310211079	1
Hedinger	Isopropyl alcohol 100%	7474942	1
Hedinger	Isopropyl alcohol 100%	704888	1
Hedinger	Isopropyl alcohol 100%	1512211079	1
Hedinger	Isopropyl alcohol 100%	1601311079	1
Hedinger	Isopropyl alcohol 100%	50700B	1
Hedinger	Isopropyl alcohol 100%	70498B	1
Hedinger	Isopropyl alcohol 100%	70497B	1
Hedinger	Isopropyl alcohol 100%	70501B	4
Hedinger	Isopropyl alcohol 100%	70500B	1
Hedinger	Isopropyl alcohol 100%	70507B	6
Hedinger	Isopropyl alcohol 100%	70511B	3
Hedinger	Isopropyl alcohol 100%	70495B	1
Hedinger	Isopropyl alcohol 100%	70488B	2
Hedinger	Isopropyl alcohol 100%	70519B	1
Hedinger	Isopropyl alcohol 100%	70527B	5
Hedinger	Isopropyl alcohol 100%	705258	1
Hedinger	Isopropyl alcohol 100%	70530B	2
Hedinger	Isopropyl alcohol 100%	70532B	3
Hedinger	Isopropyl alcohol 100%	705540B	1
Hedinger	Isopropyl alcohol 100%	3013E1079	1
Hedinger	Isopropyl alcohol 100%	231307	1
Hedinger	Isopropyl alcohol 100%	70536B	3
Hedinger	Isopropyl alcohol 100%	70540B	1
Hedinger	Isopropyl alcohol 100%	70545B	4
Hedinger	Isopropyl alcohol 100%	70541B	4
Hedinger	Isopropyl alcohol 100%	70422B	1
Hedinger	Isopropyl alcohol 100%	70559B	1
Hedinger	Isopropyl alcohol 100%	705728	2
Hedinger	Isopropyl alcohol 100%	70572B	5
Hedinger	Isopropyl alcohol 100%	70553B	5
Hedinger	Isopropyl alcohol 100%	70578	1
Hedinger	Isopropyl alcohol 100%	70574B	3
Hedinger	Isopropyl alcohol 100%	70555B	4

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70564B	2
Hedinger	Isopropyl alcohol 100%	70573B	1
Hedinger	Isopropyl alcohol 100%	70573B	2
Hedinger	Isopropyl alcohol 100%	70219B	1
Hedinger	Isopropyl alcohol 100%	70577B	1
Hedinger	Isopropyl alcohol 100%	70581B	1
Hedinger	Isopropyl alcohol 100%	70578B	2
Hedinger	Isopropyl alcohol 100%	70584B	3
Hedinger	Isopropyl alcohol 100%	70587B	2
Hedinger	Isopropyl alcohol 100%	70595B	1
Hedinger	Isopropyl alcohol 100%	70592B	1
Hedinger	Isopropyl alcohol 100%	70562B	3
Hedinger	Isopropyl alcohol 100%	70598B	9
Hedinger	Isopropyl alcohol 100%	70593B	3
Hedinger	Isopropyl alcohol 100%	7060B	1
Hedinger	Isopropyl alcohol 100%	70603B	6
Hedinger	Isopropyl alcohol 100%	70607B	3
Hedinger	Isopropyl alcohol 100%	70614B	1
Hedinger	Isopropyl alcohol 100%	70620B	6
Hedinger	Isopropyl alcohol 100%	70627B	5
Hedinger	Isopropyl alcohol 100%	70638B	3
Hedinger	Isopropyl alcohol 100%	70643B	8
Hedinger	Isopropyl alcohol 100%	70636B	2
Hedinger	Isopropyl alcohol 100%	70623B	1
Hedinger	Isopropyl alcohol 100%	7638B	1
Hedinger	Isopropyl alcohol 100%	70659B	4
Hedinger	Isopropyl alcohol 100%	70650B	5
Hedinger	Isopropyl alcohol 100%	70663B	3
Hedinger	Isopropyl alcohol 100%	70730B	2
Hedinger	Isopropyl alcohol 100%	70947B	4
Hedinger	Isopropyl alcohol 100%	70668B	1
Hedinger	Isopropyl alcohol 100%	70656B	1
Hedinger	Isopropyl alcohol 100%	70666B	1
Hedinger	Isopropyl alcohol 100%	2022015D	1
Hedinger	Isopropyl alcohol 100%	70675B	3
Hedinger	Isopropyl alcohol 100%	70680B	2
Hedinger	Isopropyl alcohol 100%	70671B	2
Hedinger	Isopropyl alcohol 100%	70685B	6
Hedinger	Isopropyl alcohol 100%	70693B	2
Hedinger	Isopropyl alcohol 100%	70690B	3
Hedinger	Isopropyl alcohol 100%	70703B	3
Hedinger	Isopropyl alcohol 100%	70695B	1
Hedinger	Isopropyl alcohol 100%	70704B	1
Hedinger	Isopropyl alcohol 100%	70707B	6
Hedinger	Isopropyl alcohol 100%	2072015A	1
Hedinger	Isopropyl alcohol 100%	70701B	2
Hedinger	Isopropyl alcohol 100%	70630B	1
Hedinger	Isopropyl alcohol 100%	70715B	5
Hedinger	Isopropyl alcohol 100%	70722B	3
Hedinger	Isopropyl alcohol 100%	70708B	2
Hedinger	Isopropyl alcohol 100%	70715B	1
Hedinger	Isopropyl alcohol 100%	70720B	3
Hedinger	Isopropyl alcohol 100%	70723B	1
Hedinger	Isopropyl alcohol 100%	31115-88	1
Hedinger	Isopropyl alcohol 100%	70736B	2
Hedinger	Isopropyl alcohol 100%	70742B	2
Hedinger	Isopropyl alcohol 100%	70737B	2
Hedinger	Isopropyl alcohol 100%	70748B	5
Hedinger	Isopropyl alcohol 100%	70715b	1
Hedinger	Isopropyl alcohol 100%	70755B	2

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70767B	3
Hedinger	Isopropyl alcohol 100%	4103014	1
Hedinger	Isopropyl alcohol 100%	70768B	4
Hedinger	Isopropyl alcohol 100%	70771B	5
Hedinger	Isopropyl alcohol 100%	70739B	1
Hedinger	Isopropyl alcohol 100%	70763B	1
Hedinger	Isopropyl alcohol 100%	70783B	3
Hedinger	Isopropyl alcohol 100%	70802B	1
Hedinger	Isopropyl alcohol 100%	70796B	1
Hedinger	Isopropyl alcohol 100%	70809B	6
Hedinger	Isopropyl alcohol 100%	70799B	5
Hedinger	Isopropyl alcohol 100%	70788B	1
Hedinger	Isopropyl alcohol 100%	707088	1
Hedinger	Isopropyl alcohol 100%	708188	1
Hedinger	Isopropyl alcohol 100%	70818B	2
Hedinger	Isopropyl alcohol 100%	70808B	1
Hedinger	Isopropyl alcohol 100%	70825B	4
Hedinger	Isopropyl alcohol 100%	708258	2
Hedinger	Isopropyl alcohol 100%	7089B	1
Hedinger	Isopropyl alcohol 100%	70835B	4
Hedinger	Isopropyl alcohol 100%	70816B	1
Hedinger	Isopropyl alcohol 100%	70858b	1
Hedinger	Isopropyl alcohol 100%	70809	1
Hedinger	Isopropyl alcohol 100%	70855B	1
Hedinger	Isopropyl alcohol 100%	70794B	1
Hedinger	Isopropyl alcohol 100%	70862B	1
Hedinger	Isopropyl alcohol 100%	70858B	7
Hedinger	Isopropyl alcohol 100%	70853B	1
Hedinger	Isopropyl alcohol 100%	70380	1
Hedinger	Isopropyl alcohol 100%	70879B	2
Hedinger	Isopropyl alcohol 100%	70882B	4
Hedinger	Isopropyl alcohol 100%	70870B	1
Hedinger	Isopropyl alcohol 100%	70898B	4
Hedinger	Isopropyl alcohol 100%	70896B	1
Hedinger	Isopropyl alcohol 100%	70889B	2
Hedinger	Isopropyl alcohol 100%	70906B	1
Hedinger	Isopropyl alcohol 100%	70908B	2
Hedinger	Isopropyl alcohol 100%	70884B	1
Hedinger	Isopropyl alcohol 100%	70915B	2
Hedinger	Isopropyl alcohol 100%	708828	1
Hedinger	Isopropyl alcohol 100%	70922B	4
Hedinger	Isopropyl alcohol 100%	70900B	1
Hedinger	Isopropyl alcohol 100%	70881B	1
Hedinger	Isopropyl alcohol 100%	70931B	4
Hedinger	Isopropyl alcohol 100%	70918B	1
Hedinger	Isopropyl alcohol 100%	70923B	1
Hedinger	Isopropyl alcohol 100%	70837B	1
Hedinger	Isopropyl alcohol 100%	20170160	1
Hedinger	Isopropyl alcohol 100%	70957B	1
Hedinger	Isopropyl alcohol 100%	70959B	3
Hedinger	Isopropyl alcohol 100%	70936B	1
Hedinger	Isopropyl alcohol 100%	70941B	1
Hedinger	Isopropyl alcohol 100%	Q101012	2
Hedinger	Isopropyl alcohol 100%	70969B	1
Hedinger	Isopropyl alcohol 100%	70943B	1
Hedinger	Isopropyl alcohol 100%	70977B	1
Hedinger	Isopropyl alcohol 100%	70983B	5
Hedinger	Isopropyl alcohol 100%	70973B	1
Hedinger	Isopropyl alcohol 100%	70991B	2
Hedinger	Isopropyl alcohol 100%	70973	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70994B	13
Hedinger	Isopropyl alcohol 100%	709738	1
Hedinger	Isopropyl alcohol 100%	171893205489	1
Hedinger	Isopropyl alcohol 100%	701011B	2
Hedinger	Isopropyl alcohol 100%	701026B	1
Hedinger	Isopropyl alcohol 100%	7010318	1
Hedinger	Isopropyl alcohol 100%	70993B	2
Hedinger	Isopropyl alcohol 100%	701031B	4
Hedinger	Isopropyl alcohol 100%	701043B	9
Hedinger	Isopropyl alcohol 100%	701054B	1
Hedinger	Isopropyl alcohol 100%	701068B	1
Hedinger	Isopropyl alcohol 100%	701065B	4
Hedinger	Isopropyl alcohol 100%	701073B	2
Hedinger	Isopropyl alcohol 100%	701078B	1
Hedinger	Isopropyl alcohol 100%	701071B	1
Hedinger	Isopropyl alcohol 100%	701061B	1
Hedinger	Isopropyl alcohol 100%	701099B	3
Hedinger	Isopropyl alcohol 100%	701113B	2
Hedinger	Isopropyl alcohol 100%	701114B	5
Hedinger	Isopropyl alcohol 100%	701123B	3
Hedinger	Isopropyl alcohol 100%	701133B	5
Hedinger	Isopropyl alcohol 100%	701145B	2
Hedinger	Isopropyl alcohol 100%	701105B	1
Hedinger	Isopropyl alcohol 100%	7011048B	1
Hedinger vdL	Isopropyl alcohol 100%	70715B	1
Hedinger Phönix	Isopropyl alcohol 100%	701073B	1
Hedinger vdL	Isopropyl alcohol 100%	70748B	1
Hedinger vdL	Isopropyl alcohol 100%	70853B	1
Hedinger vdL	Isopropyl alcohol 100%	70889B	1
Hedinger , Noweda	Isopropyl alcohol 100%	70490B	1
Hedinger , Stuttgart	Isopropyl alcohol 100%	70565B	1
Hedinger , Stuttgart	Isopropyl alcohol 100%	70545B	1
Hedinger , Stuttgart	Isopropyl alcohol 100%	70620B	1
HEDINGER / 20	Isopropyl alcohol 100%	70573B	1
HEDINGER / 20	Isopropyl alcohol 100%	70614B	1
HEDINGER / 20	Isopropyl alcohol 100%	70638B	1
HEDINGER / 20	Isopropyl alcohol 100%	70726B	1
Hedinger / 30	Isopropyl alcohol 100%	70768B	1
Hedinger / AHC	Isopropyl alcohol 100%	701073B	1
Hedinger / AHD 21.4.15	Isopropyl alcohol 100%	70693B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70983B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70969B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	701054B	2
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70796B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70858B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70875B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70936B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70991B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70461B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70448B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70541B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70587B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70643B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70581B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70742B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70802B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70809B	1
Hedinger / Kehr	Isopropyl alcohol 100%	70755B	1
Hedinger / Kehr	Isopropyl alcohol 100%	7098B	1
Hedinger / Nowed	Isopropyl alcohol 100%	70730B	1

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Supplier	Substance	Batch	Spectra
Hedinger / Noweda	Isopropyl alcohol 100%	70525B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70587B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70620B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70627B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70659B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70663B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70675B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70643B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70703B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70734B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70737B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70748B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70762B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70788B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70870B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70882B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70889B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70959B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70977B	1
Hedinger / Noweda	Isopropyl alcohol 100%	701011B	1
Hedinger / Noweda	Isopropyl alcohol 100%	701071B	1
Hedinger / Noweda	Isopropyl alcohol 100%	701136B	1
Hedinger / Noweda	Isopropyl alcohol 100%	701133B	1
HEDINGER / NOWEDA	Isopropyl alcohol 100%	70898B	1
Hedinger / Noweda Münster	Isopropyl alcohol 100%	70734B	1
Hedinger / Phoenix Leip...	Isopropyl alcohol 100%	70722B	1
Hedinger / Phönix	Isopropyl alcohol 100%	907948	1
Hedinger / Phönix	Isopropyl alcohol 100%	70994B	1
Hedinger / Phönix	Isopropyl alcohol 100%	701105B	1
Hedinger / Sana	Isopropyl alcohol 100%	70748B	1
Hedinger / Sana	Isopropyl alcohol 100%	70799B	1
Hedinger / Sana	Isopropyl alcohol 100%	70881B	1
Hedinger / Sanacorp	Isopropyl alcohol 100%	707446B	1
Hedinger / Sanacorp	Isopropyl alcohol 100%	70737B	1
Hedinger / Alliance Heal...	Isopropyl alcohol 100%	701043B	3
Hedinger / Anzag	Isopropyl alcohol 100%	70991B	3
Hedinger / Phoenix	Isopropyl alcohol 100%	701073B	1
Hedinger / Sana	Isopropyl alcohol 100%	70488B	1
Hedinger Ahc	Isopropyl alcohol 100%	70969B	2
Hedinger Ahc	Isopropyl alcohol 100%	70983B	1
Hedinger Ahc	Isopropyl alcohol 100%	701026B	1
Hedinger Gehe	Isopropyl alcohol 100%	70562B	1
Hedinger Gehe	Isopropyl alcohol 100%	70673B	1
Hedinger Gehe	Isopropyl alcohol 100%	701043B	1
Hedinger GmbH	Isopropyl alcohol 100%	70729B	1
Hedinger GmbH	Isopropyl alcohol 100%	70889B	1
Hedinger GmbH	Isopropyl alcohol 100%	16310612	1
Hedinger GmbH	Isopropyl alcohol 100%	70936B	1
Hedinger GmbH & Co. KG	Isopropyl alcohol 100%	701043B	1
Hedinger GmbH & Co KG	Isopropyl alcohol 100%	70977B	1
Hedinger GmbH & Co KG	Isopropyl alcohol 100%	701043B	1
Hedinger GmbH & Co KG	Isopropyl alcohol 100%	701071B	1
Hedinger Jenne	Isopropyl alcohol 100%	70478B	1
Hedinger Jenne	Isopropyl alcohol 100%	70545B	1
Hedinger Jenne	Isopropyl alcohol 100%	706938	1
Hedinger Jenne	Isopropyl alcohol 100%	70720B	1
Hedinger Jenne	Isopropyl alcohol 100%	709538	1
Hedinger Jenne	Isopropyl alcohol 100%	701065B	1
Hedinger Noweda	Isopropyl alcohol 100%	7010938	1
Hedinger Phönix	Isopropyl alcohol 100%	70991B	1

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Supplier	Substance	Batch	Spectra
Hedinger Sanacorp	Isopropyl alcohol 100%	70737B	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70835B	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70862B	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70931B(II)	2
Hedinger Sanacorp	Isopropyl alcohol 100%	70931B(I)	1
Hedinger über Noweda	Isopropyl alcohol 100%	70439B	1
Hedinger(Gehe)	Isopropyl alcohol 100%	70573B	1
Hedinger, Heiligenwiese...	Isopropyl alcohol 100%	70471B	1
Hedinger, Heiligenwiese...	Isopropyl alcohol 100%	70519B	1
Hedinger, Noweda	Isopropyl alcohol 100%	7474907	1
Hedinger/ AHD	Isopropyl alcohol 100%	70788B	1
Hedinger/ AHD	Isopropyl alcohol 100%	70947B	1
Hedinger/ AHD	Isopropyl alcohol 100%	70991B	1
Hedinger/ AHD	Isopropyl alcohol 100%	701043B	1
Hedinger/ AHD	Isopropyl alcohol 100%	701073B	1
Hedinger/ Alliance	Isopropyl alcohol 100%	70875B	1
Hedinger/ Anzag	Isopropyl alcohol 100%	70492B	1
Hedinger/ Anzag	Isopropyl alcohol 100%	706388	1
Hedinger/ E&J	Isopropyl alcohol 100%	70947B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70444B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70708B	2
Hedinger/ Gehe	Isopropyl alcohol 100%	70835B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70973B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70993B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	701031B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	701061B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70977B	2
Hedinger/ Gehe	Isopropyl alcohol 100%	701065B	1
Hedinger/ GEHE	Isopropyl alcohol 100%	706388	1
Hedinger/ jenne	Isopropyl alcohol 100%	70541B	1
Hedinger/ Jenne	Isopropyl alcohol 100%	70595B	1
Hedinger/ Jenne	Isopropyl alcohol 100%	70608B	1
Hedinger/ Jenne	Isopropyl alcohol 100%	70620B	1
Hedinger/ Kehr	Isopropyl alcohol 100%	70703B	1
Hedinger/ N/ PZN:07474942	Isopropyl alcohol 100%	70598B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70517B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70520B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70555B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70627B	2
Hedinger/ Noweda	Isopropyl alcohol 100%	70675B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70693B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70685B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70771B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70748b	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70799B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70835B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70853B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70889B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70884B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70818B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70943B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70957B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70977B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70959B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	701031B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	701043B	1
Hedinger/ Phoenix / 04...	Isopropyl alcohol 100%	70809b	1
Hedinger/ Phönix	Isopropyl alcohol 100%	701043B	1
Hedinger/ Phönix	Isopropyl alcohol 100%	701073B	1
Hedinger/ Sanacorp	Isopropyl alcohol 100%	70545B	1

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Supplier	Substance	Batch	Spectra
Hedinger/ Sanacorp	Isopropyl alcohol 100%	701011B	1
Hedinger/AHD	Isopropyl alcohol 100%	70527B	1
Hedinger/AHD	Isopropyl alcohol 100%	70532B	1
Hedinger/AHD	Isopropyl alcohol 100%	70507B	1
Hedinger/AHD	Isopropyl alcohol 100%	705408	1
Hedinger/AHD	Isopropyl alcohol 100%	70574B	1
Hedinger/AHD	Isopropyl alcohol 100%	70788B	1
Hedinger/AHD	Isopropyl alcohol 100%	70737B	1
Hedinger/AHD	Isopropyl alcohol 100%	707888	1
Hedinger/AHD	Isopropyl alcohol 100%	709838	1
Hedinger/AHD	Isopropyl alcohol 100%	701078B	1
Hedinger/AHD	Isopropyl alcohol 100%	701073B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70898B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70503B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70768B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70936B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70858B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70941B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70908B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70982B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	701043B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	701035B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	701071B	1
hedinger/anzag	Isopropyl alcohol 100%	705838	1
Hedinger/Anzag	Isopropyl alcohol 100%	70471B	1
Hedinger/Anzag	Isopropyl alcohol 100%	705198	1
Hedinger/Anzag	Isopropyl alcohol 100%	70519B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70545B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70553B	1
Hedinger/Anzag	Isopropyl alcohol 100%	705728	1
Hedinger/Anzag	Isopropyl alcohol 100%	70608B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70627B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70643B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70675B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70685B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70703B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70737B	2
Hedinger/Anzag	Isopropyl alcohol 100%	70736B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70768B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70788B	2
Hedinger/Anzag	Isopropyl alcohol 100%	70853B	1
Hedinger/Anzag	Isopropyl alcohol 100%	709918	1
Hedinger/Anzag	Isopropyl alcohol 100%	70982B	1
Hedinger/Anzag 27.02.2012	Isopropyl alcohol 100%	70417B	1
Hedinger/Ebert	Isopropyl alcohol 100%	70898B	1
Hedinger/Ebert	Isopropyl alcohol 100%	70943B	2
Hedinger/Ebert	Isopropyl alcohol 100%	70977B	1
Hedinger/Ebert	Isopropyl alcohol 100%	70991B	1
Hedinger/Ebert	Isopropyl alcohol 100%	701065B	1
Hedinger/Fiebig	Isopropyl alcohol 100%	70959B	1
Hedinger/Fiebig	Isopropyl alcohol 100%	701031B	1
Hedinger/Fiebig	Isopropyl alcohol 100%	701114B	1
Hedinger/G	Isopropyl alcohol 100%	70994B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70478B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70492B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70481B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70501B	1
Hedinger/Gehe	Isopropyl alcohol 100%	704988	1
Hedinger/Gehe	Isopropyl alcohol 100%	70507B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70505B	1

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Supplier	Substance	Batch	Spectra
Hedinger/Gehe	Isopropyl alcohol 100%	70532B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70540B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70527B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70553B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70581B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70562B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70598B	2
Hedinger/Gehe	Isopropyl alcohol 100%	7087B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70603B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70607B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70627B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70659B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70638B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70668B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70666B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70675B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70663B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70693B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70701B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70696B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70703B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70715B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70730B	5
Hedinger/Gehe	Isopropyl alcohol 100%	70723B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70671b	1
Hedinger/Gehe	Isopropyl alcohol 100%	70737B	1
Hedinger/Gehe	Isopropyl alcohol 100%	707308	1
Hedinger/Gehe	Isopropyl alcohol 100%	70739B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70755B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70767B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70748B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70763B	1
Hedinger/Gehe	Isopropyl alcohol 100%	7076B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70783B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70796B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70804B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70818B	3
Hedinger/Gehe	Isopropyl alcohol 100%	70771B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70809B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70816B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70858B	3
Hedinger/Gehe	Isopropyl alcohol 100%	70825B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70875B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70799B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70882B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70892B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70870B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70918B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70889B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70931B	3
Hedinger/Gehe	Isopropyl alcohol 100%	70941B	4
Hedinger/Gehe	Isopropyl alcohol 100%	70908B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70936B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70898B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70973B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70994B	1
Hedinger/Gehe	Isopropyl alcohol 100%	701031B	1
Hedinger/Gehe	Isopropyl alcohol 100%	701065B	1
Hedinger/Gehe	Isopropyl alcohol 100%	701099B	1
Hedinger/Gehe	Isopropyl alcohol 100%	701107B	1

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Supplier	Substance	Batch	Spectra
Hedinger/GEHE	Isopropyl alcohol 100%	1514Q1079	1
HEDINGER/Gehe	Isopropyl alcohol 100%	709478	1
Hedinger/Geilenkirchen	Isopropyl alcohol 100%	706388	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70607B	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70898B	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70881B	1
Hedinger/Holdermann 30...	Isopropyl alcohol 100%	70444B	1
Hedinger/Jenne	Isopropyl alcohol 100%	70525B	1
Hedinger/Jenne	Isopropyl alcohol 100%	70559B	1
Hedinger/Jenne 31.10.2014	Isopropyl alcohol 100%	706388	1
Hedinger/Kehr	Isopropyl alcohol 100%	70675B	1
Hedinger/Kehr	Isopropyl alcohol 100%	7073B	1
Hedinger/Kehr	Isopropyl alcohol 100%	701093B	2
Hedinger/L10	Isopropyl alcohol 100%	7010158	1
Hedinger/N	Isopropyl alcohol 100%	70675B	1
Hedinger/N	Isopropyl alcohol 100%	70818B	1
HEDINGER/N/1.06.13/PZN...	Isopropyl alcohol 100%	70527b	1
Hedinger/N/PZN:07474942	Isopropyl alcohol 100%	70559B	1
Hedinger/Noveda	Isopropyl alcohol 100%	701054B	1
hedinger/Noweda	Isopropyl alcohol 100%	70918B	1
Hedinger/noweda	Isopropyl alcohol 100%	70957B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70457B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70465B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70519B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70520B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70540B	1
Hedinger/Noveda	Isopropyl alcohol 100%	7054907	1
Hedinger/Noveda	Isopropyl alcohol 100%	70545B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70565B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70584B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70603B	3
Hedinger/Noveda	Isopropyl alcohol 100%	70620B	1
Hedinger/Noveda	Isopropyl alcohol 100%	706388	1
Hedinger/Noveda	Isopropyl alcohol 100%	70627B	3
Hedinger/Noveda	Isopropyl alcohol 100%	70788B	2
Hedinger/Noveda	Isopropyl alcohol 100%	70690B	2
Hedinger/Noveda	Isopropyl alcohol 100%	70685B	3
Hedinger/Noveda	Isopropyl alcohol 100%	70720B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70643B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70736B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70726B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70737B	1
Hedinger/Noveda	Isopropyl alcohol 100%	707718	1
Hedinger/Noveda	Isopropyl alcohol 100%	70767B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70818B	4
Hedinger/Noveda	Isopropyl alcohol 100%	70835B	3
Hedinger/Noveda	Isopropyl alcohol 100%	708188	1
Hedinger/Noveda	Isopropyl alcohol 100%	70853B	1
Hedinger/Noveda	Isopropyl alcohol 100%	4716M-01079	1
Hedinger/Noveda	Isopropyl alcohol 100%	4916U-01079	1
Hedinger/Noveda	Isopropyl alcohol 100%	70882b	1
Hedinger/Noveda	Isopropyl alcohol 100%	70889B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70922B	2
Hedinger/Noveda	Isopropyl alcohol 100%	70906B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70908B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70969B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70957B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70973B	1
Hedinger/Noveda	Isopropyl alcohol 100%	70977B	3
Hedinger/Noveda	Isopropyl alcohol 100%	70941B	1

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Supplier	Substance	Batch	Spectra
Hedinger/Noweda	Isopropyl alcohol 100%	709082B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70983B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70994B	2
Hedinger/Noweda	Isopropyl alcohol 100%	701006B	2
Hedinger/Noweda	Isopropyl alcohol 100%	701026B	2
Hedinger/Noweda	Isopropyl alcohol 100%	701035B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701065B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701061B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701099B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701136B	1
Hedinger/Otto	Isopropyl alcohol 100%	70581B	1
Hedinger/phoenix	Isopropyl alcohol 100%	707488	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70545B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	70578B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70659B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	70734B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70799B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70794B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70837B	3
Hedinger/Phoenix	Isopropyl alcohol 100%	70908B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70889B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70969B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	70994B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	70973B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70994B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701006B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701035B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701065B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	701073B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701073B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701093B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701105B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701113B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70520B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70565B	3
Hedinger/Phönix	Isopropyl alcohol 100%	70536B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70598B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70607B	2
Hedinger/Phönix	Isopropyl alcohol 100%	70627B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70643B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70680B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70680B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70715B	2
Hedinger/Phönix	Isopropyl alcohol 100%	70723B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70748B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70768B	2
Hedinger/Phönix	Isopropyl alcohol 100%	70771B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70783B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70809B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70825B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70858B	2
Hedinger/Phönix	Isopropyl alcohol 100%	70846B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70969B	1
Hedinger/Phönix	Isopropyl alcohol 100%	709473B	1
Hedinger/Phönix	Isopropyl alcohol 100%	701043B	1
Hedinger/Phönix	Isopropyl alcohol 100%	701073B	1
Hedinger/Phönix	Isopropyl alcohol 100%	701105B	1
Hedinger/Sana EK: EUR 72,...	Isopropyl alcohol 100%	701073B	1
Hedinger/sanacorp	Isopropyl alcohol 100%	70739B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70476B	2

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Supplier	Substance	Batch	Spectra
Hedinger/Sanacorp	Isopropyl alcohol 100%	70519B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70540B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70541B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70553BH	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70564B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70578B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70598B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70593B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70587B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70614B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70620B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70627B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70638B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70643B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70650B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70659B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70656B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70685B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70696B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70703B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70720B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70734B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70737B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70767B	5
Hedinger/Sanacorp	Isopropyl alcohol 100%	70771B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70763B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70777B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70788B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70835B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70879B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70892B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70977B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	701031B	4
Hedinger/Sanacorp	Isopropyl alcohol 100%	701043B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70762B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	701054B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	701114B	1
Hedinger/Sanacorp6.5.2014	Isopropyl alcohol 100%	70603B	1
Hedinger/VDL	Isopropyl alcohol 100%	704788	1
Hedinger/VDL	Isopropyl alcohol 100%	70884B	1
Hedinger1	Isopropyl alcohol 100%	70607B	1
HedingerAlliance	Isopropyl alcohol 100%	70866B	2
HedingerAlliance	Isopropyl alcohol 100%	70881B	2
HedingerAlliance	Isopropyl alcohol 100%	70882B	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	70430B	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	704958	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	704978	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	70527B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70994B	1
Heidinger	Isopropyl alcohol 100%	70748B	1
Heinger/G	Isopropyl alcohol 100%	70730B	1
Henry Lamotte Oils	Isopropyl alcohol 100%	16310633	1
Herdinger	Isopropyl alcohol 100%	70592B	1
Herdinger Phönix	Isopropyl alcohol 100%	70536B	1
Hetterich/Noewda	Isopropyl alcohol 100%	70796B	1
Ichthyol/Noweda	Isopropyl alcohol 100%	70587B	1
Ichthyol/Phönix	Isopropyl alcohol 100%	70835B	1
Isopropylalkohol GMP/Gehe	Isopropyl alcohol 100%	70598B	1
Jenne	Isopropyl alcohol 100%	701073B	1
Jenne, Hedinger	Isopropyl alcohol 100%	70475B	1

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Supplier	Substance	Batch	Spectra
Jenne, Hedinger	Isopropyl alcohol 100%	70501B	1
Jenne, Hedinger	Isopropyl alcohol 100%	70519B	1
Jenne/Hedinger	Isopropyl alcohol 100%	70643B	1
Kassner & Sasse	Isopropyl alcohol 100%	383316	2
Kassner & Sasse	Isopropyl alcohol 100%	669929	1
Kehr/ Hedinger	Isopropyl alcohol 100%	70994B	1
Kehr/Hedinger	Isopropyl alcohol 100%	70898B	1
Klenk	Isopropyl alcohol 100%	70475b	1
Klenk	Isopropyl alcohol 100%	70527B	1
Kögl	Isopropyl alcohol 100%	KNC0576J16	1
Kögl	Isopropyl alcohol 100%	KNC0593J17	1
Kögl	Isopropyl alcohol 100%	KNC1686J17	1
kost	Isopropyl alcohol 100%	310120913059	2
Kost/ - /16.09.13	Isopropyl alcohol 100%	310120913059	1
Kost/kost/sophien	Isopropyl alcohol 100%	310261113062	1
L 10/Hedinger	Isopropyl alcohol 100%	70866B	1
L10	Isopropyl alcohol 100%	70977B	1
L10	Isopropyl alcohol 100%	701054B	1
L10	Isopropyl alcohol 100%	701031B	1
L10/Apoth.E.Bartel	Isopropyl alcohol 100%	70858B	1
L11	Isopropyl alcohol 100%	701099B	1
L12/Apoth.E.Bartel	Isopropyl alcohol 100%	70835B	1
Merck	Isopropyl alcohol 100%	K17381091	1
Nokun	Isopropyl alcohol 100%	70870B	1
noweda	Isopropyl alcohol 100%	14278905	1
noweda	Isopropyl alcohol 100%	16137324	1
Noweda	Isopropyl alcohol 100%	11371222	1
Noweda	Isopropyl alcohol 100%	70409B	1
Noweda	Isopropyl alcohol 100%	12112218	1
Noweda	Isopropyl alcohol 100%	70459B	1
Noweda	Isopropyl alcohol 100%	70475B	2
Noweda	Isopropyl alcohol 100%	12254715	1
Noweda	Isopropyl alcohol 100%	70490B	1
Noweda	Isopropyl alcohol 100%	12379515	1
Noweda	Isopropyl alcohol 100%	70519B	1
Noweda	Isopropyl alcohol 100%	12379510	1
Noweda	Isopropyl alcohol 100%	13397303	1
Noweda	Isopropyl alcohol 100%	14051027	1
Noweda	Isopropyl alcohol 100%	70638B	1
Noweda	Isopropyl alcohol 100%	70627B	1
Noweda	Isopropyl alcohol 100%	70755B	1
Noweda	Isopropyl alcohol 100%	16137302	1
Noweda	Isopropyl alcohol 100%	70835B	1
Noweda	Isopropyl alcohol 100%	707488	1
Noweda	Isopropyl alcohol 100%	17044033	1
Noweda	Isopropyl alcohol 100%	70993B	1
Noweda	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	15398820	1
Caelo	Isopropyl alcohol 100%	12321023	3
Caelo	Isopropyl alcohol 100%	12379508	2
Caelo	Isopropyl alcohol 100%	70668B	1
Noweda / Hedinger	Isopropyl alcohol 100%	70598B	1
Noweda / Hedinger	Isopropyl alcohol 100%	70638B	1
Noweda / Hedinger	Isopropyl alcohol 100%	70742B	2
Noweda / Hedinger	Isopropyl alcohol 100%	701123B	1
Caelo	Isopropyl alcohol 100%	14134720	2
Caelo	Isopropyl alcohol 100%	14369307	3
Caelo	Isopropyl alcohol 100%	18065430	2
Noweda/ Dr. Seeger	Isopropyl alcohol 100%	70540B	1
Noweda/ Hedinger GmbH	Isopropyl alcohol 100%	70663B	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	12379522	1
Caelo	Isopropyl alcohol 100%	14278904	4
Caelo	Isopropyl alcohol 100%	15300931	1
Noweda/Hedin	Isopropyl alcohol 100%	70726B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70507B	2
Noweda/Hedinger	Isopropyl alcohol 100%	70565B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70574B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70555B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70572B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70584B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70610B	1
Noweda/Hedinger	Isopropyl alcohol 100%	706148	1
Noweda/Hedinger	Isopropyl alcohol 100%	70614B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70627B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70650B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70659B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70693B	2
Noweda/Hedinger	Isopropyl alcohol 100%	70722B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70685	1
Noweda/Hedinger	Isopropyl alcohol 100%	70730B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70734B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70923B	1
Noweda/Henry Lamotte	Isopropyl alcohol 100%	706638	1
Otto Fischar	Isopropyl alcohol 100%	ohne	1
Otto Fischar	Isopropyl alcohol 100%	603117000	1
Otto Fischar GmbH	Isopropyl alcohol 100%	4104072	1
Otto Fischar GmbH	Isopropyl alcohol 100%	1008081	1
Otto Fischer GmbH & co...	Isopropyl alcohol 100%	1008011	1
Otto Fischer GmbH & co...	Isopropyl alcohol 100%	1008081	1
Phoen	Isopropyl alcohol 100%	70809B	1
phoenix	Isopropyl alcohol 100%	70947B	1
Phoenix	Isopropyl alcohol 100%	14219204	1
Phoenix	Isopropyl alcohol 100%	701113B	1
Phoenix 22.10.14	Isopropyl alcohol 100%	70607B	1
Phoenix goettin	Isopropyl alcohol 100%	70685B	1
Caelo	Isopropyl alcohol 100%	18065412	1
Caelo	Isopropyl alcohol 100%	70593B	1
Phonix	Isopropyl alcohol 100%	14134715	1
phönix	Isopropyl alcohol 100%	70783b	1
phönix	Isopropyl alcohol 100%	70799B	1
phönix	Isopropyl alcohol 100%	70837B	1
phönix	Isopropyl alcohol 100%	70862B	1
phönix	Isopropyl alcohol 100%	70898b	1
Phönix	Isopropyl alcohol 100%	12321002	1
Phönix	Isopropyl alcohol 100%	70536B	1
Phönix	Isopropyl alcohol 100%	13249432	1
Phönix	Isopropyl alcohol 100%	70870B	1
Phönix	Isopropyl alcohol 100%	70862B	1
Phönix	Isopropyl alcohol 100%	70983B	1
Phönix 13.10.15 ...	Isopropyl alcohol 100%	70734B	1
Phönix / Hedinger	Isopropyl alcohol 100%	70809B	1
Phönix 07.01.15	Isopropyl alcohol 100%	70650B	1
Phönix W.E:11.04.18 E...	Isopropyl alcohol 100%	70991B	1
Rondell Apotheke	Isopropyl alcohol 100%	70607B	2
Rondell Apotheke	Isopropyl alcohol 100%	70818B	1
Rückgabe Marschollek	Isopropyl alcohol 100%	70896B	1
sanacorp	Isopropyl alcohol 100%	70481B	1
Sanacorp	Isopropyl alcohol 100%	12321028	1
Sanacorp	Isopropyl alcohol 100%	13050904	1
Sanacorp	Isopropyl alcohol 100%	13249416	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Isopropyl alcohol 100%	1324919	2
Sanacorp	Isopropyl alcohol 100%	13249410	1
Sanacorp	Isopropyl alcohol 100%	70593B	1
Sanacorp	Isopropyl alcohol 100%	14051017	1
Sanacorp	Isopropyl alcohol 100%	705988	1
Sanacorp	Isopropyl alcohol 100%	14134709	1
Sanacorp	Isopropyl alcohol 100%	14134725	1
Sanacorp	Isopropyl alcohol 100%	14051035	1
Sanacorp	Isopropyl alcohol 100%	14278913	1
Sanacorp	Isopropyl alcohol 100%	70701B	1
Sanacorp	Isopropyl alcohol 100%	15171302	1
Sanacorp	Isopropyl alcohol 100%	15300902	1
Sanacorp	Isopropyl alcohol 100%	16039901	1
Sanacorp	Isopropyl alcohol 100%	70809B	3
Sanacorp	Isopropyl alcohol 100%	70918B	1
Sanacorp	Isopropyl alcohol 100%	17189318	1
Sanacorp	Isopropyl alcohol 100%	701011B	2
Sanacorp	Isopropyl alcohol 100%	17189324	1
Sanacorp	Isopropyl alcohol 100%	18065405	1
Sanacorp	Isopropyl alcohol 100%	70994B	1
Sanacorp	Isopropyl alcohol 100%	18291714	1
Sanacorp	Isopropyl alcohol 100%	701123B	2
Sanacorp EK:4,56 EUR -11	Isopropyl alcohol 100%	70923B	1
Caelo	Isopropyl alcohol 100%	15398811	1
Sanacorp / Hedinger	Isopropyl alcohol 100%	70573B	1
Sanacorp, 18.03.17, 29,...	Isopropyl alcohol 100%	70906B	1
sanacorp, 29,30EUR, 15.09...	Isopropyl alcohol 100%	70835B	1
Euro OTC	Isopropyl alcohol 100%	70536B	1
Caelo	Isopropyl alcohol 100%	12112206	1
Caelo	Isopropyl alcohol 100%	12179316	1
Caelo	Isopropyl alcohol 100%	12254708/129	1
Caelo	Isopropyl alcohol 100%	12379521	2
Caelo	Isopropyl alcohol 100%	131/AKD1	1
Caelo	Isopropyl alcohol 100%	13336936	1
Caelo	Isopropyl alcohol 100%	132/AKD54	1
Caelo	Isopropyl alcohol 100%	14369302	5
Caelo	Isopropyl alcohol 100%	1469323	1
Caelo	Isopropyl alcohol 100%	15300903	2
Caelo	Isopropyl alcohol 100%	16039925	2
Sanacorp/Hedinger WE:15...	Isopropyl alcohol 100%	70748B	1
SHELL	Isopropyl alcohol 100%	70540b	1
Shell Chemicals	Isopropyl alcohol 100%	70703B	1
Shell Chemicals	Isopropyl alcohol 100%	70577B	1
sittig	Isopropyl alcohol 100%	70788B	1
Sophien AM GmbH/ Kiefer...	Isopropyl alcohol 100%	310260117116	2
sophien-arzneimittel	Isopropyl alcohol 100%	310190514069	1
Caelo	Isopropyl alcohol 100%	14278907	1
Caelo	Isopropyl alcohol 100%	14278911	2
spinnenrad	Isopropyl alcohol 100%	611410093	1
Spinnrad	Isopropyl alcohol 100%	1114410092	1
Spinnrad	Isopropyl alcohol 100%	516410091	1
Stumpf	Isopropyl alcohol 100%	70540B	1
Caelo	Isopropyl alcohol 100%	705368	1
Stumpf/Hedinger	Isopropyl alcohol 100%	70527B	2
Stumpf/Hedinger	Isopropyl alcohol 100%	70627B	1
Stumpf/Hedinger	Isopropyl alcohol 100%	70673B	1
Taoasis	Isopropyl alcohol 100%	701011B	1
VDL	Isopropyl alcohol 100%	14051020	1
VDL	Isopropyl alcohol 100%	14219213	1
Caelo	Isopropyl alcohol 100%	12179328	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	12321008	1
Caelo	Isopropyl alcohol 100%	12321012	1
Caelo	Isopropyl alcohol 100%	12254709	2
WE:Sanacorp 08.11.2016 ...	Isopropyl alcohol 100%	70870B	1
Caelo	Isopropyl alcohol 100%		5
Caelo	Isopropyl alcohol 100%	14051031	3
Fagron	Isopropyl alcohol 100%		1
Fischar	Isopropyl alcohol 100%		1
Hedinger	Isopropyl alcohol 100%		1
Hedinger/Otto	Isopropyl alcohol 100%		1
	Isopropyl alcohol 100%	70603B	1
Sanacorp	Isopropyl alcohol 100%		1

- 136 129 spectra from 703 *Apo-Ident* customers from a total of 34 346 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Isopropyl alcohol 100%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Isopropyl alcohol 100%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	260	0	56 099
Type B	0	40	0	69 434
Type C	0	2198	26	136 129

The substance/substance group *Isopropyl alcohol 100%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.6923 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6452 %)	98.8309 % (> 98.6960 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Isopropyl alcohol 100%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpantenol	142.36	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Isopropyl alcohol 100%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30759	31517	7.07	202.86
31232	31517	1.47	197.14
31386	31517	3.16	195.06
31517	31517	0.00	195.10
32817	31517	6.61	184.74
33256	31517	5.08	181.15

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Isopropyl alcohol 70%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30848-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Isopropyl alcohol 70%; Alcohol isopropylicus 70%

Special notes

When selecting the *Isopropyl alcohol 70%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Isopropyl alcohol 70%	10	12	1127

Second-stage model

For differentiation of the substance/substance group *Isopropyl alcohol 70%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Isopropyl alcohol 70%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Isopropyl alcoho...	14076503	31388	40	1412279
Caelo	Isopropyl alcoho...	14331004	31622	60	20141104
Caelo	Isopropyl alcoho...	15403802	31831	60	20151127
Caelo	Isopropyl alcoho...	160884	32216	40	20160414*
Caelo	Isopropyl alcoho...	161678	32318	40	20160722*
Caelo	Isopropyl alcoho...	161677	32319	40	20160722*
Caelo	Isopropyl alcoho...	161676	32320	40	20160722*
Caelo	Isopropyl alcoho...	161679	32322	40	20160722*
Caelo	Isopropyl alcoho...	163189	33105	40	20161206*
Caelo	Isopropyl alcoho...	163190	33106	40	20161206*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 440 spectra of 10 reference samples from the substance/substance group *Isopropyl alcohol 70%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55 919 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 480 spectra of 12 reference samples from the substance/substance group *Isopropyl alcohol 70%*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl alcohol 70%	163191	33107	40
Caelo	Isopropyl alcohol 70%	163192	33108	40
Caelo	Isopropyl alcohol 70%	172029	33685	40
Caelo	Isopropyl alcohol 70%	172028	33686	40
Caelo	Isopropyl alcohol 70%	172031	33689	40
Caelo	Isopropyl alcohol 70%	170821	33702	40
Caelo	Isopropyl alcohol 70%	181143	34067	40
Caelo	Isopropyl alcohol 70%	181142	34068	40
Caelo	Isopropyl alcohol 70%	181141	34069	40
Caelo	Isopropyl alcohol 70%	180739	34071	40
Caelo	Isopropyl alcohol 70%	183080	34465	40
Caelo	Isopropyl alcohol 70%	183079	34466	40

- 68 994 spectra from a total of 1490 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2070 spectra from 287 *Apo-Ident* customers from 1134 batches from the substance/substance group *Isopropyl alcohol 70%*.
- Among them are spectra of independent samples from 1126 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
03.08.2020	Isopropyl alcohol 70%	53532	3
03.08.2020	Isopropyl alcohol 70%	53537	1
03.08.2020	Isopropyl alcohol 70%	53536	1
A. Hedinger/Noweda	Isopropyl alcohol 70%	53336	2
AHD/Hedinger	Isopropyl alcohol 70%	53296	1
AHD/Hedinger	Isopropyl alcohol 70%	53318	1
AHD/Hedinger	Isopropyl alcohol 70%	53329	1
Caelo	Isopropyl alcohol 70%	15309201	2
Alliance Health 17.03.2...	Isopropyl alcohol 70%	53279	2
Alliance Healthcare/Hed...	Isopropyl alcohol 70%	53285	3
Alliance Healthcare/Hed...	Isopropyl alcohol 70%	53540	1
allianz	Isopropyl alcohol 70%	53388	1
Allianz	Isopropyl alcohol 70%	17036	2
Alte Apo Defekur	Isopropyl alcohol 70%	117A-01080	1
Alte Apo Defekur	Isopropyl alcohol 70%	517I-01080	1
Alte Apo Defekur	Isopropyl alcohol 70%	1617M-01080	1
Alte Apo Defekur	Isopropyl alcohol 70%	2217M-01080	1
Alte Apo Defekur	Isopropyl alcohol 70%	2217Q-01080	1
Alte Apo Defekur	Isopropyl alcohol 70%	3317I-01080	2

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Supplier	Substance	Batch	Spectra
Alte Apo Defektur	Isopropyl alcohol 70%	4317E-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	5017I-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	518A-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	818E-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	1418I-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	1918I-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	2818M-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	3218M-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	3818I-01080	2
Alte Apo Defektur	Isopropyl alcohol 70%	4818E-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	119M-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	719M-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	2019M-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	H230819	1
Alte Apo Defektur	Isopropyl alcohol 70%	3919A-01080	1
Alte Apotheke	Isopropyl alcohol 70%	4716E-01080	1
Caelo	Isopropyl alcohol 70%	17082103	2
Apo Dunningen	Isopropyl alcohol 70%	1917A-01080	1
Apo Dunningen	Isopropyl alcohol 70%	3517A-01080	1
Apolda	Isopropyl alcohol 70%	120214	1
Apotärze	Isopropyl alcohol 70%	4815I-01080	1
Apoth.E.Bartel	Isopropyl alcohol 70%	70545B/2	1
Apotheke	Isopropyl alcohol 70%	6062013	1
Apotheke	Isopropyl alcohol 70%	4813Q-0180	1
Apotheke	Isopropyl alcohol 70%	2815E-01080	1
Apotheke	Isopropyl alcohol 70%	116E-07013	1
Apotheke	Isopropyl alcohol 70%	12345	1
Apotheke	Isopropyl alcohol 70%	70214/51Dre	1
Apotheke am Holzweg	Isopropyl alcohol 70%	3912Y-01080	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	4716I-01080	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	2517Q-01080	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	3618M-01080	1
Apotheke Dunningen	Isopropyl alcohol 70%	317A-01080	1
ASS	Isopropyl alcohol 70%	314A01080	1
Aug. Hedinger	Isopropyl alcohol 70%	53385	2
Bären Apotheke	Isopropyl alcohol 70%	1917Q-01080	1
Berliner Bär Apotheke	Isopropyl alcohol 70%	H819091	2
bison	Isopropyl alcohol 70%	317H4	1
Bison	Isopropyl alcohol 70%	517H2	1
Bombastus	Isopropyl alcohol 70%	175131	1
Bombastus	Isopropyl alcohol 70%	53485	2
Bombastus	Isopropyl alcohol 70%	16319201	1
Braun / Sanacorp	Isopropyl alcohol 70%	19043M11	1
Brinn- Holtz	Isopropyl alcohol 70%	1233-04/18	1
Brinn-Holtz	Isopropyl alcohol 70%	1288-09/18	1
Brugger	Isopropyl alcohol 70%	21112013	1
C.Lange	Isopropyl alcohol 70%	50817/50La	1
C.Lange	Isopropyl alcohol 70%	60307/51La	1
Caelo	Isopropyl alcohol 70%	H22062013H1	1
Caelo	Isopropyl alcohol 70%	14101402	1
Caelo	Isopropyl alcohol 70%	2081701	1
Caelo	Isopropyl alcohol 70%	9011801	1
Caelo	Isopropyl alcohol 70%	12031801	1
Caelo	Isopropyl alcohol 70%	15031803	1
Caelo	Isopropyl alcohol 70%	14041802	1
Caelo	Isopropyl alcohol 70%	2512A-01080	1
Caelo	Isopropyl alcohol 70%	12136303	6
Caelo	Isopropyl alcohol 70%	2081202	1
Caelo	Isopropyl alcohol 70%	24081207	1
Caelo	Isopropyl alcohol 70%	24101203	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	221111205	1
Caelo	Isopropyl alcohol 70%	14121205	1
Caelo	Isopropyl alcohol 70%	12278702	1
Caelo	Isopropyl alcohol 70%	7021307	1
Caelo	Isopropyl alcohol 70%	22021303	1
Caelo	Isopropyl alcohol 70%	13008902	2
Caelo	Isopropyl alcohol 70%	13031304	1
Caelo	Isopropyl alcohol 70%	12338001	1
Caelo	Isopropyl alcohol 70%	12338101	1
Caelo	Isopropyl alcohol 70%	Eigenherstellung	1
Caelo	Isopropyl alcohol 70%	23041304	1
Caelo	Isopropyl alcohol 70%	22051301	1
Caelo	Isopropyl alcohol 70%	13092203	3
Caelo	Isopropyl alcohol 70%	13092201	1
Caelo	Isopropyl alcohol 70%	130009002	1
Caelo	Isopropyl alcohol 70%	130009003	1
Caelo	Isopropyl alcohol 70%	18061306	1
Caelo	Isopropyl alcohol 70%	7082013/1	1
Caelo	Isopropyl alcohol 70%	24081303	1
Caelo	Isopropyl alcohol 70%	3091302	1
Caelo	Isopropyl alcohol 70%	20091302	1
Caelo	Isopropyl alcohol 70%	12101301	1
Caelo	Isopropyl alcohol 70%	14101303	1
Caelo	Isopropyl alcohol 70%	18101301	1
Caelo	Isopropyl alcohol 70%	15111304	1
Caelo	Isopropyl alcohol 70%	12121306	1
Caelo	Isopropyl alcohol 70%	24011405	1
Caelo	Isopropyl alcohol 70%	6041407	1
Caelo	Isopropyl alcohol 70%	13363001	1
Caelo	Isopropyl alcohol 70%	20021415	1
Caelo	Isopropyl alcohol 70%	20021414	1
Caelo	Isopropyl alcohol 70%	113363003	1
Caelo	Isopropyl alcohol 70%	11031406	1
Caelo	Isopropyl alcohol 70%	14026303	2
Caelo	Isopropyl alcohol 70%	14026401	5
Caelo	Isopropyl alcohol 70%	6061401	1
Caelo	Isopropyl alcohol 70%	2314E-01080	1
Caelo	Isopropyl alcohol 70%	14076603	2
Caelo	Isopropyl alcohol 70%	26071401	1
Caelo	Isopropyl alcohol 70%	6081405	1
Caelo	Isopropyl alcohol 70%	3414E-01080	1
Caelo	Isopropyl alcohol 70%	25081401	1
Caelo	Isopropyl alcohol 70%	14074205	1
Caelo	Isopropyl alcohol 70%	25091402	1
Caelo	Isopropyl alcohol 70%	141t46801	1
Caelo	Isopropyl alcohol 70%	RH141030-0003	1
Caelo	Isopropyl alcohol 70%	19111401	1
Caelo	Isopropyl alcohol 70%	47141-01080	2
Caelo	Isopropyl alcohol 70%	21114103	1
Caelo	Isopropyl alcohol 70%	4914A-01080	1
Caelo	Isopropyl alcohol 70%	16121402	1
Caelo	Isopropyl alcohol 70%	14330901	3
Caelo	Isopropyl alcohol 70%	20011503	1
Caelo	Isopropyl alcohol 70%	H030315T1	1
Caelo	Isopropyl alcohol 70%	H170315T1	1
Caelo	Isopropyl alcohol 70%	15014202	2
Caelo	Isopropyl alcohol 70%	2415Q-01080	1
Caelo	Isopropyl alcohol 70%	15248503	1
Caelo	Isopropyl alcohol 70%	28091701	1
Caelo	Isopropyl alcohol 70%	14229103	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	20021506	1
Caelo	Isopropyl alcohol 70%	12031514	1
Caelo	Isopropyl alcohol 70%	18031503	1
Caelo	Isopropyl alcohol 70%	2041501	1
Caelo	Isopropyl alcohol 70%	14041501	1
Caelo	Isopropyl alcohol 70%	15076401	2
Caelo	Isopropyl alcohol 70%	15014302	2
Caelo	Isopropyl alcohol 70%	11051501	1
Caelo	Isopropyl alcohol 70%	5061501	1
Caelo	Isopropyl alcohol 70%	15053505	1
Caelo	Isopropyl alcohol 70%	23061501	1
Caelo	Isopropyl alcohol 70%	18061508	1
Caelo	Isopropyl alcohol 70%	16071503	1
Caelo	Isopropyl alcohol 70%	18081510	1
Caelo	Isopropyl alcohol 70%	18081511	1
Caelo	Isopropyl alcohol 70%	53324	1
Caelo	Isopropyl alcohol 70%	2015181201E0	1
Caelo	Isopropyl alcohol 70%	53353	2
Caelo	Isopropyl alcohol 70%	303033	1
Caelo	Isopropyl alcohol 70%	15430002	1
Caelo	Isopropyl alcohol 70%	140505	1
Caelo	Isopropyl alcohol 70%	15430004	1
Caelo	Isopropyl alcohol 70%	16049003	1
Caelo	Isopropyl alcohol 70%	53359	1
Caelo	Isopropyl alcohol 70%	2616E-01080	1
Caelo	Isopropyl alcohol 70%	2916A-01080	1
Caelo	Isopropyl alcohol 70%	15437802	3
Caelo	Isopropyl alcohol 70%	3081605	1
Caelo	Isopropyl alcohol 70%	16138703	1
Caelo	Isopropyl alcohol 70%	15430005	1
Caelo	Isopropyl alcohol 70%	16088403	3
Caelo	Isopropyl alcohol 70%	16202803	1
Caelo	Isopropyl alcohol 70%	2600980T	1
Caelo	Isopropyl alcohol 70%	16237302	1
Caelo	Isopropyl alcohol 70%	16167802	2
Caelo	Isopropyl alcohol 70%	Caelo	1
Caelo	Isopropyl alcohol 70%	16296604	1
Caelo	Isopropyl alcohol 70%	11031704	1
Caelo	Isopropyl alcohol 70%	27031704	1
Caelo	Isopropyl alcohol 70%	53415	1
Caelo	Isopropyl alcohol 70%	13041701	1
Caelo	Isopropyl alcohol 70%	15437701	1
Caelo	Isopropyl alcohol 70%	4051704	1
Caelo	Isopropyl alcohol 70%	5051702	1
Caelo	Isopropyl alcohol 70%	53413	1
Caelo	Isopropyl alcohol 70%	1061701	1
Caelo	Isopropyl alcohol 70%	17033801	1
Caelo	Isopropyl alcohol 70%	23061707	1
Caelo	Isopropyl alcohol 70%	17082102	4
Caelo	Isopropyl alcohol 70%	17082101	3
Caelo	Isopropyl alcohol 70%	53428	1
Caelo	Isopropyl alcohol 70%	9071701	1
Caelo	Isopropyl alcohol 70%	21081702	1
Caelo	Isopropyl alcohol 70%	21081701	1
Caelo	Isopropyl alcohol 70%	53444	2
Caelo	Isopropyl alcohol 70%	17082303	1
Caelo	Isopropyl alcohol 70%	17082302	5
Caelo	Isopropyl alcohol 70%	8091702	1
Caelo	Isopropyl alcohol 70%	17202903	5
Caelo	Isopropyl alcohol 70%	17202801	3

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	17202802	1
Caelo	Isopropyl alcohol 70%	17203001	4
Caelo	Isopropyl alcohol 70%	6111701	1
Caelo	Isopropyl alcohol 70%	6111702	1
Caelo	Isopropyl alcohol 70%	173441	1
Caelo	Isopropyl alcohol 70%	22111701	1
Caelo	Isopropyl alcohol 70%	20121701	1
Caelo	Isopropyl alcohol 70%	17311402	1
Caelo	Isopropyl alcohol 70%	29011805	1
Caelo	Isopropyl alcohol 70%	15021802	1
Caelo	Isopropyl alcohol 70%	174321	1
Caelo	Isopropyl alcohol 70%	18073702	6
Caelo	Isopropyl alcohol 70%	305201801	1
Caelo	Isopropyl alcohol 70%	53475	1
Caelo	Isopropyl alcohol 70%	18051801	1
Caelo	Isopropyl alcohol 70%	18073801	1
Caelo	Isopropyl alcohol 70%	18073902	8
Caelo	Isopropyl alcohol 70%	20061801	1
Caelo	Isopropyl alcohol 70%	19071801	1
Caelo	Isopropyl alcohol 70%	19071802	1
Caelo	Isopropyl alcohol 70%	18114101	1
Caelo	Isopropyl alcohol 70%	21081801	1
Caelo	Isopropyl alcohol 70%	10091802	1
Caelo	Isopropyl alcohol 70%	24101804	1
Caelo	Isopropyl alcohol 70%	30101801	1
Caelo	Isopropyl alcohol 70%	8111802	2
Caelo	Isopropyl alcohol 70%	5121814	1
Caelo	Isopropyl alcohol 70%	18235101	2
Caelo	Isopropyl alcohol 70%	8011901	1
Caelo	Isopropyl alcohol 70%	22011901	1
Caelo	Isopropyl alcohol 70%	18235302	2
Caelo	Isopropyl alcohol 70%	18308001	3
Caelo	Isopropyl alcohol 70%	184741	1
Caelo	Isopropyl alcohol 70%	18308203	1
Caelo	Isopropyl alcohol 70%	18308101	1
Caelo	Isopropyl alcohol 70%	19078704	2
Caelo	Isopropyl alcohol 70%	19079001	2
Caelo	Isopropyl alcohol 70%	14229201	1
Caelo	Isopropyl alcohol 70%	19138601	2
Caelo	Isopropyl alcohol 70%	16167601	3
Caelo	Isopropyl alcohol 70%	16167901	1
Caelo	Isopropyl alcohol 70%	53241	1
Caelo	Isopropyl alcohol 70%	1416702	1
Caelo	Isopropyl alcohol 70%	1915A-01080	1
Caelo	Isopropyl alcohol 70%	15308201	1
Caelo	Isopropyl alcohol 70%	16167801	1
Caelo	Isopropyl alcohol 70%	16319202	2
Caelo	Isopropyl alcohol 70%	16167902	4
Caelo	Isopropyl alcohol 70%	4118012	1
Caelo	Isopropyl alcohol 70%	18114302	2
Caelo	Isopropyl alcohol 70%	12338104	3
Caelo	Isopropyl alcohol 70%	13009003	1
Caelo	Isopropyl alcohol 70%	13319405	2
Caelo	Isopropyl alcohol 70%	13363107	1
Caelo	Isopropyl alcohol 70%	14076602	6
Caelo	Isopropyl alcohol 70%	14146703	1
Caelo	Isopropyl alcohol 70%	14331003	3
Caelo	Isopropyl alcohol 70%	17203101	3
Caelo	Isopropyl alcohol 70%	14327203	1
Caelo	Isopropyl alcohol 70%	1613q-01080	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	14026403	3
Caelo	Isopropyl alcohol 70%	14146803	6
Caelo	Isopropyl alcohol 70%	15076602	7
Caelo	Isopropyl alcohol 70%	15192101	3
Caelo	Isopropyl alcohol 70%	15309001	4
Caelo	Isopropyl alcohol 70%	4813E-01080	1
Caelo	Isopropyl alcohol 70%	15437601	7
Caelo	Isopropyl alcohol 70%	13008903	2
Caelo	Isopropyl alcohol 70%	13155403	3
Caelo	Isopropyl alcohol 70%	13217603	2
Caelo	Isopropyl alcohol 70%	182731	2
Caelo	Isopropyl alcohol 70%	16319201	5
Caelo	Isopropyl alcohol 70%	817J01080	1
Caelo	Isopropyl alcohol 70%	1517A-01080	1
Caelo	Isopropyl alcohol 70%	13363003	2
Caelo	Isopropyl alcohol 70%	53332	1
Caelo	Isopropyl alcohol 70%	53476	1
Caelo	Isopropyl alcohol 70%	18235201	2
Caelo	Isopropyl alcohol 70%	140902	1
Caelo	Isopropyl alcohol 70%	17311403	4
Caelo	Isopropyl alcohol 70%	15192002	2
Caelo	Isopropyl alcohol 70%	53416	1
Caelo	Isopropyl alcohol 70%	18114001	4
Caelo	Isopropyl alcohol 70%	13217602	1
Caelo	Isopropyl alcohol 70%	15076603	2
Caelo	Isopropyl alcohol 70%	15404002	2
Caelo	Isopropyl alcohol 70%	53367	1
Caelo	Isopropyl alcohol 70%	53465	2
Caelo	Isopropyl alcohol 70%	17202901	1
Caelo	Isopropyl alcohol 70%	180621006	1
Caelo	Isopropyl alcohol 70%	534825599	1
Caelo	Isopropyl alcohol 70%	53404	1
Caelo	Isopropyl alcohol 70%	2x053426	1
Caelo	Isopropyl alcohol 70%	3115E-01080	1
Caelo	Isopropyl alcohol 70%	15192102	1
Caelo	Isopropyl alcohol 70%	41161-01080	1
Caelo	Isopropyl alcohol 70%	53567	1
Caelo	Isopropyl alcohol 70%	140226402	1
Caelo	Isopropyl alcohol 70%	14114501	2
Caelo	Isopropyl alcohol 70%	14229101	3
Caelo	Isopropyl alcohol 70%	12202902	1
Caelo	Isopropyl alcohol 70%	14146804	1
Caelo	Isopropyl alcohol 70%	15014301	1
Caelo	Isopropyl alcohol 70%	15191902	2
Caelo	Isopropyl alcohol 70%	15192001	2
Caelo	Isopropyl alcohol 70%	15192003	2
Caelo	Isopropyl alcohol 70%	2601004T	1
Caelo	Isopropyl alcohol 70%	163191102	1
Caelo	Isopropyl alcohol 70%	53496	1
Caelo	Isopropyl alcohol 70%	18235202	1
Caelo	Isopropyl alcohol 70%	17203002	1
Caelo	Isopropyl alcohol 70%	16319102	1
Caelo	Isopropyl alcohol 70%	13217501	1
Caelo	Isopropyl alcohol 70%	53398	1
Caelo	Isopropyl alcohol 70%	17358201	10
Caelo	Isopropyl alcohol 70%	14146701	3
Caelo	Isopropyl alcohol 70%	53141-01080	1
Caelo	Isopropyl alcohol 70%	15014102	3
Caelo	Isopropyl alcohol 70%	15076601	1
Caelo	Isopropyl alcohol 70%	15309101	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	123456789	1
Caelo	Isopropyl alcohol 70%	53385	1
Caelo	Isopropyl alcohol 70%	53383	3
Caelo	Isopropyl alcohol 70%	16088302	4
Caelo	Isopropyl alcohol 70%	53396	1
Caelo	Isopropyl alcohol 70%	53408	1
Caelo	Isopropyl alcohol 70%	16318901	1
Caelo	Isopropyl alcohol 70%	141117P801/17203002	1
Caelo	Isopropyl alcohol 70%	17358202	1
Caelo	Isopropyl alcohol 70%	13155401	2
Caelo	Isopropyl alcohol 70%	53401	3
Caelo	Isopropyl alcohol 70%	14146801	3
Caelo	Isopropyl alcohol 70%	14330803	2
Caelo	Isopropyl alcohol 70%	12202801	1
Caelo	Isopropyl alcohol 70%	12136201	1
Caelo	Isopropyl alcohol 70%	12278601	4
Caelo	Isopropyl alcohol 70%	12278704	2
Caelo	Isopropyl alcohol 70%	13155503	5
Caelo	Isopropyl alcohol 70%	13319502	1
Caelo	Isopropyl alcohol 70%	13319404	2
Caelo	Isopropyl alcohol 70%	13363104	1
Caelo	Isopropyl alcohol 70%	13363101	2
Caelo	Isopropyl alcohol 70%	14114601	1
Caelo	Isopropyl alcohol 70%	14146802	1
Caelo	Isopropyl alcohol 70%	15014204	1
Caelo	Isopropyl alcohol 70%	15014101	1
Caelo	Isopropyl alcohol 70%	14330902	1
Caelo	Isopropyl alcohol 70%	15437801	1
Caelo	Isopropyl alcohol 70%	2216M-01080	1
Caelo	Isopropyl alcohol 70%	2171-01080	1
Caelo	Isopropyl alcohol 70%	9171-01080	1
Caelo	Isopropyl alcohol 70%	53437	2
Caelo	Isopropyl alcohol 70%	53474	1
Caelo	Isopropyl alcohol 70%	53500	2
Caelo	Isopropyl alcohol 70%	53493	3
Caelo	Isopropyl alcohol 70%	53488	1
Caelo	Isopropyl alcohol 70%	18114202	8
Caelo	Isopropyl alcohol 70%	53578	2
Caelo	Isopropyl alcohol 70%	15403902	1
Caelo	Isopropyl alcohol 70%	AL313	1
Caelo	Isopropyl alcohol 70%	116M-01080	1
Caelo	Isopropyl alcohol 70%	14330802	1
Caelo	Isopropyl alcohol 70%	1016A	1
Caelo	Isopropyl alcohol 70%	2716I-01080	1
Caelo	Isopropyl alcohol 70%	3216E	2
Caelo	Isopropyl alcohol 70%	53378	1
Caelo	Isopropyl alcohol 70%	4116104	1
Caelo	Isopropyl alcohol 70%	53551	1
Caelo	Isopropyl alcohol 70%	53395	1
Caelo	Isopropyl alcohol 70%	14229202	1
Caelo	Isopropyl alcohol 70%	15150202	4
Caelo	Isopropyl alcohol 70%	16088201	3
Caelo	Isopropyl alcohol 70%	16319001	3
Caelo	Isopropyl alcohol 70%	17082201	2
Caelo	Isopropyl alcohol 70%	15150201	1
Caesar & Loretz GmbH	Isopropyl alcohol 70%	18307901	1
Caesar & Loretz GmbH	Isopropyl alcohol 70%	19078901	1
Caolo	Isopropyl alcohol 70%	D07104T1	1
carina certain	Isopropyl alcohol 70%	11097	1
Cealo	Isopropyl alcohol 70%	14146801	1

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Supplier	Substance	Batch	Spectra
Celo	Isopropyl alcohol 70%	16167802	1
CL. LANGE	Isopropyl alcohol 70%	50921/51La	1
Claudia Lange	Isopropyl alcohol 70%	60620/51La	1
Claudia Lange	Isopropyl alcohol 70%	60620/50La	1
Claudia Lange	Isopropyl alcohol 70%	60704/50La	1
Defektur	Isopropyl alcohol 70%	2812M-01080	1
Defektur	Isopropyl alcohol 70%	23712	1
Defektur	Isopropyl alcohol 70%	3812	1
Defektur	Isopropyl alcohol 70%	53/12	1
Defektur	Isopropyl alcohol 70%	21012013	1
Defektur	Isopropyl alcohol 70%	2/13	1
Defektur	Isopropyl alcohol 70%	9/13	1
Defektur	Isopropyl alcohol 70%	200313Iso70	1
Defektur	Isopropyl alcohol 70%	16/13	1
Defektur	Isopropyl alcohol 70%	H17042013B1	1
Defektur	Isopropyl alcohol 70%	180413Iso70	1
Defektur	Isopropyl alcohol 70%	100513Iso70	1
Defektur	Isopropyl alcohol 70%	22/13	1
Defektur	Isopropyl alcohol 70%	280513Iso70	1
Defektur	Isopropyl alcohol 70%	210613Iso70	1
Defektur	Isopropyl alcohol 70%	27/13	1
Defektur	Isopropyl alcohol 70%	250713Iso70	1
Defektur	Isopropyl alcohol 70%	37/13	1
Defektur	Isopropyl alcohol 70%	290813Iso70	1
Defektur	Isopropyl alcohol 70%	3713Q-01080	1
Defektur	Isopropyl alcohol 70%	42/13	1
Defektur	Isopropyl alcohol 70%	51/13	1
Defektur	Isopropyl alcohol 70%	151113Iso70	1
Defektur	Isopropyl alcohol 70%	5013A	1
Defektur	Isopropyl alcohol 70%	58/13	1
Defektur	Isopropyl alcohol 70%	80114Iso70	1
Defektur	Isopropyl alcohol 70%	2/14	1
Defektur	Isopropyl alcohol 70%	514A	1
Defektur	Isopropyl alcohol 70%	7/14	1
Defektur	Isopropyl alcohol 70%	1214I	1
Defektur	Isopropyl alcohol 70%	1414I	1
Defektur	Isopropyl alcohol 70%	14/14	1
Defektur	Isopropyl alcohol 70%	22/14	1
Defektur	Isopropyl alcohol 70%	28/14	1
Defektur	Isopropyl alcohol 70%	1467/2014072920	1
Defektur	Isopropyl alcohol 70%	34/14	1
Defektur	Isopropyl alcohol 70%	4114I	1
Defektur	Isopropyl alcohol 70%	37/14	1
Defektur	Isopropyl alcohol 70%	4714M	1
Defektur	Isopropyl alcohol 70%	43/14	1
Defektur	Isopropyl alcohol 70%	5214A	1
Defektur	Isopropyl alcohol 70%	2/15	1
Defektur	Isopropyl alcohol 70%	12/15	1
Defektur	Isopropyl alcohol 70%	1215A	1
Defektur	Isopropyl alcohol 70%	1415M-01080	1
Defektur	Isopropyl alcohol 70%	2915E	1
Defektur	Isopropyl alcohol 70%	3715Q	1
Defektur	Isopropyl alcohol 70%	50907/50Si	1
Defektur	Isopropyl alcohol 70%	4115Q	1
Defektur	Isopropyl alcohol 70%	4315Q-01080	1
Defektur	Isopropyl alcohol 70%	4415A-01080	1
Defektur	Isopropyl alcohol 70%	60209/50Hk	1
Defektur	Isopropyl alcohol 70%	1516M-01080	1
Defektur	Isopropyl alcohol 70%	1716A-01080	1
Defektur	Isopropyl alcohol 70%	2216B-01080	1

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Supplier	Substance	Batch	Spectra
Defektur	Isopropyl alcohol 70%	170109002	1
Defektur	Isopropyl alcohol 70%	217Q-01080	1
Defektur	Isopropyl alcohol 70%	170529002	1
Defektur	Isopropyl alcohol 70%	2717I-07125	1
Defektur	Isopropyl alcohol 70%	71016/52Dre	1
Defektur	Isopropyl alcohol 70%	4517M-01080	1
Defektur	Isopropyl alcohol 70%	4917A-01080	1
Defektur	Isopropyl alcohol 70%	80625/50A1	1
Defektur	Isopropyl alcohol 70%	819060	1
DEFEKTUR	Isopropyl alcohol 70%	2314M-01080	2
Defektur / Wolf-Apotheke	Isopropyl alcohol 70%	50828/50Wlo	1
Defektur 1616E-01080	Isopropyl alcohol 70%	1616E-01080	1
Defektur 4416A-01080	Isopropyl alcohol 70%	4416A-01080	1
Defektur 4814N-01080	Isopropyl alcohol 70%	4814N-01080	2
Defektur Rheinbogen Apo...	Isopropyl alcohol 70%	1/20192005	1
Defektur/eigen	Isopropyl alcohol 70%	1416Q-01080	1
Defektur/eigen	Isopropyl alcohol 70%	2216A-01080	1
Defektur/eigen	Isopropyl alcohol 70%	2816M-01080	1
Defektur/eigen	Isopropyl alcohol 70%	3016E-01080	1
Defektur/eigen	Isopropyl alcohol 70%	3216I-01080	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	40509/50Wo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50103/50Wlo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50227/50Wlo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50313/50Wlo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50330/50Wlo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50715/50Wlo	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	61215/50Dre	1
Defektur_EW_04062013	Isopropyl alcohol 70%	130604002	1
Defektur_JP_07012013	Isopropyl alcohol 70%	213A-07015	1
Defektur_JP_25022013	Isopropyl alcohol 70%	913A-07015	1
Defektur_JP_28012013	Isopropyl alcohol 70%	513A-07015	1
Defekur	Isopropyl alcohol 70%	516Q-01080	1
Delta	Isopropyl alcohol 70%	53451	1
Delta	Isopropyl alcohol 70%	18073702	1
Delta	Isopropyl alcohol 70%	53510	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	4012M-01080	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	4912M-01080	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	913A-01080	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	3013A-01080	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	3413M-01080	1
Ebert/Hedinger	Isopropyl alcohol 70%	53526	1
Ebert/Hedinger	Isopropyl alcohol 70%	53550	1
Eiegn/Defektur	Isopropyl alcohol 70%	616E-01080	1
eigen	Isopropyl alcohol 70%	3615I-01080	1
eigen	Isopropyl alcohol 70%	116G-01080	1
eigen	Isopropyl alcohol 70%	116E-01080	1
Eigen	Isopropyl alcohol 70%	4413A-01080	1
Eigen	Isopropyl alcohol 70%	3914A-01080	1
Eigen	Isopropyl alcohol 70%	3615A-01080	1
Eigen	Isopropyl alcohol 70%	4215E-01080	1
Eigen	Isopropyl alcohol 70%	5315I-01080	1
Eigen	Isopropyl alcohol 70%	Eigen	2
Eigen	Isopropyl alcohol 70%	2416M-01080	1
Eigen	Isopropyl alcohol 70%	3116M-01080	1
Eigen	Isopropyl alcohol 70%	3616M-01080	2
Eigen	Isopropyl alcohol 70%	5216E-01079	1
Eigen	Isopropyl alcohol 70%	1317N-01080	2
EIGEN	Isopropyl alcohol 70%	4117E-01080	1
EIGEN	Isopropyl alcohol 70%	4117I-01080	1
EIGEN	Isopropyl alcohol 70%	EIGEN	1

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Supplier	Substance	Batch	Spectra
Eigen Defektur	Isopropyl alcohol 70%	316Q-01080	1
Eigen Defektur	Isopropyl alcohol 70%	1016E-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	3515A-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	4215M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	4715E-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	4815Q-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	5015A-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	216A-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	216M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	716M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	1116M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	1916M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	2316I-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	2516I-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	2716A-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	2616Q-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	3016M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	3516M-01080	1
Eigenbedarf (Hergestel...	Isopropyl alcohol 70%	260613	1
Eigene	Isopropyl alcohol 70%	3815A-01080	1
eigene herstellung	Isopropyl alcohol 70%	a1308	1
eigene herstellung	Isopropyl alcohol 70%	a1309	1
eigene herstellung	Isopropyl alcohol 70%	AL314	2
eigene Herstellung	Isopropyl alcohol 70%	3013M-01080	1
eigene Herstellung	Isopropyl alcohol 70%	1201-15	1
eigene Herstellung	Isopropyl alcohol 70%	5210115	1
eigene Herstellung	Isopropyl alcohol 70%	91215	1
eigene Herstellung	Isopropyl alcohol 70%	AL321	1
Eigene Herstellung	Isopropyl alcohol 70%	AL310	1
Eigene Herstellung	Isopropyl alcohol 70%	AL311	1
Eigene Herstellung	Isopropyl alcohol 70%	AL312	1
Eigene Herstellung	Isopropyl alcohol 70%	AL315	1
Eigene Herstellung	Isopropyl alcohol 70%	AL316	1
Eigene Herstellung	Isopropyl alcohol 70%	AL317	1
Eigene Herstellung	Isopropyl alcohol 70%	AL318	1
Eigene Herstellung	Isopropyl alcohol 70%	AL319	1
Eigene Herstellung	Isopropyl alcohol 70%	AL320	1
eigenherstellung	Isopropyl alcohol 70%	3116Q-03043	1
Eigenherstellung	Isopropyl alcohol 70%	9051212	1
Eigenherstellung	Isopropyl alcohol 70%	eigene	1
Eigenherstellung	Isopropyl alcohol 70%	9070313	1
Eigenherstellung	Isopropyl alcohol 70%	1513A-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1823	1
Eigenherstellung	Isopropyl alcohol 70%	9230413	1
Eigenherstellung	Isopropyl alcohol 70%	9010813	1
Eigenherstellung	Isopropyl alcohol 70%	3313Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9100414	1
Eigenherstellung	Isopropyl alcohol 70%	28072014	1
Eigenherstellung	Isopropyl alcohol 70%	3414E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1-20082014	1
Eigenherstellung	Isopropyl alcohol 70%	4114Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1-23102014	1
Eigenherstellung	Isopropyl alcohol 70%	1-11122014	1
Eigenherstellung	Isopropyl alcohol 70%	5114M-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9261114	1
Eigenherstellung	Isopropyl alcohol 70%	515E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9270215	1
Eigenherstellung	Isopropyl alcohol 70%	1215M-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1815E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	2015E-01080	1

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Supplier	Substance	Batch	Spectra
Eigenherstellung	Isopropyl alcohol 70%	23/15	2
Eigenherstellung	Isopropyl alcohol 70%	3215E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	4015A-0108	1
Eigenherstellung	Isopropyl alcohol 70%	4515Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9091115	1
Eigenherstellung	Isopropyl alcohol 70%	4715M	1
Eigenherstellung	Isopropyl alcohol 70%	5015Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9211215	1
Eigenherstellung	Isopropyl alcohol 70%	216M-01080	1
Eigenherstellung	Isopropyl alcohol 70%	316E	1
Eigenherstellung	Isopropyl alcohol 70%	4022016-01	1
Eigenherstellung	Isopropyl alcohol 70%	1416E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	2016040520KS	1
Eigenherstellung	Isopropyl alcohol 70%	1916A	1
Eigenherstellung	Isopropyl alcohol 70%	2216E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	2716I_01080	1
Eigenherstellung	Isopropyl alcohol 70%	1953	1
Eigenherstellung	Isopropyl alcohol 70%	Eigenherstellung	2
Eigenherstellung	Isopropyl alcohol 70%	3116I-01080	1
Eigenherstellung	Isopropyl alcohol 70%	4716Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	517Q-01080	1
Eigenherstellung	Isopropyl alcohol 70%	3917A-01080	1
Eigenherstellung	Isopropyl alcohol 70%	26107	1
Eigenherstellung	Isopropyl alcohol 70%	5018I-01080	1
Eigenherstellung	Isopropyl alcohol 70%	4115A-01080	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	3315I_01080	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	5115A-01080	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	19012017	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	1717A-01080	1
Eigenherstellung Hubert...	Isopropyl alcohol 70%	2014072221 (DF)	1
Eigenproduktion	Isopropyl alcohol 70%	2413E-01080	1
Eigenrezeptur	Isopropyl alcohol 70%	4616A-01080	1
Eigenrezeptur	Isopropyl alcohol 70%	4616E-01080	1
Engel-Apotheke	Isopropyl alcohol 70%	2519A-01080	1
Euro OCT	Isopropyl alcohol 70%	200214	1
Euro OTC	Isopropyl alcohol 70%	4012Q-01080	1
Euro OTC	Isopropyl alcohol 70%	2600973T	1
Euro OTC	Isopropyl alcohol 70%	53245	1
EuroPTC/Phönix	Isopropyl alcohol 70%	15076401	2
Fagron	Isopropyl alcohol 70%	4114104	1
Fagron	Isopropyl alcohol 70%	53411	3
Fagron	Isopropyl alcohol 70%	1234	1
Fagron	Isopropyl alcohol 70%	15076501	1
Fagron	Isopropyl alcohol 70%	13009002	1
Fagron	Isopropyl alcohol 70%	17311701	1
Fiebig	Isopropyl alcohol 70%	4116123	1
Fiebig	Isopropyl alcohol 70%	18308001	1
Fiebig/ Hedinger	Isopropyl alcohol 70%	53343	1
Fiebig/Hedinger	Isopropyl alcohol 70%	53445	1
Fiebig/Hedinger	Isopropyl alcohol 70%	53475	1
Finteler Apotheke	Isopropyl alcohol 70%	53425	1
fischar	Isopropyl alcohol 70%	4118022	1
fischar	Isopropyl alcohol 70%	4118011	1
fischar	Isopropyl alcohol 70%	4118032	2
fischar	Isopropyl alcohol 70%	4118053	4
fischar	Isopropyl alcohol 70%	4118111	4
fischar	Isopropyl alcohol 70%	4119012	3
fischar	Isopropyl alcohol 70%	4119021	3
fischar	Isopropyl alcohol 70%	4119041	1
Fischar	Isopropyl alcohol 70%	2183	1

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Supplier	Substance	Batch	Spectra
Fischar	Isopropyl alcohol 70%	4114041	1
Fischar	Isopropyl alcohol 70%	4114064	1
Fischar	Isopropyl alcohol 70%	4116044	1
Fischar	Isopropyl alcohol 70%	4114082	1
Fischar	Isopropyl alcohol 70%	4115061	1
Fischar	Isopropyl alcohol 70%	4115062	1
Fischar	Isopropyl alcohol 70%	4116123	1
Fischar	Isopropyl alcohol 70%	4116125	2
Fischar	Isopropyl alcohol 70%	4117022	2
Fischar	Isopropyl alcohol 70%	4117043	1
Fischar	Isopropyl alcohol 70%	4117052	2
Fischar	Isopropyl alcohol 70%	4117064	1
Fischar	Isopropyl alcohol 70%	4117062	1
Fischar	Isopropyl alcohol 70%	4117065	1
Fischar	Isopropyl alcohol 70%	4117082	1
Fischar	Isopropyl alcohol 70%	4117122	3
Fischar	Isopropyl alcohol 70%	4118051	1
Fischar / Anzag	Isopropyl alcohol 70%	4115073	1
Fischar/Fiebig	Isopropyl alcohol 70%	4117064	7
Fischar/Fiebig	Isopropyl alcohol 70%	4117065	12
Fischar/Phoenix	Isopropyl alcohol 70%	4117091	1
Fischar/Phönix	Isopropyl alcohol 70%	4117126	1
Fischar/Sanacorp	Isopropyl alcohol 70%	4114044	1
Franz GmbH, Phoenix	Isopropyl alcohol 70%	53426	1
Frau Hennies	Isopropyl alcohol 70%	240216	1
Gehe	Isopropyl alcohol 70%	11370004	3
Gehe	Isopropyl alcohol 70%	14026402	4
Gehe	Isopropyl alcohol 70%	53264	1
Gehe	Isopropyl alcohol 70%	53290	1
Gehe	Isopropyl alcohol 70%	16318901	1
Gehe	Isopropyl alcohol 70%	16319001	1
Gehe	Isopropyl alcohol 70%	53391	1
Gehe	Isopropyl alcohol 70%	53559	2
GEHE	Isopropyl alcohol 70%	12037601	1
GEHE	Isopropyl alcohol 70%	221160/3	1
GEHE	Isopropyl alcohol 70%	603117000	1
GEHE	Isopropyl alcohol 70%	53420	2
GEHE	Isopropyl alcohol 70%	16319001	1
GEHE	Isopropyl alcohol 70%	53491	1
GEHE	Isopropyl alcohol 70%	18114101	1
GEHE	Isopropyl alcohol 70%	18235301	1
Fagron	Isopropyl alcohol 70%	53279	1
Gehe Hedinger	Isopropyl alcohol 70%	53448	1
Caelo	Isopropyl alcohol 70%	1160113	1
Gehe 07.12.18	Isopropyl alcohol 70%	18235302	1
GEHE am 16.08.2014	Isopropyl alcohol 70%	53297	1
GEHE am 17.06.2014	Isopropyl alcohol 70%	53286	1
Gehe/ Hedinger	Isopropyl alcohol 70%	53494/1300518	1
Bombastus	Isopropyl alcohol 70%	2813Q-01080	1
Caelo	Isopropyl alcohol 70%	16319101	2
Caelo	Isopropyl alcohol 70%	17203002/1271117	1
Caelo	Isopropyl alcohol 70%	18073702/1170418	1
Gehe/Hedinger	Isopropyl alcohol 70%	53310	1
Gehe/Hedinger	Isopropyl alcohol 70%	53370	1
Gehe/Hedinger	Isopropyl alcohol 70%	83366	1
Gehe/Hedinger	Isopropyl alcohol 70%	53379	1
Gehe/Hedinger	Isopropyl alcohol 70%	53421	1
Gehe/Hedinger	Isopropyl alcohol 70%	53461	1
Gehe/Hedinger	Isopropyl alcohol 70%	53473	1
Gehe/Hedinger26.04.16	Isopropyl alcohol 70%	53359	1

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Supplier	Substance	Batch	Spectra
Gehe/Hedinger29.08.2016	Isopropyl alcohol 70%	53372	1
Gehe/Phönix	Isopropyl alcohol 70%	12338001	2
Gehe/Phönix	Isopropyl alcohol 70%	136363003	1
Gehe/Phönix	Isopropyl alcohol 70%	14229101	1
geiger	Isopropyl alcohol 70%	2213E-01080	1
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53382	1
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53383	1
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53404	1
Germania Apo	Isopropyl alcohol 70%	315032	1
GUMO/04.04.2013	Isopropyl alcohol 70%	2600726T	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	3212I-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	3812E-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	4212A-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	4612I-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130206004	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130327003	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130725001	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130813006	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130912001	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	140612014	1
hadinger/allianz	Isopropyl alcohol 70%	53420	1
hedinger	Isopropyl alcohol 70%	53236	1
hedinger	Isopropyl alcohol 70%	303073	1
Hedinger	Isopropyl alcohol 70%	53226	1
Hedinger	Isopropyl alcohol 70%	53228	1
Hedinger	Isopropyl alcohol 70%	53240	1
Hedinger	Isopropyl alcohol 70%	53241	3
Hedinger	Isopropyl alcohol 70%	53242	2
Hedinger	Isopropyl alcohol 70%	53245	1
Hedinger	Isopropyl alcohol 70%	53250	1
Hedinger	Isopropyl alcohol 70%	53259	2
Hedinger	Isopropyl alcohol 70%	53255	1
Hedinger	Isopropyl alcohol 70%	53258	1
Hedinger	Isopropyl alcohol 70%	53265	1
Hedinger	Isopropyl alcohol 70%	53268	2
Hedinger	Isopropyl alcohol 70%	53253	1
Hedinger	Isopropyl alcohol 70%	53267	2
Hedinger	Isopropyl alcohol 70%	53274	1
Hedinger	Isopropyl alcohol 70%	53280	5
Hedinger	Isopropyl alcohol 70%	53284	1
Hedinger	Isopropyl alcohol 70%	53291	1
Hedinger	Isopropyl alcohol 70%	HA32	1
Hedinger	Isopropyl alcohol 70%	53297	1
Hedinger	Isopropyl alcohol 70%	53301	1
Hedinger	Isopropyl alcohol 70%	53306	1
Hedinger	Isopropyl alcohol 70%	53303	1
Hedinger	Isopropyl alcohol 70%	53309	3
Hedinger	Isopropyl alcohol 70%	B230715	1
Hedinger	Isopropyl alcohol 70%	53308	1
Hedinger	Isopropyl alcohol 70%	53315	4
Hedinger	Isopropyl alcohol 70%	53320	1
Hedinger	Isopropyl alcohol 70%	53316	1
Hedinger	Isopropyl alcohol 70%	53324	2
Hedinger	Isopropyl alcohol 70%	53333	1
Hedinger	Isopropyl alcohol 70%	53334	2
Hedinger	Isopropyl alcohol 70%	53340	3
Hedinger	Isopropyl alcohol 70%	53341	2
Hedinger	Isopropyl alcohol 70%	53350	1
Hedinger	Isopropyl alcohol 70%	53354	3
Hedinger	Isopropyl alcohol 70%	53357	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 70%	53362	2
Hedinger	Isopropyl alcohol 70%	53352	1
Hedinger	Isopropyl alcohol 70%	53351	1
Hedinger	Isopropyl alcohol 70%	53353	2
Hedinger	Isopropyl alcohol 70%	53359	2
Hedinger	Isopropyl alcohol 70%	53368	2
Hedinger	Isopropyl alcohol 70%	53370	3
Hedinger	Isopropyl alcohol 70%	53366	1
Hedinger	Isopropyl alcohol 70%	53375	2
Hedinger	Isopropyl alcohol 70%	53371	1
Hedinger	Isopropyl alcohol 70%	53363	2
Hedinger	Isopropyl alcohol 70%	53378	2
Hedinger	Isopropyl alcohol 70%	53372	1
Hedinger	Isopropyl alcohol 70%	53373	1
Hedinger	Isopropyl alcohol 70%	53382	5
Hedinger	Isopropyl alcohol 70%	53383	3
Hedinger	Isopropyl alcohol 70%	53385	3
Hedinger	Isopropyl alcohol 70%	53386	1
Hedinger	Isopropyl alcohol 70%	53392	4
Hedinger	Isopropyl alcohol 70%	53387	2
Hedinger	Isopropyl alcohol 70%	53388	1
Hedinger	Isopropyl alcohol 70%	53398	7
Hedinger	Isopropyl alcohol 70%	53390	1
Hedinger	Isopropyl alcohol 70%	53404	5
Hedinger	Isopropyl alcohol 70%	53402	3
Hedinger	Isopropyl alcohol 70%	53401	1
Hedinger	Isopropyl alcohol 70%	53407	1
Hedinger	Isopropyl alcohol 70%	53411	2
Hedinger	Isopropyl alcohol 70%	53408	1
Hedinger	Isopropyl alcohol 70%	53410	2
Hedinger	Isopropyl alcohol 70%	53400	1
Hedinger	Isopropyl alcohol 70%	53418	5
Hedinger	Isopropyl alcohol 70%	53406	1
Hedinger	Isopropyl alcohol 70%	53412	2
Hedinger	Isopropyl alcohol 70%	53409	1
Hedinger	Isopropyl alcohol 70%	53419	1
Hedinger	Isopropyl alcohol 70%	53429	2
Hedinger	Isopropyl alcohol 70%	53425	1
Hedinger	Isopropyl alcohol 70%	53416	2
Hedinger	Isopropyl alcohol 70%	53421	1
Hedinger	Isopropyl alcohol 70%	53413	2
Hedinger	Isopropyl alcohol 70%	53427	2
Hedinger	Isopropyl alcohol 70%	53437	2
Hedinger	Isopropyl alcohol 70%	303049	2
Hedinger	Isopropyl alcohol 70%	53430	2
Hedinger	Isopropyl alcohol 70%	53442	5
Hedinger	Isopropyl alcohol 70%	53438	1
Hedinger	Isopropyl alcohol 70%	534375310	1
Hedinger	Isopropyl alcohol 70%	53444	3
Hedinger	Isopropyl alcohol 70%	53440	2
Hedinger	Isopropyl alcohol 70%	53439	1
Hedinger	Isopropyl alcohol 70%	53443	1
Hedinger	Isopropyl alcohol 70%	53449	2
Hedinger	Isopropyl alcohol 70%	534275329	1
Hedinger	Isopropyl alcohol 70%	53447	2
Hedinger	Isopropyl alcohol 70%	303054	1
Hedinger	Isopropyl alcohol 70%	53428	1
Hedinger	Isopropyl alcohol 70%	53462	1
Hedinger	Isopropyl alcohol 70%	53458	2
Hedinger	Isopropyl alcohol 70%	534495370	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 70%	53461	1
Hedinger	Isopropyl alcohol 70%	53465	2
Hedinger	Isopropyl alcohol 70%	53467	1
Hedinger	Isopropyl alcohol 70%	534405397	1
Hedinger	Isopropyl alcohol 70%	53448	1
Hedinger	Isopropyl alcohol 70%	53470	2
Hedinger	Isopropyl alcohol 70%	53463	1
Hedinger	Isopropyl alcohol 70%	53469	3
Hedinger	Isopropyl alcohol 70%	53464	1
Hedinger	Isopropyl alcohol 70%	534685436	1
Hedinger	Isopropyl alcohol 70%	53460	1
Hedinger	Isopropyl alcohol 70%	53474	1
Hedinger	Isopropyl alcohol 70%	53480	3
Hedinger	Isopropyl alcohol 70%	53479	2
Hedinger	Isopropyl alcohol 70%	303071	1
Hedinger	Isopropyl alcohol 70%	181108187	1
Hedinger	Isopropyl alcohol 70%	53468	1
Hedinger	Isopropyl alcohol 70%	534685475	1
Hedinger	Isopropyl alcohol 70%	534895520	1
Hedinger	Isopropyl alcohol 70%	53456	1
Hedinger	Isopropyl alcohol 70%	53482	1
Hedinger	Isopropyl alcohol 70%	53484	2
Hedinger	Isopropyl alcohol 70%	53495	1
Hedinger	Isopropyl alcohol 70%	53502	2
Hedinger	Isopropyl alcohol 70%	53491	1
Hedinger	Isopropyl alcohol 70%	303081	1
Hedinger	Isopropyl alcohol 70%	53509	1
Hedinger	Isopropyl alcohol 70%	303087	1
Hedinger	Isopropyl alcohol 70%	53515	1
Hedinger	Isopropyl alcohol 70%	53510	1
Hedinger	Isopropyl alcohol 70%	53513	1
Hedinger	Isopropyl alcohol 70%	53519	1
Hedinger	Isopropyl alcohol 70%	53523	1
Hedinger	Isopropyl alcohol 70%	53542	3
Hedinger	Isopropyl alcohol 70%	53537	1
Hedinger	Isopropyl alcohol 70%	53527	1
Hedinger	Isopropyl alcohol 70%	53525	1
Hedinger	Isopropyl alcohol 70%	53533	1
Hedinger	Isopropyl alcohol 70%	53539	1
Hedinger	Isopropyl alcohol 70%	53521	1
Hedinger	Isopropyl alcohol 70%	53558	2
Hedinger	Isopropyl alcohol 70%	53550	2
Hedinger	Isopropyl alcohol 70%	53548	1
Hedinger	Isopropyl alcohol 70%	53567	3
Hedinger	Isopropyl alcohol 70%	53577	1
Hedinger / AHD	Isopropyl alcohol 70%	53378	1
Hedinger / AHD	Isopropyl alcohol 70%	53499	1
Hedinger / AHD	Isopropyl alcohol 70%	53572	1
Hedinger / Gehe	Isopropyl alcohol 70%	53337	1
Hedinger / Gehe	Isopropyl alcohol 70%	303059	1
Hedinger / Kehr	Isopropyl alcohol 70%	53359	1
Hedinger / Noweda	Isopropyl alcohol 70%	53266	1
Hedinger / Noweda	Isopropyl alcohol 70%	53267	1
Hedinger / Noweda	Isopropyl alcohol 70%	53300	1
Hedinger / Noweda	Isopropyl alcohol 70%	5331	1
Hedinger / Noweda	Isopropyl alcohol 70%	53321	1
Hedinger / Noweda	Isopropyl alcohol 70%	53324	1
Hedinger / Noweda	Isopropyl alcohol 70%	53385	1
Hedinger / Noweda	Isopropyl alcohol 70%	53387	2
Hedinger / Noweda	Isopropyl alcohol 70%	53461	1

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Supplier	Substance	Batch	Spectra
HEDINGER / Noweda	Isopropyl alcohol 70%	53340	1
Hedinger / Phoenix	Isopropyl alcohol 70%	53561	1
Hedinger / Phönix	Isopropyl alcohol 70%	53266	1
Hedinger / Phönix	Isopropyl alcohol 70%	53290	1
Hedinger / Phönix	Isopropyl alcohol 70%	53309	1
Hedinger / Phönix	Isopropyl alcohol 70%	53326	1
Hedinger / Phönix	Isopropyl alcohol 70%	53413	1
Hedinger / Phönix	Isopropyl alcohol 70%	53430	1
Hedinger / Phönix	Isopropyl alcohol 70%	53442	1
Hedinger / Sanacorp	Isopropyl alcohol 70%	53407	1
Hedinger / Sanacorp	Isopropyl alcohol 70%	53483	1
Hedinger / Sanacorp	Isopropyl alcohol 70%	53491	1
Hedinger / Sanacorp	Isopropyl alcohol 70%	503549	1
hedinger /AHD	Isopropyl alcohol 70%	535045666	1
Hedinger /Sanacorp WE: ...	Isopropyl alcohol 70%	53338	1
Hedinger Gehe	Isopropyl alcohol 70%	53476	1
Hedinger Gehe	Isopropyl alcohol 70%	53473	1
Hedinger Gehe	Isopropyl alcohol 70%	53517	1
Hedinger Gehe	Isopropyl alcohol 70%	53536	1
Hedinger Gehe	Isopropyl alcohol 70%	53549	1
Hedinger GmbH & Co. KG	Isopropyl alcohol 70%	53515	1
Hedinger GmbH & Co. KG/...	Isopropyl alcohol 70%	53328	1
Hedinger GmbH & Co. KG/...	Isopropyl alcohol 70%	53329	1
Hedinger Jenne	Isopropyl alcohol 70%	53417	1
Hedinger Jenne	Isopropyl alcohol 70%	53441	1
Hedinger Jenne	Isopropyl alcohol 70%	53435	1
Hedinger/ Gehe	Isopropyl alcohol 70%	53354	1
Hedinger/ Kehr	Isopropyl alcohol 70%	53377	4
Hedinger/ Kehr	Isopropyl alcohol 70%	53429	1
Hedinger/ Noweda	Isopropyl alcohol 70%	53440	1
Hedinger/ Noweda	Isopropyl alcohol 70%	53480	1
Hedinger/ Noweda	Isopropyl alcohol 70%	53499	1
Hedinger/ Phoenix	Isopropyl alcohol 70%	53413	1
Hedinger/ Phönix	Isopropyl alcohol 70%	53578	1
hedinger/ Sanacorp	Isopropyl alcohol 70%	535105725	1
hedinger/ Sanacorp	Isopropyl alcohol 70%	535265764	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53354	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53360	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53398	1
Hedinger/AHD	Isopropyl alcohol 70%	53265	1
Hedinger/AHD	Isopropyl alcohol 70%	53268	1
Hedinger/AHD	Isopropyl alcohol 70%	53290	1
Hedinger/AHD	Isopropyl alcohol 70%	53277	1
Hedinger/AHD	Isopropyl alcohol 70%	53310	1
Hedinger/AHD	Isopropyl alcohol 70%	53322	1
Hedinger/AHD	Isopropyl alcohol 70%	53346	1
Hedinger/AHD	Isopropyl alcohol 70%	53355	1
Hedinger/AHD	Isopropyl alcohol 70%	53340	1
Hedinger/AHD	Isopropyl alcohol 70%	53326	1
Hedinger/AHD	Isopropyl alcohol 70%	53407	1
Hedinger/AHD	Isopropyl alcohol 70%	53479	1
Hedinger/AHD	Isopropyl alcohol 70%	53549	1
Hedinger/AHD	Isopropyl alcohol 70%	53557	1
Hedinger/AHD	Isopropyl alcohol 70%	53555	1
Hedinger/Alliance	Isopropyl alcohol 70%	53324	1
Hedinger/Alliance	Isopropyl alcohol 70%	53353	1
Hedinger/Alliance Hirc...	Isopropyl alcohol 70%	53519	1
Hedinger/Anz	Isopropyl alcohol 70%	53399	1
Hedinger/Anz	Isopropyl alcohol 70%	53514	1
Hedinger/Anzag	Isopropyl alcohol 70%	303007	2

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Supplier	Substance	Batch	Spectra
Hedinger/Anzag	Isopropyl alcohol 70%	303006	1
Hedinger/Anzag	Isopropyl alcohol 70%	303008	1
Hedinger/Anzag	Isopropyl alcohol 70%	53447	1
Hedinger/Anzag	Isopropyl alcohol 70%	53497	1
Hedinger/Delta	Isopropyl alcohol 70%	53539	1
Hedinger/Ebert	Isopropyl alcohol 70%	53449	2
Hedinger/Ebert	Isopropyl alcohol 70%	53452	1
Hedinger/Ebert	Isopropyl alcohol 70%	53462	1
Hedinger/Ebert	Isopropyl alcohol 70%	53460	1
Hedinger/Ebert	Isopropyl alcohol 70%	53504	1
Hedinger/Ebert	Isopropyl alcohol 70%	53494	1
Hedinger/Ebert	Isopropyl alcohol 70%	53506	2
Hedinger/Fiebig	Isopropyl alcohol 70%	53326	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53409	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53420	3
Hedinger/Fiebig	Isopropyl alcohol 70%	53440	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53456	3
Hedinger/Fiebig	Isopropyl alcohol 70%	53495	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53505	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53510	1
Hedinger/Gehe	Isopropyl alcohol 70%	53302	1
Hedinger/Gehe	Isopropyl alcohol 70%	53315	1
Hedinger/Gehe	Isopropyl alcohol 70%	53322	1
Hedinger/Gehe	Isopropyl alcohol 70%	53333	1
Hedinger/Gehe	Isopropyl alcohol 70%	53340	1
Hedinger/Gehe	Isopropyl alcohol 70%	53338	1
Hedinger/Gehe	Isopropyl alcohol 70%	53346	1
Hedinger/Gehe	Isopropyl alcohol 70%	53357	3
Hedinger/Gehe	Isopropyl alcohol 70%	53352	1
Hedinger/Gehe	Isopropyl alcohol 70%	5335	1
Hedinger/Gehe	Isopropyl alcohol 70%	53351	1
Hedinger/Gehe	Isopropyl alcohol 70%	53367	1
Hedinger/Gehe	Isopropyl alcohol 70%	53366	1
Hedinger/Gehe	Isopropyl alcohol 70%	53379	1
Hedinger/Gehe	Isopropyl alcohol 70%	53380	1
Hedinger/Gehe	Isopropyl alcohol 70%	53376	1
Hedinger/Gehe	Isopropyl alcohol 70%	53388	1
Hedinger/Gehe	Isopropyl alcohol 70%	53392	1
Hedinger/Gehe	Isopropyl alcohol 70%	53402	2
Hedinger/Gehe	Isopropyl alcohol 70%	53385	1
Hedinger/Gehe	Isopropyl alcohol 70%	53401	2
Hedinger/Gehe	Isopropyl alcohol 70%	53416	1
Hedinger/Gehe	Isopropyl alcohol 70%	53422	1
Hedinger/Gehe	Isopropyl alcohol 70%	1200717/053443	1
Hedinger/Gehe	Isopropyl alcohol 70%	53482	4
Hedinger/Gehe	Isopropyl alcohol 70%	53492	1
Hedinger/Gehe	Isopropyl alcohol 70%	53498	1
Hedinger/Gehe	Isopropyl alcohol 70%	53511	1
Hedinger/Gehe	Isopropyl alcohol 70%	53532	2
Hedinger/Gehe	Isopropyl alcohol 70%	53536	1
Hedinger/Gehe	Isopropyl alcohol 70%	53565	2
Hedinger/GEHE	Isopropyl alcohol 70%	53266	1
Hedinger/GEHE	Isopropyl alcohol 70%	53453	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53266	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53262	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53306	2
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53320	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53333	1
Hedinger/Kehr	Isopropyl alcohol 70%	53386	1
Hedinger/Kehr	Isopropyl alcohol 70%	53393	1

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Supplier	Substance	Batch	Spectra
Hedinger/Kehr	Isopropyl alcohol 70%	53425	2
Hedinger/Kehr	Isopropyl alcohol 70%	53435	1
Hedinger/Kehr	Isopropyl alcohol 70%	53439	1
Hedinger/Kehr	Isopropyl alcohol 70%	53438	1
Hedinger/Kehr	Isopropyl alcohol 70%	53497	1
Hedinger/Kehr	Isopropyl alcohol 70%	53524	1
Hedinger/Kehr	Isopropyl alcohol 70%	53555	1
Hedinger/Kehr	Isopropyl alcohol 70%	53601	1
Hedinger/Klosterring	Isopropyl alcohol 70%	53518	1
hedinger/noweda	Isopropyl alcohol 70%	53397	1
hedinger/Noweda	Isopropyl alcohol 70%	53412	1
hedinger/Noweda	Isopropyl alcohol 70%	53403	1
hedinger/Noweda	Isopropyl alcohol 70%	53420	1
hedinger/Noweda	Isopropyl alcohol 70%	53434	1
hedinger/Noweda	Isopropyl alcohol 70%	53441	1
hedinger/Noweda	Isopropyl alcohol 70%	53459	1
hedinger/Noweda	Isopropyl alcohol 70%	53461	1
hedinger/Noweda	Isopropyl alcohol 70%	53464	1
hedinger/Noweda	Isopropyl alcohol 70%	181115182	1
hedinger/Noweda	Isopropyl alcohol 70%	53503	1
hedinger/Noweda	Isopropyl alcohol 70%	53497	1
hedinger/Noweda	Isopropyl alcohol 70%	53511	1
hedinger/Noweda	Isopropyl alcohol 70%	53517	1
hedinger/Noweda	Isopropyl alcohol 70%	53514	1
hedinger/Noweda	Isopropyl alcohol 70%	53544	1
Hedinger/Noweda	Isopropyl alcohol 70%	53266	1
Hedinger/Noweda	Isopropyl alcohol 70%	53320	1
Hedinger/Noweda	Isopropyl alcohol 70%	53346	1
Hedinger/Noweda	Isopropyl alcohol 70%	53343	1
Hedinger/Noweda	Isopropyl alcohol 70%	53357	1
Hedinger/Noweda	Isopropyl alcohol 70%	53360	1
Hedinger/Noweda	Isopropyl alcohol 70%	53367	1
Hedinger/Noweda	Isopropyl alcohol 70%	53380	1
Hedinger/Noweda	Isopropyl alcohol 70%	53379	1
Hedinger/Noweda	Isopropyl alcohol 70%	53383	1
Hedinger/Noweda	Isopropyl alcohol 70%	53395	1
Hedinger/Noweda	Isopropyl alcohol 70%	53397	1
Hedinger/Noweda	Isopropyl alcohol 70%	53406	1
Hedinger/Noweda	Isopropyl alcohol 70%	53410	1
Hedinger/Noweda	Isopropyl alcohol 70%	53417	2
Hedinger/Noweda	Isopropyl alcohol 70%	53439	1
Hedinger/Noweda	Isopropyl alcohol 70%	53443	1
Hedinger/Noweda	Isopropyl alcohol 70%	3817M-01080	1
Hedinger/Noweda	Isopropyl alcohol 70%	53458	1
Hedinger/Noweda	Isopropyl alcohol 70%	53454	1
Hedinger/Noweda	Isopropyl alcohol 70%	53355	1
Hedinger/Noweda	Isopropyl alcohol 70%	53485	1
Hedinger/Noweda	Isopropyl alcohol 70%	53491	1
Hedinger/Noweda	Isopropyl alcohol 70%	53517	1
Hedinger/Noweda	Isopropyl alcohol 70%	53526	1
Hedinger/Noweda	Isopropyl alcohol 70%	53518	3
Hedinger/Noweda	Isopropyl alcohol 70%	53521	1
Hedinger/phoenix	Isopropyl alcohol 70%	53567	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53332	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53367	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53382	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53377	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53392	1
Hedinger/Phoenix	Isopropyl alcohol 70%	303053	4
Hedinger/Phoenix	Isopropyl alcohol 70%	53453	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phoenix	Isopropyl alcohol 70%	53448	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53475	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53499	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53509	4
Hedinger/Phoenix	Isopropyl alcohol 70%	53506	6
Hedinger/Phoenix	Isopropyl alcohol 70%	53511	3
Hedinger/Phoenix	Isopropyl alcohol 70%	53522	2
Hedinger/Phoenix	Isopropyl alcohol 70%	53517	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53528	2
Hedinger/Phoenix	Isopropyl alcohol 70%	53539	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53527	5
Hedinger/Phoenix	Isopropyl alcohol 70%	53524	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53540	8
Hedinger/Phoenix	Isopropyl alcohol 70%	53537	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53552	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53559	1
Hedinger/Phoenix 16.07.18	Isopropyl alcohol 70%	53480	1
Hedinger/Phoenix WE: 09...	Isopropyl alcohol 70%	53410	2
Hedinger/Phönix	Isopropyl alcohol 70%	53348	1
Hedinger/Phönix	Isopropyl alcohol 70%	303035	1
Hedinger/Phönix	Isopropyl alcohol 70%	303037	3
Hedinger/Phönix	Isopropyl alcohol 70%	303039	3
Hedinger/Phönix	Isopropyl alcohol 70%	53385	1
Hedinger/Phönix	Isopropyl alcohol 70%	303040	1
Hedinger/Phönix	Isopropyl alcohol 70%	53397	1
Hedinger/Phönix	Isopropyl alcohol 70%	53392	1
Hedinger/Phönix	Isopropyl alcohol 70%	53401	2
Hedinger/Phönix	Isopropyl alcohol 70%	303042	1
Hedinger/Phönix	Isopropyl alcohol 70%	53410	3
Hedinger/Phönix	Isopropyl alcohol 70%	303045	1
Hedinger/Phönix	Isopropyl alcohol 70%	3030046	1
Hedinger/Phönix	Isopropyl alcohol 70%	53426	1
Hedinger/Phönix	Isopropyl alcohol 70%	53432	1
Hedinger/Phönix	Isopropyl alcohol 70%	53451	3
Hedinger/Phönix	Isopropyl alcohol 70%	303059	1
Hedinger/Phönix	Isopropyl alcohol 70%	53462	1
Hedinger/Phönix	Isopropyl alcohol 70%	53447	1
Hedinger/Phönix	Isopropyl alcohol 70%	53480	1
Hedinger/Phönix	Isopropyl alcohol 70%	53456	1
Hedinger/Phönix	Isopropyl alcohol 70%	53479	1
Hedinger/Phönix	Isopropyl alcohol 70%	53486	1
Hedinger/Phönix	Isopropyl alcohol 70%	53488	5
Hedinger/Phönix	Isopropyl alcohol 70%	53493	1
Hedinger/Phönix	Isopropyl alcohol 70%	53497	1
Hedinger/Phönix	Isopropyl alcohol 70%	53502	2
Hedinger/Phönix	Isopropyl alcohol 70%	53520	4
Hedinger/Phönix	Isopropyl alcohol 70%	53523	2
Hedinger/Phönix	Isopropyl alcohol 70%	53519	2
Hedinger/Phönix	Isopropyl alcohol 70%	53539	1
Hedinger/Phönix	Isopropyl alcohol 70%	53541	1
Hedinger/Phönix	Isopropyl alcohol 70%	53550	4
Hedinger/Phönix	Isopropyl alcohol 70%	53526	2
Hedinger/Phönix	Isopropyl alcohol 70%	53573	2
Hedinger/Phönix	Isopropyl alcohol 70%	53577	1
Hedinger/Phönix	Isopropyl alcohol 70%	533586	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53369	2
HEDINGER/Phönix	Isopropyl alcohol 70%	53380	2
HEDINGER/Phönix	Isopropyl alcohol 70%	53387	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53398	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53401	4

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Supplier	Substance	Batch	Spectra
HEDINGER/Phönix	Isopropyl alcohol 70%	53410	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53416	3
HEDINGER/Phönix	Isopropyl alcohol 70%	53426	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53432	4
HEDINGER/Phönix	Isopropyl alcohol 70%	53451	2
HEDINGER/Phönix	Isopropyl alcohol 70%	53456	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53493	1
Hedinger/sanacorp	Isopropyl alcohol 70%	53571	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53300	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53324	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53337	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53341	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53353	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53371	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53370	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53372	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53375	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53383	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53382	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53396	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53404	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	3407	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53412	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53411	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53416	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	704103	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53421	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53432	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53443	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53440	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53456	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53447	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53460	3
Hedinger/Sanacorp	Isopropyl alcohol 70%	53466	3
Hedinger/Sanacorp	Isopropyl alcohol 70%	53470	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53469	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53465	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53494	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53492	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53479	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53519	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53540	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53561	1
Hedinger/Spangro	Isopropyl alcohol 70%	53508	1
Hedinger/Spangro	Isopropyl alcohol 70%	53524	3
Hedinger/Spangro	Isopropyl alcohol 70%	53548	1
Hedinger/VDL	Isopropyl alcohol 70%	53425	1
Hedinger1	Isopropyl alcohol 70%	53290	1
HedingerSanacorp	Isopropyl alcohol 70%	53526	1
Heidinger/Sanacorp	Isopropyl alcohol 70%	53454	1
Hedinger/AHD	Isopropyl alcohol 70%	53296	1
Hergestellt	Isopropyl alcohol 70%	1150727	1
hergestellt am 11.04.13	Isopropyl alcohol 70%	191012/925	1
Herstellung	Isopropyl alcohol 70%	110416P2	1
Herstellung in Apotheke	Isopropyl alcohol 70%	20120911	1
Herstellung in Apotheke	Isopropyl alcohol 70%	20130102	1
Herstellung in Apotheke	Isopropyl alcohol 70%	22042013	1
Herstellung in Apotheke	Isopropyl alcohol 70%	70587B	1
Herstellung in Apotheke	Isopropyl alcohol 70%	20130613	1
Herstellung in Apotheke	Isopropyl alcohol 70%	70643B	1

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Supplier	Substance	Batch	Spectra
Hetterich	Isopropyl alcohol 70%	140301	1
Hetterich	Isopropyl alcohol 70%	140403	1
Hirsch	Isopropyl alcohol 70%	Die16041301	1
Hirsch	Isopropyl alcohol 70%	1913E-01080	1
Hirsch	Isopropyl alcohol 70%	4213E-01080	1
Hirsch	Isopropyl alcohol 70%	4413I-01080	1
Hirsch	Isopropyl alcohol 70%	5013Q-01080	1
Hirsch	Isopropyl alcohol 70%	714E-01080	1
Hirsch Apotheke	Isopropyl alcohol 70%	4714I-01080	1
Hirsch Apotheke	Isopropyl alcohol 70%	415M-0108	1
Hirsch Apotheke	Isopropyl alcohol 70%	1615I-01080	1
HirschApotheke	Isopropyl alcohol 70%	4514I-01080	1
HirschApotheke	Isopropyl alcohol 70%	1015I-01080	1
HirschApotheke	Isopropyl alcohol 70%	1815E-01080	1
HirschApotheke	Isopropyl alcohol 70%	2315I-01080	1
hochhaus-Apotheke	Isopropyl alcohol 70%	4715E-01080	1
hochhaus-Apotheke	Isopropyl alcohol 70%	5315E-01080	1
hochhaus-Apotheke	Isopropyl alcohol 70%	916I-01080	1
hochhaus-Apotheke	Isopropyl alcohol 70%	917M-01080	1
Hochhaus-Apotheke	Isopropyl alcohol 70%	3715A-01080	1
Hochhaus-Apotheke	Isopropyl alcohol 70%	4315E-01080	1
Hochhaus-Apotheke	Isopropyl alcohol 70%	1116E-01080	1
Hochhaus-Apotheke	Isopropyl alcohol 70%	117E-01080	1
hochhaus-apotheke/Eigen...	Isopropyl alcohol 70%	2417Q-01080	1
Hofmann und Sommer	Isopropyl alcohol 70%	940817	1
Hubertus Apotheke	Isopropyl alcohol 70%	ChB120914	1
Hubertus Apotheke	Isopropyl alcohol 70%	71014	1
Hubertus Apotheke	Isopropyl alcohol 70%	ChB060115	1
Hubertus Apotheke	Isopropyl alcohol 70%	230915	1
Hubertus Apotheke	Isopropyl alcohol 70%	31215	1
Hubertus Apotheke	Isopropyl alcohol 70%	110416	1
Hubertus Apotheke	Isopropyl alcohol 70%	103172	1
Hubertus Apotheke	Isopropyl alcohol 70%	103173	1
Hubertus Apotheke	Isopropyl alcohol 70%	103171	1
Ichthyol über Phoenix	Isopropyl alcohol 70%	16167802	1
Igel Apotheke	Isopropyl alcohol 70%	3813E-01080	1
Infectopharm / Noweda	Isopropyl alcohol 70%	53504	1
Isopropylalkohol GMP/Gehe	Isopropyl alcohol 70%	2314M-01080	1
Kastner	Isopropyl alcohol 70%	914I-01080	1
Kastner	Isopropyl alcohol 70%	1714I-01080	1
Kastner (eigen)	Isopropyl alcohol 70%	3914A-01080	1
Kehr	Isopropyl alcohol 70%	53444	1
Kehr	Isopropyl alcohol 70%	53451	1
Kehr	Isopropyl alcohol 70%	53458	1
Kehr	Isopropyl alcohol 70%	53486	1
Kehr	Isopropyl alcohol 70%	53498	2
Kehr	Isopropyl alcohol 70%	53484	1
Kehr	Isopropyl alcohol 70%	53516	1
Kehr/A.Hedinger	Isopropyl alcohol 70%	53490	1
Caelo	Isopropyl alcohol 70%	53589	1
Kehr/Hedinger	Isopropyl alcohol 70%	53406	1
Kehr/Hedinger	Isopropyl alcohol 70%	53419	4
Kehr/Hedinger	Isopropyl alcohol 70%	53482	1
Kehr/Hedinger	Isopropyl alcohol 70%	53584	1
Klenk	Isopropyl alcohol 70%	1214M-1080	1
Klosterring	Isopropyl alcohol 70%	53448	1
Krieger/hedinger	Isopropyl alcohol 70%	53388	1
Krieger/Hedinger	Isopropyl alcohol 70%	53449	1
Krieger/Hedinger	Isopropyl alcohol 70%	53488	1
Krieger/Hedinger	Isopropyl alcohol 70%	53516	1

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Supplier	Substance	Batch	Spectra
Krieger/Hedinger	Isopropyl alcohol 70%	53559	1
kruppa	Isopropyl alcohol 70%	717H4	1
kruppa	Isopropyl alcohol 70%	817H2	1
Kruppa	Isopropyl alcohol 70%	1116H2	1
Kruppa	Isopropyl alcohol 70%	117H2	1
Kruppa	Isopropyl alcohol 70%	317H2	1
Kruppa	Isopropyl alcohol 70%	417H2	1
Kruppa	Isopropyl alcohol 70%	617H2	1
Kruppa	Isopropyl alcohol 70%	218H2	1
Kruppa	Isopropyl alcohol 70%	118H4	1
Kruppa	Isopropyl alcohol 70%	418H4	1
Kruppa	Isopropyl alcohol 70%	518H2	1
Kruppa	Isopropyl alcohol 70%	718H4	1
Kruppa	Isopropyl alcohol 70%	718H6	1
Kruppa	Isopropyl alcohol 70%	818H7	1
L10	Isopropyl alcohol 70%	53427	1
L10	Isopropyl alcohol 70%	53429	1
L10	Isopropyl alcohol 70%	53423	3
L10	Isopropyl alcohol 70%	53449	2
L10	Isopropyl alcohol 70%	53466	2
L10	Isopropyl alcohol 70%	53486	1
L10	Isopropyl alcohol 70%	53562	1
L10	Isopropyl alcohol 70%	53561	3
L12	Isopropyl alcohol 70%	53402	1
L12	Isopropyl alcohol 70%	53404	1
L12	Isopropyl alcohol 70%	53567	2
L30	Isopropyl alcohol 70%	53387	6
L30	Isopropyl alcohol 70%	53456	1
L30	Isopropyl alcohol 70%	53469	3
L30	Isopropyl alcohol 70%	53484	1
L30	Isopropyl alcohol 70%	53502	3
L30	Isopropyl alcohol 70%	53494	1
L30	Isopropyl alcohol 70%	53539	5
L30	Isopropyl alcohol 70%	53516	1
L30	Isopropyl alcohol 70%	53530	4
L30	Isopropyl alcohol 70%	53542	1
L30	Isopropyl alcohol 70%	53576	1
Lamotte/Alliance	Isopropyl alcohol 70%	303032	1
Lamotte/Sanacorp	Isopropyl alcohol 70%	53377	1
Caelo	Isopropyl alcohol 70%	16052014-100	1
Lehy/ Noweda	Isopropyl alcohol 70%	182741	1
Ley Pharma/Phönix	Isopropyl alcohol 70%	153741	1
Ley/Noweda	Isopropyl alcohol 70%	170951	1
Ley/Noweda	Isopropyl alcohol 70%	172241	1
Ley/Noweda	Isopropyl alcohol 70%	174521	3
leyh pharma	Isopropyl alcohol 70%	161411	1
Leyh Pharma	Isopropyl alcohol 70%	132021	1
Leyh Pharma	Isopropyl alcohol 70%	141311	1
Leyh Pharma	Isopropyl alcohol 70%	143541	1
Leyh Pharma	Isopropyl alcohol 70%	152121	1
Leyh Pharma	Isopropyl alcohol 70%	154531	1
Leyh Pharma	Isopropyl alcohol 70%	155021	1
Leyh Pharma	Isopropyl alcohol 70%	164721	1
Leyh Pharma	Isopropyl alcohol 70%	170951	1
Leyh Pharma	Isopropyl alcohol 70%	170721	2
Leyh Pharma	Isopropyl alcohol 70%	174921	1
Leyh Pharma	Isopropyl alcohol 70%	184341	1
Leyh Pharma GmbH	Isopropyl alcohol 70%	181231	1
Leyh Pharma GmbH	Isopropyl alcohol 70%	191041	1
Leyh Pharma/ AHD	Isopropyl alcohol 70%	191411	1

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Supplier	Substance	Batch	Spectra
Leyh Pharms	Isopropyl alcohol 70%	152521	1
Lichtenstein	Isopropyl alcohol 70%	123456789	1
Linden-Apotheke Görlitz	Isopropyl alcohol 70%	2915Q-01080	1
Linden-Apotheke Görlitz	Isopropyl alcohol 70%	2816E-01080	1
Löwen Apotheke	Isopropyl alcohol 70%	H28122012P1	1
M.Kastner	Isopropyl alcohol 70%	2914M-01080	1
M.Kastner	Isopropyl alcohol 70%	3314I-01080	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-171013-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-131213-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-150314-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-300714-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-191214-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-030715-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-241115-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-150216-1D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-110716-2D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-021116-2D	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-200117-1D	1
Nauto	Isopropyl alcohol 70%	180131	1
Neugereut Apotheke	Isopropyl alcohol 70%	713M-01080	1
Neugereut Apotheke	Isopropyl alcohol 70%	3531Q-01080	1
Neugereut Apotheke	Isopropyl alcohol 70%	4913M-01080	1
Neugereut Apotheke	Isopropyl alcohol 70%	214Q-01080	1
noweda	Isopropyl alcohol 70%	2600787T	1
Noweda	Isopropyl alcohol 70%	53333	1
Noweda	Isopropyl alcohol 70%	53422	1
Caelo	Isopropyl alcohol 70%	18073901	2
Euro OTC	Isopropyl alcohol 70%	53398	1
Noweda/ Hedinger	Isopropyl alcohol 70%	53383	1
Noweda/ Hedinger	Isopropyl alcohol 70%	53408	1
Noweda/ Hedinger	Isopropyl alcohol 70%	53426	1
Noweda/Hedinger	Isopropyl alcohol 70%	53350	1
Ohm Apotheke	Isopropyl alcohol 70%	12345	1
Ottlik	Isopropyl alcohol 70%	2015090420	1
Otto Fischar gmbh	Isopropyl alcohol 70%	4116045	1
Otto Fischar GmbH & Co...	Isopropyl alcohol 70%	4115012	1
Otto Fischar GmbH & Co...	Isopropyl alcohol 70%	4115114	2
Otto Fischer	Isopropyl alcohol 70%	4117121	1
Otto Fischer	Isopropyl alcohol 70%	4118011	1
Otto Fischer	Isopropyl alcohol 70%	4118062	1
Otto Fischer GmbH	Isopropyl alcohol 70%	4118073	1
Otto Fischer/Fiebig	Isopropyl alcohol 70%	4117041	15
Otto Fischer/Fiebig	Isopropyl alcohol 70%	4117042	11
Otto Fischer/Phönix	Isopropyl alcohol 70%	4117043	20
OttoFischar/Fiebig	Isopropyl alcohol 70%	41170	1
Phoen	Isopropyl alcohol 70%	162621	1
Phoenix	Isopropyl alcohol 70%	4116125053416	1
Phoenix	Isopropyl alcohol 70%	4116126	6
Phoenix	Isopropyl alcohol 70%	53447	1
Phoenix 17.03.2014	Isopropyl alcohol 70%	53280	1
Phoenix/AHD	Isopropyl alcohol 70%	53329	1
Phoenix/Cealo	Isopropyl alcohol 70%	53496	1
Phoenix/Hedinger	Isopropyl alcohol 70%	53493	1
Phoenix/Hedinger	Isopropyl alcohol 70%	53578	1
Phonix	Isopropyl alcohol 70%	14026403	1
Phönix	Isopropyl alcohol 70%	53252	1
Phönix	Isopropyl alcohol 70%	1217603	1
Phönix	Isopropyl alcohol 70%	13217601	1
Phönix	Isopropyl alcohol 70%	18308101	1
Phönix E.K:5,68 -1L	Isopropyl alcohol 70%	53474	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	18235002	2
Phönix 05.01.15	Isopropyl alcohol 70%	53303	1
Phönix 13.01.2014	Isopropyl alcohol 70%	13319404	1
Caelo	Isopropyl alcohol 70%	53369	1
Phönix/fischar	Isopropyl alcohol 70%	4118073	1
Phönix/Hedinger	Isopropyl alcohol 70%	53295	2
Phönix/Hedinger	Isopropyl alcohol 70%	53341	1
Phönix/Hedinger	Isopropyl alcohol 70%	53426	1
Phönix/Hedinger	Isopropyl alcohol 70%	53486	2
Phönix/Hedinger	Isopropyl alcohol 70%	53525	1
Phönix/Hedinger	Isopropyl alcohol 70%	53153	1
Phönix/Hedinger	Isopropyl alcohol 70%	53513	1
Phönix/Leyhpharma	Isopropyl alcohol 70%	180311	1
Purren Apotheke	Isopropyl alcohol 70%	18043	1
Rezeptur	Isopropyl alcohol 70%	1150617	1
Rezeptur	Isopropyl alcohol 70%	Rezeptur	1
Rondell	Isopropyl alcohol 70%	414Q-07123	1
Rondell	Isopropyl alcohol 70%	1014M-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	2613Q-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	3113M-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	2814E-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	4814E-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	245Q-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	1115Q-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	2615E-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	3215M-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	4215E-07123	1
Rondell Apotheke	Isopropyl alcohol 70%	4815M-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	716M-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	1316I-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	1316I-01080	2
Rondell Apotheke	Isopropyl alcohol 70%	3016E-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	3816A-01080	1
rondell-Apotheke	Isopropyl alcohol 70%	3413M-07123	1
Rondell-Apotheke	Isopropyl alcohol 70%	3814Q-07123	1
Rosen Apotheke	Isopropyl alcohol 70%	2017E-07125	1
Sanacorp	Isopropyl alcohol 70%	14267805	1
Sanacorp	Isopropyl alcohol 70%	53430	1
Sanacorp	Isopropyl alcohol 70%	53417	1
Sanacorp	Isopropyl alcohol 70%	16319102	1
Sanacorp	Isopropyl alcohol 70%	418E-01080	1
Sanacorp	Isopropyl alcohol 70%	2218E-01080	1
Sanacorp	Isopropyl alcohol 70%	419E-01080	1
Caelo	Isopropyl alcohol 70%	53426	1
Sanacorp (Hedinger)	Isopropyl alcohol 70%	53397	1
Caelo	Isopropyl alcohol 70%	2600907T	1
Caelo	Isopropyl alcohol 70%	2600887T	1
Sanacorp 26.11.15	Isopropyl alcohol 70%	2600905T	1
Sanacorp WE: 21.11.17 1...	Isopropyl alcohol 70%	53460	1
Sanacorp WE: 25.10.17 1...	Isopropyl alcohol 70%	53452	1
Euro OTC	Isopropyl alcohol 70%	53442	1
Sanacorp/ Hedinger	Isopropyl alcohol 70%	53467	2
Sanacorp/ Hedinger	Isopropyl alcohol 70%	53534	2
Caelo	Isopropyl alcohol 70%	19138501	1
sanacorp/hedinger	Isopropyl alcohol 70%	53499	1
Sanacorp/Winthrop WE:18...	Isopropyl alcohol 70%	2600929T	1
SanacorpWE:19.01.2017 ...	Isopropyl alcohol 70%	53407	2
Schwanen-Apotheke, Köster	Isopropyl alcohol 70%	160104-1	1
Schwanen-Apothek-Köster	Isopropyl alcohol 70%	151028-1	1
selbst	Isopropyl alcohol 70%	7106	1

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Supplier	Substance	Batch	Spectra
selbst	Isopropyl alcohol 70%	8108	1
Selbsterstellung	Isopropyl alcohol 70%	1017A-07096	1
Sieg-Apotheke	Isopropyl alcohol 70%	661302027	1
sittig	Isopropyl alcohol 70%	10815	1
sittig	Isopropyl alcohol 70%	130616	1
Sittig	Isopropyl alcohol 70%	150416	1
Sonnen - Apotheke	Isopropyl alcohol 70%	9/16	1
Sonnen-Apotheke	Isopropyl alcohol 70%	210513H1	1
Sonnen-Apotheke	Isopropyl alcohol 70%	3/16	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	17/2015	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	33/15	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	37/15	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	44/15	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	18/16	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	23/16	1
Sonnenberg-Apotheke	Isopropyl alcohol 70%	100214	1
Caelo	Isopropyl alcohol 70%	13337004	1
STERN	Isopropyl alcohol 70%	131202002	1
STERN	Isopropyl alcohol 70%	140507002	1
STERN	Isopropyl alcohol 70%	140617002	1
Stern-Defekur	Isopropyl alcohol 70%	130321004	1
Stern-Defekur	Isopropyl alcohol 70%	130425004	1
Stern-Defekur	Isopropyl alcohol 70%	130703007	1
Stern-Defekur	Isopropyl alcohol 70%	130805002	1
Stern-Defekur	Isopropyl alcohol 70%	20130912	1
Stern-Defekur	Isopropyl alcohol 70%	130927002	1
Stern-Defekur	Isopropyl alcohol 70%	20131022	1
Stern-Defekur	Isopropyl alcohol 70%	131108001	1
Stern-Defekur	Isopropyl alcohol 70%	131216005	1
Stern-Defekur	Isopropyl alcohol 70%	140116004	1
Stern-Defekur	Isopropyl alcohol 70%	140210001	1
Stern-Defekur	Isopropyl alcohol 70%	140310001	1
Stern-Defekur	Isopropyl alcohol 70%	140404005	1
Stern-Rezeptur	Isopropyl alcohol 70%	131015001	1
Stifts-Apotheke	Isopropyl alcohol 70%	2716Q-01080	1
Stifts-Apotheke	Isopropyl alcohol 70%	317E-01080	1
Unisan	Isopropyl alcohol 70%	13155502	1
Caelo	Isopropyl alcohol 70%	14076501	2
WE 27.12.16 Hedinger/Ph...	Isopropyl alcohol 70%	53401	1
WE: Phoenix 19.10.2016 ...	Isopropyl alcohol 70%	53388	2
Werner Hofmann/Werner H...	Isopropyl alcohol 70%	53580	1
Winthrop	Isopropyl alcohol 70%	2601013T	1
Winthrop	Isopropyl alcohol 70%	26010231	1
Winthrop AM/NOW	Isopropyl alcohol 70%	2600790T	1
winthrop	Isopropyl alcohol 70%	2600735T	1
Winthrop	Isopropyl alcohol 70%	2600670T	1
Winthrop	Isopropyl alcohol 70%	2600681T	1
Winthrop	Isopropyl alcohol 70%	2600685T	1
Winthrop	Isopropyl alcohol 70%	2600706T	1
Winthrop	Isopropyl alcohol 70%	2600846T	1
Winthrop	Isopropyl alcohol 70%	2600940T	1
Winthrop	Isopropyl alcohol 70%	2600938T	1
Winthrop	Isopropyl alcohol 70%	2600977T	1
Winthrop Arzneimittel	Isopropyl alcohol 70%	2600969T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600915T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600916T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2601007T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2601021T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2601026T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600802T	1

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Supplier	Substance	Batch	Spectra
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600857T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600807T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600830T	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600846T	1
Winthrop/Alliance Healt...	Isopropyl alcohol 70%	2600875T	1
Winthrop/Alliance Healt...	Isopropyl alcohol 70%	2600892t	1
Winthrop/Phönix	Isopropyl alcohol 70%	2600852T	1
Winthrop/Sanacorp	Isopropyl alcohol 70%	2600873T	1
Winthrop/Sanacorp	Isopropyl alcohol 70%	2600882t	1
Winthrop/Sanacorp	Isopropyl alcohol 70%	2600981T	1
Wintrop	Isopropyl alcohol 70%	2600863T	2
Wintrop	Isopropyl alcohol 70%	2600869t	1
Wintrop	Isopropyl alcohol 70%	2600908t	1
Wintrop	Isopropyl alcohol 70%	80616-12	1
Wintrop	Isopropyl alcohol 70%	2600969T	1
Wintrop AM GmbH	Isopropyl alcohol 70%	2600749T	1
Wintrop AM GmbH/Anzag	Isopropyl alcohol 70%	2600754T	1
wir leben Apotheke Tespe	Isopropyl alcohol 70%	3415M-01080	1
Wolf- Apotheke / Defektur	Isopropyl alcohol 70%	50914/51W1o	1
Wolf-Apotheke	Isopropyl alcohol 70%	60623/50Dre	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	40729/50Hk	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	123456	2
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41017/50W1o	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41125/1Hk	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41212/50Si	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	50204/50Bz	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600866T	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600887T	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600906T	2
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600953T	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600948T	1
Caelo	Isopropyl alcohol 70%		5
Caelo	Isopropyl alcohol 70%	14331004	2
Caelo	Isopropyl alcohol 70%	15403802	8
Defektur	Isopropyl alcohol 70%		5
Eigen	Isopropyl alcohol 70%		1
Eigenherstellung	Isopropyl alcohol 70%		3
Hedinger	Isopropyl alcohol 70%		2
Fagron	Isopropyl alcohol 70%		1
MAROS Arznei, Noweda	Isopropyl alcohol 70%		1
N.N.	Isopropyl alcohol 70%		1
Neugereut Apotheke	Isopropyl alcohol 70%		2
Praxisbedarf Neurologen	Isopropyl alcohol 70%		5
selbst	Isopropyl alcohol 70%		2
Wensauer Apotheke	Isopropyl alcohol 70%		1

- 136 283 spectra from 703 *Apo-Ident* customers from a total of 34 183 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Isopropyl alcohol 70%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Isopropyl alcohol 70%* and it was

evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	440	0	55 919
Type B	0	480	0	68 994
Type C	0	2057	13	136 283

The substance/substance group *Isopropyl alcohol 70%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.6364 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.7500 %)
Type C	100.0000 % (> 99.6452 %)	99.3720 % (> 99.2271 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Isopropyl alcohol 70%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Camphor spirit	53.61	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Isopropyl alcohol 70%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31388	31388	0.00	71.42
31622	32318	3.19	57.55
31831	32216	2.75	68.26
32216	32216	0.00	70.68

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32318	32318	0.00	55.79
32319	32319	0.00	55.31
32320	32320	0.00	56.93
32322	32322	0.00	56.81
33105	33105	0.00	55.32
33106	33106	0.00	55.93

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Isopropyl myristate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30977-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Isopropyl myristate; Isopropylis myristas

Special notes

When selecting the *Isopropyl myristate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Isopropyl myristate	4	5	68

Second-stage model

For differentiation of the substance/substance group *Isopropyl myristate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Isopropyl myristate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Isopropyl myrist...	12171522	30977	80	1408077
Caelo	Isopropyl myrist...	13144311	31363	40	1412539
Euro OTC	Isopropyl myrist...	1303034-03	31530	60	20130502
Euro OTC	Isopropyl myrist...	1508035	31774	60	20150907*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 4 reference samples from the substance/substance group *Isopropyl myristate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 119 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 200 spectra of 5 reference samples from the substance/substance group *Isopropyl myristate*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl myristate	172729	33882	40
Caelo	Isopropyl myristate	181308	34234	40
Caelo	Isopropyl myristate	192333	34726	40
Euro OTC	Isopropyl myristate	1608039	32776	40
Euro OTC	Isopropyl myristate	1801035	33926	40

- 69 274 spectra from a total of 1497 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 289 spectra from 147 *Apo-Ident* customers from 71 batches from the substance/substance group *Isopropyl myristate*.
- Among them are spectra of independent samples from 68 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Isopropyl myristate	1301992	1
AHD	Isopropyl myristate	15438215	1
Anzag	Isopropyl myristate	120100801	1
Anzag 1.03.13 ek:3,45EUR	Isopropyl myristate	121203101	2
Caelo	Isopropyl myristate	12171518	1
Caelo	Isopropyl myristate	13019902	2
Caelo	Isopropyl myristate	13144308	7
Caelo	Isopropyl myristate	14155909	7
Caelo	Isopropyl myristate	1407015-01	1
Caelo	Isopropyl myristate	14155902	1
Caelo	Isopropyl myristate	30051502	1
Caelo	Isopropyl myristate	15284807	2
Caelo	Isopropyl myristate	15284804	1
Caelo	Isopropyl myristate	15438024	1
Caelo	Isopropyl myristate	15248304	4
Caelo	Isopropyl myristate	15248306	5
Caelo	Isopropyl myristate	1608039-01	1
Caelo	Isopropyl myristate	2091713	1
Caelo	Isopropyl myristate	15438210	1
Caelo	Isopropyl myristate	15438215	7
Caelo	Isopropyl myristate	21071805	1
Caelo	Isopropyl myristate	13019910	2
Caelo	Isopropyl myristate	15438204	4
Caelo	Isopropyl myristate	17272901	7
Caelo	Isopropyl myristate	19059103	2
Caelo	Isopropyl myristate	1303034-01	1
Caelo	Isopropyl myristate	1(18130801)	1
Caelo	Isopropyl myristate	15438206	1
Caelo	Isopropyl myristate	11178415	1
Caelo	Isopropyl myristate	1508035-01	4
Caelo	Isopropyl myristate	17359501	3
Caelo	Isopropyl myristate	15035906	6
Caelo	Isopropyl myristate	18130803	8

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl myristate	1508035-02	1
Caelo	Isopropyl myristate	130303402	1
Caelo	Isopropyl myristate	14155914	1
Caelo	Isopropyl myristate	17272902	1
Caesar & Loretz GmbH	Isopropyl myristate	13019902	1
Caesar & Loretz GmbH	Isopropyl myristate	18130803	1
Caesar&Loretz GmbH D-40...	Isopropyl myristate	1201008-01	1
EuRho	Isopropyl myristate	12100801	1
EuRho	Isopropyl myristate	1106026-01	1
EuRho	Isopropyl myristate	1201008-01	1
EuRho	Isopropyl myristate	1303034-01	1
EuRho/Phönix	Isopropyl myristate	1212031-01	1
EuRho/Phönix	Isopropyl myristate	1407015-03	1
Euro OTC	Isopropyl myristate	120100801	1
Euro OTC	Isopropyl myristate	1212031-01	4
Euro OTC	Isopropyl myristate	1407015_03	1
Euro OTC	Isopropyl myristate	1508035-02	6
Euro OTC	Isopropyl myristate	1608039-02	9
Euro OTC	Isopropyl myristate	1608039	1
Euro OTC	Isopropyl myristate	1303034-01	5
Euro OTC	Isopropyl myristate	140701503	2
Euro OTC	Isopropyl myristate	1508035-01	17
Euro OTC	Isopropyl myristate	71142935	2
Euro OTC	Isopropyl myristate	160839-02	1
Euro OTC	Isopropyl myristate	41140874	1
Euro OTC	Isopropyl myristate	1303034-02	20
Euro OTC	Isopropyl myristate	3515Q-02898	1
Euro OTC	Isopropyl myristate	1608039-01	23
Euro OTC	Isopropyl myristate	1303034	1
Euro OTC	Isopropyl myristate	1407015-02	3
Euro OTC	Isopropyl myristate	160803902	1
Euro OTC	Isopropyl myristate	130303403	1
Euro OTC	Isopropyl myristate	180135-01	1
Euro OTG	Isopropyl myristate	1303034-02	1
Euro/ Sanacorp	Isopropyl myristate	1303034-02	1
Euro/ Sanacorp	Isopropyl myristate	1407015-01	1
Euro/Phönix	Isopropyl myristate	1303034-01	1
Euro/Phönix	Isopropyl myristate	1508035	1
Euroo/Phoenix	Isopropyl myristate	1303034-03	1
Euro OTC	Isopropyl myristate	1407015-01	4
Euro OTC	Isopropyl myristate	18130803	1
Euro OTC	Isopropyl myristate	1407015-03	11
Euro OTC	Isopropyl myristate	1801035-01	15
Fagron	Isopropyl myristate	13A17-B03-295774	2
Fiebig ek: 3,00EUR 31.08.12	Isopropyl myristate	1201008-01	1
GEHE 26.11.2014	Isopropyl myristate	1303034-03	1
Kögl	Isopropyl myristate	388310152916	1
Kögl	Isopropyl myristate	12402172817	1
Kögl	Isopropyl myristate	1800589	1
Caelo	Isopropyl myristate	18130808	2
Nachtestung-Verlängerung	Isopropyl myristate	349/18	1
Noweda	Isopropyl myristate	12171511	1
Noweda	Isopropyl myristate	1407015-01	1
Euro OTC	Isopropyl myristate	130133402	1
Euro OTC	Isopropyl myristate	1106026-01	1
Euro OTC	Isopropyl myristate	1407015	1
Euro OTC	Isopropyl myristate	1201008-01	3
Phoenix	Isopropyl myristate	1407015-03	2
Phönix	Isopropyl myristate	12171522	1
Phönix	Isopropyl myristate	13019910	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl myristate	18130801	7
Phönix, 18.07.2013	Isopropyl myristate	130303401	1
Caelo	Isopropyl myristate	12248600	1
Sanacorp	Isopropyl myristate	12171511	1
Sanacorp	Isopropyl myristate	18130801	1
Wolf-Apotheke	Isopropyl myristate	1508035-02	1
	Isopropyl myristate	1508035-02	1
Caelo	Isopropyl myristate	12171522	3
Euro OTC	Isopropyl myristate	1303034-03	9
Euro OTC	Isopropyl myristate	1508035	2

- 138 064 spectra from 703 *Apo-Ident* customers from a total of 35 224 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Isopropyl myristate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Isopropyl myristate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	200	0	69 274
Type C	0	286	3	138 064

The substance/substance group *Isopropyl myristate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6452 %)	98.9619 % (> 97.9239 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Isopropyl myristate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Metronidazole 25% in white petrolatum	19.57	—
Isopropyl palmitate	20.62	—
Shea butter, refined	28.47	—
Wool fat	28.51	—
Triglycerides, medium-chain	32.70	—
Pasta Cordes®	35.92	—
Camphor ointment	36.22	—
Laurel oil	40.38	—
Permethrin 25% solution	46.20	—
Squalane	56.30	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Isopropyl myristate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30977	30977	0.00	28.30
31363	31363	0.00	20.86
31530	31774	1.55	24.08
31774	31774	0.00	22.70

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Isopropyl palmitate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30868-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Isopropyl palmitate; Isopropylis palmitas

Special notes

When selecting the *Isopropyl palmitate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Isopropyl palmitate	4	3	92

Second-stage model

For differentiation of the substance/substance group *Isopropyl palmitate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Isopropyl palmitate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Isopropyl palmit...	284060	31268	40	20131119
Bombastus	Isopropyl palmit...	306390	32995	40	20161219
Bombastus	Isopropyl palmit...	306390	33040	40	20161219
Caelo	Isopropyl palmit...	12229109	30868	40	20120807
Caelo	Isopropyl palmit...	14034806	31364	40	AR-15-FG-000372-01

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 5 reference samples from the substance/substance group *Isopropyl palmitate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Isopropyl palmitate*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl palmitate	16091706	32570	40
Caelo	Isopropyl palmitate	180672	34079	40
Caelo	Isopropyl palmitate	192499	34727	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 415 spectra from 225 *Apo-Ident* customers from 97 batches from the substance/substance group *Isopropyl palmitate*.
- Among them are spectra of independent samples from 92 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Isopropyl palmitate	14034801	1
AHD	Isopropyl palmitate	288083	1
Bombastus	Isopropyl palmitate	288083	9
Caelo	Isopropyl palmitate	18067201	13
Allianz	Isopropyl palmitate	18067201	1
Anzag	Isopropyl palmitate	277740Bombastus	1
Anzag	Isopropyl palmitate	16333401	1
Audor Pharma	Isopropyl palmitate	285604	1
Bionorica/Kehr	Isopropyl palmitate	17000844	1
bomb	Isopropyl palmitate	18001978	1
Bomb/Gehe	Isopropyl palmitate	299989	1
Bombas über Sanacorp	Isopropyl palmitate	290363	1
bombast/Px	Isopropyl palmitate	293140	1
Bombastus	Isopropyl palmitate	269359	2
Bombastus	Isopropyl palmitate	266038	3
Bombastus	Isopropyl palmitate	273823	2
Bombastus	Isopropyl palmitate	275014	6
Bombastus	Isopropyl palmitate	272307	3
Bombastus	Isopropyl palmitate	262190	1
Bombastus	Isopropyl palmitate	277740	3
Bombastus	Isopropyl palmitate	276178	1
Bombastus	Isopropyl palmitate	279468	4
Bombastus	Isopropyl palmitate	281057	6
Bombastus	Isopropyl palmitate	26041301	1
Bombastus	Isopropyl palmitate	290363	3
Bombastus	Isopropyl palmitate	299989	12
Bombastus	Isopropyl palmitate	302669	19
Bombastus	Isopropyl palmitate	307838	11
Bombastus	Isopropyl palmitate	19002375	1
Bombastus	Isopropyl palmitate	291043	9
Bombastus	Isopropyl palmitate	19000596	5
Bombastus	Isopropyl palmitate	285604	6
Bombastus	Isopropyl palmitate	271265	2
Bombastus	Isopropyl palmitate	170703IP/306390	1
Bombastus	Isopropyl palmitate	60092401	3

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Supplier	Substance	Batch	Spectra
Bombastus	Isopropyl palmitate	309754	2
Bombastus	Isopropyl palmitate	293140	16
Bombastus	Isopropyl palmitate	18001978	2
Bombastus	Isopropyl palmitate	108611	2
Bombastus	Isopropyl palmitate	4613Q-02899	1
Bombastus	Isopropyl palmitate	1317001786	1
Bombastus	Isopropyl palmitate	18004344	5
Bombastus	Isopropyl palmitate	297284	15
Bombastus	Isopropyl palmitate	293410	1
Bombastus	Isopropyl palmitate	18003207	1
Bombastus	Isopropyl palmitate	281766	6
Bombastus	Isopropyl palmitate	3015I-02899	1
Bombastus	Isopropyl palmitate	17000844	4
Bombastus	Isopropyl palmitate	17001786	6
Bombastus	Isopropyl palmitate	9082013B	1
Bombastus	Isopropyl palmitate	170612183	1
Brückenapotheke	Isopropyl palmitate	285604	1
Caelo	Isopropyl palmitate	4061201	1
Caelo	Isopropyl palmitate	9324202	1
Caelo	Isopropyl palmitate	14034801	1
Caelo	Isopropyl palmitate	17091205	1
Caelo	Isopropyl palmitate	20210212-1	1
Caelo	Isopropyl palmitate	11207309	1
Caelo	Isopropyl palmitate	11207301	5
Caelo	Isopropyl palmitate	12014106	2
Caelo	Isopropyl palmitate	25031302	1
Caelo	Isopropyl palmitate	13134903	3
Caelo	Isopropyl palmitate	15071303	1
Caelo	Isopropyl palmitate	13134905	3
Caelo	Isopropyl palmitate	28111309	1
Caelo	Isopropyl palmitate	26021402	1
Caelo	Isopropyl palmitate	13134909	1
Caelo	Isopropyl palmitate	2081401	1
Caelo	Isopropyl palmitate	16021504	1
Caelo	Isopropyl palmitate	16071504	1
Caelo	Isopropyl palmitate	15128803	9
Caelo	Isopropyl palmitate	60092401	1
Caelo	Isopropyl palmitate	15169701	11
Caelo	Isopropyl palmitate	15169702	2
Caelo	Isopropyl palmitate	15169705	2
Caelo	Isopropyl palmitate	1516975	1
Caelo	Isopropyl palmitate	16091706	12
Caelo	Isopropyl palmitate	16333401	6
Caelo	Isopropyl palmitate	16333404	9
Caelo	Isopropyl palmitate	10071702	1
Caelo	Isopropyl palmitate	28031801	1
Caelo	Isopropyl palmitate	9061814	1
Caelo	Isopropyl palmitate	16081808	1
Caelo	Isopropyl palmitate	21111820	1
Caelo	Isopropyl palmitate	18234501	2
Caelo	Isopropyl palmitate	18003207	1
Caelo	Isopropyl palmitate	18067202	1
Caelo	Isopropyl palmitate	14034807	7
Caelo	Isopropyl palmitate	306390	1
Caelo	Isopropyl palmitate	291043	1
Caelo	Isopropyl palmitate	273823	2
Caelo	Isopropyl palmitate	18067204	6
Caelo	Isopropyl palmitate	14213111	2
Caelo	Isopropyl palmitate	16091708	1
Caelo	Isopropyl palmitate	18234505	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl palmitate	281766	2
Caelo	Isopropyl palmitate	13134906	2
Caelo	Isopropyl palmitate	293140	1
Caelo	Isopropyl palmitate	297284	1
Caelo	Isopropyl palmitate	1633401	1
Caelo	Isopropyl palmitate	17346502	1
Caelo	Isopropyl palmitate	16091701	8
Caelo	Isopropyl palmitate	1721402	1
Caelo	Isopropyl palmitate	18234504	3
Caelo	Isopropyl palmitate	16091709	3
Caelo	Isopropyl palmitate	17021402	19
Caelo	Isopropyl palmitate	307838	2
Caeol/Phoenix	Isopropyl palmitate	15169701	1
Caesar & Loretz GmbH	Isopropyl palmitate	18234501	2
Caesar & Loretz GmbH	Isopropyl palmitate	18234504	1
Caesar/Noweda	Isopropyl palmitate	16091701	1
Delta	Isopropyl palmitate	307838	1
Euro OTC	Isopropyl palmitate	299989	2
Fagron	Isopropyl palmitate	9G14-M08	1
Fagron	Isopropyl palmitate	293140	1
Fiebig 21.08.13 EK5,60	Isopropyl palmitate	13134903	1
Gehe	Isopropyl palmitate	12229112	1
Gehe	Isopropyl palmitate	16091701	1
GEHE	Isopropyl palmitate	269359	1
GEHE	Isopropyl palmitate	18067201	1
Caelo	Isopropyl palmitate	16091706/1060217	1
Gutenberg-Apotheke	Isopropyl palmitate	285604	1
Hedinger	Isopropyl palmitate	271265	1
Ichthyl-Gesellschaft	Isopropyl palmitate	299989	1
Lamotte/ Phönix	Isopropyl palmitate	302669	1
Nachtstung-Verlängerung	Isopropyl palmitate	240/17	1
Noweda	Isopropyl palmitate	13134906	1
Noweda	Isopropyl palmitate	14213111	1
Noweda	Isopropyl palmitate	16333404	1
Phoenix	Isopropyl palmitate	281766	1
Phonix	Isopropyl palmitate	17001786	1
phönix	Isopropyl palmitate	299989	1
Phönix	Isopropyl palmitate	16333401	1
Phönix	Isopropyl palmitate	16333404	1
Phönix	Isopropyl palmitate	309754	1
Phönix	Isopropyl palmitate	18067201	1
Sanacorp	Isopropyl palmitate	273823	1
Sanacorp	Isopropyl palmitate	290363	1
Sanacorp	Isopropyl palmitate	14034807	1
Sanacorp	Isopropyl palmitate	15128803	1
Sanacorp	Isopropyl palmitate	18067201	1
Sanacorp, 4,85EUR, 14.1.17	Isopropyl palmitate	302669	1
Sanacorp/Fischar	Isopropyl palmitate	16091701	2
VDL;4,53EUR;23.06.15	Isopropyl palmitate	29314	1
Bombastus	Isopropyl palmitate	284060	7
Bombastus	Isopropyl palmitate	306390	3
Caelo	Isopropyl palmitate	12229109	2
Caelo	Isopropyl palmitate	14034806	5
Euro OTC	Isopropyl palmitate		1

- 137 938 spectra from 703 *Apo-Ident* customers from a total of 35 201 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#),

the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Isopropyl palmitate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Isopropyl palmitate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	120	0	69 354
Type C	0	414	1	137 938

The substance/substance group *Isopropyl palmitate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.7590 % (> 99.0361 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Isopropyl palmitate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Isopropyl myristate	14.86	—
Metronidazole 25% in white petrolatum	16.12	—
Wool fat	20.17	—
Shea butter, refined	20.29	—
Pasta Cordes®	24.44	—
Laurel oil	26.89	—
Softisan® 378	32.84	—
Permethrin 25% solution	37.77	—
Triglycerides, medium-chain	37.95	—
Paraffin, yellow	39.94	—
Camphor ointment	41.39	—
Emulsifying hydrophobic base gel DAC	42.17	—
Wool alcohol ointment DAB	44.69	—
Paraffin, white	45.44	—
Olive oil, native	45.77	—

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Substanz	Distance in main model	Distance in second-stage model
Paraffin, light liquid	48.13	—
Avocado oil, refined	48.62	—
Squalane	50.69	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Isopropyl palmitate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30868	31364	5.18	16.12
31268	31364	2.71	18.47
31364	31364	0.00	19.40
32995	31364	12.17	23.84
33040	31364	11.81	22.94

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Juniper oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30711-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Juniper oil; Oleum juniperi e baccaræ

Special notes

When selecting the *Juniper oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Juniper oil	5	2	12

Second-stage model

For differentiation of the substance/substance group *Juniper oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Juniper oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Juniper oil	11379007	30711	40	1404599
Caelo	Juniper oil	13240811	31665	60	20130726
Caelo	Juniper oil	16160703	32918	40	1708747
Caelo	Juniper oil	171597	33311	40	20170601*
Caelo	Juniper oil	192077	34618	40	20190801*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Juniper oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 50 spectra of 2 reference samples from the substance/substance group *Juniper oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Juniper oil	13240807	31244	10
Caelo	Juniper oil	15185205	32352	40

- 69 424 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 21 spectra from 17 *Apo-Ident* customers from 13 batches from the substance/substance group *Juniper oil*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Juniper oil	11379012	2
Caelo	Juniper oil	11379006	1
Caelo	Juniper oil	12322707	1
Caelo	Juniper oil	18121306	1
Caelo	Juniper oil	18056101	2
Caelo	Juniper oil	11379003	1
Caelo	Juniper oil	111275	1
Caelo	Juniper oil	13240802	3
Caelo	Juniper oil	14115802	3
Caelo	Juniper oil	15141302	1
Kögl	Juniper oil	104204171714	1
Caelo	Juniper oil	15185205	1
Sanacorp	Juniper oil	11379012	1
VDL;15.05.15;9,95EUR	Juniper oil	14115802	1
Caelo	Juniper oil	11379007	1

- 138 332 spectra from 703 *Apo-Ident* customers from a total of 35 282 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Juniper oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Juniper oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	48	2	69 424
Type C	0	20	1	138 332

The substance/substance group *Juniper oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9654 %)	96.0000 % (> 90.0000 %)
Type C	100.0000 % (> 99.6456 %)	95.2381 % (> 80.9524 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Juniper oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dwarf pine oil	17.69	—
Cypress oil	26.08	—
Cedar wood oil	27.73	—
Bergamot oil	28.21	—
Spearmint oil	28.34	—
Acorus oil	30.78	—
Angelica root oil	31.30	—
Pine silvestris oil	32.25	—
Caraway oil	33.38	—
Peppermint oil	37.93	—
Bitter orange oil	38.38	—
Citric oil	41.66	—
Verbena oil, nature-identical	43.31	—
Grapefruit oil	47.23	—
Myrtle oil	48.05	—
Turpentine oil	48.16	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Juniper oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested

reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33311	33311	0.00	25.38
32918	32918	0.00	31.30
34618	34618	0.00	27.29
30711	30711	0.00	29.41
31665	30711	16.60	26.08

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Lanette® ointment (conserved)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30499-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Lanette® ointment (conserved); Unguentum Lanette®

Special notes

When selecting the *Lanette® ointment (conserved)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Lanette® ointment (conserved)	10	11	125

Second-stage model

For differentiation of the substance/substance group *Lanette[®] ointment (conserved)* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Lanette[®] ointment (conserved)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Lanette [®] ointmen...	13257301	31166	37	1402587
Caelo	Lanette [®] ointmen...	13257301	31225	40	1403113
Caelo	Lanette [®] ointmen...	13393001	31454	40	20131206
Caelo	Lanette [®] ointmen...	153481	31913	60	20151111*
Caelo	Lanette [®] ointmen...	153482	31914	60	20151111*
Caelo	Lanette [®] ointmen...	153483	31915	60	20151111*
Caelo	Lanette [®] ointmen...	160894	32093	40	20160318*
Caelo	Lanette [®] ointmen...	162580	32500	40	20160920*
Caelo	Lanette [®] ointmen...	162580	32501	40	20160920*
Caelo	Lanette [®] ointmen...	162581	32502	40	20160920*
Caelo	Lanette [®] ointmen...	162581	32503	40	20160920*
Caelo	Lanette [®] ointmen...	190107	34540	40	20190128*
Caelo	Lanette [®] ointmen...	190508	34541	40	20190319*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 577 spectra of 13 reference samples from the substance/substance group *Lanette[®] ointment (conserved)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55 782 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 483 spectra of 13 reference samples from the substance/substance group *Lanette[®] ointment (conserved)*.
- Among them are spectra of independent samples from 11 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lanette [®] ointment (conserved)	12223801	30777	40
Caelo	Lanette [®] ointment (conserved)	162582	32504	40
Caelo	Lanette [®] ointment (conserved)	170567	33144	40
Caelo	Lanette [®] ointment (conserved)	170415	33145	40
Caelo	Lanette [®] ointment (conserved)	172430	33752	40
Caelo	Lanette [®] ointment (conserved)	172431	33753	40
Caelo	Lanette [®] ointment (conserved)	173110	34008	40
Caelo	Lanette [®] ointment (conserved)	180232	34196	40
Caelo	Lanette [®] ointment (conserved)	180870	34197	40
Caelo	Lanette [®] ointment (conserved)	181184	34198	40
Caelo	Lanette [®] ointment (conserved)	182334	34263	40
Caelo	Lanette [®] ointment (conserved)	13257301	31166 [†]	3
Caelo	Lanette [®] ointment (conserved)	162582	32505	40

- 68991 spectra from a total of 1490 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 670 spectra from 172 *Apo-Ident* customers from 129 batches from the substance/substance group *Lanette[®] ointment (conserved)*.
- Among them are spectra of independent samples from 125 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Lanette [®] ointment (conserved)	14089801	1
Alliance	Lanette [®] ointment (conserved)	13046701	1
Anzah / Henry lamotte	Lanette [®] ointment (conserved)	13257501	1
Bombastus	Lanette [®] ointment (conserved)	16258001	1
Caelo	Lanette [®] ointment (conserved)	12081301	6
Caelo	Lanette [®] ointment (conserved)	12170301	1
Caelo	Lanette [®] ointment (conserved)	20310812-5	1
Caelo	Lanette [®] ointment (conserved)	20110712-3	1
Caelo	Lanette [®] ointment (conserved)	12223701	4
Caelo	Lanette [®] ointment (conserved)	12223801	6

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[†]These spectra were recorded from material of the same package as the corresponding calibration spectra (*Type A*). Hence, these spectra are not independent and are not of *Type B*.

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Supplier	Substance	Batch	Spectra
Caelo	Lanette [®] ointment (conserved)	20021309	1
Caelo	Lanette [®] ointment (conserved)	12313101	7
Caelo	Lanette [®] ointment (conserved)	12313102	2
Caelo	Lanette [®] ointment (conserved)	1222380	1
Caelo	Lanette [®] ointment (conserved)	1231302	1
Caelo	Lanette [®] ointment (conserved)	U-150513-3	1
Caelo	Lanette [®] ointment (conserved)	13046802	4
Caelo	Lanette [®] ointment (conserved)	16102013C	1
Caelo	Lanette [®] ointment (conserved)	13177301	3
Caelo	Lanette [®] ointment (conserved)	28111311	1
Caelo	Lanette [®] ointment (conserved)	6012014D	1
Caelo	Lanette [®] ointment (conserved)	24022014C	1
Caelo	Lanette [®] ointment (conserved)	13257402	1
Caelo	Lanette [®] ointment (conserved)	13234007	1
Caelo	Lanette [®] ointment (conserved)	24062014A	1
Caelo	Lanette [®] ointment (conserved)	16071402	1
Caelo	Lanette [®] ointment (conserved)	13392901	3
Caelo	Lanette [®] ointment (conserved)	14089601	5
Caelo	Lanette [®] ointment (conserved)	14221601	2
Caelo	Lanette [®] ointment (conserved)	20092014B	1
Caelo	Lanette [®] ointment (conserved)	14277101	3
Caelo	Lanette [®] ointment (conserved)	23012015C	1
Caelo	Lanette [®] ointment (conserved)	8041502	1
Caelo	Lanette [®] ointment (conserved)	15048901	17
Caelo	Lanette [®] ointment (conserved)	15048801	1
Caelo	Lanette [®] ointment (conserved)	19082015C	1
Caelo	Lanette [®] ointment (conserved)	15095902	3
Caelo	Lanette [®] ointment (conserved)	152114021	1
Caelo	Lanette [®] ointment (conserved)	15211401	3
Caelo	Lanette [®] ointment (conserved)	15348201	6
Caelo	Lanette [®] ointment (conserved)	16089404	3
Caelo	Lanette [®] ointment (conserved)	16188701	2
Caelo	Lanette [®] ointment (conserved)	ChB280916	1
Caelo	Lanette [®] ointment (conserved)	160817UL	1
Caelo	Lanette [®] ointment (conserved)	16184702	12
Caelo	Lanette [®] ointment (conserved)	161104UL/16188701	1
Caelo	Lanette [®] ointment (conserved)	16258001	23
Caelo	Lanette [®] ointment (conserved)	16258201	11
Caelo	Lanette [®] ointment (conserved)	16184703	1
Caelo	Lanette [®] ointment (conserved)	17134001	7
Caelo	Lanette [®] ointment (conserved)	17243001	10
Caelo	Lanette [®] ointment (conserved)	17243102	12
Caelo	Lanette [®] ointment (conserved)	17311001	8
Caelo	Lanette [®] ointment (conserved)	18087001	17
Caelo	Lanette [®] ointment (conserved)	18023202	5
Caelo	Lanette [®] ointment (conserved)	18118401	2
Caelo	Lanette [®] ointment (conserved)	18302001	10
Caelo	Lanette [®] ointment (conserved)	19010701	6
Caelo	Lanette [®] ointment (conserved)	18296701	3
Caelo	Lanette [®] ointment (conserved)	18233402	2
Caelo	Lanette [®] ointment (conserved)	13392701	11
Caelo	Lanette [®] ointment (conserved)	14089501	5
Caelo	Lanette [®] ointment (conserved)	15258001	1
Caelo	Lanette [®] ointment (conserved)	170530UL/16188801	1
Caelo	Lanette [®] ointment (conserved)	170710UL/16188801	1
Caelo	Lanette [®] ointment (conserved)	171107UL/17134001	1
Caelo	Lanette [®] ointment (conserved)	17133902	4
Caelo	Lanette [®] ointment (conserved)	17311002	1
Caelo	Lanette [®] ointment (conserved)	152113001	1
Caelo	Lanette [®] ointment (conserved)	170328UL/16188801	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanette [®] ointment (conserved)	14277401	20
Caelo	Lanette [®] ointment (conserved)	19010702	1
Caelo	Lanette [®] ointment (conserved)	18233502	3
Caelo	Lanette [®] ointment (conserved)	18233501	4
Caelo	Lanette [®] ointment (conserved)	19144401	2
Caelo	Lanette [®] ointment (conserved)	19144401	1
Caelo	Lanette [®] ointment (conserved)	19144501	1
Caelo	Lanette [®] ointment (conserved)	153483301	1
Caelo	Lanette [®] ointment (conserved)	1811402	2
Caelo	Lanette [®] ointment (conserved)	130456601	1
Caelo	Lanette [®] ointment (conserved)	13046601	4
Caelo	Lanette [®] ointment (conserved)	18(18087001)	1
Caelo	Lanette [®] ointment (conserved)	14277201	3
Caelo	Lanette [®] ointment (conserved)	13046501	2
Caelo	Lanette [®] ointment (conserved)	1339201	1
Caelo	Lanette [®] ointment (conserved)	14277301	5
Caelo	Lanette [®] ointment (conserved)	16089402	20
Caelo	Lanette [®] ointment (conserved)	15211201	10
Caelo	Lanette [®] ointment (conserved)	16089401	46
Caelo	Lanette [®] ointment (conserved)	13257501	9
Caelo	Lanette [®] ointment (conserved)	16258101	11
Caelo	Lanette [®] ointment (conserved)	309918023301	1
Caelo	Lanette [®] ointment (conserved)	18118502	3
Caelo	Lanette [®] ointment (conserved)	13046701	15
Caelo	Lanette [®] ointment (conserved)	12312101	1
Caelo	Lanette [®] ointment (conserved)	173111001	1
Caelo	Lanette [®] ointment (conserved)	180102UL/17134001	1
Caelo	Lanette [®] ointment (conserved)	1807001	1
Caelo	Lanette [®] ointment (conserved)	280714B	1
Caelo	Lanette [®] ointment (conserved)	13191201	7
Caelo	Lanette [®] ointment (conserved)	12312901	1
Caelo	Lanette [®] ointment (conserved)	12313001	3
Caelo	Lanette [®] ointment (conserved)	1391201	1
Caelo	Lanette [®] ointment (conserved)	17133801	9
Caelo	Lanette [®] ointment (conserved)	15348301	17
Caelo	Lanette [®] ointment (conserved)	35151-03211	1
Caelo	Lanette [®] ointment (conserved)	15211301	21
Caelo	Lanette [®] ointment (conserved)	14200601	8
Caelo	Lanette [®] ointment (conserved)	15211102	1
Caelo	Lanette [®] ointment (conserved)	15348202	1
Caelo	Lanette [®] ointment (conserved)	16188801	4
Caelo	Lanette [®] ointment (conserved)	17041501	14
Caelo	Lanette [®] ointment (conserved)	1731002	1
Caelo	Lanette [®] ointment (conserved)	18023301	4
Caelo	Lanette [®] ointment (conserved)	18118402	9
Caelo	Lanette [®] ointment (conserved)	180870001	1
Caelo	Lanette [®] ointment (conserved)	18087101	1
Caelo	Lanette [®] ointment (conserved)	19050802	2
Caelo	Lanette [®] ointment (conserved)	14089801	12
Caelo	Lanette [®] ointment (conserved)	1420061	1
Caelo	Lanette [®] ointment (conserved)	613Q-03211	1
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	15348201	1
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	18233501	2
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	18302001	2
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	19010701	1
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	19144301	1
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	18087001	1
Caesar & Loretz GmbH / ...	Lanette [®] ointment (conserved)	15211301	1
Caesar & Loretz GmbH/Ph...	Lanette [®] ointment (conserved)	19010702	1
Caesar/Lorenz	Lanette [®] ointment (conserved)	13046701	1

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Supplier	Substance	Batch	Spectra
Caesar/Lorenz	Lanette [®] ointment (conserved)	13257301	2
Caesar/Lorenz	Lanette [®] ointment (conserved)	12313102	1
Caesar/Lorenz	Lanette [®] ointment (conserved)	13257501	1
Fagron	Lanette [®] ointment (conserved)	15348201	1
Fagron	Lanette [®] ointment (conserved)	13046601	1
gehe	Lanette [®] ointment (conserved)	13177501	1
Gehe	Lanette [®] ointment (conserved)	16258001	1
GEHE	Lanette [®] ointment (conserved)	13046701	1
GEHE	Lanette [®] ointment (conserved)	16184702	1
GEHE	Lanette [®] ointment (conserved)	9639910	1
GEHE	Lanette [®] ointment (conserved)	16258101	2
GEHE	Lanette [®] ointment (conserved)	18023202	1
Caelo	Lanette [®] ointment (conserved)	15049001	12
Henry Lamotte Oils GmbH	Lanette [®] ointment (conserved)	18087001	1
Caelo	Lanette [®] ointment (conserved)	17133901	13
L12	Lanette [®] ointment (conserved)	18087001	1
L30	Lanette [®] ointment (conserved)	16184702	1
L30	Lanette [®] ointment (conserved)	17133801	1
Phoenix	Lanette [®] ointment (conserved)	14089501	1
Phoenix	Lanette [®] ointment (conserved)	16089402	2
Caelo	Lanette [®] ointment (conserved)	17311101	7
Phönix	Lanette [®] ointment (conserved)	12223701	1
PHÖNIX	Lanette [®] ointment (conserved)	17311101	1
Sanacorp	Lanette [®] ointment (conserved)	14089801	1
Sanacorp	Lanette [®] ointment (conserved)	16089401	1
Sanacorp	Lanette [®] ointment (conserved)	160258001	1
Sanacorp	Lanette [®] ointment (conserved)	17133901	1
Caelo	Lanette [®] ointment (conserved)	13177501	11
Caelo	Lanette [®] ointment (conserved)	40/AKD2	1
VDL;3,33EUR;22.10.14	Lanette [®] ointment (conserved)	14089801	2
Caelo	Lanette [®] ointment (conserved)	13257301	12
Caelo	Lanette [®] ointment (conserved)	13393001	17
Caelo	Lanette [®] ointment (conserved)		1
Caelo	Lanette [®] ointment (conserved)	162580	1

- 137 683 spectra from 703 *Apo-Ident* customers from a total of 35 170 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Lanette[®] ointment (conserved)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Lanette[®] ointment (conserved)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	577	0	55 782
Type B	0	483	0	68 990
Type C	0	635	35	137 682

The substance/substance group *Lanette[®] ointment (conserved)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 98.9601 %)
Type B	100.0000 % (> 99.9652 %)	100.0000 % (> 98.7578 %)
Type C	100.0000 % (> 99.6446 %)	94.7761 % (> 94.3284 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Lanette® ointment (conserved)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Anionic hydrophilic cream SR (NRF p.27)	16.30	—
Eucerin® cum Aqua	19.22	23.62
Anionic hydrophilic cream DAB	20.87	—
Hydrophilic cream, non-ionic SR (NRF p...	21.19	—
Anionic hydrophilic cream without prese...	22.84	—
Psorisol base cream Audor®	23.79	—
Base cream, hydrophobic DAC	24.31	—
Hydrophilic cream, non-ionic without p...	26.81	—
Base cream DAC	28.79	27.27
Anionic hydrophilic cream with propyle...	29.46	—
Skin care ointment W/L SR (without pre...	30.49	—
Wool alcohol cream SR	31.38	13.89
Transdermal base cream	31.80	—
Glycolic acid 70%	36.85	—
Non-ionic hydrophil ointment	37.74	12.73
Wool alcohol cream DAB	38.96	22.01
Skin care ointment W/L SR	45.03	—
⋮	⋮	⋮
Squalane	>50	203.81
2-ethylhexyl laurate	>50	234.89

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Lanette® ointment (conserved)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32500	32500	0.00	26.31
34540	34540	0.00	19.22
31454	31225	2.55	23.79
31915	31915	0.00	32.63
32503	32503	0.00	25.72
31225	31225	0.00	25.85
32502	32502	0.00	24.66
34541	34541	0.00	35.79
32093	32093	0.00	28.60
31166	31166	0.00	38.22
31913	31913	0.00	35.26
31914	31914	0.00	27.80
32501	32501	0.00	27.74

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Lanolin DAB**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30013-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Lanolin DAB; Lanolinum DAB

Special notes

When selecting the *Lanolin DAB* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Lanolin DAB	10	13	377

Second-stage model

For differentiation of the substance/substance group *Lanolin DAB* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Lanolin DAB*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Lanolin DAB	294969	31795	60	20150611
Bombastus	Lanolin DAB	19001199	34518	40	20190301
Caelo	Lanolin DAB	13062501	31003	40	20130226
Caelo	Lanolin DAB	14032001	31439	40	AR-15-FG-008283-01
Caelo	Lanolin DAB	15255201	31746	60	20150727
Caelo	Lanolin DAB	15405502	31798	60	20151130
Caelo	Lanolin DAB	163026	32863	40	20161028*
Fagron	Lanolin DAB	15G02-T11-024155	31794	60	AR-16-FG-004053-01
Fagron	Lanolin DAB	18L18-T08-062838	34597	40	20190227
Henry Lamotte	Lanolin DAB	8005213004	34686	40	20190306

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 480 spectra of 10 reference samples from the substance/substance group *Lanolin DAB*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55 879 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 520 spectra of 13 reference samples from the substance/substance group *Lanolin DAB*.
- Among them are spectra of independent samples from 13 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lanolin DAB	163022	32859	40
Caelo	Lanolin DAB	163023	32860	40
Caelo	Lanolin DAB	163024	32861	40
Caelo	Lanolin DAB	163025	32862	40
Caelo	Lanolin DAB	163444	33181	40
Caelo	Lanolin DAB	170184	33182	40
Caelo	Lanolin DAB	170187	33183	40
Caelo	Lanolin DAB	171351	33370	40
Caelo	Lanolin DAB	171354	33371	40
Caelo	Lanolin DAB	172965	34015	40
Caelo	Lanolin DAB	180443	34151	40
Caelo	Lanolin DAB	182302	34270	40
Henry Lamotte	Lanolin DAB	5264900	30922	40

- 68 954 spectra from a total of 1489 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2511 spectra from 519 *Apo-Ident* customers from 394 batches from the substance/substance group *Lanolin DAB*.
- Among them are spectra of independent samples from 377 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
26.07.2018	Lanolin DAB	17000364	1
AHD	Lanolin DAB	5517200	1
AHD	Lanolin DAB	16189401	1
AHD	Lanolin DAB	16302501	1
AHD	Lanolin DAB	17222601	1
AHD	Lanolin DAB	19071101	1
AHD , 05.09.13	Lanolin DAB	274414	1
AHD 14.03.17 Ek:6,91	Lanolin DAB	6003682006	1
AHD, 08.11.13	Lanolin DAB	280111	1
Caelo	Lanolin DAB	16302401	44
AHDE/Cael030.12.16 EUR5,33	Lanolin DAB	16302401	1
Alliance	Lanolin DAB	13102802	1
Alliance H.	Lanolin DAB	15405501	1
Alliance health 12.01.15	Lanolin DAB	14A06-T05-0002	1
Alliance Healthcare	Lanolin DAB	13062401	1
Alliance Healthcare	Lanolin DAB	5375500	1
Alliance Healthcare	Lanolin DAB	5447700	3
Alte Apotheke	Lanolin DAB	16189602	1

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Supplier	Substance	Batch	Spectra
anzag	Lanolin DAB	15255301	1
Anzag	Lanolin DAB	11315101	1
Anzag	Lanolin DAB	5264900	1
Anzag	Lanolin DAB	16189501	1
Anzag	Lanolin DAB	17A03-T02-040001	1
Anzag	Lanolin DAB	17222401	1
ANZAG 01.01.143	Lanolin DAB	14a06-t01-009011	1
Anzag 10.04.13	Lanolin DAB	5264900	1
Anzag/	Lanolin DAB	12193901	1
Bombastus	Lanolin DAB	277970	4
Anzag/Henry Lamotte	Lanolin DAB	5264900	1
Bombasatus	Lanolin DAB	288635	1
Bombastus	Lanolin DAB	16189501	1
Bombastus	Lanolin DAB	264723	1
Bombastus	Lanolin DAB	266981	1
Bombastus	Lanolin DAB	270443	1
Bombastus	Lanolin DAB	270439	1
Bombastus	Lanolin DAB	277968	1
Bombastus	Lanolin DAB	280111	3
Bombastus	Lanolin DAB	277969	1
Bombastus	Lanolin DAB	282979	2
Bombastus	Lanolin DAB	285097	4
Bombastus	Lanolin DAB	286690	1
Bombastus	Lanolin DAB	286691	2
Bombastus	Lanolin DAB	285096	2
Bombastus	Lanolin DAB	288636	2
Bombastus	Lanolin DAB	290885	4
Bombastus	Lanolin DAB	292906	4
Bombastus	Lanolin DAB	292905	1
Bombastus	Lanolin DAB	297583	6
Bombastus	Lanolin DAB	299082	5
Bombastus	Lanolin DAB	300144	2
Bombastus	Lanolin DAB	301169	2
Bombastus	Lanolin DAB	302809	5
Bombastus	Lanolin DAB	163023	1
Bombastus	Lanolin DAB	60080101	4
Bombastus	Lanolin DAB	304540	2
Bombastus	Lanolin DAB	305440	1
Bombastus	Lanolin DAB	305441	2
Bombastus	Lanolin DAB	306635	2
Bombastus	Lanolin DAB	17222601	1
Bombastus	Lanolin DAB	18001870	1
Bombastus	Lanolin DAB	19000702	1
Bombastus	Lanolin DAB	288637	5
Bombastus	Lanolin DAB	17001447	4
Bombastus	Lanolin DAB	294968	1
Bombastus	Lanolin DAB	17000364	5
Bombastus	Lanolin DAB	13173601	1
Bombastus	Lanolin DAB	277967	2
Bombastus	Lanolin DAB	124967	1
Bombastus	Lanolin DAB	286688	1
Bombastus	Lanolin DAB	294967	2
Bombastus	Lanolin DAB	18003635	3
Bombastus	Lanolin DAB	306633	4
Bombastus	Lanolin DAB	17000363	1
Bombastus	Lanolin DAB	18003634	1
Bombastus	Lanolin DAB	302808	2
Bombastus	Lanolin DAB	306634	2
Bombastus	Lanolin DAB	17001446	1
Bombastus	Lanolin DAB	309000	5

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Supplier	Substance	Batch	Spectra
Bombastus	Lanolin DAB	274413	1
Bombastus	Lanolin DAB	274412	1
Bombastus	Lanolin DAB	9/14	1
Bombastus	Lanolin DAB	1700000363	1
Bombastus	Lanolin DAB	16302401	1
Bombastus	Lanolin DAB	264721	1
Bombastus	Lanolin DAB	305411	2
Bombastus	Lanolin DAB	17000425	1
Bombastus	Lanolin DAB	18001869	1
Bombastus	Lanolin DAB	18003633	1
Bombastus	Lanolin DAB	18005860	1
Bombastus	Lanolin DAB	14032101	1
Bombastus	Lanolin DAB	14166001	1
Bombastus	Lanolin DAB	18D11-T03-054713	1
Bombastus	Lanolin DAB	292904	1
Bombastus	Lanolin DAB	304541	6
Bombastus	Lanolin DAB	301170	4
Bombastus	Lanolin DAB	302807	1
Bombstus	Lanolin DAB	273293	1
caedo	Lanolin DAB	17296501	1
Cael Sanacorp 05.02.2016	Lanolin DAB	15255202	1
Caelo	Lanolin DAB	14165601	38
Caelo	Lanolin DAB	15193401	18
Caelo	Lanolin DAB	15255601	7
Caelo	Lanolin DAB	11281702	2
Caelo	Lanolin DAB	11281701	2
Caelo	Lanolin DAB	10358301	1
Caelo	Lanolin DAB	11315101	3
Caelo	Lanolin DAB	12037401	4
Caelo	Lanolin DAB	12037101	7
Caelo	Lanolin DAB	7071205	1
Caelo	Lanolin DAB	12065102	1
Caelo	Lanolin DAB	12065101	5
Caelo	Lanolin DAB	12260301	5
Caelo	Lanolin DAB	20240912-1	1
Caelo	Lanolin DAB	213Q-01765	1
Caelo	Lanolin DAB	14011304	1
Caelo	Lanolin DAB	12H01-T02	1
Caelo	Lanolin DAB	713I-01765	1
Caelo	Lanolin DAB	12037002	1
Caelo	Lanolin DAB	12308601	6
Caelo	Lanolin DAB	13062401	13
Caelo	Lanolin DAB	13062701	6
Caelo	Lanolin DAB	13102802	25
Caelo	Lanolin DAB	14101306	1
Caelo	Lanolin DAB	13E07-T20-003399	1
Caelo	Lanolin DAB	9112013B	1
Caelo	Lanolin DAB	1310802	1
Caelo	Lanolin DAB	23326501	1
Caelo	Lanolin DAB	31121301	1
Caelo	Lanolin DAB	9011406	1
Caelo	Lanolin DAB	133326701	1
Caelo	Lanolin DAB	1096249	2
Caelo	Lanolin DAB	11011404	1
Caelo	Lanolin DAB	13326601	7
Caelo	Lanolin DAB	13345902	19
Caelo	Lanolin DAB	14032101	23
Caelo	Lanolin DAB	14032201	4
Caelo	Lanolin DAB	1042014A	1
Caelo	Lanolin DAB	9041401	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	13345901	1
Caelo	Lanolin DAB	26052014B	1
Caelo	Lanolin DAB	26061401	1
Caelo	Lanolin DAB	8072014A	1
Caelo	Lanolin DAB	14165901	30
Caelo	Lanolin DAB	8082014B	1
Caelo	Lanolin DAB	18092014B	1
Caelo	Lanolin DAB	14032302	2
Caelo	Lanolin DAB	14166001	12
Caelo	Lanolin DAB	16011501	1
Caelo	Lanolin DAB	23012015B	1
Caelo	Lanolin DAB	1433602	4
Caelo	Lanolin DAB	14334001	28
Caelo	Lanolin DAB	15024201	27
Caelo	Lanolin DAB	15024102	27
Caelo	Lanolin DAB	14K11-T01-016976	2
Caelo	Lanolin DAB	8071503	1
Caelo	Lanolin DAB	15c1903020815	1
Caelo	Lanolin DAB	17082015D	1
Caelo	Lanolin DAB	15255501	2
Caelo	Lanolin DAB	1525501	1
Caelo	Lanolin DAB	15255301	6
Caelo	Lanolin DAB	15405601	31
Caelo	Lanolin DAB	15405505	1
Caelo	Lanolin DAB	15405801	6
Caelo	Lanolin DAB	16054801	40
Caelo	Lanolin DAB	123456	1
Caelo	Lanolin DAB	1540502	1
Caelo	Lanolin DAB	16549	1
Caelo	Lanolin DAB	15405702	1
Caelo	Lanolin DAB	16189401	42
Caelo	Lanolin DAB	16189501	36
Caelo	Lanolin DAB	290316L	1
Caelo	Lanolin DAB	16189602	2
Caelo	Lanolin DAB	16302202	3
Caelo	Lanolin DAB	1602301	1
Caelo	Lanolin DAB	16302402	1
Caelo	Lanolin DAB	16189501/160314L	1
Caelo	Lanolin DAB	17018701	25
Caelo	Lanolin DAB	15344401	1
Caelo	Lanolin DAB	16302302	3
Caelo	Lanolin DAB	8061713	1
Caelo	Lanolin DAB	17018503	3
Caelo	Lanolin DAB	16302601	3
Caelo	Lanolin DAB	1735201	2
Caelo	Lanolin DAB	17222601	73
Caelo	Lanolin DAB	17222401	27
Caelo	Lanolin DAB	23121703	1
Caelo	Lanolin DAB	172226015502	1
Caelo	Lanolin DAB	17296602	45
Caelo	Lanolin DAB	17H24-T04-047697	1
Caelo	Lanolin DAB	23051815	1
Caelo	Lanolin DAB	18044301	73
Caelo	Lanolin DAB	30081806	1
Caelo	Lanolin DAB	18044001	4
Caelo	Lanolin DAB	18107401	5
Caelo	Lanolin DAB	18242701	1
Caelo	Lanolin DAB	188044301	1
Caelo	Lanolin DAB	18D11-T04-054716	1
Caelo	Lanolin DAB	18230201	20

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	18107302	3
Caelo	Lanolin DAB	18325501	11
Caelo	Lanolin DAB	18L18-To-062839	1
Caelo	Lanolin DAB	18124-T07-060227	1
Caelo	Lanolin DAB	19071101	6
Caelo	Lanolin DAB	15024101	1
Caelo	Lanolin DAB	19000701	3
Caelo	Lanolin DAB	16302501	3
Caelo	Lanolin DAB	18044301-L20181115Ma	1
Caelo	Lanolin DAB	13326502	6
Caelo	Lanolin DAB	15045502	1
Caelo	Lanolin DAB	16054701	9
Caelo	Lanolin DAB	16189701	2
Caelo	Lanolin DAB	17H24T01047688	1
Caelo	Lanolin DAB	16344401	28
Caelo	Lanolin DAB	16064901	1
Caelo	Lanolin DAB	4616M-01765	1
Caelo	Lanolin DAB	44(18107202)	1
Caelo	Lanolin DAB	1306501	1
Caelo	Lanolin DAB	4817E-01765	1
Caelo	Lanolin DAB	16189402	2
Caelo	Lanolin DAB	19176601	1
Caelo	Lanolin DAB	12308801	1
Caelo	Lanolin DAB	80816	1
Caelo	Lanolin DAB	19176701	1
Caelo	Lanolin DAB	17135201	30
Caelo	Lanolin DAB	1717135101	1
Caelo	Lanolin DAB	12037301	2
Caelo	Lanolin DAB	13227601	23
Caelo	Lanolin DAB	2913U-01765	1
Caelo	Lanolin DAB	1515Q-01765	1
Caelo	Lanolin DAB	5651400	1
Caelo	Lanolin DAB	17222701	6
Caelo	Lanolin DAB	17A17296601	1
Caelo	Lanolin DAB	12193901	12
Caelo	Lanolin DAB	13227801	6
Caelo	Lanolin DAB	160614	1
Caelo	Lanolin DAB	14032401	7
Caelo	Lanolin DAB	14A06-T01-009011	1
Caelo	Lanolin DAB	14333701	4
Caelo	Lanolin DAB	15024003	1
Caelo	Lanolin DAB	15024301	4
Caelo	Lanolin DAB	15255202	27
Caelo	Lanolin DAB	16054702	1
Caelo	Lanolin DAB	1701801	1
Caelo	Lanolin DAB	17135102	3
Caelo	Lanolin DAB	17296601	14
Caelo	Lanolin DAB	18230302	14
Caelo	Lanolin DAB	18242801	1
Caelo	Lanolin DAB	12308802	21
Caelo	Lanolin DAB	4413M01765	1
Caelo	Lanolin DAB	42(17222601)	1
Caelo	Lanolin DAB	43(17296602)	1
Caelo	Lanolin DAB	181072020	1
Caelo	Lanolin DAB	17018401	79
Caelo	Lanolin DAB	5113A-01765	1
Caelo	Lanolin DAB	15405501	24
Caelo	Lanolin DAB	16302301	59
Caelo	Lanolin DAB	17A03-T05-040010	1
Caelo	Lanolin DAB	170614181	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	17135101	44
Caelo	Lanolin DAB	17134201	1
Caelo	Lanolin DAB	170105186	1
Caelo	Lanolin DAB	18912181	1
Caelo	Lanolin DAB	19000703	1
Caelo	Lanolin DAB	17135401	4
Fagron	Lanolin DAB	18044101	1
Caelo	Lanolin DAB	12193701	22
Caelo	Lanolin DAB	12260302	3
Caelo	Lanolin DAB	14333901	9
Caelo	Lanolin DAB	17296501	22
Caelo	Lanolin DAB	17222691	1
Caelo	Lanolin DAB	18044101	17
Caelo	Lanolin DAB	14333602	33
Caelo	Lanolin DAB	12H01-T01	1
Caelo	Lanolin DAB	13062602	3
Caelo	Lanolin DAB	13326701	29
Caelo	Lanolin DAB	16054602	4
Caelo	Lanolin DAB	17296702	5
Caelo	Lanolin DAB	17222501	1
Caelo	Lanolin DAB	19000702	16
Caelo	Lanolin DAB	170184	1
Caelo	Lanolin DAB	172960025649	1
Caelo	Lanolin DAB	180443015739	1
Caelo	Lanolin DAB	13227701	17
Caelo	Lanolin DAB	13326701-3455311103	1
Caelo	Lanolin DAB	14032301	11
Caelo	Lanolin DAB	14165701	3
Caelo	Lanolin DAB	1433001	1
Caelo	Lanolin DAB	15193501	29
Caelo	Lanolin DAB	1634401	1
Caelo	Lanolin DAB	18107202	21
Caelo	Lanolin DAB	17K27-T07-050540	1
Caelo	Lanolin DAB	13062801	2
Caelo	Lanolin DAB	13227602	5
Caelo	Lanolin DAB	5211Q-01765	1
Caelo	Lanolin DAB	3613A-01765	1
Caeol	Lanolin DAB	7022014A	1
Caeolo/ Noweda	Lanolin DAB	14333701	1
Caeolo/Gehe	Lanolin DAB	17135101	1
Caeolo/Noweda	Lanolin DAB	15193501	1
Caeolo/Noweda	Lanolin DAB	16302401	1
caesar & Loretz	Lanolin DAB	16054901	1
Caesar & Loretz	Lanolin DAB	16189401	1
Caesar & Loretz	Lanolin DAB	16302401	3
Caesar & Loretz GmbH	Lanolin DAB	12193701	1
Caesar & Loretz GmbH	Lanolin DAB	13227601	1
Caesar & Loretz GmbH	Lanolin DAB	14032001	1
Caesar & Loretz GmbH	Lanolin DAB	14165601	1
Caesar & Loretz GmbH	Lanolin DAB	15024102	1
Caesar & Loretz GmbH	Lanolin DAB	16189401	1
Caesar & Loretz GmbH	Lanolin DAB	16189501	1
Caesar & Loretz GmbH	Lanolin DAB	16344401	1
Caesar & Loretz GmbH	Lanolin DAB	17018701	1
Caesar & Loretz GmbH	Lanolin DAB	17135101	1
Caesar & Loretz GmbH	Lanolin DAB	18044301	1
Caesar & Loretz GmbH	Lanolin DAB	18107202	1
Caesar & Loretz GmbH	Lanolin DAB	18230201	2
Caesar & Loretz GmbH	Lanolin DAB	19000701	1
Caesar & Loretz GmbH	Lanolin DAB	18325501	2

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Lanolin DAB	19000602	1
Caesar & Loretz GmbH	Lanolin DAB	19071101	2
Caesar & Loretz GmbH	Lanolin DAB	19176601	1
Caesar & Loretz GmbH Hi...	Lanolin DAB	16189401	1
Caesar & Loretz GmbH, 4...	Lanolin DAB	12037101	1
Caesar & Loretz GmbH, 4...	Lanolin DAB	12260301	1
Caesar & Loretz GmbH, 4...	Lanolin DAB	13062401	1
Caesar & Loretz GmbH/MI...	Lanolin DAB	19071201	1
Caesar & Loretz GmbH/Ph...	Lanolin DAB	18230302	1
Caesar & Loretz/ Noweda	Lanolin DAB	17222601	1
Caesar & Loretz/Noweda	Lanolin DAB	17018401	1
Caesar &Loretz GmbH	Lanolin DAB	12193701	1
Caesar&loretz,Phoenix	Lanolin DAB	14333602	1
caesar&loretz,Phönix	Lanolin DAB	15405502	1
Caesar/Lorenz	Lanolin DAB	14032001	1
Castor/Phönix	Lanolin DAB	15255301	1
Cealo	Lanolin DAB	16054701	1
Cealo	Lanolin DAB	17222401	2
Cealo/ AHD	Lanolin DAB	15405501	1
Cealo/AHD	Lanolin DAB	16054801	2
Cealo/AHD	Lanolin DAB	18044301	1
Cealo/Gehe	Lanolin DAB	17296602	1
Cealo/Phoenix	Lanolin DAB	17222601	1
DAB 2008	Lanolin DAB	11281701	1
Delta	Lanolin DAB	17222601	1
Dr. Wolff/phönix	Lanolin DAB	17222401	1
E Plus	Lanolin DAB	17296602	1
Eigene Herstellung	Lanolin DAB	10052016	1
Euro OTC	Lanolin DAB	260416v1	1
Euro OTC	Lanolin DAB	16189401	1
Euro OTC	Lanolin DAB	11281901	2
Euro OTC	Lanolin DAB	15405501	2
Euro OTC	Lanolin DAB	17K27-T07-050540	1
Euro OTC	Lanolin DAB	306635	1
Fagron	Lanolin DAB	13804-T22-0002	1
Fagron	Lanolin DAB	13E0760-0002	1
Fagron	Lanolin DAB	17H24t02047691	1
Fagron	Lanolin DAB	12C06-T02	1
Fagron	Lanolin DAB	11k18-t01	1
Fagron	Lanolin DAB	12E22-T04	4
Fagron	Lanolin DAB	12E22-T07	1
Fagron	Lanolin DAB	12H01-T04	2
Fagron	Lanolin DAB	13B04-T20-001084	3
Fagron	Lanolin DAB	13B04-T20-0010B4	1
Fagron	Lanolin DAB	13B04-T20-00108	1
Fagron	Lanolin DAB	13E07-Trg-oo3395	1
Fagron	Lanolin DAB	13H13T11-006183	1
Fagron	Lanolin DAB	13H13-T12-006187	3
Fagron	Lanolin DAB	13H13T11006184	1
Fagron	Lanolin DAB	13H13-T08-006173	1
Fagron	Lanolin DAB	13E07-T20-003401	1
Fagron	Lanolin DAB	14A06T02	3
Fagron	Lanolin DAB	14A06-T06-009028	1
Fagron	Lanolin DAB	14A06T01009011	1
Fagron	Lanolin DAB	14A06-T02-009014	2
Fagron	Lanolin DAB	13H13-T08_006173	1
Fagron	Lanolin DAB	14A06-T04-009021	1
Fagron	Lanolin DAB	14E06-T10	1
Fagron	Lanolin DAB	14E06-T11-012200	2
Fagron	Lanolin DAB	14E06T07	1

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Supplier	Substance	Batch	Spectra
Fagron	Lanolin DAB	14E06-T09-012194	6
Fagron	Lanolin DAB	14E06-T10-012197	1
Fagron	Lanolin DAB	14K11-T03-016983	2
Fagron	Lanolin DAB	15C19T03	1
Fagron	Lanolin DAB	15C19-T04-020818	1
Fagron	Lanolin DAB	15405601	1
Fagron	Lanolin DAB	15G02-T10-024152	2
Fagron	Lanolin DAB	15C19-T05-020821	1
Fagron	Lanolin DAB	16G01-T08-034867	5
Fagron	Lanolin DAB	15c19-t03-020815	1
Fagron	Lanolin DAB	16G01-T03-034847	4
Fagron	Lanolin DAB	16G01-T06	1
Fagron	Lanolin DAB	17A03-T03-040004	2
Fagron	Lanolin DAB	17A03-T02-040010	1
Fagron	Lanolin DAB	17H24-T03-047694	2
Fagron	Lanolin DAB	17H24-T01-047688	2
Fagron	Lanolin DAB	17H24T04047697	1
Fagron	Lanolin DAB	17k27-t07-050540	1
Fagron	Lanolin DAB	17K27-T07-050540	6
Fagron	Lanolin DAB	1824-T08-060230	1
Fagron	Lanolin DAB	18L18-T08-062839	5
Fagron	Lanolin DAB	19C28-T09-065460	1
Fagron	Lanolin DAB	19L18-T08-062839	1
Fagron	Lanolin DAB	15C19-T01-0001	1
Fagron	Lanolin DAB	14A06-T01-009011	4
Fagron	Lanolin DAB	17H24-T02-047691	1
Fagron	Lanolin DAB	18D11-T04-054716	2
Fagron	Lanolin DAB	16G01-T04-034850	5
Fagron	Lanolin DAB	17018401	2
Fagron	Lanolin DAB	13E07-T21-003404	1
Fagron	Lanolin DAB	12H01-T01	1
Fagron	Lanolin DAB	15C19-T01-020809	1
Fagron	Lanolin DAB	12E22-T06	1
Fagron	Lanolin DAB	15255201	1
Fagron	Lanolin DAB	13H13-12	1
Fagron	Lanolin DAB	13B04-T22-001078	2
Fagron	Lanolin DAB	13B04-T21-001085	4
Fagron	Lanolin DAB	18D11-T03-054713	1
Fagron	Lanolin DAB	17A03-T02-040001	5
Fagron	Lanolin DAB	17H24-T04-047697	1
Fagron	Lanolin DAB	17-A03-T04-040007	1
Fagron	Lanolin DAB	16G01-T07-034861	5
Fagron	Lanolin DAB	15C19-T02-020812	8
Fagron	Lanolin DAB	17A03-T05-040010	3
Fagron	Lanolin DAB	17A03-040004	1
Fagron	Lanolin DAB	13E07-T22-003407	1
Fagron	Lanolin DAB	15C19-T03-020815	6
Fagron	Lanolin DAB	15c19-t05-020821	1
Fagron	Lanolin DAB	15c19-t02-020812	1
Fagron	Lanolin DAB	15C-9-T02020812	1
Fagron	Lanolin DAB	18K05-T05-061772	1
Fagron	Lanolin DAB	13B12-T01-001087	2
Fagron	Lanolin DAB	16G01-T06-034857	2
Fagron	Lanolin DAB	14166001	1
Fagron	Lanolin DAB	14E06-T07	1
Fagron	Lanolin DAB	14K11-T03-016984	2
Fagron	Lanolin DAB	16302401	2
Fagron	Lanolin DAB	18K05-T04-061769	1
Fagron	Lanolin DAB	17135101	1
Fargon	Lanolin DAB	14k11-t01-016976	1

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Supplier	Substance	Batch	Spectra
Fargron/Noweda	Lanolin DAB	15C19-T01-020809	1
Fiebig	Lanolin DAB	15405702	2
Fiebig	Lanolin DAB	16189701	1
Fiebig	Lanolin DAB	16344401	1
Fiebig	Lanolin DAB	17135201	1
Fiebig	Lanolin DAB	16302601	1
Fiebig	Lanolin DAB	17222401	1
Fiebig	Lanolin DAB	17222701	1
Fiebig	Lanolin DAB	17296702	1
Fiebig	Lanolin DAB	18044001	2
Fiebig	Lanolin DAB	18044101	1
Fiebig	Lanolin DAB	18107401	1
Fiebig	Lanolin DAB	18325501	3
Caelo	Lanolin DAB	17135302	1
Fragron / PhönixF	Lanolin DAB	18L18-T08-062838	1
Gehe	Lanolin DAB	12193701	1
Gehe	Lanolin DAB	13062501	1
Gehe	Lanolin DAB	13B04-T20-001084	1
Gehe	Lanolin DAB	13326601	1
Gehe	Lanolin DAB	14032001	1
Gehe	Lanolin DAB	14165601	1
Gehe	Lanolin DAB	14E06-T07-012186	1
Gehe	Lanolin DAB	15024102	1
Gehe	Lanolin DAB	15255201	2
Gehe	Lanolin DAB	16054602	1
Gehe	Lanolin DAB	16054702	1
Gehe	Lanolin DAB	301170	1
Gehe	Lanolin DAB	17000364	1
GEHE	Lanolin DAB	14K11-T03-016984	1
GEHE	Lanolin DAB	16189501	2
GEHE	Lanolin DAB	17018701	1
GEHE	Lanolin DAB	17018401	1
GEHE	Lanolin DAB	309000	1
GEHE	Lanolin DAB	17135101	1
GEHE	Lanolin DAB	18044301	3
GEHE	Lanolin DAB	18107202	2
Fagron	Lanolin DAB	13E07-T18-003392	3
GEHE 26.11.2014	Lanolin DAB	14A06-T04-009021	1
Gehe 29.07.14	Lanolin DAB	14032001	1
Gehe am 21.2.14	Lanolin DAB	13326501	2
Caelo	Lanolin DAB	12194201	4
Caelo	Lanolin DAB	13326501	27
Caelo	Lanolin DAB	1230317	1
Euro OTC	Lanolin DAB	16054901	2
Fagron	Lanolin DAB	15E04-T01-022046	2
H.Lamotte	Lanolin DAB	8002875002	1
H.Lamotte	Lanolin DAB	8004134012	2
Hedinger	Lanolin DAB	16302301	1
Henry	Lanolin DAB	5316400	1
Henry Lamotte	Lanolin DAB	5375500	2
Henry Lamotte	Lanolin DAB	5860800	1
Henry Lamotte	Lanolin DAB	8002875002	1
Henry Lamotte Oils	Lanolin DAB	5264900	1
Henry Lamotte Oils	Lanolin DAB	5316400	1
Henry Lamotte Oils / AHD	Lanolin DAB	5375500	3
Henry Lamotte Oils GmbH	Lanolin DAB	6000746001	1
Henry Lamotte Oils GmbH	Lanolin DAB	6003682006	1
Henry Lamotte Oils GmbH	Lanolin DAB	8002875002	3
Henry Lamotte Oils GmbH...	Lanolin DAB	5264900	1
Henry Lamotte Oils GmbH...	Lanolin DAB	5375500	2

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH...	Lanolin DAB	6000746001	2
Henry Lamotte Oils GmbH...	Lanolin DAB	5860800	1
Henry Lamotte/ Noweda	Lanolin DAB	5517200	1
Henry Lamotte/ Noweda	Lanolin DAB	5651400	2
Henry Lamotte/ Noweda	Lanolin DAB	6000746001	1
Henry Lamotte/ Noweda	Lanolin DAB	60000746001	1
Henry Lamotte/Noweda	Lanolin DAB	5860800	1
Henry Lamotte/Noweda	Lanolin DAB	6003682006	1
Henry Lamotte/Noweda	Lanolin DAB	8002875002	1
Henry/AHD	Lanolin DAB	5651400	1
Henry/Fiebig	Lanolin DAB	5860800	3
HenryLamotte/Alliance	Lanolin DAB	5517200	1
Hubertus Apotheke	Lanolin DAB	16302401	1
Ichthyol/Noveda	Lanolin DAB	17135101	1
Ichthyol-Gesellschaft	Lanolin DAB	16054701	1
Jenne	Lanolin DAB	18044301	1
Kehr	Lanolin DAB	17135201	1
Kehr	Lanolin DAB	17296501	1
Kehr	Lanolin DAB	18003635	1
Klosterring	Lanolin DAB	16302202	1
Krieger	Lanolin DAB	133266012x	1
Krieger	Lanolin DAB	17222601	2
L12	Lanolin DAB	17135101	1
L12	Lanolin DAB	17222601	1
L12	Lanolin DAB	18230302	1
Lamotte	Lanolin DAB	5651400	1
Lamotte	Lanolin DAB	5860800	1
Lamotte	Lanolin DAB	600746001	1
Lamotte	Lanolin DAB	6000746001	2
Lamotte	Lanolin DAB	5860900	1
Lamotte / AHC	Lanolin DAB	8002875003	1
Lamotte / AHC	Lanolin DAB	8004134013	1
Lamotte / AHD EK 6,75	Lanolin DAB	5860800	1
Lamotte GmbH	Lanolin DAB	6000746001	1
Lamotte/Alliance	Lanolin DAB	5517200	1
Lamotte/Anzag	Lanolin DAB	5447700	1
Lamotte/Noweda	Lanolin DAB	5152000	1
Lamotte/Noweda	Lanolin DAB	5264900	1
Lamotte/Noweda	Lanolin DAB	5375500	1
Midas	Lanolin DAB	17222601	1
Midas	Lanolin DAB	18044101	1
Midas	Lanolin DAB	18044301	1
Nachprüfung	Lanolin DAB	123456	1
Noweda	Lanolin DAB	12065101	1
Noweda	Lanolin DAB	13102802	1
Noweda	Lanolin DAB	7102013A	1
Noweda	Lanolin DAB	13227701	1
Noweda	Lanolin DAB	13345902	1
Noweda	Lanolin DAB	14032301	1
Noweda	Lanolin DAB	14333901	1
Noweda	Lanolin DAB	14165701	1
Noweda	Lanolin DAB	15255501	2
Noweda	Lanolin DAB	15C19-T02-020812	1
Noweda	Lanolin DAB	15255601	2
Noweda	Lanolin DAB	15405501	1
Noweda	Lanolin DAB	16189401	1
Noweda	Lanolin DAB	17018401	1
Noweda	Lanolin DAB	17135101	1
Noweda	Lanolin DAB	17222601	1
Bombastus	Lanolin DAB	276824	1

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Supplier	Substance	Batch	Spectra
Bombastus	Lanolin DAB	274414	1
Caelo	Lanolin DAB	13H13-To8-006173	1
Fagron	Lanolin DAB	14E06-T07-012186	5
Fagron	Lanolin DAB	14A06-T03-009017	3
Fagron	Lanolin DAB	14K11-T01-016976	4
Fagron	Lanolin DAB	16G01-T05-034853	7
Phoenix	Lanolin DAB	16054901	2
Phoenix	Lanolin DAB	16189401	1
Phoenix	Lanolin DAB	16302301	1
Phoenix	Lanolin DAB	17018503	1
Phoenix	Lanolin DAB	18242801	1
Phoenix 10.04.2014	Lanolin DAB	14032001	2
Phoenix WE:04.11.17 100...	Lanolin DAB	17135101	1
phönix	Lanolin DAB	34/AKD2	1
phönix	Lanolin DAB	16189401	2
phönix	Lanolin DAB	17135101	1
Phönix	Lanolin DAB	13062401	1
Phönix	Lanolin DAB	11113902	1
Phönix	Lanolin DAB	5316400	1
Phönix	Lanolin DAB	13326701	1
Phönix	Lanolin DAB	14165601	1
Phönix	Lanolin DAB	15024102	1
Phönix	Lanolin DAB	16054901	1
Phönix	Lanolin DAB	17222601	1
Phönix	Lanolin DAB	306635	2
Phönix	Lanolin DAB	17000364	1
PHÖNIX	Lanolin DAB	17222601	1
PHÖNIX	Lanolin DAB	17296602	2
Caelo	Lanolin DAB	16054901	50
Phönix Gotha	Lanolin DAB	12193901	1
Phönix Gotha	Lanolin DAB	12308802	1
Phönix Gotha	Lanolin DAB	13062401	2
Phönix Gotha	Lanolin DAB	13227701	2
Phönix Gotha	Lanolin DAB	14032101	1
Phönix Gotha	Lanolin DAB	14165901	2
Phönix Gotha	Lanolin DAB	14334001	1
Phönix Gotha	Lanolin DAB	15024201	2
Phönix Gotha	Lanolin DAB	15193401	1
Caelo	Lanolin DAB	12193702	2
Caelo	Lanolin DAB	15C19-T01-020809	2
Caelo	Lanolin DAB	1713510	1
Caelo	Lanolin DAB	19071201	11
Rabenapotheke	Lanolin DAB	288634	2
Raben-Apotheke Mildenau	Lanolin DAB	282976	1
Reichelt	Lanolin DAB	17001447	1
sanacorp	Lanolin DAB	14032001	1
sanacorp	Lanolin DAB	14165901	1
Sanacorp	Lanolin DAB	12193701	2
Sanacorp	Lanolin DAB	12260301	1
Sanacorp	Lanolin DAB	12308801	1
Sanacorp	Lanolin DAB	12308802	2
Sanacorp	Lanolin DAB	13062401	2
Sanacorp	Lanolin DAB	13062501	1
Sanacorp	Lanolin DAB	13227601	2
Sanacorp	Lanolin DAB	34/AKD1	1
Sanacorp	Lanolin DAB	14165901	1
Sanacorp	Lanolin DAB	14032301	1
Sanacorp	Lanolin DAB	14333602	2
Sanacorp	Lanolin DAB	14334001	1
Sanacorp	Lanolin DAB	15255301	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Lanolin DAB	17078401	1
Sanacorp	Lanolin DAB	305411	2
Sanacorp	Lanolin DAB	17135101	2
Sanacorp	Lanolin DAB	306634	1
Sanacorp	Lanolin DAB	17222601	3
Sanacorp	Lanolin DAB	306635	1
Sanacorp	Lanolin DAB	17000364	3
Sanacorp	Lanolin DAB	17001447	4
Sanacorp	Lanolin DAB	18003635	2
Sanacorp	Lanolin DAB	19000702	2
Sanacorp	Lanolin DAB	19176601	1
SANACORP	Lanolin DAB	19000702	2
Sanacorp W.E: 31.03.20...	Lanolin DAB	17222601	1
Sanacorp 31.12.14 EK 3,76	Lanolin DAB	14333602	2
Sanacorp, 25.2.17, 4,30EUR	Lanolin DAB	16302301	1
Sanacorp,04.04.17, 4,30EUR	Lanolin DAB	17018401	1
Caelo	Lanolin DAB	11315102	2
Sanacorp/ Henry Lamotte...	Lanolin DAB	5651400	1
Caelo	Lanolin DAB	11282001	2
SanacorpWE:12.12.2016 ...	Lanolin DAB	16189401	1
SanacorpWE:27.01.2017 ...	Lanolin DAB	16302301	1
UNISAN	Lanolin DAB	5651400	5
VDL	Lanolin DAB	12037301	1
VDL	Lanolin DAB	12065101/32	1
WE:06.04.2016 Phönix	Lanolin DAB	16054901	3
WE:18.03.2016 Sanacorp	Lanolin DAB	15405502	1
	Lanolin DAB	309000	1
AHD 14.5.14, Preis 16,69	Lanolin DAB		1
Caelo	Lanolin DAB	15255201	25
Bombastus	Lanolin DAB	19001199	1
Caelo	Lanolin DAB	13062501	10
Caelo	Lanolin DAB	14032001	25
Caelo	Lanolin DAB	15405502	32
Caelo	Lanolin DAB		2
	Lanolin DAB	13H13-T10-006179	1
Fagron	Lanolin DAB	15G02-T11-024155	2
Fagron	Lanolin DAB	18L18-T08-062838	1
Fagron	Lanolin DAB		1
phönix	Lanolin DAB		1

- 135 842 spectra from 702 *Apo-Ident* customers from a total of 34 908 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Lanolin DAB* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Lanolin DAB* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	475	5	55 879
Type B	0	520	0	68 914
Type C	0	2421	90	135 842

The substance/substance group *Lanolin DAB* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	98.9583 % (> 98.3333 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.8462 %)
Type C	100.0000 % (> 99.6452 %)	96.4158 % (> 96.2963 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Lanolin DAB* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Cooling cream DAB	19.86	—
Cooling cream DAB 6 (stabilised, conta...	33.09	—
Basis Cordes® RK	39.71	—
Clotrimazole 10% Cordes® RK	46.42	—
Macrogols 300	101.17	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Lanolin DAB* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31003	32863	10.50	25.66
31439	31439	0.00	37.16
31746	32863	3.42	26.91
31794	31794	0.00	26.53

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31795	31794	1.97	27.34
31798	31794	3.94	28.12
32863	32863	0.00	28.00
34518	31794	9.19	22.97
34597	31794	2.75	22.85
34686	31794	4.42	25.22

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Lauromacrogols
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30594-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Lauromacrogols; Lauromacrogol 400; Macrogol 20 glycerol monostearate type II; Macrogol 20 glyceroli monostearas; Macrogol 4 lauryl ether; Macrogolglycerol hydroxystearate 40; Macrogolglyceroli hydroxystearas; Macrogoli aether laurilicus; Polidocanolum; Polysorbate 20; Polysorbate 60; Polysorbatum 20; Polysorbatum 60

Special notes

When selecting the *Lauromacrogols* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Lauromacrogol 400	7	9	433
Macrogol 20 glycerol monostearate type II	4	6	22
Macrogol 4 lauryl ether	3	2	100
Macrogolglycerol hydroxystearate 40	3	2	142
Polysorbate 20	5	2	104
Polysorbate 60	8	2	24

Second-stage model

For differentiation of the substance/substance group *Lauromacrogols* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Lauromacrogols*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Lauromacrogol 400	13095802	31025	40	20130523
Caelo	Lauromacrogol 400	13340701	31372	40	AR-14-FG-012474-01
Euro OTC	Lauromacrogol 400	1510024	31768	58	20151102*
Euro OTC	Lauromacrogol 400	1605006	32283	40	20160531*
Euro OTC	Lauromacrogol 400	1610034	32816	40	20161202*
Fagron	Lauromacrogol 400	12E03-N05	30594	40	20120608
Fagron	Lauromacrogol 400	16E18-B04-326089	32824	40	20160527
Caelo	Macrogol 20 glyc...	14033701	31469	60	20140214
Caelo	Macrogol 20 glyc...	162800	33323	40	20161026*
Caelo	Macrogol 20 glyc...	170801	33324	40	20170428*
Fagron	Macrogol 20 glyc...	13H09-N06	31182	40	1407195
Caelo	Macrogol 4 laury...	14054401	31381	40	1507230
Caelo	Macrogol 4 laury...	14225301	31583	60	20140820
Caelo	Macrogol 4 laury...	16100205	33216	40	20160527
Caelo	Macrogolglycerol...	14283805	31608	60	20141014
Caelo	Macrogolglycerol...	14283808	31625	60	AR-15-FG-010151-01
Fagron	Macrogolglycerol...	12L06-N02	30765	40	1405328
Caelo	Polysorbate 20	14019413	31323	40	AR-15-FG-008174-01
Caelo	Polysorbate 20	14365105	31697	60	20150116
Caelo	Polysorbate 20	182768	34331	40	20180312*
Caelo	Polysorbate 20	190922	34469	40	20190503*
Caelo	Polysorbate 20	192430	34707	40	20191014*
Caelo	Polysorbate 60	12133619	31033	40	20120531
Caelo	Polysorbate 60	14027102	31324	40	AR-15-FG-008175-01
Caelo	Polysorbate 60	170258	33058	40	20170313*
Caelo	Polysorbate 60	172920	33888	40	20171117*
Caelo	Polysorbate 60	180292	34081	40	20180302*
Caelo	Polysorbate 60	182897	34338	40	20181128*
Caelo	Polysorbate 60	191141	34623	40	20190604*
Caelo	Polysorbate 60	192038	34702	40	20190827*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 1318 spectra of 30 reference samples from the substance/substance group *Lauromacrogols*. These samples are listed above in the *calibration samples* section. The reference samples come from 30 different batches.
- 55 041 spectra from a total of 1086 batches from further 213 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this *chemometric model*, the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in *Appendix A*. The samples in *Appendix A* were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1060 spectra of 26 reference samples from the substance/substance group *Lauromacrogols*.
- Among them are spectra of independent samples from 22 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lauromacrogol 400	172509	33899	40
Caelo	Lauromacrogol 400	181755	34235	40
Caelo	Lauromacrogol 400	191310	34630	40
Euro OTC	Lauromacrogol 400	1703033	33448	40
Euro OTC	Lauromacrogol 400	1710026	33844	40
Euro OTC	Lauromacrogol 400	1801043	34007	40
Euro OTC	Lauromacrogol 400	1901029	34421	40
Euro OTC	Lauromacrogol 400	1907010	34700	40
Euro OTC	Lauromacrogol 400	1911015	34749	40
Caelo	Macrogol 20 glycerol monoste...	161883	33325	40
Caelo	Macrogol 20 glycerol monoste...	161884	33326	40
Caelo	Macrogol 20 glycerol monoste...	172882	33901	40
Caelo	Macrogol 20 glycerol monoste...	172880	33902	40
Caelo	Macrogol 20 glycerol monoste...	181870	34239	40
Caelo	Macrogol 20 glycerol monoste...	183242	34335	40
Caelo	Macrogol 4 lauryl ether	161002	33690	40
Caelo	Macrogol 4 lauryl ether	17028303	33950	40
Caelo	Macrogolglycerol hydroxystea...	16349304	33935	40
Fagron	Macrogolglycerol hydroxystea...	14283808	31640	60
Caelo	Polysorbate 20	162335	32330	40
Caelo	Polysorbate 20	172825	33884	40
Caelo	Polysorbate 60	161771	32329	40
Caelo	Polysorbate 60	170999	33322	40
Caelo	Macrogol 20 glycerol monoste...	162800	32702	40
Caelo	Macrogol 20 glycerol monoste...	161883	33722	40
Caelo	Macrogol 20 glycerol monoste...	161884	33723	40

- 68 414 spectra from a total of 1478 batches from further 355 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the

substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 4613 spectra from 606 *Apo-Ident* customers from 844 batches from the substance/substance group *Lauromacrogols*.
- Among them are spectra of independent samples from 795 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
/Sanacorp	Lauromacrogol 400	160312	1
agron/ Phönix	Lauromacrogol 400	18A18-B98-0596	1
AHD	Lauromacrogol 400	140911	1
AHD	Lauromacrogol 400	160312	2
AHD	Lauromacrogol 400	160312A	1
AHD	Lauromacrogol 400	19054203	1
Fagron	Lauromacrogol 400	130599	1
AHD 09.12.14	Lauromacrogol 400	130109	2
AHD 21.03.16 EK 36,71	Lauromacrogol 400	140911	1
Euro OTC	Lauromacrogol 400	180104301	2
AHL	Lauromacrogol 400	160312A	1
ALH	Lauromacrogol 400	160312	6
Allianc. Health. / gepe...	Lauromacrogol 400	160312	1
Allianc. Healthc./ Gepe	Lauromacrogol 400	140911	2
Euro OTC	Lauromacrogol 400	180802501	1
Allianz	Lauromacrogol 400	160312A	1
Anzag	Lauromacrogol 400	110408	3
Anzag	Lauromacrogol 400	13A31N04	1
Anzag	Lauromacrogol 400	140911	1
Anzag	Lauromacrogol 400	160312	2
ANZAG	Lauromacrogol 400	110408	2
anzag gepepharm	Lauromacrogol 400	160312	1
Anzag/Anzag 28.08.18	Lauromacrogol 400	17250913	1
Caelo	Lauromacrogol 400	17250901	2
apomix PKH GmbH Halle	Lauromacrogol 400	15A26B02-30362	1
apomix AHD	Lauromacrogol 400	140911	11
Audor Pharma	Lauromacrogol 400	140911	2
Bombastus	Lauromacrogol 400	15G10-B05-318670	1
Bombastus	Lauromacrogol 400	16102912	1
Bombastus	Lauromacrogol 400	16E18-B04-328582	1
Caelo	Lauromacrogol 400	130109	21
Caelo	Lauromacrogol 400	7250901	1
Caelo	Lauromacrogol 400	12092512	3
Caelo	Lauromacrogol 400	11107901	1
Caelo	Lauromacrogol 400	11107804	1
Caelo	Lauromacrogol 400	12092501	1
Caelo	Lauromacrogol 400	12E03-N04	2
Caelo	Lauromacrogol 400	12092516	2
Caelo	Lauromacrogol 400	12092525	3
Caelo	Lauromacrogol 400	12092530	2
Caelo	Lauromacrogol 400	13095801	3
Caelo	Lauromacrogol 400	13095809	2
Caelo	Lauromacrogol 400	1306004-01	1
Caelo	Lauromacrogol 400	13340706	1
Caelo	Lauromacrogol 400	13340712	1
Caelo	Lauromacrogol 400	14220807	2

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Supplier	Substance	Batch	Spectra
Caelo	Lauromacrogol 400	21011501	1
Caelo	Lauromacrogol 400	14220805	2
Caelo	Lauromacrogol 400	14H04-B03-297071	2
Caelo	Lauromacrogol 400	14220813	3
Caelo	Lauromacrogol 400	14H04-B03-301517	2
Caelo	Lauromacrogol 400	14220820	2
Caelo	Lauromacrogol 400	14220818	1
Caelo	Lauromacrogol 400	15192205	10
Caelo	Lauromacrogol 400	15192203	3
Caelo	Lauromacrogol 400	15192202	2
Caelo	Lauromacrogol 400	15A26-B02-303627	1
Caelo	Lauromacrogol 400	15192208	5
Caelo	Lauromacrogol 400	12345	1
Caelo	Lauromacrogol 400	15G10-B05-315343	1
Caelo	Lauromacrogol 400	15363705	2
Caelo	Lauromacrogol 400	15363710	4
Caelo	Lauromacrogol 400	16E18B04321109	1
Caelo	Lauromacrogol 400	16E18-B04-324095	2
Caelo	Lauromacrogol 400	16102901	1
Caelo	Lauromacrogol 400	16102903	1
Caelo	Lauromacrogol 400	1142238	1
Caelo	Lauromacrogol 400	16102916	22
Caelo	Lauromacrogol 400	16102920	7
Caelo	Lauromacrogol 400	16102912	2
Caelo	Lauromacrogol 400	16-1155	1
Caelo	Lauromacrogol 400	17046401	15
Caelo	Lauromacrogol 400	16E18-B04-328737	1
Caelo	Lauromacrogol 400	17046412	4
Caelo	Lauromacrogol 400	18111708	1
Caelo	Lauromacrogol 400	17h21b07341796	1
Caelo	Lauromacrogol 400	17A23-B01-332867	1
Caelo	Lauromacrogol 400	1184359	1
Caelo	Lauromacrogol 400	170845	1
Caelo	Lauromacrogol 400	160312A	24
Caelo	Lauromacrogol 400	18B26-B06-347342	2
Caelo	Lauromacrogol 400	18B26-B06-346398	1
Caelo	Lauromacrogol 400	18175503	5
Caelo	Lauromacrogol 400	18175504	7
Caelo	Lauromacrogol 400	18175513	5
Caelo	Lauromacrogol 400	19054203	4
Caelo	Lauromacrogol 400	18175508	4
Caelo	Lauromacrogol 400	13175513	1
Caelo	Lauromacrogol 400	19131004	1
Caelo	Lauromacrogol 400	11107905	1
Caelo	Lauromacrogol 400	19131002	2
Caelo	Lauromacrogol 400	16E18B04324095	2
Caelo	Lauromacrogol 400	17046411	18
Caelo	Lauromacrogol 400	18175521	1
Caelo	Lauromacrogol 400	16E18-B04-322723	2
Caelo	Lauromacrogol 400	13095811	5
Caelo	Lauromacrogol 400	13-0599	1
Caelo	Lauromacrogol 400	18b26-b06-346398	1
Caelo	Lauromacrogol 400	B14-1414	1
Caelo	Lauromacrogol 400	130600401	1
Caelo	Lauromacrogol 400	15363701	1
Caelo	Lauromacrogol 400	160312	25
Caelo	Lauromacrogol 400	17A23-B01-330983	2
Caelo	Lauromacrogol 400	17250909	15
Caelo	Lauromacrogol 400	12A26-N08	1
Caelo	Lauromacrogol 400	180802501	1

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Supplier	Substance	Batch	Spectra
Caelo	Lauromacrogol 400	16102908	3
Caelo	Lauromacrogol 400	3121505	1
Caelo	Lauromacrogol 400	13340710	3
Caelo	Lauromacrogol 400	90807	1
Caelo	Lauromacrogol 400	14-1414	1
Caelo	Lauromacrogol 400	15192209	3
Caelo	Lauromacrogol 400	17046406	7
Caelo	Lauromacrogol 400	18175502	8
Caelo	Lauromacrogol 400	15A26-802	1
Caelo	Lauromacrogol 400	17046408	6
Caelo	Lauromacrogol 400	15363702	7
Caelo	Lauromacrogol 400	15363703	4
Caelo	Lauromacrogol 400	15363712	7
Caelo	Lauromacrogol 400	17046502	7
Caelo	Lauromacrogol 400	16E18-B04-328699	1
Caelo	Lauromacrogol 400	13B13-N01	3
Caelo	Lauromacrogol 400	16/077/M	1
Caelo	Lauromacrogol 400	151002402	1
Caelo	Lauromacrogol 400	16102902	10
Caelo	Lauromacrogol 400	16D18-B04	1
Caelo	Lauromacrogol 400	17H21B07341796	2
Caelo	Lauromacrogol 400	17A23-B01-332868	1
Caelo	Lauromacrogol 400	18B26-B06-346397	2
Caelo	Lauromacrogol 400	18D30-B09-350641	1
Caelo	Lauromacrogol 400	16E18-B04-327811	1
Caelo	Lauromacrogol 400	13K18-B30	1
Caelo	Lauromacrogol 400	18175509	2
Caelo	Lauromacrogol 400	19131006	6
Caelo	Lauromacrogol 400	14220808	1
Caelo	Lauromacrogol 400	15A26-B02	2
Caelo	Lauromacrogol 400	140911	10
Caelo	Lauromacrogol 400	15a26-b02-303628	1
Caelo	Lauromacrogol 400	15363707	3
Caelo	Lauromacrogol 400	16102909	3
Caelo	Lauromacrogol 400	17250904	16
Caelo	Lauromacrogol 400	18912184	1
Caelo	Lauromacrogol 400	17250908	10
Caelo	Lauromacrogol 400	1801043-01	5
Caelo	Lauromacrogol 400	18826806347342	1
Caelo	Lauromacrogol 400	1808025-01	1
Fagron	Lauromacrogol 400	160312A	1
Caelo	Lauromacrogol 400	16E18-Bo4-326090	1
Caelo	Lauromacrogol 400	18175515	2
Caelo	Lauromacrogol 400	1302014-01	1
Caelo	Lauromacrogol 400	16E18-B04-326089	1
Caelo	Lauromacrogol 400	163012	1
Caelo	Lauromacrogol 400	17A23-B01-332868	1
Caelo	Lauromacrogol 400	17H21-B07	1
Caelo	Lauromacrogol 400	17H21-B07-339504	1
Caelo	Lauromacrogol 400	41796	1
Caelo	Lauromacrogol 400	15-0596	1
Caelo	Lauromacrogol 400	1298974	1
Caelo	Lauromacrogol 400	18175517	3
Caelo	Lauromacrogol 400	1703033-01	4
Caelo	Lauromacrogol 400	110408	18
Caelo	Lauromacrogol 400	13-0108	1
Caelo	Lauromacrogol 400	13095817	4
Caelo	Lauromacrogol 400	14220816	8
Caelo	Lauromacrogol 400	15G10-B05	1
Caelo	Lauromacrogol 400	16102914	4

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Supplier	Substance	Batch	Spectra
Caelo	Lauromacrogol 400	16E18B04326089	1
Caelo	Lauromacrogol 400	17250902	15
Caelo	Lauromacrogol 400	18175501	10
Caesar & Lorenz	Lauromacrogol 400	13095802	1
Caesar & Loretz GmbH	Lauromacrogol 400	16102911	1
Caesar & Loretz GmbH	Lauromacrogol 400	17046411	1
Caesar & Loretz GmbH	Lauromacrogol 400	18175512	3
Caesar & Loretz GmbH	Lauromacrogol 400	18175508	1
Caesar & Loretz GmbH	Lauromacrogol 400	18175504	1
Caesar & Loretz GmbH	Lauromacrogol 400	19131002	1
Caesar & Loretz GmbH	Lauromacrogol 400	19131003	1
Caesar & Loretz/Sanacorp	Lauromacrogol 400	15363712	1
Caesar/Noweda	Lauromacrogol 400	13B13-N01	1
Calo/AHD	Lauromacrogol 400	14-0731	1
Cecepharm / Gehe	Lauromacrogol 400	140911	3
Chemische Fabrik / Phönix	Lauromacrogol 400	19054203	1
Chemische Fabrik/AHD	Lauromacrogol 400	19054203	1
Croda Iberica	Lauromacrogol 400	1510024-02	1
Delta	Lauromacrogol 400	17H21-B07-341795	1
Depepharm/Sanacorp	Lauromacrogol 400	140911	2
Devesa/NOW	Lauromacrogol 400	15363712	1
E Plus	Lauromacrogol 400	17046502	1
E Plus	Lauromacrogol 400	17250909	1
E Plus	Lauromacrogol 400	18175502	2
Ebert & Jacobi 31.05...	Lauromacrogol 400	140911	2
Caelo	Lauromacrogol 400	17250913	7
Ebert+Jacobi	Lauromacrogol 400	12A26-N08	1
EoRho	Lauromacrogol 400	1302014-01	2
EuRho	Lauromacrogol 400	130109	2
EuRho/Sanacorp	Lauromacrogol 400	1703033-01	1
Euro	Lauromacrogol 400	1510024-01	1
Euro OTC	Lauromacrogol 400	13F13-N07	1
Euro OTC	Lauromacrogol 400	502956	1
Euro OTC	Lauromacrogol 400	1302014-01	5
Euro OTC	Lauromacrogol 400	221542	1
Euro OTC	Lauromacrogol 400	1503032	1
Euro OTC	Lauromacrogol 400	151002401	1
Euro OTC	Lauromacrogol 400	17H21-B07-341797	1
Euro OTC	Lauromacrogol 400	MLE2018625	1
Euro OTC	Lauromacrogol 400	180002541	1
Euro OTC	Lauromacrogol 400	1901029-01	8
Euro OTC	Lauromacrogol 400	1907010-01	2
Euro OTC	Lauromacrogol 400	1109011-01	2
Euro OTC	Lauromacrogol 400	1210035-01	2
Euro OTC	Lauromacrogol 400	1009020-02	2
Euro OTC	Lauromacrogol 400	1306004-01	8
Euro OTC	Lauromacrogol 400	1306004-02	3
Euro OTC	Lauromacrogol 400	1410010-01	1
Euro OTC	Lauromacrogol 400	1510024-01	5
Euro OTC	Lauromacrogol 400	161003401	1
Euro OTC	Lauromacrogol 400	1275280	2
Euro OTC	Lauromacrogol 400	1808025-01	9
Euro OTC	Lauromacrogol 400	260315/1	1
Euro OTC	Lauromacrogol 400	1410010-02	1
Euro OTC	Lauromacrogol 400	1184359	1
Euro OTC	Lauromacrogol 400	14100100-01	1
Euro OTC	Lauromacrogol 400	160312	7
Euro OTC	Lauromacrogol 400	1605006-01	10
Euro OTC	Lauromacrogol 400	160500602	3
Euro OTC	Lauromacrogol 400	171116PC/1703033-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Lauromacrogol 400	180143-01	1
Euro OTC	Lauromacrogol 400	1510024-02	9
Euro OTC	Lauromacrogol 400	1801043-01	10
Euro OTC	Lauromacrogol 400	180101043-01	1
Euro OTC	Lauromacrogol 400	160312A	2
Euro OTC	Lauromacrogol 400	1503032-01	3
Euro OTC	Lauromacrogol 400	1510025-01	1
Euro OTC	Lauromacrogol 400	160500601	1
Euro OTC	Lauromacrogol 400	170303301	1
Euro OTC	Lauromacrogol 400	171002601	1
Fagron	Lauromacrogol 400	15G10-B05	1
Fagron	Lauromacrogol 400	15G10-B05-318670	1
fagr	Lauromacrogol 400	16-0290	1
Fagro/Noweda	Lauromacrogol 400	18826-806-346397	1
Fagron	Lauromacrogol 400	12-1074	1
Fagron	Lauromacrogol 400	15G10-B05-315343	3
Fagron	Lauromacrogol 400	11F28-N08	4
Fagron	Lauromacrogol 400	11f28-n08	1
Fagron	Lauromacrogol 400	13A31-N04	3
Fagron	Lauromacrogol 400	12A26-N08	1
Fagron	Lauromacrogol 400	13K18-B30-28816	2
Fagron	Lauromacrogol 400	12e03-n04	1
Fagron	Lauromacrogol 400	11B11-N15	2
Fagron	Lauromacrogol 400	11I07-N05	1
Fagron	Lauromacrogol 400	13B13-N01	1
Fagron	Lauromacrogol 400	13813-N01	3
Fagron	Lauromacrogol 400	21121201	1
Fagron	Lauromacrogol 400	13G02-N03	2
Fagron	Lauromacrogol 400	13J01-N03	2
Fagron	Lauromacrogol 400	13K18-B30	5
Fagron	Lauromacrogol 400	13G02N03	1
Fagron	Lauromacrogol 400	130109	1
Fagron	Lauromacrogol 400	13K18-B30-288165	2
Fagron	Lauromacrogol 400	13-1827	1
Fagron	Lauromacrogol 400	14E06-B05293848	1
Fagron	Lauromacrogol 400	14H04-B03-297073	3
Fagron	Lauromacrogol 400	14H04B03	1
Fagron	Lauromacrogol 400	14E06-B05-295979	4
Fagron	Lauromacrogol 400	14H04-B03-301520	4
Fagron	Lauromacrogol 400	14H04-B03-301519	6
Fagron	Lauromacrogol 400	15A26-B02-303626	5
Fagron	Lauromacrogol 400	15A26-B02303628	1
Fagron	Lauromacrogol 400	303628	1
Fagron	Lauromacrogol 400	15E27-B99-308668	1
Fagron	Lauromacrogol 400	15G10-B05-314366	5
Fagron	Lauromacrogol 400	15G1-B05-313605	1
Fagron	Lauromacrogol 400	14A26-B02-303629	1
Fagron	Lauromacrogol 400	15G10-B05-313605	6
Fagron	Lauromacrogol 400	15-0596	3
Fagron	Lauromacrogol 400	15G10-B05-313606	1
Fagron	Lauromacrogol 400	15C10-B05-314366	1
Fagron	Lauromacrogol 400	15G10-B05	6
Fagron	Lauromacrogol 400	15A26-B02-303626	1
Fagron	Lauromacrogol 400	15G10-B05-317457	5
Fagron	Lauromacrogol 400	15G10-B05-318670	4
Fagron	Lauromacrogol 400	15G10-B05-317456	7
Fagron	Lauromacrogol 400	15G10-B05-317-56	1
Fagron	Lauromacrogol 400	15G10-B025-318670	1
Fagron	Lauromacrogol 400	16E18-804-321110	1
Fagron	Lauromacrogol 400	15g10-b05-317457	2

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	15G10	2
Fagron	Lauromacrogol 400	16E18-B04-321109	7
Fagron	Lauromacrogol 400	16E18-B04	20
Fagron	Lauromacrogol 400	15g10-b05-317456	1
Fagron	Lauromacrogol 400	16e18-b04-321110	1
Fagron	Lauromacrogol 400	16-0290	5
Fagron	Lauromacrogol 400	1510024-02	1
Fagron	Lauromacrogol 400	16E18-B04-324095	11
Fagron	Lauromacrogol 400	16E18804-322722	1
Fagron	Lauromacrogol 400	1618B04-324095	1
Fagron	Lauromacrogol 400	16E-18-BB04-324095	1
Fagron	Lauromacrogol 400	16E18-B04-32495	1
Fagron	Lauromacrogol 400	16E18-B04_326089	2
Fagron	Lauromacrogol 400	16E18-B04_328699	1
Fagron	Lauromacrogol 400	16E18-B04-328582	4
Fagron	Lauromacrogol 400	16E18-B04-327811	4
Fagron	Lauromacrogol 400	16E18-804-326090	1
Fagron	Lauromacrogol 400	17A23-B01-331156	2
Fagron	Lauromacrogol 400	160312	2
Fagron	Lauromacrogol 400	17A23-B01	14
Fagron	Lauromacrogol 400	332867	1
Fagron	Lauromacrogol 400	17H21-B07-339504	5
Fagron	Lauromacrogol 400	17H21-B07	11
Fagron	Lauromacrogol 400	17H21-B07-339506	7
Fagron	Lauromacrogol 400	330983	1
Fagron	Lauromacrogol 400	17H21-B07-341796	8
Fagron	Lauromacrogol 400	17H21-B-07-341796	1
Fagron	Lauromacrogol 400	18A18-B98-344798	5
Fagron	Lauromacrogol 400	17-0845	3
Fagron	Lauromacrogol 400	17H21-B07-341797	1
Fagron	Lauromacrogol 400	18A18-B98	2
Fagron	Lauromacrogol 400	170845	1
Fagron	Lauromacrogol 400	18A18-B98-344789	1
Fagron	Lauromacrogol 400	18A19-B98-344798	1
Fagron	Lauromacrogol 400	18B26-B06-346397	2
Fagron	Lauromacrogol 400	18826-B06-346398	1
Fagron	Lauromacrogol 400	18D30-B09-350641	4
Fagron	Lauromacrogol 400	18B26-B06-347343	2
Fagron	Lauromacrogol 400	17H21B07	1
Fagron	Lauromacrogol 400	18b26-b06	1
Fagron	Lauromacrogol 400	18D30-B09-350640	3
Fagron	Lauromacrogol 400	18d30-b09-350640	2
Fagron	Lauromacrogol 400	18D30-B09-352738	7
Fagron	Lauromacrogol 400	18D30-B09-352740	2
Fagron	Lauromacrogol 400	18J08-B03-355981	1
Fagron	Lauromacrogol 400	13F13-N07	5
Fagron	Lauromacrogol 400	13K18-B30-288164	4
Fagron	Lauromacrogol 400	17AB23-B01-332868	1
Fagron	Lauromacrogol 400	15A26-B02-303625	9
Fagron	Lauromacrogol 400	14H04-B03	7
Fagron	Lauromacrogol 400	14371706	1
Fagron	Lauromacrogol 400	16E-18-B04-321109	1
Fagron	Lauromacrogol 400	17H21-B07-339505	3
Fagron	Lauromacrogol 400	12E03-N04	24
Fagron	Lauromacrogol 400	12-0719	1
Fagron	Lauromacrogol 400	T-190116-1	1
Fagron	Lauromacrogol 400	16e18-b04-324095	1
Fagron	Lauromacrogol 400	18J08-B03-355980	1
Fagron	Lauromacrogol 400	15A26-B02	8
Fagron	Lauromacrogol 400	15g10-b05-313605	2

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	18a18-b98-344799	1
Fagron	Lauromacrogol 400	15G10-B05-31745	1
Fagron	Lauromacrogol 400	12A26-N08	9
Fagron	Lauromacrogol 400	16E18-B04-326091	4
Fagron	Lauromacrogol 400	11D28-N20	1
Fagron	Lauromacrogol 400	16E18B04326089	1
Fagron	Lauromacrogol 400	17A23-B01-330982	6
Fagron	Lauromacrogol 400	18B26-B06-346396	1
Fagron	Lauromacrogol 400	16E18-B04-328699	12
Fagron	Lauromacrogol 400	17A23-B01-335355	5
Fagron	Lauromacrogol 400	18826-B06-347341	1
Fagron	Lauromacrogol 400	14E06-B05-29847	1
Fagron	Lauromacrogol 400	15a26-b02-303628	1
Fagron	Lauromacrogol 400	15a26-b02-303625	1
Fagron	Lauromacrogol 400	13K18-B30_288163	1
Fagron	Lauromacrogol 400	16E18-B04-322724	2
Fagron	Lauromacrogol 400	16E18-B04-326090	8
Fagron	Lauromacrogol 400	16E18-B04-324095	1
Fagron	Lauromacrogol 400	14H04-B03-301518	2
Fagron	Lauromacrogol 400	16E-18-B04-327811	1
Fagron	Lauromacrogol 400	12/18-N04	5
Fagron	Lauromacrogol 400	12L18-N04	1
Fagron	Lauromacrogol 400	12I18-N04	2
Fagron	Lauromacrogol 400	13B13-No1	1
Fagron	Lauromacrogol 400	13-0599	2
Fagron	Lauromacrogol 400	14H04-B03-297070	5
Fagron	Lauromacrogol 400	14-0731	5
Fagron	Lauromacrogol 400	16/149/P	1
Fagron	Lauromacrogol 400	16E18-B04-0290	1
Fagron	Lauromacrogol 400	17A23B01-330982	1
Fagron	Lauromacrogol 400	17A23B01330983	2
Fagron	Lauromacrogol 400	17H21B07341795	1
Fagron	Lauromacrogol 400	18B26-B06-347342	6
Fagron	Lauromacrogol 400	18B26-B06-346398	3
Fagron	Lauromacrogol 400	160312/A	1
Fagron	Lauromacrogol 400	18D30B09350640	1
Fagron	Lauromacrogol 400	18D30B221542	1
Fagron	Lauromacrogol 400	18D30B09350641	1
Fagron	Lauromacrogol 400	18D30-B09-349679	1
Fagron	Lauromacrogol 400	18J08B03355980	1
Fagron	Lauromacrogol 400	13G02-N03	15
Fagron	Lauromacrogol 400	13G02-N030515/1084	1
Fagron	Lauromacrogol 400	13k18-b30-288163	1
Fagron	Lauromacrogol 400	13G02-N030021/1084	1
Fagron	Lauromacrogol 400	13G02-N030047/1084	1
Fagron	Lauromacrogol 400	14H04-B03-297074	2
Fagron	Lauromacrogol 400	18b26-b06-346397	1
Fagron	Lauromacrogol 400	14E06-B05-293847	12
Fagron	Lauromacrogol 400	14H04-B03-301517	5
Fagron	Lauromacrogol 400	14H-04-B03-301518	2
Fagron	Lauromacrogol 400	15A26-B02_303626	1
Fagron	Lauromacrogol 400	16e18-b04-321109	1
Fagron	Lauromacrogol 400	16B18-B04-321109	1
Fagron	Lauromacrogol 400	1605006-01	1
Fagron	Lauromacrogol 400	17A23-B01-330983	9
Fagron	Lauromacrogol 400	17A23-B01-332869	5
Fagron	Lauromacrogol 400	17H21-807	1
Fagron	Lauromacrogol 400	18A18-B98-344799	3
Fagron	Lauromacrogol 400	15A26-B02-303628	21
Fagron	Lauromacrogol 400	15A26-B02-303629	6

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	15a26-B02	1
Fagron	Lauromacrogol 400	15A26B02303627	1
Fagron	Lauromacrogol 400	16-1155	1
Fagron	Lauromacrogol 400	3713U-02384	1
Fagron	Lauromacrogol 400	1314A-02384	1
Fagron	Lauromacrogol 400	2215I-02384	1
Fagron	Lauromacrogol 400	15G10-B05317456	2
Fagron	Lauromacrogol 400	16E18-B04-321110	3
Fagron	Lauromacrogol 400	17A23-B01-335356	2
Fagron	Lauromacrogol 400	140911	1
Fagron	Lauromacrogol 400	17A23-B01-355355	1
Fagron	Lauromacrogol 400	18A-18-B98-344797	1
Fagron	Lauromacrogol 400	18A18-B98-344797	1
Fagron	Lauromacrogol 400	188B26-B06-346396	2
Fagron	Lauromacrogol 400	18B26-B06	5
Fagron	Lauromacrogol 400	18B26-B03-347343	1
Fagron	Lauromacrogol 400	18D30-B09-350642	2
Fagron	Lauromacrogol 400	18D30-B09-352739	5
Fagron	Lauromacrogol 400	18D30B09-350642	1
Fagron	Lauromacrogol 400	18J08-B03-355982	1
Fagron	Lauromacrogol 400	14H04-B03-297071	2
Fagron	Lauromacrogol 400	15A26B02-303627	1
Fagron	Lauromacrogol 400	15G10-B05-31457	1
Fagron	Lauromacrogol 400	17A23-B01-332867	1
Fagron	Lauromacrogol 400	17H21-B07-341795	9
Fagron	Lauromacrogol 400	17H21-B07-3411795	1
Fagron	Lauromacrogol 400	18-0103	2
Fagron	Lauromacrogol 400	18B30-B09	1
Fargon	Lauromacrogol 400	13K18-B30-288166	1
Fargon GmbH & Co.KG	Lauromacrogol 400	16E18-B04-326091	1
Fargon/Phönix	Lauromacrogol 400	18D30-B09-350640	1
Fiebig	Lauromacrogol 400	18175517	1
Fiebig/ gepepharm	Lauromacrogol 400	140911	1
Frago/Gehe	Lauromacrogol 400	17A23-B01-332869	1
Frago/Noweda	Lauromacrogol 400	17H21-B07	2
Fragon/Noweda	Lauromacrogol 400	17A23-B01-330982	1
Fragon/Noweda	Lauromacrogol 400	17H21-B07-339507	1
Gatt-Koller	Lauromacrogol 400	1504/05153915	2
Gatt-Koller	Lauromacrogol 400	1900852	2
gebepharma	Lauromacrogol 400	20030412-1	1
gebepharma	Lauromacrogol 400	813E-02384	1
gebepharma	Lauromacrogol 400	813Q-02384	1
Gebepharma GmbH	Lauromacrogol 400	130109	2
gebepharma N PZN 01915345	Lauromacrogol 400	130109	1
Gebepharma/Anzag	Lauromacrogol 400	130109	1
Gebepharma/Anzag	Lauromacrogol 400	110408	1
gegepharma	Lauromacrogol 400	130109	1
gegepharma	Lauromacrogol 400	140911	2
gegepharma	Lauromacrogol 400	160312	1
gegepharma	Lauromacrogol 400	1603125281	1
gegepharma	Lauromacrogol 400	1603125464	1
Gegepharma	Lauromacrogol 400	160312	2
Gegepharma	Lauromacrogol 400	160312A	1
Gegepharma GmbH /Phönix	Lauromacrogol 400	19054203	8
gegepharma GmbH/ Noweda	Lauromacrogol 400	130109	1
gegepharma,Anzag	Lauromacrogol 400	110408	2
gegepharma/Gehe	Lauromacrogol 400	160312	2
gegepharma/Gehe	Lauromacrogol 400	182743	1
Gegepharma/Gehe	Lauromacrogol 400	130109	3
Gegepharma/N/26.02.13 PZ...	Lauromacrogol 400	110408	1

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Supplier	Substance	Batch	Spectra
Gegepharm/Phönix	Lauromacrogol 400	160312	1
Gegepharm/Phönix	Lauromacrogol 400	160312A	1
Gehe	Lauromacrogol 400	110408	3
Gehe	Lauromacrogol 400	130109	2
Gehe	Lauromacrogol 400	160312	4
Gehe	Lauromacrogol 400	140911	1
Gehe	Lauromacrogol 400	17A23-B01-332867	1
GEHE	Lauromacrogol 400	13B13-N01	1
GEHE	Lauromacrogol 400	130109	1
GEHE	Lauromacrogol 400	160312	1
GEHE	Lauromacrogol 400	17250904	1
GEHE	Lauromacrogol 400	17250909	2
GEHE	Lauromacrogol 400	18175501	2
GEHE	Lauromacrogol 400	18175502	2
GEHE	Lauromacrogol 400	18175507	1
GEHE	Lauromacrogol 400	19131004	2
Caelo	Lauromacrogol 400	17046552	1
Fagron	Lauromacrogol 400	16E18-804-324095	1
GEHE 28.11.2014	Lauromacrogol 400	14H04-B03-297070	1
Gehe gepepharmn	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	16102904	8
Caelo	Lauromacrogol 400	17A23-B01-33287	1
Fagron	Lauromacrogol 400	13g02-n03	1
Fagron	Lauromacrogol 400	15A26-B02-303627	5
Fagron	Lauromacrogol 400	15G10B05315343	1
Fagron	Lauromacrogol 400	16E18-B04-322723	5
Fagron	Lauromacrogol 400	14A23B01332867	2
Fagron	Lauromacrogol 400	18B26-B06-0103	1
Fagron	Lauromacrogol 400	18B26B06346396	1
Gehe/Fragon	Lauromacrogol 400	15A26B02303627	1
Gehe/Fragon	Lauromacrogol 400	15G10B05317456	1
Gehe/Fragon	Lauromacrogol 400	17A23B01332868	1
gehe/gepepharm	Lauromacrogol 400	160312	1
Gehe/gepepharm	Lauromacrogol 400	140911	2
Gehe/gepepharm	Lauromacrogol 400	160312	1
Gehe/Gepepharm	Lauromacrogol 400	160312A	1
geopharm /Gehe	Lauromacrogol 400	160312A	1
gepharm GmbH	Lauromacrogol 400	140911	1
Spangropharm	Lauromacrogol 400	160312	1
Spangropharm	Lauromacrogol 400	19054203	1
GEPE/Anzag	Lauromacrogol 400	110408	2
gepe/Gehe	Lauromacrogol 400	130109	1
Gepegepharm	Lauromacrogol 400	130109	1
gepeharm/AHD	Lauromacrogol 400	130109	1
gepeharm/Gehe	Lauromacrogol 400	140911	3
Gepehpharm	Lauromacrogol 400	160312	1
gepep/Phoenix	Lauromacrogol 400	140911	1
Gepeph/Phönix	Lauromacrogol 400	160312	1
gepepharm	Lauromacrogol 400	110408	5
gepepharm	Lauromacrogol 400	130109	55
gepepharm	Lauromacrogol 400	13044009	1
gepepharm	Lauromacrogol 400	13-0108	2
gepepharm	Lauromacrogol 400	140911	32
gepepharm	Lauromacrogol 400	160312	39
gepepharm	Lauromacrogol 400	16-0290	3
gepepharm	Lauromacrogol 400	1603102	1
gepepharm	Lauromacrogol 400	160312A	17
gepepharm	Lauromacrogol 400	19054203	3
Gepepharm	Lauromacrogol 400	19101201	1
Gepepharm	Lauromacrogol 400	110408	6

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Supplier	Substance	Batch	Spectra
Gepepharm	Lauromacrogol 400	6111203	1
Gepepharm	Lauromacrogol 400	4111M-02384	1
Gepepharm	Lauromacrogol 400	27111202	1
Gepepharm	Lauromacrogol 400	19121203	1
Gepepharm	Lauromacrogol 400	2002312384	1
Gepepharm	Lauromacrogol 400	30031303	1
Gepepharm	Lauromacrogol 400	130109	14
Gepepharm	Lauromacrogol 400	17111403	1
Gepepharm	Lauromacrogol 400	13051502	1
Gepepharm	Lauromacrogol 400	25061502	1
Gepepharm	Lauromacrogol 400	140911	22
Gepepharm	Lauromacrogol 400	160312	16
Gepepharm	Lauromacrogol 400	16031705	1
Gepepharm	Lauromacrogol 400	9041702	1
Gepepharm	Lauromacrogol 400	17061708	1
Gepepharm	Lauromacrogol 400	21071712	1
Gepepharm	Lauromacrogol 400	28101704	1
Gepepharm	Lauromacrogol 400	160290	1
Gepepharm	Lauromacrogol 400	16-0290	1
Gepepharm	Lauromacrogol 400	160312A	15
Gepepharm	Lauromacrogol 400	19054203	3
GEPEPHARM	Lauromacrogol 400	14-1414	1
GEPEPHARM	Lauromacrogol 400	140911	5
gepepharm / G	Lauromacrogol 400	160312A	1
Gepepharm Anzag	Lauromacrogol 400	22(160312A)	1
gepepharm (Thesit)	Lauromacrogol 400	160312	1
gepepharm (Thesit)	Lauromacrogol 400	160312A	1
gepepharm (Thesit)	Lauromacrogol 400	16-0290	1
gepepharm / Alliance he...	Lauromacrogol 400	160312	3
gepepharm / Alliance He...	Lauromacrogol 400	19054203	1
gepepharm / Allianz Hea...	Lauromacrogol 400	160312A	1
gepepharm / G	Lauromacrogol 400	160312	1
Gepepharm / Gehe	Lauromacrogol 400	110408	1
Gepepharm / Gehe	Lauromacrogol 400	130109	5
Gepepharm / Gehe	Lauromacrogol 400	160312A	8
Gepepharm / Gehe	Lauromacrogol 400	19054203	4
Gepepharm / GEHE	Lauromacrogol 400	130109	1
gepepharm / Noweda	Lauromacrogol 400	130109	7
gepepharm / Noweda	Lauromacrogol 400	110408	1
gepepharm / Noweda	Lauromacrogol 400	140911	1
gepepharm / Noweda	Lauromacrogol 400	160312	2
gepepharm / Noweda	Lauromacrogol 400	160312-A	1
Gepepharm / Noweda	Lauromacrogol 400	140911	1
gepepharm / Phönix	Lauromacrogol 400	140911	2
gepepharm / Sanacorp	Lauromacrogol 400	130109	3
gepepharm / Sanacorp	Lauromacrogol 400	13-0108	1
gepepharm / Sanacorp	Lauromacrogol 400	160312	2
Gepepharm / Sanacorp	Lauromacrogol 400	110408	2
Gepepharm / Sanacorp	Lauromacrogol 400	130109	1
Gepepharm / Fiebig	Lauromacrogol 400	labip-g97-110616-01	1
gepepharm / Noweda	Lauromacrogol 400	130109	2
Gepepharm / Noweda	Lauromacrogol 400	140911	1
Gepepharm Anzag	Lauromacrogol 400	110408	16
gepepharm CmbH	Lauromacrogol 400	140911	1
gepepharm CmbH	Lauromacrogol 400	160312	1
gepepharm CmbH	Lauromacrogol 400	160312A	1
GEPEPHARM GEHE 14:02:17	Lauromacrogol 400	160312	7
GEPEPHARM GEHE 25.07.19	Lauromacrogol 400	19054203	1
gepepharm gmbh	Lauromacrogol 400	130109	4
gepepharm gmbh	Lauromacrogol 400	160312	2

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Supplier	Substance	Batch	Spectra
gepepharm GmbH	Lauromacrogol 400	110408	12
gepepharm GmbH	Lauromacrogol 400	130109	27
gepepharm GmbH	Lauromacrogol 400	13-0108	1
gepepharm GmbH	Lauromacrogol 400	13-0109	1
gepepharm GmbH	Lauromacrogol 400	3072014A	1
gepepharm GmbH	Lauromacrogol 400	27112014A	1
gepepharm GmbH	Lauromacrogol 400	1915345	1
gepepharm GmbH	Lauromacrogol 400	8062015D	1
gepepharm GmbH	Lauromacrogol 400	140911	22
gepepharm GmbH	Lauromacrogol 400	14091	1
gepepharm GmbH	Lauromacrogol 400	160312	22
gepepharm GmbH	Lauromacrogol 400	160312A	3
gepepharm GmbH	Lauromacrogol 400	19054203	1
gepepharm GmbH	Lauromacrogol 400	182743	1
gepepharm GmbH	Lauromacrogol 400	130109	1
Gepepharm GmbH	Lauromacrogol 400	110408	3
Gepepharm GmbH	Lauromacrogol 400	140911	5
Gepepharm GmbH	Lauromacrogol 400	160312	2
Gepepharm GmbH	Lauromacrogol 400	160312A	2
Gepepharm GmbH	Lauromacrogol 400	19054203	1
GEpepharm GmbH	Lauromacrogol 400	160312	3
gepepharm GmbH / Allian...	Lauromacrogol 400	140911	1
Gepepharm GmbH / Anzag	Lauromacrogol 400	110408	1
Gepepharm GmbH / Anzag	Lauromacrogol 400	130109	1
Gepepharm GmbH / Gehe	Lauromacrogol 400	160312	1
gepepharm GmbH / Phönix	Lauromacrogol 400	160312A	10
gepepharm GmbH, Gehe	Lauromacrogol 400	160312	1
Gepepharm GmbH/ Alliance	Lauromacrogol 400	160312	1
gepepharm GmbH/ Gehe	Lauromacrogol 400	160312	2
gepepharm GmbH/ NOW	Lauromacrogol 400	140911	1
Gepepharm GmbH/ Noweda	Lauromacrogol 400	19054203	1
gepepharm GmbH/Alliance...	Lauromacrogol 400	160312A	1
gepepharm GmbH/Gehe	Lauromacrogol 400	130109	3
gepepharm GmbH/Gehe	Lauromacrogol 400	140911	3
gepepharm GmbH/Gehe	Lauromacrogol 400	160312	5
Gepepharm GmbH/Gehe	Lauromacrogol 400	140911/20160309/13	1
Gepepharm GmbH/Gehe	Lauromacrogol 400	160312	10
gepepharm GmbH/Kehr	Lauromacrogol 400	160312	7
gepepharm gmbH/Noweda	Lauromacrogol 400	160312	1
gepepharm gmbH/Noweda	Lauromacrogol 400	160312A	1
gepepharm GmbH/Noweda	Lauromacrogol 400	130109	4
gepepharm gmbH/Phoenix	Lauromacrogol 400	16-0290	2
Gepepharm GmbH/Phoenix	Lauromacrogol 400	140911	2
Gepepharm GmbH/Phoenix	Lauromacrogol 400	160312	2
Gepepharm GmbH/Phoenix	Lauromacrogol 400	160312A	3
gepepharm GmbH/Phönix	Lauromacrogol 400	160312	6
gepepharm GmbH/Phönix	Lauromacrogol 400	140911	1
gepepharm GmbH/Phönix	Lauromacrogol 400	160312A	3
gepepharm GmbH/Sanacorp	Lauromacrogol 400	160312	1
Gepepharm GmbH	Lauromacrogol 400	140911	5
Gepepharm über Phoenix	Lauromacrogol 400	130109	7
Gepepharm über Phoenix	Lauromacrogol 400	140911	3
gepepharm, Noweda	Lauromacrogol 400	110408	4
gepepharm, Noweda	Lauromacrogol 400	130109	1
Gepepharm/ Sanacorp	Lauromacrogol 400	160312	1
gepepharm/ Gehe	Lauromacrogol 400	20170829/2	1
gepepharm/ Gehe	Lauromacrogol 400	160312A	2
Gepepharm/ Gehe	Lauromacrogol 400	14-1414	1
Gepepharm/ Gehe	Lauromacrogol 400	160312	2
gepepharm/ Gehe 15.12.17	Lauromacrogol 400	160312-20180112Ma7	1

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Supplier	Substance	Batch	Spectra
gepepharm/ Gehe 16.10.18	Lauromacrogol 400	160312A-T20181115Ma7	1
gepepharm/ Gehe 26.6.17	Lauromacrogol 400	160312-20170704Ma10	1
gepepharm/ Gehe 5.5.17	Lauromacrogol 400	160312-20170704Ma9	1
gepepharm/ Kehr	Lauromacrogol 400	160312	1
gepepharm/ Noweda	Lauromacrogol 400	130109	4
gepepharm/ Noweda	Lauromacrogol 400	160312	1
Gepepharm/ Noweda	Lauromacrogol 400	130109	1
Gepepharm/ Noweda	Lauromacrogol 400	160132	1
Gepepharm/ Noweda	Lauromacrogol 400	160312A	5
gepepharm/ Phoenix	Lauromacrogol 400	160312A	1
gepepharm/ Phönix	Lauromacrogol 400	19054203	1
Gepepharm/ Phönix	Lauromacrogol 400	140911	1
Gepepharm/ Phönix	Lauromacrogol 400	160312	1
gepepharm/ Sanacorp	Lauromacrogol 400	160312	1
gepepharm/ Sanacorp 22...	Lauromacrogol 400	130109	1
gepepharm/AHD	Lauromacrogol 400	160312	1
gepepharm/AHD	Lauromacrogol 400	1603123A	1
Gepepharm/AHD	Lauromacrogol 400	160312	2
Gepepharm/Alliance	Lauromacrogol 400	160312	1
gepepharm/Anzag	Lauromacrogol 400	130109	1
gepepharm/Anzag	Lauromacrogol 400	160312	2
Gepepharm/Anzag	Lauromacrogol 400	140911	1
Gepepharm/Anzag	Lauromacrogol 400	160312	3
Gepepharm/Anzag	Lauromacrogol 400	160312A	1
gepepharm/Anzag 27.04.2...	Lauromacrogol 400	110408	8
Gepepharm/Fiebig	Lauromacrogol 400	130109	1
Gepepharm/Fiebig	Lauromacrogol 400	160312	1
gepepharm/G	Lauromacrogol 400	140911	1
gepepharm/gehe	Lauromacrogol 400	110408	2
gepepharm/gehe	Lauromacrogol 400	130109	2
gepepharm/gehe	Lauromacrogol 400	160312	5
gepepharm/Gehe	Lauromacrogol 400	130109	3
gepepharm/Gehe	Lauromacrogol 400	140911	1
gepepharm/Gehe	Lauromacrogol 400	14-1414	2
gepepharm/Gehe	Lauromacrogol 400	160312	4
gepepharm/Gehe	Lauromacrogol 400	160312A	4
Gepepharm/Gehe	Lauromacrogol 400	110408	2
Gepepharm/Gehe	Lauromacrogol 400	140911	12
Gepepharm/Gehe	Lauromacrogol 400	160312	3
Gepepharm/Gehe	Lauromacrogol 400	160312A	8
gepepharm/Kehr	Lauromacrogol 400	160312A	1
Gepepharm/Kehr	Lauromacrogol 400	51123/2Sie	1
Gepepharm/Kehr	Lauromacrogol 400	160312A	1
gepepharm/Krieger	Lauromacrogol 400	160312	1
gepepharm/Nowe	Lauromacrogol 400	160312	11
gepepharm/Noweda	Lauromacrogol 400	130109	2
gepepharm/Noweda	Lauromacrogol 400	140911	4
gepepharm/Noweda	Lauromacrogol 400	160312	2
gepepharm/Noweda	Lauromacrogol 400	160312A	1
Gepepharm/Noweda	Lauromacrogol 400	130109	2
Gepepharm/Noweda	Lauromacrogol 400	140911	3
Gepepharm/Noweda	Lauromacrogol 400	1440911	1
Gepepharm/Noweda	Lauromacrogol 400	160312	3
Gepepharm/Noweda	Lauromacrogol 400	160312A	7
Gepepharm/Noweda	Lauromacrogol 400	19054203	1
gepepharm/Otto	Lauromacrogol 400	65793	1
gepepharm/Otto	Lauromacrogol 400	130109	18
gepepharm/Phoenix	Lauromacrogol 400	130109	4
gepepharm/Phoenix	Lauromacrogol 400	160312	4
gepepharm/Phoenix	Lauromacrogol 400	160312A	1

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Supplier	Substance	Batch	Spectra
gepepharm/Phoenix	Lauromacrogol 400	19054203	1
Gepepharm/Phoenix	Lauromacrogol 400	3813E02384	1
Gepepharm/Phoenix	Lauromacrogol 400	130109	2
Gepepharm/Phoenix	Lauromacrogol 400	1614U2384	1
Gepepharm/Phoenix	Lauromacrogol 400	160312	2
Gepepharm/Phoenix	Lauromacrogol 400	160312A	1
Gepepharm/Phoenix	Lauromacrogol 400	19054203	1
gepepharm/Phönix	Lauromacrogol 400	110408	2
gepepharm/Phönix	Lauromacrogol 400	130109	4
gepepharm/Phönix	Lauromacrogol 400	1101409	1
gepepharm/Phönix	Lauromacrogol 400	140911	11
gepepharm/Phönix	Lauromacrogol 400	160312	3
gepepharm/Phönix	Lauromacrogol 400	160312A	3
gepepharm/Phönix	Lauromacrogol 400	19054203	3
Gepepharm/Phönix	Lauromacrogol 400	130109	7
Gepepharm/Phönix	Lauromacrogol 400	140911	4
Gepepharm/Phönix	Lauromacrogol 400	160312	8
Gepepharm/Phönix	Lauromacrogol 400	160312A	1
Gepepharm/Phönix	Lauromacrogol 400	19054203	1
gepepharm/Phönix 07.09.18	Lauromacrogol 400	160312	1
Gepepharm/Sana	Lauromacrogol 400	140911	1
gepepharm/Sanac	Lauromacrogol 400	130109	1
gepepharm/sanacorp	Lauromacrogol 400	130109	1
gepepharm/Sanacorp	Lauromacrogol 400	130109	7
gepepharm/Sanacorp	Lauromacrogol 400	140911	1
gepepharm/Sanacorp	Lauromacrogol 400	14-1414	1
gepepharm/Sanacorp	Lauromacrogol 400	160312A	1
Gepepharm/Sanacorp	Lauromacrogol 400	130109	6
Gepepharm/Sanacorp	Lauromacrogol 400	140911	9
Gepepharm/Sanacorp	Lauromacrogol 400	14-1414	1
Gepepharm/Spangro	Lauromacrogol 400	160312A	1
Gepepharm/V.d.L.	Lauromacrogol 400	130109	1
Gepepharm/VDL	Lauromacrogol 400	110408	3
Gepepharm/VDL	Lauromacrogol 400	130109	6
gepepharm [®] GmbH	Lauromacrogol 400	110408	1
gepepharma/Phönix	Lauromacrogol 400	130109	1
Gepepharma/Sanacorp	Lauromacrogol 400	130109	1
gepepharmGmbH	Lauromacrogol 400	110408	1
gepepharmGmbH	Lauromacrogol 400	160312A	1
geprpharm GmbH	Lauromacrogol 400	140911	1
Hedinger Phönix	Lauromacrogol 400	160312A	1
Hedinger/ Sanacorp	Lauromacrogol 400	140911	1
Hedinger/Gehe	Lauromacrogol 400	13G02-N03	1
Heyl/Gehe	Lauromacrogol 400	18175508	1
Ichthyol	Lauromacrogol 400	110408	4
Ichthyol-Gesellschaft	Lauromacrogol 400	160312	1
Kehr	Lauromacrogol 400	17046502	2
Kehr	Lauromacrogol 400	17250904	2
Kehr	Lauromacrogol 400	17250909	1
Fagron	Lauromacrogol 400	17H21-B07-339505	1
Kehr/gepepharm	Lauromacrogol 400	140911	1
kögl	Lauromacrogol 400	1908852	1
Kögl	Lauromacrogol 400	177906163716	2
Kögl	Lauromacrogol 400	177906162916	1
Kögl	Lauromacrogol 400	381311161917	5
Kögl	Lauromacrogol 400	381311161917	1
Kögl	Lauromacrogol 400	1700029	5
Kögl	Lauromacrogol 400	17700029	1
Kögl	Lauromacrogol 400	1800519	5
Kögl	Lauromacrogol 400	1802732	6

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Supplier	Substance	Batch	Spectra
Krieger/ Gepepharm	Lauromacrogol 400	140911	2
Krieger/ Gepepharm	Lauromacrogol 400	160312A	2
Caelo	Lauromacrogol 400	17046404	1
Fagron	Lauromacrogol 400	16E18B04-321110	1
L12	Lauromacrogol 400	17A23-B01-330983	1
L12	Lauromacrogol 400	17A23-B01-332868	1
L12	Lauromacrogol 400	17A23-B01-332869	1
L12	Lauromacrogol 400	17H21-B07-341795	1
Fagron	Lauromacrogol 400	18B26-B06-347341	4
L30	Lauromacrogol 400	18D30-B09	1
Lamotte	Lauromacrogol 400	15192209	1
Löwen City-Apotheke Bar...	Lauromacrogol 400	2042015	1
Noweda	Lauromacrogol 400	13B13-N01	1
Noweda	Lauromacrogol 400	15A26-B02-303625	1
Noweda	Lauromacrogol 400	1915345	1
Noweda	Lauromacrogol 400	160312	2
Noweda	Lauromacrogol 400	16E18-B04-326089	1
Noweda	Lauromacrogol 400	17-0845	1
Noweda	Lauromacrogol 400	160312A	1
Noweda	Lauromacrogol 400	1710026-01	1
Noweda	Lauromacrogol 400	18175513	1
Fagron	Lauromacrogol 400	18B26B06347342	1
Euro OTC	Lauromacrogol 400	15A26-B02_303628	1
Caelo	Lauromacrogol 400	13K18-B30-288163	1
Caelo	Lauromacrogol 400	15G10-B05-313605	1
Euro OTC	Lauromacrogol 400	150303201	1
Euro OTC	Lauromacrogol 400	1710026-01/180606P	1
Fagron	Lauromacrogol 400	16E-B04-328737	1
Noweda/gepepharm	Lauromacrogol 400	130109	1
Noweda/gepepharm	Lauromacrogol 400	140911	1
Noweda/Gepepharm	Lauromacrogol 400	160312	1
Pharmachem/ Phönix	Lauromacrogol 400	16E18-B04-322722	1
Phoenix	Lauromacrogol 400	110408	1
Phoenix	Lauromacrogol 400	130109	2
Phoenix	Lauromacrogol 400	13-0108	1
Phoenix	Lauromacrogol 400	140911	2
Phoenix	Lauromacrogol 400	160312A	4
Phoenix (gepepharm)	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	13340703	4
Phoenix/gepepharm	Lauromacrogol 400	110408	1
Phoenix/gepepharm	Lauromacrogol 400	140911	3
phoenix/noveda	Lauromacrogol 400	140911	2
phönix	Lauromacrogol 400	15g10b05314366	1
phönix	Lauromacrogol 400	17a23-b01-330983	1
Phönix	Lauromacrogol 400	13B13-N01	1
Phönix	Lauromacrogol 400	12E03-N04	1
Phönix	Lauromacrogol 400	130109	1
Phönix	Lauromacrogol 400	13K18-B30-28816	1
Phönix	Lauromacrogol 400	13-0108130109	1
Phönix	Lauromacrogol 400	18A18-B98-344798	2
Phönix	Lauromacrogol 400	160312A	2
Phönix	Lauromacrogol 400	19054203	1
PHÖNIX	Lauromacrogol 400	17046411	2
Fagron	Lauromacrogol 400	17A23-B10-335356	1
Phönix /fargon	Lauromacrogol 400	18D30-B09-350640	1
Bombastus	Lauromacrogol 400	17250913	2
Phönix Gotha	Lauromacrogol 400	12092516	1
Phönix Gotha	Lauromacrogol 400	130109	3
Phönix Gotha	Lauromacrogol 400	13B13-N01	1
Phönix Gotha	Lauromacrogol 400	13-0599	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Lauromacrogol 400	13G02-N030461/1210	1
Phönix Gotha	Lauromacrogol 400	140911	1
Phönix/Apomix	Lauromacrogol 400	3B280217	1
Fagron	Lauromacrogol 400	16E-18-B04-328582	1
Phönix/gepepharm	Lauromacrogol 400	130109	1
PKH Halle/AHD	Lauromacrogol 400	160312A	1
Reichelt/Phönix	Lauromacrogol 400	17A23-Bo1-330983	1
Sanacoro W.E:01.03.18 ...	Lauromacrogol 400	17A23-b01-330983	1
Sanacorp	Lauromacrogol 400	130109	3
Sanacorp	Lauromacrogol 400	13095802	1
Sanacorp	Lauromacrogol 400	130108	1
Sanacorp	Lauromacrogol 400	13340710	1
Sanacorp	Lauromacrogol 400	160290	1
Sanacorp	Lauromacrogol 400	160312	1
Sanacorp	Lauromacrogol 400	160312A	4
Sanacorp	Lauromacrogol 400	19054203	1
Euro OTC	Lauromacrogol 400	19054203	1
Fagron	Lauromacrogol 400	16E18-B04-322722	7
Schärer & Schläpfer	Lauromacrogol 400	19054203	2
Schärer & Schläpfer AG	Lauromacrogol 400	16E18-B04-324095	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	15A26-02	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	15A26-B02	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	16E18-B04	1
Schärer&Schläpfer AG/Ph...	Lauromacrogol 400	13B13-N01	1
Standgefäß Apotheke, Ve...	Lauromacrogol 400	16E18-B04-328582	1
Caelo	Lauromacrogol 400	1410010-10	1
Fagron	Lauromacrogol 400	13B13-N01	26
Fagron	Lauromacrogol 400	9002-92-0	1
Stumpf/gepepharm	Lauromacrogol 400	110408	1
Taoasis	Lauromacrogol 400	17250901	1
Bombastus	Macrogol 20 glycerol monoste...	13H09-N06	1
Bombastus	Macrogol 20 glycerol monoste...	700906	1
Caelo	Macrogol 20 glycerol monoste...	12326201	2
Caelo	Macrogol 20 glycerol monoste...	13213601	1
Caelo	Macrogol 20 glycerol monoste...	14302001	2
Caelo	Macrogol 20 glycerol monoste...	16188401	7
Caelo	Macrogol 20 glycerol monoste...	17080101	2
Caelo	Macrogol 20 glycerol monoste...	17080104	4
Caelo	Macrogol 20 glycerol monoste...	18018506	1
Caelo	Macrogol 20 glycerol monoste...	1708002	1
Caelo	Macrogol 20 glycerol monoste...	18018501	4
Caelo	Macrogol 20 glycerol monoste...	ES62A93607	1
Caelo	Macrogol 20 glycerol monoste...	18018508	3
Caelo	Macrogol 20 glycerol monoste...	15410504	4
Caelo	Macrogol 20 glycerol monoste...	15060303	2
Caelo	Macrogol 20 glycerol monoste...	15410502	3
Caelo	Macrogol 20 glycerol monoste...	17080102	4
Caelo	Macrogol 20 glycerol monoste...	18018505	2
Caelo	Macrogol 20 glycerol monoste...	18324202	1
Euro OTC	Macrogol 20 glycerol monoste...	15410502	1
Fagron	Macrogol 20 glycerol monoste...	ES61A85388	1
Caelo	Macrogol 20 glycerol monoste...	13213602	3
Caelo	Macrogol 20 glycerol monoste...	3042223	1
Fagron	Macrogol 20 glycerol monoste...	12H23-N03	4
Caelo	Macrogol 4 lauryl ether	221542	1
AHD, 25.07.2013	Macrogol 4 lauryl ether	13136202	1
AHD/ Spinnrad	Macrogol 4 lauryl ether	314400031	1
AHD;2,32EUR;19.06.15	Macrogol 4 lauryl ether	1014400032	1
Anzag	Macrogol 4 lauryl ether	12180204	1
Anzag	Macrogol 4 lauryl ether	15323701	1

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Supplier	Substance	Batch	Spectra
Anzag	Macrogol 4 lauryl ether	818400032	1
Apinnrad/Gehe	Macrogol 4 lauryl ether	417400031	1
Bombastus	Macrogol 4 lauryl ether	18040103	1
Bombastus	Macrogol 4 lauryl ether	18040101	1
Caelo	Macrogol 4 lauryl ether	12057806	3
Caelo	Macrogol 4 lauryl ether	20121112-1	1
Caelo	Macrogol 4 lauryl ether	12180202	3
Caelo	Macrogol 4 lauryl ether	13041706	3
Caelo	Macrogol 4 lauryl ether	13136202	2
Caelo	Macrogol 4 lauryl ether	7121201	1
Caelo	Macrogol 4 lauryl ether	14225303	5
Caelo	Macrogol 4 lauryl ether	15041801	5
Caelo	Macrogol 4 lauryl ether	715400031	1
Caelo	Macrogol 4 lauryl ether	16100201	12
Caelo	Macrogol 4 lauryl ether	16102911	4
Caelo	Macrogol 4 lauryl ether	16100207	14
Caelo	Macrogol 4 lauryl ether	17028303	9
Caelo	Macrogol 4 lauryl ether	7028303	1
Caelo	Macrogol 4 lauryl ether	188B26-B06	1
Caelo	Macrogol 4 lauryl ether	18040103	8
Caelo	Macrogol 4 lauryl ether	18215504	8
Caelo	Macrogol 4 lauryl ether	16215504	1
Caelo	Macrogol 4 lauryl ether	18215506	4
Caelo	Macrogol 4 lauryl ether	18215508	1
Caelo	Macrogol 4 lauryl ether	1710026	1
Caelo	Macrogol 4 lauryl ether	15041704	11
Caelo	Macrogol 4 lauryl ether	18040101	21
Caelo	Macrogol 4 lauryl ether	15323701	19
Caelo	Macrogol 4 lauryl ether	3272779	1
Caelo	Macrogol 4 lauryl ether	19(18215504)	1
Caelo	Macrogol 4 lauryl ether	18(17028301)	1
Caelo	Macrogol 4 lauryl ether	1825504	1
Caelo	Macrogol 4 lauryl ether	14225308	4
Caelo	Macrogol 4 lauryl ether	15323704	10
Caelo	Macrogol 4 lauryl ether	5041801	1
Caelo	Macrogol 4 lauryl ether	4214A-02868	1
Caelo	Macrogol 4 lauryl ether	616A-02868	1
Caelo	Macrogol 4 lauryl ether	17028301	20
Caelo	Macrogol 4 lauryl ether	11220306	1
Caelo	Macrogol 4 lauryl ether	13041702	4
Caelo	Macrogol 4 lauryl ether	12180204	2
Caelo	Macrogol 4 lauryl ether	13229805	6
Caelo	Macrogol 4 lauryl ether	14054405	7
Caelo	Macrogol 4 lauryl ether	18215501	12
Caelo	Macrogol 4 lauryl ether	12057804	4
Caelo	Macrogol 4 lauryl ether	1013400032	1
Caelo	Macrogol 4 lauryl ether	1710026-01	2
Caelo	Macrogol 4 lauryl ether	218400031	1
Caelo	Macrogol 4 lauryl ether	14225306	3
Caelo	Macrogol 4 lauryl ether	18040106	2
Caelo	Macrogol 4 lauryl ether	13229808	2
Caelo	Macrogol 4 lauryl ether	1014400032	3
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	14054405	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	14225308	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	16100201	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	18040101	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	18215501	1
Caesar & Loretz GmbH Hi...	Macrogol 4 lauryl ether	14283001	1
Caesar & Loretz GmbH, 4...	Macrogol 4 lauryl ether	11220306	1
Caesar & Loretz/Noweda	Macrogol 4 lauryl ether	715400031	1

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Supplier	Substance	Batch	Spectra
Caesar &Loretz GmbH	Macrolog 4 lauryl ether	13229802	1
Caesar&loretz,Anzag	Macrolog 4 lauryl ether	13041702	1
Caesar&loretz,Phoenix	Macrolog 4 lauryl ether	14225308	1
Euro OTC	Macrolog 4 lauryl ether	15323704	1
Euro OTC	Macrolog 4 lauryl ether	1610034-01	11
Euro OTC	Macrolog 4 lauryl ether	18040101	2
Euro OTC	Macrolog 4 lauryl ether	1503032-02	6
Euro OTC	Macrolog 4 lauryl ether	14054401	1
Euro OTC	Macrolog 4 lauryl ether	1407007-01	5
Euro OTC	Macrolog 4 lauryl ether	1605006-02	10
Euro OTC	Macrolog 4 lauryl ether	1142238	3
Euro OTC	Macrolog 4 lauryl ether	1703033-01	24
Euro OTC	Macrolog 4 lauryl ether	1710026-01	20
Fagron	Macrolog 4 lauryl ether	18B26-B06346398	1
Fagron	Macrolog 4 lauryl ether	15A26B02	1
Fagron	Macrolog 4 lauryl ether	17A23-B01-332868	6
Fagron	Macrolog 4 lauryl ether	170303301	1
Fagron	Macrolog 4 lauryl ether	13136202	1
Fagron	Macrolog 4 lauryl ether	16E18-B04-326871	1
Fagron	Macrolog 4 lauryl ether	18D30-B09	6
Fagron	Macrolog 4 lauryl ether	14E06-B05-293846	5
Fagron	Macrolog 4 lauryl ether	14E06-B05-293848	4
Fagron	Macrolog 4 lauryl ether	316400031	2
Fagron	Macrolog 4 lauryl ether	17A23-B01-332867	8
Fagron	Macrolog 4 lauryl ether	13K18-B30-288163	11
Fagron	Macrolog 4 lauryl ether	13B13_N01	1
Fagron	Macrolog 4 lauryl ether	17H21-Bo7-341795	1
Gehe	Macrolog 4 lauryl ether	11220306	1
Gehe	Macrolog 4 lauryl ether	13136206	1
Gehe	Macrolog 4 lauryl ether	14054401	1
Gehe	Macrolog 4 lauryl ether	18215501	1
GEHE	Macrolog 4 lauryl ether	21021172/5	1
GEHE	Macrolog 4 lauryl ether	15323704	1
GEHE	Macrolog 4 lauryl ether	17028301	2
Gehe/ Spinnrad	Macrolog 4 lauryl ether	715400031	1
Fagron	Macrolog 4 lauryl ether	16E18-B04-328737	2
Gehe/Spinnrad	Macrolog 4 lauryl ether	715400031	1
Hedinger	Macrolog 4 lauryl ether	15041704	1
Ichthyol/Gehe	Macrolog 4 lauryl ether	316400031	1
INTR/Phönix	Macrolog 4 lauryl ether	16100205	1
Jenne	Macrolog 4 lauryl ether	13136202	1
Kehr	Macrolog 4 lauryl ether	16100207	2
Kehr	Macrolog 4 lauryl ether	17028303	1
L12	Macrolog 4 lauryl ether	18B26-B06-347341	1
L30	Macrolog 4 lauryl ether	18B26-B06	1
L30	Macrolog 4 lauryl ether	18B26-B06-346396	1
Noweda	Macrolog 4 lauryl ether	1111400032	1
Noweda	Macrolog 4 lauryl ether	512400031	1
Noweda	Macrolog 4 lauryl ether	413400031	2
Noweda	Macrolog 4 lauryl ether	123400033	1
Noweda 10.07.2015	Macrolog 4 lauryl ether	1014400032	1
Caelo	Macrolog 4 lauryl ether	13229801	1
Phönix	Macrolog 4 lauryl ether	17H21-B07-339506	1
Raben-Apotheke Mildenau	Macrolog 4 lauryl ether	314400031	1
sanacorp	Macrolog 4 lauryl ether	14054405	1
Sanacorp	Macrolog 4 lauryl ether	12180204	1
Sanacorp	Macrolog 4 lauryl ether	1013400032	1
Sanacorp	Macrolog 4 lauryl ether	1014400032	1
Sanacorp	Macrolog 4 lauryl ether	417400001	1
Sanacorp	Macrolog 4 lauryl ether	17028303	1

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Supplier	Substance	Batch	Spectra
Sanacorp, 21.03.17, 9,45EUR	Macrogol 4 lauryl ether	16100205	1
Sanacorp/ Spinnrad	Macrogol 4 lauryl ether	218400031	1
Schärer&Schlapfer	Macrogol 4 lauryl ether	14E06-B05-295979	1
Sinnrad GmbH,Bad Seegeb...	Macrogol 4 lauryl ether	316400031	1
Soinnrad	Macrogol 4 lauryl ether	11012014B	1
Spinnrad	Macrogol 4 lauryl ether	316400031	1
spinnrad	Macrogol 4 lauryl ether	1214000321	1
spinnrad	Macrogol 4 lauryl ether	715400031	2
spinnrad	Macrogol 4 lauryl ether	512400031	1
spinnrad	Macrogol 4 lauryl ether	1213400033	1
spinnrad	Macrogol 4 lauryl ether	314400031	1
Spinnrad	Macrogol 4 lauryl ether	1111400032	2
Spinnrad	Macrogol 4 lauryl ether	512400031	2
Spinnrad	Macrogol 4 lauryl ether	12124000321	5
Spinnrad	Macrogol 4 lauryl ether	111140032	1
Spinnrad	Macrogol 4 lauryl ether	413400031	4
Spinnrad	Macrogol 4 lauryl ether	11B11-N151110400032	1
Spinnrad	Macrogol 4 lauryl ether	1213400033	2
Spinnrad	Macrogol 4 lauryl ether	101440032	1
Spinnrad	Macrogol 4 lauryl ether	1014400032	2
Spinnrad	Macrogol 4 lauryl ether	715400031	4
Spinnrad	Macrogol 4 lauryl ether	725400031	1
Spinnrad	Macrogol 4 lauryl ether	316400031	4
Spinnrad	Macrogol 4 lauryl ether	417400031	5
Spinnrad	Macrogol 4 lauryl ether	218400031	2
Spinnrad	Macrogol 4 lauryl ether	41740031	1
Spinnrad	Macrogol 4 lauryl ether	81840032	1
Spinnrad / Alliance HC	Macrogol 4 lauryl ether	314400031	1
Spinnrad / Noweda	Macrogol 4 lauryl ether	512400031	1
Spinnrad / Noweda	Macrogol 4 lauryl ether	1014400032	1
Spinnrad GmbH	Macrogol 4 lauryl ether	1111400032	1
Spinnrad GmbH	Macrogol 4 lauryl ether	2240003	1
Spinnrad GmbH	Macrogol 4 lauryl ether	12124000321	1
Spinnrad GmbH	Macrogol 4 lauryl ether	1013400032	1
Spinnrad GmbH	Macrogol 4 lauryl ether	314400031	1
Spinnrad GmbH	Macrogol 4 lauryl ether	1014400032	2
Spinnrad GmbH	Macrogol 4 lauryl ether	316400031	1
Spinnrad GmbH	Macrogol 4 lauryl ether	417400031	2
Spinnrad GmbH	Macrogol 4 lauryl ether	218400031	1
Spinnrad GmbH / Allianc...	Macrogol 4 lauryl ether	218400031	1
Spinnrad GmbH / Phönix	Macrogol 4 lauryl ether	413400031	1
Spinnrad/ Noweda	Macrogol 4 lauryl ether	715400031	1
Spinnrad/Anzag	Macrogol 4 lauryl ether	12124000321	2
Caelo	Macrogol 4 lauryl ether	1510024-02	2
Spinnrad/G	Macrogol 4 lauryl ether	417400031	1
Spinnrad/Gehe	Macrogol 4 lauryl ether	1014400032	1
Spinnrad/Gehe	Macrogol 4 lauryl ether	218400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	413400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	512400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	314400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	715400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	316400031	2
Spinnrad/Phoenix	Macrogol 4 lauryl ether	1014400032	1
Spinnrad/Phönix	Macrogol 4 lauryl ether	413400031	1
Spinnrad/Phönix	Macrogol 4 lauryl ether	417400031	2
Spinnrad/Phönix	Macrogol 4 lauryl ether	218400031	1
Spinnrad/Phönix	Macrogol 4 lauryl ether	818400032	1
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	314400031	2
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	1014400032	1
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	715400031	2

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Supplier	Substance	Batch	Spectra
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	218400031	2
VDL;7.75EUR; 30.09.2015	Macrogol 4 lauryl ether	15041801	1
AHD	Macrogolglycerol hydroxystea...	14B14-B06-295486	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-309197	2
Alliance H.	Macrogolglycerol hydroxystea...	15378302	1
Alliance health	Macrogolglycerol hydroxystea...	14283808	1
Allianz	Macrogolglycerol hydroxystea...	18204507	1
Anzag	Macrogolglycerol hydroxystea...	16247401	1
Anzag 07.02.13 ek:4,70EUR	Macrogolglycerol hydroxystea...	12103807	1
BASF SE	Macrogolglycerol hydroxystea...	14B14B06292160	1
BASF SE/ Phönix	Macrogolglycerol hydroxystea...	39658724U0	1
Bombastus	Macrogolglycerol hydroxystea...	14196805	1
Bombastus	Macrogolglycerol hydroxystea...	15378304	1
Bombastus	Macrogolglycerol hydroxystea...	16H05-B04-328700	1
Bombastus	Macrogolglycerol hydroxystea...	14B14-B06	1
Bombastus	Macrogolglycerol hydroxystea...	14K28-B01-309197	1
Caelo	Macrogolglycerol hydroxystea...	10236606	1
Caelo	Macrogolglycerol hydroxystea...	12103803	4
Caelo	Macrogolglycerol hydroxystea...	21071201	1
Caelo	Macrogolglycerol hydroxystea...	17111202	1
Caelo	Macrogolglycerol hydroxystea...	19111202	1
Caelo	Macrogolglycerol hydroxystea...	20130912-1	1
Caelo	Macrogolglycerol hydroxystea...	12158602	2
Caelo	Macrogolglycerol hydroxystea...	12103807	5
Caelo	Macrogolglycerol hydroxystea...	6021304	1
Caelo	Macrogolglycerol hydroxystea...	12158606	9
Caelo	Macrogolglycerol hydroxystea...	26061303	1
Caelo	Macrogolglycerol hydroxystea...	12158610	2
Caelo	Macrogolglycerol hydroxystea...	12158611	3
Caelo	Macrogolglycerol hydroxystea...	1215614	1
Caelo	Macrogolglycerol hydroxystea...	21121203	1
Caelo	Macrogolglycerol hydroxystea...	12071402	1
Caelo	Macrogolglycerol hydroxystea...	29091402	1
Caelo	Macrogolglycerol hydroxystea...	30091404	1
Caelo	Macrogolglycerol hydroxystea...	2101415	1
Caelo	Macrogolglycerol hydroxystea...	14196805	13
Caelo	Macrogolglycerol hydroxystea...	16045403	17
Caelo	Macrogolglycerol hydroxystea...	140415C	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-301467	2
Caelo	Macrogolglycerol hydroxystea...	14283813	12
Caelo	Macrogolglycerol hydroxystea...	15169405	12
Caelo	Macrogolglycerol hydroxystea...	15169404	14
Caelo	Macrogolglycerol hydroxystea...	15378304	9
Caelo	Macrogolglycerol hydroxystea...	14C28-b01	1
Caelo	Macrogolglycerol hydroxystea...	16045406	1
Caelo	Macrogolglycerol hydroxystea...	16247405	11
Caelo	Macrogolglycerol hydroxystea...	16247410	9
Caelo	Macrogolglycerol hydroxystea...	16349303	16
Caelo	Macrogolglycerol hydroxystea...	17D03-B04-333357	2
Caelo	Macrogolglycerol hydroxystea...	1624401	1
Caelo	Macrogolglycerol hydroxystea...	16349304	9
Caelo	Macrogolglycerol hydroxystea...	17D03-B04	1
Caelo	Macrogolglycerol hydroxystea...	19021802	1
Caelo	Macrogolglycerol hydroxystea...	21111816	1
Caelo	Macrogolglycerol hydroxystea...	18204504	1
Caelo	Macrogolglycerol hydroxystea...	18278410	4
Caelo	Macrogolglycerol hydroxystea...	11161504	5
Caelo	Macrogolglycerol hydroxystea...	18278403	10
Caelo	Macrogolglycerol hydroxystea...	13072008	4
Caelo	Macrogolglycerol hydroxystea...	14283810	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogolglycerol hydroxystea...	15169805	1
Caelo	Macrogolglycerol hydroxystea...	12158614	4
Caelo	Macrogolglycerol hydroxystea...	17257004	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-309197	1
Caelo	Macrogolglycerol hydroxystea...	30378697V0	1
Caelo	Macrogolglycerol hydroxystea...	15378302	25
Caelo	Macrogolglycerol hydroxystea...	16349305	7
Caelo	Macrogolglycerol hydroxystea...	13K07-N02	1
Caelo	Macrogolglycerol hydroxystea...	18G13-B05-355855	1
Caelo	Macrogolglycerol hydroxystea...	17257007	1
Caelo	Macrogolglycerol hydroxystea...	P146/14	1
Caelo	Macrogolglycerol hydroxystea...	13072004	11
Caelo	Macrogolglycerol hydroxystea...	4613M-01308	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-301468	2
Caelo	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Caelo	Macrogolglycerol hydroxystea...	18278406	5
Caelo	Macrogolglycerol hydroxystea...	182004507	1
Caelo	Macrogolglycerol hydroxystea...	16349310	1
Caelo	Macrogolglycerol hydroxystea...	14b14-b06-2921600855	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01	1
Caelo	Macrogolglycerol hydroxystea...	14k28-b01-301467	1
Caelo	Macrogolglycerol hydroxystea...	15378309	4
Caelo	Macrogolglycerol hydroxystea...	16H05-B04-326362	1
Caelo	Macrogolglycerol hydroxystea...	54764324U0	1
Caelo	Macrogolglycerol hydroxystea...	17257003	19
Caelo	Macrogolglycerol hydroxystea...	18204506	6
Fagron	Macrogolglycerol hydroxystea...	18204509	1
Caelo	Macrogolglycerol hydroxystea...	16247401	24
Caelo	Macrogolglycerol hydroxystea...	18204509	8
Caelo	Macrogolglycerol hydroxystea...	163493105682	1
Caelo	Macrogolglycerol hydroxystea...	13072005	1
Caelo	Macrogolglycerol hydroxystea...	18204507	12
Caesar & Loretz GmbH	Macrogolglycerol hydroxystea...	18278403	1
Caesar & Loretz GmbH Hi...	Macrogolglycerol hydroxystea...	16247401	1
Caesar & Loretz GmbH/Ph...	Macrogolglycerol hydroxystea...	18278406	1
Caesar & Loretz GmbH	Macrogolglycerol hydroxystea...	12158610	1
Caesar u. Loretz/Noweda	Macrogolglycerol hydroxystea...	14196805	1
Calo/AHD	Macrogolglycerol hydroxystea...	16247401	1
E Plus	Macrogolglycerol hydroxystea...	17257003	1
Euro OTC	Macrogolglycerol hydroxystea...	16247401	1
Euro OTC	Macrogolglycerol hydroxystea...	28227168E0	1
Euro OTC	Macrogolglycerol hydroxystea...	15169404	1
Euro OTC	Macrogolglycerol hydroxystea...	17J05-B99-341057	1
Euro OTC	Macrogolglycerol hydroxystea...	1483808	1
Fagron	Macrogolglycerol hydroxystea...	702016880o	1
Fafon/Anzag	Macrogolglycerol hydroxystea...	49426297V0	1
Fagron/VDL	Macrogolglycerol hydroxystea...	14K28-B01-301467	1
Fagron	Macrogolglycerol hydroxystea...	11K16-N09	3
Fagron	Macrogolglycerol hydroxystea...	79793775L0	1
Fagron	Macrogolglycerol hydroxystea...	12H24-N06	4
Fagron	Macrogolglycerol hydroxystea...	13D23-N03	14
Fagron	Macrogolglycerol hydroxystea...	13D23-N03	2
Fagron	Macrogolglycerol hydroxystea...	13G03-N18	4
Fagron	Macrogolglycerol hydroxystea...	87712168E0	1
Fagron	Macrogolglycerol hydroxystea...	49426297V0	2
Fagron	Macrogolglycerol hydroxystea...	13K07N02	3
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-292160	12
Fagron	Macrogolglycerol hydroxystea...	14B14-B06	6
Fagron	Macrogolglycerol hydroxystea...	700362-0001	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-324748	6

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Supplier	Substance	Batch	Spectra
Fagron	Macrogolglycerol hydroxystea...	30378697Vo	1
Fagron	Macrogolglycerol hydroxystea...	15E18-B10-309198	5
Fagron	Macrogolglycerol hydroxystea...	267209T0	2
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-328700	8
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-333357	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B-04-333357	1
Fagron	Macrogolglycerol hydroxystea...	17d03b04334770	1
Fagron	Macrogolglycerol hydroxystea...	17J05-B99-341057	2
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Fagron	Macrogolglycerol hydroxystea...	18G13-B05-351723	3
Fagron	Macrogolglycerol hydroxystea...	18G13-B05-355855	3
Fagron	Macrogolglycerol hydroxystea...	18G13-B05	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-29212160	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-295486	9
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-301468	8
Fagron	Macrogolglycerol hydroxystea...	14B14-B06292160	2
Fagron	Macrogolglycerol hydroxystea...	87712168E0	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-301467	12
Fagron	Macrogolglycerol hydroxystea...	1(18G13B05355855)	1
Fagron	Macrogolglycerol hydroxystea...	12E11-N03	4
Fagron	Macrogolglycerol hydroxystea...	12D23-N03	1
Fagron	Macrogolglycerol hydroxystea...	13K07-N02	5
Fagron	Macrogolglycerol hydroxystea...	150056P0	1
Fagron	Macrogolglycerol hydroxystea...	13D23N03	3
Fagron	Macrogolglycerol hydroxystea...	19D30-B03-362727	2
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-295468	1
Fagron	Macrogolglycerol hydroxystea...	14K28B01301467	1
Fagron	Macrogolglycerol hydroxystea...	8771216E0	1
Fagron	Macrogolglycerol hydroxystea...	30378697V0	1
Fagron	Macrogolglycerol hydroxystea...	303786970V0	1
Fagron	Macrogolglycerol hydroxystea...	16H-05-B04-328700	1
Fagron	Macrogolglycerol hydroxystea...	18G13B05355855	1
Fagron	Macrogolglycerol hydroxystea...	153356P0	1
Fagron	Macrogolglycerol hydroxystea...	13d23-n03	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-326362	4
Fagron	Macrogolglycerol hydroxystea...	70201688Q0	1
Fagron	Macrogolglycerol hydroxystea...	170703MS/17D03B04333	1
Fagron	Macrogolglycerol hydroxystea...	160516172	1
Fagron	Macrogolglycerol hydroxystea...	509A372	1
Fagron	Macrogolglycerol hydroxystea...	14K28-801-301467	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01	6
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-333357	3
Fagron	Macrogolglycerol hydroxystea...	54764324U0	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B04	2
Fagron	Macrogolglycerol hydroxystea...	17257003	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04	4
Fagron	Macrogolglycerol hydroxystea...	18G13-B05-357024	1
Fagron	Macrogolglycerol hydroxystea...	15E18-B10	3
Fagron	Macrogolglycerol hydroxystea...	16H05B04328700	1
Fagron	Macrogolglycerol hydroxystea...	19D30-B03-362726	2
Fargon	Macrogolglycerol hydroxystea...	13G03-N18	1
Gehe	Macrogolglycerol hydroxystea...	11K16-N09	1
Gehe	Macrogolglycerol hydroxystea...	79793775L0	1
Gehe	Macrogolglycerol hydroxystea...	13K07-N02	1
Gehe	Macrogolglycerol hydroxystea...	14196804	1
Gehe	Macrogolglycerol hydroxystea...	16247401	1
Gehe	Macrogolglycerol hydroxystea...	17257003	1
Caelo	Macrogolglycerol hydroxystea...	1647401	1
Caelo	Macrogolglycerol hydroxystea...	16247405/1060217	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-334770	8

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Supplier	Substance	Batch	Spectra
Gutenberg-Apotheke	Macrogolglycerol hydroxystea...	13072008	1
Hedinger	Macrogolglycerol hydroxystea...	13333702	1
Kehr	Macrogolglycerol hydroxystea...	16349304	1
Krieger	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Noweda	Macrogolglycerol hydroxystea...	11C18-N08	1
Noweda	Macrogolglycerol hydroxystea...	13d23-N03	1
Noweda	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Noweda	Macrogolglycerol hydroxystea...	17257003	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-2965486	1
phönix	Macrogolglycerol hydroxystea...	14196805	1
phönix	Macrogolglycerol hydroxystea...	15378302	1
Phönix	Macrogolglycerol hydroxystea...	11161504	1
Phönix	Macrogolglycerol hydroxystea...	14283813	1
Phönix	Macrogolglycerol hydroxystea...	16H05B04-326362	1
Phönix 31.01.2014	Macrogolglycerol hydroxystea...	13D23N03	1
Phönix Gotha	Macrogolglycerol hydroxystea...	282268E0	1
Sanacorp	Macrogolglycerol hydroxystea...	12L06-N02	2
Sanacorp	Macrogolglycerol hydroxystea...	2/AKD16	1
Sanacorp	Macrogolglycerol hydroxystea...	13072004	1
Sanacorp	Macrogolglycerol hydroxystea...	14B14B06	1
Sanacorp	Macrogolglycerol hydroxystea...	14196805	1
Sanacorp	Macrogolglycerol hydroxystea...	1423805	1
Sanacorp	Macrogolglycerol hydroxystea...	15378309	1
Sanacorp	Macrogolglycerol hydroxystea...	16247405	1
Caelo	Macrogolglycerol hydroxystea...	14B14-B06-292160	1
Sanacorp/Fischar	Macrogolglycerol hydroxystea...	16045403	1
siehe Protokoll	Macrogolglycerol hydroxystea...	15378302	1
21.03.2017	Polysorbate 20	153233912	1
AHD	Polysorbate 20	15323912	1
AHD	Polysorbate 20	16233506	1
AHD	Polysorbate 20	17021310	1
Alliance	Polysorbate 20	17021310	1
Anzag	Polysorbate 20	12303006Caelo	1
Anzag	Polysorbate 20	16114502	1
Caelo	Polysorbate 20	11347719	8
Berkel AHK	Polysorbate 20	14019418	1
Bionorica/Phönix	Polysorbate 20	17325410	1
Bombastus	Polysorbate 20	13297001	1
Cael Sanacorp 05.02.2016	Polysorbate 20	15323902	1
Caelo	Polysorbate 20	3478	1
Caelo	Polysorbate 20	11117201	1
Caelo	Polysorbate 20	11179506	2
Caelo	Polysorbate 20	11179511	4
Caelo	Polysorbate 20	2704212525	1
Caelo	Polysorbate 20	11347701	1
Caelo	Polysorbate 20	11347711	8
Caelo	Polysorbate 20	2112E-02525	1
Caelo	Polysorbate 20	20210312-1	1
Caelo	Polysorbate 20	20220312-1	1
Caelo	Polysorbate 20	19021303	1
Caelo	Polysorbate 20	11347702	1
Caelo	Polysorbate 20	12303016	13
Caelo	Polysorbate 20	2713E2525	1
Caelo	Polysorbate 20	13086505	3
Caelo	Polysorbate 20	13086509	9
Caelo	Polysorbate 20	13086512	14
Caelo	Polysorbate 20	13066512	1
Caelo	Polysorbate 20	611poly	1
Caelo	Polysorbate 20	1329001	1
Caelo	Polysorbate 20	13086510	1

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Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 20	13297009	11
Caelo	Polysorbate 20	14041503	1
Caelo	Polysorbate 20	14365109	25
Caelo	Polysorbate 20	15323912	16
Caelo	Polysorbate 20	12031605	1
Caelo	Polysorbate 20	16114503	36
Caelo	Polysorbate 20	16233501	41
Caelo	Polysorbate 20	170130P/16233501	1
Caelo	Polysorbate 20	162335	1
Caelo	Polysorbate 20	24061713	1
Caelo	Polysorbate 20	17021303	32
Caelo	Polysorbate 20	16233500	1
Caelo	Polysorbate 20	16114504	1
Caelo	Polysorbate 20	17021311	8
Caelo	Polysorbate 20	17021304	1
Caelo	Polysorbate 20	25041806	1
Caelo	Polysorbate 20	19071802	1
Caelo	Polysorbate 20	17325410	16
Caelo	Polysorbate 20	17325413	22
Caelo	Polysorbate 20	18276806	3
Caelo	Polysorbate 20	182768012	1
Caelo	Polysorbate 20	17021307	1
Caelo	Polysorbate 20	17325407	27
Caelo	Polysorbate 20	17325301-20180404Ma	1
Caelo	Polysorbate 20	714E-02525	1
Caelo	Polysorbate 20	11347715	6
Caelo	Polysorbate 20	80479168	1
Caelo	Polysorbate 20	26(18276801)	1
Caelo	Polysorbate 20	17325301	38
Caelo	Polysorbate 20	1532902	2
Caelo	Polysorbate 20	19092207	1
Caelo	Polysorbate 20	25(17021303)	1
Caelo	Polysorbate 20	70879397	1
Caelo	Polysorbate 20	173254105745	1
Caelo	Polysorbate 20	13297010	18
Caelo	Polysorbate 20	13297001-3449311132	1
Caelo	Polysorbate 20	13086517	14
Caelo	Polysorbate 20	13297001	7
Caelo	Polysorbate 20	15159004	1
Caelo	Polysorbate 20	15323902	19
Caelo	Polysorbate 20	4612A-02525	1
Caelo	Polysorbate 20	14365116	26
Caelo	Polysorbate 20	182776806	1
Caelo	Polysorbate 20	18276807	8
Caelo	Polysorbate 20	1532302	1
Caelo	Polysorbate 20	14019410	8
Caelo	Polysorbate 20	14213213	8
Caelo	Polysorbate 20	1465109	1
Caelo	Polysorbate 20	16114502	6
Caelo	Polysorbate 20	17021310	42
Caelo	Polysorbate 20	1912M-02525	1
Caelo	Polysorbate 20	1709930	1
Caelo	Polysorbate 20	14213211	2
Caelo	Polysorbate 20	18276810	3
Caelo	Polysorbate 20	12303006	8
Caelo	Polysorbate 20	3114I-02525	1
Caelo	Polysorbate 20	2215I-02525	1
Caelo	Polysorbate 20	16233506	16
Caelo	Polysorbate 20	18276801	40
Caelo	Polysorbate 20	19092206	1

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Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 20	13297005	10
Caelo	Polysorbate 20	1086517	1
Caelo	Polysorbate 20	14019418	22
Caelo	Polysorbate 20	5/AKD7	1
Caelo	Polysorbate 20	16029703	47
Caecolo	Polysorbate 20	17325301	1
Caecolo/Gehe	Polysorbate 20	16233501	1
Caesar & Loretz GmbH	Polysorbate 20	16233501	1
Caesar & Loretz GmbH	Polysorbate 20	18276807	3
Caesar & Loretz GmbH	Polysorbate 20	18276810	1
Caesar & Loretz GmbH Hi...	Polysorbate 20	15323902	1
Caesar & Loretz GmbH/ AHD	Polysorbate 20	18276807	1
Caesar & Loretz GmbH/ P...	Polysorbate 20	18276810	1
Caolo- Noweda	Polysorbate 20	16029703	1
Cealo	Polysorbate 20	14019418	1
Dr. Wolff	Polysorbate 20	17021303	1
Eurho Phönix	Polysorbate 20	18276806	1
Euro OTC	Polysorbate 20	13297009	1
Euro OTC	Polysorbate 20	16029703	2
Euro OTC	Polysorbate 20	14213213	1
Euro OTC	Polysorbate 20	18276806	1
euro//Noweda	Polysorbate 20	17325413	1
Fagron	Polysorbate 20	11I15-N13	1
Fagron	Polysorbate 20	13J18-B02-287378	4
Fagron	Polysorbate 20	14A23-B01-294167	1
Fagron	Polysorbate 20	25092014A	1
Fagron	Polysorbate 20	13J18-B02	1
Fagron	Polysorbate 20	14A23-B01	1
Fagron	Polysorbate 20	14365105	1
Fagron	Polysorbate 20	16029703	1
Fagron	Polysorbate 20	17021311	1
Fiebig	Polysorbate 20	17325413	1
Fiebig	Polysorbate 20	18276807	1
Gehe	Polysorbate 20	16233501	1
Gehe	Polysorbate 20	17325410	1
GEHE	Polysorbate 20	13086505	1
GEHE	Polysorbate 20	17325407	1
GEHE	Polysorbate 20	18276801	1
Fagron	Polysorbate 20	16114502	2
Infectopharm / Noweda	Polysorbate 20	17325301	1
Jenne	Polysorbate 20	17021310	1
Kehr	Polysorbate 20	17021303	1
Kehr	Polysorbate 20	17325413	2
L10	Polysorbate 20	17021303	1
L12	Polysorbate 20	17325410	1
Lamotte/Alliance	Polysorbate 20	15323912	1
Nachprüfung	Polysorbate 20	111111	1
Nachprüfung	Polysorbate 20	123456	1
Noweda	Polysorbate 20	12303016	1
Noweda	Polysorbate 20	15323902	1
Noweda	Polysorbate 20	16233506	1
Caelo	Polysorbate 20	11117205	2
Caelo	Polysorbate 20	1523902	1
Phoenix	Polysorbate 20	13086517	1
Phoenix	Polysorbate 20	17021303	2
Phönix	Polysorbate 20	14019410	2
Phönix	Polysorbate 20	14365116	1
Phönix	Polysorbate 20	16233501	1
Phönix	Polysorbate 20	1735301	1
Phönix Gotha	Polysorbate 20	11347701	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Polysorbate 20	13297005	1
Phönix Gotha	Polysorbate 20	14365116	1
Caelo	Polysorbate 20	11347707	4
Sanacorp	Polysorbate 20	12345	1
Sanacorp	Polysorbate 20	11347711	1
Sanacorp	Polysorbate 20	12303006	1
Sanacorp	Polysorbate 20	13086509	2
Sanacorp	Polysorbate 20	13086517	1
Sanacorp	Polysorbate 20	4/AKD1	1
Sanacorp	Polysorbate 20	14019410	1
Sanacorp	Polysorbate 20	16114503	1
Sanacorp	Polysorbate 20	17021303	1
Sanacorp	Polysorbate 20	17325413	2
Sanacorp, 16.08.2016, 4...	Polysorbate 20	16114502	1
VDL	Polysorbate 20	11347707	1
VDL	Polysorbate 20	13297005	1
VDL;4,39EUR;23.03.15	Polysorbate 20	14365105	1
WE:31.03.2016 Sanacorp	Polysorbate 20	15323902	2
Caelo	Polysorbate 60	15067408	12
Caelo	Polysorbate 60	15292906	5
Caelo	Polysorbate 60	17025804	2
Caelo	Polysorbate 60	17099901	8
Caelo	Polysorbate 60	16177106	1
Caelo	Polysorbate 60	17099903	3
Caelo	Polysorbate 60	18005903	2
Caelo	Polysorbate 60	18005909	3
Caelo	Polysorbate 60	15067407	2
Caelo	Polysorbate 60	12133602	1
Caelo	Polysorbate 60	18005910	1
Caelo	Polysorbate 60	14027103	1
Caelo	Polysorbate 60	18005907	2
Caelo	Polysorbate 60	13098006	1
Caelo	Polysorbate 60	15067401	4
Caelo	Polysorbate 60	1805909	1
Caelo	Polysorbate 60	16177104	2
Caelo	Polysorbate 60	15067409	2
Caelo	Polysorbate 60	13258902	5
Caelo	Polysorbate 60	16007302	10
Caelo	Polysorbate 60	17099905	2
Caesar & Loretz GmbH	Polysorbate 60	18029208	1
Caesar&Loretz GmbH	Polysorbate 60	15067409	1
Ebert-Jacobi	Polysorbate 60	1617106	1
Gehe	Polysorbate 60	16177104	1
Gehe am 06.02.2014	Polysorbate 60	13258902	1
Sanacorp	Polysorbate 60	17099905	1
Sanacorp	Polysorbate 60	18005909	1
Caelo	Polysorbate 60	12133611	2
Caelo	Lauromacrogol 400	13095802	9
Caelo	Lauromacrogol 400	13340701	6
Caelo	Lauromacrogol 400		6
Euro OTC	Lauromacrogol 400	1610034	1
Euro OTC	Lauromacrogol 400		1
Fagron	Lauromacrogol 400	16E18-B04-326089	8
Gepepharm GmbH/Gehe	Lauromacrogol 400		1
Sanacorp	Lauromacrogol 400		1
Caelo	Macrogol 20 glycerol monoste...	14033701	2
Fagron	Macrogol 20 glycerol monoste...	13H09-N06	5
Caelo	Macrogol 4 lauryl ether	16100205	12
Caelo	Macrogol 4 lauryl ether	14054401	8
Caelo	Macrogol 4 lauryl ether	14225301	3

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Supplier	Substance	Batch	Spectra
Caelo	Macrogolglycerol hydroxystea...	14283805	6
Caelo	Macrogolglycerol hydroxystea...	14283808	7
	Macrogolglycerol hydroxystea...	13D23-N03	1
Fagron	Macrogolglycerol hydroxystea...	12L06-N02	13
Caelo	Polysorbate 20	14019413	1
Caelo	Polysorbate 20	14365105	17
	Polysorbate 20	14019413	1
Caelo	Polysorbate 60	14027102	1

- 133 740 spectra from 703 *Apo-Ident* customers from a total of 34 462 batches from a further 334 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Lauromacrogols* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Lauromacrogols* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1318	0	55 041
Type B	0	1044	16	68 414
Type C	0	4567	46	133 740

The substance/substance group *Lauromacrogols* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.5448 %)
Type B	100.0000 % (> 99.9653 %)	98.4906 % (> 98.2075 %)
Type C	100.0000 % (> 99.6452 %)	99.0028 % (> 98.9378 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Lauromacrogols* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Polysorbate 80	11.76	—
Macrogol-2-laurylether	15.60	—
Macrogol 8 stearate type I	17.07	—
Macrogol ointment	19.13	—
Polyol fatty acid ester	21.34	—
Macrogolglycerol ricinoleate	23.38	—
Macrogols 400	44.57	—
Macrogols 300	50.14	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Lauromacrogols* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30594	32283	2.84	22.44
31025	32283	2.01	22.83
31372	31372	0.00	25.26
31768	31768	0.00	25.53
32283	32283	0.00	24.21
32816	32816	0.00	27.04
33058	33058	0.00	23.26
31381	31381	0.00	20.78
31583	31381	6.78	20.81
30765	30765	0.00	22.76
31608	31625	11.48	26.02
31625	31625	0.00	28.22
34702	34702	0.00	27.46
31324	31324	0.00	14.87
31033	34623	1.28	15.02
34338	34338	0.00	21.31
34623	34623	0.00	15.28
34331	34331	0.00	24.04
34469	34469	0.00	21.75
34081	34081	0.00	21.96
31323	31323	0.00	24.66
31697	34707	7.24	25.06
34707	34707	0.00	29.72
33888	33888	0.00	23.24
33216	31381	7.81	24.57
31182	31182	0.00	18.18
31469	31182	4.17	20.54
33323	33323	0.00	19.28
32824	32816	8.13	38.55
33324	33324	0.00	19.90

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Lavender oil / Clary sage oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30861-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Lavender oil / Clary sage oil; Clary sage oil; Lavender oil; Oleum lavendula officinalis; Oleum salviae sclarea

Special notes

When selecting the *Lavender oil / Clary sage oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Clary sage oil	2	2	2
Lavender oil	11	10	357

Second-stage model

For differentiation of the substance/substance group *Lavender oil* / *Clary sage oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Lavender oil* / *Clary sage oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Clary sage oil	13334802	31413	40	1509218
Caelo	Clary sage oil	1431102	31668	60	20141031
Caelo	Lavender oil	12201206	30861	40	20120721
Caelo	Lavender oil	12201213	31237	30	20120721
Caelo	Lavender oil	12334514	31238	30	20121120
Caelo	Lavender oil	13252605	31416	40	20130802
Caelo	Lavender oil	13252207	31422	60	20130802
Euro OTC	Lavender oil	1312008-01	31528	60	AR-15-FG-000438-01
Euro OTC	Lavender oil	1507031	31721	60	0000010673
Euro OTC	Lavender oil	1510040	31800	60	20151119*
Euro OTC	Lavender oil	1608026	32710	40	20160902*
Fagron	Lavender oil	13D24-N01	31223	40	AR-15-FG-009308-01
Fagron	Lavender oil	15I03-B01-314158	32996	40	20150916

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 600 spectra of 13 reference samples from the substance/substance group *Lavender oil* / *Clary sage oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 13 different batches.
- 55759 spectra from a total of 1103 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 480 spectra of 12 reference samples from the substance/substance group *Lavender oil / Clary sage oil*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Clary sage oil	16269902	33281	40
Caelo	Clary sage oil	171087	33911	40
Caelo	Lavender oil	162922	32684	40
Caelo	Lavender oil	191847	34612	40
Caelo	Lavender oil	192713	34724	40
Euro OTC	Lavender oil	1601053	31997	40
Euro OTC	Lavender oil	1606004	32458	40
Euro OTC	Lavender oil	1610029	32834	40
Euro OTC	Lavender oil	1701005	32986	40
Euro OTC	Lavender oil	1706003	33597	40
Euro OTC	Lavender oil	1710038	33846	40
Euro OTC	Lavender oil	1808034	34213	40

- 68994 spectra from a total of 1490 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1038 spectra from 301 *Apo-Ident* customers from 370 batches from the substance/substance group *Lavender oil / Clary sage oil*.
- Among them are spectra of independent samples from 357 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Primavera/Phoenix	Clary sage oil	416L25	1
Taoasis	Clary sage oil	1700-125289	1
ACM	Lavender oil	4683Pos2	1
AHC 22.08.13 EK5,83 25ml	Lavender oil	12334516	1
AHD	Lavender oil	15363302	1
AHD	Lavender oil	16292214	1
AHD 15.10.14 EK 5,76	Lavender oil	13252220	1
AHD, 25.11.13	Lavender oil	13G11-N04	1
Bombastus	Lavender oil	311261	3
Anzag 10.04.13 ek: 5,83EUR	Lavender oil	12334510	1
Anzag 10.04.13 ek: 9,57EUR	Lavender oil	273725	1
Anzag 15.11.2012	Lavender oil	270560	1
Bombastus	Lavender oil	272797	4
Bergland	Lavender oil	K700033	1

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Supplier	Substance	Batch	Spectra
Bergland Pharma / Anzag	Lavender oil	K051367	1
Bombastus	Lavender oil	18005208	1
Bombastus	Lavender oil	273007	1
Bombastus	Lavender oil	273980	2
Bombastus	Lavender oil	276644	1
Bombastus	Lavender oil	274960	1
Bombastus	Lavender oil	276783	2
Bombastus	Lavender oil	279919	6
Bombastus	Lavender oil	281214	1
Bombastus	Lavender oil	281980	1
Bombastus	Lavender oil	287254	3
Bombastus	Lavender oil	290711	1
Bombastus	Lavender oil	277773	1
Bombastus	Lavender oil	295873	1
Bombastus	Lavender oil	303335	2
Bombastus	Lavender oil	311260	1
Bombastus	Lavender oil	288979	5
Bombastus	Lavender oil	297733	2
Bombastus	Lavender oil	273725	1
Bombastus	Lavender oil	275898	1
Bombastus	Lavender oil	307666	1
Bombastus	Lavender oil	284486	2
Bombastus	Lavender oil	311562	5
Bombastus	Lavender oil	303303	2
Bombastus	Lavender oil	300666	3
Bombastus	Lavender oil	180004761	1
Bombastus	Lavender oil	297007	3
Bombastus	Lavender oil	295738	3
Bombastus	Lavender oil	308745	2
Bombastus	Lavender oil	293661	4
Bombastus	Lavender oil	295593	3
Bombastus	Lavender oil	301109	1
Caelo	Lavender oil	12334516	5
Caelo	Lavender oil	13252220	9
Caelo	Lavender oil	7111403	1
Caelo	Lavender oil	14218310	2
Caelo	Lavender oil	11053709	3
Caelo	Lavender oil	11221308	1
Caelo	Lavender oil	3091207	1
Caelo	Lavender oil	16101203	1
Caelo	Lavender oil	12056802	4
Caelo	Lavender oil	4110E-01990	1
Caelo	Lavender oil	213A-01990	1
Caelo	Lavender oil	12056822	9
Caelo	Lavender oil	12334501	6
Caelo	Lavender oil	12H15-N01	4
Caelo	Lavender oil	12334510	7
Caelo	Lavender oil	276783	1
Caelo	Lavender oil	12334507	3
Caelo	Lavender oil	13071302	1
Caelo	Lavender oil	12081301	1
Caelo	Lavender oil	15081301	1
Caelo	Lavender oil	30081301	1
Caelo	Lavender oil	1245	1
Caelo	Lavender oil	1234514	2
Caelo	Lavender oil	123344514	1
Caelo	Lavender oil	3011401	1
Caelo	Lavender oil	1021403	1
Caelo	Lavender oil	13133715	13
Caelo	Lavender oil	13252202	7

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	17051404	1
Caelo	Lavender oil	2189	1
Caelo	Lavender oil	13252206	3
Caelo	Lavender oil	13252225	4
Caelo	Lavender oil	13252611	2
Caelo	Lavender oil	15043505	5
Caelo	Lavender oil	15278101	8
Caelo	Lavender oil	15363304	5
Caelo	Lavender oil	31031501	1
Caelo	Lavender oil	17041502	1
Caelo	Lavender oil	15043520	3
Caelo	Lavender oil	15043525	11
Caelo	Lavender oil	15363001	5
Caelo	Lavender oil	1510040-01	2
Caelo	Lavender oil	123456	1
Caelo	Lavender oil	559621	1
Caelo	Lavender oil	15363004	7
Caelo	Lavender oil	15363303	4
Caelo	Lavender oil	16023002	10
Caelo	Lavender oil	16023001	10
Caelo	Lavender oil	911624	1
Caelo	Lavender oil	16023017	12
Caelo	Lavender oil	18031703	1
Caelo	Lavender oil	16023014	3
Caelo	Lavender oil	15363007	2
Caelo	Lavender oil	8061702	1
Caelo	Lavender oil	15363011	1
Caelo	Lavender oil	15363016	1
Caelo	Lavender oil	26081707	1
Caelo	Lavender oil	308745	1
Caelo	Lavender oil	15111741	1
Caelo	Lavender oil	1706003-01	3
Caelo	Lavender oil	16H01-B04-335775	1
Caelo	Lavender oil	15363019	3
Caelo	Lavender oil	17132701	3
Caelo	Lavender oil	17132711	18
Caelo	Lavender oil	16H01-B04	1
Caelo	Lavender oil	30041807	1
Caelo	Lavender oil	16H01-B04-337333	1
Caelo	Lavender oil	16H01-B04-338189	1
Caelo	Lavender oil	16081806	1
Caelo	Lavender oil	30081810	1
Caelo	Lavender oil	30081811	1
Caelo	Lavender oil	18128204	3
Caelo	Lavender oil	31101803	1
Caelo	Lavender oil	17G20-B07-342691	1
Caelo	Lavender oil	18B26-B02-351972	1
Caelo	Lavender oil	311562	1
Caelo	Lavender oil	18001512	1
Caelo	Lavender oil	18326211	1
Caelo	Lavender oil	12056821	2
Caelo	Lavender oil	18326201	1
Caelo	Lavender oil	12056816	2
Caelo	Lavender oil	13252212	1
Caelo	Lavender oil	16292211	14
Caelo	Lavender oil	16023015	1
Caelo	Lavender oil	1536007	1
Caelo	Lavender oil	16292206	11
Caelo	Lavender oil	13252603	1
Caelo	Lavender oil	15363013	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	16292216	6
Caelo	Lavender oil	1712070L/16292216	1
Caelo	Lavender oil	13252224	1
Caelo	Lavender oil	15043516	1
Caelo	Lavender oil	15278102	2
Caelo	Lavender oil	L12334511	1
Caelo	Lavender oil	13252607	1
Caelo	Lavender oil	14A07-B02-289955	1
Caelo	Lavender oil	1414-B02-302035	1
Caelo	Lavender oil	12056809	15
Caelo	Lavender oil	1234501	1
Caelo	Lavender oil	13133703	12
Caelo	Lavender oil	13252218	1
Caelo	Lavender oil	12201215	1
Caelo	Lavender oil	305280	1
Caelo	Lavender oil	12H15-No1	1
Caelo	Lavender oil	15363002	1
Caelo	Lavender oil	15363310	11
Caelo	Lavender oil	16292205	13
Caelo	Lavender oil	11221315	1
Caelo	Lavender oil	17G20-B07-342692	1
Caelo	Lavender oil	1421831	1
Caelo	Lavender oil	16292217	1
Caelo	Lavender oil	780162	1
Caelo	Lavender oil	12056804	2
Caelo	Lavender oil	9229520	2
Caelo	Lavender oil	18326213	1
Caelo	Lavender oil	87 (15363016)	1
Caelo	Lavender oil	16292214	1
Caelo	Lavender oil	15363305	2
Caelo	Lavender oil	17132712	2
Caelo	Lavender oil	12334503	3
Caelo	Lavender oil	1313375	1
Caelo	Lavender oil	13252204	8
Caelo	Lavender oil	14218314	9
Caelo	Lavender oil	14218322	6
Caelo	Lavender oil	15043512	1
Caelo	Lavender oil	14218324	4
Caelo	Lavender oil	15043526	7
Caelo	Lavender oil	15363302	17
Caelo	Lavender oil	17244101	4
Caelo	Lavender oil	18326207	1
Caelo	Lavender oil	18219012	7
Caelo	Lavender oil	273289	1
Caelo	Lavender oil	13202218	1
Caelo	Lavender oil	14218301	3
Caelo	Lavender oil	14218311	7
Caelo	Lavender oil	13252621	1
Caelo	Lavender oil	15043518	4
Caelo	Lavender oil	16A07-B01-32195	1
Caelo	Lavender oil	16292213	1
Caelo	Lavender oil	170531810	1
Caelo	Lavender oil	162992216	1
Caelo	Lavender oil	1710038-01	2
Caelo	Lavender oil	18128202	11
Caelo	Lavender oil	18219004	4
Caelo	Lavender oil	13252201	5
Caelo	Lavender oil	15043504	6
Caelo	Lavender oil	16H01-B04-336278	4
Caelo	Lavender oil	16A07-B01-32196	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	13133706	19
Caelo	Lavender oil	15C26-B02-310275	5
Caelo	Lavender oil	15C26-B02-310775	2
Caelo	Lavender oil	305279	2
Caelo	Lavender oil	17132707	1
Caelo	Lavender oil	17132710	4
Caelo	Lavender oil	12056814	5
Caelo	Lavender oil	12201201	1
Caelo	Lavender oil	13133705	2
Caelo	Lavender oil	14218321	1
Caelo	Lavender oil	16023003	5
Caelo	Lavender oil	16023018	1
Caelo	Lavender oil	16292209	2
Caecolo / Phönix	Lavender oil	18326207	1
Caesar & Loretz GmbH D...	Lavender oil	12334510	2
Caesar & Loretz GmbH, 4...	Lavender oil	12056804	1
Caesar & Loretz GmbH, 4...	Lavender oil	13133706	1
Caesar & Loretz GmbH, 4...	Lavender oil	11355	1
Caesar & Loretz/ Noweda	Lavender oil	12056816	1
Caelo	Lavender oil	13B22-No2	1
Euro OTC	Lavender oil	1601053-01	1
Euro OTC	Lavender oil	1210031-01	1
Euro OTC	Lavender oil	12334514	2
Euro OTC	Lavender oil	1610029-01	3
Euro OTC	Lavender oil	1701005-01	5
Euro OTC	Lavender oil	1706003-01	1
Euro OTC	Lavender oil	1503006-01	2
Euro OTC	Lavender oil	15B10-B07	1
Euro OTC	Lavender oil	1507031-01	1
Euro OTC	Lavender oil	15043525	2
Euro OTC	Lavender oil	1808034-02	1
Euro OTC	Lavender oil	1302023-01	1
Euro OTC	Lavender oil	160105301	1
Euro OTC	Lavender oil	1510040-01	2
Euro OTC	Lavender oil	16292214	1
Fagron	Lavender oil	15C26-B02-314159	3
Fagron	Lavender oil	11K17-N06	1
Fagron	Lavender oil	652607	1
Fagron	Lavender oil	12B16-N02	4
Fagron	Lavender oil	612211990	2
Fagron	Lavender oil	1601311990	1
Fagron	Lavender oil	13B22-N02	11
Fagron	Lavender oil	13D24-N01	1
Fagron	Lavender oil	13D24N01	3
Fagron	Lavender oil	13D24-0003	1
Fagron	Lavender oil	13E30-B01-285543	2
Fagron	Lavender oil	13G11N04	1
Fagron	Lavender oil	13J11-B03-289423	6
Fagron	Lavender oil	13J11B03	1
Fagron	Lavender oil	759243	1
Fagron	Lavender oil	13J11-B03-289424	1
Fagron	Lavender oil	780162	1
Fagron	Lavender oil	13/11-B03-289423	1
Fagron	Lavender oil	893241	3
Fagron	Lavender oil	15I03-B01-893241	1
Fagron	Lavender oil	14a07-B02	1
Fagron	Lavender oil	4A07-B02	1
Fagron	Lavender oil	14A07-B02-294931	4
Fagron	Lavender oil	14D14B02	1
Fagron	Lavender oil	794323	1

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Supplier	Substance	Batch	Spectra
Fagron	Lavender oil	14A07B02	1
Fagron	Lavender oil	14D14-B02-302035	1
Fagron	Lavender oil	14D14-B02-302034	3
Fagron	Lavender oil	140120277773	1
Fagron	Lavender oil	15C26-B02-310775	1
Fagron	Lavender oil	15CV26-B02-309881	1
Fagron	Lavender oil	15B10-B07-304079	2
Fagron	Lavender oil	15B10-B07-309880	1
Fagron	Lavender oil	867858	1
Fagron	Lavender oil	16A07-B01	3
Fagron	Lavender oil	15I03-B01-317686	1
Fagron	Lavender oil	15I03-B01-317686	2
Fagron	Lavender oil	16A07-B01-322846	2
Fagron	Lavender oil	16A07-B01-32195	1
Fagron	Lavender oil	15/03-B01-317686	1
Fagron	Lavender oil	16A07-B01-321296	1
Fagron	Lavender oil	16H01-B04-329684	1
Fagron	Lavender oil	17G20-B07-344584	4
Fagron	Lavender oil	17G20-B07-342693	1
Fagron	Lavender oil	16H01-B04-336278	1
Fagron	Lavender oil	18B26-B02	1
Fagron	Lavender oil	17G20-B07-349417	1
Fagron	Lavender oil	18826-B02-352705	2
Fagron	Lavender oil	18K19-B01-356766	1
Fagron	Lavender oil	16A07-B01-321295	3
Fagron	Lavender oil	11F09-N07	1
Fagron	Lavender oil	12D05-N02	5
Fagron	Lavender oil	13G11-N04	12
Fagron	Lavender oil	13E30-B01-285544	4
Fagron	Lavender oil	13J11-B03-780162	1
Fagron	Lavender oil	16H01-B04-329685	5
Fagron	Lavender oil	12H15-N01	8
Fagron	Lavender oil	14A07-B02-289955	2
Fagron	Lavender oil	88(18B26-B02-352706)	1
Fagron	Lavender oil	12334516	2
Fagron	Lavender oil	13B22N02	2
Fagron	Lavender oil	13J11-B03	4
Fagron	Lavender oil	13J11-BC3-289423	1
Fagron	Lavender oil	14A07-B02	4
Fagron	Lavender oil	16H01-B04-329684-201	1
Fagron	Lavender oil	18B26-B02-355045	1
Fagron	Lavender oil	911624	2
Fagron	Lavender oil	14D-B02-302034	1
Fagron	Lavender oil	1826-B02-355045	1
Fagron	Lavender oil	15810-B07-309880	2
Fagron	Lavender oil	13097R	1
Fagron	Lavender oil	16H01-B04	2
Fagron	Lavender oil	5013I1990	1
Fagron	Lavender oil	13e30-b01-285544	1
Fagron	Lavender oil	18B-26B02-351906	1
Fagron	Lavender oil	19B20-B01-191699	2
Fagron	Lavender oil	16A07-B01-325888	2
Fagron	Lavender oil	16H01-B04-335505	4
Fagron	Lavender oil	14d14-b02	1
Fagron	Lavender oil	15B10-B07-304078	2
Fagron	Lavender oil	15I03-B01-317687	3
Fagron	Lavender oil	1503B01317685	1
Fagron	Lavender oil	15I03-B01-314160	1
Fagron	Lavender oil	15/03-B01-317687	1
Fagron	Lavender oil	16A07-B01-322523	1

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Supplier	Substance	Batch	Spectra
Fagron	Lavender oil	16H01-B04-327861	4
Fagron	Lavender oil	16H01-B04-335506	2
Fagron	Lavender oil	17G20-B07-349418	1
Fagron	Lavender oil	13E30-B01	4
Fagron	Lavender oil	14A07-B02-294930	1
Fagron	Lavender oil	14D14-B02	5
Fagron	Lavender oil	15/03-B01-317685	1
Fagron	Lavender oil	16A07-B01-324336	1
Fagron	Lavender oil	16H01-B04-332352	2
Fagron	Lavender oil	192900-0004	1
Fagron	Lavender oil	18B26-B02-351972	2
Fagron	Lavender oil	17G20-B07342691	1
Fagron	Lavender oil	15b10-b07	1
Fagron	Lavender oil	15/03-B01-314158	3
Fagron	Lavender oil	15C26-B02	1
Fargon	Lavender oil	16A07-B01	1
Fiebi 29.09.12 ek:8,95	Lavender oil	271465	1
Fiebig	Lavender oil	266070	1
Frey & Lau GmbH/Phoenix	Lavender oil	14A07-B02-289955	1
Gatt-Koller	Lavender oil	1900739	1
gehe	Lavender oil	15363019	1
Gehe	Lavender oil	11221301	1
Gehe	Lavender oil	12H15-N01	2
Gehe	Lavender oil	13252601	1
Gehe	Lavender oil	301109	1
Gehe	Lavender oil	306049	1
GEHE	Lavender oil	17132710	1
GEHE 17.05.2014	Lavender oil	13133703	1
Caelo	Lavender oil	12056815	1
Caelo	Lavender oil	16023002/1270217	1
Gehe/EuRo	Lavender oil	1601053-01	1
geile	Lavender oil	12334516	1
Hedinger	Lavender oil	273007	1
InfectoPharm/Noweda	Lavender oil	297733	1
Jenne	Lavender oil	192900-0003	1
Kehr	Lavender oil	16292216	1
Kögl	Lavender oil	357910164416	1
Kögl	Lavender oil	225506172617	1
Kögl	Lavender oil	20172255	2
Kögl	Lavender oil	180050	1
Kögl	Lavender oil	1802634	3
L10	Lavender oil	17244101	4
L10/Bambastus	Lavender oil	301109	1
L12	Lavender oil	16A07-B01-322523	2
L12	Lavender oil	18128204	1
Fagron	Lavender oil	16A07-B01-321296	5
Bombastus	Lavender oil	305279	1
Lamotte / Gehe	Lavender oil	13E30-B01-285544	1
Noweda	Lavender oil	11221315	2
Noweda	Lavender oil	11221309	1
Noweda	Lavender oil	284691	1
Noweda	Lavender oil	13252201	1
Noweda	Lavender oil	293661	1
Noweda	Lavender oil	15363011	1
Caelo	Lavender oil	13252616	4
Caelo	Lavender oil	480435519	1
Caelo	Lavender oil	1536016	1
Phoenix	Lavender oil	17G20-B07-342691	1
PHOENIX 05.05.2014	Lavender oil	130202301	1
phönix	Lavender oil	759243	1

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Supplier	Substance	Batch	Spectra
Phönix	Lavender oil	652607	1
Phönix	Lavender oil	11L22-N16	1
Phönix	Lavender oil	12D05-N02	1
Phönix	Lavender oil	13252220	2
PHÖNIX	Lavender oil	17132711	1
Caelo	Lavender oil	18219001	4
Bombastus	Lavender oil	308369	2
Caelo	Lavender oil	617A-01990	1
Fagron	Lavender oil	11L22-N16	4
Fagron	Lavender oil	13B22-N02	1
primavera	Lavender oil	1480513	1
Primavera	Lavender oil	8508143	1
Primavera/Phoenix	Lavender oil	163H26	1
PVL	Lavender oil	1401110	1
Sanacorp	Lavender oil	12056821	1
Sanacorp	Lavender oil	12334513	1
Sanacorp	Lavender oil	13133703	2
Sanacorp	Lavender oil	13G11-N04	1
Sanacorp	Lavender oil	15278102	1
Sanacorp	Lavender oil	308369	2
Sanacorp	Lavender oil	16292214	1
Sanacorp	Lavender oil	18128204	2
Caelo	Lavender oil	15043519	3
Sanacorp WE: 09.04.18 E...	Lavender oil	17132710	1
Sanacorp WE:15.04.16 EK...	Lavender oil	15278101	1
Sanacorp WE11.04.17 -15...	Lavender oil	16023018	1
Bombastus	Lavender oil	18002108	1
Caelo	Lavender oil	16292207	1
Caelo	Lavender oil	949399	1
Caelo	Lavender oil	12334513	12
Taoasis	Lavender oil	30560-108326	1
Taoasis	Lavender oil	30560-110088	1
Taoasis	Lavender oil	30560-111623	1
Taoasis	Lavender oil	30560-113019	1
Taoasis	Lavender oil	30560-113018	1
Taoasis	Lavender oil	130201-115396	1
Taoasis	Lavender oil	130201-115678	1
Taoasis	Lavender oil	130201-116395	2
Taoasis	Lavender oil	130201-116899	6
Taoasis	Lavender oil	4651010-118091	1
Taoasis	Lavender oil	4651010118091	1
Taoasis	Lavender oil	L0G2014-119488	2
Taoasis	Lavender oil	30560-111202	1
Taoasis	Lavender oil	22015-122102	1
Taoasis	Lavender oil	L0G2014-121513	2
Taoasis	Lavender oil	43703-122404	1
Taoasis	Lavender oil	L0G2014-120278	1
Taoasis	Lavender oil	22015-122995	2
Taoasis	Lavender oil	66179-857	2
Taoasis	Lavender oil	66179-128588	1
Taoasis	Lavender oil	2015-2395	1
Taoasis	Lavender oil	16082301/2016-2908	1
Taoasis GmbH	Lavender oil	30560	1
Taoasis GmbH/ Taoasis	Lavender oil	S05-18-8043	2
Taoasis/Noweda	Lavender oil	130201-117994	1
Taoasis/Taoasis	Lavender oil	30560-112844	1
VDI;15.12.14;20.19EUR	Lavender oil	12201213	1
VDI;7,53EUR;13.4.15	Lavender oil	13252611	2
Bombastus	Lavender oil		1
Caelo	Lavender oil	13252605	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	12201206	2
Caelo	Lavender oil	12334514	6
Caelo	Lavender oil	13252207	4
Caelo	Lavender oil		1
Caelo	Lavender oil	12201213	2
Fagron	Lavender oil	13D24-N01	3
Noweda	Lavender oil		1
Phönix	Lavender oil		1

- 137 315 spectra from 703 *Apo-Ident* customers from a total of 34 931 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Lavender oil / Clary sage oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Lavender oil / Clary sage oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	600	0	55 759
Type B	0	480	0	68 994
Type C	0	1010	28	137 315

The substance/substance group *Lavender oil / Clary sage oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.7500 %)
Type C	100.0000 % (> 99.6452 %)	97.3025 % (> 97.0135 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Lavender oil / Clary sage oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Coriander oil	32.25	—
Bergamot oil	44.37	—
Ylang-ylang oil	49.50	—
Acorus oil	52.55	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Lavender oil* / *Clary sage oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31413	31413	0.00	51.57
31668	31413	7.05	54.63
30861	32710	18.07	56.72
31237	32710	17.33	63.59
31238	31721	2.60	54.59
31416	32710	18.21	58.73
32996	31721	3.35	50.93
31223	31223	0.00	56.59
31422	31223	1.94	57.46
31528	31528	0.00	60.57
31721	31721	0.00	58.61
31800	31800	0.00	57.46
32710	32710	0.00	58.19

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Liniment ointments**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 10002320-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Liniment ointments; Hydrated liniment SR/DAC (NRF p.40); Linimentum aquosum N (NRF S. 39);
Linimentum aquosum SR/DAC (NRF S.40); Non-ionic hydrous liniment SR/DAC (NRF P. 39)

Special notes

When selecting the *Liniment ointments* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Hydrated liniment SR/DAC (NRF p.40)	8	4	514
Non-ionic hydrous liniment SR/DAC (NRF P. 39)	8	27	579

Second-stage model

For differentiation of the substance/substance group *Liniment ointments* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Liniment ointments*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Hydrated linimen...	73A041113	31170	40	1405106
apomix	Hydrated linimen...	08B010216	32305	40	20160203
apomix	Hydrated linimen...	32B090516	32727	30	20160509
Caelo	Hydrated linimen...	14063201	31438	40	20140513
Caelo	Hydrated linimen...	160217	31938	60	20160127*
Caelo	Hydrated linimen...	153244	31939	60	20150922*
Caelo	Hydrated linimen...	160217	32089	40	20160127*
Leyh Pharma	Hydrated linimen...	124611	30982	80	20121123
Leyh Pharma	Hydrated linimen...	191511	34505	40	20190423
Bombastus	Non-ionic hydrou...	282335	31169	40	1405256
Bombastus	Non-ionic hydrou...	297176	31830	60	20150909
Caelo	Non-ionic hydrou...	14134601	31476	40	20140516
Caelo	Non-ionic hydrou...	15420901	31827	60	20151221
Caelo	Non-ionic hydrou...	153267	31943	60	20150922*
Caelo	Non-ionic hydrou...	153342	31945	60	20151008*
Caelo	Non-ionic hydrou...	153342	31946	60	20151008*
Caelo	Non-ionic hydrou...	160216	31947	60	20160127*
Caelo	Non-ionic hydrou...	161138	32090	40	20160415*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 910 spectra of 18 reference samples from the substance/substance group *Liniment ointments*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 16 different batches.
- 55 449 spectra from a total of 1100 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1950 spectra of 49 reference samples from the substance/substance group *Liniment ointments*.
- Among them are spectra of independent samples from 31 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydrated liniment SR/DAC (NR...	161824	32395	40
Caelo	Hydrated liniment SR/DAC (NR...	171989	33572	40
Caelo	Hydrated liniment SR/DAC (NR...	173334	34014	40
Caelo	Hydrated liniment SR/DAC (NR...	181848	34158	40
Caelo	Non-ionic hydrous liniment S...	153341	31944	60
Caelo	Non-ionic hydrous liniment S...	161139	32091	40
Caelo	Non-ionic hydrous liniment S...	161140	32092	40
Caelo	Non-ionic hydrous liniment S...	161767	32398	40
Caelo	Non-ionic hydrous liniment S...	161768	32401	40
Caelo	Non-ionic hydrous liniment S...	162035	32404	40
Caelo	Non-ionic hydrous liniment S...	162181	32605	40
Caelo	Non-ionic hydrous liniment S...	162182	32609	40
Caelo	Non-ionic hydrous liniment S...	162183	32611	40
Caelo	Non-ionic hydrous liniment S...	162584	32615	40
Caelo	Non-ionic hydrous liniment S...	162585	32616	40
Caelo	Non-ionic hydrous liniment S...	163188	32874	40
Caelo	Non-ionic hydrous liniment S...	171173	33400	40
Caelo	Non-ionic hydrous liniment S...	171444	33401	40
Caelo	Non-ionic hydrous liniment S...	171446	33402	40
Caelo	Non-ionic hydrous liniment S...	171445	33403	40
Caelo	Non-ionic hydrous liniment S...	172088	33569	40
Caelo	Non-ionic hydrous liniment S...	172089	33570	40
Caelo	Non-ionic hydrous liniment S...	172090	33571	40
Caelo	Non-ionic hydrous liniment S...	172611	33746	40
Caelo	Non-ionic hydrous liniment S...	172612	33747	40
Caelo	Non-ionic hydrous liniment S...	173125	34013	40
Caelo	Non-ionic hydrous liniment S...	180507	34146	40
Caelo	Non-ionic hydrous liniment S...	180867	34147	40
Caelo	Non-ionic hydrous liniment S...	181744	34148	40
Caelo	Non-ionic hydrous liniment S...	182331	34254	40
Caelo	Non-ionic hydrous liniment S...	182789	34355	40
apomix	Hydrated liniment SR/DAC (NR...	32B090516	32727 [†]	10
Caelo	Hydrated liniment SR/DAC (NR...	161824	32396	40
Caelo	Hydrated liniment SR/DAC (NR...	161824	32397	40
Caelo	Non-ionic hydrous liniment S...	161767	32399	40
Caelo	Non-ionic hydrous liniment S...	161767	32400	40
Caelo	Non-ionic hydrous liniment S...	161768	32402	40
Caelo	Non-ionic hydrous liniment S...	161768	32403	40
Caelo	Non-ionic hydrous liniment S...	162035	32405	40
Caelo	Non-ionic hydrous liniment S...	161139	32604	40
Caelo	Non-ionic hydrous liniment S...	162181	32606	40
Caelo	Non-ionic hydrous liniment S...	162181	32607	40
Caelo	Non-ionic hydrous liniment S...	162181	32608	40
Caelo	Non-ionic hydrous liniment S...	162182	32610	40
Caelo	Non-ionic hydrous liniment S...	162183	32612	40
Caelo	Non-ionic hydrous liniment S...	162183	32613	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Non-ionic hydrous liniment S...	162183	32614	40
Caelo	Non-ionic hydrous liniment S...	162585	32617	40
Caelo	Non-ionic hydrous liniment S...	162585	32618	40

- 67 524 spectra from a total of 1470 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 3140 spectra from 452 *Apo-Ident* customers from 1096 batches from the substance/substance group *Liniment ointments*.
- Among them are spectra of independent samples from 1063 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Hydrated liniment SR/DAC (NR...	18233003	1
Bombastus	Hydrated liniment SR/DAC (NR...	303961	3
Bombastus	Hydrated liniment SR/DAC (NR...	307265	6
Bombastus	Hydrated liniment SR/DAC (NR...	301992	2
Bombastus	Hydrated liniment SR/DAC (NR...	302930	2
AHD /LeyhPharma	Hydrated liniment SR/DAC (NR...	150321	1
AHD PKH	Hydrated liniment SR/DAC (NR...	62A021017	1
AHD/23.07.14/Leyh Pharma	Hydrated liniment SR/DAC (NR...	142231	1
Bombastus	Hydrated liniment SR/DAC (NR...	297054	1
Bombastus	Hydrated liniment SR/DAC (NR...	297053	2
AHD/Leyh Pharma/25.10.14	Hydrated liniment SR/DAC (NR...	144031	1
Bombastus	Hydrated liniment SR/DAC (NR...	294435	2
Allianc. Health. /Apomix	Hydrated liniment SR/DAC (NR...	297052	1
Allianc. Health. /Apomix	Hydrated liniment SR/DAC (NR...	299338	1
Bombastus	Hydrated liniment SR/DAC (NR...	289864	5
Euro OTC	Hydrated liniment SR/DAC (NR...	33A210513	1
AMH Niemann GmbH und Co. ...	Hydrated liniment SR/DAC (NR...	30B040515	1
AMH Niemann/Noweda	Hydrated liniment SR/DAC (NR...	83A021214	1
AMH Niemann/Noweda	Hydrated liniment SR/DAC (NR...	26A130415	1
AMH Niemann/Sanacorp	Hydrated liniment SR/DAC (NR...	46B260514	1
Angag Leyh	Hydrated liniment SR/DAC (NR...	4580715	1
Anzag	Hydrated liniment SR/DAC (NR...	74B081012	2
Anzag	Hydrated liniment SR/DAC (NR...	30B130513	1
Anzag	Hydrated liniment SR/DAC (NR...	33A190515	1
aopmix/Phoenix	Hydrated liniment SR/DAC (NR...	62A110814	1
apo	Hydrated liniment SR/DAC (NR...	56A240712	2
apomix	Hydrated liniment SR/DAC (NR...	6A180112	1
apomix	Hydrated liniment SR/DAC (NR...	60A020812	1
apomix	Hydrated liniment SR/DAC (NR...	56A240712	1
apomix	Hydrated liniment SR/DAC (NR...	65B290812	1
apomix	Hydrated liniment SR/DAC (NR...	69A120912	1

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[†]These spectra were recorded from material of the same package as the corresponding calibration spectra (*Type A*). Hence, these spectra are not independent and are not of *Type B*.

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Supplier	Substance	Batch	Spectra
apomix	Hydrated liniment SR/DAC (NR...	48A020712	1
apomix	Hydrated liniment SR/DAC (NR...	80A061112	1
apomix	Hydrated liniment SR/DAC (NR...	27B230413	1
apomix	Hydrated liniment SR/DAC (NR...	33A210513	1
apomix	Hydrated liniment SR/DAC (NR...	23A020413	1
apomix	Hydrated liniment SR/DAC (NR...	46B150713	1
apomix	Hydrated liniment SR/DAC (NR...	72B041113	1
apomix	Hydrated liniment SR/DAC (NR...	79A091213	1
apomix	Hydrated liniment SR/DAC (NR...	13A110214	2
apomix	Hydrated liniment SR/DAC (NR...	46B260514	1
apomix	Hydrated liniment SR/DAC (NR...	36A120514	1
apomix	Hydrated liniment SR/DAC (NR...	42A020614	1
apomix	Hydrated liniment SR/DAC (NR...	62A110814	1
apomix	Hydrated liniment SR/DAC (NR...	73B131014	1
apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
apomix	Hydrated liniment SR/DAC (NR...	88A161214	1
apomix	Hydrated liniment SR/DAC (NR...	88A061211	1
apomix	Hydrated liniment SR/DAC (NR...	12A150212	1
apomix	Hydrated liniment SR/DAC (NR...	63A120814	1
apomix	Hydrated liniment SR/DAC (NR...	3B130115	1
apomix	Hydrated liniment SR/DAC (NR...	2A120115	1
apomix	Hydrated liniment SR/DAC (NR...	10B160215	1
apomix	Hydrated liniment SR/DAC (NR...	37B010615	1
apomix	Hydrated liniment SR/DAC (NR...	46A290615	1
apomix	Hydrated liniment SR/DAC (NR...	68B210915	1
apomix	Hydrated liniment SR/DAC (NR...	66A210915	1
apomix	Hydrated liniment SR/DAC (NR...	81B071215	1
apomix	Hydrated liniment SR/DAC (NR...	61A010915	1
apomix	Hydrated liniment SR/DAC (NR...	14B220216	1
apomix	Hydrated liniment SR/DAC (NR...	19A070316	1
apomix	Hydrated liniment SR/DAC (NR...	428140616	1
apomix	Hydrated liniment SR/DAC (NR...	17A290216	1
apomix	Hydrated liniment SR/DAC (NR...	55A250716	1
apomix	Hydrated liniment SR/DAC (NR...	53B140716	1
apomix	Hydrated liniment SR/DAC (NR...	60A150816	1
apomix	Hydrated liniment SR/DAC (NR...	51A130716	1
apomix	Hydrated liniment SR/DAC (NR...	83B051216	1
apomix	Hydrated liniment SR/DAC (NR...	11A070217	1
apomix	Hydrated liniment SR/DAC (NR...	8A070217	1
apomix	Hydrated liniment SR/DAC (NR...	18B030417	2
apomix	Hydrated liniment SR/DAC (NR...	17B270317	1
apomix	Hydrated liniment SR/DAC (NR...	27A150517	1
apomix	Hydrated liniment SR/DAC (NR...	48A170717	1
apomix	Hydrated liniment SR/DAC (NR...	62A021017	1
apomix	Hydrated liniment SR/DAC (NR...	23A240417	1
apomix	Hydrated liniment SR/DAC (NR...	5A150118	1
apomix	Hydrated liniment SR/DAC (NR...	11A270218	1
apomix	Hydrated liniment SR/DAC (NR...	17A270318	2
apomix	Hydrated liniment SR/DAC (NR...	28B240518	1
apomix	Hydrated liniment SR/DAC (NR...	49A300718	1
apomix	Hydrated liniment SR/DAC (NR...	73B101218	1
apomix	Hydrated liniment SR/DAC (NR...	69B051118	1
Apomix	Hydrated liniment SR/DAC (NR...	35A290512	1
Apomix	Hydrated liniment SR/DAC (NR...	58A010812	1
Apomix	Hydrated liniment SR/DAC (NR...	83A071112	1
Apomix	Hydrated liniment SR/DAC (NR...	44A120612	1
Apomix	Hydrated liniment SR/DAC (NR...	72A011012	1
Apomix	Hydrated liniment SR/DAC (NR...	5A210113	1
Apomix	Hydrated liniment SR/DAC (NR...	69A120912	1
Apomix	Hydrated liniment SR/DAC (NR...	10A260213	1

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Supplier	Substance	Batch	Spectra
Apomix	Hydrated liniment SR/DAC (NR...	5A210110	1
Apomix	Hydrated liniment SR/DAC (NR...	21A180313	2
Apomix	Hydrated liniment SR/DAC (NR...	27A230413	1
Apomix	Hydrated liniment SR/DAC (NR...	33A210513	2
Apomix	Hydrated liniment SR/DAC (NR...	17B050313	1
Apomix	Hydrated liniment SR/DAC (NR...	36B270513	1
Apomix	Hydrated liniment SR/DAC (NR...	49B170713	1
Apomix	Hydrated liniment SR/DAC (NR...	90A171212	1
Apomix	Hydrated liniment SR/DAC (NR...	20B180313	1
Apomix	Hydrated liniment SR/DAC (NR...	48A170713	1
Apomix	Hydrated liniment SR/DAC (NR...	51A230713	2
Apomix	Hydrated liniment SR/DAC (NR...	42B240613	1
Apomix	Hydrated liniment SR/DAC (NR...	43A010713	1
Apomix	Hydrated liniment SR/DAC (NR...	56A120813	1
Apomix	Hydrated liniment SR/DAC (NR...	70A071013	2
Apomix	Hydrated liniment SR/DAC (NR...	77A251113	1
Apomix	Hydrated liniment SR/DAC (NR...	6A2000114	1
Apomix	Hydrated liniment SR/DAC (NR...	72B041113	1
Apomix	Hydrated liniment SR/DAC (NR...	62B050913	1
Apomix	Hydrated liniment SR/DAC (NR...	9A270114	1
Apomix	Hydrated liniment SR/DAC (NR...	25A310314	2
Apomix	Hydrated liniment SR/DAC (NR...	6A200114	1
Apomix	Hydrated liniment SR/DAC (NR...	3A070114	2
Apomix	Hydrated liniment SR/DAC (NR...	12B110214	1
Apomix	Hydrated liniment SR/DAC (NR...	13A110214	1
Apomix	Hydrated liniment SR/DAC (NR...	22A250314	1
Apomix	Hydrated liniment SR/DAC (NR...	34B080514	1
Apomix	Hydrated liniment SR/DAC (NR...	45A170614	1
Apomix	Hydrated liniment SR/DAC (NR...	61A110814	1
Apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
Apomix	Hydrated liniment SR/DAC (NR...	72A220914	1
Apomix	Hydrated liniment SR/DAC (NR...	76A271014	1
Apomix	Hydrated liniment SR/DAC (NR...	16A070312	2
Apomix	Hydrated liniment SR/DAC (NR...	76B1611012	1
Apomix	Hydrated liniment SR/DAC (NR...	79A091213	2
Apomix	Hydrated liniment SR/DAC (NR...	3B130115	1
Apomix	Hydrated liniment SR/DAC (NR...	80A241114	1
Apomix	Hydrated liniment SR/DAC (NR...	25B130415	1
Apomix	Hydrated liniment SR/DAC (NR...	10B160215	1
Apomix	Hydrated liniment SR/DAC (NR...	33A190515	1
Apomix	Hydrated liniment SR/DAC (NR...	64A140915	1
Apomix	Hydrated liniment SR/DAC (NR...	71A051015	1
Apomix	Hydrated liniment SR/DAC (NR...	85A281215	1
Apomix	Hydrated liniment SR/DAC (NR...	69A220915	1
Apomix	Hydrated liniment SR/DAC (NR...	45A270616	1
Apomix	Hydrated liniment SR/DAC (NR...	63B050916	1
Apomix	Hydrated liniment SR/DAC (NR...	64A050916	1
Apomix	Hydrated liniment SR/DAC (NR...	45A270606	1
Apomix	Hydrated liniment SR/DAC (NR...	74B111016	1
Apomix	Hydrated liniment SR/DAC (NR...	4576872	1
Apomix	Hydrated liniment SR/DAC (NR...	58A010816	1
Apomix	Hydrated liniment SR/DAC (NR...	1A020117	1
Apomix	Hydrated liniment SR/DAC (NR...	75B191016	1
Apomix	Hydrated liniment SR/DAC (NR...	14A150317	1
Apomix	Hydrated liniment SR/DAC (NR...	16A200317	1
Apomix	Hydrated liniment SR/DAC (NR...	28B160517	2
Apomix	Hydrated liniment SR/DAC (NR...	18B030417	1
Apomix	Hydrated liniment SR/DAC (NR...	11A270217	1
Apomix	Hydrated liniment SR/DAC (NR...	19B040417	1
Apomix	Hydrated liniment SR/DAC (NR...	42B030717	1

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Supplier	Substance	Batch	Spectra
Apomix	Hydrated liniment SR/DAC (NR...	59B180917	1
Apomix	Hydrated liniment SR/DAC (NR...	22A180417	1
Apomix	Hydrated liniment SR/DAC (NR...	31A290517	1
Apomix	Hydrated liniment SR/DAC (NR...	44A040717	1
Apomix	Hydrated liniment SR/DAC (NR...	39A190617	1
Apomix	Hydrated liniment SR/DAC (NR...	62A021017	1
Apomix	Hydrated liniment SR/DAC (NR...	75A271217	1
Apomix	Hydrated liniment SR/DAC (NR...	8A050218	1
Apomix	Hydrated liniment SR/DAC (NR...	74B271217	2
Apomix	Hydrated liniment SR/DAC (NR...	11A270218	1
Apomix	Hydrated liniment SR/DAC (NR...	20A100418	1
Apomix	Hydrated liniment SR/DAC (NR...	30A280518	1
Apomix	Hydrated liniment SR/DAC (NR...	16B270318	1
Apomix	Hydrated liniment SR/DAC (NR...	49A300718	1
Apomix	Hydrated liniment SR/DAC (NR...	40A030718	1
Apomix	Hydrated liniment SR/DAC (NR...	42B090718	1
Apomix	Hydrated liniment SR/DAC (NR...	56A130818	1
Apomix	Hydrated liniment SR/DAC (NR...	43A090718	4
Apomix	Hydrated liniment SR/DAC (NR...	52A060818	1
Apomix	Hydrated liniment SR/DAC (NR...	9B25019	1
Apomix	Hydrated liniment SR/DAC (NR...	27B030619	1
Apomix	Hydrated liniment SR/DAC (NR...	45A200819	1
ApoMix	Hydrated liniment SR/DAC (NR...	4A110112	1
ApoMix	Hydrated liniment SR/DAC (NR...	12A150212	1
apomix / Phoenix / 03...	Hydrated liniment SR/DAC (NR...	20a150316	1
apomix / Phoenix / 05...	Hydrated liniment SR/DAC (NR...	38a060616	1
apomix 004	Hydrated liniment SR/DAC (NR...	23A270312	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	19B100314	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	41A080615	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	71A051015	2
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	28A060416	1
apomix / AHD	Hydrated liniment SR/DAC (NR...	3B090117	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	46B170717	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	31A290517	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	72A041217	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	25A090518	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	40A030718	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	7B050218	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	39A020718	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	2B140119	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	25A140519	2
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	10A25019	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	35A240619	2
apomix / Anzag	Hydrated liniment SR/DAC (NR...	64A050916	1
Apomix / Gehe	Hydrated liniment SR/DAC (NR...	42B090718	1
apomix / Noweda	Hydrated liniment SR/DAC (NR...	83B051216	1
apomix / Phoenix	Hydrated liniment SR/DAC (NR...	48A300718	1
Apomix / Phoenix	Hydrated liniment SR/DAC (NR...	62A170918	1
Apomix / Phoenix	Hydrated liniment SR/DAC (NR...	39A020718	1
apomix / Phoenix / 17.0...	Hydrated liniment SR/DAC (NR...	22a210316	1
apomix / Phoenix / 19.0...	Hydrated liniment SR/DAC (NR...	9A010216	1
apomix / Phoenix / 25.0...	Hydrated liniment SR/DAC (NR...	17A290216	1
apomix / Phoenix 13.04.18	Hydrated liniment SR/DAC (NR...	3a080118	1
apomix / Phoenix 13.04.18	Hydrated liniment SR/DAC (NR...	2a080118	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	85A281215	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	78A161115	1
Apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	50A130715	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	64A140915	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	67A220915	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	14a190318	1

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Supplier	Substance	Batch	Spectra
apomix / Phönix	Hydrated liniment SR/DAC (NR...	61B021017	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	38A040613	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	12B110214	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	47B170614	1
Apomix /Alliance	Hydrated liniment SR/DAC (NR...	3A070114	1
Apomix /Alliance	Hydrated liniment SR/DAC (NR...	41A260514	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	43B040614	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	55A250716	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	66b120916	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	73A101016	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	45A270616	2
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	60A150816	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	69A200916	2
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	84A271216	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	26A020517	2
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	40A200617	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	54A210817	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	62A021017	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	70A201117	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	8A050218	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	17A270318	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	40A030718	3
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	72A031218	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	16A0101419	1
apomix AMH Niemann GmbH...	Hydrated liniment SR/DAC (NR...	21A060519	1
Apomix Anzag	Hydrated liniment SR/DAC (NR...	17A030314	1
Apomix Anzag	Hydrated liniment SR/DAC (NR...	51B170712	2
apomix GmbH/Phönix	Hydrated liniment SR/DAC (NR...	36A120514	1
Apomix Noweda	Hydrated liniment SR/DAC (NR...	56B210817	1
Apomix Noweda	Hydrated liniment SR/DAC (NR...	60B040918	1
Apomix Phönix	Hydrated liniment SR/DAC (NR...	71A291013	1
Apomix PKH GmbH	Hydrated liniment SR/DAC (NR...	79011215	1
Apomix, Phoenix 07.11.2...	Hydrated liniment SR/DAC (NR...	60A180917	1
apomix, Phoenix 26.10.2...	Hydrated liniment SR/DAC (NR...	48a170717	1
apomix, Phönix, 09.01.2...	Hydrated liniment SR/DAC (NR...	64a091017	1
apomix, Phönix, 29.12.2...	Hydrated liniment SR/DAC (NR...	57a070917	1
apomix/ AHD	Hydrated liniment SR/DAC (NR...	39B150719	1
Apomix/ Galenus Apotheke	Hydrated liniment SR/DAC (NR...	7A250116	1
Apomix/ GEHE	Hydrated liniment SR/DAC (NR...	5A150118	1
Apomix/ GEHE	Hydrated liniment SR/DAC (NR...	15A210318	1
apomix/ Noweda	Hydrated liniment SR/DAC (NR...	65B290812	1
apomix/ Phoenix / 01.11...	Hydrated liniment SR/DAC (NR...	65a060916	2
apomix/ Phoenix / 07.09...	Hydrated liniment SR/DAC (NR...	57a010816	1
apomix/ Phoenix / 11.11...	Hydrated liniment SR/DAC (NR...	52a130716	1
apomix/ Phoenix / 13.04...	Hydrated liniment SR/DAC (NR...	84a141215	1
apomix/ Phoenix 18.07.18	Hydrated liniment SR/DAC (NR...	29A280518	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	72a270916	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	72a101016	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	8a070217	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	58a180815	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	16a200317	1
apomix/Aep	Hydrated liniment SR/DAC (NR...	66A161017	2
apomix/AHD	Hydrated liniment SR/DAC (NR...	4A090117	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	73A041217	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	17A270318	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	20A100418	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	31A290518	1
apomix/Anzag	Hydrated liniment SR/DAC (NR...	11a270217	1
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	56B100815	1
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	24A290316	1

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Supplier	Substance	Batch	Spectra
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	24A080518	1
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	60B040918	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	33A070514	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	68A080914	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	81A251114	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	27A050416	6
apomix/Gehe	Hydrated liniment SR/DAC (NR...	43A140616	5
apomix/Gehe	Hydrated liniment SR/DAC (NR...	46A280616	2
apomix/Gehe	Hydrated liniment SR/DAC (NR...	60A150816	6
apomix/Gehe	Hydrated liniment SR/DAC (NR...	72A270916	4
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	85A281112	1
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	86A161214	1
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	31A040515	2
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	18B030417	1
Apomix/Gehe/12.05.14	Hydrated liniment SR/DAC (NR...	81A161213	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	9A020215	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	32A120515	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	76A031115	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	35A170516	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	65A060916	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	29A060513	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	24A070415	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	16B190716	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	69A200916	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	81A211116	6
apomix/Noweda	Hydrated liniment SR/DAC (NR...	80A211116	2
apomix/Noweda	Hydrated liniment SR/DAC (NR...	16A200317	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	68A301017	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	16B270318	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	40A170613	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	43A010713	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	3A070114	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	17A030314	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	75A131113	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	41A260514	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	35A080514	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	42A020614	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	67A010914	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	85A091214	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	84B021214	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	33A190515	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	78A161115	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	9A010216	3
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	13A160216	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	2B090117	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	33B120617	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	36B130617	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	49B240717	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	8A050218	1
Apomix/NOWEDA	Hydrated liniment SR/DAC (NR...	54A030815	1
Apomix/NOWEDA	Hydrated liniment SR/DAC (NR...	47B300718	1
Apomix/Phoenix	Hydrated liniment SR/DAC (NR...	51A230713	1
Apomix/Phoenix	Hydrated liniment SR/DAC (NR...	306060	1
Apomix/Phoenix	Hydrated liniment SR/DAC (NR...	42B030717	1
apomix/Phoenix Leipzig ...	Hydrated liniment SR/DAC (NR...	47a170717	1
Apomix/Phoenix-Leipzig/...	Hydrated liniment SR/DAC (NR...	29A160517	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	5A210113	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	68A300913	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	22A250314	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	10A080216	1

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Supplier	Substance	Batch	Spectra
apomix/Phönix	Hydrated liniment SR/DAC (NR...	81A211116	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	24A240417	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	57B030918	2
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	25A220413	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	47B170614	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	59A050814	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	15A260813	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	22A231017	1
Apomix/PKH Halle/Phönix	Hydrated liniment SR/DAC (NR...	37B020718	1
Apomix/PKH Halle/Phönix	Hydrated liniment SR/DAC (NR...	31A290518	1
Apomix/Sana	Hydrated liniment SR/DAC (NR...	66A210915	1
apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	34B120617	1
Apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	55A040815	1
Apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	35A120617	1
Apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	12B180319	1
Bomastus Werke	Hydrated liniment SR/DAC (NR...	307265	1
Bomastus Werke	Hydrated liniment SR/DAC (NR...	307264	1
Bomastus	Hydrated liniment SR/DAC (NR...	265946	1
Bomastus	Hydrated liniment SR/DAC (NR...	274772	1
Bomastus	Hydrated liniment SR/DAC (NR...	275869	1
Bomastus	Hydrated liniment SR/DAC (NR...	277782	2
Bomastus	Hydrated liniment SR/DAC (NR...	279399	1
Bomastus	Hydrated liniment SR/DAC (NR...	282885	1
Bomastus	Hydrated liniment SR/DAC (NR...	4A070114	1
Bomastus	Hydrated liniment SR/DAC (NR...	285738	2
Bomastus	Hydrated liniment SR/DAC (NR...	285740	1
Bomastus	Hydrated liniment SR/DAC (NR...	286935	4
Bomastus	Hydrated liniment SR/DAC (NR...	287411	1
Bomastus	Hydrated liniment SR/DAC (NR...	287410	3
Bomastus	Hydrated liniment SR/DAC (NR...	288535	5
Bomastus	Hydrated liniment SR/DAC (NR...	288538	2
Bomastus	Hydrated liniment SR/DAC (NR...	288536	2
Bomastus	Hydrated liniment SR/DAC (NR...	289863	6
Bomastus	Hydrated liniment SR/DAC (NR...	292492	1
Bomastus	Hydrated liniment SR/DAC (NR...	292621	5
Bomastus	Hydrated liniment SR/DAC (NR...	268572	1
Bomastus	Hydrated liniment SR/DAC (NR...	270673	3
Bomastus	Hydrated liniment SR/DAC (NR...	273773	1
Bomastus	Hydrated liniment SR/DAC (NR...	281642	2
Bomastus	Hydrated liniment SR/DAC (NR...	281646	2
Bomastus	Hydrated liniment SR/DAC (NR...	282884	1
Bomastus	Hydrated liniment SR/DAC (NR...	284340	4
Bomastus	Hydrated liniment SR/DAC (NR...	284338	1
Bomastus	Hydrated liniment SR/DAC (NR...	292493	4
Bomastus	Hydrated liniment SR/DAC (NR...	293590	4
Bomastus	Hydrated liniment SR/DAC (NR...	293591	1
Bomastus	Hydrated liniment SR/DAC (NR...	294433	4
Bomastus	Hydrated liniment SR/DAC (NR...	296504	6
Bomastus	Hydrated liniment SR/DAC (NR...	295857	3
Bomastus	Hydrated liniment SR/DAC (NR...	295853	2
Bomastus	Hydrated liniment SR/DAC (NR...	295852	1
Bomastus	Hydrated liniment SR/DAC (NR...	298572	1
Bomastus	Hydrated liniment SR/DAC (NR...	299987	3
Bomastus	Hydrated liniment SR/DAC (NR...	300966	2
Bomastus	Hydrated liniment SR/DAC (NR...	301562	4
Bomastus	Hydrated liniment SR/DAC (NR...	301995	3
Bomastus	Hydrated liniment SR/DAC (NR...	301993	2
Bomastus	Hydrated liniment SR/DAC (NR...	301558	9
Bomastus	Hydrated liniment SR/DAC (NR...	304842	5
Bomastus	Hydrated liniment SR/DAC (NR...	304843	2

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrated liniment SR/DAC (NR...	303959	1
Bombastus	Hydrated liniment SR/DAC (NR...	307684	6
Bombastus	Hydrated liniment SR/DAC (NR...	307683	4
Bombastus	Hydrated liniment SR/DAC (NR...	308909	2
Bombastus	Hydrated liniment SR/DAC (NR...	310644	16
Bombastus	Hydrated liniment SR/DAC (NR...	308910	2
Bombastus	Hydrated liniment SR/DAC (NR...	18001660	7
Bombastus	Hydrated liniment SR/DAC (NR...	17001840	3
Bombastus	Hydrated liniment SR/DAC (NR...	17001838	1
Bombastus	Hydrated liniment SR/DAC (NR...	17000556	1
Bombastus	Hydrated liniment SR/DAC (NR...	18006889	7
Bombastus	Hydrated liniment SR/DAC (NR...	285737	4
Bombastus	Hydrated liniment SR/DAC (NR...	280805	1
Bombastus	Hydrated liniment SR/DAC (NR...	296589	3
Bombastus	Hydrated liniment SR/DAC (NR...	308912	7
Bombastus	Hydrated liniment SR/DAC (NR...	296503	1
Bombastus	Hydrated liniment SR/DAC (NR...	303960	1
Bombastus	Hydrated liniment SR/DAC (NR...	284234	2
Bombastus	Hydrated liniment SR/DAC (NR...	300968	7
Bombastus	Hydrated liniment SR/DAC (NR...	307263	14
Bombastus	Hydrated liniment SR/DAC (NR...	269132	1
Bombastus	Hydrated liniment SR/DAC (NR...	285792	3
Bombastus	Hydrated liniment SR/DAC (NR...	285739	2
Bombastus	Hydrated liniment SR/DAC (NR...	286936	2
Bombastus	Hydrated liniment SR/DAC (NR...	19001959	1
Bombastus	Hydrated liniment SR/DAC (NR...	18004547	6
Bombastus	Hydrated liniment SR/DAC (NR...	19001958	4
Bombastus	Hydrated liniment SR/DAC (NR...	18005584	1
Bombastus	Hydrated liniment SR/DAC (NR...	18002959	2
Bombastus	Hydrated liniment SR/DAC (NR...	281645	2
Bombastus	Hydrated liniment SR/DAC (NR...	281562	2
Bombastus	Hydrated liniment SR/DAC (NR...	294434	4
Bombastus	Hydrated liniment SR/DAC (NR...	17000560	7
Bombastus	Hydrated liniment SR/DAC (NR...	17001841	10
Bombastus	Hydrated liniment SR/DAC (NR...	306060	3
Bombastus	Hydrated liniment SR/DAC (NR...	310641	7
Bombastus	Hydrated liniment SR/DAC (NR...	310642	5
Bombastus	Hydrated liniment SR/DAC (NR...	17001837	3
Bombastus	Hydrated liniment SR/DAC (NR...	18004548	6
Bombastus	Hydrated liniment SR/DAC (NR...	18004546	6
Bombastus	Hydrated liniment SR/DAC (NR...	278256	2
Bombastus	Hydrated liniment SR/DAC (NR...	171207WL/310644	1
Bombastus	Hydrated liniment SR/DAC (NR...	171229WL/310644	1
Bombastus	Hydrated liniment SR/DAC (NR...	180305WL/307264	1
Bombastus	Hydrated liniment SR/DAC (NR...	18001658	4
Bombastus	Hydrated liniment SR/DAC (NR...	18002958	2
Bombastus	Hydrated liniment SR/DAC (NR...	277778	1
Bombastus	Hydrated liniment SR/DAC (NR...	282882	1
Bombastus	Hydrated liniment SR/DAC (NR...	287409	1
Bombastus	Hydrated liniment SR/DAC (NR...	288533	1
Bombastus	Hydrated liniment SR/DAC (NR...	306059	7
Bombastus	Hydrated liniment SR/DAC (NR...	280876	2
Bombastus	Hydrated liniment SR/DAC (NR...	279400	4
Bombastus	Hydrated liniment SR/DAC (NR...	305596	8
Bombastus	Hydrated liniment SR/DAC (NR...	281644	1
Bombastus	Hydrated liniment SR/DAC (NR...	275864	1
Bombastus	Hydrated liniment SR/DAC (NR...	284339	1
Bombastus	Hydrated liniment SR/DAC (NR...	301989	1
Bombastus	Hydrated liniment SR/DAC (NR...	275792	2
Bombastus	Hydrated liniment SR/DAC (NR...	18001659	2

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrated liniment SR/DAC (NR...	18005586	7
Bombastus	Hydrated liniment SR/DAC (NR...	19003405	4
Bombastus	Hydrated liniment SR/DAC (NR...	285838	2
Bombastus	Hydrated liniment SR/DAC (NR...	296506	3
Bombastus	Hydrated liniment SR/DAC (NR...	299988	2
Bombastus	Hydrated liniment SR/DAC (NR...	3048843	1
Bombastus	Hydrated liniment SR/DAC (NR...	18005583	2
Bombastus	Hydrated liniment SR/DAC (NR...	292491	7
Bombastus	Hydrated liniment SR/DAC (NR...	295854	5
Bombastus	Hydrated liniment SR/DAC (NR...	303962	7
Bombastus	Hydrated liniment SR/DAC (NR...	302933	4
Bombastus	Hydrated liniment SR/DAC (NR...	303963	7
Bombastus	Hydrated liniment SR/DAC (NR...	307264	11
Bombastus	Hydrated liniment SR/DAC (NR...	300965	3
Bombastus	Hydrated liniment SR/DAC (NR...	308911	2
Bombastus	Hydrated liniment SR/DAC (NR...	17000557	4
Bombastus	Hydrated liniment SR/DAC (NR...	4114E-03266	1
Bombastus	Hydrated liniment SR/DAC (NR...	300967	1
Bombastus	Hydrated liniment SR/DAC (NR...	301561	1
Bombastus	Hydrated liniment SR/DAC (NR...	279397	1
Bombastus	Hydrated liniment SR/DAC (NR...	291866	3
Bombastus	Hydrated liniment SR/DAC (NR...	304841	1
Bombastus	Hydrated liniment SR/DAC (NR...	304844	4
Bombastus	Hydrated liniment SR/DAC (NR...	304840	2
Bombastus	Hydrated liniment SR/DAC (NR...	18001655	1
Bombastus	Hydrated liniment SR/DAC (NR...	289862	2
Bombastus	Hydrated liniment SR/DAC (NR...	277781	1
Bombastus	Hydrated liniment SR/DAC (NR...	291867	1
Bombastus	Hydrated liniment SR/DAC (NR...	299986	1
Bombastus	Hydrated liniment SR/DAC (NR...	302931	3
Bombastus	Hydrated liniment SR/DAC (NR...	17000559	2
Bombastus	Hydrated liniment SR/DAC (NR...	18002960	1
Bombastus	Hydrated liniment SR/DAC (NR...	19003408	2
Bombastus	Hydrated liniment SR/DAC (NR...	18002957	2
Bombastus	Hydrated liniment SR/DAC (NR...	306362	10
Bombastus	Hydrated liniment SR/DAC (NR...	17000558	2
Bombastus	Hydrated liniment SR/DAC (NR...	273774	3
Bombastus	Hydrated liniment SR/DAC (NR...	307680	2
Bombastus	Hydrated liniment SR/DAC (NR...	19001961	4
Bombastus	Hydrated liniment SR/DAC (NR...	19004641	1
Bombastus	Hydrated liniment SR/DAC (NR...	285791	1
Bombastus	Hydrated liniment SR/DAC (NR...	26B0590416	1
Bombastus	Hydrated liniment SR/DAC (NR...	310643	3
Bombastus	Hydrated liniment SR/DAC (NR...	18001657	5
Bombastus	Hydrated liniment SR/DAC (NR...	18006890	1
Bombastus	Hydrated liniment SR/DAC (NR...	88A161214	1
Bombastus	Hydrated liniment SR/DAC (NR...	18002961	8
Bombstus/ Sanacorp	Hydrated liniment SR/DAC (NR...	281643	2
Caelo	Hydrated liniment SR/DAC (NR...	47B020712	1
Caelo	Hydrated liniment SR/DAC (NR...	20614	1
Caelo	Hydrated liniment SR/DAC (NR...	287410	1
Caelo	Hydrated liniment SR/DAC (NR...	15002302	5
Caelo	Hydrated liniment SR/DAC (NR...	14350002	1
Caelo	Hydrated liniment SR/DAC (NR...	15324402	1
Caelo	Hydrated liniment SR/DAC (NR...	34B170516	1
Caelo	Hydrated liniment SR/DAC (NR...	304842	1
Caelo	Hydrated liniment SR/DAC (NR...	17064401	12
Caelo	Hydrated liniment SR/DAC (NR...	70717	1
Caelo	Hydrated liniment SR/DAC (NR...	52B010817	1
Caelo	Hydrated liniment SR/DAC (NR...	63A170918	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrated liniment SR/DAC (NR...	18313901	1
Caelo	Hydrated liniment SR/DAC (NR...	18002961	1
Caelo	Hydrated liniment SR/DAC (NR...	18005586	3
Caelo	Hydrated liniment SR/DAC (NR...	16182403	1
Caelo	Hydrated liniment SR/DAC (NR...	304844	2
Caelo	Hydrated liniment SR/DAC (NR...	308912	3
Caelo	Hydrated liniment SR/DAC (NR...	18002957	1
Caelo	Hydrated liniment SR/DAC (NR...	18001658	1
Caelo	Hydrated liniment SR/DAC (NR...	16330502	1
Caelo	Hydrated liniment SR/DAC (NR...	18001660	1
Caelo	Hydrated liniment SR/DAC (NR...	67A12092916	1
Caelo	Hydrated liniment SR/DAC (NR...	70B191118	1
Caelo	Hydrated liniment SR/DAC (NR...	310641	1
Caelo	Hydrated liniment SR/DAC (NR...	31a290517	1
Caelo	Hydrated liniment SR/DAC (NR...	30A280518	1
Caelo	Hydrated liniment SR/DAC (NR...	15324403	1
Caelo	Hydrated liniment SR/DAC (NR...	17022202	1
Caelo	Hydrated liniment SR/DAC (NR...	59b030918	1
Caesar & Loretz GmbH	Hydrated liniment SR/DAC (NR...	18184802	1
Caesar & Loretz GmbH	Hydrated liniment SR/DAC (NR...	18313902	3
Euro OTC	Hydrated liniment SR/DAC (NR...	300968	1
Euro Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	110315	1
Euro OTC	Hydrated liniment SR/DAC (NR...	310644	1
Fagron	Hydrated liniment SR/DAC (NR...	16182403	1
Fagron	Hydrated liniment SR/DAC (NR...	289863	1
Fagron	Hydrated liniment SR/DAC (NR...	294434	1
Gehe	Hydrated liniment SR/DAC (NR...	284338	1
Gehe	Hydrated liniment SR/DAC (NR...	6B260115	1
Gehe	Hydrated liniment SR/DAC (NR...	310642	1
Gehe 09.01.15 Apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
Gehe 09.01.15/apomix	Hydrated liniment SR/DAC (NR...	74A131014	1
Gehe/18.08.14	Hydrated liniment SR/DAC (NR...	42A020614	3
Gehe/Apomix	Hydrated liniment SR/DAC (NR...	77A251113	1
Gehe/Apomix	Hydrated liniment SR/DAC (NR...	20A170315	1
Gehe/Apomix/06.11.2013	Hydrated liniment SR/DAC (NR...	21013	1
Gehe/apomix/12.03.14	Hydrated liniment SR/DAC (NR...	79A091213	1
GEHE/Apomix/29.04.14	Hydrated liniment SR/DAC (NR...	24A310314	1
GEHE/LEYH Parma/09.04.2...	Hydrated liniment SR/DAC (NR...	134211	2
Gehe/Pharmachem /13.06....	Hydrated liniment SR/DAC (NR...	250412	1
GEHE/Pharmachem/20.04.2...	Hydrated liniment SR/DAC (NR...	91211	1
Infectopharm / Noweda	Hydrated liniment SR/DAC (NR...	18001660	4
Kehr	Hydrated liniment SR/DAC (NR...	56B210817	1
Leyh	Hydrated liniment SR/DAC (NR...	124941	1
Leyh	Hydrated liniment SR/DAC (NR...	153511	1
Leyh	Hydrated liniment SR/DAC (NR...	162141	2
Leyh Pharma	Hydrated liniment SR/DAC (NR...	154111	1
Leyh Pharma	Hydrated liniment SR/DAC (NR...	151621	1
Leyh Pharma	Hydrated liniment SR/DAC (NR...	160551	1
Leyh Pharma	Hydrated liniment SR/DAC (NR...	181151	1
Leyh Pharma	Hydrated liniment SR/DAC (NR...	4580715	1
Leyh Pharma / Alliance ...	Hydrated liniment SR/DAC (NR...	153511	1
Leyh Pharma GmbH	Hydrated liniment SR/DAC (NR...	110531	1
Leyh Pharma GmbH	Hydrated liniment SR/DAC (NR...	173041	1
leyh Pharma/ Sanacorp	Hydrated liniment SR/DAC (NR...	124941	1
Leyh Pharma/Noweda	Hydrated liniment SR/DAC (NR...	164021	1
Leyh Pharma/Sanacorp	Hydrated liniment SR/DAC (NR...	164641	1
Leyh/Gehe	Hydrated liniment SR/DAC (NR...	131121	1
Leyh-Pharma GmbH	Hydrated liniment SR/DAC (NR...	142231	1
Leyh-Pharma GmbH	Hydrated liniment SR/DAC (NR...	133721	1
LeyhPharma/AlianceH.	Hydrated liniment SR/DAC (NR...	173051	1

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Supplier	Substance	Batch	Spectra
LeyhPharma/AllianceH.	Hydrated liniment SR/DAC (NR...	180141	1
LeyhPharma/AllianceH.	Hydrated liniment SR/DAC (NR...	181151	1
LeyhPharma/AllianceH.	Hydrated liniment SR/DAC (NR...	191021	1
Leyhs	Hydrated liniment SR/DAC (NR...	162231	1
Leyhs	Hydrated liniment SR/DAC (NR...	163541	1
Leyhs	Hydrated liniment SR/DAC (NR...	164541	2
Leyhs Pharma Gmbh	Hydrated liniment SR/DAC (NR...	161121	1
Noweda	Hydrated liniment SR/DAC (NR...	15A040315	1
Noweda	Hydrated liniment SR/DAC (NR...	74A261015	1
Noweda	Hydrated liniment SR/DAC (NR...	304844	2
Noweda	Hydrated liniment SR/DAC (NR...	307263	1
Bombastus	Hydrated liniment SR/DAC (NR...	287323	5
Noweda PKH Halle	Hydrated liniment SR/DAC (NR...	31A290517	1
Bombastus	Hydrated liniment SR/DAC (NR...	288537	1
Euro OTC	Hydrated liniment SR/DAC (NR...	42B160615	1
Pharmachem	Hydrated liniment SR/DAC (NR...	160115	1
Pharmachem	Hydrated liniment SR/DAC (NR...	190416	1
Pharmachem / AHD	Hydrated liniment SR/DAC (NR...	307264	1
Pharmachem Gmbh	Hydrated liniment SR/DAC (NR...	20614	2
Pharmachem GmbH & Co KG	Hydrated liniment SR/DAC (NR...	100315	4
Pharmachem GmbH Pößneck	Hydrated liniment SR/DAC (NR...	190416	1
Pharmachem GmbH/Phönix	Hydrated liniment SR/DAC (NR...	30815	1
Pharmachem Pößneck	Hydrated liniment SR/DAC (NR...	270918	1
Pharmachem Pößneck GmbH...	Hydrated liniment SR/DAC (NR...	250516	2
Pharmachem Pößneck GmbH...	Hydrated liniment SR/DAC (NR...	10916	1
Pharmachem Pößneck GmbH...	Hydrated liniment SR/DAC (NR...	141016	1
Pharmachem/ Anzag	Hydrated liniment SR/DAC (NR...	301018	1
Pharmachem/ Noweda	Hydrated liniment SR/DAC (NR...	310715	1
Pharmachem/Alliance Hea...	Hydrated liniment SR/DAC (NR...	70717	1
Pharmachem/Anzag/10.07...	Hydrated liniment SR/DAC (NR...	60513	1
Pharmachem/ANZAG/27.03...	Hydrated liniment SR/DAC (NR...	210113	1
Pharmachem/Noweda	Hydrated liniment SR/DAC (NR...	10916	1
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	21013	1
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	160115	1
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	190416	1
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	50318	2
PHK GmbH	Hydrated liniment SR/DAC (NR...	66A160913	1
PHK GmbH	Hydrated liniment SR/DAC (NR...	71A291013	2
Phoenix (PKH Halle)	Hydrated liniment SR/DAC (NR...	7A290113	1
Phoenix (PKH Halle)	Hydrated liniment SR/DAC (NR...	5A210113	1
Phoenix/Apomix	Hydrated liniment SR/DAC (NR...	71A291013	1
Phönix	Hydrated liniment SR/DAC (NR...	39A190617	1
Phönix	Hydrated liniment SR/DAC (NR...	67B301017	1
Phönix (PKH Halle)	Hydrated liniment SR/DAC (NR...	60A020812	1
Caelo	Hydrated liniment SR/DAC (NR...	17198902	2
Caelo	Hydrated liniment SR/DAC (NR...	18109001	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	275789	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	274014	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	279496	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001839	1
phönix/Apomix	Hydrated liniment SR/DAC (NR...	25A090518	1
Phönix/Apomix	Hydrated liniment SR/DAC (NR...	73A041217	1
PKH / Phoenix Leipzig	Hydrated liniment SR/DAC (NR...	14A040315	1
PKH GmbH	Hydrated liniment SR/DAC (NR...	35A120617	1
PKH GmbH Apomix / Phönix	Hydrated liniment SR/DAC (NR...	69B071013	2
PKH GmbH/ Phönix	Hydrated liniment SR/DAC (NR...	23A020413	1
PKH GmbH/ Sanacorp	Hydrated liniment SR/DAC (NR...	78B031213	1
PKH Halle	Hydrated liniment SR/DAC (NR...	56A120813	4
PKH Halle	Hydrated liniment SR/DAC (NR...	24A310314	1
PKH Halle	Hydrated liniment SR/DAC (NR...	42A020614	1

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Supplier	Substance	Batch	Spectra
PKH Halle	Hydrated liniment SR/DAC (NR...	69A080914	1
PKH Halle	Hydrated liniment SR/DAC (NR...	85A281215	1
PKH Halle	Hydrated liniment SR/DAC (NR...	72A101016	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	15A050313	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	71A291013	2
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	22A250314	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	45A170614	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	59A050814	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	5A190115	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	2A120115	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	44A220615	1
PKH Halle/ Alliance Hea...	Hydrated liniment SR/DAC (NR...	11A270218	1
PKH Halle/ Alliance Hea...	Hydrated liniment SR/DAC (NR...	8A050218	1
PKH Halle/ GEHE	Hydrated liniment SR/DAC (NR...	3A080118	1
PKH Halle/ Phoenix / 12...	Hydrated liniment SR/DAC (NR...	33a090516	1
PKH Halle/ Phoenix Lepz...	Hydrated liniment SR/DAC (NR...	47A060715	1
pkh, Phönix	Hydrated liniment SR/DAC (NR...	14B170214	1
pkh, Phönix	Hydrated liniment SR/DAC (NR...	32A120515	1
PKH/ Phoenix Leipzig 04...	Hydrated liniment SR/DAC (NR...	24a080518	1
Rabenapotheke	Hydrated liniment SR/DAC (NR...	76A271014	1
Raben-Apotheke Mildenau	Hydrated liniment SR/DAC (NR...	49A230614	1
Raben-Apotheke Mildenau	Hydrated liniment SR/DAC (NR...	63A120814	2
sanacorp	Hydrated liniment SR/DAC (NR...	24A310314	1
Sanacorp	Hydrated liniment SR/DAC (NR...	2A120115	1
Sanacorp	Hydrated liniment SR/DAC (NR...	275869	1
Caelo	Hydrated liniment SR/DAC (NR...	281646	1
Bombastus	Hydrated liniment SR/DAC (NR...	269848	2
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	115051	1
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	122141	1
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	123011	1
/Noweda	Non-ionic hydrous liniment S...	281562	1
10260682	Non-ionic hydrous liniment S...	19055702	1
Bombastus	Non-ionic hydrous liniment S...	301556	2
Bombastus	Non-ionic hydrous liniment S...	302284	3
AHD	Non-ionic hydrous liniment S...	17144401	1
AHD	Non-ionic hydrous liniment S...	18153501	1
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	22A101114	1
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	A150914	1
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	20A150914	1
Bombastus	Non-ionic hydrous liniment S...	297177	6
Bombastus	Non-ionic hydrous liniment S...	300200	8
Caelo	Non-ionic hydrous liniment S...	16114002	9
Caelo	Non-ionic hydrous liniment S...	16218201	15
AHL	Non-ionic hydrous liniment S...	17312501	1
Bombastus	Non-ionic hydrous liniment S...	294211	8
Allianc. Health. /Apomix	Non-ionic hydrous liniment S...	301558	1
Bombastus	Non-ionic hydrous liniment S...	297175	4
Alliance	Non-ionic hydrous liniment S...	18005541	1
Alliance health	Non-ionic hydrous liniment S...	14350703	2
Alliance Health 09.05.2...	Non-ionic hydrous liniment S...	14134601	2
Bombastus	Non-ionic hydrous liniment S...	290613	8
Anzag	Non-ionic hydrous liniment S...	274016	1
Anzag	Non-ionic hydrous liniment S...	275786	1
Anzag	Non-ionic hydrous liniment S...	275788	1
Anzag	Non-ionic hydrous liniment S...	17027801	1
Bombastus	Non-ionic hydrous liniment S...	289207	1
Anzag/Anzag 14.09.18	Non-ionic hydrous liniment S...	18003529	1
Bombastus	Non-ionic hydrous liniment S...	18000059	10
apomix	Non-ionic hydrous liniment S...	20A221012	1
apomix	Non-ionic hydrous liniment S...	10A1206013	1

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Supplier	Substance	Batch	Spectra
apomix	Non-ionic hydrous liniment S...	11A010713	1
apomix	Non-ionic hydrous liniment S...	20A051113	1
apomix	Non-ionic hydrous liniment S...	7A170414	1
apomix	Non-ionic hydrous liniment S...	13A040614	1
apomix	Non-ionic hydrous liniment S...	8A170412	1
apomix	Non-ionic hydrous liniment S...	24A101212	1
apomix	Non-ionic hydrous liniment S...	2A100215	1
apomix	Non-ionic hydrous liniment S...	3A100215	2
apomix	Non-ionic hydrous liniment S...	12A100615	1
apomix	Non-ionic hydrous liniment S...	15A150715	2
apomix	Non-ionic hydrous liniment S...	14A300615	1
apomix	Non-ionic hydrous liniment S...	16A050815	2
apomix	Non-ionic hydrous liniment S...	20A280915	1
apomix	Non-ionic hydrous liniment S...	26A281215	1
apomix	Non-ionic hydrous liniment S...	10A110515	1
apomix	Non-ionic hydrous liniment S...	6A310316	1
apomix	Non-ionic hydrous liniment S...	9A190516	1
apomix	Non-ionic hydrous liniment S...	10A310516	1
apomix	Non-ionic hydrous liniment S...	8A100516	1
apomix	Non-ionic hydrous liniment S...	14A180716	2
apomix	Non-ionic hydrous liniment S...	17A220816	1
apomix	Non-ionic hydrous liniment S...	16A020817	1
apomix	Non-ionic hydrous liniment S...	9A230518	1
apomix	Non-ionic hydrous liniment S...	5A150419	1
Apomix	Non-ionic hydrous liniment S...	24A101212	1
Apomix	Non-ionic hydrous liniment S...	11A010713	1
Apomix	Non-ionic hydrous liniment S...	17A230913	1
Apomix	Non-ionic hydrous liniment S...	15A260813	1
Apomix	Non-ionic hydrous liniment S...	20A051113	1
Apomix	Non-ionic hydrous liniment S...	23A111213	2
Apomix	Non-ionic hydrous liniment S...	4A250214	2
Apomix	Non-ionic hydrous liniment S...	7A170414	1
Apomix	Non-ionic hydrous liniment S...	286420	1
Apomix	Non-ionic hydrous liniment S...	12A270514	1
Apomix	Non-ionic hydrous liniment S...	18A200814	1
Apomix	Non-ionic hydrous liniment S...	16A040814	1
Apomix	Non-ionic hydrous liniment S...	22A101114	2
Apomix	Non-ionic hydrous liniment S...	15A300712	1
Apomix	Non-ionic hydrous liniment S...	17A030912	1
Apomix	Non-ionic hydrous liniment S...	27A221214	2
Apomix	Non-ionic hydrous liniment S...	25A021214	2
Apomix	Non-ionic hydrous liniment S...	2A100215	2
Apomix	Non-ionic hydrous liniment S...	5A110315	1
Apomix	Non-ionic hydrous liniment S...	11B270515	1
Apomix	Non-ionic hydrous liniment S...	16A050815	2
Apomix	Non-ionic hydrous liniment S...	20A280915	1
Apomix	Non-ionic hydrous liniment S...	23A181115	3
Apomix	Non-ionic hydrous liniment S...	25A081215	1
Apomix	Non-ionic hydrous liniment S...	2A020216	4
Apomix	Non-ionic hydrous liniment S...	6A310316	2
Apomix	Non-ionic hydrous liniment S...	10A310516	2
Apomix	Non-ionic hydrous liniment S...	9A190516	1
Apomix	Non-ionic hydrous liniment S...	12A200616	1
Apomix	Non-ionic hydrous liniment S...	19A010916	1
Apomix	Non-ionic hydrous liniment S...	24A231116	2
Apomix	Non-ionic hydrous liniment S...	1A100117	1
Apomix	Non-ionic hydrous liniment S...	6A290317	1
Apomix	Non-ionic hydrous liniment S...	8A250417	1
Apomix	Non-ionic hydrous liniment S...	13A260617	1
Apomix	Non-ionic hydrous liniment S...	17A140817	2

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Supplier	Substance	Batch	Spectra
Apomix	Non-ionic hydrous liniment S...	21A250917	2
Apomix	Non-ionic hydrous liniment S...	27A181217	1
Apomix	Non-ionic hydrous liniment S...	4A190218	1
Apomix	Non-ionic hydrous liniment S...	5A120318	1
Apomix	Non-ionic hydrous liniment S...	17A020818	1
Apomix	Non-ionic hydrous liniment S...	13A260618	1
Apomix	Non-ionic hydrous liniment S...	22A100918	1
Apomix	Non-ionic hydrous liniment S...	2A290119	1
apomix / Phoenix / 05...	Non-ionic hydrous liniment S...	12a200616	1
apomix / Phoenix / 24...	Non-ionic hydrous liniment S...	14a180716	1
apomix PKH GmbH Halle	Non-ionic hydrous liniment S...	9A190516	1
apomix / Anzag	Non-ionic hydrous liniment S...	13A040614	1
apomix / Anzag	Non-ionic hydrous liniment S...	15A140714	1
apomix / Anzag	Non-ionic hydrous liniment S...	22A101114	1
apomix / Anzag	Non-ionic hydrous liniment S...	1A200115	1
apomix / Gehe	Non-ionic hydrous liniment S...	18B010916	1
Apomix / Gehe	Non-ionic hydrous liniment S...	6A310316	1
Apomix / Gehe	Non-ionic hydrous liniment S...	1A100117	1
apomix / Phoenix	Non-ionic hydrous liniment S...	11A040618	1
apomix / Phoenix	Non-ionic hydrous liniment S...	22A100918	2
apomix / Phoenix	Non-ionic hydrous liniment S...	23A081018	1
apomix / Phoenix / 23.0...	Non-ionic hydrous liniment S...	4a010316	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	18a070915	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	26A28125	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	23a181115	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	18A070915	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	5a120318	1
Apomix / Phönix	Non-ionic hydrous liniment S...	15A260813	1
Apomix / Phönix	Non-ionic hydrous liniment S...	20A051113	1
Apomix / Phönix	Non-ionic hydrous liniment S...	23A111213	1
Apomix / Phönix	Non-ionic hydrous liniment S...	17A230913	1
Apomix / Phönix	Non-ionic hydrous liniment S...	25A191213	3
Apomix / Phönix	Non-ionic hydrous liniment S...	10A150514	1
Apomix / Phönix	Non-ionic hydrous liniment S...	15A140714	1
Apomix / Phönix	Non-ionic hydrous liniment S...	16A040814	1
Apomix / Phönix	Non-ionic hydrous liniment S...	24A271114	1
Apomix / Phönix	Non-ionic hydrous liniment S...	22A101114	1
Apomix / Phönix	Non-ionic hydrous liniment S...	12A100615	1
Apomix / Phönix	Non-ionic hydrous liniment S...	15A150715	1
Apomix / Phönix	Non-ionic hydrous liniment S...	16A050815	1
Apomix / Phönix	Non-ionic hydrous liniment S...	4A010316	1
Apomix / Phönix	Non-ionic hydrous liniment S...	8A100516	3
Apomix / Phönix	Non-ionic hydrous liniment S...	21A241016	1
Apomix / Phönix	Non-ionic hydrous liniment S...	2A010217	1
apomix AHD	Non-ionic hydrous liniment S...	23A181115	1
Apomix Anzag	Non-ionic hydrous liniment S...	10A150512	2
Apomix Anzag	Non-ionic hydrous liniment S...	6A080413	1
Apomix Anzag	Non-ionic hydrous liniment S...	12A270514	1
Apomix PKH GmbH	Non-ionic hydrous liniment S...	20A280915	1
Apomix PKH GmbH	Non-ionic hydrous liniment S...	4A010316	1
apomix, phoenix 02.05.2...	Non-ionic hydrous liniment S...	4a190218	1
Apomix, Phoenix 03.11.2...	Non-ionic hydrous liniment S...	19A040917	1
apomix, phoenix 28.05.2...	Non-ionic hydrous liniment S...	6a120318	1
apomix, Phoenix, 03.02...	Non-ionic hydrous liniment S...	25a071217	3
apomix, Phönix, 09.01.2...	Non-ionic hydrous liniment S...	22a231017	2
apomix, Phönix, 23.11..2...	Non-ionic hydrous liniment S...	19a040917	1
Apomix/ Anzag	Non-ionic hydrous liniment S...	10A310516	1
apomix/ Phoenix	Non-ionic hydrous liniment S...	6A120318	1
apomix/ Phoenix	Non-ionic hydrous liniment S...	11A230719	1
Apomix/ Phoenix	Non-ionic hydrous liniment S...	25A081215	1

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Supplier	Substance	Batch	Spectra
apomix/ Phoenix / 07.04...	Non-ionic hydrous liniment S...	25a081215	1
apomix/ Phoenix / 24.10...	Non-ionic hydrous liniment S...	8a100516	1
apomix/ Phoenix 18.07.18	Non-ionic hydrous liniment S...	9A230518	3
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	1a100117	1
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	4a010317	1
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	6A290317	1
Apomix/ Phönix	Non-ionic hydrous liniment S...	11A010713	1
Apomix/ Phönix	Non-ionic hydrous liniment S...	25A081215	1
Apomix//Gehe	Non-ionic hydrous liniment S...	24A151117	1
Apomix/AHD	Non-ionic hydrous liniment S...	17A140817	1
Apomix/AHD	Non-ionic hydrous liniment S...	24A151117	1
Apomix/AHD	Non-ionic hydrous liniment S...	25A071217	1
Apomix/AHD	Non-ionic hydrous liniment S...	25A181217	1
Apomix/AHD	Non-ionic hydrous liniment S...	27A181217	1
Apomix/AHD	Non-ionic hydrous liniment S...	6A120318	1
Apomix/AHD	Non-ionic hydrous liniment S...	16A170718	1
Apomix/AHD	Non-ionic hydrous liniment S...	15A170718	1
Apomix/AHD	Non-ionic hydrous liniment S...	24A081018	1
Apomix/Gehe	Non-ionic hydrous liniment S...	27A221214	1
Apomix/Gehe	Non-ionic hydrous liniment S...	24A0801018	1
apomix/Noweda	Non-ionic hydrous liniment S...	19A010916	1
apomix/Noweda	Non-ionic hydrous liniment S...	25A071217	1
apomix/Noweda	Non-ionic hydrous liniment S...	2A170118	1
Apomix/Noweda	Non-ionic hydrous liniment S...	12A100713	1
Apomix/Noweda	Non-ionic hydrous liniment S...	3B180214	1
Apomix/Noweda	Non-ionic hydrous liniment S...	13A040614	1
Apomix/Noweda	Non-ionic hydrous liniment S...	6B180315	1
Apomix/Noweda	Non-ionic hydrous liniment S...	2A020216	1
Apomix/Noweda	Non-ionic hydrous liniment S...	24A231116	1
Apomix/Noweda	Non-ionic hydrous liniment S...	2A010217	1
Apomix/Noweda	Non-ionic hydrous liniment S...	13A260617	1
Apomix/Phoenix Leipzig ...	Non-ionic hydrous liniment S...	14A260617	3
apomix/Phoenix/03.01.2017	Non-ionic hydrous liniment S...	22a251016	2
apomix/Phönix	Non-ionic hydrous liniment S...	17A030912	2
apomix/Phönix	Non-ionic hydrous liniment S...	20A121211	1
apomix/Phönix	Non-ionic hydrous liniment S...	5B170414	2
apomix/Phönix	Non-ionic hydrous liniment S...	22A101114	1
apomix/Phönix	Non-ionic hydrous liniment S...	8A080415	1
Apomix/Phönix	Non-ionic hydrous liniment S...	9A290513	1
Apomix/Phönix	Non-ionic hydrous liniment S...	18B010916	1
Apomix/Phönix	Non-ionic hydrous liniment S...	24A151117	1
Apomix/Phönix	Non-ionic hydrous liniment S...	2A170118	1
Apomix/Phönix 3.09.19	Non-ionic hydrous liniment S...	11A230719	1
Apomix/PKH Halle/Phönix	Non-ionic hydrous liniment S...	16A020817	1
Apomix/PKH Halle/Phönix	Non-ionic hydrous liniment S...	23A081018	1
Apomix/PKH Halle/Phönix	Non-ionic hydrous liniment S...	2A290119	2
Audor Pharma	Non-ionic hydrous liniment S...	17312601	1
Beiersdorf/Kehr	Non-ionic hydrous liniment S...	302849	1
Bomastus/Phönix	Non-ionic hydrous liniment S...	290610	1
bomb	Non-ionic hydrous liniment S...	18005144	1
Bombastus/Sanac	Non-ionic hydrous liniment S...	279498	1
BOMBASTU Gehe 29:01.18	Non-ionic hydrous liniment S...	170011409	1
Bombastus	Non-ionic hydrous liniment S...	310356	1
Bombastus	Non-ionic hydrous liniment S...	267339	1
Bombastus	Non-ionic hydrous liniment S...	267329	1
Bombastus	Non-ionic hydrous liniment S...	269133	1
Bombastus	Non-ionic hydrous liniment S...	269131	1
Bombastus	Non-ionic hydrous liniment S...	269843	1
Bombastus	Non-ionic hydrous liniment S...	271236	1
Bombastus	Non-ionic hydrous liniment S...	273371	1

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	274016	2
Bombastus	Non-ionic hydrous liniment S...	274813	1
Bombastus	Non-ionic hydrous liniment S...	273375	1
Bombastus	Non-ionic hydrous liniment S...	274820	1
Bombastus	Non-ionic hydrous liniment S...	275786	4
Bombastus	Non-ionic hydrous liniment S...	275787	2
Bombastus	Non-ionic hydrous liniment S...	274815	1
Bombastus	Non-ionic hydrous liniment S...	271302	1
Bombastus	Non-ionic hydrous liniment S...	276525	5
Bombastus	Non-ionic hydrous liniment S...	273374	1
Bombastus	Non-ionic hydrous liniment S...	278255	1
Bombastus	Non-ionic hydrous liniment S...	278259	6
Bombastus	Non-ionic hydrous liniment S...	278260	4
Bombastus	Non-ionic hydrous liniment S...	276523	1
Bombastus	Non-ionic hydrous liniment S...	279502	6
Bombastus	Non-ionic hydrous liniment S...	276524	1
Bombastus	Non-ionic hydrous liniment S...	600991111	1
Bombastus	Non-ionic hydrous liniment S...	281563	2
Bombastus	Non-ionic hydrous liniment S...	281561	2
Bombastus	Non-ionic hydrous liniment S...	282334	4
Bombastus	Non-ionic hydrous liniment S...	131648	1
Bombastus	Non-ionic hydrous liniment S...	7021402	1
Bombastus	Non-ionic hydrous liniment S...	282947	5
Bombastus	Non-ionic hydrous liniment S...	229263	1
Bombastus	Non-ionic hydrous liniment S...	284237	1
Bombastus	Non-ionic hydrous liniment S...	285025	2
Bombastus	Non-ionic hydrous liniment S...	285795	4
Bombastus	Non-ionic hydrous liniment S...	286421	1
Bombastus	Non-ionic hydrous liniment S...	287318	7
Bombastus	Non-ionic hydrous liniment S...	288386	1
Bombastus	Non-ionic hydrous liniment S...	288453	7
Bombastus	Non-ionic hydrous liniment S...	488451	1
Bombastus	Non-ionic hydrous liniment S...	288389	2
Bombastus	Non-ionic hydrous liniment S...	289209	4
Bombastus	Non-ionic hydrous liniment S...	290612	3
Bombastus	Non-ionic hydrous liniment S...	291223	4
Bombastus	Non-ionic hydrous liniment S...	291286	4
Bombastus	Non-ionic hydrous liniment S...	291222	6
Bombastus	Non-ionic hydrous liniment S...	296584	7
Bombastus	Non-ionic hydrous liniment S...	302852	10
Bombastus	Non-ionic hydrous liniment S...	310359	5
Bombastus	Non-ionic hydrous liniment S...	287320	1
Bombastus	Non-ionic hydrous liniment S...	288452	1
Bombastus	Non-ionic hydrous liniment S...	291220	2
Bombastus	Non-ionic hydrous liniment S...	291861	3
Bombastus	Non-ionic hydrous liniment S...	291860	3
Bombastus	Non-ionic hydrous liniment S...	292742	2
Bombastus	Non-ionic hydrous liniment S...	293578	3
Bombastus	Non-ionic hydrous liniment S...	294213	2
Bombastus	Non-ionic hydrous liniment S...	294277	2
Bombastus	Non-ionic hydrous liniment S...	294212	1
Bombastus	Non-ionic hydrous liniment S...	295073	1
Bombastus	Non-ionic hydrous liniment S...	295910	5
Bombastus	Non-ionic hydrous liniment S...	296108	2
Bombastus	Non-ionic hydrous liniment S...	296106	3
Bombastus	Non-ionic hydrous liniment S...	15192502	1
Bombastus	Non-ionic hydrous liniment S...	296111	1
Bombastus	Non-ionic hydrous liniment S...	297172	3
Bombastus	Non-ionic hydrous liniment S...	296107	2
Bombastus	Non-ionic hydrous liniment S...	297174	2

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	297178	4
Bombastus	Non-ionic hydrous liniment S...	298468	1
Bombastus	Non-ionic hydrous liniment S...	298466	1
Bombastus	Non-ionic hydrous liniment S...	300196	3
Bombastus	Non-ionic hydrous liniment S...	300861	2
Bombastus	Non-ionic hydrous liniment S...	301555	1
Bombastus	Non-ionic hydrous liniment S...	301557	3
Bombastus	Non-ionic hydrous liniment S...	302851	2
Bombastus	Non-ionic hydrous liniment S...	302849	3
Bombastus	Non-ionic hydrous liniment S...	300858	1
Bombastus	Non-ionic hydrous liniment S...	304932	6
Bombastus	Non-ionic hydrous liniment S...	303896	3
Bombastus	Non-ionic hydrous liniment S...	304496	1
Bombastus	Non-ionic hydrous liniment S...	306361	13
Bombastus	Non-ionic hydrous liniment S...	30898	1
Bombastus	Non-ionic hydrous liniment S...	305594	2
Bombastus	Non-ionic hydrous liniment S...	303893	1
Bombastus	Non-ionic hydrous liniment S...	306359	2
Bombastus	Non-ionic hydrous liniment S...	308623	3
Bombastus	Non-ionic hydrous liniment S...	308628	14
Bombastus	Non-ionic hydrous liniment S...	308624	4
Bombastus	Non-ionic hydrous liniment S...	309791	4
Bombastus	Non-ionic hydrous liniment S...	309795	3
Bombastus	Non-ionic hydrous liniment S...	309803	3
Bombastus	Non-ionic hydrous liniment S...	309797	1
Bombastus	Non-ionic hydrous liniment S...	311041	9
Bombastus	Non-ionic hydrous liniment S...	311611	6
Bombastus	Non-ionic hydrous liniment S...	17001405	5
Bombastus	Non-ionic hydrous liniment S...	311039	1
Bombastus	Non-ionic hydrous liniment S...	18000058	9
Bombastus	Non-ionic hydrous liniment S...	18000055	2
Bombastus	Non-ionic hydrous liniment S...	18001761	1
Bombastus	Non-ionic hydrous liniment S...	1800059	1
Bombastus	Non-ionic hydrous liniment S...	18002335	12
Bombastus	Non-ionic hydrous liniment S...	18002332	2
Bombastus	Non-ionic hydrous liniment S...	18002887	11
Bombastus	Non-ionic hydrous liniment S...	18003531	2
Bombastus	Non-ionic hydrous liniment S...	18002886	3
Bombastus	Non-ionic hydrous liniment S...	18006450	1
Bombastus	Non-ionic hydrous liniment S...	18006449	4
Bombastus	Non-ionic hydrous liniment S...	18006451	1
Bombastus	Non-ionic hydrous liniment S...	18005536	1
Bombastus	Non-ionic hydrous liniment S...	19000521	1
Bombastus	Non-ionic hydrous liniment S...	273373	1
Bombastus	Non-ionic hydrous liniment S...	282332	4
Bombastus	Non-ionic hydrous liniment S...	286417	5
Bombastus	Non-ionic hydrous liniment S...	298465	2
Bombastus	Non-ionic hydrous liniment S...	309794	2
Bombastus	Non-ionic hydrous liniment S...	309796	1
Bombastus	Non-ionic hydrous liniment S...	18003529	2
Bombastus	Non-ionic hydrous liniment S...	305595	4
Bombastus	Non-ionic hydrous liniment S...	308626	5
Bombastus	Non-ionic hydrous liniment S...	311610	3
Bombastus	Non-ionic hydrous liniment S...	18001762	2
Bombastus	Non-ionic hydrous liniment S...	18002885	5
Bombastus	Non-ionic hydrous liniment S...	18004188	1
Bombastus	Non-ionic hydrous liniment S...	18005142	1
Bombastus	Non-ionic hydrous liniment S...	18006452	3
Bombastus	Non-ionic hydrous liniment S...	19000519	1
Bombastus	Non-ionic hydrous liniment S...	17001408	1

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	24(125336)	1
Bombastus	Non-ionic hydrous liniment S...	19001298	5
Bombastus	Non-ionic hydrous liniment S...	29(19000519)	1
Bombastus	Non-ionic hydrous liniment S...	30(19001296)	1
Bombastus	Non-ionic hydrous liniment S...	303898	8
Bombastus	Non-ionic hydrous liniment S...	26(18005138)	1
Bombastus	Non-ionic hydrous liniment S...	27(18006450)	1
Bombastus	Non-ionic hydrous liniment S...	32(19002434)	1
Bombastus	Non-ionic hydrous liniment S...	33(19001295)	1
Bombastus	Non-ionic hydrous liniment S...	300864	6
Bombastus	Non-ionic hydrous liniment S...	19002441	1
Bombastus	Non-ionic hydrous liniment S...	279497	1
Bombastus	Non-ionic hydrous liniment S...	281564	4
Bombastus	Non-ionic hydrous liniment S...	285023	1
Bombastus	Non-ionic hydrous liniment S...	289205	1
Bombastus	Non-ionic hydrous liniment S...	290121	2
Bombastus	Non-ionic hydrous liniment S...	17144502	1
Bombastus	Non-ionic hydrous liniment S...	272615	4
Bombastus	Non-ionic hydrous liniment S...	295069	3
Bombastus	Non-ionic hydrous liniment S...	308622	1
Bombastus	Non-ionic hydrous liniment S...	286419	3
Bombastus	Non-ionic hydrous liniment S...	296109	2
Bombastus	Non-ionic hydrous liniment S...	296110	3
Bombastus	Non-ionic hydrous liniment S...	306358	3
Bombastus	Non-ionic hydrous liniment S...	309804	5
Bombastus	Non-ionic hydrous liniment S...	311040	2
Bombastus	Non-ionic hydrous liniment S...	18000057	5
Bombastus	Non-ionic hydrous liniment S...	18004191	4
Bombastus	Non-ionic hydrous liniment S...	19002437	1
Bombastus	Non-ionic hydrous liniment S...	279498	2
Bombastus	Non-ionic hydrous liniment S...	281558	3
Bombastus	Non-ionic hydrous liniment S...	282946	3
Bombastus	Non-ionic hydrous liniment S...	285790	2
Bombastus	Non-ionic hydrous liniment S...	289206	3
Bombastus	Non-ionic hydrous liniment S...	291859	3
Bombastus	Non-ionic hydrous liniment S...	272614	1
Bombastus	Non-ionic hydrous liniment S...	284236	1
Bombastus	Non-ionic hydrous liniment S...	297171	1
Bombastus	Non-ionic hydrous liniment S...	279500	4
Bombastus	Non-ionic hydrous liniment S...	276526	1
Bombastus	Non-ionic hydrous liniment S...	300859	6
Bombastus	Non-ionic hydrous liniment S...	18005143	3
Bombastus	Non-ionic hydrous liniment S...	18003533	3
Bombastus	Non-ionic hydrous liniment S...	288387	2
Bombastus	Non-ionic hydrous liniment S...	274819	2
Bombastus	Non-ionic hydrous liniment S...	304933	6
Bombastus	Non-ionic hydrous liniment S...	284233	1
Bombastus	Non-ionic hydrous liniment S...	274869	1
Bombastus	Non-ionic hydrous liniment S...	17001403	3
Bombastus	Non-ionic hydrous liniment S...	290610	3
Bombastus	Non-ionic hydrous liniment S...	295068	2
Bombastus	Non-ionic hydrous liniment S...	299132	1
Bombastus	Non-ionic hydrous liniment S...	300860	4
Bombastus	Non-ionic hydrous liniment S...	303894	6
Bombastus	Non-ionic hydrous liniment S...	281560	1
Bombastus	Non-ionic hydrous liniment S...	271245	2
Bombastus	Non-ionic hydrous liniment S...	279499	2
Bombastus	Non-ionic hydrous liniment S...	18001767	6
Bombastus	Non-ionic hydrous liniment S...	271249	1
Bombastus	Non-ionic hydrous liniment S...	18005139	2

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	302285	3
Bombastus	Non-ionic hydrous liniment S...	303895	2
Bombastus	Non-ionic hydrous liniment S...	279501	3
Bombastus	Non-ionic hydrous liniment S...	307681	3
Bombastus	Non-ionic hydrous liniment S...	309799	1
Bombastus	Non-ionic hydrous liniment S...	18(310355)	1
Bombastus	Non-ionic hydrous liniment S...	19(17000575)	1
Bombastus	Non-ionic hydrous liniment S...	17001409	5
Bombastus	Non-ionic hydrous liniment S...	20(17000575)	1
Bombastus	Non-ionic hydrous liniment S...	21(17001405)	1
Bombastus	Non-ionic hydrous liniment S...	23(18002332)	1
Bombastus	Non-ionic hydrous liniment S...	296585	8
Bombastus	Non-ionic hydrous liniment S...	304935	6
Bombastus	Non-ionic hydrous liniment S...	306360	2
Bombastus	Non-ionic hydrous liniment S...	305591	1
Bombastus	Non-ionic hydrous liniment S...	308627	3
Bombastus	Non-ionic hydrous liniment S...	18005144	6
Bombastus	Non-ionic hydrous liniment S...	18005541	4
Bombastus	Non-ionic hydrous liniment S...	17001407	2
Bombastus	Non-ionic hydrous liniment S...	306357	1
Bombastus	Non-ionic hydrous liniment S...	309786	1
Bombastus	Non-ionic hydrous liniment S...	17000574	2
Bombastus	Non-ionic hydrous liniment S...	18002331	1
Bombastus	Non-ionic hydrous liniment S...	18004183	1
Bombastus	Non-ionic hydrous liniment S...	268125	1
Bombastus	Non-ionic hydrous liniment S...	285024	1
Bombastus	Non-ionic hydrous liniment S...	274014	2
Bombastus	Non-ionic hydrous liniment S...	308625	1
Bombastus	Non-ionic hydrous liniment S...	17001411	5
Bombastus	Non-ionic hydrous liniment S...	18006453	3
Bombastus	Non-ionic hydrous liniment S...	278258	4
Bombastus	Non-ionic hydrous liniment S...	310358-20180112Ma4	1
Bombastus	Non-ionic hydrous liniment S...	309790	2
Bombastus	Non-ionic hydrous liniment S...	22(18000057)	1
Bombastus	Non-ionic hydrous liniment S...	18004190	3
Bombastus	Non-ionic hydrous liniment S...	18003534	2
Bombastus	Non-ionic hydrous liniment S...	16318801	1
Bombastus	Non-ionic hydrous liniment S...	18002333	3
Bombastus	Non-ionic hydrous liniment S...	300863	5
Bombastus	Non-ionic hydrous liniment S...	60091112	1
Bombastus	Non-ionic hydrous liniment S...	310355	1
Bombastus	Non-ionic hydrous liniment S...	18001764	1
Bombastus	Non-ionic hydrous liniment S...	289208	2
Bombastus	Non-ionic hydrous liniment S...	291221	3
Bombastus	Non-ionic hydrous liniment S...	295070	5
Bombastus	Non-ionic hydrous liniment S...	60091111	1
Bombastus	Non-ionic hydrous liniment S...	298467	1
Bombastus	Non-ionic hydrous liniment S...	299133	3
Bombastus	Non-ionic hydrous liniment S...	300198	1
Bombastus	Non-ionic hydrous liniment S...	302287	11
Bombastus	Non-ionic hydrous liniment S...	303897	1
Bombastus	Non-ionic hydrous liniment S...	18001768	4
Bombastus	Non-ionic hydrous liniment S...	18005145	2
Bombastus	Non-ionic hydrous liniment S...	275789	1
Bombastus	Non-ionic hydrous liniment S...	279496	3
Bombastus	Non-ionic hydrous liniment S...	287321	6
Bombastus	Non-ionic hydrous liniment S...	288454	4
Bombastus	Non-ionic hydrous liniment S...	293579	5
Bombastus	Non-ionic hydrous liniment S...	295072	2
Bombastus	Non-ionic hydrous liniment S...	295911	2

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	300862	6
Bombastus	Non-ionic hydrous liniment S...	302286	12
Bombastus	Non-ionic hydrous liniment S...	302283	2
Bombastus	Non-ionic hydrous liniment S...	304934	6
Bombastus	Non-ionic hydrous liniment S...	305593	2
Bombastus	Non-ionic hydrous liniment S...	304936	3
Bombastus	Non-ionic hydrous liniment S...	307685	8
Bombastus	Non-ionic hydrous liniment S...	17001410	4
Bombastus	Non-ionic hydrous liniment S...	18004187	2
Bombastus	Non-ionic hydrous liniment S...	18006454	7
Bombastus	Non-ionic hydrous liniment S...	19001299	8
Bombastus	Non-ionic hydrous liniment S...	19002805	3
Bombastus	Non-ionic hydrous liniment S...	19002801	1
Bombastus	Non-ionic hydrous liniment S...	19002806	1
Bombastus	Non-ionic hydrous liniment S...	19004234	1
Bombastus	Non-ionic hydrous liniment S...	284231	1
Bombastus	Non-ionic hydrous liniment S...	19002440	3
Bombastus	Non-ionic hydrous liniment S...	275788	4
Bombastus	Non-ionic hydrous liniment S...	282333	3
Bombastus	Non-ionic hydrous liniment S...	286418	8
Bombastus	Non-ionic hydrous liniment S...	286420	1
Bombastus	Non-ionic hydrous liniment S...	293574	1
Bombastus	Non-ionic hydrous liniment S...	98434	1
Bombastus	Non-ionic hydrous liniment S...	300197	5
Bombastus	Non-ionic hydrous liniment S...	300199	2
Bombastus	Non-ionic hydrous liniment S...	311609	2
Bombastus	Non-ionic hydrous liniment S...	275626	1
Bombastus	Non-ionic hydrous liniment S...	288390	1
Bombastus	Non-ionic hydrous liniment S...	295071	1
Bombastus	Non-ionic hydrous liniment S...	300195	4
Bombastus	Non-ionic hydrous liniment S...	309798	2
Bombastus	Non-ionic hydrous liniment S...	258820	1
Bombastus	Non-ionic hydrous liniment S...	264191	1
Bombastus	Non-ionic hydrous liniment S...	269847	2
Bombastus	Non-ionic hydrous liniment S...	271304	2
Bombastus	Non-ionic hydrous liniment S...	275785	2
Bombastus	Non-ionic hydrous liniment S...	293577	3
Bombastus	Non-ionic hydrous liniment S...	29715	1
Bombastus	Non-ionic hydrous liniment S...	302887	1
Bombastus	Non-ionic hydrous liniment S...	309792	1
Bombastus	Non-ionic hydrous liniment S...	17000575	1
Bombastus	Non-ionic hydrous liniment S...	17001412	6
Bombastus	Non-ionic hydrous liniment S...	18000056	1
Bombastus	Non-ionic hydrous liniment S...	18174401	1
Bombastus	Non-ionic hydrous liniment S...	18005539	1
Bombastus	Non-ionic hydrous liniment S...	19001295	3
Bombastus	Non-ionic hydrous liniment S...	19002436	2
Bombastus	Non-ionic hydrous liniment S...	292618	3
Bombastus	Non-ionic hydrous liniment S...	297173	2
Bombastus	Non-ionic hydrous liniment S...	17000577	8
Bombastus	Non-ionic hydrous liniment S...	18002884	3
Bombastus	Non-ionic hydrous liniment S...	26A281216	1
Bombastus	Non-ionic hydrous liniment S...	307682	1
Bombastus	Non-ionic hydrous liniment S...	285793	4
Bombastus	Non-ionic hydrous liniment S...	288451	4
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	281564	1
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	282947	1
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	285025	1
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	288452	1
Bombstus	Non-ionic hydrous liniment S...	300199	1

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Supplier	Substance	Batch	Spectra
Cael/Phönix	Non-ionic hydrous liniment S...	15326702	1
Caelo	Non-ionic hydrous liniment S...	288454	1
Caelo	Non-ionic hydrous liniment S...	123304	1
Caelo	Non-ionic hydrous liniment S...	21A201113	1
Caelo	Non-ionic hydrous liniment S...	102600630	1
Caelo	Non-ionic hydrous liniment S...	285791	1
Caelo	Non-ionic hydrous liniment S...	14328402	3
Caelo	Non-ionic hydrous liniment S...	15192391	1
Caelo	Non-ionic hydrous liniment S...	15096001	1
Caelo	Non-ionic hydrous liniment S...	300199	3
Caelo	Non-ionic hydrous liniment S...	15279702	1
Caelo	Non-ionic hydrous liniment S...	16113901	10
Caelo	Non-ionic hydrous liniment S...	300864	2
Caelo	Non-ionic hydrous liniment S...	15096101	8
Caelo	Non-ionic hydrous liniment S...	24A271114	1
Caelo	Non-ionic hydrous liniment S...	15192301	6
Caelo	Non-ionic hydrous liniment S...	10A110515	1
Caelo	Non-ionic hydrous liniment S...	14092015A	1
Caelo	Non-ionic hydrous liniment S...	295072	1
Caelo	Non-ionic hydrous liniment S...	1519252	1
Caelo	Non-ionic hydrous liniment S...	15420902	4
Caelo	Non-ionic hydrous liniment S...	15421002	3
Caelo	Non-ionic hydrous liniment S...	16113801	9
Caelo	Non-ionic hydrous liniment S...	300863	2
Caelo	Non-ionic hydrous liniment S...	16218301	10
Caelo	Non-ionic hydrous liniment S...	16258501	17
Caelo	Non-ionic hydrous liniment S...	302285	1
Caelo	Non-ionic hydrous liniment S...	16B190716	1
Caelo	Non-ionic hydrous liniment S...	16318801	35
Caelo	Non-ionic hydrous liniment S...	16318802	7
Caelo	Non-ionic hydrous liniment S...	1625401	1
Caelo	Non-ionic hydrous liniment S...	307658	1
Caelo	Non-ionic hydrous liniment S...	307685	1
Caelo	Non-ionic hydrous liniment S...	1744401	1
Caelo	Non-ionic hydrous liniment S...	17209001	15
Caelo	Non-ionic hydrous liniment S...	17208802	1
Caelo	Non-ionic hydrous liniment S...	17261101	11
Caelo	Non-ionic hydrous liniment S...	17261201	9
Caelo	Non-ionic hydrous liniment S...	17313201	7
Caelo	Non-ionic hydrous liniment S...	18050701	32
Caelo	Non-ionic hydrous liniment S...	17A140817	1
Caelo	Non-ionic hydrous liniment S...	1805702	1
Caelo	Non-ionic hydrous liniment S...	18002886	1
Caelo	Non-ionic hydrous liniment S...	18002885	1
Caelo	Non-ionic hydrous liniment S...	18174501	7
Caelo	Non-ionic hydrous liniment S...	18278901	5
Caelo	Non-ionic hydrous liniment S...	19004501	6
Caelo	Non-ionic hydrous liniment S...	19055702	3
Caelo	Non-ionic hydrous liniment S...	190555703	1
Caelo	Non-ionic hydrous liniment S...	191367012x	1
Caelo	Non-ionic hydrous liniment S...	17144401	16
Caelo	Non-ionic hydrous liniment S...	18003534	2
Caelo	Non-ionic hydrous liniment S...	26A281216	1
Caelo	Non-ionic hydrous liniment S...	16A050815	2
Caelo	Non-ionic hydrous liniment S...	13A260617	2
Caelo	Non-ionic hydrous liniment S...	6A290317	1
Caelo	Non-ionic hydrous liniment S...	18050702	14
Caelo	Non-ionic hydrous liniment S...	11A040618	1
Caelo	Non-ionic hydrous liniment S...	200618	2
Caelo	Non-ionic hydrous liniment S...	140918	4

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrous liniment S...	291286	1
Caelo	Non-ionic hydrous liniment S...	18233201	8
Caelo	Non-ionic hydrous liniment S...	19000521	1
Caelo	Non-ionic hydrous liniment S...	22A100918	1
Caelo	Non-ionic hydrous liniment S...	5A110315	1
Caelo	Non-ionic hydrous liniment S...	302283	1
Caelo	Non-ionic hydrous liniment S...	297171	1
Caelo	Non-ionic hydrous liniment S...	19136704	1
Caelo	Non-ionic hydrous liniment S...	18153602	2
Caelo	Non-ionic hydrous liniment S...	15192502	8
Caelo	Non-ionic hydrous liniment S...	18086801	1
Caelo	Non-ionic hydrous liniment S...	296585	1
Caelo	Non-ionic hydrous liniment S...	31(19136701)	1
Caelo	Non-ionic hydrous liniment S...	17027801	17
Caelo	Non-ionic hydrous liniment S...	18086702	6
Caelo	Non-ionic hydrous liniment S...	18153501	7
Caelo	Non-ionic hydrous liniment S...	170644	1
Caelo	Non-ionic hydrous liniment S...	19136701	6
Caelo	Non-ionic hydrous liniment S...	16021601	17
Caelo	Non-ionic hydrous liniment S...	300862	1
Caelo	Non-ionic hydrous liniment S...	303898	1
Caelo	Non-ionic hydrous liniment S...	310355	1
Caelo	Non-ionic hydrous liniment S...	15326703	8
Fagron	Non-ionic hydrous liniment S...	14350703	1
Caelo	Non-ionic hydrous liniment S...	16113902	1
Caelo	Non-ionic hydrous liniment S...	16176701	18
Caelo	Non-ionic hydrous liniment S...	15014601	7
Caelo	Non-ionic hydrous liniment S...	15192401	10
Caelo	Non-ionic hydrous liniment S...	16258401	8
Caelo	Non-ionic hydrous liniment S...	17027901	8
Caelo	Non-ionic hydrous liniment S...	1290617/17064402	1
Caelo	Non-ionic hydrous liniment S...	20170829Ma1	1
Caelo	Non-ionic hydrous liniment S...	17312601	10
Caelo	Non-ionic hydrous liniment S...	19055703	5
Caelo	Non-ionic hydrous liniment S...	281562	1
Caelo	Non-ionic hydrous liniment S...	287323	1
Caelo	Non-ionic hydrous liniment S...	1616701	1
Caelo	Non-ionic hydrous liniment S...	1621821	1
Caelo	Non-ionic hydrous liniment S...	162258402	1
Caelo	Non-ionic hydrous liniment S...	10260682	1
Caelo	Non-ionic hydrous liniment S...	17175201	10
Caelo	Non-ionic hydrous liniment S...	17053187	1
Caelo	Non-ionic hydrous liniment S...	17312501	14
Caelo	Non-ionic hydrous liniment S...	18174401	2
Caelo	Non-ionic hydrous liniment S...	180050701	1
Caelo	Non-ionic hydrous liniment S...	278260	1
Caelo	Non-ionic hydrous liniment S...	14350703	3
Caelo	Non-ionic hydrous liniment S...	295910	1
Caelo	Non-ionic hydrous liniment S...	298466	1
Caelo	Non-ionic hydrous liniment S...	297175	1
Caelo	Non-ionic hydrous liniment S...	1676802	1
Caelo	Non-ionic hydrous liniment S...	17064402	30
Caelo	Non-ionic hydrous liniment S...	18233101	1
Caelo	Non-ionic hydrous liniment S...	291222	3
Caelo	Non-ionic hydrous liniment S...	16176802	3
Caelo	Non-ionic hydrous liniment S...	275787	1
Caelo	Non-ionic hydrous liniment S...	282333	1
Caelo	Non-ionic hydrous liniment S...	297178	1
Caelo	Non-ionic hydrous liniment S...	299133	1
Caelo	Non-ionic hydrous liniment S...	10A310516	1

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrous liniment S...	17117303	2
Caelo	Non-ionic hydrous liniment S...	17144502	4
Caelo	Non-ionic hydrous liniment S...	17208901	8
Caelo	Non-ionic hydrous liniment S...	181065035784	1
Caelo	Non-ionic hydrous liniment S...	275785	1
Caelo	Non-ionic hydrous liniment S...	122304	1
Caelo	Non-ionic hydrous liniment S...	14024104	1
Caelo	Non-ionic hydrous liniment S...	14024102	1
Caelo	Non-ionic hydrous liniment S...	14209501	8
Caelo	Non-ionic hydrous liniment S...	14173601	3
Caelo	Non-ionic hydrous liniment S...	14276002	7
Caelo	Non-ionic hydrous liniment S...	293579	1
Caelo	Non-ionic hydrous liniment S...	306362	2
Caelo	Non-ionic hydrous liniment S...	311039	1
Caelo	Non-ionic hydrous liniment S...	1823301	1
Caelo	Non-ionic hydrous liniment S...	15326702	11
Caecolo / Anzag	Non-ionic hydrous liniment S...	308627	1
Caesar & Loretz GmbH	Non-ionic hydrous liniment S...	19004501	1
Caesar & Loretz GmbH	Non-ionic hydrous liniment S...	19004301	2
Caesar & Loretz GmbH	Non-ionic hydrous liniment S...	19136702	2
Caesar & Loretz/ Noweda	Non-ionic hydrous liniment S...	278260	1
Caesar/Noweda	Non-ionic hydrous liniment S...	14173601	1
Caesar/Noweda	Non-ionic hydrous liniment S...	15326703	1
Cealo/Noweda	Non-ionic hydrous liniment S...	15096101	1
Cealo/Noweda	Non-ionic hydrous liniment S...	17027801	1
Celo	Non-ionic hydrous liniment S...	16113801	1
Chiesi/Phoenix	Non-ionic hydrous liniment S...	18050701	1
Delta	Non-ionic hydrous liniment S...	18050701	1
E Plus	Non-ionic hydrous liniment S...	309802	1
E Plus	Non-ionic hydrous liniment S...	18001767	1
E Plus	Non-ionic hydrous liniment S...	18002887	1
Ebert u. Jacobi 16.0...	Non-ionic hydrous liniment S...	300864	1
Caelo	Non-ionic hydrous liniment S...	308627	2
Eigene Herstellung	Non-ionic hydrous liniment S...	1546	1
Eigene Herstellung	Non-ionic hydrous liniment S...	1567	1
Euro OTC	Non-ionic hydrous liniment S...	15192401	1
Euro OTC	Non-ionic hydrous liniment S...	16218301	2
Euro OTC	Non-ionic hydrous liniment S...	16C190716	1
Euro OTC	Non-ionic hydrous liniment S...	18050701	1
Fagron	Non-ionic hydrous liniment S...	257210	1
Fagron	Non-ionic hydrous liniment S...	125304	1
Fagron	Non-ionic hydrous liniment S...	27301	1
Fagron	Non-ionic hydrous liniment S...	16113901	1
Fagron	Non-ionic hydrous liniment S...	311038	1
Fagron	Non-ionic hydrous liniment S...	17001403	1
Fagron	Non-ionic hydrous liniment S...	311040	1
Fagron	Non-ionic hydrous liniment S...	18086801	1
Fagron	Non-ionic hydrous liniment S...	18233201	1
Fagron	Non-ionic hydrous liniment S...	288452	1
Fagron	Non-ionic hydrous liniment S...	17027801	1
Fagron	Non-ionic hydrous liniment S...	123304	2
Fagron	Non-ionic hydrous liniment S...	301558	1
Fagron	Non-ionic hydrous liniment S...	311041	1
Fagron	Non-ionic hydrous liniment S...	258210	1
Fagron	Non-ionic hydrous liniment S...	122304	1
Gehe	Non-ionic hydrous liniment S...	269845	1
Gehe	Non-ionic hydrous liniment S...	271303	1
Gehe	Non-ionic hydrous liniment S...	272611	1
Gehe	Non-ionic hydrous liniment S...	274014	1
Gehe	Non-ionic hydrous liniment S...	278253	2

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Supplier	Substance	Batch	Spectra
Gehe	Non-ionic hydrous liniment S...	275792	1
Gehe	Non-ionic hydrous liniment S...	280873	1
Gehe	Non-ionic hydrous liniment S...	280877	1
Gehe	Non-ionic hydrous liniment S...	282335	1
Gehe	Non-ionic hydrous liniment S...	285024	1
Gehe	Non-ionic hydrous liniment S...	269846	1
Gehe	Non-ionic hydrous liniment S...	279498	2
Gehe	Non-ionic hydrous liniment S...	289205	1
Gehe	Non-ionic hydrous liniment S...	17064404	1
Gehe	Non-ionic hydrous liniment S...	306361	1
Gehe	Non-ionic hydrous liniment S...	25A071217	1
GEHE	Non-ionic hydrous liniment S...	24A231116	1
GEHE	Non-ionic hydrous liniment S...	2A010217	3
GEHE	Non-ionic hydrous liniment S...	14A260617	1
GEHE	Non-ionic hydrous liniment S...	16A020817	1
GEHE	Non-ionic hydrous liniment S...	21A250917	1
GEHE	Non-ionic hydrous liniment S...	307684	1
GEHE	Non-ionic hydrous liniment S...	17312501	1
GEHE	Non-ionic hydrous liniment S...	27A181217	1
GEHE	Non-ionic hydrous liniment S...	18000054	1
GEHE	Non-ionic hydrous liniment S...	18050701	1
GEHE	Non-ionic hydrous liniment S...	2A170118	1
GEHE	Non-ionic hydrous liniment S...	17001403	1
GEHE	Non-ionic hydrous liniment S...	18002332	1
GEHE	Non-ionic hydrous liniment S...	18003529	1
GEHE	Non-ionic hydrous liniment S...	18004188	1
GEHE	Non-ionic hydrous liniment S...	18006450	1
GEHE	Non-ionic hydrous liniment S...	19001296	3
Bombastus	Non-ionic hydrous liniment S...	310358	7
Bombastus	Non-ionic hydrous liniment S...	18003532	5
Gehe 18.08.14	Non-ionic hydrous liniment S...	288387	4
Gehe Kassel	Non-ionic hydrous liniment S...	15014601	2
Bombastus	Non-ionic hydrous liniment S...	280877	7
Gehe/Apomix	Non-ionic hydrous liniment S...	286417	1
Bombastus	Non-ionic hydrous liniment S...	282945	2
Bombastus	Non-ionic hydrous liniment S...	268124	1
Bombastus	Non-ionic hydrous liniment S...	287319	2
Caelo	Non-ionic hydrous liniment S...	4063101	1
Caelo	Non-ionic hydrous liniment S...	17175301	9
hochhaus-Apotheke	Non-ionic hydrous liniment S...	16318801	1
hochhaus-Apotheke	Non-ionic hydrous liniment S...	2116617027801	1
Ichthyol/Phönix	Non-ionic hydrous liniment S...	16113901	2
Kehr	Non-ionic hydrous liniment S...	14A260617	1
Kehr	Non-ionic hydrous liniment S...	22A231017	1
Kehr	Non-ionic hydrous liniment S...	16A170718	1
Kehr/ PKH GmbH	Non-ionic hydrous liniment S...	14A260617	1
Kehr/ PKH GmbH	Non-ionic hydrous liniment S...	15A170718	1
Caelo	Non-ionic hydrous liniment S...	19136702	3
Leyh Pharma	Non-ionic hydrous liniment S...	153811	1
Noweda	Non-ionic hydrous liniment S...	271243	1
Noweda	Non-ionic hydrous liniment S...	274820	1
Noweda	Non-ionic hydrous liniment S...	281562	1
Noweda	Non-ionic hydrous liniment S...	25A191213	1
Noweda	Non-ionic hydrous liniment S...	285795	1
Noweda	Non-ionic hydrous liniment S...	287323	1
Noweda	Non-ionic hydrous liniment S...	10A150514	1
Noweda	Non-ionic hydrous liniment S...	22A101114	1
Noweda	Non-ionic hydrous liniment S...	292618	1
Noweda	Non-ionic hydrous liniment S...	8A080415	1
Noweda	Non-ionic hydrous liniment S...	15096002	1

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Supplier	Substance	Batch	Spectra
Noweda	Non-ionic hydrous liniment S...	296109	1
Noweda	Non-ionic hydrous liniment S...	15192502	1
Noweda	Non-ionic hydrous liniment S...	15420902	1
Noweda	Non-ionic hydrous liniment S...	15421002	1
Noweda	Non-ionic hydrous liniment S...	16318802	1
Noweda	Non-ionic hydrous liniment S...	308628	1
Bombastus	Non-ionic hydrous liniment S...	192621	1
Caelo	Non-ionic hydrous liniment S...	294211	2
Noweda 27.08.15	Non-ionic hydrous liniment S...	15192301	1
Caelo	Non-ionic hydrous liniment S...	276526	1
Caelo	Non-ionic hydrous liniment S...	19002801	1
Noweda/apomix	Non-ionic hydrous liniment S...	12A100615	1
Noweda/Apomix	Non-ionic hydrous liniment S...	6B180315	1
Bombastus	Non-ionic hydrous liniment S...	309802	7
Caelo	Non-ionic hydrous liniment S...	284237	1
Pharmachem	Non-ionic hydrous liniment S...	309802	1
PharmaChem	Non-ionic hydrous liniment S...	140814	1
Pharmachem / Gehe	Non-ionic hydrous liniment S...	91118	1
phoenix	Non-ionic hydrous liniment S...	309791	1
Phoenix	Non-ionic hydrous liniment S...	300860	1
Phoenix	Non-ionic hydrous liniment S...	302283	1
Phoenix	Non-ionic hydrous liniment S...	303895	1
phönix	Non-ionic hydrous liniment S...	17027801	1
Phönix	Non-ionic hydrous liniment S...	307684	1
Phönix	Non-ionic hydrous liniment S...	17175201	2
Phönix	Non-ionic hydrous liniment S...	311611	1
Phönix	Non-ionic hydrous liniment S...	17001410	1
Phönix	Non-ionic hydrous liniment S...	18006454	1
Phönix	Non-ionic hydrous liniment S...	19055703	1
PHÖNIX	Non-ionic hydrous liniment S...	311040	1
Phönix (PKH Halle)	Non-ionic hydrous liniment S...	16A060812	1
Bombastus	Non-ionic hydrous liniment S...	309801	1
Phönix Gotha	Non-ionic hydrous liniment S...	273375	2
Phönix Gotha	Non-ionic hydrous liniment S...	278255	1
Phönix Gotha	Non-ionic hydrous liniment S...	281559	2
Phönix Gotha	Non-ionic hydrous liniment S...	282946	1
Phönix Gotha	Non-ionic hydrous liniment S...	287316	1
Phönix Gotha	Non-ionic hydrous liniment S...	270008	1
Phönix Gotha	Non-ionic hydrous liniment S...	275792	1
Phönix Gotha	Non-ionic hydrous liniment S...	290610	1
Phönix Gotha	Non-ionic hydrous liniment S...	292617	1
Phönix Gotha	Non-ionic hydrous liniment S...	295072	1
Phönix Gotha	Non-ionic hydrous liniment S...	296108	1
Bombastus	Non-ionic hydrous liniment S...	388627	1
Phönix/Gehe	Non-ionic hydrous liniment S...	18106503	1
PKH GmbH	Non-ionic hydrous liniment S...	6B180315	1
PKH GmbH	Non-ionic hydrous liniment S...	27A291215	1
PKH GmbH	Non-ionic hydrous liniment S...	7A300316	1
PKH GmbH	Non-ionic hydrous liniment S...	12a200616	1
PKH GmbH	Non-ionic hydrous liniment S...	21A241016	1
PKH GmbH	Non-ionic hydrous liniment S...	22A251016	1
PKH GmbH	Non-ionic hydrous liniment S...	17A140817	1
PKH GmbH / Phönix	Non-ionic hydrous liniment S...	11B270515	1
PKH GmbH/ Alliance Heal...	Non-ionic hydrous liniment S...	6A120318	1
PKH GmbH/ Alliance Heal...	Non-ionic hydrous liniment S...	15A170718	1
PKH GmbH/Kehr	Non-ionic hydrous liniment S...	24A231116	1
PKH Halle	Non-ionic hydrous liniment S...	6A120312	1
PKH Halle	Non-ionic hydrous liniment S...	13A200616	1
PKH Halle	Non-ionic hydrous liniment S...	27A181217	1
PKH Halle	Non-ionic hydrous liniment S...	13A260618	1

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Supplier	Substance	Batch	Spectra
PKH Halle	Non-ionic hydrous liniment S...	17A020818	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	4A110313	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	17A230913	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	4A250214	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	10A150514	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	15A140714	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	25A021214	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	15A150715	1
PKH Halle, Anzag	Non-ionic hydrous liniment S...	20A221012	1
PKH Halle, Phönix	Non-ionic hydrous liniment S...	17A030912	1
PKH Halle/ Phoenix Lepz...	Non-ionic hydrous liniment S...	10A110515	1
PKH Halle/ Phoenix Lepz...	Non-ionic hydrous liniment S...	8A250417	2
PKH Halle/Holdermann	Non-ionic hydrous liniment S...	10A100517	1
PKH Halle/Noweda	Non-ionic hydrous liniment S...	25A081215	1
PKH Halle/Phönix	Non-ionic hydrous liniment S...	12A200616	1
PKH/Noweda	Non-ionic hydrous liniment S...	21A250917	1
PKH/Phönix	Non-ionic hydrous liniment S...	9A190516	1
Pößneek Pharma / Gehe	Non-ionic hydrous liniment S...	23A181115	2
Rondell Apotheke	Non-ionic hydrous liniment S...	297175	1
sanacorp	Non-ionic hydrous liniment S...	15096002	1
Sanacorp	Non-ionic hydrous liniment S...	274820	1
Sanacorp	Non-ionic hydrous liniment S...	279500	1
Sanacorp	Non-ionic hydrous liniment S...	279501	1
Sanacorp	Non-ionic hydrous liniment S...	15002302	1
Sanacorp	Non-ionic hydrous liniment S...	15014601	1
Sanacorp	Non-ionic hydrous liniment S...	8/AKD101	1
Sanacorp	Non-ionic hydrous liniment S...	17064402	1
Sanacorp 21.10.15 und...	Non-ionic hydrous liniment S...	15192301	1
Caelo	Non-ionic hydrous liniment S...	14276001	5
Caelo	Non-ionic hydrous liniment S...	15096002	9
Bombastus	Non-ionic hydrous liniment S...	19003333	1
Caelo	Non-ionic hydrous liniment S...	269134	1
Caelo	Non-ionic hydrous liniment S...	2/AD1	1
Caelo	Non-ionic hydrous liniment S...	281564	2
Caelo	Non-ionic hydrous liniment S...	18106503	10
Selbstersteller	Non-ionic hydrous liniment S...	20140116	1
wepa/Sanaco	Non-ionic hydrous liniment S...	1542102	1
Wolf Apotheke	Non-ionic hydrous liniment S...	28(18006449)	1
Wolf-Apotheke	Non-ionic hydrous liniment S...	285793	1
	Hydrated liniment SR/DAC (NR...	37B190514	1
apomix	Hydrated liniment SR/DAC (NR...		1
Bombastus	Hydrated liniment SR/DAC (NR...		3
Phönix	Hydrated liniment SR/DAC (NR...		1
PKH Halle/Kehr	Hydrated liniment SR/DAC (NR...		1
	Non-ionic hydrous liniment S...	4A010317	1
Bombastus	Non-ionic hydrous liniment S...	297176	3
Bombastus	Non-ionic hydrous liniment S...	282335	1
	Non-ionic hydrous liniment S...	14350703	1
Caelo	Non-ionic hydrous liniment S...	14134601	9
Caelo	Non-ionic hydrous liniment S...	15420901	2
	Non-ionic hydrous liniment S...	288452	1

- 135 213 spectra from 702 *Apo-Ident* customers from a total of 34 216 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Liniment ointments* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Liniment ointments* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	910	0	55 449
Type B	0	1946	4	67 524
Type C	0	3038	102	135 106

The substance/substance group *Liniment ointments* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.3407 %)
Type B	100.0000 % (> 99.9653 %)	99.7949 % (> 99.6410 %)
Type C	100.0000 % (> 99.6439 %)	96.7516 % (> 96.6561 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Liniment ointments* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydrophilic cream, non-ionic SR (NRF p...	18.07	—
Hydrophilic cream, non-ionic without p...	24.96	—
Base cream, hydrophobic DAC	27.00	—
Anionic hydrophilic cream SR (NRF p.27)	28.79	—
Sodium laureth sulfate solution 27%	30.18	—
Wolff® base half-fat cream	33.97	—
Anionic hydrophilic cream without prese...	33.98	—
Sodium lactate solution 50%	36.06	—
Hydrophilic base emulsion (NRF p.25)	36.82	—
Anionic hydrophilic cream DAB	37.43	—
Glycolic acid 70%	38.59	—
Skin care ointment W/L SR (without pre...	39.36	—
Anionic hydrophilic cream with propyle...	40.70	—
Gel Cordes®	44.01	—
Liquorice juice purified, diluted	47.02	—
Base cream, diluted	47.44	—
Skin care ointment W/L SR	47.61	—
Lotio Cordes®	49.46	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Liniment ointments* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34505	31939	5.04	38.96
31169	31169	0.00	36.86
31476	31945	5.37	40.28
31827	31947	2.22	39.72
31830	31947	1.26	36.82
31943	31943	0.00	37.09
31945	31945	0.00	37.74
31946	31946	0.00	38.44
31947	31947	0.00	37.09
32090	32090	0.00	38.52
31438	31938	3.35	36.74
30982	31939	7.88	35.74
31939	31939	0.00	39.21
31938	31938	0.00	41.16
32089	32089	0.00	40.61
31170	31170	0.00	40.33
32305	31170	5.05	35.27
32727	32089	3.78	37.61

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Macrogol 8 stearate type I**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30554-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Macrogol 8 stearate type I; Polyäthylenglycol-8-stearat

Special notes

When selecting the *Macrogol 8 stearate type I* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macrogol 8 stearate type I	5	2	29

Second-stage model

For differentiation of the substance/substance group *Macrogol 8 stearate type I* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Macrogol 8 stearate type I*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogol 8 stere...	13077501	31165	40	1407187
Caelo	Macrogol 8 stere...	13324506	31453	40	AR-15-FG-001640-01
Caelo	Macrogol 8 stere...	172186	33717	40	20170906*
Caelo	Macrogol 8 stere...	173095	33900	40	20180111*
Caelo	Macrogol 8 stere...	192346	34708	40	20191010*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 5 reference samples from the substance/substance group *Macrogol 8 stearate type I*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 159 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Macrogol 8 stearate type I*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol 8 stearate type I	162302	32339	40
Caelo	Macrogol 8 stearate type I	182402	34339	40
Caelo	Macrogol 8 stearate type I	162302	32701	40

- 69 354 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 90 spectra from 53 *Apo-Ident* customers from 30 batches from the substance/substance group *Macrogol 8 stearate type I*.
- Among them are spectra of independent samples from 29 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag	Macrogol 8 stearate type I	16230202	1
Bombastus	Macrogol 8 stearate type I	16230202	1
Caelo	Macrogol 8 stearate type I	15249601	5
Caelo	Macrogol 8 stearate type I	12125404	1
Caelo	Macrogol 8 stearate type I	14074603	2
Caelo	Macrogol 8 stearate type I	153773	1
Caelo	Macrogol 8 stearate type I	16063205	3
Caelo	Macrogol 8 stearate type I	17309502	2
Caelo	Macrogol 8 stearate type I	17309504	10
Caelo	Macrogol 8 stearate type I	19234602	2
Caelo	Macrogol 8 stearate type I	18240202	5
Caelo	Macrogol 8 stearate type I	13304501	1
Caelo	Macrogol 8 stearate type I	13324501	1
Caelo	Macrogol 8 stearate type I	16063202	4
Caelo	Macrogol 8 stearate type I	15377305	3
Caelo	Macrogol 8 stearate type I	12H23-N02	1
Caelo	Macrogol 8 stearate type I	12E24-N07	1
Caelo	Macrogol 8 stearate type I	16230202	5
Caelo	Macrogol 8 stearate type I	15377301	7
Caelo	Macrogol 8 stearate type I	17218602	10
Caelo	Macrogol 8 stearate type I	T30911	1
Caerol	Macrogol 8 stearate type I	15249601	1
Caesar & Loretz GmbH	Macrogol 8 stearate type I	17309504	1
Fagron	Macrogol 8 stearate type I	11K04-N06	1
Fagron	Macrogol 8 stearate type I	14A17-B08-290544	1
Fagron	Macrogol 8 stearate type I	T30911	1
Fagron	Macrogol 8 stearate type I	T32431	1
Fagron	Macrogol 8 stearate type I	12E24-N07	1
Fagron	Macrogol 8 stearate type I	13H08-N04	1
Fagron	Macrogol 8 stearate type I	14H04-B01-298920	1
Fagron	Macrogol 8 stearate type I	1115M-03130	1
Fagron	Macrogol 8 stearate type I	1515Q-03130	1
Gehe	Macrogol 8 stearate type I	16063202	1
Caelo	Macrogol 8 stearate type I	13324504	4
Kehr	Macrogol 8 stearate type I	17309504	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogol 8 stearate type I	1721602	1
Phönix	Macrogol 8 stearate type I	13324501	1
sana	Macrogol 8 stearate type I	13077505	1
Sanacorp	Macrogol 8 stearate type I	17309504	1
Caelo	Macrogol 8 stearate type I	13324506	2

- 138 263 spectra from 703 *Apo-Ident* customers from a total of 35 265 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Macrogol 8 stearate type I* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Macrogol 8 stearate type I* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	120	0	69 354
Type C	0	89	1	138 263

The substance/substance group *Macrogol 8 stearate type I* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6453 %)	98.8889 % (> 95.5556 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Macrogol 8 stearate type I* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Polysorbate 60	20.34	—
Lauromacrogol 400	20.44	—
Macrogolglycerol hydroxystearate 40	20.59	—
Macrogol 20 glycerol monostearate type...	21.31	—
Macrogol ointment	26.40	—
Polysorbate 80	26.50	—
Polyol fatty acid ester	28.46	—
Macrogolglycerol ricinoleate	29.09	—
Macrogol 4 lauryl ether	37.38	—
Polysorbate 20	39.17	—
Hydrophilic ointment DAB	40.70	—
Macrogol-2-laurylether	43.07	—
Macrogols 300	46.08	—
Pasta Cordes®	55.93	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Macrogol 8 stearate type I* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31165	31165	0.00	20.78
31453	31453	0.00	26.31
34708	34708	0.00	23.68
33717	33717	0.00	33.65
33900	33900	0.00	21.33

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Macrogol ointment
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30465-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Macrogol ointment; Unguentum polyethylenglycoli

Special notes

When selecting the *Macrogol ointment* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macrogol ointment	9	2	62

Second-stage model

For differentiation of the substance/substance group *Macrogol ointment* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Macrogol ointment*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogol ointment	13002502	31004	40	20130108
Caelo	Macrogol ointment	13177801	31247	40	1405327
Caelo	Macrogol ointment	14078601	31442	40	20140321
Caelo	Macrogol ointment	13177801	31486	40	20130709
Caelo	Macrogol ointment	153838	31989	60	20151117*
Caelo	Macrogol ointment	162577	32493	40	20160928*
Caelo	Macrogol ointment	162578	32494	40	20160928*
Caelo	Macrogol ointment	172237	33751	40	20170828*
Caelo	Macrogol ointment	190510	34531	40	20190325*
Caelo	Macrogol ointment	190511	34532	40	20190325*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 420 spectra of 10 reference samples from the substance/substance group *Macrogol ointment*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 9 different batches.
- 55 939 spectra from a total of 1107 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 80 spectra of 2 reference samples from the substance/substance group *Macrogol ointment*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol ointment	182006	34257	40
Caelo	Macrogol ointment	182587	34357	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 208 spectra from 99 *Apo-Ident* customers from 66 batches from the substance/substance group *Macrogol ointment*.
- Among them are spectra of independent samples from 62 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag	Macrogol ointment	12117202	1
Anzag	Macrogol ointment	12353501	3
Anzag/	Macrogol ointment	12261402	2
Caelo	Macrogol ointment	13177702	3
apomix/ Phoenix Leipzig...	Macrogol ointment	16314502	1
Bahnhof-Apothek/Bahnhof...	Macrogol ointment	3418A-07196	1
Bombastus	Macrogol ointment	13177801	1
Bombastus	Macrogol ointment	17319301	1
Caelo	Macrogol ointment	10166302	1
Caelo	Macrogol ointment	11277702	1
Caelo	Macrogol ointment	6091202	1
Caelo	Macrogol ointment	12179102	2
Caelo	Macrogol ointment	29111202	1
Caelo	Macrogol ointment	12353502	4
Caelo	Macrogol ointment	12261403	2
Caelo	Macrogol ointment	22051304	1
Caelo	Macrogol ointment	13002505	1
Caelo	Macrogol ointment	19071305	1
Caelo	Macrogol ointment	16062002	2
Caelo	Macrogol ointment	6031507	1
Caelo	Macrogol ointment	14336302	4
Caelo	Macrogol ointment	15170701	5
Caelo	Macrogol ointment	16062003	4
Caelo	Macrogol ointment	15383802	1
Caelo	Macrogol ointment	16186301	13
Caelo	Macrogol ointment	16257801	3
Caelo	Macrogol ointment	16257802	3
Caelo	Macrogol ointment	16314502	7
Caelo	Macrogol ointment	17063901	2

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Supplier	Substance	Batch	Spectra
Caelo	Macrogol ointment	18111706	1
Caelo	Macrogol ointment	171276	1
Caelo	Macrogol ointment	17319302	3
Caelo	Macrogol ointment	18057501	1
Caelo	Macrogol ointment	18200702	2
Caelo	Macrogol ointment	18200701	4
Caelo	Macrogol ointment	19051001	4
Caelo	Macrogol ointment	14336301	6
Caelo	Macrogol ointment	17127601	17
Caelo	Macrogol ointment	12117202	2
Caelo	Macrogol ointment	18057701	8
Caelo	Macrogol ointment	16186302	1
Caelo	Macrogol ointment	151707107	1
Caelo	Macrogol ointment	17127601/5579	1
Caelo	Macrogol ointment	13275302	1
Caelo	Macrogol ointment	1012A-02834	1
Caelo	Macrogol ointment	1731931	1
Caelo	Macrogol ointment	15170602	4
Caelo	Macrogol ointment	14219802	3
Caelo	Macrogol ointment	14219801	3
Caelo	Macrogol ointment	13324901	1
Caelo	Macrogol ointment	170619181	1
Caelo	Macrogol ointment	13002602	4
Caelo	Macrogol ointment	13002601	1
Caelo	Macrogol ointment	17319301	3
Caelo	Macrogol ointment	18057801	1
Caelo	Macrogol ointment	4511M-02834	1
Caelo	Macrogol ointment	15383902	2
Caelo	Macrogol ointment	3315A-02834	1
Caelo	Macrogol ointment	12353501	4
Caelo	Macrogol ointment	13177701	1
Caelo	Macrogol ointment	13324902	1
Caelo	Macrogol ointment	312E-02834	1
Caeolo/Gehe	Macrogol ointment	18200701	1
Caesar & Loretz GmbH	Macrogol ointment	14336301	1
Caesar & Loretz GmbH	Macrogol ointment	14078601	1
cesar&llorenz/Phönix	Macrogol ointment	11327702	1
Ebert+Jacobi	Macrogol ointment	11277701	1
Euro OTC	Macrogol ointment	16314502	3
Fagron	Macrogol ointment	14012201	1
Fagron	Macrogol ointment	17127601	1
GEHE	Macrogol ointment	16186301	1
GEHE	Macrogol ointment	16314502	1
GEHE	Macrogol ointment	17127601	2
Caelo	Macrogol ointment	16186401	1
L12	Macrogol ointment	17127601	1
Noweda	Macrogol ointment	12179102	1
Caelo	Macrogol ointment	14012201	6
Sanacorp	Macrogol ointment	13177801	1
Caelo	Macrogol ointment	16092003	1
Caelo	Macrogol ointment	13002502	7
Caelo	Macrogol ointment	13177801	6
Caelo	Macrogol ointment	14078601	9
Euro OTC	Macrogol ointment		1

- 138 145 spectra from 703 *Apo-Ident* customers from a total of 35 231 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#),

the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Macrogol ointment* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Macrogol ointment* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	420	0	55 939
Type B	0	80	0	69 314
Type C	0	208	0	138 145

The substance/substance group *Macrogol ointment* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.5714 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 97.1154 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Macrogol ointment* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Macrogols 400	34.31	—
Macrogols 300	45.70	—
Polysorbate 20	59.29	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Macrogol ointment* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested

reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31004	31989	5.00	38.93
31247	31247	0.00	39.53
31442	33751	7.43	28.28
31486	33751	5.49	34.01
31989	31989	0.00	38.75
32493	32493	0.00	34.53
32494	32494	0.00	41.16
33751	33751	0.00	34.72
34531	34531	0.00	42.76
34532	34532	0.00	34.90

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Macrogol-2-laurylether**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31731-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Macrogol-2-laurylether; Dehydol® LS 2

Special notes

When selecting the *Macrogol-2-laurylether* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macrogol-2-laurylether	2	1	5

Second-stage model

For differentiation of the substance/substance group *Macrogol-2-laurylether* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Macrogol-2-laurylether*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogol-2-laury...	14054304	31731	60	1603434
Caelo	Macrogol-2-laury...	14054309	31867	60	20140225

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 2 reference samples from the substance/substance group *Macrogol-2-laurylether*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 239 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Macrogol-2-laurylether*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol-2-laurylether	15411908	33273	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 32 spectra from 11 *Apo-Ident* customers from 5 batches from the substance/substance group *Macrogol-2-laurylether*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Macrogol-2-laurylether	15411904	26
Caelo	Macrogol-2-laurylether	15411910	1
Caelo	Macrogol-2-laurylether	15411903	1
Caelo	Macrogol-2-laurylether	15411902	3
Caelo	Macrogol-2-laurylether	18093302	1

- 138 321 spectra from 703 *Apo-Ident* customers from a total of 35 290 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Macrogol-2-laurylether* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Macrogol-2-laurylether* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	40	0	69 434
Type C	0	32	0	138 321

The substance/substance group *Macrogol-2-laurylether* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6454 %)	100.0000 % (> 81.2500 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Macrogol-2-laurylether* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Macrogol 4 lauryl ether	19.62	—
Macrogol 8 stearate type I	25.84	—
Polyol fatty acid ester	27.22	—
Macrogol 20 glycerol monostearate type...	30.23	—
Macrogolglycerol hydroxystearate 40	32.07	—
Polysorbate 80	32.24	—
Lauromacrogol 400	32.51	—
Macrogolglycerol ricinoleate	38.08	—
Macrogol ointment	39.25	—
Polysorbate 60	39.40	—
Macrogols 400	44.79	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Macrogol-2-laurylether* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31731	31731	0.00	25.66
31867	31731	5.09	23.53

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Macrogols 300**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31151-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Macrogols 300; Polyethylenglycol 300

Special notes

When selecting the *Macrogols 300* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macrogols 300	8	2	30

Second-stage model

For differentiation of the substance/substance group *Macrogols 300* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Macrogols 300*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogols 300	13070109	31151	40	1403339
Caelo	Macrogols 300	14043802	31370	40	20140221
Caelo	Macrogols 300	16022102	32073	60	20160222
Caelo	Macrogols 300	160221	32209	40	20160222*
Caelo	Macrogols 300	161609	32212	40	20160607*
Caelo	Macrogols 300	162196	32337	40	20160729*
Caelo	Macrogols 300	182525	34312	40	20181011*
Caelo	Macrogols 300	183201	34325	40	20181214*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 340 spectra of 8 reference samples from the substance/substance group *Macrogols 300*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 56019 spectra from a total of 1108 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Macrogols 300*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogols 300	172105	33710	40
Caelo	Macrogols 300	181748	34232	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 65 spectra from 36 *Apo-Ident* customers from 33 batches from the substance/substance group *Macrogols 300*.
- Among them are spectra of independent samples from 30 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Macrogols 300	14145106	3
Caelo	Macrogols 300	1406212102	1
Caelo	Macrogols 300	12108103	1
Caelo	Macrogols 300	13233304	5
Caelo	Macrogols 300	1307109	1
Caelo	Macrogols 300	1323304	1
Caelo	Macrogols 300	15286409	5
Caelo	Macrogols 300	16219601	2
Caelo	Macrogols 300	17034402	1
Caelo	Macrogols 300	17210502	3
Caelo	Macrogols 300	8051813	1
Caelo	Macrogols 300	18040002	2
Caelo	Macrogols 300	17034406	2
Caelo	Macrogols 300	18040001	6
Caelo	Macrogols 300	18174803	1
Caelo	Macrogols 300	18252503	1
Caelo	Macrogols 300	14183102	2
Caelo	Macrogols 300	18252501	3
Caelo	Macrogols 300	15286402	3
Caelo	Macrogols 300	11336201	1
Caelo	Macrogols 300	16160903	2
Caelo	Macrogols 300	17034404	1
Caelo	Macrogols 300	12272906	1
Euro OTC	Macrogols 300	2512051	1
Euro OTC	Macrogols 300	4315A-02102	1
Euro OTC	Macrogols 300	4312I-02102	1
Euro OTC	Macrogols 300	5214I-02102	1
Gehe	Macrogols 300	16219601	1
Gehe	Macrogols 300	17034406	1
Nachtestung-Verlängerung	Macrogols 300	164/17	1
Phoenix am 13.03.14	Macrogols 300	13233304	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogols 300	17034401	4
Sanacorp	Macrogols 300	1703441	1
Caelo	Macrogols 300	160221	1
Caelo	Macrogols 300	162196	1
Caelo	Macrogols 300	14043802	1

- 138 288 spectra from 703 *Apo-Ident* customers from a total of 35 262 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Macrogols 300* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Macrogols 300* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	340	0	56 019
Type B	0	80	0	69 394
Type C	0	64	1	138 288

The substance/substance group *Macrogols 300* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.2353 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	98.4615 % (> 93.8462 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Macrogols 300* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Macrogols 400	26.52	—
Macrogol ointment	33.78	—
Basis Cordes® RK	114.09	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Macrogols 300* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31151	31151	0.00	50.29
31370	31151	4.10	46.84
32073	32209	0.48	41.25
32209	32209	0.00	40.95
32212	32212	0.00	40.66
32337	32337	0.00	41.87
34312	34312	0.00	38.69
34325	34325	0.00	38.80

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Macrogols 400**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30523-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Macrogols 400; Macrogolum 400

Special notes

When selecting the *Macrogols 400* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macrogols 400	5	13	171

Second-stage model

For differentiation of the substance/substance group *Macrogols 400* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Macrogols 400*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogols 400	13171112	31149	40	1403644
Caelo	Macrogols 400	14009101	31367	40	20140123
Caelo	Macrogols 400	170137	33057	40	20170125*
Euro OTC	Macrogols 400	1510042	31814	60	20151216*
Euro OTC	Macrogols 400	1609017	32714	40	20160929*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Macrogols 400*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 520 spectra of 13 reference samples from the substance/substance group *Macrogols 400*.
- Among them are spectra of independent samples from 13 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogols 400	160022	32211	40
Caelo	Macrogols 400	162941	33096	40
Caelo	Macrogols 400	171100	33321	40
Caelo	Macrogols 400	172833	33890	40
Caelo	Macrogols 400	190105	34463	40
Euro OTC	Macrogols 400	1603008	32185	40
Euro OTC	Macrogols 400	1412015	32187	40
Euro OTC	Macrogols 400	1607022	32461	40
Euro OTC	Macrogols 400	1610001	32712	40
Euro OTC	Macrogols 400	1702024	33226	40
Euro OTC	Macrogols 400	1711029	33932	40
Euro OTC	Macrogols 400	1807027	34214	40
Euro OTC	Macrogols 400	1906024	34655	40

- 68954 spectra from a total of 1489 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 773 spectra from 265 *Apo-Ident* customers from 174 batches from the substance/substance group *Macrogols 400*.
- Among them are spectra of independent samples from 171 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Macrogols 400	13171106	1
Fagron	Macrogols 400	14B05-B04-294688	3
AHD;19.06.15;3,34EUR	Macrogols 400	14352801	1
ALH	Macrogols 400	16128203	1
Euro OTC	Macrogols 400	1603008-01	4
Alliance Health 14.04.2...	Macrogols 400	13272908	2
Euro OTC	Macrogols 400	1206030-02	4
Allianz	Macrogols 400	180396802	1
Anzag	Macrogols 400	16128203	1
Anzag	Macrogols 400	17013701	1
Anzag	Macrogols 400	17110001	1
ApoIdent/ Phoenix	Macrogols 400	1711029-01	2
Bombastus	Macrogols 400	14352814	2
Bombastus	Macrogols 400	13F06-N11	3
Bombastus	Macrogols 400	3215E-03059	1
Bombastus	Macrogols 400	160300801	1
Caelo	Macrogols 400	13272909	3
Caelo	Macrogols 400	11293311	1
Caelo	Macrogols 400	12043312	2
Caelo	Macrogols 400	12152602	4
Caelo	Macrogols 400	12043311	1
Caelo	Macrogols 400	12152608	6
Caelo	Macrogols 400	12152601	1
Caelo	Macrogols 400	20190612-1	1
Caelo	Macrogols 400	11293302	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogols 400	20021306	1
Caelo	Macrogols 400	1213M-03059	1
Caelo	Macrogols 400	12152612	8
Caelo	Macrogols 400	12152614	2
Caelo	Macrogols 400	131711102	1
Caelo	Macrogols 400	12277603	1
Caelo	Macrogols 400	13171102	9
Caelo	Macrogols 400	13171106	4
Caelo	Macrogols 400	12277608	1
Caelo	Macrogols 400	13171109	2
Caelo	Macrogols 400	27111309	1
Caelo	Macrogols 400	13272901	4
Caelo	Macrogols 400	13272904	7
Caelo	Macrogols 400	13171113	2
Caelo	Macrogols 400	14009103	2
Caelo	Macrogols 400	13272908	1
Caelo	Macrogols 400	1409103	1
Caelo	Macrogols 400	14009110	1
Caelo	Macrogols 400	14009113	2
Caelo	Macrogols 400	140211-01	1
Caelo	Macrogols 400	14195605	3
Caelo	Macrogols 400	14352814	14
Caelo	Macrogols 400	14352805	1
Caelo	Macrogols 400	14195613	1
Caelo	Macrogols 400	14352804	4
Caelo	Macrogols 400	1412015-01	1
Caelo	Macrogols 400	18081505	1
Caelo	Macrogols 400	21092015B	1
Caelo	Macrogols 400	15324007	3
Caelo	Macrogols 400	15131407	2
Caelo	Macrogols 400	16002202	3
Caelo	Macrogols 400	16128202	3
Caelo	Macrogols 400	16128205	7
Caelo	Macrogols 400	161282	1
Caelo	Macrogols 400	17013702	7
Caelo	Macrogols 400	162941	1
Caelo	Macrogols 400	17013705	4
Caelo	Macrogols 400	17110003	5
Caelo	Macrogols 400	17283303	5
Caelo	Macrogols 400	18022801	1
Caelo	Macrogols 400	18039802	30
Caelo	Macrogols 400	18039804	1
Caelo	Macrogols 400	18039803	14
Caelo	Macrogols 400	18129401	10
Caelo	Macrogols 400	16081807	1
Caelo	Macrogols 400	18229702	3
Caelo	Macrogols 400	18229703	15
Caelo	Macrogols 400	18229707	5
Caelo	Macrogols 400	18129405	3
Caelo	Macrogols 400	19010501	3
Caelo	Macrogols 400	19010502	1
Caelo	Macrogols 400	14009102	4
Caelo	Macrogols 400	11293304	1
Caelo	Macrogols 400	13272906	2
Caelo	Macrogols 400	15324001	5
Caelo	Macrogols 400	12152613	3
Caelo	Macrogols 400	16128204/170227M	1
Caelo	Macrogols 400	1206030-02	2
Caelo	Macrogols 400	14352813	5
Caelo	Macrogols 400	14195601	12

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Supplier	Substance	Batch	Spectra
Caelo	Macrogols 400	16294107	2
Caelo	Macrogols 400	17013706	10
Caelo	Macrogols 400	3790304	1
Caelo	Macrogols 400	17283301	19
Caelo	Macrogols 400	15324002	15
Caelo	Macrogols 400	14352803	14
Caelo	Macrogols 400	17283302	6
Caelo	Macrogols 400	14195602	8
Caelo	Macrogols 400	15131406	2
Caelo	Macrogols 400	15324008	3
Caelo	Macrogols 400	12277607	9
Caelo	Macrogols 400	2412U-03059	1
Caelo	Macrogols 400	1314I-03059	1
Caelo	Macrogols 400	16002203	4
Caelo	Macrogols 400	11172705	1
Caelo	Macrogols 400	12152607	1
Caelo	Macrogols 400	13171103	4
Caelo	Macrogols 400	14352801	4
Caelo	Macrogols 400	16128204	7
Caelo	Macrogols 400	16294106	6
Caelo	Macrogols 400	19010508	4
Caelo	Macrogols 400	19107502	1
Caelo	Macrogols 400	13171104	5
Caelo	Macrogols 400	15131401	2
Caelo	Macrogols 400	13171107	3
Caelo	Macrogols 400	14009107	8
Caelo	Macrogols 400	15324003	1
Caelo	Macrogols 400	16128201	1
Caelo	Macrogols 400	15H28-B11-313603	1
Caelo	Macrogols 400	17013701	14
Caelo	Macrogols 400	16128203	29
Caelo	Macrogols 400	3790505	1
Caelo	Macrogols 400	16002201	24
Caelo	Macrogols 400	17110006	4
Caelo	Macrogols 400	19010505	1
Caelo	Macrogols 400	17110007	5
Caelo	Macrogols 400	18229706	13
Caelo	Macrogols 400	38121-03059	1
Caesar & Loretz GmbH	Macrogols 400	14195603	1
Caesar & Loretz GmbH	Macrogols 400	18229708	1
Caesar & Loretz GmbH	Macrogols 400	18229706	1
Caesar & Loretz GmbH	Macrogols 400	18229707	1
Caesar & Loretz GmbH/Gehe	Macrogols 400	18229706	1
Caesar&Loretz GmbH/Anzag	Macrogols 400	14352803	2
Caesar/Noweda	Macrogols 400	13171106	1
calo	Macrogols 400	18039804	1
Canea/Phönix	Macrogols 400	14352805	1
Cealo/Gehe	Macrogols 400	12043311	1
Euro OTC	Macrogols 400	1206030-01	4
Euro OTC	Macrogols 400	1610001-01	1
Euro OTC	Macrogols 400	1702024-01	1
Euro OTC	Macrogols 400	1702024-02	2
Euro OTC	Macrogols 400	1711029-01	3
Euro OTC	Macrogols 400	1807027_01	1
Euro OTC	Macrogols 400	1807027-01	4
Euro OTC	Macrogols 400	1412015-02	1
Euro OTC	Macrogols 400	1402011-01	14
Euro OTC	Macrogols 400	180308M/1711029-01	1
Euro OTC	Macrogols 400	17112019-01	1
Euro OTC	Macrogols 400	1510042-01	4

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Supplier	Substance	Batch	Spectra
Euro OTC	Macrogols 400	1304030-01	10
Euro OTC	Macrogols 400	1412015-01	6
Euro OTC	Macrogols 400	9309522	1
Euro OTC	Macrogols 400	1304030	1
Euro OTC	Macrogols 400	130403001	1
Fafron/Anzag	Macrogols 400	1014E-03059	1
Fagron	Macrogols 400	13F06-B40-289978	1
Fagron	Macrogols 400	14G10-B05-300393	2
Fagron	Macrogols 400	15B16-02-B02-308528	1
Fagron	Macrogols 400	15B16-B02-308528	2
Fagron	Macrogols 400	16K14-B01-331740	3
Fagron	Macrogols 400	17110001	1
Fagron	Macrogols 400	17J27-B02	1
Fagron	Macrogols 400	13I26-N21	1
Fagron	Macrogols 400	14G10-B05_300393	1
Fagron	Macrogols 400	12H02-N05	1
Fagron	Macrogols 400	13A25-N02	6
Fagron	Macrogols 400	13F06-N11	4
Fagron	Macrogols 400	11F07-N01	1
Fagron	Macrogols 400	11I13-N04	1
Fagron	Macrogols 400	12C21-N10	7
Fagron	Macrogols 400	12c21-n10	1
Fagron	Macrogols 400	12H02-N05	4
Fagron	Macrogols 400	14G10-B05-300394	2
Fagron	Macrogols 400	18039802	1
Fagron	Macrogols 400	11/45	1
Fagron	Macrogols 400	13126-N21	1
Fagron	Macrogols 400	2314A-03059	1
Fagron	Macrogols 400	16D07-B09-322539	1
Fagron	Macrogols 400	14B05-B04	1
Fagron	Macrogols 400	14G10-B05	1
Fagron	Macrogols 400	14K26-B01	2
Fagron	Macrogols 400	14K26-B01-301176	1
Finteler Apotheke	Macrogols 400	17013701	1
Finteler Apotheke	Macrogols 400	17110001	1
Gatt-Koller	Macrogols 400	1701872	1
Gatt-Koller	Macrogols 400	1802331	1
Gehe	Macrogols 400	16002201	2
Gehe	Macrogols 400	16128203	2
GEHE	Macrogols 400	19010502	1
Euro OTC	Macrogols 400	1607022-01	5
Caelo	Macrogols 400	16294102	5
Euro OTC	Macrogols 400	1402011-11	1
Hedinger	Macrogols 400	13F06-N11	1
Henry Lamotte	Macrogols 400	18229703	3
JENNE	Macrogols 400	170013706	1
Kehr	Macrogols 400	17013701	2
Kehr	Macrogols 400	17283302	1
Caelo	Macrogols 400	17110001	32
Kögl	Macrogols 400	267208163416	1
Kögl	Macrogols 400	1700723	1
KÖGL	Macrogols 400	1803626	1
Krieger	Macrogols 400	17013706	1
L12	Macrogols 400	16294106	2
L12	Macrogols 400	17110001	2
L30	Macrogols 400	17283301	2
L30	Macrogols 400	18229703	1
Noweda	Macrogols 400	12152614	3
Noweda	Macrogols 400	1215614	1
Noweda	Macrogols 400	12043312	1

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Supplier	Substance	Batch	Spectra
Noweda	Macrogols 400	15131406	1
Noweda	Macrogols 400	15324008	1
Caelo	Macrogols 400	14009109	5
OTG/Phönix	Macrogols 400	1412015-01	1
Phoenix	Macrogols 400	12152611	1
Phoenix	Macrogols 400	16002203	1
Caelo	Macrogols 400	12152611	3
Caelo	Macrogols 400	12043301	3
phönix	Macrogols 400	16128205	1
Phönix	Macrogols 400	12152601	1
Phönix	Macrogols 400	1206030-01	1
Phönix	Macrogols 400	14009109	1
Phönix	Macrogols 400	14352814	1
PHÖNIX	Macrogols 400	17283303	1
PHÖNIX	Macrogols 400	18129401	1
Phönix Gotha	Macrogols 400	12277607	1
Caelo	Macrogols 400	14195603	12
Sanacorp	Macrogols 400	17110006	1
Sanacorp	Macrogols 400	17283301	3
Sanacorp	Macrogols 400	17283302	1
Sanacorp	Macrogols 400	18229706	1
sanacorp, 3,43EUR, 20.09...	Macrogols 400	16128201	1
VDL 16.04.14	Macrogols 400	13272906//05R06	1
WE:Sanacorp 19.10.2016 ...	Macrogols 400	16128203	1
Caelo	Macrogols 400	13171112	5
Caelo	Macrogols 400	14009101	3

- 137 580 spectra from 703 *Apo-Ident* customers from a total of 35 123 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Macrogols 400* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Macrogols 400* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	520	0	68 954
Type C	0	761	12	137 580

The substance/substance group *Macrogols 400* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.8462 %)
Type C	100.0000 % (> 99.6452 %)	98.4476 % (> 98.0595 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Macrogols 400* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Macrogols 300	17.79	—
Macrogol ointment	19.29	—
Polysorbate 20	74.28	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Macrogols 400* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31149	31149	0.00	24.72
31367	33057	8.28	21.05
32714	32714	0.00	23.22
31814	31814	0.00	25.69
33057	33057	0.00	23.79

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Mandarin oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31747-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Mandarin oil; Oleum Mandarinae

Special notes

When selecting the *Mandarin oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Mandarin oil	2	2	6

Second-stage model

For differentiation of the substance/substance group *Mandarin oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Mandarin oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Mandarin oil	14064103	31747	60	1602210
Caelo	Mandarin oil	15398001	31863	60	20151127

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 2 reference samples from the substance/substance group *Mandarin oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 239 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Mandarin oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Mandarin oil	170368	33074	40
Caelo	Mandarin oil	180923	34055	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 20 spectra from 7 *Apo-Ident* customers from 7 batches from the substance/substance group *Mandarin oil*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Mandarin oil	15011601	12
Caelo	Mandarin oil	15398003	1
Caelo	Mandarin oil	17036801	2
Caelo	Mandarin oil	17361201	2
Caelo	Mandarin oil	18092301	1
Taoasis	Mandarin oil	412011-124957	1
Caelo	Mandarin oil	15398001	1

- 138 333 spectra from 703 *Apo-Ident* customers from a total of 35 288 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Mandarin oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Mandarin oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	80	0	69 394
Type C	0	20	0	138 333

The substance/substance group *Mandarin oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6456 %)	100.0000 % (> 70.0000 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Mandarin oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Bitter orange oil	12.15	–
Grapefruit oil	21.69	–
Sweet orange oil	22.78	–
Citric oil	24.29	–
Caraway oil	49.08	–
Bergamot oil	88.39	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Mandarin oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31747	31747	0.00	20.49
31863	31747	4.27	19.24

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Matricaria oil, rich in (-)-alpha-bisabolol
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30738-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Matricaria oil, rich in (-)-alpha-bisabolol; Oleum chamomillae

Special notes

When selecting the *Matricaria oil, rich in (-)-alpha-bisabolol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Matricaria oil, rich in (-)-alpha-bisabolol	4	3	15

Second-stage model

For differentiation of the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Matricaria oil, ...	11221206	30738	40	20110810
Caelo	Matricaria oil, ...	13195103	31239	30	1504133
Caelo	Matricaria oil, ...	13334702	31427	60	20131009
Caelo	Matricaria oil, ...	13334702	31428	60	20131009
Caelo	Matricaria oil, ...	190925	34442	40	20190405*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 230 spectra of 5 reference samples from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 129 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 100 spectra of 3 reference samples from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Matricaria oil, rich in (-)-...	13195101	31160	20
Caelo	Matricaria oil, rich in (-)-...	163310	33081	40
Caelo	Matricaria oil, rich in (-)-...	181173	34072	40

- 69 374 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 21 spectra from 8 *Apo-Ident* customers from 15 batches from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*.
- Among them are spectra of independent samples from 15 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Matricaria oil, rich in (-)-...	18091401	1
Caelo	Matricaria oil, rich in (-)-...	15080505	2
Caelo	Matricaria oil, rich in (-)-...	4916E-03052	1
Caelo	Matricaria oil, rich in (-)-...	16331005	2
Caelo	Matricaria oil, rich in (-)-...	17353504	4
Caelo	Matricaria oil, rich in (-)-...	15137801	2
Caelo	Matricaria oil, rich in (-)-...	16048910	1
Caelo	Matricaria oil, rich in (-)-...	17353506	1
Taoasis	Matricaria oil, rich in (-)-...	16266-119132	1
Taoasis	Matricaria oil, rich in (-)-...	929-115334	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-121466	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-122141	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-123770	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-123496	1
Taoasis	Matricaria oil, rich in (-)-...	2017100477-128584	1

- 138 332 spectra from 703 *Apo-Ident* customers from a total of 35 280 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Matricaria oil, rich in (-)-alpha-bisabolol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	230	0	56 129
Type B	0	100	0	69 374
Type C	0	21	0	138 332

The substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.3913 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6456 %)	100.0000 % (> 71.4286 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Verbena oil, nature-identical	30.66	—
Geranium oil, genuine	37.86	—
Tea tree oil	47.89	—
Acorus oil	48.42	—
Citronella oil	54.00	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30738	34442	4.02	23.60
31239	31239	0.00	28.06
31427	31239	6.34	22.31
31428	31239	6.54	22.18
34442	34442	0.00	21.22

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Melissa oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30207-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Melissa oil; Oleum melissae rectific.

Special notes

When selecting the *Melissa oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Melissa oil	4	2	52

Second-stage model

For differentiation of the substance/substance group *Melissa oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Melissa oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Melissa oil	13086306	31163	40	1403319
Caelo	Melissa oil	13354110	31403	40	20131028
Caelo	Melissa oil	163349	33080	40	20161215*
Caelo	Melissa oil	183300	34641	40	20181221*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Melissa oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Melissa oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Melissa oil	16053609	33784	40
Caelo	Melissa oil	180973	34084	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 175 spectra from 78 *Apo-Ident* customers from 54 batches from the substance/substance group *Melissa oil*.
- Among them are spectra of independent samples from 52 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alte Apotheke	Melissa oil	16053601	1
Anzag 27.02.13 ek: 8.17EUR	Melissa oil	122833801	1
Caelo	Melissa oil	4110I-01993	1
Caelo	Melissa oil	11323903	1
Caelo	Melissa oil	11323911	1
Caelo	Melissa oil	17091201	1
Caelo	Melissa oil	20230712-7	1
Caelo	Melissa oil	5211R-01993	1
Caelo	Melissa oil	122283804	1
Caelo	Melissa oil	1228380	1
Caelo	Melissa oil	28051311	1
Caelo	Melissa oil	13086303	1
Caelo	Melissa oil	12283801	1
Caelo	Melissa oil	21111303	1
Caelo	Melissa oil	190412	1
Caelo	Melissa oil	14332504	2
Caelo	Melissa oil	14332501	5
Caelo	Melissa oil	14332502	2
Caelo	Melissa oil	14332511	14
Caelo	Melissa oil	18081501	1
Caelo	Melissa oil	15172303	16
Caelo	Melissa oil	14332512	1
Caelo	Melissa oil	15172310	1
Caelo	Melissa oil	10019704	1
Caelo	Melissa oil	21041715	1
Caelo	Melissa oil	16053609	8
Caelo	Melissa oil	18097301	7
Caelo	Melissa oil	16334912	1
Caelo	Melissa oil	17012014	1
Caelo	Melissa oil	25(18097301)	1
Caelo	Melissa oil	11323902	3
Caelo	Melissa oil	12283809	8
Caelo	Melissa oil	13354113	5
Caelo	Melissa oil	1712070M/16053609	1
Caelo	Melissa oil	13086304	1
Caelo	Melissa oil	13086310	3

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Supplier	Substance	Batch	Spectra
Caelo	Melissa oil	13354105	2
Caelo	Melissa oil	13354108	1
Caelo	Melissa oil	12283804	5
Caelo	Melissa oil	16053601	11
Caelo	Melissa oil	13086308	6
Caelo	Melissa oil	15123303	1
Caelo	Melissa oil	11323909	1
Caelo	Melissa oil	18097308	4
Caelo	Melissa oil	18330007	1
Caelo	Melissa oil	14332508	1
Caelo	Melissa oil	15172308	9
Caelo	Melissa oil	16334905	11
Caelo	Melissa oil	12283805	2
Caeolo	Melissa oil	14332501	1
Caesar & Loretz GmbH, 4...	Melissa oil	11323910	1
Caesar&lorenz,Anzag	Melissa oil	11323902	1
Caleo/Phönix	Melissa oil	16053609	1
celo/phönix	Melissa oil	12283805	1
Nachprüfung	Melissa oil	130863060	1
Phönix	Melissa oil	12283809	1
Caelo	Melissa oil	13086311	6
Sanacorp	Melissa oil	13086306	1
Sanacorp	Melissa oil	1334110	1
Caelo	Melissa oil	13086306	4
Caelo	Melissa oil	13354110	3

- 138 178 spectra from 703 *Apo-Ident* customers from a total of 35 242 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Melissa oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Melissa oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	173	2	138 178

The substance/substance group *Melissa oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	98.8571 % (> 97.1429 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Melissa oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Citronella oil	40.57	—
Tea tree oil	46.71	—
Bitter orange oil	50.41	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Melissa oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31163	31163	0.00	50.77
31403	31163	4.79	48.29
33080	33080	0.00	51.73
34641	34641	0.00	52.00

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Methyl salicylate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31038-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Methyl salicylate; Methylum salicylicum

Special notes

When selecting the *Methyl salicylate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Methyl salicylate	4	2	55

Second-stage model

For differentiation of the substance/substance group *Methyl salicylate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Methyl salicylate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Methyl salicylate	12215217	31038	40	1403162
Caelo	Methyl salicylate	15409810	33280	40	20160118
Fagron	Methyl salicylate	14D03-B04-294169	31607	60	20140414
Fagron	Methyl salicylate	16E23-B05-332971	33275	40	20160608

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Methyl salicylate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Methyl salicylate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Methyl salicylate	192086	34728	40
Fagron	Methyl salicylate	18B19-B06-346255	34047	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 90 spectra from 49 *Apo-Ident* customers from 58 batches from the substance/substance group *Methyl salicylate*.
- Among them are spectra of independent samples from 56 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
ACM	Methyl salicylate	KNC1794J14	1
Alliance Health 10.06.2...	Methyl salicylate	RMS1332311	1
Alliance Health 18.11.2...	Methyl salicylate	13185102	1
Bomb/ Noweda	Methyl salicylate	RMS1332311	1
Caelo	Methyl salicylate	7111203	1
Caelo	Methyl salicylate	90328419	1
Caelo	Methyl salicylate	15B09-B04	1
Caelo	Methyl salicylate	13189309	2
Caelo	Methyl salicylate	12308313	1
Caelo	Methyl salicylate	15117910	1
Caelo	Methyl salicylate	17071301	1
Caelo	Methyl salicylate	13-11-n06	1
Caelo	Methyl salicylate	13I11-N06	1
Caelo	Methyl salicylate	12308307	1
Caelo	Methyl salicylate	13185101	3
Caelo	Methyl salicylate	18039003	2
Caelo	Methyl salicylate	12215215	1
Caelo	Methyl salicylate	15409807	1
Caelo	Methyl salicylate	15117904	2
Caesar & Loretz GmbH, 4...	Methyl salicylate	12215215	1
Fagron	Methyl salicylate	11H30-N14	1
Fagron	Methyl salicylate	11D08-N07	3
Fagron	Methyl salicylate	19061309	1
Fagron	Methyl salicylate	13d24-no9	1
Fagron	Methyl salicylate	12D24-N09	1
Fagron	Methyl salicylate	13I11-N06	1
Fagron	Methyl salicylate	30121414	1
Fagron	Methyl salicylate	RMS13332311	1
Fagron	Methyl salicylate	14D03-B04-294170	1
Fagron	Methyl salicylate	15B09-B04_303941	1
Fagron	Methyl salicylate	15B09-B04	1
Fagron	Methyl salicylate	15809-B04	1
Fagron	Methyl salicylate	303941	1
Fagron	Methyl salicylate	15B09-04-309068	1
Fagron	Methyl salicylate	15H04-B01-326798	1
Fagron	Methyl salicylate	24061714	1
Fagron	Methyl salicylate	16e23-b05-332971	1
Fagron	Methyl salicylate	13/11-N060025/364	1
Fagron	Methyl salicylate	13/11-N060013/364	1
Fagron	Methyl salicylate	14D03-B04-301825	1
Fagron	Methyl salicylate	RMS1409712	2

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Supplier	Substance	Batch	Spectra
Fagron	Methyl salicylate	17H21-B04-338848	1
Fagron	Methyl salicylate	15H04-B01	1
Fagron	Methyl salicylate	14D03-B04	1
Fagron	Methyl salicylate	RMS1332311	1
Fagron	Methyl salicylate	18B19-B06-346255	1
Fagron	Methyl salicylate	15B09-B04-303941	1
Fagron	Methyl salicylate	172650-0002	2
Fagron	Methyl salicylate	711Q-01867	1
Fagron	Methyl salicylate	13/11-N06	4
Fagron	Methyl salicylate	1139	1
Fagron	Methyl salicylate	14D03-B04-292643	1
Caelo	Methyl salicylate	10313708	3
Kögl	Methyl salicylate	157905164116	1
Kögl	Methyl salicylate	36202170817	1
Kögl	Methyl salicylate	1800961	1
L12	Methyl salicylate	18J01-B01-354337	1
Caelo	Methyl salicylate	14D03-B04-294169	1
Fagron	Methyl salicylate	12D27-n05	1
Fagron	Methyl salicylate	13D24-N09	6
PHOENIX 08.05.2014	Methyl salicylate	13I11-N06	1
Phönix	Methyl salicylate	13D24-N09	1
Caelo	Methyl salicylate	13189308	1
Fagron	Methyl salicylate	12C02-No2	1
Fagron	Methyl salicylate	12D27-N05	5
Fagron	Methyl salicylate	14D03-B04-294169	2

- 138 263 spectra from 703 *Apo-Ident* customers from a total of 35 238 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Methyl salicylate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Methyl salicylate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	90	0	138 263

The substance/substance group *Methyl salicylate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 93.3333 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Methyl salicylate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydroxyethyl salicylate	136.62	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Methyl salicylate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31038	31038	0.00	148.57
31607	31038	5.90	148.90
33275	31038	2.31	150.36
33280	31038	2.78	149.02

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Metronidazole 25% in white petrolatum**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30663-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Metronidazole 25% in white petrolatum

Special notes

When selecting the *Metronidazole 25% in white petrolatum* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Metronidazole 25% in white petrolatum	3	1	13

Second-stage model

For differentiation of the substance/substance group *Metronidazole 25% in white petrolatum* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Metronidazole 25% in white petrolatum*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Metronidazole 25...	12266401	30663	40	1405100
Caelo	Metronidazole 25...	14116801	31316	40	20140411
Caelo	Metronidazole 25...	16063101	32456	40	20160229
Caelo	Metronidazole 25...	16063101	32768	40	20160229

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Metronidazole 25% in white petrolatum*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56199 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Metronidazole 25% in white petrolatum*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Metronidazole 25% in white p...	16249701	33272	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 41 spectra from 14 *Apo-Ident* customers from 15 batches from the substance/substance group *Metronidazole 25% in white petrolatum*.
- Among them are spectra of independent samples from 13 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Cael Sanacorp 05.02.2016	Metronidazole 25% in white p...	15207101	1
Caelo	Metronidazole 25% in white p...	13188901	2
Caelo	Metronidazole 25% in white p...	14209301	1
Caelo	Metronidazole 25% in white p...	1285301	1
Caelo	Metronidazole 25% in white p...	13077601	3
Caelo	Metronidazole 25% in white p...	13002801	2
Caelo	Metronidazole 25% in white p...	13296501	3
Caelo	Metronidazole 25% in white p...	15207101	5
Caelo	Metronidazole 25% in white p...	13109801	4
Caelo	Metronidazole 25% in white p...	14024301	3
Caelo	Metronidazole 25% in white p...	14247201	1
Caelo	Metronidazole 25% in white p...	16249701	1
celo/Jenne	Metronidazole 25% in white p...	13077601	1
Gehe	Metronidazole 25% in white p...	14209301	1
GEHE/26.02.2013	Metronidazole 25% in white p...	12306601	1
Noweda 20.02.2015	Metronidazole 25% in white p...	14247301	1
Phoenix	Metronidazole 25% in white p...	16249701	1
Sanacorp	Metronidazole 25% in white p...	12306601	1
Caelo	Metronidazole 25% in white p...	14116801	3
Caelo	Metronidazole 25% in white p...	16063101	5

- 138 312 spectra from 703 *Apo-Ident* customers from a total of 35 280 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Metronidazole 25% in white petrolatum* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Metronidazole 25% in white petrolatum* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and

incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	40	0	69 434
Type C	0	41	0	138 312

The substance/substance group *Metronidazole 25% in white petrolatum* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6454 %)	100.0000 % (> 85.3659 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Metronidazole 25% in white petrolatum* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Pasta Cordes [®]	41.34	–
Permethrin 25% solution	43.90	–
Shea butter, refined	44.89	–
Laurel oil	56.54	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Metronidazole 25% in white petrolatum* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30663	30663	0.00	46.90
32768	30663	19.16	47.89

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31316	30663	10.36	46.70
32456	30663	15.96	48.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Mint oil / Peppermint oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30856-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Mint oil / Peppermint oil; Menthae arvensis aetheroleum partim mentholum depletum; Mint oil; Oleum menthae piperitae dopp. rectific.; Peppermint oil

Special notes

When selecting the *Mint oil / Peppermint oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Mint oil	3	2	4
Peppermint oil	5	6	260

Second-stage model

For differentiation of the substance/substance group *Mint oil* / *Peppermint oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Mint oil* / *Peppermint oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Mint oil	16053503	32474	40	1701393
Caelo	Mint oil	15380507	32476	40	1701394
Caelo	Mint oil	15380507	32484	40	20151116
Caelo	Mint oil	16053503	32780	40	20160309
Caelo	Mint oil	190224	34647	40	20190226*
Caelo	Peppermint oil	12114206	30856	40	20120424
Caelo	Peppermint oil	13303915	31410	40	1502136
Caelo	Peppermint oil	191136	34443	40	20190515*
Euro OTC	Peppermint oil	1312009-01	31294	40	20140130
Euro OTC	Peppermint oil	1512011	31811	60	20151214*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 420 spectra of 10 reference samples from the substance/substance group *Mint oil* / *Peppermint oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55 939 spectra from a total of 1108 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 320 spectra of 8 reference samples from the substance/substance group *Mint oil / Peppermint oil*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Mint oil	15380509	32781	40
Caelo	Mint oil	16053508	32845	40
Caelo	Peppermint oil	161904	32333	40
Caelo	Peppermint oil	172919	33699	40
Caelo	Peppermint oil	191359	34620	40
Euro OTC	Peppermint oil	1607018	32468	40
Euro OTC	Peppermint oil	1703032	33229	40
Euro OTC	Peppermint oil	1804008	34089	40

- 69 154 spectra from a total of 1494 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 791 spectra from 337 *Apo-Ident* customers from 269 batches from the substance/substance group *Mint oil / Peppermint oil*.
- Among them are spectra of independent samples from 263 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Mint oil	1061802	1
Caelo	Mint oil	16053514	1
Caelo	Mint oil	16053508	1
Caelo	Mint oil	17134803	1
ACM	Peppermint oil	407000718901021	1
AHD, 29.11.13	Peppermint oil	282542	1
Euro OTC	Peppermint oil	1512011-01	5
Alliance	Peppermint oil	56335	1
Alliance Healthcare	Peppermint oil	16F01-B03-322190	1
Fagron	Peppermint oil	285571	1
Anzag	Peppermint oil	11G19N07	1
Anzag	Peppermint oil	283491	1
Anzag	Peppermint oil	16114611	1
Anzag ek:13.70EUR 15.08.12	Peppermint oil	270566	1
Bio-Diät / Phönix	Peppermint oil	20553	1
Bombastus	Peppermint oil	300843	5
Bombastus	Peppermint oil	274804	1
Bombastus	Peppermint oil	1001311995	1
Bombastus	Peppermint oil	274976	1
Bombastus	Peppermint oil	277504	3
Bombastus	Peppermint oil	283491	4
Bombastus	Peppermint oil	286376	1

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Supplier	Substance	Batch	Spectra
Bombastus	Peppermint oil	283734	1
Bombastus	Peppermint oil	290394	2
Bombastus	Peppermint oil	292472	7
Bombastus	Peppermint oil	289675	1
Bombastus	Peppermint oil	289595	1
Bombastus	Peppermint oil	296017	1
Bombastus	Peppermint oil	304515	9
Bombastus	Peppermint oil	305627	1
Bombastus	Peppermint oil	17000387	1
Bombastus	Peppermint oil	311274	1
Bombastus	Peppermint oil	17002163	4
Bombastus	Peppermint oil	18000796	1
Bombastus	Peppermint oil	271257	1
Bombastus	Peppermint oil	277817	2
Bombastus	Peppermint oil	110(18003400)	1
Bombastus	Peppermint oil	295985	4
Bombastus	Peppermint oil	14150216	1
Bombastus	Peppermint oil	294802	1
Bombastus	Peppermint oil	309390	1
Bombastus	Peppermint oil	307810	1
Bombastus	Peppermint oil	60012008	1
Bombastus	Peppermint oil	18004277	1
Bombastus	Peppermint oil	298969	1
Bombastus	Peppermint oil	307854	1
Bombastus	Peppermint oil	280894	1
Bombastus	Peppermint oil	282542	1
Bombastus	Peppermint oil	286204	3
Bombastus	Peppermint oil	284588	1
Bombastus	Peppermint oil	290301	5
Bombastus	Peppermint oil	299058	4
Bombastus	Peppermint oil	300468	3
Bombastus	Peppermint oil	303064	2
Bombastus	Peppermint oil	275481	2
Bombastus	Peppermint oil	297946	1
Bombastus	Peppermint oil	295737	5
Bombastus	Peppermint oil	302909	1
Bombastus	Peppermint oil	311547	2
Bombastus	Peppermint oil	287528	3
Bombastus	Peppermint oil	287325	1
Bombastus	Peppermint oil	292138	6
Bombastus	Peppermint oil	288864	2
Bombastus	Peppermint oil	294293	4
Bombastus	Peppermint oil	295599	2
Bombastus	Peppermint oil	278812	2
Bombastus	Peppermint oil	80312004	1
Bombastus	Peppermint oil	285571	2
Bombastus	Peppermint oil	288086	1
Bombastus	Peppermint oil	279930	4
Bombastus	Peppermint oil	297256	4
Caelo	Peppermint oil	13105306	1
Caelo	Peppermint oil	13318004	4
Caelo	Peppermint oil	11287416	9
Caelo	Peppermint oil	2112E-01995	1
Caelo	Peppermint oil	11124709	3
Caelo	Peppermint oil	20151112-6	1
Caelo	Peppermint oil	1124709	1
Caelo	Peppermint oil	11287419	1
Caelo	Peppermint oil	11071312	1
Caelo	Peppermint oil	688901	2
Caelo	Peppermint oil	13105801	10

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Supplier	Substance	Batch	Spectra
Caelo	Peppermint oil	12114224	2
Caelo	Peppermint oil	13303912	2
Caelo	Peppermint oil	12180024	1
Caelo	Peppermint oil	20111417	1
Caelo	Peppermint oil	14150218	1
Caelo	Peppermint oil	13303914	1
Caelo	Peppermint oil	14369911	2
Caelo	Peppermint oil	152555801	1
Caelo	Peppermint oil	150415A	1
Caelo	Peppermint oil	13I04-N01	1
Caelo	Peppermint oil	14B03-B40	1
Caelo	Peppermint oil	14369909	11
Caelo	Peppermint oil	294293	1
Caelo	Peppermint oil	2115E-01995	1
Caelo	Peppermint oil	15255801	29
Caelo	Peppermint oil	15112908	1
Caelo	Peppermint oil	15112909	2
Caelo	Peppermint oil	15383704	2
Caelo	Peppermint oil	298969	1
Caelo	Peppermint oil	15255816	23
Caelo	Peppermint oil	4214U-01995	1
Caelo	Peppermint oil	15363201	1
Caelo	Peppermint oil	16114611	16
Caelo	Peppermint oil	16114601	1
Caelo	Peppermint oil	8061701	1
Caelo	Peppermint oil	15363214	7
Caelo	Peppermint oil	5170717	1
Caelo	Peppermint oil	1538707	1
Caelo	Peppermint oil	17188609	19
Caelo	Peppermint oil	16114619	1
Caelo	Peppermint oil	311547	1
Caelo	Peppermint oil	17188611	1
Caelo	Peppermint oil	1718610	1
Caelo	Peppermint oil	26051806	1
Caelo	Peppermint oil	180009905	1
Caelo	Peppermint oil	22091805	1
Caelo	Peppermint oil	18009914	1
Caelo	Peppermint oil	18221703	4
Caelo	Peppermint oil	18221702	12
Caelo	Peppermint oil	1820401	1
Caelo	Peppermint oil	18221716	1
Caelo	Peppermint oil	15255805	3
Caelo	Peppermint oil	15B11-B08-308854	1
Caelo	Peppermint oil	297256	1
Caelo	Peppermint oil	16114607	2
Caelo	Peppermint oil	18047501	4
Caelo	Peppermint oil	14369910	2
Caelo	Peppermint oil	16114627	7
Caelo	Peppermint oil	14150215	2
Caelo	Peppermint oil	11287421	5
Caelo	Peppermint oil	13105905	2
Caelo	Peppermint oil	18009905	1
Caelo	Peppermint oil	16190405	6
Caelo	Peppermint oil	14150220	6
Caelo	Peppermint oil	4517A-01995	1
Caelo	Peppermint oil	15127004	2
Caelo	Peppermint oil	14150221	4
Caelo	Peppermint oil	15255811	13
Caelo	Peppermint oil	171886095683	1
Caelo	Peppermint oil	13303903	5

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Supplier	Substance	Batch	Spectra
Caelo	Peppermint oil	12114219	4
Caelo	Peppermint oil	3913I-01995	1
Caelo	Peppermint oil	16114604	1
Caelo	Peppermint oil	16114613	1
Caelo	Peppermint oil	1324302	1
Caelo	Peppermint oil	18009910	7
Caelo	Peppermint oil	11124706	1
Caelo	Peppermint oil	10235317	1
Caelo	Peppermint oil	12D10-N04	1
Caelo	Peppermint oil	15235504	2
Caelo	Peppermint oil	17364301	2
Caelo	Peppermint oil	16114628	2
Caelo	Peppermint oil	13A10-N08	2
Caelo	Peppermint oil	11287407	5
Caelo	Peppermint oil	16114625	4
Caelo	Peppermint oil	1703032-01	1
Caelo	Peppermint oil	1703032-02	2
Caelo	Peppermint oil	18208401	1
Caelo	Peppermint oil	12114225	13
Caelo	Peppermint oil	15363207	1
Caelo	Peppermint oil	17188610	3
Caelo	Peppermint oil	13/04-N01	1
Caelo	Peppermint oil	16114603	4
Caelo	Peppermint oil	15383707	1
Caelo	Peppermint oil	16114602	16
Caelo	Peppermint oil	17291901	2
Caelo	Peppermint oil	12114211	2
Caelo	Peppermint oil	C101761	1
Caelo	Peppermint oil	13303904	6
Caelo	Peppermint oil	1330394904	1
Caelo	Peppermint oil	14150209	7
Caelo	Peppermint oil	1469910	1
Caelo	Peppermint oil	52/AKD15	1
Caelo	Peppermint oil	14150214	14
Caelo	Peppermint oil	12020812	1
Caelo	Peppermint oil	12020815	1
Caelo	Peppermint oil	307839	1
Caelo	Peppermint oil	14150209	1
Caesar & Loretz GmbH	Peppermint oil	18221702	5
Caesar & Loretz GmbH, 4...	Peppermint oil	12184601	2
Caesar & Loretz GmbH/ P...	Peppermint oil	18208401	1
Caesar & Loretz GmbH/Ph...	Peppermint oil	18221716	1
Caesar/Noweda	Peppermint oil	13303915	1
Caesar/Noweda	Peppermint oil	15255811	1
EuRho/Noweda	Peppermint oil	17291901	1
Euro OTC	Peppermint oil	1303015-01	2
Euro OTC	Peppermint oil	1703032-01	3
Euro OTC	Peppermint oil	1607018-02	2
Euro OTC	Peppermint oil	1504017-01	3
Euro OTC	Peppermint oil	15255816	1
Euro OTC	Peppermint oil	170303	1
Euro OTC	Peppermint oil	909185	1
Euro OTC	Peppermint oil	1804008	1
Euro OTC	Peppermint oil	1404038-01	1
Euro OTC	Peppermint oil	1804008-02	1
Euro OTC	Peppermint oil	1410005-01	1
Euro OTC	Peppermint oil	1804008-01	2
Euro OTC	Peppermint oil	1607018-01	2
Euro/Phönix	Peppermint oil	1703032-02	1
Euro OTC	Peppermint oil	1703030-02	1

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Supplier	Substance	Batch	Spectra
Fagron	Peppermint oil	11C14-N06	2
Fagron	Peppermint oil	12D10-N04	7
Fagron	Peppermint oil	11G19-N07	4
Fagron	Peppermint oil	11F09-N12	1
Fagron	Peppermint oil	8574769	1
Fagron	Peppermint oil	13A10-N08	5
Fagron	Peppermint oil	13A10-N8	1
Fagron	Peppermint oil	13A10N08	2
Fagron	Peppermint oil	688901	1
Fagron	Peppermint oil	12I19-N09	1
Fagron	Peppermint oil	100030-N05	1
Fagron	Peppermint oil	1304-N01	2
Fagron	Peppermint oil	13104-N10	1
Fagron	Peppermint oil	14B03-B40	3
Fagron	Peppermint oil	14B03-B40-295665	3
Fagron	Peppermint oil	14B03B40	1
Fagron	Peppermint oil	15B11-B08-304115	1
Fagron	Peppermint oil	15255801	1
Fagron	Peppermint oil	15K27-B01	1
Fagron	Peppermint oil	16F01-B03-322190	2
Fagron	Peppermint oil	16F01-B03-322818	2
Fagron	Peppermint oil	16F01-B03-326342	5
Fagron	Peppermint oil	16F01-B03-326341	1
Fagron	Peppermint oil	17F0-B07-336043	1
Fagron	Peppermint oil	17Fo8-B07-336043	1
Fagron	Peppermint oil	18B08-B06-354449	1
Fagron	Peppermint oil	16F01-B03-322189	1
Fagron	Peppermint oil	1512011-01	1
Fagron	Peppermint oil	15K27-B01-317773	2
Fagron	Peppermint oil	18B08-B06-352613	1
Fagron	Peppermint oil	15B11-B08	1
Fagron	Peppermint oil	12114206	1
Fagron	Peppermint oil	17F08-B07-342991	2
Fagron	Peppermint oil	250214PJK02	1
Fagron	Peppermint oil	18B08-B06-352613	1
Fagron	Peppermint oil	19C14-B12-191227	1
Fagron	Peppermint oil	19C14-B12	1
Fagron	Peppermint oil	15B11-B08-308854	1
Fagron	Peppermint oil	17F08-B07-139332	1
Fagron	Peppermint oil	13/04-N10	2
Fagron	Peppermint oil	17F08-B07-336043	3
Fagron	Peppermint oil	304515	1
Fagron	Peppermint oil	17F08-B07-337476	1
Fagron	Peppermint oil	11A05-N02	1
Fagron	Peppermint oil	16F01-B03	1
Fagron	Peppermint oil	934920	1
Fagron	Peppermint oil	18B08-B06-352613	1
Fagron	Peppermint oil	267849	1
Fagron	Peppermint oil	13i04-N10	1
Fagron	Peppermint oil	13I04-N01	7
Fagron	Peppermint oil	13I04-N10	4
Fagron	Peppermint oil	700599	1
Fagron	Peppermint oil	15B11-B08-304117	1
Fagron	Peppermint oil	17F08-B07	4
Fagron	Peppermint oil	17F08-B07-336086	1
Fiebig	Peppermint oil	21022172/1	1
Gatt-Koller	Peppermint oil	1802889	1
Gehe	Peppermint oil	13303903	1
Gehe	Peppermint oil	13105801	1
Gehe	Peppermint oil	305627	2

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Supplier	Substance	Batch	Spectra
GEHE	Peppermint oil	17F08-B07-324991	2
GEHE	Peppermint oil	17188609	1
GEHE 06.06.2014	Peppermint oil	283491	1
Caelo	Peppermint oil	153663207	1
Fagron	Peppermint oil	15363207	1
Hedinger	Peppermint oil	12114206	1
Hedinger/Gehe	Peppermint oil	13105801	1
hochhaus-Apotheke	Peppermint oil	16114603	1
Ichthyol GmbH/Noweda	Peppermint oil	16114611	1
Kehr	Peppermint oil	17188609	1
Kögl	Peppermint oil	1801774	1
L12	Peppermint oil	16114602	2
L12	Peppermint oil	16114625	3
Caelo	Peppermint oil	15255817	5
L30	Peppermint oil	17188609	2
Noweda	Peppermint oil	12114206	1
Bombastus	Peppermint oil	285715	2
Caelo	Peppermint oil	13241303	8
Caelo	Peppermint oil	15126904	1
Phoenix	Peppermint oil	12114211	1
Phoenix	Peppermint oil	16F01-B03-326341	1
Phoenix	Peppermint oil	18221702	1
Phönix	Peppermint oil	11124710	1
Phönix	Peppermint oil	13303915	1
Phönix Gotha	Peppermint oil	14150225	1
Caelo	Peppermint oil	18009912	1
Primavera	Peppermint oil	7703L22	1
Primavera	Peppermint oil	5409142	1
sanacorp	Peppermint oil	13I04-N01	1
sanacorp	Peppermint oil	14150214	1
Sanacorp	Peppermint oil	11287416	1
Sanacorp	Peppermint oil	12114219	1
Sanacorp	Peppermint oil	12114206	1
Sanacorp	Peppermint oil	47/AKD19	1
Sanacorp	Peppermint oil	280894	1
Sanacorp	Peppermint oil	13303915	3
Sanacorp	Peppermint oil	16114625	1
Sanacorp	Peppermint oil	309390	2
Sanacorp	Peppermint oil	17002163	1
Sanacorp	Peppermint oil	18004277	1
Sanacorp	Peppermint oil	18003400	1
Sanacorp, 16.08.2016, 7...	Peppermint oil	15255816	2
Caelo	Peppermint oil	11124710	1
Caelo	Peppermint oil	46/AD1	1
Caelo	Peppermint oil	14150225	11
Sensient	Peppermint oil	C9982	1
Caelo	Peppermint oil	269560	1
Taoasis	Peppermint oil	501319-105273	1
Taoasis	Peppermint oil	515574-107811	1
Taoasis	Peppermint oil	512777-107965	1
Taoasis	Peppermint oil	525728-109630	1
Taoasis	Peppermint oil	539490-111157	2
Taoasis	Peppermint oil	548992-112346	3
Taoasis	Peppermint oil	13486-116309	1
Taoasis	Peppermint oil	6316-115825	1
Taoasis	Peppermint oil	31145-118741	1
Taoasis	Peppermint oil	37979-120290	1
Taoasis	Peppermint oil	75404-127882	1
Taoasis	Peppermint oil	79725-128653	3
Taoasis	Peppermint oil	88914-2568	1

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Supplier	Substance	Batch	Spectra
Taoasis GmbH	Peppermint oil	534640-110874	1
Taoasis/Phönix	Peppermint oil	32724-118746	1
Caelo	Peppermint oil	12114206	15
Caelo	Peppermint oil	13303915	11
Caelo	Peppermint oil		2
Fargon	Peppermint oil		1
phönix	Peppermint oil		1
Taomed	Peppermint oil		1
	Peppermint oil	9183299	1

- 137 562 spectra from 703 *Apo-Ident* customers from a total of 35 029 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Mint oil / Peppermint oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Mint oil / Peppermint oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	420	0	55 939
Type B	0	320	0	69 154
Type C	0	770	21	137 562

The substance/substance group *Mint oil / Peppermint oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.5714 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.1250 %)
Type C	100.0000 % (> 99.6452 %)	97.3451 % (> 96.9659 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Mint oil / Peppermint oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Juniper oil	26.38	—
Verbena oil, nature-identical	33.44	—
Matricaria oil, rich in (-)-alpha-bisa...	34.41	—
Dwarf pine oil	34.82	—
Cypress oil	36.20	—
Myrtle oil	36.80	—
Turpentine oil	36.94	—
Cedar wood oil	37.44	—
Tea tree oil	39.21	—
Citronella oil	42.99	—
Petroleum ether DAB	44.87	—
Juniper wood oil	45.30	—
Acorus oil	46.03	—
Citric oil	46.25	—
Geranium oil, genuine	47.10	—
D-alpha tocopherol	47.26	—
Petroleum oil, white, cohobated	47.77	—
Pine silvestris oil	49.54	—
Caraway oil	49.67	—
Rose oil (genuine / artificial)	54.79	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Mint oil / Peppermint oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32474	32474	0.00	50.03
32780	32474	3.83	47.81
34647	34647	0.00	56.03
30856	31410	11.43	56.14
31410	31410	0.00	57.88
34443	34443	0.00	31.38
32476	32476	0.00	55.40
32484	32476	3.82	55.36
31294	31811	1.96	55.87
31811	31811	0.00	55.36

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Myrtle oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31836-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Myrtle oil; Oleum myrte

Special notes

When selecting the *Myrtle oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Myrtle oil	4	2	2

Second-stage model

For differentiation of the substance/substance group *Myrtle oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Myrtle oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Myrtle oil	15225102	31836	60	1606483
Caelo	Myrtle oil	15225103	32182	40	20150721
Caelo	Myrtle oil	15225102	32349	40	20150721
Caelo	Myrtle oil	182822	34449	40	20181030*
Caelo	Myrtle oil	183298	34458	40	20190122*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Myrtle oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56139 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Myrtle oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Myrtle oil	17227302	33879	40
Caelo	Myrtle oil	173184	34082	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2 spectra from 1 *Apo-Ident* customers from 2 batches from the substance/substance group *Myrtle oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Myrtle oil	15225104	1
Caelo	Myrtle oil	16296202	1

- 138 351 spectra from 703 *Apo-Ident* customers from a total of 35 293 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Myrtle oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Myrtle oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 394
Type C	0	2	0	138 351

The substance/substance group *Myrtle oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6497 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Myrtle oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Turpentine oil	16.95	—
Rosemary oil	20.83	—
Juniper wood oil	21.31	—
Cajeput (essentiel oil)	23.10	—
Cypress oil	24.87	—
Eucalyptus oil	30.12	—
Sage oil	32.06	—
Verbena oil, nature-identical	33.57	—
Acorus oil	43.37	—
Juniper oil	43.95	—
Spruce needle oil	44.47	—
Peppermint oil	49.06	—
Cedar wood oil	51.78	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Myrtle oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31836	31836	0.00	25.06
32182	31836	2.34	26.79
32349	31836	2.82	26.94
34449	34449	0.00	24.87
34458	34458	0.00	24.06

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances,

thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Non-ionic hydrophil ointment
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30463-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Non-ionic hydrophil ointment; Non-ionic hydrophil ointment, conserved; Unguentum emulsificans nonionicum aquosum DAB

Special notes

When selecting the *Non-ionic hydrophil ointment* substance/substance group, the following information is displayed to the user:

- Advice for the identification of Non-ionic hydrophil ointment DAB: Improper storage of samples can result in identification problems. Please homogenises the sample and let it adapt to room temperature before the measurement.

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Non-ionic hydrophil ointment	9	27	225

Second-stage model

For differentiation of the substance/substance group *Non-ionic hydrophil ointment* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Non-ionic hydrophil ointment*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Non-ionic hydrop...	295368	31749	60	20150625
Bombastus	Non-ionic hydrop...	300481	32105	40	20160225
Bombastus	Non-ionic hydrop...	300481	32726	40	20160225
Caelo	Non-ionic hydrop...	13138001	31001	40	20130531
Caelo	Non-ionic hydrop...	13332901	31227	40	20131104
Caelo	Non-ionic hydrop...	13333101	31451	40	1509156
Caelo	Non-ionic hydrop...	15151601	31748	60	9129
Caelo	Non-ionic hydrop...	161042	32088	40	20160411*
Caelo	Non-ionic hydrop...	172006	34010	40	20170810*
Fagron	Non-ionic hydrop...	170744	33360	40	20170413*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 440 spectra of 10 reference samples from the substance/substance group *Non-ionic hydrophil ointment*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 9 different batches.
- 55 919 spectra from a total of 1107 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 1390 spectra of 35 reference samples from the substance/substance group *Non-ionic hydrophil ointment*.
- Among them are spectra of independent samples from 26 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Non-ionic hydrophil ointment	153446	32077	40
Caelo	Non-ionic hydrophil ointment	153447	32078	40
Caelo	Non-ionic hydrophil ointment	153463	32084	40
Caelo	Non-ionic hydrophil ointment	161045	32085	40
Caelo	Non-ionic hydrophil ointment	161041	32087	40
Caelo	Non-ionic hydrophil ointment	153465	32106	40
Caelo	Non-ionic hydrophil ointment	160438	32107	40
Caelo	Non-ionic hydrophil ointment	161043	32110	40
Caelo	Non-ionic hydrophil ointment	161044	32112	40
Caelo	Non-ionic hydrophil ointment	161735	32417	40
Caelo	Non-ionic hydrophil ointment	161736	32418	40
Caelo	Non-ionic hydrophil ointment	161793	32419	40
Caelo	Non-ionic hydrophil ointment	161794	32421	40
Caelo	Non-ionic hydrophil ointment	162348	32488	40
Caelo	Non-ionic hydrophil ointment	162349	32489	40
Caelo	Non-ionic hydrophil ointment	162350	32490	40
Caelo	Non-ionic hydrophil ointment	170866	33361	40
Caelo	Non-ionic hydrophil ointment	170745	33362	40
Caelo	Non-ionic hydrophil ointment	170865	33363	40
Caelo	Non-ionic hydrophil ointment	170744	33364	40
Caelo	Non-ionic hydrophil ointment	170742	33366	40
Caelo	Non-ionic hydrophil ointment	170746	33367	40
Caelo	Non-ionic hydrophil ointment	170743	33369	40
Caelo	Non-ionic hydrophil ointment	171510	34009	40
Caelo	Non-ionic hydrophil ointment	172946	34011	40
Caelo	Non-ionic hydrophil ointment	181079	34154	40
Caelo	Non-ionic hydrophil ointment	182536	34358	40
Caelo	Non-ionic hydrophil ointment	161041	32108	40
Caelo	Non-ionic hydrophil ointment	161042	32109	30
Caelo	Non-ionic hydrophil ointment	161043	32111	40
Caelo	Non-ionic hydrophil ointment	161044	32113	40
Caelo	Non-ionic hydrophil ointment	161045	32114	40
Caelo	Non-ionic hydrophil ointment	161793	32420	40
Caelo	Non-ionic hydrophil ointment	170865	33365	40
Caelo	Non-ionic hydrophil ointment	170866	33368	40

- 68084 spectra from a total of 1474 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 853 spectra from 266 *Apo-Ident* customers from 233 batches from the substance/substance group *Non-ionic hydrophil ointment*.
- Among them are spectra of independent samples from 225 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrophil ointment	271973	1
AHD	Non-ionic hydrophil ointment	14069001	3
AHD	Non-ionic hydrophil ointment	16104201	1
AHD	Non-ionic hydrophil ointment	308111	1
Caelo	Non-ionic hydrophil ointment	15286701	6
Berkel AHK	Non-ionic hydrophil ointment	13332901	3
Berkel AHK	Non-ionic hydrophil ointment	13333101	2
Berkel AHK	Non-ionic hydrophil ointment	15002901	6
bom	Non-ionic hydrophil ointment	286003	1
Bomb/Gehe	Non-ionic hydrophil ointment	301280	1
Bombastus	Non-ionic hydrophil ointment	275259	2
Bombastus	Non-ionic hydrophil ointment	286003	5
Bombastus	Non-ionic hydrophil ointment	286002	2
Bombastus	Non-ionic hydrophil ointment	288044	6
Bombastus	Non-ionic hydrophil ointment	296803	4
Bombastus	Non-ionic hydrophil ointment	297634	2
Bombastus	Non-ionic hydrophil ointment	303641	3
Bombastus	Non-ionic hydrophil ointment	600807	1
Bombastus	Non-ionic hydrophil ointment	303643	4
Bombastus	Non-ionic hydrophil ointment	308112	7
Bombastus	Non-ionic hydrophil ointment	314098	1
Bombastus	Non-ionic hydrophil ointment	17001326	9
Bombastus	Non-ionic hydrophil ointment	278694	2
Bombastus	Non-ionic hydrophil ointment	308108	3
Bombastus	Non-ionic hydrophil ointment	267625	3
Bombastus	Non-ionic hydrophil ointment	272063	3
Bombastus	Non-ionic hydrophil ointment	293403	3
Bombastus	Non-ionic hydrophil ointment	303644	3
Bombastus	Non-ionic hydrophil ointment	306522	7
Bombastus	Non-ionic hydrophil ointment	311098	9
Bombastus	Non-ionic hydrophil ointment	271976	1
Bombastus	Non-ionic hydrophil ointment	271977	1
Bombastus	Non-ionic hydrophil ointment	303642	6
Bombastus	Non-ionic hydrophil ointment	286001	1
Bombastus	Non-ionic hydrophil ointment	288042	3
Bombastus	Non-ionic hydrophil ointment	290281	1
Bombastus	Non-ionic hydrophil ointment	293402	2
Bombastus	Non-ionic hydrophil ointment	296802	1
Bombastus	Non-ionic hydrophil ointment	300480	1
Bombastus	Non-ionic hydrophil ointment	160905UEN	1
Bombastus	Non-ionic hydrophil ointment	301279	2
Bombastus	Non-ionic hydrophil ointment	161220NHC/301280	1
Bombastus	Non-ionic hydrophil ointment	275256	1
Bombastus	Non-ionic hydrophil ointment	170905NHC/308112	1
Bombastus	Non-ionic hydrophil ointment	171114NHC/308111	1
Bombastus	Non-ionic hydrophil ointment	171128NHC/308111	1
Bombastus	Non-ionic hydrophil ointment	180308NHC/308108	1
Bombastus	Non-ionic hydrophil ointment	282903	4
Bombastus	Non-ionic hydrophil ointment	18004818	3
Bombastus	Non-ionic hydrophil ointment	282902	1
Bombastus	Non-ionic hydrophil ointment	271981	2
Bombastus	Non-ionic hydrophil ointment	308110	1
Bombastus	Non-ionic hydrophil ointment	290283	7
Bombastus	Non-ionic hydrophil ointment	6861335	1
Bombastus	Non-ionic hydrophil ointment	308111	4
Bombastus	Non-ionic hydrophil ointment	18006046	2
Bombastus	Non-ionic hydrophil ointment	301280	7
Bombastus	Non-ionic hydrophil ointment	295367	1
Bombastus	Non-ionic hydrophil ointment	297633	2
Bombastus	Non-ionic hydrophil ointment	18001524	7

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrophil ointment	19000787	1
Bombastus	Non-ionic hydrophil ointment	282904	3
Bombastus	Non-ionic hydrophil ointment	19002323	1
Bombastus	Non-ionic hydrophil ointment	303640	11
Bombastus	Non-ionic hydrophil ointment	288043	6
Bombastus	Non-ionic hydrophil ointment	266631	2
Bombastus	Non-ionic hydrophil ointment	268754	2
Bombastus	Non-ionic hydrophil ointment	275260	2
Bombastus	Non-ionic hydrophil ointment	280909	3
Bombastus	Non-ionic hydrophil ointment	296801	4
Bombastus	Non-ionic hydrophil ointment	300479	5
Bombastus	Non-ionic hydrophil ointment	18004817	1
Bombastus	Non-ionic hydrophil ointment	18001523	3
Bombastus	Non-ionic hydrophil ointment	293401	1
Bombastus, Noweda	Non-ionic hydrophil ointment	272063	1
Caelo	Non-ionic hydrophil ointment	16043801	5
Caelo	Non-ionic hydrophil ointment	16104101	17
Caelo	Non-ionic hydrophil ointment	11357801	1
Caelo	Non-ionic hydrophil ointment	21081202	1
Caelo	Non-ionic hydrophil ointment	21111203	1
Caelo	Non-ionic hydrophil ointment	12155901	5
Caelo	Non-ionic hydrophil ointment	12223601	3
Caelo	Non-ionic hydrophil ointment	12156101	2
Caelo	Non-ionic hydrophil ointment	4812I-02543	1
Caelo	Non-ionic hydrophil ointment	12223301	4
Caelo	Non-ionic hydrophil ointment	513Q-02543	1
Caelo	Non-ionic hydrophil ointment	12155801	1
Caelo	Non-ionic hydrophil ointment	12352801	6
Caelo	Non-ionic hydrophil ointment	12353001	1
Caelo	Non-ionic hydrophil ointment	12352901	3
Caelo	Non-ionic hydrophil ointment	12223602	1
Caelo	Non-ionic hydrophil ointment	6061305	1
Caelo	Non-ionic hydrophil ointment	13045401	4
Caelo	Non-ionic hydrophil ointment	13045102	1
Caelo	Non-ionic hydrophil ointment	130450401	1
Caelo	Non-ionic hydrophil ointment	13138201	4
Caelo	Non-ionic hydrophil ointment	13263501	7
Caelo	Non-ionic hydrophil ointment	13263401	1
Caelo	Non-ionic hydrophil ointment	13263601	3
Caelo	Non-ionic hydrophil ointment	CHB13263501	1
Caelo	Non-ionic hydrophil ointment	13263902	3
Caelo	Non-ionic hydrophil ointment	13263801	2
Caelo	Non-ionic hydrophil ointment	13333001	3
Caelo	Non-ionic hydrophil ointment	13333201	2
Caelo	Non-ionic hydrophil ointment	20061406	1
Caelo	Non-ionic hydrophil ointment	13333301	3
Caelo	Non-ionic hydrophil ointment	14068601	10
Caelo	Non-ionic hydrophil ointment	14069001	1
Caelo	Non-ionic hydrophil ointment	14176502	1
Caelo	Non-ionic hydrophil ointment	14221301	1
Caelo	Non-ionic hydrophil ointment	15002901	4
Caelo	Non-ionic hydrophil ointment	16173501	10
Caelo	Non-ionic hydrophil ointment	14221401	6
Caelo	Non-ionic hydrophil ointment	17112014A	1
Caelo	Non-ionic hydrophil ointment	14258901	6
Caelo	Non-ionic hydrophil ointment	14221501	2
Caelo	Non-ionic hydrophil ointment	14259201	2
Caelo	Non-ionic hydrophil ointment	15007402	4
Caelo	Non-ionic hydrophil ointment	5052015B	1
Caelo	Non-ionic hydrophil ointment	14259301	1

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrophil ointment	1326501	1
Caelo	Non-ionic hydrophil ointment	19081505	1
Caelo	Non-ionic hydrophil ointment	15286901	4
Caelo	Non-ionic hydrophil ointment	15346401	7
Caelo	Non-ionic hydrophil ointment	15344701	1
Caelo	Non-ionic hydrophil ointment	15286601	2
Caelo	Non-ionic hydrophil ointment	15346501	1
Caelo	Non-ionic hydrophil ointment	15346301	1
Caelo	Non-ionic hydrophil ointment	16104501	2
Caelo	Non-ionic hydrophil ointment	16173401	5
Caelo	Non-ionic hydrophil ointment	16173601	1
Caelo	Non-ionic hydrophil ointment	16234801	10
Caelo	Non-ionic hydrophil ointment	17074301	4
Caelo	Non-ionic hydrophil ointment	162334801	1
Caelo	Non-ionic hydrophil ointment	21041721	1
Caelo	Non-ionic hydrophil ointment	16179603	1
Caelo	Non-ionic hydrophil ointment	16258501	1
Caelo	Non-ionic hydrophil ointment	16235001	4
Caelo	Non-ionic hydrophil ointment	16179301	1
Caelo	Non-ionic hydrophil ointment	17086601	3
Caelo	Non-ionic hydrophil ointment	27071704	1
Caelo	Non-ionic hydrophil ointment	170865015315	1
Caelo	Non-ionic hydrophil ointment	17074601	5
Caelo	Non-ionic hydrophil ointment	17151301	2
Caelo	Non-ionic hydrophil ointment	18121708	1
Caelo	Non-ionic hydrophil ointment	17151001	3
Caelo	Non-ionic hydrophil ointment	19021813	1
Caelo	Non-ionic hydrophil ointment	17294602	6
Caelo	Non-ionic hydrophil ointment	14051806	1
Caelo	Non-ionic hydrophil ointment	17294603	3
Caelo	Non-ionic hydrophil ointment	18107903	4
Caelo	Non-ionic hydrophil ointment	18200801	18
Caelo	Non-ionic hydrophil ointment	18002339	1
Caelo	Non-ionic hydrophil ointment	19000803	1
Caelo	Non-ionic hydrophil ointment	13263701	4
Caelo	Non-ionic hydrophil ointment	19000804	1
Caelo	Non-ionic hydrophil ointment	297633	2
Caelo	Non-ionic hydrophil ointment	16104201	1
Caelo	Non-ionic hydrophil ointment	18107901	6
Caelo	Non-ionic hydrophil ointment	13138101	8
Caelo	Non-ionic hydrophil ointment	14259001	5
Caelo	Non-ionic hydrophil ointment	13333401	4
Caelo	Non-ionic hydrophil ointment	13263301	2
Caelo	Non-ionic hydrophil ointment	18107902	8
Caelo	Non-ionic hydrophil ointment	18253604	3
Caelo	Non-ionic hydrophil ointment	1318001	1
Caelo	Non-ionic hydrophil ointment	16179302	9
Caelo	Non-ionic hydrophil ointment	18253603	1
Caelo	Non-ionic hydrophil ointment	19000802	1
Caelo	Non-ionic hydrophil ointment	18200802	2
Caelo	Non-ionic hydrophil ointment	13045601	2
Caelo	Non-ionic hydrophil ointment	170328UENA303640	1
Caelo	Non-ionic hydrophil ointment	15002801	3
Caelo	Non-ionic hydrophil ointment	13045501	3
Caelo	Non-ionic hydrophil ointment	18200803	4
Caelo	Non-ionic hydrophil ointment	6(18253604)	1
Caelo	Non-ionic hydrophil ointment	18253602	4
Caelo	Non-ionic hydrophil ointment	15151801	5
Caelo	Non-ionic hydrophil ointment	17086501	6
Caelo	Non-ionic hydrophil ointment	15105101	8

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrophil ointment	13137901	1
Caelo	Non-ionic hydrophil ointment	13333501	5
Caelo	Non-ionic hydrophil ointment	11273303	1
Caelo	Non-ionic hydrophil ointment	17086701	2
Caelo	Non-ionic hydrophil ointment	290283	1
Caelo	Non-ionic hydrophil ointment	4(17151101)	1
Caelo	Non-ionic hydrophil ointment	170744015335	1
Caelo	Non-ionic hydrophil ointment	15105001	2
Caelo	Non-ionic hydrophil ointment	17200601	6
Caelo	Non-ionic hydrophil ointment	16179401	26
Caelo	Non-ionic hydrophil ointment	12086802	1
Caelo	Non-ionic hydrophil ointment	12086902	1
Caelo	Non-ionic hydrophil ointment	14259101	3
Caelo	Non-ionic hydrophil ointment	15286801	3
Caelo	Non-ionic hydrophil ointment	19083603	3
Caelo	Non-ionic hydrophil ointment	14068901	2
Caelo	Non-ionic hydrophil ointment	14068401	1
Caelo	Non-ionic hydrophil ointment	12086901	2
Caelo	Non-ionic hydrophil ointment	11273001	1
Caelo	Non-ionic hydrophil ointment	278694	1
Caelo	Non-ionic hydrophil ointment	13045201	3
Caelo	Non-ionic hydrophil ointment	13137801	1
Caelo	Non-ionic hydrophil ointment	16234901	4
Caelo	Non-ionic hydrophil ointment	170729183	1
Caelo	Non-ionic hydrophil ointment	17294601	15
Caelo	Non-ionic hydrophil ointment	17074501	7
Caelo	Non-ionic hydrophil ointment	15027801	19
Caelo	Non-ionic hydrophil ointment	15002601	4
Caelo	Non-ionic hydrophil ointment	15105201	1
Caelo	Non-ionic hydrophil ointment	297634	1
Caelo	Non-ionic hydrophil ointment	300481	2
Caelo	Non-ionic hydrophil ointment	16179303	5
Caelo	Non-ionic hydrophil ointment	19177503	2
Caelo	Non-ionic hydrophil ointment	12223501	3
Caelo	Non-ionic hydrophil ointment	14068801	2
Caelo	Non-ionic hydrophil ointment	14068701	2
Caelo	Non-ionic hydrophil ointment	15105301	1
Caelo	Non-ionic hydrophil ointment	17151101	2
Caelo	Non-ionic hydrophil ointment	288044	1
Caelo	Non-ionic hydrophil ointment	17074401	7
Caelo	Non-ionic hydrophil ointment	17200603	3
Caelo	Non-ionic hydrophil ointment	51121-02543	1
Caesolo ,	Non-ionic hydrophil ointment	17086601	1
Caesar & Loretz GmbH	Non-ionic hydrophil ointment	18107902	1
Caesar & Loretz GmbH	Non-ionic hydrophil ointment	12352901	1
Caesar/Noweda	Non-ionic hydrophil ointment	15346401	1
Cealo	Non-ionic hydrophil ointment	13138101	1
Caelo	Non-ionic hydrophil ointment	17074201	7
Euro OTC	Non-ionic hydrophil ointment	17200603	1
Euro OTC	Non-ionic hydrophil ointment	18253602	1
Euro OTC	Non-ionic hydrophil ointment	266631	1
Euro OTC	Non-ionic hydrophil ointment	17151301	1
Euro OTC	Non-ionic hydrophil ointment	311098	1
Fagron	Non-ionic hydrophil ointment	13045301	1
Fagron	Non-ionic hydrophil ointment	290282	1
Gehe	Non-ionic hydrophil ointment	16104401	1
GEHE	Non-ionic hydrophil ointment	17200603	1
GEHE	Non-ionic hydrophil ointment	18253602	1
GEHE	Non-ionic hydrophil ointment	18253604	1
GEHE	Non-ionic hydrophil ointment	19083602	1

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Supplier	Substance	Batch	Spectra
GEHE 10.03.2014	Non-ionic hydrophil ointment	13137901	1
GEHE 23.09.2014	Non-ionic hydrophil ointment	14221301	1
Bombastus	Non-ionic hydrophil ointment	308109	2
Kehr	Non-ionic hydrophil ointment	17294601	1
Kehr	Non-ionic hydrophil ointment	18107902	1
Kehr	Non-ionic hydrophil ointment	18253602	1
Martinus-Apotheke	Non-ionic hydrophil ointment	13138001	1
Noweda	Non-ionic hydrophil ointment	11357301	1
Noweda	Non-ionic hydrophil ointment	1812U-02543	1
Noweda	Non-ionic hydrophil ointment	271980	1
Noweda	Non-ionic hydrophil ointment	13138101	1
Noweda	Non-ionic hydrophil ointment	2122013c	1
Noweda	Non-ionic hydrophil ointment	16179302	1
Noweda	Non-ionic hydrophil ointment	16234801	1
Noweda	Non-ionic hydrophil ointment	17074601	1
Noweda	Non-ionic hydrophil ointment	17994601	1
Caelo	Non-ionic hydrophil ointment	1333101	1
Bombastus	Non-ionic hydrophil ointment	18002339	5
Caelo	Non-ionic hydrophil ointment	308111	1
Noweda08.06.2015	Non-ionic hydrophil ointment	15027801	1
Phoenix	Non-ionic hydrophil ointment	16104501	2
Phönix	Non-ionic hydrophil ointment	13045501	1
Phönix	Non-ionic hydrophil ointment	3033640	1
PHÖNIX	Non-ionic hydrophil ointment	17151302	1
Caelo	Non-ionic hydrophil ointment	15287001	12
Euro OTC	Non-ionic hydrophil ointment	14068601	3
Phönix/Bionorica	Non-ionic hydrophil ointment	17200601	1
Bombastus	Non-ionic hydrophil ointment	17086701	1
Caelo	Non-ionic hydrophil ointment	16179402	3
Post-Apotheke	Non-ionic hydrophil ointment	13263701	2
Sanacorp	Non-ionic hydrophil ointment	15105101	1
Sanacorp	Non-ionic hydrophil ointment	271980	1
Sanacorp	Non-ionic hydrophil ointment	271981	1
Sanacorp	Non-ionic hydrophil ointment	13045401	1
Sanacorp	Non-ionic hydrophil ointment	13138001	1
Sanacorp	Non-ionic hydrophil ointment	14068601	1
Sanacorp	Non-ionic hydrophil ointment	288043	1
Sanacorp	Non-ionic hydrophil ointment	15002901	1
Sanacorp	Non-ionic hydrophil ointment	17086501	2
Sanacorp	Non-ionic hydrophil ointment	18200802	1
Caelo	Non-ionic hydrophil ointment	12087001	3
vdl	Non-ionic hydrophil ointment	11357601	2
VDL	Non-ionic hydrophil ointment	13332901	1
Caelo	Non-ionic hydrophil ointment	13333101	10
Bombastus	Non-ionic hydrophil ointment	300481	8
Bombastus	Non-ionic hydrophil ointment	295368	5
Bombastus	Non-ionic hydrophil ointment		1
Caelo	Non-ionic hydrophil ointment	13138001	14
Caelo	Non-ionic hydrophil ointment	13332901	7
Caelo	Non-ionic hydrophil ointment	15151601	9
Caelo	Non-ionic hydrophil ointment		2

- 137 500 spectra from 703 *Apo-Ident* customers from a total of 35 067 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Non-ionic hydrophil ointment* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Non-ionic hydrophil ointment* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	440	0	55 919
Type B	0	1349	41	68 084
Type C	0	736	117	137 500

The substance/substance group *Non-ionic hydrophil ointment* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.6364 %)
Type B	100.0000 % (> 99.9653 %)	97.0504 % (> 96.8345 %)
Type C	100.0000 % (> 99.6452 %)	86.2837 % (> 85.9320 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Non-ionic hydrophil ointment* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Base cream DAC	13.25	12.49
Psorisol base cream Audor®	13.30	—
Base cream, hydrophobic DAC	18.64	—
Anionic hydrophilic cream with propyle...	20.50	—
Anionic hydrophilic cream DAB	23.21	—
Lanette® ointment (conserved)	23.63	12.36
Anionic hydrophilic cream SR (NRF p.27)	30.44	—
Skin care ointment W/L SR (without pre...	34.69	—
Hydrophilic cream, non-ionic SR (NRF p...	38.76	—
Hydrophilic cream, non-ionic without p...	38.96	—
Eucerin® cum Aqua	40.03	17.38
Anionic hydrophilic cream without prese...	40.76	—
Wool alcohol cream SR	42.50	10.08
Skin care ointment W/L SR	45.88	—
Glycolic acid 70%	45.92	—
:	:	:
Wool alcohol cream DAB	>50	20.59
Squalane	>50	142.99
2-ethylhexyl laurate	>50	149.11

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Non-ionic hydrophil ointment* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31227	31748	6.28	15.61
32088	32088	0.00	14.76
31748	31748	0.00	13.30
32105	31748	5.04	15.22
31451	31451	0.00	15.66
34010	34010	0.00	13.25
33360	33360	0.00	22.35
31001	31748	6.48	15.95
31749	31748	3.50	15.58
32726	31748	8.79	19.18

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Octyldodecanol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30867-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Octyldodecanol; Octyldodecanolum

Special notes

When selecting the *Octyldodecanol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Octyldodecanol	7	2	212

Second-stage model

For differentiation of the substance/substance group *Octyldodecanol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Octyldodecanol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Octyldodecanol	12165509	30867	40	20120711
Caelo	Octyldodecanol	13360010	31330	40	AR-15-FG-000314-01
Caelo	Octyldodecanol	15135212	31753	60	20150506
Caelo	Octyldodecanol	16095507	32958	40	20160421
Caelo	Octyldodecanol	163127	33093	40	20161219*
Caelo	Octyldodecanol	190136	34468	40	20190211*
Caelo	Octyldodecanol	190961	34471	40	20190521*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 300 spectra of 7 reference samples from the substance/substance group *Octyldodecanol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 7 different batches.
- 56 059 spectra from a total of 1109 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Octyldodecanol*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Octyldodecanol	171381	34052	40
Caelo	Octyldodecanol	181120	34220	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1995 spectra from 467 *Apo-Ident* customers from 219 batches from the substance/substance group *Octyldodecanol*.
- Among them are spectra of independent samples from 211 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
A.H.D.	Octyldodecanol	13044007	1
AHD	Octyldodecanol	16312701	1
AHD 09.04.2013	Octyldodecanol	12165521	1
AHD 30.5 preis:6,07	Octyldodecanol	13360011//05R06	1
AHD, 09.10.2013	Octyldodecanol	13044016	1
Caelo	Octyldodecanol	14371716	11
ALH	Octyldodecanol	16099503	1
ALH	Octyldodecanol	16095507	2
ALH	Octyldodecanol	16095503	1
ALH	Octyldodecanol	16312701	2
Alliance healthcare	Octyldodecanol	13044013	1
Alliance Healthcare	Octyldodecanol	18112006	1
Allianz	Octyldodecanol	17273001	1
Allianz	Octyldodecanol	18112001	3
Anzag	Octyldodecanol	12165519	1
Anzag	Octyldodecanol	15383005	1
Anzag	Octyldodecanol	16095503	2
Anzag	Octyldodecanol	16095507	1
Anzag	Octyldodecanol	16312701	1
Anzag/Henry Lamotte	Octyldodecanol	14371711	1
Beiersdorf/Anzag	Octyldodecanol	13044007	1
Bombastus	Octyldodecanol	11060318	1
Bombastus	Octyldodecanol	14371703	1
Bombastus	Octyldodecanol	15383008	1
Bombastus	Octyldodecanol	16095506	1
Caelo	Octyldodecanol	13044016	16
Caelo	Octyldodecanol	11060305	1
Caelo	Octyldodecanol	11060319	2
Caelo	Octyldodecanol	26071208	1
Caelo	Octyldodecanol	B11060317	1
Caelo	Octyldodecanol	11369016	8

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	11369012	2
Caelo	Octyldodecanol	12165506	3
Caelo	Octyldodecanol	13044002	10
Caelo	Octyldodecanol	13044005	12
Caelo	Octyldodecanol	13044007	8
Caelo	Octyldodecanol	13044013	17
Caelo	Octyldodecanol	13044015	9
Caelo	Octyldodecanol	12091304	1
Caelo	Octyldodecanol	13092013A	1
Caelo	Octyldodecanol	13222002	11
Caelo	Octyldodecanol	1322005	1
Caelo	Octyldodecanol	12111303	1
Caelo	Octyldodecanol	13222008	17
Caelo	Octyldodecanol	13360002	13
Caelo	Octyldodecanol	11012014A	1
Caelo	Octyldodecanol	13222001	1
Caelo	Octyldodecanol	12011401	1
Caelo	Octyldodecanol	13360005	6
Caelo	Octyldodecanol	13360008	14
Caelo	Octyldodecanol	24062014B	1
Caelo	Octyldodecanol	14130205	14
Caelo	Octyldodecanol	14130206	15
Caelo	Octyldodecanol	15092014B	1
Caelo	Octyldodecanol	31101416	1
Caelo	Octyldodecanol	8012015B	1
Caelo	Octyldodecanol	14158411	3
Caelo	Octyldodecanol	11052015A	1
Caelo	Octyldodecanol	14158401	1
Caelo	Octyldodecanol	15135205	1
Caelo	Octyldodecanol	17082015C	1
Caelo	Octyldodecanol	15135203	14
Caelo	Octyldodecanol	14371703	1
Caelo	Octyldodecanol	15135213	71
Caelo	Octyldodecanol	15383003	7
Caelo	Octyldodecanol	151352	1
Caelo	Octyldodecanol	15383004	22
Caelo	Octyldodecanol	153830	3
Caelo	Octyldodecanol	153830004	1
Caelo	Octyldodecanol	15383008	31
Caelo	Octyldodecanol	15383009	27
Caelo	Octyldodecanol	15383002	2
Caelo	Octyldodecanol	16095502	15
Caelo	Octyldodecanol	1538009	1
Caelo	Octyldodecanol	1583009	1
Caelo	Octyldodecanol	16095506	45
Caelo	Octyldodecanol	160955	2
Caelo	Octyldodecanol	16312706	23
Caelo	Octyldodecanol	16312704	5
Caelo	Octyldodecanol	17138102	63
Caelo	Octyldodecanol	27101712	1
Caelo	Octyldodecanol	4111712	1
Caelo	Octyldodecanol	1738102	2
Caelo	Octyldodecanol	17138103	10
Caelo	Octyldodecanol	187273002	1
Caelo	Octyldodecanol	1/2/3002	1
Caelo	Octyldodecanol	17273008	34
Caelo	Octyldodecanol	1273001	1
Caelo	Octyldodecanol	17273006	1
Caelo	Octyldodecanol	18112001	31
Caelo	Octyldodecanol	160112-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	12091806	1
Caelo	Octyldodecanol	250918A	1
Caelo	Octyldodecanol	18112008	19
Caelo	Octyldodecanol	18112004	4
Caelo	Octyldodecanol	18112012	1
Caelo	Octyldodecanol	19013609	4
Caelo	Octyldodecanol	1901360	1
Caelo	Octyldodecanol	19096105	1
Caelo	Octyldodecanol	18112011	27
Caelo	Octyldodecanol	18112010	6
Caelo	Octyldodecanol	12165519	8
Caelo	Octyldodecanol	12165521	10
Caelo	Octyldodecanol	13222013	1
Caelo	Octyldodecanol	14158410	9
Caelo	Octyldodecanol	9013603	1
Caelo	Octyldodecanol	1695511	1
Caelo	Octyldodecanol	19013602	10
Caelo	Octyldodecanol	19096102	1
Caelo	Octyldodecanol	CE11350022	2
Caelo	Octyldodecanol	14130207	28
Caelo	Octyldodecanol	15135207	7
Caelo	Octyldodecanol	13360012	14
Caelo	Octyldodecanol	13044009	13
Caelo	Octyldodecanol	14130204	3
Caelo	Octyldodecanol	3314E-02875	1
Caelo	Octyldodecanol	1718102	1
Caelo	Octyldodecanol	13222010	1
Caelo	Octyldodecanol	10281907	1
Caelo	Octyldodecanol	33(18112001)	1
Caelo	Octyldodecanol	34(19013602)	1
Caelo	Octyldodecanol	35(19013602)	1
Caelo	Octyldodecanol	17138105	20
Caelo	Octyldodecanol	17273002	77
Caelo	Octyldodecanol	14135206	1
Caelo	Octyldodecanol	4817E-02875	1
Caelo	Octyldodecanol	13222005	4
Caelo	Octyldodecanol	13360009	2
Caelo	Octyldodecanol	14371705	4
Caelo	Octyldodecanol	1513513	1
Caelo	Octyldodecanol	717Q-02875	1
Caelo	Octyldodecanol	18112006	43
Caelo	Octyldodecanol	13222011	9
Caelo	Octyldodecanol	15135211	9
Caelo	Octyldodecanol	12165517	2
Caelo	Octyldodecanol	13360001	3
Caelo	Octyldodecanol	29(17077701)	1
Caelo	Octyldodecanol	13360011	14
Caelo	Octyldodecanol	11369021	3
Caelo	Octyldodecanol	516A-02875	1
Caelo	Octyldodecanol	30(17273001)	1
Caelo	Octyldodecanol	31(17273001)	1
Caelo	Octyldodecanol	32(18112001)	1
Caelo	Octyldodecanol	1812001	1
Caelo	Octyldodecanol	12165515	13
Caelo	Octyldodecanol	11369004	3
Caelo	Octyldodecanol	4214U-02875	1
Caelo	Octyldodecanol	11369017	5
Caelo	Octyldodecanol	12165520	9
Caelo	Octyldodecanol	2513A-02875	1
Caelo	Octyldodecanol	13360006	12

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	14371710	2
Caelo	Octyldodecanol	1431707	1
Caelo	Octyldodecanol	1538003	1
Caelo	Octyldodecanol	1583004	1
Caelo	Octyldodecanol	13360003	8
Caelo	Octyldodecanol	11369003	7
Caelo	Octyldodecanol	11060317	1
Caelo	Octyldodecanol	11369014	2
Caelo	Octyldodecanol	2xa13360002	1
Caelo	Octyldodecanol	16312707	22
Caelo	Octyldodecanol	82695089	1
Caelo	Octyldodecanol	2613M-02875	2
Caelo	Octyldodecanol	1314I-02875	1
Caelo	Octyldodecanol	143710706	1
Caelo	Octyldodecanol	1098722	1
Caelo	Octyldodecanol	13044040	1
Caelo	Octyldodecanol	14158402	15
Caelo	Octyldodecanol	13222003	17
Caelo	Octyldodecanol	14371707	5
Caelo	Octyldodecanol	14371714	6
Caelo	Octyldodecanol	1538004	2
Caelo	Octyldodecanol	16095508	4
Caelo	Octyldodecanol	16312710	10
Caelo	Octyldodecanol	1707701	1
Caelo	Octyldodecanol	17138109	18
Caelo	Octyldodecanol	1801190D/17138109	1
Caelo	Octyldodecanol	1802080D/17138109	1
Fagron	Octyldodecanol	18112004	1
Caelo	Octyldodecanol	4113A2875	1
Caelo	Octyldodecanol	12165511	9
Caelo	Octyldodecanol	14371706	15
Caelo	Octyldodecanol	14158407	2
Caelo	Octyldodecanol	17138110	2
Caelo	Octyldodecanol	19013603	26
Caelo	Octyldodecanol	1538005	2
Caelo	Octyldodecanol	16095503	42
Caelo	Octyldodecanol	16095501	3
Caelo	Octyldodecanol	16312701	71
Caelo	Octyldodecanol	17273001	52
Caelo	Octyldodecanol	19013610	5
Caelo	Octyldodecanol	12165514	3
Caelo	Octyldodecanol	13044010	12
Caelo	Octyldodecanol	133360010	1
Caelo	Octyldodecanol	14130202	1
Caelo	Octyldodecanol	15135206	31
Caelo	Octyldodecanol	15383005	47
Caelo	Octyldodecanol	17077701	13
Caelo	Octyldodecanol	18112002	28
Caelo	Octyldodecanol	190136202	1
Caeo	Octyldodecanol	14130205	1
Caeol	Octyldodecanol	6022014B	1
Caeol/Phoenix	Octyldodecanol	15383005	1
Caeolo / Phönix	Octyldodecanol	16312707	1
Caeolo/Noweda	Octyldodecanol	15383008	1
Caesar & Lorenz GmbH	Octyldodecanol	17273002	2
Caesar & Lorenz GmbH	Octyldodecanol	17273008	2
Caesar & Loretz	Octyldodecanol	16312707	1
Caesar & Loretz GmbH	Octyldodecanol	13222008	1
Caesar & Loretz GmbH	Octyldodecanol	13360010	1
Caesar & Loretz GmbH	Octyldodecanol	15135206	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Octyldodecanol	16095511	1
Caesar & Loretz GmbH	Octyldodecanol	16312701	1
Caesar & Loretz GmbH	Octyldodecanol	18112011	4
Caesar & Loretz GmbH	Octyldodecanol	18112010	1
Caesar & Loretz GmbH	Octyldodecanol	19013603	4
Caesar & Loretz GmbH	Octyldodecanol	19013609	1
Caesar & Loretz/ Noweda	Octyldodecanol	13044009	1
Caesar & Loretz/AHC	Octyldodecanol	16095503	1
Caesar & Loretz/Noweda	Octyldodecanol	16095503	2
Caesar&Loretz	Octyldodecanol	16095502	1
Caesar&Loretz GmbH	Octyldodecanol	15383004	1
Caesar&Loretz GmbH,09.0. . .	Octyldodecanol	16095507	1
Caesar&loretz,Phoenix	Octyldodecanol	13044016	1
Caesar&loretz,Phoenix	Octyldodecanol	13360006	1
Caesar&loretz,Phoenix	Octyldodecanol	14371711	1
caesar&loretz,Phönix	Octyldodecanol	15135206	1
Caesar/Lorenz	Octyldodecanol	13044009	1
Caesar/Noweda	Octyldodecanol	13044009	1
Caesar/Noweda	Octyldodecanol	13222010	1
Caesar/Noweda	Octyldodecanol	15135207	1
Caolo	Octyldodecanol	15383005	1
Cealo	Octyldodecanol	18112002	1
Cealo / Noweda	Octyldodecanol	13222008	1
Cealo/Anzag	Octyldodecanol	16312701	2
Cealo/Gehe	Octyldodecanol	15135212	2
Cealo/Noweda	Octyldodecanol	17138102	1
Cealo/Noweda	Octyldodecanol	17273008	1
E-Plus	Octyldodecanol	18112001	1
Euro OTC	Octyldodecanol	13044015	1
Euro OTC	Octyldodecanol	17273003	3
Euro OTC	Octyldodecanol	15383004	1
Euro OTC	Octyldodecanol	16312701	1
Euro OTC	Octyldodecanol	16095511	1
Euro/Phönix	Octyldodecanol	15383009	1
Fagron	Octyldodecanol	200714112-2	1
Fagron	Octyldodecanol	12J04-N01	3
Fagron	Octyldodecanol	12C31-N03	1
Fagron	Octyldodecanol	13E07-N03	3
Fagron	Octyldodecanol	13L02-B05-288975	1
Fagron	Octyldodecanol	14E06-B02-301705	2
Fagron	Octyldodecanol	15E06-B02-30170	1
Fagron	Octyldodecanol	16G20-B99-324356	12
Fagron	Octyldodecanol	17273008	1
Fagron	Octyldodecanol	15383004	1
Fagron	Octyldodecanol	14E06-B02-293745	1
Fagron	Octyldodecanol	14E06-B02-293746	1
Fagron	Octyldodecanol	14E06-B02-30170	1
Fagron	Octyldodecanol	11J13-N05	5
Fagron	Octyldodecanol	10598578	1
Fagron	Octyldodecanol	16312701	1
Fagron	Octyldodecanol	14e06-b02-293745	1
Fagron	Octyldodecanol	15135213	1
Fagron	Octyldodecanol	13L02-B05	2
Fagron	Octyldodecanol	14E06-B02	5
Fagron	Octyldodecanol	14E06-B02-301706	1
Fagron	Octyldodecanol	17138102	1
Fagron	Octyldodecanol	18112008	1
Fargon	Octyldodecanol	11C14-N14	1
Fresenius	Octyldodecanol	300615100	1
gehe	Octyldodecanol	17138109	1

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Supplier	Substance	Batch	Spectra
Gehe	Octyldodecanol	11369012	1
Gehe	Octyldodecanol	11369021	1
Gehe	Octyldodecanol	12165515	1
Gehe	Octyldodecanol	12165519	1
Gehe	Octyldodecanol	12165506	1
Gehe	Octyldodecanol	13044013	1
Gehe	Octyldodecanol	13360003	1
Gehe	Octyldodecanol	13360006	1
Gehe	Octyldodecanol	13360012	1
Gehe	Octyldodecanol	15383009	1
Gehe	Octyldodecanol	16312701	3
Gehe	Octyldodecanol	16095503	1
Gehe	Octyldodecanol	17138102	1
Gehe	Octyldodecanol	18112002	1
GEHE	Octyldodecanol	16095507	1
GEHE	Octyldodecanol	16312701	1
GEHE	Octyldodecanol	1098685	1
GEHE	Octyldodecanol	17273002	1
GEHE	Octyldodecanol	17273008	2
GEHE	Octyldodecanol	19013609	1
Caelo	Octyldodecanol	1265515	1
Hedinger/Noweda	Octyldodecanol	17138102	3
Ichthyol/Phönix	Octyldodecanol	16095503	1
Kehr	Octyldodecanol	16312707	1
Kehr	Octyldodecanol	17138102	1
Kehr	Octyldodecanol	1098722	1
Kehr	Octyldodecanol	17273008	3
Klenk	Octyldodecanol	13360003	1
Krieger	Octyldodecanol	13360006	1
Krieger	Octyldodecanol	16312701	1
L12	Octyldodecanol	16095507	1
Nachprüfung	Octyldodecanol	1018J-02875	1
Noweda	Octyldodecanol	21022171/7	1
Noweda	Octyldodecanol	1216551	1
Noweda	Octyldodecanol	12165515	1
Noweda	Octyldodecanol	13044005	1
Noweda	Octyldodecanol	13044013	1
Noweda	Octyldodecanol	13044016	1
Noweda	Octyldodecanol	13222003	1
Noweda	Octyldodecanol	13222008	1
Noweda	Octyldodecanol	13360002	1
Noweda	Octyldodecanol	13360003	1
Noweda	Octyldodecanol	13360012	1
Noweda	Octyldodecanol	14371705	1
Noweda	Octyldodecanol	15135213	1
Noweda	Octyldodecanol	15383009	1
Noweda	Octyldodecanol	16095511	1
Noweda	Octyldodecanol	17138105	1
Noweda	Octyldodecanol	18112001	1
Noweda 10.07.2015	Octyldodecanol	14371714	1
Fagron	Octyldodecanol	12C21-N03	3
Fagron	Octyldodecanol	CE11350022	1
Caelo	Octyldodecanol	14371711	24
Caelo	Octyldodecanol	16095511	50
Caelo	Octyldodecanol	17273003	9
P.W.Beyvers	Octyldodecanol	18112001	1
Phoenix	Octyldodecanol	13360006	1
Phoenix	Octyldodecanol	14130207	1
Phoenix	Octyldodecanol	14158411	1
Phoenix	Octyldodecanol	15383009	1

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Supplier	Substance	Batch	Spectra
Phoenix	Octyldodecanol	16095503	1
Phoenix	Octyldodecanol	16312701	1
Phoenix	Octyldodecanol	17138102	1
Phoenix	Octyldodecanol	17273002	1
Phoenix	Octyldodecanol	17273008	1
Phoenix	Octyldodecanol	19013603	1
PHOENIX 30.06.2014	Octyldodecanol	13360011	1
Phoenix WE 22.03.17 EK...	Octyldodecanol	16095511	1
Phoenix/Fargon	Octyldodecanol	12J04-N01	1
Phönix	Octyldodecanol	12J04-N01	1
Phönix	Octyldodecanol	12165521	3
Phönix	Octyldodecanol	13044005	1
Phönix	Octyldodecanol	13222008	1
Phönix	Octyldodecanol	14130206	1
Phönix	Octyldodecanol	1538009	1
Phönix	Octyldodecanol	16095506	1
Phönix	Octyldodecanol	17077701	1
Phönix	Octyldodecanol	17138109	1
Phönix	Octyldodecanol	17138105	1
Phönix	Octyldodecanol	17273002	2
Phönix	Octyldodecanol	17273001	2
Phönix	Octyldodecanol	18112008	1
Phönix 08.11.12	Octyldodecanol	11369021	1
Phönix Gotha	Octyldodecanol	13044002	1
Phönix W.E:27.02.18 E...	Octyldodecanol	17273001	1
sanacorp	Octyldodecanol	14130207	2
sanacorp	Octyldodecanol	14371706	1
Sanacorp	Octyldodecanol	12165514	2
Sanacorp	Octyldodecanol	13044002	1
Sanacorp	Octyldodecanol	13044005	2
Sanacorp	Octyldodecanol	13E07-N07	1
Sanacorp	Octyldodecanol	13222003	4
Sanacorp	Octyldodecanol	12142726	1
Sanacorp	Octyldodecanol	13222002	1
Sanacorp	Octyldodecanol	AKD31	1
Sanacorp	Octyldodecanol	13222008	1
Sanacorp	Octyldodecanol	13360006	1
Sanacorp	Octyldodecanol	13102-b05-288974	1
Sanacorp	Octyldodecanol	14371711	1
Sanacorp	Octyldodecanol	14371716	1
Sanacorp	Octyldodecanol	17138102	1
Sanacorp	Octyldodecanol	17273001	1
Sanacorp	Octyldodecanol	18112002	1
Sanacorp WE:09.11.17 10...	Octyldodecanol	17138105	1
Sanacorp WE:21.12.17 E...	Octyldodecanol	17138109	1
Spangropharm	Octyldodecanol	11060317	1
Caelo	Octyldodecanol	1136017	1
VDL 30.04.14_5.77 euro	Octyldodecanol	13360006	1
VDL,5,77EUR; 27.04.15	Octyldodecanol	14371711	2
VDL; 5,77EUR;21.01.2015	Octyldodecanol	14158402	1
VDL;15.3.16;5,75EUR	Octyldodecanol	15383005	1
Caelo	Octyldodecanol	16095507	58
Caelo	Octyldodecanol		2
Caelo	Octyldodecanol	12165509	6
Caelo	Octyldodecanol	13360010	15
Caelo	Octyldodecanol	15135212	11
Caelo	Octyldodecanol	163127	1

- 136 358 spectra from 703 *Apo-Ident* customers from a total of 35 080 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Octyldodecanol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Octyldodecanol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	300	0	56 059
Type B	0	80	0	69 394
Type C	0	1988	7	136 358

The substance/substance group *Octyldodecanol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.6491 % (> 99.4987 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Octyldodecanol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydrophilic ointment DAB	29.33	—
Macrogol-2-laurylether	30.31	—
Paraffin, white	33.79	—
Macrogol 8 stearate type I	35.34	—
Wool alcohol ointment SR with white pa...	39.42	—
Paraffin, yellow	39.93	—
Macrogolglycerol hydroxystearate 40	44.66	—
Wool alcohol ointment DAB	45.89	—
Softisan® 649	46.10	—
Polyol fatty acid ester	46.89	—
Wool alcohol ointment SR/DAC	48.70	—
Sorbitan- and glycerol monooleate	50.94	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Octyldodecanol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30867	31330	4.00	54.05
31330	31330	0.00	53.99
31753	33093	3.19	57.86
32958	33093	4.70	54.57
33093	33093	0.00	55.69
34468	34468	0.00	58.39
34471	34471	0.00	53.13

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Oleic acid**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 32471-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Oleic acid; Acidum oleicum

Special notes

When selecting the *Oleic acid* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Oleic acid	2	1	1

Second-stage model

For differentiation of the substance/substance group *Oleic acid* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Oleic acid*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Oleic acid	15298701	32471	40	1702061
Caelo	Oleic acid	163091	33076	40	20161212*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 80 spectra of 2 reference samples from the substance/substance group *Oleic acid*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 279 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Oleic acid*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Oleic acid	172741	33898	40
Caelo	Oleic acid	15298701	32475	40
Caelo	Oleic acid	15298701	32747	40

- 69 354 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1 spectra from 1 *Apo-Ident* customers from 1 batches from the substance/substance group *Oleic acid*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Oleic acid	16309108	1

- 138 352 spectra from 703 *Apo-Ident* customers from a total of 35 294 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Oleic acid* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Oleic acid* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	80	0	56 279
Type B	0	120	0	69 354
Type C	0	1	0	138 352

The substance/substance group *Oleic acid* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9784 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6542 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Oleic acid* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Metronidazole 25% in white petrolatum	37.35	—
Pasta Cordes®	39.40	—
Shea butter, refined	41.03	—
Permethrin 25% solution	45.96	—
Laurel oil	56.34	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Oleic acid* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32471	32471	0.00	55.18
33076	33076	0.00	59.37

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Oregano oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30669-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Oregano oil; Oleum origani cretici

Special notes

When selecting the *Oregano oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Oregano oil	5	1	6

Second-stage model

For differentiation of the substance/substance group *Oregano oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Oregano oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Oregano oil	11247605	30669	40	20110829
Caelo	Oregano oil	13354002	31196	40	1502253
Caelo	Oregano oil	13354007	31302	40	20131028
Caelo	Oregano oil	13354006	31406	40	20131028
Caelo	Oregano oil	14242905	31788	60	20140904

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Oregano oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 100 spectra of 2 reference samples from the substance/substance group *Oregano oil*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Oregano oil	16011001	32070	60
Caelo	Oregano oil	16011001	33469	40

- 69 374 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 8 spectra from 7 *Apo-Ident* customers from 6 batches from the substance/substance group *Oregano oil*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Oregano oil	16011001	1
Caelo	Oregano oil	1601101	1
Caelo	Oregano oil	15248805	1
Caelo	Oregano oil	12347604	2
Noweda/Taoasis	Oregano oil	43878A-123313	1
Taoasis	Oregano oil	43878A-123313	1
Taoasis	Oregano oil	43878A-127300	1

- 138 345 spectra from 703 *Apo-Ident* customers from a total of 35 289 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Oregano oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Oregano oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	100	0	69 374
Type C	0	8	0	138 345

The substance/substance group *Oregano oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6463 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Oregano oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Thyme oil	32.06	–
Coriander oil	117.68	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Oregano oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30669	31196	6.49	54.63
31196	31196	0.00	49.03
31302	31196	2.95	50.29
31406	31196	6.43	51.22
31788	31196	8.03	48.66

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Paraffin classification
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30932-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Paraffin classification; Emulsifying hydrophobic base gel DAC; Eye ointment, emulsifying DAC; Eye paraffin; Gelatum basalis hydrophobicum; Gelatum basalis hydrophobicum emulsificans; Hydrophilic ointment DAB; Hydrophobic base gel DAC; Lanae alcoholum unguentum; Oculentum emulsificans DAC; Paraffin, light liquid; Paraffin, liquid; Paraffin, white; Paraffin, yellow; Paraffinum liquidum; Paraffinum perliquidum; Unguentum alcoholum lanae SR; Unguentum Cordes®; Unguentum Cordes®; Unguentum emulsificans DAB; Vaseline, white; Vaseline, yellow; Vaselinum album; Vaselinum album pro ophthalmicum; Vaselinum flavum; Wool alcohol ointment DAB; Wool alcohol ointment SR with white paraffin; Wool alcohol ointment SR/DAC

Special notes

When selecting the *Paraffin classification* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Emulsifying hydrophobic base gel DAC	12	2	78
Eye ointment, emulsifying DAC	4	2	134
Eye paraffin	3	1	113
Hydrophilic ointment DAB	6	19	346
Hydrophobic base gel DAC	4	2	169
Paraffin, light liquid	6	9	0
Paraffin, liquid	6	14	8
Paraffin, white	13	15	834
Paraffin, yellow	6	7	107
Unguentum Cordes®	3	3	443
Wool alcohol ointment DAB	6	26	542
Wool alcohol ointment SR with white paraffin	5	2	89
Wool alcohol ointment SR/DAC	3	1	54

Second-stage model

For differentiation of the substance/substance group *Paraffin classification* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Paraffin classification*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Emulsifying hydr...	12343501	30933	40	1405098
Caelo	Emulsifying hydr...	14276401	31570	60	AR-15-FG-014916-01
Caelo	Emulsifying hydr...	153311	31920	60	20151006*
Caelo	Emulsifying hydr...	162259	32518	40	20160812*
Caelo	Emulsifying hydr...	162260	32519	40	20160812*
Caelo	Emulsifying hydr...	170321	33124	40	20170206*
Caelo	Emulsifying hydr...	170322	33132	40	20170206*
Caelo	Emulsifying hydr...	170323	33133	40	20170206*
Caelo	Emulsifying hydr...	171137	33396	40	20170426*
Caelo	Emulsifying hydr...	171253	33398	40	20170509*
Caelo	Emulsifying hydr...	171137	33399	40	20170426*
Caelo	Emulsifying hydr...	171979	33545	40	20170713*
Caelo	Emulsifying hydr...	183158	34545	40	20181212*
apomix	Eye ointment, em...	15B241013	31174	40	1405331
apomix	Eye ointment, em...	06A090516	32946	40	20160517
apomix	Eye ointment, em...	10A041016	32947	40	20161017
apomix	Eye ointment, em...	10A050919	34678	40	20190916
Caelo	Eye paraffin	13338710	31445	40	20131108
Caelo	Eye paraffin	13338711	31610	60	AR-15-FG-008217-01
Caelo	Eye paraffin	162718	32900	40	20161020*
Caelo	Hydrophilic oint...	14024802	31456	40	AR-14-FG-012697-01
Caelo	Hydrophilic oint...	14024802	31567	60	20140129
Caelo	Hydrophilic oint...	13245302	31611	60	20131008
Caelo	Hydrophilic oint...	154164	31909	60	20151215*
Caelo	Hydrophilic oint...	154165	31910	60	20151215*
Fagron	Hydrophilic oint...	14G08-T08-013954	31612	60	20140829
Fagron	Hydrophilic oint...	19D25-T11-066650	34675	40	20190805
Caelo	Hydrophobic base...	12229003	30932	40	1405121
Caelo	Hydrophobic base...	13299604	31168	40	20130909
Caelo	Hydrophobic base...	14044601	31446	40	AR-15-FG-007940-01

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Hansen & Rose...	Hydrophobic base...	1023472	31292	40	20140328
Caelo	Paraffin, light ...	13248007	34550	60	AR-15-FG-002534-01
Caelo	Paraffin, light ...	161710	34555	40	20160704*
Euro OTC	Paraffin, light ...	1409007-01	34551	60	20140929
Euro OTC	Paraffin, light ...	1506021	34552	60	20150622*
Euro OTC	Paraffin, light ...	1511029	34553	60	20151208*
Fagron	Paraffin, light ...	15B18-B01-333364	34559	40	20150302
Caelo	Paraffin, liquid	12324307	34858	40	20121031
Caelo	Paraffin, liquid	13390602	34859	60	AR-15-FG-002530-01
Euro OTC	Paraffin, liquid	1509011	34860	60	20150918*
Euro OTC	Paraffin, liquid	1511030	34861	60	20151208*
Euro OTC	Paraffin, liquid	1607039	34865	40	20160826*
Fagron	Paraffin, liquid	16E30-B05-327577	34867	40	20160614
Bombastus	Paraffin, white	290271	31601	60	20140929
Bombastus	Paraffin, white	19001675	34509	40	20190322
Caelo	Paraffin, white	12374502	31009	40	20130102
Caelo	Paraffin, white	12032413	31010	40	20120203
Caelo	Paraffin, white	13341601	31437	40	20131108
Caelo	Paraffin, white	13268421	31468	40	20130823
Caelo	Paraffin, white	153276	31916	60	20151001*
Caelo	Paraffin, white	153368	31917	60	20151012*
Caelo	Paraffin, white	153368	31918	60	20151012*
Caelo	Paraffin, white	162274	32495	40	20160804*
Euro OTC	Paraffin, white	1405014-01	31590	60	20140702
Euro OTC	Paraffin, white	1509019	31736	70	20150929*
Fagron	Paraffin, white	18K01-T06-063753	34510	40	20190227
Fagron	Paraffin, white	17E02-T01-049359	34511	40	20171123
Caelo	Paraffin, yellow	12321908	31473	40	AR-15-FG-002511-01
Caelo	Paraffin, yellow	153304	31940	60	20151001*
Caelo	Paraffin, yellow	153305	31941	60	20151001*
Euro OTC	Paraffin, yellow	1401017-01	31541	60	20140210
Euro OTC	Paraffin, yellow	1401017-01	31586	60	20140210
Euro OTC	Paraffin, yellow	1811024-01	34433	40	20190122
Euro OTC	Paraffin, yellow	1904027	34498	40	20190527*
Ichthyol	Unguentum Cordes®	13A067	31602	60	1507406
Ichthyol	Unguentum Cordes®	15A137	31807	60	20150804
Ichthyol	Unguentum Cordes®	15A150	31954	60	20150930
Caelo	Wool alcohol oin...	12244302	31228	70	AR-15-FG-001376-01
Caelo	Wool alcohol oin...	14067001	31441	40	20140307
Caelo	Wool alcohol oin...	153421	31999	40	20151012*
Caelo	Wool alcohol oin...	153562	32017	60	20151028*
Euro OTC	Wool alcohol oin...	1211017-01	31522	60	AR-14-FG-012695-01
Euro OTC	Wool alcohol oin...	1608040	32777	40	20160915*
Caelo	Wool alcohol oin...	14032501	31272	40	1507263
Caelo	Wool alcohol oin...	153347	31921	60	20150930*
Caelo	Wool alcohol oin...	162513	32517	40	20160907*
Caelo	Wool alcohol oin...	16251301	33614	40	20160907
Caelo	Wool alcohol oin...	190042	34542	40	20190110*
apomix	Wool alcohol oin...	02A070515	31744	60	AR-16-FG-004495-01
apomix	Wool alcohol oin...	01A180215	31949	60	20150223
apomix	Wool alcohol oin...	01A210519	34679	40	20190520

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 3940 spectra of 81 reference samples from the substance/substance group *Paraffin classification*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 77 different batches.
- 52 419 spectra from a total of 1039 batches from further 206 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 4551 spectra of 108 reference samples from the substance/substance group *Paraffin classification*.
- Among them are spectra of independent samples from 103 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Emulsifying hydrophobic base...	181406	34155	40
Caelo	Emulsifying hydrophobic base...	182502	34307	40
apomix	Eye ointment, emulsifying DAC	08A150517	33503	40
apomix	Eye ointment, emulsifying DAC	13C071216	33504	40
Caelo	Eye paraffin	15441514	33491	40
Caelo	Hydrophilic ointment DAB	11211601	30609	40
Caelo	Hydrophilic ointment DAB	161668	32389	40
Caelo	Hydrophilic ointment DAB	161670	32391	40
Caelo	Hydrophilic ointment DAB	162824	32866	40
Caelo	Hydrophilic ointment DAB	162825	32867	40
Caelo	Hydrophilic ointment DAB	162826	32868	40
Caelo	Hydrophilic ointment DAB	162827	32869	40
Caelo	Hydrophilic ointment DAB	162828	32870	40
Caelo	Hydrophilic ointment DAB	170403	33134	40
Caelo	Hydrophilic ointment DAB	170406	33135	40
Caelo	Hydrophilic ointment DAB	170402	33159	40
Caelo	Hydrophilic ointment DAB	170405	33160	40
Caelo	Hydrophilic ointment DAB	171855	33554	40
Caelo	Hydrophilic ointment DAB	171563	33555	40
Caelo	Hydrophilic ointment DAB	171564	33556	40
Caelo	Hydrophilic ointment DAB	170830	34025	40
Caelo	Hydrophilic ointment DAB	172906	34026	40
Caelo	Hydrophilic ointment DAB	173302	34027	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydrophilic ointment DAB	182075	34261	40
Caelo	Hydrophobic base gel DAC	16151105	33223	40
Caelo	Hydrophobic base gel DAC	173204	34018	40
Caelo	Paraffin, light liquid	12102101	34549	40
Euro OTC	Paraffin, light liquid	1604009	34554	40
Euro OTC	Paraffin, light liquid	1608007	34556	40
Euro OTC	Paraffin, light liquid	1701052	34557	40
Euro OTC	Paraffin, light liquid	1706017	34558	40
Euro OTC	Paraffin, light liquid	1802016	34560	40
Euro OTC	Paraffin, light liquid	1810001	34561	40
Euro OTC	Paraffin, light liquid	1902012	34562	40
Euro OTC	Paraffin, light liquid	1909016	34697	40
Euro OTC	Paraffin, liquid	1904026	34659	40
Euro OTC	Paraffin, liquid	1909010	34694	40
Euro OTC	Paraffin, liquid	1602026	34862	40
Euro OTC	Paraffin, liquid	1604045	34863	40
Euro OTC	Paraffin, liquid	1606032	34864	40
Euro OTC	Paraffin, liquid	1610017	34866	40
Euro OTC	Paraffin, liquid	1701033	34868	40
Euro OTC	Paraffin, liquid	1707002	34869	40
Euro OTC	Paraffin, liquid	1709002	34870	40
Euro OTC	Paraffin, liquid	1710025	34871	40
Euro OTC	Paraffin, liquid	1801041	34872	40
Euro OTC	Paraffin, liquid	1806004	34873	40
Euro OTC	Paraffin, liquid	1810002	34874	40
Euro OTC	Paraffin, liquid	1901011	34875	40
Caelo	Paraffin, white	90292119	30006	39
Caelo	Paraffin, white	11374906	30466	30
Caelo	Paraffin, white	153497	31919	60
Caelo	Paraffin, white	161380	32223	40
Caelo	Paraffin, white	162411	32901	40
Euro OTC	Paraffin, white	1602009	32191	40
Euro OTC	Paraffin, white	1605019	32282	40
Euro OTC	Paraffin, white	1608041	32711	40
Euro OTC	Paraffin, white	1612007	32982	40
Euro OTC	Paraffin, white	1705015	33445	40
Euro OTC	Paraffin, white	1709016	33659	40
Euro OTC	Paraffin, white	1712008	33934	40
Euro OTC	Paraffin, white	1804011	34098	40
Euro OTC	Paraffin, white	1811025-01	34434	40
Euro OTC	Paraffin, white	1904028	34661	40
Caelo	Paraffin, yellow	153306	31942	60
Caelo	Paraffin, yellow	180920	34161	40
Caelo	Paraffin, yellow	181915	34255	40
Euro OTC	Paraffin, yellow	1701027	32987	40
Euro OTC	Paraffin, yellow	1705016	33444	42
Euro OTC	Paraffin, yellow	1709015	33663	40
Euro OTC	Paraffin, yellow	1804012	34099	40
Ichthyol	Unguentum Cordes®	11A202	30626	40
Ichthyol	Unguentum Cordes®	16A061	32912	40
Ichthyol	Unguentum Cordes®	18A101	34364	40
Caelo	Wool alcohol ointment DAB	153423	32011	60
Caelo	Wool alcohol ointment DAB	153424	32012	60
Caelo	Wool alcohol ointment DAB	153427	32013	60
Caelo	Wool alcohol ointment DAB	153428	32014	60
Caelo	Wool alcohol ointment DAB	153429	32015	60
Caelo	Wool alcohol ointment DAB	153558	32016	60
Caelo	Wool alcohol ointment DAB	153563	32018	60
Caelo	Wool alcohol ointment DAB	153619	32019	60
Caelo	Wool alcohol ointment DAB	153618	32020	60

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wool alcohol ointment DAB	153620	32021	60
Caelo	Wool alcohol ointment DAB	161102	32098	40
Caelo	Wool alcohol ointment DAB	161101	32099	40
Caelo	Wool alcohol ointment DAB	161103	32100	40
Caelo	Wool alcohol ointment DAB	161104	32101	40
Caelo	Wool alcohol ointment DAB	161105	32102	40
Caelo	Wool alcohol ointment DAB	161106	32103	40
Caelo	Wool alcohol ointment DAB	161107	32104	40
Caelo	Wool alcohol ointment DAB	162488	32511	40
Caelo	Wool alcohol ointment DAB	162951	32864	40
Caelo	Wool alcohol ointment DAB	162952	32865	40
Caelo	Wool alcohol ointment DAB	163318	33184	40
Caelo	Wool alcohol ointment DAB	163317	33185	40
Caelo	Wool alcohol ointment DAB	172062	33547	40
Caelo	Wool alcohol ointment DAB	171416	33548	40
Caelo	Wool alcohol ointment DAB	182509	34353	40
Euro OTC	Wool alcohol ointment DAB	1811023-01	34435	40
Caelo	Wool alcohol ointment SR wit...	180745	34143	40
Caelo	Wool alcohol ointment SR wit...	181899	34271	40
apomix	Wool alcohol ointment SR/DAC	01B310517	33615	40
Caelo	Hydrophilic ointment DAB	161668	32390	40
Caelo	Paraffin, white	161380	32224	40
Caelo	Wool alcohol ointment DAB	162488	32512	40
Caelo	Wool alcohol ointment SR wit...	14032501	31448	40
apomix	Wool alcohol ointment SR/DAC	01B310517	33616	40

- 64 923 spectra from a total of 1398 batches from further 348 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 12 386 spectra from 650 *Apo-Ident* customers from 2862 batches from the substance/substance group *Paraffin classification*.
- Among them are spectra of independent samples from 2773 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag 05.11.12	Emulsifying hydrophobic base...	271106	1
Bombastus	Emulsifying hydrophobic base...	271106	2
Bombastus	Emulsifying hydrophobic base...	255106	1
Bombastus	Emulsifying hydrophobic base...	262696	1
Bombastus	Emulsifying hydrophobic base...	11041301	1
Bombastus	Emulsifying hydrophobic base...	11071308	1
Bombastus	Emulsifying hydrophobic base...	22111307	1
Bombastus	Emulsifying hydrophobic base...	22011402	1
Caelo	Emulsifying hydrophobic base...	13361004	6
Caelo	Emulsifying hydrophobic base...	11105002	1
Caelo	Emulsifying hydrophobic base...	30071201	1
Caelo	Emulsifying hydrophobic base...	11301605	1
Caelo	Emulsifying hydrophobic base...	12182303	3

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Supplier	Substance	Batch	Spectra
Caelo	Emulsifying hydrophobic base...	12078001	1
Caelo	Emulsifying hydrophobic base...	28051301	1
Caelo	Emulsifying hydrophobic base...	20081302	1
Caelo	Emulsifying hydrophobic base...	16225902	2
Caelo	Emulsifying hydrophobic base...	19021301	1
Caelo	Emulsifying hydrophobic base...	14276301	5
Caelo	Emulsifying hydrophobic base...	15964101	1
Caelo	Emulsifying hydrophobic base...	15205102	1
Caelo	Emulsifying hydrophobic base...	171137703	1
Caelo	Emulsifying hydrophobic base...	15269102	1
Caelo	Emulsifying hydrophobic base...	12160201	4
Caelo	Emulsifying hydrophobic base...	18250301	1
Caelo	Emulsifying hydrophobic base...	13177602	1
Caelo	Emulsifying hydrophobic base...	13340814	1
Caelo	Emulsifying hydrophobic base...	16172402	1
Caelo	Emulsifying hydrophobic base...	15205101	1
Caelo	Emulsifying hydrophobic base...	16172201	4
Caelo	Emulsifying hydrophobic base...	18075804	1
Caelo	Emulsifying hydrophobic base...	15331101	2
Caelo	Emulsifying hydrophobic base...	13066802	10
Caelo	Emulsifying hydrophobic base...	13177601	6
Caelo	Emulsifying hydrophobic base...	11016804	1
Caesar & Loretz	Emulsifying hydrophobic base...	17032303	1
Caesar & Loretz GmbH	Emulsifying hydrophobic base...	14276401	2
Caesar & Loretz GmbH	Emulsifying hydrophobic base...	16226002	1
Caesar & Loretz GmbH	Emulsifying hydrophobic base...	17113702	1
Caesar & Loretz GmbH	Emulsifying hydrophobic base...	18228301	1
Cealo / Noweda	Emulsifying hydrophobic base...	13361004	4
Cealo/Sanacorp	Emulsifying hydrophobic base...	18075803	1
Euro OTC	Emulsifying hydrophobic base...	16172301	1
Euro OTC	Emulsifying hydrophobic base...	17113703	1
Euro OTC	Emulsifying hydrophobic base...	16172201	3
Fagron	Emulsifying hydrophobic base...	11I08-T01	2
Fagron	Emulsifying hydrophobic base...	1108-T01	1
Fagron	Emulsifying hydrophobic base...	10L14-T54-111713	1
Fagron	Emulsifying hydrophobic base...	10L14-T54-003418	1
Fagron	Emulsifying hydrophobic base...	11G25-T01	1
Fagron	Emulsifying hydrophobic base...	12F29-T01	1
Gehe	Emulsifying hydrophobic base...	17032303	1
Noweda	Emulsifying hydrophobic base...	12160201	1
Noweda	Emulsifying hydrophobic base...	13361004	1
Noweda	Emulsifying hydrophobic base...	17113703	1
Noweda	Emulsifying hydrophobic base...	17032303	1
Caelo	Emulsifying hydrophobic base...	12303402	6
Th. Geyer	Emulsifying hydrophobic base...	16172301	1
Phoenix	Emulsifying hydrophobic base...	14087502	1
Phoenix 02.05.2014	Emulsifying hydrophobic base...	282094	1
Phönix Gotha	Emulsifying hydrophobic base...	15064101	1
Sanacorp	Emulsifying hydrophobic base...	13177601	1
Sanacorp	Emulsifying hydrophobic base...	17032303	1
Caelo	Emulsifying hydrophobic base...	11209302	1
Taoasis	Emulsifying hydrophobic base...	17113703	1
AHD	Eye ointment, emulsifying DAC	18A021115	1
AHD / apomix	Eye ointment, emulsifying DAC	7B010616	1
AHD /apomix	Eye ointment, emulsifying DAC	3B060217	1
All. Healthc. /Apomix	Eye ointment, emulsifying DAC	10A010615	2
Allianc. Health. / Apomix	Eye ointment, emulsifying DAC	10C041016	2
Allianc. Health. /Apomix	Eye ointment, emulsifying DAC	18A021115	1
Allianc. Health. /Apomix	Eye ointment, emulsifying DAC	5D110416	1
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	17A111113	1

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Supplier	Substance	Batch	Spectra
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	14A011013	1
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	9C190514	1
Alliance HealthcareApomix	Eye ointment, emulsifying DAC	18B021214	1
AMH	Eye ointment, emulsifying DAC	16B011015	1
AMH Niemann/E	Eye ointment, emulsifying DAC	1C080114	1
AMH Niemannn GmbH	Eye ointment, emulsifying DAC	5B110416	1
apomix	Eye ointment, emulsifying DAC	17B111113	1
apomix	Eye ointment, emulsifying DAC	12C010814	1
apomix	Eye ointment, emulsifying DAC	15D030815	1
apomix	Eye ointment, emulsifying DAC	14A091017	1
apomix	Eye ointment, emulsifying DAC	16B011117	1
apomix	Eye ointment, emulsifying DAC	5C260418	1
Apomix	Eye ointment, emulsifying DAC	7C040612	1
Apomix	Eye ointment, emulsifying DAC	11B030912	1
Apomix	Eye ointment, emulsifying DAC	3A180213	1
Apomix	Eye ointment, emulsifying DAC	5B220413	1
Apomix	Eye ointment, emulsifying DAC	15A241013	1
Apomix	Eye ointment, emulsifying DAC	17A111113	1
Apomix	Eye ointment, emulsifying DAC	5A030314	1
Apomix	Eye ointment, emulsifying DAC	14A011013	1
Apomix	Eye ointment, emulsifying DAC	14C170914	1
Apomix	Eye ointment, emulsifying DAC	18B021214	1
Apomix	Eye ointment, emulsifying DAC	2C040116	2
Apomix	Eye ointment, emulsifying DAC	1D040116	1
Apomix	Eye ointment, emulsifying DAC	9C050916	1
Apomix	Eye ointment, emulsifying DAC	2B020117	1
Apomix	Eye ointment, emulsifying DAC	3V060217	1
Apomix	Eye ointment, emulsifying DAC	7D180417	1
Apomix	Eye ointment, emulsifying DAC	6B150317	1
Apomix	Eye ointment, emulsifying DAC	7C180417	1
Apomix	Eye ointment, emulsifying DAC	13B070817	2
Apomix	Eye ointment, emulsifying DAC	2A070318	1
Apomix	Eye ointment, emulsifying DAC	6C260418	1
Apomix	Eye ointment, emulsifying DAC	11D030818	1
Apomix	Eye ointment, emulsifying DAC	16A031218	2
Apomix /	Eye ointment, emulsifying DAC	17B111113	1
Apomix / AHD	Eye ointment, emulsifying DAC	11B170713	1
Apomix / Alliance Healt...	Eye ointment, emulsifying DAC	2A070318	1
Apomix / Alliance Healt...	Eye ointment, emulsifying DAC	16A031218	1
Apomix / Kehr	Eye ointment, emulsifying DAC	48200114	1
Apomix / Kehr	Eye ointment, emulsifying DAC	14A011013	1
Apomix / Noweda	Eye ointment, emulsifying DAC	9A080415	1
Apomix / Noweda	Eye ointment, emulsifying DAC	15A030815	1
Apomix / Noweda	Eye ointment, emulsifying DAC	6A090516	1
Apomix / Phönix	Eye ointment, emulsifying DAC	17C061212	2
Apomix / Phönix	Eye ointment, emulsifying DAC	7A210513	1
Apomix / Phönix	Eye ointment, emulsifying DAC	7B030314	1
Apomix / Phönix	Eye ointment, emulsifying DAC	15A170914	1
Apomix / Phönix	Eye ointment, emulsifying DAC	13B071216	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	12C011012	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	4B200114	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	16A231014	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	18C021214	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	6D090516	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	13A071216	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	6D150317	1
Apomix /Noweda	Eye ointment, emulsifying DAC	9B050916	1
Apomix /Noweda	Eye ointment, emulsifying DAC	10C041016	1
Apomix /Noweda	Eye ointment, emulsifying DAC	2D020117	1
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	5B110416	4

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Supplier	Substance	Batch	Spectra
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	20B011215	1
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	1D040116	1
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	6B090516	2
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	9B050916	1
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	2D020117	2
Apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	6B150317	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	1B040116	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	7A010616	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	12C011116	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	13B071216	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	4B060217	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	9C150517	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	9B150517	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	15B091017	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	12C070817	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	17B011117	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	17C11117	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	4A260418	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	8C070618	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	7B070618	2
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	10A030818	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	12B130918	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	1B090119	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	3B070319	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	5A010419	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	5C010419	1
apomix AMH Niemann GmbH...	Eye ointment, emulsifying DAC	7B140519	1
Apomix Noweda	Eye ointment, emulsifying DAC	8B150517	1
Apomix PKH GmbH	Eye ointment, emulsifying DAC	3B010316	1
Apomix/ AEP	Eye ointment, emulsifying DAC	6C260418	1
Apomix/ GEHE	Eye ointment, emulsifying DAC	2B050219	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	3C200114	2
Apomix/ Phönix	Eye ointment, emulsifying DAC	19A021214	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	13A010715	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	7A010616	1
apomix/ Sanacorp	Eye ointment, emulsifying DAC	12C300813	1
Apomix/ Sanacorp	Eye ointment, emulsifying DAC	16C011117	1
Apomix/AHD	Eye ointment, emulsifying DAC	9D070618	1
apomix/AllianceH.	Eye ointment, emulsifying DAC	14A091017	1
apomix/AllianceH.	Eye ointment, emulsifying DAC	16A031218	1
Apomix/Anzag	Eye ointment, emulsifying DAC	16B061212	1
Apomix/Anzag	Eye ointment, emulsifying DAC	9A080415	1
apomix/Holdermann	Eye ointment, emulsifying DAC	7A180417	1
Apomix/Kehr	Eye ointment, emulsifying DAC	7A160315	1
Apomix/Kehr	Eye ointment, emulsifying DAC	15B030815	1
Apomix/Kehr	Eye ointment, emulsifying DAC	20D011215	1
Apomix/Kehr	Eye ointment, emulsifying DAC	19B021115	1
Apomix/Kehr	Eye ointment, emulsifying DAC	2D040116	1
Apomix/Kehr	Eye ointment, emulsifying DAC	10B041016	1
Apomix/Kehr	Eye ointment, emulsifying DAC	10A041016	1
Apomix/Kehr	Eye ointment, emulsifying DAC	11B011116	1
Apomix/Kehr	Eye ointment, emulsifying DAC	1B020117	1
Apomix/Kehr	Eye ointment, emulsifying DAC	7D180417	1
apomix/Noweda	Eye ointment, emulsifying DAC	20D011215	1
apomix/Noweda	Eye ointment, emulsifying DAC	18C021115	1
apomix/NOWEDA	Eye ointment, emulsifying DAC	13D070817	1
Apomix/Noweda	Eye ointment, emulsifying DAC	7D210513	1
Apomix/Noweda	Eye ointment, emulsifying DAC	8D020414	1
Apomix/Noweda	Eye ointment, emulsifying DAC	17A231014	1
Apomix/Noweda	Eye ointment, emulsifying DAC	15C030815	1

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Supplier	Substance	Batch	Spectra
Apomix/Noweda	Eye ointment, emulsifying DAC	10A100717	1
apomix/Phönix	Eye ointment, emulsifying DAC	9B25061	1
apomix/Phönix	Eye ointment, emulsifying DAC	11A170713	1
apomix/Phönix	Eye ointment, emulsifying DAC	4C060217	1
Apomix/Phönix	Eye ointment, emulsifying DAC	11A011116	1
Apomix/Phönix	Eye ointment, emulsifying DAC	3C060217	1
Apomix/Phönix	Eye ointment, emulsifying DAC	13D070817	1
Apomix/Phönix	Eye ointment, emulsifying DAC	14A101018	1
Apomix/Phönix	Eye ointment, emulsifying DAC	13A130918	1
Apomix/Phönix	Eye ointment, emulsifying DAC	4C010419	1
Apomix/PKH Halle/Phönix	Eye ointment, emulsifying DAC	13D07017	1
apomix/Sanacorp	Eye ointment, emulsifying DAC	9A190514	1
apomix/Sanacorp	Eye ointment, emulsifying DAC	11B030818	1
apomix/Sanacorp	Eye ointment, emulsifying DAC	11D030818	1
Apomix/Sanacorp 13.05.2...	Eye ointment, emulsifying DAC	3270115	1
Caelo	Eye ointment, emulsifying DAC	4A270212	1
Caelo	Eye ointment, emulsifying DAC	3A180213	1
Caelo	Eye ointment, emulsifying DAC	14C030815	1
Caelo	Eye ointment, emulsifying DAC	5D110416	1
Caelo	Eye ointment, emulsifying DAC	14B101018	1
Caesar & Loretz GmbH	Eye ointment, emulsifying DAC	14A101018	1
Euro OTC	Eye ointment, emulsifying DAC	18A021115	1
Gehe/Apomix	Eye ointment, emulsifying DAC	1C080114	1
L12	Eye ointment, emulsifying DAC	14A091017	1
L12/Apomix	Eye ointment, emulsifying DAC	16C011117	1
Noweda/ PKH Halle	Eye ointment, emulsifying DAC	16A061212	1
Noweda/apomix	Eye ointment, emulsifying DAC	1B070113	1
Noweda/apomix	Eye ointment, emulsifying DAC	4B200114	1
Noweda/apomix	Eye ointment, emulsifying DAC	18C021214	1
PHOENIX 03.03.2014	Eye ointment, emulsifying DAC	16B111113	1
Phönix Gotha	Eye ointment, emulsifying DAC	16B061212	1
Phönix Gotha	Eye ointment, emulsifying DAC	5B220413	1
PhR Neidhardt	Eye ointment, emulsifying DAC	20A011215	1
PKH	Eye ointment, emulsifying DAC	11B011116	2
PKH	Eye ointment, emulsifying DAC	18B231117	1
PKH GmbH Halle	Eye ointment, emulsifying DAC	1C080114	1
PKH GmbH/ Phönix	Eye ointment, emulsifying DAC	12C300813	1
PKH GmbH/Phönix	Eye ointment, emulsifying DAC	7B210513	1
PKH Halle / Noweda	Eye ointment, emulsifying DAC	9C250612	1
PKH Halle / Noweda	Eye ointment, emulsifying DAC	7D210513	1
PKH Halle/ Phoenix	Eye ointment, emulsifying DAC	3A180213	1
PKH Halle/ Phoenix	Eye ointment, emulsifying DAC	11D170713	1
PKH/ Noweda	Eye ointment, emulsifying DAC	12E010814	1
PKH/Gehe	Eye ointment, emulsifying DAC	3B180213	1
PKH/Gehe	Eye ointment, emulsifying DAC	10C170613	1
AHD	Eye paraffin	15441514	3
AMH Niemann/Sanacorp	Eye paraffin	17052003	1
Beiersdorf AG	Eye paraffin	15441502	1
Bombastus	Eye paraffin	1800348	1
Bombastus	Eye paraffin	15441501	1
Bombastus	Eye paraffin	16271810	1
Bombastus	Eye paraffin	17052001	1
Caele	Eye paraffin	15050002	1
Caelo	Eye paraffin	20101401	1
Caelo	Eye paraffin	15441508	1
Caelo	Eye paraffin	29101401	1
Caelo	Eye paraffin	1412703	1
Caelo	Eye paraffin	5011507	1
Caelo	Eye paraffin	6021505	1
Caelo	Eye paraffin	24031503	1

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Supplier	Substance	Batch	Spectra
Caelo	Eye paraffin	19051504	1
Caelo	Eye paraffin	31071502	1
Caelo	Eye paraffin	1505003	1
Caelo	Eye paraffin	15050007	4
Caelo	Eye paraffin	152788	2
Caelo	Eye paraffin	152778809	1
Caelo	Eye paraffin	154415	2
Caelo	Eye paraffin	160427VA0	1
Caelo	Eye paraffin	1578809	1
Caelo	Eye paraffin	14551510	1
Caelo	Eye paraffin	15278803/170314VA	1
Caelo	Eye paraffin	15441414	1
Caelo	Eye paraffin	16121502	1
Caelo	Eye paraffin	15278802	2
Caelo	Eye paraffin	17061704	1
Caelo	Eye paraffin	6271810	1
Caelo	Eye paraffin	18121707	1
Caelo	Eye paraffin	170520	1
Caelo	Eye paraffin	10271807	1
Caelo	Eye paraffin	17052009	6
Caelo	Eye paraffin	3051809	1
Caelo	Eye paraffin	23051817	1
Caelo	Eye paraffin	23061813	1
Caelo	Eye paraffin	17342005	7
Caelo	Eye paraffin	17111804	1
Caelo	Eye paraffin	17342007	4
Caelo	Eye paraffin	18179704	2
Caelo	Eye paraffin	17342008	9
Caelo	Eye paraffin	17342013	1
Caelo	Eye paraffin	16096913	8
Caelo	Eye paraffin	1732008	1
Caelo	Eye paraffin	18179703	1
Caelo	Eye paraffin	19/AKD13	1
Caelo	Eye paraffin	1505002	2
Caelo	Eye paraffin	1627810	1
Caelo	Eye paraffin	15278801/20160309/5	1
Caelo	Eye paraffin	1544514	2
Caelo	Eye paraffin	171123VPA/16271808	1
Caelo	Eye paraffin	17342014	7
Caelo	Eye paraffin	15278803	2
Caelo	Eye paraffin	17342001	5
Caelo	Eye paraffin	17342015	9
Caelo	Eye paraffin	1424704	1
Caelo	Eye paraffin	1544111	1
Caelo	Eye paraffin	16271808	4
Caelo	Eye paraffin	17052008	13
Caelo	Eye paraffin	17052007	4
Caelo	Eye paraffin	17342006	1
Caelo	Eye paraffin	17432008	1
Caelo	Eye paraffin	17352016	1
Caelo	Eye paraffin	180206AV/17052002	1
Caelo	Eye paraffin	10752008	1
Caelo	Eye paraffin	17345005	1
Caelo	Eye paraffin	18179717	2
Caelo	Eye paraffin	14301806	1
Caelo	Eye paraffin	3210-16271807	1
Caelo	Eye paraffin	173420055675	1
Caelo	Eye paraffin	19/AKD7	1
Caelo	Eye paraffin	1527880	1
Caeolo	Eye paraffin	15441514	1

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Supplier	Substance	Batch	Spectra
Caerlo/Noweda	Eye paraffin	15441504	1
Caesar & Loretz GmbH	Eye paraffin	17342015	4
Caesar & Loretz GmbH	Eye paraffin	17342016	3
Caesar & Loretz GmbH	Eye paraffin	17342007	1
Caesar & Loretz GmbH / ...	Eye paraffin	14301804	1
Caesar & Loretz/Noweda	Eye paraffin	150500004	1
Cealo/ Alliance	Eye paraffin	17342005	1
Cealo/ Noweda	Eye paraffin	14301804	1
Ebert & Jacobi 31.05...	Eye paraffin	15278809	1
Ebert u. Jacobi 20.07...	Eye paraffin	15441505	1
Engel-Apotheke	Eye paraffin	2119I-07033	1
Euro OTC	Eye paraffin	17342005	1
Euro OTC	Eye paraffin	15441514	1
Fagron	Eye paraffin	790619-021159	2
Fagron	Eye paraffin	15441514	2
Fagron	Eye paraffin	760619-021159	1
Fiebig	Eye paraffin	17052001	2
Fiebig	Eye paraffin	17342016	1
Finteler Apotheke	Eye paraffin	16271807	2
Gehe	Eye paraffin	14124706	1
Gehe	Eye paraffin	15441509	1
Gehe	Eye paraffin	15441514	2
Gehe	Eye paraffin	15441511	1
Ichthyol-Gesellschaft	Eye paraffin	17052010	1
Kehr	Eye paraffin	17052010	1
Klenk	Eye paraffin	15441514	2
Noweda	Eye paraffin	15441510	2
Noweda	Eye paraffin	16271807	1
Phoenix	Eye paraffin	13338713	2
Phoenix Goettin	Eye paraffin	14124704	1
Phoenix/Cealo	Eye paraffin	15441504	1
phönix	Eye paraffin	15441514	1
Phönix	Eye paraffin	17342014	1
Sanacorp	Eye paraffin	14124704	1
Sanacorp	Eye paraffin	14124707	1
Sanacorp	Eye paraffin	14124705	1
Sanacorp	Eye paraffin	19/AKD4	1
Sanacorp	Eye paraffin	16271807	3
Sanacorp	Eye paraffin	16271810	1
Sanacorp	Eye paraffin	17052001	1
Sanacorp	Eye paraffin	17052010	2
Sanacorp	Eye paraffin	17052003	2
Caelo	Eye paraffin	19/AKD2	1
AHC/Lamotte	Hydrophilic ointment DAB	8002320009	1
AHD	Hydrophilic ointment DAB	14024803	1
AHD	Hydrophilic ointment DAB	16009301	1
AHD	Hydrophilic ointment DAB	17330402	1
Caelo	Hydrophilic ointment DAB	16166802	1
Alliance	Hydrophilic ointment DAB	303216009101	1
Alliance Health 09.05.2...	Hydrophilic ointment DAB	14024701	1
Alliance Healthcare	Hydrophilic ointment DAB	12311102	1
Alliance Healthcare	Hydrophilic ointment DAB	13117501	1
Alliance Healthcare / H...	Hydrophilic ointment DAB	8004399001	1
Allianz Healthcare	Hydrophilic ointment DAB	17040301	1
Anza	Hydrophilic ointment DAB	305393	1
Anzag	Hydrophilic ointment DAB	271047	1
Anzag	Hydrophilic ointment DAB	293264	1
Anzag	Hydrophilic ointment DAB	17290703	1
Anzag 17.03.2014 EK 13...	Hydrophilic ointment DAB	5448000	1
Bombastus	Hydrophilic ointment DAB	274002	1

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Supplier	Substance	Batch	Spectra
Anzag/Ichtyol-Gesellsch. . .	Hydrophilic ointment DAB	16009201	1
Aponorm/Wepa	Hydrophilic ointment DAB	17185501	1
Bombastus	Hydrophilic ointment DAB	269539	3
Bombastus	Hydrophilic ointment DAB	274003	1
Bombastus	Hydrophilic ointment DAB	269537	1
Bombastus	Hydrophilic ointment DAB	269532	1
Bombastus	Hydrophilic ointment DAB	274004	1
Bombastus	Hydrophilic ointment DAB	279002	8
Bombastus	Hydrophilic ointment DAB	284748	5
Bombastus	Hydrophilic ointment DAB	14025001	2
Bombastus	Hydrophilic ointment DAB	293261	4
Bombastus	Hydrophilic ointment DAB	296866	3
Bombastus	Hydrophilic ointment DAB	299391	2
Bombastus	Hydrophilic ointment DAB	299390	4
Bombastus	Hydrophilic ointment DAB	301094	1
Bombastus	Hydrophilic ointment DAB	303000	1
Bombastus	Hydrophilic ointment DAB	288366	1
Bombastus	Hydrophilic ointment DAB	290600	3
Bombastus	Hydrophilic ointment DAB	294449	1
Bombastus	Hydrophilic ointment DAB	299392	3
Bombastus	Hydrophilic ointment DAB	301096	3
Bombastus	Hydrophilic ointment DAB	301095	1
Bombastus	Hydrophilic ointment DAB	303001	2
Bombastus	Hydrophilic ointment DAB	16166801	1
Bombastus	Hydrophilic ointment DAB	302998	1
Bombastus	Hydrophilic ointment DAB	307095	3
Bombastus	Hydrophilic ointment DAB	17/11-T04-48192	1
Bombastus	Hydrophilic ointment DAB	18002963	1
Bombastus	Hydrophilic ointment DAB	18004578	1
Bombastus	Hydrophilic ointment DAB	294448	4
Bombastus	Hydrophilic ointment DAB	281351	6
Bombastus	Hydrophilic ointment DAB	18001505	2
Bombastus	Hydrophilic ointment DAB	305394	3
Bombastus	Hydrophilic ointment DAB	16167001	3
Bombastus	Hydrophilic ointment DAB	269536	1
Bombastus	Hydrophilic ointment DAB	305395	6
Bombastus	Hydrophilic ointment DAB	290597	2
Bombastus	Hydrophilic ointment DAB	15221801	2
Bombastus	Hydrophilic ointment DAB	308899	2
Bombastus	Hydrophilic ointment DAB	307093	2
Bombastus	Hydrophilic ointment DAB	18001506	3
Bombastus	Hydrophilic ointment DAB	311067	1
Bombastus	Hydrophilic ointment DAB	311065	1
Bombastus	Hydrophilic ointment DAB	281347	1
Bombastus	Hydrophilic ointment DAB	290599	4
Bombastus	Hydrophilic ointment DAB	281350	1
Bombastus	Hydrophilic ointment DAB	269534	2
Bombastus	Hydrophilic ointment DAB	286544	6
Bombastus	Hydrophilic ointment DAB	279000	2
Bombastus	Hydrophilic ointment DAB	288368	1
Bombastus	Hydrophilic ointment DAB	286545	9
Bombastus	Hydrophilic ointment DAB	290601	9
Bombastus	Hydrophilic ointment DAB	293264	7
Bombastus	Hydrophilic ointment DAB	294451	3
Bombastus	Hydrophilic ointment DAB	301097	6
Bombastus	Hydrophilic ointment DAB	302999	1
Bombastus	Hydrophilic ointment DAB	281346	2
Bombastus	Hydrophilic ointment DAB	311063	1
Bombastus	Hydrophilic ointment DAB	281248	1
Bombastus	Hydrophilic ointment DAB	284746	2

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic ointment DAB	308900	2
Bombastus	Hydrophilic ointment DAB	305397	1
Bombastus	Hydrophilic ointment DAB	307092	2
Bombastus	Hydrophilic ointment DAB	276670	1
Bombastus	Hydrophilic ointment DAB	279001	2
Bombastus	Hydrophilic ointment DAB	281349	1
Bombastus	Hydrophilic ointment DAB	281348	3
Bombastus	Hydrophilic ointment DAB	284747	1
Bombastus	Hydrophilic ointment DAB	286543	1
Bombastus	Hydrophilic ointment DAB	293262	4
Bombastus	Hydrophilic ointment DAB	18004579	2
Bombastus	Hydrophilic ointment DAB	307094	5
Bombastus	Hydrophilic ointment DAB	296865	3
Bombastus	Hydrophilic ointment DAB	18004579	2
caedo	Hydrophilic ointment DAB	17185501	1
Caelo	Hydrophilic ointment DAB	14024803	3
Caelo	Hydrophilic ointment DAB	11133701	1
Caelo	Hydrophilic ointment DAB	2803212539	1
Caelo	Hydrophilic ointment DAB	11212201	2
Caelo	Hydrophilic ointment DAB	12014701	2
Caelo	Hydrophilic ointment DAB	12055901	7
Caelo	Hydrophilic ointment DAB	2109212539	1
Caelo	Hydrophilic ointment DAB	12014602	1
Caelo	Hydrophilic ointment DAB	11133601	3
Caelo	Hydrophilic ointment DAB	12086702	3
Caelo	Hydrophilic ointment DAB	11212001	1
Caelo	Hydrophilic ointment DAB	12205201	7
Caelo	Hydrophilic ointment DAB	10025601	1
Caelo	Hydrophilic ointment DAB	12204802	6
Caelo	Hydrophilic ointment DAB	12205101	4
Caelo	Hydrophilic ointment DAB	12204803	1
Caelo	Hydrophilic ointment DAB	20221110-1	1
Caelo	Hydrophilic ointment DAB	12311401	11
Caelo	Hydrophilic ointment DAB	80127028	1
Caelo	Hydrophilic ointment DAB	24011315	1
Caelo	Hydrophilic ointment DAB	12311501	14
Caelo	Hydrophilic ointment DAB	12311502	2
Caelo	Hydrophilic ointment DAB	103312539	1
Caelo	Hydrophilic ointment DAB	5099200	1
Caelo	Hydrophilic ointment DAB	12311102	5
Caelo	Hydrophilic ointment DAB	12311301	8
Caelo	Hydrophilic ointment DAB	12311701	6
Caelo	Hydrophilic ointment DAB	13014002	7
Caelo	Hydrophilic ointment DAB	25051307	1
Caelo	Hydrophilic ointment DAB	U-020413-1	1
Caelo	Hydrophilic ointment DAB	11211601	1
Caelo	Hydrophilic ointment DAB	13117103	3
Caelo	Hydrophilic ointment DAB	15056002	1
Caelo	Hydrophilic ointment DAB	13014001	4
Caelo	Hydrophilic ointment DAB	13117501	12
Caelo	Hydrophilic ointment DAB	70913UngEm	1
Caelo	Hydrophilic ointment DAB	13117601	6
Caelo	Hydrophilic ointment DAB	13245801	4
Caelo	Hydrophilic ointment DAB	13245401	10
Caelo	Hydrophilic ointment DAB	27121301	1
Caelo	Hydrophilic ointment DAB	13245301	7
Caelo	Hydrophilic ointment DAB	13245501	6
Caelo	Hydrophilic ointment DAB	15042014B	1
Caelo	Hydrophilic ointment DAB	12051401	1
Caelo	Hydrophilic ointment DAB	1423101	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	14025001	7
Caelo	Hydrophilic ointment DAB	14123101	15
Caelo	Hydrophilic ointment DAB	13H13-T03-006141	1
Caelo	Hydrophilic ointment DAB	14123401	12
Caelo	Hydrophilic ointment DAB	14123502	3
Caelo	Hydrophilic ointment DAB	15016602	2
Caelo	Hydrophilic ointment DAB	16009001	8
Caelo	Hydrophilic ointment DAB	16008702	7
Caelo	Hydrophilic ointment DAB	14225001	7
Caelo	Hydrophilic ointment DAB	14224701	4
Caelo	Hydrophilic ointment DAB	14278003	4
Caelo	Hydrophilic ointment DAB	15016502	9
Caelo	Hydrophilic ointment DAB	15221602	7
Caelo	Hydrophilic ointment DAB	15416401	15
Caelo	Hydrophilic ointment DAB	16009301	18
Caelo	Hydrophilic ointment DAB	16166701	18
Caelo	Hydrophilic ointment DAB	16166801	31
Caelo	Hydrophilic ointment DAB	160408UE	1
Caelo	Hydrophilic ointment DAB	16166901	9
Caelo	Hydrophilic ointment DAB	1616801	1
Caelo	Hydrophilic ointment DAB	16282401	17
Caelo	Hydrophilic ointment DAB	16282402	15
Caelo	Hydrophilic ointment DAB	16282501	7
Caelo	Hydrophilic ointment DAB	17040202	5
Caelo	Hydrophilic ointment DAB	17040501	7
Caelo	Hydrophilic ointment DAB	17040601	8
Caelo	Hydrophilic ointment DAB	17040315375	1
Caelo	Hydrophilic ointment DAB	17083103	4
Caelo	Hydrophilic ointment DAB	17083102	3
Caelo	Hydrophilic ointment DAB	17083002	24
Caelo	Hydrophilic ointment DAB	17185502	2
Caelo	Hydrophilic ointment DAB	17156401	9
Caelo	Hydrophilic ointment DAB	17186601	1
Caelo	Hydrophilic ointment DAB	17290703	8
Caelo	Hydrophilic ointment DAB	17290801	17
Caelo	Hydrophilic ointment DAB	17290702	23
Caelo	Hydrophilic ointment DAB	17E04-T08-044042	1
Caelo	Hydrophilic ointment DAB	18207501	3
Caelo	Hydrophilic ointment DAB	8004399001	3
Caelo	Hydrophilic ointment DAB	15016801	10
Caelo	Hydrophilic ointment DAB	15221902	4
Caelo	Hydrophilic ointment DAB	16009101-20160615Ma2	1
Caelo	Hydrophilic ointment DAB	16009101-20160615Ma3	1
Caelo	Hydrophilic ointment DAB	16009401	7
Caelo	Hydrophilic ointment DAB	281349	2
Caelo	Hydrophilic ointment DAB	14123301	7
Caelo	Hydrophilic ointment DAB	17185501	17
Caelo	Hydrophilic ointment DAB	14231901	8
Caelo	Hydrophilic ointment DAB	3962/V04/16	1
Caelo	Hydrophilic ointment DAB	13117201	2
Caelo	Hydrophilic ointment DAB	13013901	2
Caelo	Hydrophilic ointment DAB	Test	1
Caelo	Hydrophilic ointment DAB	9(18207501)	1
Caelo	Hydrophilic ointment DAB	105/AKD16	1
Caelo	Hydrophilic ointment DAB	15016601	13
Caelo	Hydrophilic ointment DAB	15221701	22
Caelo	Hydrophilic ointment DAB	13014101	6
Caelo	Hydrophilic ointment DAB	13117301	20
Caelo	Hydrophilic ointment DAB	17330301-H20190115Ma	1
Caelo	Hydrophilic ointment DAB	13014003	5

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	16K09-T03-03854	1
Caelo	Hydrophilic ointment DAB	6001368013	1
Caelo	Hydrophilic ointment DAB	17290701	20
Caelo	Hydrophilic ointment DAB	301097	1
Caelo	Hydrophilic ointment DAB	18207602	3
Caelo	Hydrophilic ointment DAB	18303302	2
Caelo	Hydrophilic ointment DAB	19190601	4
Caelo	Hydrophilic ointment DAB	281347	2
Caelo	Hydrophilic ointment DAB	17093002	1
Caelo	Hydrophilic ointment DAB	12311801	3
Caelo	Hydrophilic ointment DAB	916I-02539	1
Caelo	Hydrophilic ointment DAB	296865	1
Caelo	Hydrophilic ointment DAB	19025401	2
Caelo	Hydrophilic ointment DAB	14024601	4
Caelo	Hydrophilic ointment DAB	308900	1
Caelo	Hydrophilic ointment DAB	14024901	9
Caelo	Hydrophilic ointment DAB	15416502	13
Caelo	Hydrophilic ointment DAB	16166902	19
Caelo	Hydrophilic ointment DAB	10082901	1
Caelo	Hydrophilic ointment DAB	14277601	9
Caelo	Hydrophilic ointment DAB	14277901	12
Caelo	Hydrophilic ointment DAB	16008901	8
Caelo	Hydrophilic ointment DAB	12015001	3
Caelo	Hydrophilic ointment DAB	13246002	3
Caelo	Hydrophilic ointment DAB	13245601	9
Caelo	Hydrophilic ointment DAB	13245701	5
Caelo	Hydrophilic ointment DAB	17083004	4
Caelo	Hydrophilic ointment DAB	17330202	2
Caelo	Hydrophilic ointment DAB	17040301	19
Caelo	Hydrophilic ointment DAB	16009101	23
Caelo	Hydrophilic ointment DAB	13117102	5
Caelo	Hydrophilic ointment DAB	15016701	6
Caelo	Hydrophilic ointment DAB	15221601	14
Caelo	Hydrophilic ointment DAB	15016501	1
Caelo	Hydrophilic ointment DAB	15221501	5
Caelo	Hydrophilic ointment DAB	294449	2
Caelo	Hydrophilic ointment DAB	16009201	11
Caelo	Hydrophilic ointment DAB	1617102	2
Caelo	Hydrophilic ointment DAB	16167001	17
Caelo	Hydrophilic ointment DAB	1617001	1
Caelo	Hydrophilic ointment DAB	170614183	1
Caelo	Hydrophilic ointment DAB	170905UE/16167001	1
Caelo	Hydrophilic ointment DAB	305396	1
Caelo	Hydrophilic ointment DAB	17083201	6
Caelo	Hydrophilic ointment DAB	17083202	5
Caelo	Hydrophilic ointment DAB	299392	1
Caelo	Hydrophilic ointment DAB	180808183	1
Caelo	Hydrophilic ointment DAB	17330302	4
Caelo	Hydrophilic ointment DAB	17330601	6
Caelo	Hydrophilic ointment DAB	1733031	1
Caelo	Hydrophilic ointment DAB	12205001	6
Caelo	Hydrophilic ointment DAB	15221801	3
Caelo	Hydrophilic ointment DAB	3613Q2539	1
Caelo	Hydrophilic ointment DAB	1614U2539	1
Caelo	Hydrophilic ointment DAB	17083301	9
Caelo	Hydrophilic ointment DAB	17290603	6
Caelo	Hydrophilic ointment DAB	17330303	3
Caelo	Hydrophilic ointment DAB	12014601	1
Caelo	Hydrophilic ointment DAB	12056001	1
Caelo	Hydrophilic ointment DAB	13117401	7

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	281351	1
Caelo	Hydrophilic ointment DAB	286545	1
Caelo	Hydrophilic ointment DAB	14277701	4
Caelo	Hydrophilic ointment DAB	16282702	3
Caelo	Hydrophilic ointment DAB	17262701	1
Caelo	Hydrophilic ointment DAB	18207502	8
Caelo	Hydrophilic ointment DAB	18207503	3
Caelo	Hydrophilic ointment DAB	19025402	14
Caelo	Hydrophilic ointment DAB	18303301	1
Caelo	Hydrophilic ointment DAB	15016901	11
Caelo	Hydrophilic ointment DAB	11015402	1
Caelo	Hydrophilic ointment DAB	13B04-T18-001061	2
Caelo	Hydrophilic ointment DAB	13245303	1
Caelo	Hydrophilic ointment DAB	14123201	4
Caelo	Hydrophilic ointment DAB	4225001	1
Caelo	Hydrophilic ointment DAB	14224901	5
Caelo	Hydrophilic ointment DAB	14277801	7
Caelo	Hydrophilic ointment DAB	15016503	4
Caelo	Hydrophilic ointment DAB	15400701	1
Caelo	Hydrophilic ointment DAB	103/AKD15	1
Caelo	Hydrophilic ointment DAB	17330501	12
Caelo	Hydrophilic ointment DAB	17040201	17
Caelo	Hydrophilic ointment DAB	4912E-02539	1
Caeolo/Noweda	Hydrophilic ointment DAB	6/2019	1
Caeolo/Noweda	Hydrophilic ointment DAB	16167102	1
Caesar & Loretz	Hydrophilic ointment DAB	16166701	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	13014002	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	13245401	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14024901	2
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14277801	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14277901	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	15221701	2
Caesar & Loretz GmbH	Hydrophilic ointment DAB	17330501	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	18207502	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	17330301	1
Caesar & Loretz GmbH Hi...	Hydrophilic ointment DAB	16008701	2
Caesar & Loretz GmbH, 4...	Hydrophilic ointment DAB	12056002	1
Caesar & Loretz GmbH, 4...	Hydrophilic ointment DAB	13117501	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	13245401	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	13245301	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	14277901	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	16009101	1
Caesar&lorenz,Phoenix	Hydrophilic ointment DAB	12311501	1
Caesar&lorenz,Phoenix	Hydrophilic ointment DAB	13245401	1
Caleo/Noweda	Hydrophilic ointment DAB	17040201	1
Cealo/Noweda	Hydrophilic ointment DAB	15221601	1
Celo	Hydrophilic ointment DAB	16009101	1
DAB 2008 Henry Lamotte ...	Hydrophilic ointment DAB	5243000	1
Defekur / Wolf-Apotheke	Hydrophilic ointment DAB	299390	3
Defekur	Hydrophilic ointment DAB	3216M-02539	1
Doroderm GmbH/ Noweda	Hydrophilic ointment DAB	12311501	1
Ebert & Jacobi 03.08.16	Hydrophilic ointment DAB	160091001	1
Eigen Defekur	Hydrophilic ointment DAB	316M-02539	1
Eigen Defekur	Hydrophilic ointment DAB	1716E-02539	1
Eigen/Defekur	Hydrophilic ointment DAB	3415I-02539	1
Eigen/Defekur	Hydrophilic ointment DAB	4215E-02539	1
Eigen/Defekur	Hydrophilic ointment DAB	5015E-02539	1
Eigen/Defekur	Hydrophilic ointment DAB	2516A-02539	1
EuRho/ Noweda	Hydrophilic ointment DAB	14277601	1
Euro OTC	Hydrophilic ointment DAB	13117102	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Hydrophilic ointment DAB	17040202	1
Euro OTC	Hydrophilic ointment DAB	11211601	2
Euro OTC	Hydrophilic ointment DAB	14A06-T10-009049	1
Euro OTC	Hydrophilic ointment DAB	288369	1
Fagron	Hydrophilic ointment DAB	12A12-T03	1
Fagron	Hydrophilic ointment DAB	13B04-T18-001057	3
Fagron	Hydrophilic ointment DAB	14A06-T10-009049	1
Fagron	Hydrophilic ointment DAB	14G08-T06-013947	2
Fagron	Hydrophilic ointment DAB	14Go8-To8-013954	1
Fagron	Hydrophilic ointment DAB	15F23-T12-023864	1
Fagron	Hydrophilic ointment DAB	17040501	3
Fagron	Hydrophilic ointment DAB	16K09-T09-038560	1
Fagron	Hydrophilic ointment DAB	17E04-T07-044038	1
Fagron	Hydrophilic ointment DAB	17I11-T03-048188	3
Fagron	Hydrophilic ointment DAB	18001506	1
Fagron	Hydrophilic ointment DAB	17I11-T05	1
Fagron	Hydrophilic ointment DAB	16K09-T02-038560	1
Fagron	Hydrophilic ointment DAB	14G08-T07-013951	2
Fagron	Hydrophilic ointment DAB	14A06-T11-009054	3
Fagron	Hydrophilic ointment DAB	15F09-T02-023370	1
Fagron	Hydrophilic ointment DAB	15B19-T01-019409	1
Fagron	Hydrophilic ointment DAB	13H13T04006144	1
Fagron	Hydrophilic ointment DAB	18F27-T05-057539	3
Fagron	Hydrophilic ointment DAB	13H13-T04-006144	1
Fagron	Hydrophilic ointment DAB	19B28-T05-064717	3
Fagron	Hydrophilic ointment DAB	14A06T11009054	1
Fagron	Hydrophilic ointment DAB	16K09-T03-038564	1
Fagron	Hydrophilic ointment DAB	12C09-T01	2
Fagron	Hydrophilic ointment DAB	13E10-T06-003563	1
Fagron	Hydrophilic ointment DAB	14A06-T11	1
Fagron	Hydrophilic ointment DAB	14G08-T06-013948	1
Fagron	Hydrophilic ointment DAB	14G08-T06	1
Fagron	Hydrophilic ointment DAB	15B19-T01	1
Fagron	Hydrophilic ointment DAB	15B19-T01-019411	2
Fagron	Hydrophilic ointment DAB	15K24-T01-027590	1
Fagron	Hydrophilic ointment DAB	16G18-T04-035261	3
Fagron	Hydrophilic ointment DAB	15F24-T05-023887	1
Fagron	Hydrophilic ointment DAB	1F27-T0-07539	1
Fagron	Hydrophilic ointment DAB	12J31-T04	3
Fagron	Hydrophilic ointment DAB	18K16-T02-062150	1
Fagron	Hydrophilic ointment DAB	17/11-T03-048188	2
Fiebig	Hydrophilic ointment DAB	17290703	1
Fiebig	Hydrophilic ointment DAB	17185501	1
Fiebig	Hydrophilic ointment DAB	18207602	1
Fiebig	Hydrophilic ointment DAB	19025402	1
Fiebig 08.10.12 ek: 10,...	Hydrophilic ointment DAB	12055901	1
Fiebig/ Lamotte	Hydrophilic ointment DAB	5860400	2
Gehe	Hydrophilic ointment DAB	12205201	1
Gehe	Hydrophilic ointment DAB	276671	2
Gehe	Hydrophilic ointment DAB	13117301	2
Gehe	Hydrophilic ointment DAB	14G08-T08-013954	1
Gehe	Hydrophilic ointment DAB	16167001	1
Gehe/Henry Lamotte	Hydrophilic ointment DAB	6001368013	2
Caelo	Hydrophilic ointment DAB	14278002	2
H.Lamotte/Anzag 04.07.17	Hydrophilic ointment DAB	8002320009	5
H.Lamotte/Anzag 06.11.18	Hydrophilic ointment DAB	8004399001	1
Henry Lamotte Oils	Hydrophilic ointment DAB	5860400	2
Henry Lamotte oils GmbH	Hydrophilic ointment DAB	8002320009	5
Henry Lamotte Oils GmbH	Hydrophilic ointment DAB	5862400	1
Henry Lamotte Oils GmbH	Hydrophilic ointment DAB	5860400	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Hydrophilic ointment DAB	8003325012	1
Henry Lamotte Oils GmbH...	Hydrophilic ointment DAB	8003325012	1
Henry Lamotte Oils GmbH...	Hydrophilic ointment DAB	6001368013	1
Henry Lamotte/ Noweda	Hydrophilic ointment DAB	6001368013	1
Henry Lamotte/Anzag	Hydrophilic ointment DAB	5321400	1
Henry Lamotte/Anzag	Hydrophilic ointment DAB	2215M-02539	1
Henry Lamotte/Noweda	Hydrophilic ointment DAB	6001368014	2
Ichthyol-Gesellschaft	Hydrophilic ointment DAB	11212101	2
Infectopharm / Noweda	Hydrophilic ointment DAB	17040201	1
Klenk	Hydrophilic ointment DAB	1783002	1
Krieger	Hydrophilic ointment DAB	12311401	1
Krieger	Hydrophilic ointment DAB	16282801	1
Caelo	Hydrophilic ointment DAB	1622801	1
Caelo	Hydrophilic ointment DAB	17156302	1
Caelo	Hydrophilic ointment DAB	16282801	6
L12	Hydrophilic ointment DAB	16167001	1
Lamotta/Anzag	Hydrophilic ointment DAB	6001368014	1
lamotte	Hydrophilic ointment DAB	5517900	1
lamotte	Hydrophilic ointment DAB	5448000	1
Lamotte	Hydrophilic ointment DAB	518400	1
Lamotte	Hydrophilic ointment DAB	5321400	1
Lamotte	Hydrophilic ointment DAB	5651600	2
Lamotte / Noweda	Hydrophilic ointment DAB	8004399001	3
Lamotte//AHD	Hydrophilic ointment DAB	5860500	1
Lamotte/AHC	Hydrophilic ointment DAB	6001368014	1
Lamotte/AHD	Hydrophilic ointment DAB	8002320009	1
Lamotte/Alliance	Hydrophilic ointment DAB	5517900	1
Lamotte/Alliance	Hydrophilic ointment DAB	5651600	1
Lamotte/Anzag	Hydrophilic ointment DAB	5112A-02539	1
Lamotte/ANZAG	Hydrophilic ointment DAB	5860400	1
Noweda	Hydrophilic ointment DAB	12311801	1
Noweda	Hydrophilic ointment DAB	12205201	1
Noweda	Hydrophilic ointment DAB	11133501	1
Noweda	Hydrophilic ointment DAB	17290702	1
Caelo	Hydrophilic ointment DAB	17330402	6
Noweda 06.04.2016	Hydrophilic ointment DAB	15221601	1
Caelo	Hydrophilic ointment DAB	12J31-T04	1
Bombastus	Hydrophilic ointment DAB	288369	6
Bombastus	Hydrophilic ointment DAB	288367	4
Bombastus	Hydrophilic ointment DAB	293263	2
Bombastus	Hydrophilic ointment DAB	296867	1
Caelo	Hydrophilic ointment DAB	13245901	10
Caelo	Hydrophilic ointment DAB	14225002	11
Caelo	Hydrophilic ointment DAB	1120462	1
Caelo	Hydrophilic ointment DAB	1628401	1
Phoenix	Hydrophilic ointment DAB	308898	3
Caelo	Hydrophilic ointment DAB	15113602	1
phönix	Hydrophilic ointment DAB	16166801	1
phönix	Hydrophilic ointment DAB	16008701	1
phönix	Hydrophilic ointment DAB	17040301	1
phönix	Hydrophilic ointment DAB	16282401	1
Phönix	Hydrophilic ointment DAB	12311301	1
Phönix	Hydrophilic ointment DAB	5321400	1
Phönix	Hydrophilic ointment DAB	14024701	1
Phönix	Hydrophilic ointment DAB	16166901	1
Phönix	Hydrophilic ointment DAB	16282702	1
Phönix	Hydrophilic ointment DAB	16166801	1
Phönix	Hydrophilic ointment DAB	17330601	2
Phönix Gotha	Hydrophilic ointment DAB	12G18-T10	1
phönix Pharmochem	Hydrophilic ointment DAB	17040301	2

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Supplier	Substance	Batch	Spectra
Phönix/Bionorica	Hydrophilic ointment DAB	17083002	3
Caelo	Hydrophilic ointment DAB	12204901	2
Caelo	Hydrophilic ointment DAB	15221901	2
Caelo	Hydrophilic ointment DAB	16008701	12
Caelo	Hydrophilic ointment DAB	1682401	1
Caelo	Hydrophilic ointment DAB	17330301	36
PhönixWE:2.02.2017 EK...	Hydrophilic ointment DAB	16166801	1
sanacorp	Hydrophilic ointment DAB	15F09-T02023370	1
Sanacorp	Hydrophilic ointment DAB	12205001	1
Sanacorp	Hydrophilic ointment DAB	13117102	3
Sanacorp	Hydrophilic ointment DAB	AKD32	1
Sanacorp	Hydrophilic ointment DAB	6/AKD7	1
Sanacorp	Hydrophilic ointment DAB	17040301	1
Sanacorp	Hydrophilic ointment DAB	17290702	1
Sanacorp	Hydrophilic ointment DAB	17330301	4
Caelo	Hydrophilic ointment DAB	12J31T04	1
Sanacorp 18.03.17 Ek:11...	Hydrophilic ointment DAB	16167001	1
Caelo	Hydrophilic ointment DAB	12056002	4
Caelo	Hydrophilic ointment DAB	15097714	1
Stumpf	Hydrophilic ointment DAB	269539	1
Stumpf	Hydrophilic ointment DAB	274004	1
Bombastus	Hydrophilic ointment DAB	296868	6
Bombastus	Hydrophilic ointment DAB	276671	5
THC Rezeptur-Set	Hydrophilic ointment DAB	307095	1
Caelo	Hydrophilic ointment DAB	12055801	2
Wepa/ Phoenix	Hydrophilic ointment DAB	17040301	1
Fagron	Hydrophobic base gel DAC	15L10-T04-028696	2
Euro OTC	Hydrophobic base gel DAC	16240105	1
Allianz	Hydrophobic base gel DAC	18075803	1
Anzag	Hydrophobic base gel DAC	16172301	1
Bombastus	Hydrophobic base gel DAC	277443	3
Bombastus	Hydrophobic base gel DAC	283998	1
Bombastus	Hydrophobic base gel DAC	10071402	1
Bombastus	Hydrophobic base gel DAC	286013	1
Bombastus	Hydrophobic base gel DAC	28111403	1
Bombastus	Hydrophobic base gel DAC	289214	5
Bombastus	Hydrophobic base gel DAC	24031504	1
Bombastus	Hydrophobic base gel DAC	289213	1
Bombastus	Hydrophobic base gel DAC	294417	1
Bombastus	Hydrophobic base gel DAC	294418	3
Bombastus	Hydrophobic base gel DAC	300896	4
Bombastus	Hydrophobic base gel DAC	297392	1
Bombastus	Hydrophobic base gel DAC	16054302	1
Bombastus	Hydrophobic base gel DAC	4082897	1
Bombastus	Hydrophobic base gel DAC	304036	5
Bombastus	Hydrophobic base gel DAC	9031704	1
Bombastus	Hydrophobic base gel DAC	26081706	1
Bombastus	Hydrophobic base gel DAC	23121704	1
Bombastus	Hydrophobic base gel DAC	12051806	1
Bombastus	Hydrophobic base gel DAC	15081828	1
Bombastus	Hydrophobic base gel DAC	5121804	1
Bombastus	Hydrophobic base gel DAC	19011905	1
Bombastus	Hydrophobic base gel DAC	308440	2
Bombastus	Hydrophobic base gel DAC	160607HB	1
Bombastus	Hydrophobic base gel DAC	295729	5
Bombastus	Hydrophobic base gel DAC	2(18001099)	1
Bombastus	Hydrophobic base gel DAC	18004043	1
Bombastus	Hydrophobic base gel DAC	306482	1
Bombastus	Hydrophobic base gel DAC	271904	2
Bombastus	Hydrophobic base gel DAC	279074	5

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophobic base gel DAC	308439	1
Bombastus	Hydrophobic base gel DAC	18001099	3
Bombastus	Hydrophobic base gel DAC	302I45	1
Bombastus	Hydrophobic base gel DAC	302145	2
Bombastus	Hydrophobic base gel DAC	292717	1
Bombastus	Hydrophobic base gel DAC	299263	2
Bombastus	Hydrophobic base gel DAC	300895	1
Bombastus	Hydrophobic base gel DAC	304035	4
Bombastus	Hydrophobic base gel DAC	17001133	2
Bombastus	Hydrophobic base gel DAC	18003236	1
Bombastus	Hydrophobic base gel DAC	18005370	2
Bombastus	Hydrophobic base gel DAC	282094	6
Bombastus	Hydrophobic base gel DAC	295369	1
Bombastus	Hydrophobic base gel DAC	297433	1
Bombastus	Hydrophobic base gel DAC	19001130	1
Caelo	Hydrophobic base gel DAC	15149605	3
Caelo	Hydrophobic base gel DAC	12229001	6
Caelo	Hydrophobic base gel DAC	12229005	1
Caelo	Hydrophobic base gel DAC	123662505	1
Caelo	Hydrophobic base gel DAC	9082013C	1
Caelo	Hydrophobic base gel DAC	14102505	2
Caelo	Hydrophobic base gel DAC	14158002	4
Caelo	Hydrophobic base gel DAC	14161501	12
Caelo	Hydrophobic base gel DAC	286013	2
Caelo	Hydrophobic base gel DAC	14158003	9
Caelo	Hydrophobic base gel DAC	13341701	1
Caelo	Hydrophobic base gel DAC	10L14-T54-009128	1
Caelo	Hydrophobic base gel DAC	15149602	1
Caelo	Hydrophobic base gel DAC	15240801	7
Caelo	Hydrophobic base gel DAC	15064001	4
Caelo	Hydrophobic base gel DAC	15240805	9
Caelo	Hydrophobic base gel DAC	15240807	3
Caelo	Hydrophobic base gel DAC	15436105	3
Caelo	Hydrophobic base gel DAC	15436102	7
Caelo	Hydrophobic base gel DAC	15240806	1
Caelo	Hydrophobic base gel DAC	15436103	6
Caelo	Hydrophobic base gel DAC	16070501	1
Caelo	Hydrophobic base gel DAC	15436106	1
Caelo	Hydrophobic base gel DAC	16054302	7
Caelo	Hydrophobic base gel DAC	1607050	1
Caelo	Hydrophobic base gel DAC	16151101	4
Caelo	Hydrophobic base gel DAC	160705	1
Caelo	Hydrophobic base gel DAC	16070502	5
Caelo	Hydrophobic base gel DAC	16172401	15
Caelo	Hydrophobic base gel DAC	16240105	9
Caelo	Hydrophobic base gel DAC	16240104	4
Caelo	Hydrophobic base gel DAC	17032201	8
Caelo	Hydrophobic base gel DAC	16151107	1
Caelo	Hydrophobic base gel DAC	16240110	1
Caelo	Hydrophobic base gel DAC	16240112	4
Caelo	Hydrophobic base gel DAC	16240114	6
Caelo	Hydrophobic base gel DAC	17043605	8
Caelo	Hydrophobic base gel DAC	16240111	5
Caelo	Hydrophobic base gel DAC	17196704	11
Caelo	Hydrophobic base gel DAC	17113703	28
Caelo	Hydrophobic base gel DAC	17196712	12
Caelo	Hydrophobic base gel DAC	17196707	4
Caelo	Hydrophobic base gel DAC	17196703	1
Caelo	Hydrophobic base gel DAC	17196713	1
Caelo	Hydrophobic base gel DAC	18075803	21

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic base gel DAC	17320408	1
Caelo	Hydrophobic base gel DAC	18228301	8
Caelo	Hydrophobic base gel DAC	17196715	1
Caelo	Hydrophobic base gel DAC	18140606	8
Caelo	Hydrophobic base gel DAC	18140607	7
Caelo	Hydrophobic base gel DAC	18004043	1
Caelo	Hydrophobic base gel DAC	18001099	1
Caelo	Hydrophobic base gel DAC	19123607	1
Caelo	Hydrophobic base gel DAC	19253904	1
Caelo	Hydrophobic base gel DAC	17001133	1
Caelo	Hydrophobic base gel DAC	16172301	14
Caelo	Hydrophobic base gel DAC	181400604	1
Caelo	Hydrophobic base gel DAC	17043606	4
Caelo	Hydrophobic base gel DAC	12362504	3
Caelo	Hydrophobic base gel DAC	17043604	2
Caelo	Hydrophobic base gel DAC	18240302	5
Caelo	Hydrophobic base gel DAC	13085004	2
Caelo	Hydrophobic base gel DAC	18240307	5
Caelo	Hydrophobic base gel DAC	14304604	1
Caelo	Hydrophobic base gel DAC	182280301	1
Caelo	Hydrophobic base gel DAC	18315801	7
Caelo	Hydrophobic base gel DAC	18140605	6
Caelo	Hydrophobic base gel DAC	15064101	22
Caelo	Hydrophobic base gel DAC	15149604	8
Caelo	Hydrophobic base gel DAC	16226002	8
Caelo	Hydrophobic base gel DAC	17113702	13
Caelo	Hydrophobic base gel DAC	17196709	2
Caelo	Hydrophobic base gel DAC	64/2014	1
Caelo	Hydrophobic base gel DAC	19044903	4
Caelo	Hydrophobic base gel DAC	19101801	3
Caelo	Hydrophobic base gel DAC	14304603	3
Caelo	Hydrophobic base gel DAC	15055705	5
Caelo	Hydrophobic base gel DAC	15149603	3
Caelo	Hydrophobic base gel DAC	19044904	1
Caelo	Hydrophobic base gel DAC	15205002	14
Caelo	Hydrophobic base gel DAC	13165201	3
Caelo	Hydrophobic base gel DAC	16070503	10
Caelo	Hydrophobic base gel DAC	16240107	6
Caelo	Hydrophobic base gel DAC	15240802	2
Caelo	Hydrophobic base gel DAC	12362503	5
Caelo	Hydrophobic base gel DAC	13341703	3
Caelo	Hydrophobic base gel DAC	14102502	5
Caelo	Hydrophobic base gel DAC	15055702	2
Caelo	Hydrophobic base gel DAC	16070505	6
Caelo	Hydrophobic base gel DAC	17032303	17
Caelo	Hydrophobic base gel DAC	13295701	9
Caelo	Hydrophobic base gel DAC	15383005	1
Caelo	Hydrophobic base gel DAC	15269201	15
Caelo	Hydrophobic base gel DAC	17032102	2
Caelo	Hydrophobic base gel DAC	18075802	8
Caelo	Hydrophobic base gel DAC	15055701	1
Caelo	Hydrophobic base gel DAC	16054201	18
Caelo	Hydrophobic base gel DAC	302145	1
Caelo	Hydrophobic base gel DAC	12362505	5
Caelo	Hydrophobic base gel DAC	13295801	4
Caelo	Hydrophobic base gel DAC	14158006	1
Caelo	Hydrophobic base gel DAC	18140604	5
Caelo	Hydrophobic base gel DAC	17196714	1
Caelo	Hydrophobic base gel DAC	18240308	2
Caelo	Hydrophobic base gel DAC	13165205	2

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic base gel DAC	282094	2
Caelo	Hydrophobic base gel DAC	15331102	4
Caelo	Hydrophobic base gel DAC	16151105	7
Caelo	Hydrophobic base gel DAC	16151102	4
Caelo	Hydrophobic base gel DAC	304036	1
Caelo	Hydrophobic base gel DAC	18240305	1
Caelo	Hydrophobic base gel DAC	14304624	1
Caesar & Loretz GmbH	Hydrophobic base gel DAC	18240302	3
Caesar & Loretz GmbH	Hydrophobic base gel DAC	18240305	1
Caesar & Loretz GmbH	Hydrophobic base gel DAC	18240307	1
Caesar & Loretz GmbH	Hydrophobic base gel DAC	19044904	1
Caesar & Loretz GmbH	Hydrophobic base gel DAC	19101801	1
Caesar & Loretz GmbH Hi...	Hydrophobic base gel DAC	16070503	2
Caesar & Loretz GmbH, 4...	Hydrophobic base gel DAC	13165201	1
Caesar & Loretz GmbH/Ph...	Hydrophobic base gel DAC	18240305	1
Caesar&Loretz GmbH	Hydrophobic base gel DAC	17043605	1
Caesar/Noweda	Hydrophobic base gel DAC	15436103	1
Celo	Hydrophobic base gel DAC	16172301	1
E Plus	Hydrophobic base gel DAC	17043605	1
E Plus	Hydrophobic base gel DAC	17196704	1
E Plus	Hydrophobic base gel DAC	17196705	2
Euro OTC	Hydrophobic base gel DAC	15436102	1
Euro/Noweda	Hydrophobic base gel DAC	16151105	1
Euro OTC	Hydrophobic base gel DAC	12362505	1
Europ Ots Pharma	Hydrophobic base gel DAC	13299604	1
Fagro	Hydrophobic base gel DAC	15240805	1
Fagron	Hydrophobic base gel DAC	10L14-T54	3
Fagron	Hydrophobic base gel DAC	10L14-T54-009128	2
Fagron	Hydrophobic base gel DAC	15J02-T09-023890	1
Fagron	Hydrophobic base gel DAC	15436101	3
Fagron	Hydrophobic base gel DAC	15240805	1
Fagron	Hydrophobic base gel DAC	17032201	1
Fagron	Hydrophobic base gel DAC	17E29-T03-051638	1
Fagron	Hydrophobic base gel DAC	18K01-T05062018	1
Fagron	Hydrophobic base gel DAC	16H24-T02-034643	4
Fagron	Hydrophobic base gel DAC	11K23-T01	1
Fagron	Hydrophobic base gel DAC	10L14-T54-000713	1
Fagron	Hydrophobic base gel DAC	10L14-T54-006109	4
Gehe	Hydrophobic base gel DAC	16151105	1
Gehe	Hydrophobic base gel DAC	16240104	1
Gehe	Hydrophobic base gel DAC	17113702	1
GEHE	Hydrophobic base gel DAC	19123606	2
Gehe 23.05.2014	Hydrophobic base gel DAC	14044601	1
Gehe Kassel	Hydrophobic base gel DAC	271904	1
GEHE Kassel	Hydrophobic base gel DAC	289214	1
Caelo	Hydrophobic base gel DAC	17196706	1
Geilenkirchen	Hydrophobic base gel DAC	15064201	1
HansenRosenthalKG/Hansen	Hydrophobic base gel DAC	1078667	1
Infectopharm / Noweda	Hydrophobic base gel DAC	17320409	1
JENNE	Hydrophobic base gel DAC	18140607	1
L12	Hydrophobic base gel DAC	16151105	1
L12	Hydrophobic base gel DAC	17320409	1
Noweda	Hydrophobic base gel DAC	15055705	1
Noweda	Hydrophobic base gel DAC	15149604	1
Noweda	Hydrophobic base gel DAC	15240805	2
Noweda	Hydrophobic base gel DAC	15331102	1
Caelo	Hydrophobic base gel DAC	15064201	5
Phoenix	Hydrophobic base gel DAC	17196703	1
Phoenix/ Bombatus-Werke...	Hydrophobic base gel DAC	302145	1
Phoenix/Cealo	Hydrophobic base gel DAC	17196704	1

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Supplier	Substance	Batch	Spectra
Phönix	Hydrophobic base gel DAC	16240105	1
Phönix	Hydrophobic base gel DAC	17043606	1
Phönix	Hydrophobic base gel DAC	18240307	1
Caelo	Hydrophobic base gel DAC	17196705	6
Caelo	Hydrophobic base gel DAC	17320409	8
Sanacorp	Hydrophobic base gel DAC	13165201	1
Sanacorp	Hydrophobic base gel DAC	AKD18	1
Sanacorp	Hydrophobic base gel DAC	308440	1
Caelo	Hydrophobic base gel DAC	14102504	3
Caelo	Hydrophobic base gel DAC	14087501	8
Caelo	Paraffin, liquid	19010304	2
Caelo	Paraffin, liquid	19010307	4
Caelo	Paraffin, liquid	19010316	1
Caelo	Paraffin, liquid	19010315	3
Caelo	Paraffin, liquid	19010303	2
Caesar & Loretz GmbH	Paraffin, liquid	18177008	2
Euro OTC	Paraffin, liquid	1904026-01	1
Euro OTC	Paraffin, liquid	1909010-01	1
Euro OTC	Paraffin, white	1612007-01	2
ACM	Paraffin, white	KNC1628J15	1
Bombastus	Paraffin, white	17038204	1
AHC 08.07.13 EK5,61	Paraffin, white	12374502	1
AHD	Paraffin, white	5489700	1
AHD	Paraffin, white	13268410	2
AHD	Paraffin, white	123test	1
AHD	Paraffin, white	14355806	1
AHD	Paraffin, white	16181901	3
AHD	Paraffin, white	16241105	4
AHD	Paraffin, white	16326707	1
AHD	Paraffin, white	16326706	1
AHD	Paraffin, white	17106004	3
AHD	Paraffin, white	17106005	2
AHD	Paraffin, white	17347803	2
AHD	Paraffin, white	18005001	3
AHD, 30.09.2013	Paraffin, white	279970	1
Caelo	Paraffin, white	15441501	21
Caelo	Paraffin, white	6002062001	1
Caelo	Paraffin, white	6000083007	2
Euro OTC	Paraffin, white	1509019-01	7
Alliance Healthcare	Paraffin, white	12306302	1
Alliance Healthcare	Paraffin, white	276088	1
Alliance Healthcare	Paraffin, white	277444	1
Euro OTC	Paraffin, white	1302022-01	6
Euro OTC	Paraffin, white	1409009-01	3
Euro OTC	Paraffin, white	1501037-01	4
Allianz Healthcare	Paraffin, white	16181904	1
Alte Apotheke	Paraffin, white	16181902	1
Anza	Paraffin, white	15162519	1
Anza	Paraffin, white	16181901	1
Anzag	Paraffin, white	1105029-01	1
Anzag	Paraffin, white	271435	1
Anzag	Paraffin, white	12209204	1
Anzag	Paraffin, white	1402501	1
Anzag	Paraffin, white	13163701	1
Anzag	Paraffin, white	285231	1
Anzag	Paraffin, white	15349706	1
ANZAG	Paraffin, white	12032413	1
Anzag 08.10.12	Paraffin, white	270491	1
Anzag 15.03.13 ek: 5,61EUR	Paraffin, white	12209210	1
Anzag 27.03.13 ek: 3,66EUR	Paraffin, white	12115101	1

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Supplier	Substance	Batch	Spectra
Anzag 27.12.12 ek:5.45	Paraffin, white	12209204	1
Anzag/	Paraffin, white	12182505	2
Caelo	Paraffin, white	13130909	15
Caelo	Paraffin, white	11315412	1
Caelo	Paraffin, white	12311010	12
Caelo	Paraffin, white	11374903	4
Caelo	Paraffin, white	11060212	2
Anzag/Henry Lamotte	Paraffin, white	15060014	1
Apo Ident/ Noweda	Paraffin, white	16326707	1
apomix/Noweda	Paraffin, white	306020	1
Audor Pharma	Paraffin, white	18174302	1
Bambustus/Noweda	Paraffin, white	295265	1
Bambustus/Noweda	Paraffin, white	296854	4
Bambynek/Gehe	Paraffin, white	303786	1
Beiersdorf	Paraffin, white	30841410	3
Beiersdorf/Gehe	Paraffin, white	1401017-01	1
Berkel AHK	Paraffin, white	13338710	1
Berkel AHK	Paraffin, white	14087403	1
Bionorica Ethics	Paraffin, white	311259	1
Bomastus/Anzag	Paraffin, white	18003484	1
Bomastus/Phönix	Paraffin, white	307661	1
Bomastus-Werke AG	Paraffin, white	18002117	1
Bomb/Gehe	Paraffin, white	304124	1
BOMBASTU Gehe 20.04.18	Paraffin, white	17000584	1
Bombastus	Paraffin, white	291319	3
Bombastus	Paraffin, white	268099	2
Bombastus	Paraffin, white	267010	2
Bombastus	Paraffin, white	267671	2
Bombastus	Paraffin, white	268390	1
Bombastus	Paraffin, white	2704212549	1
Bombastus	Paraffin, white	268016	1
Bombastus	Paraffin, white	270492	1
Bombastus	Paraffin, white	1406212549	1
Bombastus	Paraffin, white	270831	1
Bombastus	Paraffin, white	30061201	1
Bombastus	Paraffin, white	270165	1
Bombastus	Paraffin, white	270163	2
Bombastus	Paraffin, white	270490	1
Bombastus	Paraffin, white	270834	4
Bombastus	Paraffin, white	2909212549	1
Bombastus	Paraffin, white	270491	1
Bombastus	Paraffin, white	270984	1
Bombastus	Paraffin, white	271261	2
Bombastus	Paraffin, white	265508	1
Bombastus	Paraffin, white	1001312549	1
Bombastus	Paraffin, white	271437	3
Bombastus	Paraffin, white	270983	1
Bombastus	Paraffin, white	270980	2
Bombastus	Paraffin, white	269733	1
Bombastus	Paraffin, white	271213	3
Bombastus	Paraffin, white	271435	1
Bombastus	Paraffin, white	270977	2
Bombastus	Paraffin, white	2002312549	1
Bombastus	Paraffin, white	270979	5
Bombastus	Paraffin, white	271260	1
Bombastus	Paraffin, white	276968	1
Bombastus	Paraffin, white	277060	4
Bombastus	Paraffin, white	277987	5
Bombastus	Paraffin, white	3013M2549	1
Bombastus	Paraffin, white	279970	4

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, white	3113Q02549	1
Bombastus	Paraffin, white	278595	1
Bombastus	Paraffin, white	280702	3
Bombastus	Paraffin, white	279161	6
Bombastus	Paraffin, white	281291	6
Bombastus	Paraffin, white	4013E-02549	1
Bombastus	Paraffin, white	258551	1
Bombastus	Paraffin, white	279805	1
Bombastus	Paraffin, white	282964	2
Bombastus	Paraffin, white	281539	1
Bombastus	Paraffin, white	283948	1
Bombastus	Paraffin, white	287147	1
Bombastus	Paraffin, white	285310	12
Bombastus	Paraffin, white	288715	4
Bombastus	Paraffin, white	288717	3
Bombastus	Paraffin, white	292219	2
Bombastus	Paraffin, white	293553	3
Bombastus	Paraffin, white	297282	5
Bombastus	Paraffin, white	297283	8
Bombastus	Paraffin, white	302037	18
Bombastus	Paraffin, white	306020	21
Bombastus	Paraffin, white	60081102	1
Bombastus	Paraffin, white	311259	5
Bombastus	Paraffin, white	18000101	16
Bombastus	Paraffin, white	18005698	10
Bombastus	Paraffin, white	309122	3
Bombastus	Paraffin, white	90016751	1
Bombastus	Paraffin, white	276127	1
Bombastus	Paraffin, white	278620	1
Bombastus	Paraffin, white	282700	5
Bombastus	Paraffin, white	304125	1
Bombastus	Paraffin, white	18002117	14
Bombastus	Paraffin, white	18000670	8
Bombastus	Paraffin, white	111967	1
Bombastus	Paraffin, white	289344	6
Bombastus	Paraffin, white	305197	1
Bombastus	Paraffin, white	269732	1
Bombastus	Paraffin, white	290441	7
Bombastus	Paraffin, white	14087402	1
Bombastus	Paraffin, white	298427	3
Bombastus	Paraffin, white	303786	1
Bombastus	Paraffin, white	306019	1
Bombastus	Paraffin, white	18000100	2
Bombastus	Paraffin, white	309564	15
Bombastus	Paraffin, white	17000584	10
Bombastus	Paraffin, white	288714	4
Bombastus	Paraffin, white	292220	5
Bombastus	Paraffin, white	5215200	1
Bombastus	Paraffin, white	270978	3
Bombastus	Paraffin, white	270635	3
Bombastus	Paraffin, white	286095	3
Bombastus	Paraffin, white	269731	1
Bombastus	Paraffin, white	270553	1
Bombastus	Paraffin, white	270981	1
Bombastus	Paraffin, white	5213A2549	1
Bombastus	Paraffin, white	2014Q2549	1
Bombastus	Paraffin, white	276088	1
Bombastus	Paraffin, white	285231	3
Bombastus	Paraffin, white	277059	2
Bombastus	Paraffin, white	277988	2

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, white	285309	2
Bombastus	Paraffin, white	280452	8
Bombastus	Paraffin, white	290714	4
Bombastus	Paraffin, white	2999469	1
Bombastus	Paraffin, white	18003484	13
Bombastus	Paraffin, white	6861393	1
Bombastus	Paraffin, white	283949	6
Bombastus	Paraffin, white	283951	1
Bombastus	Paraffin, white	294851	1
Bombastus	Paraffin, white	299468	2
Bombastus	Paraffin, white	282699	1
Bombastus	Paraffin, white	307661	22
Bombastus	Paraffin, white	298600	1
Bombastus	Paraffin, white	295265	2
Bombastus	Paraffin, white	308197	12
Bombastus	Paraffin, white	18006514	4
Bombastus	Paraffin, white	2761127	1
Bombastus	Paraffin, white	277986	2
Bombastus	Paraffin, white	283873	1
Bombastus	Paraffin, white	291318	14
Bombastus	Paraffin, white	299469	8
Bombastus	Paraffin, white	18002116	1
Bombastus	Paraffin, white	18003483	1
Bombastus	Paraffin, white	19003074	2
Bombastus	Paraffin, white	282336	2
Bombastus	Paraffin, white	295344	4
Bombastus	Paraffin, white	305140	1
Bombastus	Paraffin, white	17148702	1
Bombastus	Paraffin, white	270982	3
Bombastus	Paraffin, white	269734	3
Bombastus	Paraffin, white	279969	3
Bombastus	Paraffin, white	286096	5
Bombastus	Paraffin, white	288716	6
Bombastus	Paraffin, white	263683	1
Bombastus	Paraffin, white	265814	2
Bombastus	Paraffin, white	270634	2
Bombastus	Paraffin, white	270976	4
Bombastus	Paraffin, white	2888717	1
Bombastus	Paraffin, white	19101701	1
Bombastus	Paraffin, white	282966	7
Bombastus	Paraffin, white	295301	9
Bombastus	Paraffin, white	298599	13
Bombastus	Paraffin, white	304124	13
Bombastus	Paraffin, white	300120	13
Bombastus	Paraffin, white	294852	4
Bombastus	Paraffin, white	287148	2
Bombastu-Werke AG/Gehe	Paraffin, white	282964	3
Bombastus/Gehe	Paraffin, white	302037	2
Bombastus/ Phönix	Paraffin, white	280451	1
cae	Paraffin, white	13380706	1
Caelo	Paraffin, white	20061206	1
Caelo	Paraffin, white	12182505	9
Caelo	Paraffin, white	13338703	13
Caelo	Paraffin, white	17101410	1
Caelo	Paraffin, white	790619-021159	1
Caelo	Paraffin, white	15031806	1
Caelo	Paraffin, white	12041801	1
Caelo	Paraffin, white	11115501	1
Caelo	Paraffin, white	11265703	1
Caelo	Paraffin, white	90292119	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	11265708	2
Caelo	Paraffin, white	11301301	5
Caelo	Paraffin, white	11265711	1
Caelo	Paraffin, white	11315401	1
Caelo	Paraffin, white	12061201	1
Caelo	Paraffin, white	29051201	1
Caelo	Paraffin, white	3071202	1
Caelo	Paraffin, white	23071202	1
Caelo	Paraffin, white	12078105	1
Caelo	Paraffin, white	12012707	2
Caelo	Paraffin, white	14081205	1
Caelo	Paraffin, white	11060210	1
Caelo	Paraffin, white	17081202	1
Caelo	Paraffin, white	22081206	1
Caelo	Paraffin, white	3091209	1
Caelo	Paraffin, white	11315408	2
Caelo	Paraffin, white	11060211	1
Caelo	Paraffin, white	12190401	4
Caelo	Paraffin, white	27091205	1
Caelo	Paraffin, white	11374906	4
Caelo	Paraffin, white	12081601	3
Caelo	Paraffin, white	26101202	1
Caelo	Paraffin, white	12111203	1
Caelo	Paraffin, white	26111203	1
Caelo	Paraffin, white	12121201	1
Caelo	Paraffin, white	12121204	1
Caelo	Paraffin, white	17121206	1
Caelo	Paraffin, white	12032404	1
Caelo	Paraffin, white	20160812-4	1
Caelo	Paraffin, white	12012604	2
Caelo	Paraffin, white	11315402	1
Caelo	Paraffin, white	11011309	1
Caelo	Paraffin, white	17011309	1
Caelo	Paraffin, white	12311003	4
Caelo	Paraffin, white	11060213	2
Caelo	Paraffin, white	12209210	30
Caelo	Paraffin, white	1021302	1
Caelo	Paraffin, white	402312550	1
Caelo	Paraffin, white	613Q-02549	1
Caelo	Paraffin, white	713I-02549	1
Caelo	Paraffin, white	12311004	5
Caelo	Paraffin, white	813E-02549	1
Caelo	Paraffin, white	122092004	1
Caelo	Paraffin, white	5098800	1
Caelo	Paraffin, white	12115113	1
Caelo	Paraffin, white	12306401	5
Caelo	Paraffin, white	8031302	1
Caelo	Paraffin, white	13031301	1
Caelo	Paraffin, white	20031303	1
Caelo	Paraffin, white	12311011	10
Caelo	Paraffin, white	12012609	6
Caelo	Paraffin, white	5041303	1
Caelo	Paraffin, white	11041302	1
Caelo	Paraffin, white	15041305	1
Caelo	Paraffin, white	18041315	1
Caelo	Paraffin, white	12337704	11
Caelo	Paraffin, white	12337703	16
Caelo	Paraffin, white	8051303	1
Caelo	Paraffin, white	12115108	5
Caelo	Paraffin, white	13051305	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	12374501	5
Caelo	Paraffin, white	12D19-T54-000715	3
Caelo	Paraffin, white	1061301	1
Caelo	Paraffin, white	6061302	1
Caelo	Paraffin, white	12337707	9
Caelo	Paraffin, white	13095601	10
Caelo	Paraffin, white	12012605	1
Caelo	Paraffin, white	12306202	2
Caelo	Paraffin, white	11283902	1
Caelo	Paraffin, white	26061307	1
Caelo	Paraffin, white	27061301	1
Caelo	Paraffin, white	11104903	1
Caelo	Paraffin, white	10071304	1
Caelo	Paraffin, white	16071306	1
Caelo	Paraffin, white	13095602	1
Caelo	Paraffin, white	12306303	1
Caelo	Paraffin, white	13050102	1
Caelo	Paraffin, white	12321906	3
Caelo	Paraffin, white	20081304	1
Caelo	Paraffin, white	13028302	1
Caelo	Paraffin, white	10091301	1
Caelo	Paraffin, white	13130910	7
Caelo	Paraffin, white	19091308	1
Caelo	Paraffin, white	26091303	1
Caelo	Paraffin, white	13005719	9
Caelo	Paraffin, white	13130901	5
Caelo	Paraffin, white	8101302	1
Caelo	Paraffin, white	13130911	7
Caelo	Paraffin, white	15101308	1
Caelo	Paraffin, white	21101306	1
Caelo	Paraffin, white	13084906	14
Caelo	Paraffin, white	12111307	1
Caelo	Paraffin, white	13130912	13
Caelo	Paraffin, white	22111306	1
Caelo	Paraffin, white	130510	1
Caelo	Paraffin, white	13185501	1
Caelo	Paraffin, white	13185504	4
Caelo	Paraffin, white	13005708	2
Caelo	Paraffin, white	13005720	2
Caelo	Paraffin, white	13121303	1
Caelo	Paraffin, white	13163701	5
Caelo	Paraffin, white	27121304	1
Caelo	Paraffin, white	8012014D	1
Caelo	Paraffin, white	13011407	1
Caelo	Paraffin, white	13185506	4
Caelo	Paraffin, white	12321905	4
Caelo	Paraffin, white	22011401	1
Caelo	Paraffin, white	13163702	4
Caelo	Paraffin, white	8021401	1
Caelo	Paraffin, white	23051101	1
Caelo	Paraffin, white	2061201	1
Caelo	Paraffin, white	25021403	1
Caelo	Paraffin, white	27021402	1
Caelo	Paraffin, white	4031406	1
Caelo	Paraffin, white	11031403	1
Caelo	Paraffin, white	15031402	1
Caelo	Paraffin, white	13268410	9
Caelo	Paraffin, white	14025201	10
Caelo	Paraffin, white	30012014F	1
Caelo	Paraffin, white	13341606	6

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	13338714	7
Caelo	Paraffin, white	250414002	1
Caelo	Paraffin, white	13268411	6
Caelo	Paraffin, white	10051402	1
Caelo	Paraffin, white	23051404	1
Caelo	Paraffin, white	5061412	1
Caelo	Paraffin, white	16061403	1
Caelo	Paraffin, white	27061401	1
Caelo	Paraffin, white	13333101	1
Caelo	Paraffin, white	19071401	1
Caelo	Paraffin, white	1338714	1
Caelo	Paraffin, white	1081409	1
Caelo	Paraffin, white	12081404	1
Caelo	Paraffin, white	15081406	1
Caelo	Paraffin, white	26081409	1
Caelo	Paraffin, white	13268422	4
Caelo	Paraffin, white	13268423	3
Caelo	Paraffin, white	11091402	1
Caelo	Paraffin, white	13380703	13
Caelo	Paraffin, white	14087403	2
Caelo	Paraffin, white	26091406	1
Caelo	Paraffin, white	14124703	8
Caelo	Paraffin, white	13380704	5
Caelo	Paraffin, white	133380703	1
Caelo	Paraffin, white	22111401	1
Caelo	Paraffin, white	14201001	2
Caelo	Paraffin, white	25112014A	1
Caelo	Paraffin, white	14124704	12
Caelo	Paraffin, white	14087409	3
Caelo	Paraffin, white	14124702	1
Caelo	Paraffin, white	5121403	1
Caelo	Paraffin, white	13380702	4
Caelo	Paraffin, white	15121407	1
Caelo	Paraffin, white	14087410	6
Caelo	Paraffin, white	30121427	1
Caelo	Paraffin, white	22011510	1
Caelo	Paraffin, white	14189006	6
Caelo	Paraffin, white	11021510	1
Caelo	Paraffin, white	13380708	11
Caelo	Paraffin, white	14189002	6
Caelo	Paraffin, white	13380719	7
Caelo	Paraffin, white	50115/1	1
Caelo	Paraffin, white	14189007	6
Caelo	Paraffin, white	7031502	1
Caelo	Paraffin, white	14324402	2
Caelo	Paraffin, white	13380709	7
Caelo	Paraffin, white	20031518	1
Caelo	Paraffin, white	15060003	13
Caelo	Paraffin, white	18041504	1
Caelo	Paraffin, white	14124706	10
Caelo	Paraffin, white	28041508	1
Caelo	Paraffin, white	14248403	6
Caelo	Paraffin, white	290441	2
Caelo	Paraffin, white	14301804	22
Caelo	Paraffin, white	13380721	16
Caelo	Paraffin, white	14124705	7
Caelo	Paraffin, white	21051509	1
Caelo	Paraffin, white	14189008	2
Caelo	Paraffin, white	4051502	1
Caelo	Paraffin, white	20061503	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	15060007	3
Caelo	Paraffin, white	15060014	12
Caelo	Paraffin, white	20071505	1
Caelo	Paraffin, white	15060008	3
Caelo	Paraffin, white	2948852	1
Caelo	Paraffin, white	15204302	11
Caelo	Paraffin, white	12081504	1
Caelo	Paraffin, white	15060012	4
Caelo	Paraffin, white	15204303	23
Caelo	Paraffin, white	4091517	1
Caelo	Paraffin, white	14092015B	1
Caelo	Paraffin, white	15050003	15
Caelo	Paraffin, white	15219903	11
Caelo	Paraffin, white	15204304	6
Caelo	Paraffin, white	15330502	2
Caelo	Paraffin, white	15162508	3
Caelo	Paraffin, white	15050004	11
Caelo	Paraffin, white	15278804	23
Caelo	Paraffin, white	15339806	17
Caelo	Paraffin, white	15336810	4
Caelo	Paraffin, white	15278808	6
Caelo	Paraffin, white	15349701	7
Caelo	Paraffin, white	15330401	9
Caelo	Paraffin, white	15278801	22
Caelo	Paraffin, white	1509019-01	1
Caelo	Paraffin, white	15339807	16
Caelo	Paraffin, white	15278809	12
Caelo	Paraffin, white	15336809	7
Caelo	Paraffin, white	15349705	1
Caelo	Paraffin, white	15339801	1
Caelo	Paraffin, white	15349709	3
Caelo	Paraffin, white	15339808	14
Caelo	Paraffin, white	15339805	3
Caelo	Paraffin, white	15349708	10
Caelo	Paraffin, white	323915339805	1
Caelo	Paraffin, white	15355806	1
Caelo	Paraffin, white	16029211	10
Caelo	Paraffin, white	16138003	20
Caelo	Paraffin, white	15441502	24
Caelo	Paraffin, white	16029212	2
Caelo	Paraffin, white	16029208	1
Caelo	Paraffin, white	16029213	3
Caelo	Paraffin, white	16029221	6
Caelo	Paraffin, white	16029222	6
Caelo	Paraffin, white	1544150	1
Caelo	Paraffin, white	16227403	8
Caelo	Paraffin, white	161338003	1
Caelo	Paraffin, white	16227401	2
Caelo	Paraffin, white	16181902	17
Caelo	Paraffin, white	16029220	7
Caelo	Paraffin, white	16181901	6
Caelo	Paraffin, white	1544159	1
Caelo	Paraffin, white	16224704	1
Caelo	Paraffin, white	15441504	34
Caelo	Paraffin, white	16181904	16
Caelo	Paraffin, white	16181903	12
Caelo	Paraffin, white	170203VA/16181901	1
Caelo	Paraffin, white	15441511	40
Caelo	Paraffin, white	11031707	1
Caelo	Paraffin, white	21031701	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	16227411	8
Caelo	Paraffin, white	8041703	1
Caelo	Paraffin, white	16161901	1
Caelo	Paraffin, white	26041702	1
Caelo	Paraffin, white	11051702	1
Caelo	Paraffin, white	15441510	17
Caelo	Paraffin, white	6326702	1
Caelo	Paraffin, white	10061715	1
Caelo	Paraffin, white	16272009	5
Caelo	Paraffin, white	3071709	1
Caelo	Paraffin, white	16272017	16
Caelo	Paraffin, white	16241105	4
Caelo	Paraffin, white	28071709	1
Caelo	Paraffin, white	26081705	1
Caelo	Paraffin, white	17038202	12
Caelo	Paraffin, white	3091702	1
Caelo	Paraffin, white	30091701	1
Caelo	Paraffin, white	17106001	14
Caelo	Paraffin, white	23101702	1
Caelo	Paraffin, white	11111704	1
Caelo	Paraffin, white	170382063	1
Caelo	Paraffin, white	170382045420	1
Caelo	Paraffin, white	17038206	1
Caelo	Paraffin, white	2121704	1
Caelo	Paraffin, white	7106001	1
Caelo	Paraffin, white	23121701	1
Caelo	Paraffin, white	17000584	2
Caelo	Paraffin, white	17204204	2
Caelo	Paraffin, white	26011805	1
Caelo	Paraffin, white	17106008	2
Caelo	Paraffin, white	10021803	1
Caelo	Paraffin, white	311259	2
Caelo	Paraffin, white	17347901	8
Caelo	Paraffin, white	15359105	7
Caelo	Paraffin, white	17204203	2
Caelo	Paraffin, white	17106005	26
Caelo	Paraffin, white	17350004	8
Caelo	Paraffin, white	18000101	1
Caelo	Paraffin, white	3051811	1
Caelo	Paraffin, white	17350003	1
Caelo	Paraffin, white	25051801	1
Caelo	Paraffin, white	1720401	1
Caelo	Paraffin, white	6061801	1
Caelo	Paraffin, white	7061802	1
Caelo	Paraffin, white	17052012	23
Caelo	Paraffin, white	29061803	1
Caelo	Paraffin, white	17350013	7
Caelo	Paraffin, white	17347802	15
Caelo	Paraffin, white	1710650	1
Caelo	Paraffin, white	30081813	1
Caelo	Paraffin, white	17350007	1
Caelo	Paraffin, white	22091803	1
Caelo	Paraffin, white	19101810	1
Caelo	Paraffin, white	17350019	1
Caelo	Paraffin, white	18006401	14
Caelo	Paraffin, white	17111801	1
Caelo	Paraffin, white	5121803	1
Caelo	Paraffin, white	19121801	1
Caelo	Paraffin, white	18006404	5
Caelo	Paraffin, white	18003484	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	2021901	1
Caelo	Paraffin, white	18174305	2
Caelo	Paraffin, white	18174311	3
Caelo	Paraffin, white	18174314	3
Caelo	Paraffin, white	18174303	4
Caelo	Paraffin, white	17342016	5
Caelo	Paraffin, white	18314802	3
Caelo	Paraffin, white	13005712	13
Caelo	Paraffin, white	1203413	1
Caelo	Paraffin, white	18005023	5
Caelo	Paraffin, white	11040603	1
Caelo	Paraffin, white	11108710	1
Caelo	Paraffin, white	11315413	2
Caelo	Paraffin, white	15060006	4
Caelo	Paraffin, white	10220214	1
Caelo	Paraffin, white	15441506	11
Caelo	Paraffin, white	14124707	29
Caelo	Paraffin, white	16138004	23
Caelo	Paraffin, white	11265701	1
Caelo	Paraffin, white	13130907	6
Caelo	Paraffin, white	283949	1
Caelo	Paraffin, white	13084905	12
Caelo	Paraffin, white	10155402	1
Caelo	Paraffin, white	13185507	6
Caelo	Paraffin, white	1111111	1
Caelo	Paraffin, white	16272990	1
Caelo	Paraffin, white	51210195	1
Caelo	Paraffin, white	15162504	8
Caelo	Paraffin, white	12321902	2
Caelo	Paraffin, white	276127	1
Caelo	Paraffin, white	13341604	1
Caelo	Paraffin, white	17038215	3
Caelo	Paraffin, white	295300	1
Caelo	Paraffin, white	13174901	1
Caelo	Paraffin, white	13380720	25
Caelo	Paraffin, white	14347302	10
Caelo	Paraffin, white	297283	1
Caelo	Paraffin, white	12306302	6
Caelo	Paraffin, white	12071805	5
Caelo	Paraffin, white	1318504	1
Caelo	Paraffin, white	13185512	9
Caelo	Paraffin, white	12115105	1
Caelo	Paraffin, white	17L22-T05-056478	1
Caelo	Paraffin, white	jjjjjj	1
Caelo	Paraffin, white	14324601	5
Caelo	Paraffin, white	1672017	1
Caelo	Paraffin, white	12032405	1
Caelo	Paraffin, white	12115102	15
Caelo	Paraffin, white	12115107	9
Caelo	Paraffin, white	13163602	2
Caelo	Paraffin, white	17106002	18
Caelo	Paraffin, white	12003603	1
Caelo	Paraffin, white	12115106	7
Caelo	Paraffin, white	14025101	4
Caelo	Paraffin, white	17347802-V20181115Ma	1
Caelo	Paraffin, white	16326702-20170704Ma3	1
Caelo	Paraffin, white	13109010	1
Caelo	Paraffin, white	12182504	1
Caelo	Paraffin, white	154(18174302)	1
Caelo	Paraffin, white	156(18174312)	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	1612007-01	2
Caelo	Paraffin, white	13005711	12
Caelo	Paraffin, white	292220	1
Caelo	Paraffin, white	16272002	7
Caelo	Paraffin, white	153(17204201)	1
Caelo	Paraffin, white	15162507	9
Caelo	Paraffin, white	11108711	1
Caelo	Paraffin, white	13341612	7
Caelo	Paraffin, white	15060004	6
Caelo	Paraffin, white	15162506	1
Caelo	Paraffin, white	1712008-01	1
Caelo	Paraffin, white	15204301	11
Caelo	Paraffin, white	18005015	10
Caelo	Paraffin, white	18005033	4
Caelo	Paraffin, white	PV43	1
Caelo	Paraffin, white	301424	1
Caelo	Paraffin, white	16082701	2
Caelo	Paraffin, white	15162503	7
Caelo	Paraffin, white	15162519	1
Caelo	Paraffin, white	16029219	4
Caelo	Paraffin, white	12209203	3
Caelo	Paraffin, white	12337706	13
Caelo	Paraffin, white	1215106	1
Caelo	Paraffin, white	286095	1
Caelo	Paraffin, white	15327602	1
Caelo	Paraffin, white	17204207	5
Caelo	Paraffin, white	16181907	5
Caelo	Paraffin, white	13341605	7
Caelo	Paraffin, white	16326702	36
Caelo	Paraffin, white	14087408	2
Caelo	Paraffin, white	12209204	17
Caelo	Paraffin, white	10271001	1
Caelo	Paraffin, white	15349702	10
Caelo	Paraffin, white	16326707	4
Caelo	Paraffin, white	15349706	3
Caelo	Paraffin, white	16272001	1
Caelo	Paraffin, white	13268420	4
Caelo	Paraffin, white	6861393	1
Caelo	Paraffin, white	16271810	27
Caelo	Paraffin, white	17350014	7
Caelo	Paraffin, white	12337708	16
Caelo	Paraffin, white	13365103	2
Caelo	Paraffin, white	12031202	1
Caelo	Paraffin, white	1310909	1
Caelo	Paraffin, white	13084903	1
Caelo	Paraffin, white	13341602	4
Caelo	Paraffin, white	13341608	8
Caelo	Paraffin, white	282700	1
Caelo	Paraffin, white	13365104	4
Caelo	Paraffin, white	14324301	16
Caelo	Paraffin, white	15050005	9
Caelo	Paraffin, white	15060013	5
Caelo	Paraffin, white	15330601	15
Caelo	Paraffin, white	16227412	12
Caelo	Paraffin, white	17038212	12
Caelo	Paraffin, white	17038219	14
Caelo	Paraffin, white	17204201	27
Caelo	Paraffin, white	17350017	4
Caelo	Paraffin, white	18174304	7
Caelo	Paraffin, white	18006406	5

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	18174312	7
Caelo	Paraffin, white	17347903	2
Caelo	Paraffin, white	18174317	1
Caelo	Paraffin, white	13185505	1
Caelo	Paraffin, white	1231010	1
Caelo	Paraffin, white	150(17038202)	1
Caelo	Paraffin, white	16271807	26
Caelo	Paraffin, white	151(17204209)	1
Caelo	Paraffin, white	152(17350004)	1
Caelo	Paraffin, white	155(18174304)	1
Caelo	Paraffin, white	157(18314803)	1
Caelo	Paraffin, white	12337701	5
Caelo	Paraffin, white	17347902	3
Caelo	Paraffin, white	13084902	14
Caelo	Paraffin, white	1210006-01	1
Caelo	Paraffin, white	P159/14	1
Caelo	Paraffin, white	12337709	15
Caelo	Paraffin, white	13268409	13
Caelo	Paraffin, white	14124708	10
Caelo	Paraffin, white	14189004	4
Caelo	Paraffin, white	14355806	10
Caelo	Paraffin, white	133807212	1
Caelo	Paraffin, white	16029210	3
Caelo	Paraffin, white	15441509	25
Caelo	Paraffin, white	15441514	42
Caelo	Paraffin, white	16181804	1
Caelo	Paraffin, white	171114VA/16241105	1
Caelo	Paraffin, white	17038201	4
Caelo	Paraffin, white	17038213	3
Caelo	Paraffin, white	308197	2
Fagron	Paraffin, white	18005001	1
Caelo	Paraffin, white	13268408	21
Caelo	Paraffin, white	15050002	37
Caelo	Paraffin, white	12081502	1
Caelo	Paraffin, white	14189019	1
Caelo	Paraffin, white	14301805	11
Caelo	Paraffin, white	16872018	1
Caelo	Paraffin, white	17038204	6
Caelo	Paraffin, white	17052003	19
Caelo	Paraffin, white	17560004	1
Caelo	Paraffin, white	17347801	11
Caelo	Paraffin, white	17052010	40
Caelo	Paraffin, white	17350005	4
Caelo	Paraffin, white	18005001	2
Caelo	Paraffin, white	18005016	8
Caelo	Paraffin, white	14201003	1
Caelo	Paraffin, white	13005701	8
Caelo	Paraffin, white	13005713	4
Caelo	Paraffin, white	12K01-T52-002659	1
Caelo	Paraffin, white	13185513	1
Caelo	Paraffin, white	282964	1
Caelo	Paraffin, white	14087402	4
Caelo	Paraffin, white	14087404	11
Caelo	Paraffin, white	14087406	2
Caelo	Paraffin, white	14087405	3
Caelo	Paraffin, white	14189003	2
Caelo	Paraffin, white	14189018	7
Caelo	Paraffin, white	15162501	2
Caelo	Paraffin, white	15278805	15
Caelo	Paraffin, white	299469	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	16227406	13
Caelo	Paraffin, white	303786	1
Caelo	Paraffin, white	15441515	4
Caelo	Paraffin, white	17052001	34
Caelo	Paraffin, white	17204209	10
Caelo	Paraffin, white	14J03-Z03-020829	1
Caelo	Paraffin, white	17106004	5
Caelo	Paraffin, white	17350016	7
Caelo	Paraffin, white	17350006	1
Caelo	Paraffin, white	18174302	4
Caelo	Paraffin, white	13338702	6
Caelo	Paraffin, white	1704209-1703824	1
Caelo	Paraffin, white	12115101	10
Caelo	Paraffin, white	12032412	2
Caelo	Paraffin, white	13005710	6
Caelo	Paraffin, white	13185502	8
Caelo	Paraffin, white	13084907	1
Caelo	Paraffin, white	15060005	9
Caelo	Paraffin, white	1506005	1
Caelo	Paraffin, white	15060011	2
Caelo	Paraffin, white	15162505	11
Caelo	Paraffin, white	15336808	3
Caelo	Paraffin, white	15162512	5
Caelo	Paraffin, white	108/AKD12	1
Caelo	Paraffin, white	16227402	7
Caelo	Paraffin, white	16227404	18
Caelo	Paraffin, white	1101559	1
Caelo	Paraffin, white	16272008	2
Caelo	Paraffin, white	17038203	10
Caelo	Paraffin, white	17350002	2
Caelo	Paraffin, white	18002117	3
Caelo	Paraffin, white	1305031-01	1
Caelo	Paraffin, white	307661	1
Caelo	Paraffin, white	13338704	3
Caelo	Paraffin, white	1310911	1
Caelo	Paraffin, white	213E-02549	1
Caelo	Paraffin, white	15441505	31
Caelo	Paraffin, white	18174301	7
Caerlo	Paraffin, white	15394701	1
Caesar & Loretz	Paraffin, white	15339808	1
Caesar & Loretz GmbH	Paraffin, white	17038204	1
Caesar & Loretz GmbH	Paraffin, white	17350004	1
Caesar & Loretz GmbH	Paraffin, white	17204201	1
Caesar & Loretz GmbH	Paraffin, white	18174301	1
Caesar & Loretz GmbH	Paraffin, white	18174312	1
Caesar & Loretz GmbH	Paraffin, white	18174302	1
Caesar & Loretz GmbH	Paraffin, white	17204207	2
Caesar & Loretz GmbH	Paraffin, white	18005015	2
Caesar & Loretz GmbH	Paraffin, white	18174303	1
Caesar & Loretz GmbH	Paraffin, white	18005016	2
Caesar & Loretz GmbH	Paraffin, white	18314810	1
Caesar & Loretz GmbH Hi...	Paraffin, white	13095701	1
Caesar & Loretz GmbH Hi...	Paraffin, white	16227403	1
Caesar & Loretz GmbH, 4...	Paraffin, white	11301301	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12071805	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12209204	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12209210	1
Caesar & Loretz GmbH, 4...	Paraffin, white	13130911	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12337706	1
Caesar & Loretz GmbH/ M...	Paraffin, white	18005023	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH/An...	Paraffin, white	18005015	1
Caesar & Loretz GmbH/Ph...	Paraffin, white	18174312	1
Caesar & Loretz/ Noweda	Paraffin, white	1710005	1
Caesar & Loretz/Noweda	Paraffin, white	15339806	1
Caesar & Loretz/Noweda	Paraffin, white	16326702	1
Caesar&Loretz GmbH,27.0...	Paraffin, white	16227405	1
Caesar&Loretz GmbH/Anzag	Paraffin, white	12337708	1
Caesar&loretz,Anzag	Paraffin, white	12003601	2
Caesar/Lorenz	Paraffin, white	12337704	1
Caesar/Lorenz	Paraffin, white	12321906	1
Caesar/Noweda	Paraffin, white	13084905	1
canea, gehe	Paraffin, white	13095701	2
Caolo/Anzag	Paraffin, white	13185505	1
Cealo	Paraffin, white	12209210	1
Cealo	Paraffin, white	14124707	1
Cealo	Paraffin, white	17204201	1
Cealo/AHD	Paraffin, white	16272004	1
Celo	Paraffin, white	16181902	2
chaelo/gehe	Paraffin, white	17106002	1
Doroderm GmbH/ Noweda	Paraffin, white	12115106	1
E Plus	Paraffin, white	309122	2
Ebert & Jacobi 19.07...	Paraffin, white	1509019-01	1
Eplus	Paraffin, white	307661	2
Euro OTC	Paraffin, white	1605019-01	10
EuRho/Noweda	Paraffin, white	1705015-01	1
Euro OTC	Paraffin, white	1401018-01	2
Euro OTC	Paraffin, white	140900901	1
Euro OTC	Paraffin, white	1109002-01	2
Euro OTC	Paraffin, white	12337707	1
Euro OTC	Paraffin, white	1108046-01	2
Euro OTC	Paraffin, white	F603290	1
Euro OTC	Paraffin, white	288714	1
Euro OTC	Paraffin, white	150901901	1
Euro OTC	Paraffin, white	1602009-01	4
Euro OTC	Paraffin, white	160519-01	1
Euro OTC	Paraffin, white	15441505	1
Euro OTC	Paraffin, white	1608041-01	4
Euro OTC	Paraffin, white	16272003	1
Euro OTC	Paraffin, white	17106001	1
Euro OTC	Paraffin, white	1709016-01	2
Euro OTC	Paraffin, white	1811025-01	1
Euro OTC	Paraffin, white	1210006-01	8
Euro OTC	Paraffin, white	1205048-01	3
Euro OTC	Paraffin, white	F602635	1
Euro OTC	Paraffin, white	1305031-01	13
Euro OTC	Paraffin, white	1230341	1
Euro OTC	Paraffin, white	1505017-01	6
Euro OTC	Paraffin, white	15339806	1
Euro OTC	Paraffin, white	17347802	1
Euro OTC	Paraffin, white	1210009-01	3
Euro OTC	Paraffin, white	130503101	1
Euro OTC	Paraffin, white	16138004	1
Euro OTC	Paraffin, white	1712008-01	4
Euro OTC	Paraffin, white	297283	1
Euro OTC	Paraffin, white	17347903	1
Euro OTC	Paraffin, white	1804011-01	2
Euro OTC	Paraffin, white	1808001-01	4
Euro OTC	Paraffin, white	302037	1
Euro OTC	Paraffin, white	1705015-01	3
Euro OTC	Paraffin, white	307661	1

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Supplier	Substance	Batch	Spectra
Euro/Phönix	Paraffin, white	17347901	3
Euroo/Gehe	Paraffin, white	1602009-01	1
Euro OTC	Paraffin, white	170901601	1
Euro OTC	Paraffin, white	17052012	1
Fagron	Paraffin, white	11K14-T01	7
Fagron	Paraffin, white	10H12-T01	1
Fagron	Paraffin, white	12D16-To1	1
Fagron	Paraffin, white	12D16-T01	2
Fagron	Paraffin, white	12H10-T05	2
Fagron	Paraffin, white	12/17-T01	2
Fagron	Paraffin, white	12K01-T52-000717	1
Fagron	Paraffin, white	11G11-T02	2
Fagron	Paraffin, white	12D19-T54-000715	1
Fagron	Paraffin, white	12115107	1
Fagron	Paraffin, white	probe	1
Fagron	Paraffin, white	13I19-T05-006192	2
Fagron	Paraffin, white	13I19-T05-008452	2
Fagron	Paraffin, white	14C14T01	3
Fagron	Paraffin, white	13D02-T02-004621	1
Fagron	Paraffin, white	14201001	1
Fagron	Paraffin, white	13h19-T05-008453	1
Fagron	Paraffin, white	14E30-T07-012095	1
Fagron	Paraffin, white	790619-013771	2
Fagron	Paraffin, white	13119-T05-008452	1
Fagron	Paraffin, white	14E30-T07-012094	1
Fagron	Paraffin, white	14F30-T07-014285	1
Fagron	Paraffin, white	291318	2
Fagron	Paraffin, white	14e30-t07-012095	1
Fagron	Paraffin, white	14j03-t003-020827	1
Fagron	Paraffin, white	14j03-to3-020827	1
Fagron	Paraffin, white	14j03-t03020831	1
Fagron	Paraffin, white	14J03-T03	1
Fagron	Paraffin, white	14J03-020827	1
Fagron	Paraffin, white	14J03-T03-020827	6
Fagron	Paraffin, white	14L11-T03-027930	6
Fagron	Paraffin, white	14j03-t03-020827	1
Fagron	Paraffin, white	162274112	4
Fagron	Paraffin, white	16272004	3
Fagron	Paraffin, white	17052001	1
Fagron	Paraffin, white	13338703	1
Fagron	Paraffin, white	14E30-T07-014285	9
Fagron	Paraffin, white	12J31-T52-000963	1
Fagron	Paraffin, white	290441	1
Fagron	Paraffin, white	12/17-To1	1
Fagron	Paraffin, white	12K01-T52-002659	2
Fagron	Paraffin, white	1166979	1
Fagron	Paraffin, white	13I19-T05-006193	1
Fagron	Paraffin, white	14E30-T07	3
Fagron	Paraffin, white	14I03-T03-020831	1
Fagron	Paraffin, white	16L27-T01-042282	1
Fagron	Paraffin, white	17L22-T05-056230	1
Fagron	Paraffin, white	12I17-T01	2
Fagron	Paraffin, white	306019	2
Fagron	Paraffin, white	18003484	1
Fagron	Paraffin, white	13/19-T05-006193	1
Fagron	Paraffin, white	14E30-T07-012096	4
Fagron	Paraffin, white	14189012	2
Fagron	Paraffin, white	14J03T-03-020831	1
Fagron	Paraffin, white	16L27-T01-042281	3
Fagron	Paraffin, white	13D02T02002660	1

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Supplier	Substance	Batch	Spectra
Fagron	Paraffin, white	14J03-T03-020831	2
Fagron	Paraffin, white	14J03T03020831	1
Fagron	Paraffin, white	27930	1
Fagron	Paraffin, white	13/19-T05-006192	1
Fagron	Paraffin, white	17L22-T05-056478	1
Fagron	Paraffin, white	13D02-T02-002660	1
Fagron	Paraffin, white	14189019	1
Fagron	Paraffin, white	14L11-T03-027931	1
Fiebig	Paraffin, white	1618904	1
Fiebig	Paraffin, white	16181903	1
Fiebig	Paraffin, white	16181904	1
Fiebig	Paraffin, white	16326702	4
Fiebig	Paraffin, white	17106002	1
Fiebig	Paraffin, white	17347901	1
Fiebig	Paraffin, white	17347802	1
Fiebig	Paraffin, white	18006401	3
Fiebig	Paraffin, white	18006406	2
Fiebig	Paraffin, white	18005016	1
Fiebig	Paraffin, white	17350018	1
Fiebig 22.02.13 ek:3,63EUR	Paraffin, white	12115107	1
Fagron	Paraffin, white	16181902	2
Fragon/Phoenix	Paraffin, white	14J03-T03-020831	1
Gatt-Koller	Paraffin, white	1802870	1
Gatt-Koller	Paraffin, white	1803869	1
Gatt-Koller	Paraffin, white	1900832	1
gehe	Paraffin, white	15339806	1
Gehe	Paraffin, white	268099	1
Gehe	Paraffin, white	11315403	1
Gehe	Paraffin, white	12032404	1
Gehe	Paraffin, white	1205048-01	1
Gehe	Paraffin, white	12311004	1
Gehe	Paraffin, white	277059	2
Gehe	Paraffin, white	277060	1
Gehe	Paraffin, white	279969	1
Gehe	Paraffin, white	279161	1
Gehe	Paraffin, white	1210006-01	1
Gehe	Paraffin, white	282966	1
Gehe	Paraffin, white	286095	2
Gehe	Paraffin, white	286096	1
Gehe	Paraffin, white	288714	2
Gehe	Paraffin, white	291318	1
Gehe	Paraffin, white	15060012	1
Gehe	Paraffin, white	297282	1
Gehe	Paraffin, white	293553	1
Gehe	Paraffin, white	306019	1
Gehe	Paraffin, white	60081104	1
Gehe	Paraffin, white	16241105	1
GEHE	Paraffin, white	270163	1
GEHE	Paraffin, white	270834	1
GEHE	Paraffin, white	12115106	1
GEHE	Paraffin, white	300119	1
GEHE	Paraffin, white	17350004	1
GEHE	Paraffin, white	18174307	1
GEHE	Paraffin, white	18314811	1
Gehe 20.06.15/euro	Paraffin, white	13380709	1
gehe 26.11.13	Paraffin, white	5489700	1
Gehe am 03.02.2014	Paraffin, white	5489700	1
Gehe am 27.2.14	Paraffin, white	12337706	1
Bombastus	Paraffin, white	270489	3
Caelo	Paraffin, white	15349707	4

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	16227405	9
Caelo	Paraffin, white	16029220/1170117	1
Caelo	Paraffin, white	16272010	10
Caelo	Paraffin, white	1730005	1
Caelo	Paraffin, white	18314803	1
Caelo	Paraffin, white	13338707	9
Euro OTC	Paraffin, white	1210010-01	2
Euro OTC	Paraffin, white	929392	1
Fagron	Paraffin, white	1401453	1
Caelo	Paraffin, white	14189012	2
Gutenberg-Apotheke	Paraffin, white	13185502	1
Hansen&Rosenthal/Phönix	Paraffin, white	1108046-01	1
Hedinger	Paraffin, white	15060004	1
Hedinger	Paraffin, white	17106004	1
Hedinger/Noweda	Paraffin, white	4-219072	1
Henry Lamotte	Paraffin, white	1509019-01	1
Henry Lamotte	Paraffin, white	8002875007	1
Henry Lamotte GMBH/AHD	Paraffin, white	5691100	2
Henry Lamotte Oils	Paraffin, white	16181904	1
henry lamotte oils gmbh	Paraffin, white	5538300	1
Henry Lamotte Oils GmbH	Paraffin, white	5098800	2
Henry Lamotte Oils GmbH	Paraffin, white	5322600	1
Henry Lamotte Oils GmbH	Paraffin, white	5489700	3
Henry Lamotte Oils GmbH	Paraffin, white	5538300	2
Henry Lamotte Oils GmbH	Paraffin, white	5691100	1
Henry Lamotte Oils GmbH	Paraffin, white	6000083007	2
Henry Lamotte Oils GmbH...	Paraffin, white	1705015-01	1
Henry Lamotte/ AHD	Paraffin, white	6002062001	1
Henry Lamotte/N/14.12.12	Paraffin, white	5322600	1
HenryLamotte	Paraffin, white	6002062001	3
Herbasinica	Paraffin, white	13338712	1
HerryLamotte/AHD	Paraffin, white	5098800	1
Ichthyol	Paraffin, white	13A010	2
Ichthyol/Phönix	Paraffin, white	16138003	1
Ichthyol-Gesellschaft	Paraffin, white	160829VA	1
Kehr	Paraffin, white	17038202	1
Caelo	Paraffin, white	16272003	4
Kögl	Paraffin, white	305109163916	1
Kögl	Paraffin, white	396911160317	2
Kögl	Paraffin, white	400111165016	1
Kögl	Paraffin, white	16402171117	1
Kögl	Paraffin, white	16402170817	1
Kögl	Paraffin, white	63403171917	1
Kögl	Paraffin, white	166205172017	1
Kögl	Paraffin, white	218806172717	1
Kögl	Paraffin, white	1700060	1
Kögl	Paraffin, white	1700760	1
Kögl	Paraffin, white	1700443	1
Kögl	Paraffin, white	1701037	1
Kögl	Paraffin, white	1701633	1
Kögl	Paraffin, white	1800323	1
Kögl	Paraffin, white	1802638	2
Caelo	Paraffin, white	16272004	5
Bombastus	Paraffin, white	300119	3
Bombastus	Paraffin, white	309563	2
L12	Paraffin, white	16227406	1
L12	Paraffin, white	16272003	3
Lamotte	Paraffin, white	5322600	1
Lamotte	Paraffin, white	5215200	1
Lamotte	Paraffin, white	6000083007	1

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Supplier	Substance	Batch	Spectra
Lamotte	Paraffin, white	6002062001	2
Lamotte	Paraffin, white	8002875007	1
Lamotte 001	Paraffin, white	5691100	1
Lamotte/ Anzag	Paraffin, white	5538300	1
Midas	Paraffin, white	17038204	1
Midas	Paraffin, white	17204209	2
Midas	Paraffin, white	17350004	1
Midas	Paraffin, white	17204201	1
Midas	Paraffin, white	18003484	1
Midas	Paraffin, white	18174301	1
Midas	Paraffin, white	18174304	1
Noweda	Paraffin, white	255510	1
Noweda	Paraffin, white	263762	1
Noweda	Paraffin, white	270163	3
Noweda	Paraffin, white	12209203	1
Noweda	Paraffin, white	271261	1
Noweda	Paraffin, white	12337707	1
Noweda	Paraffin, white	13337706	1
Noweda	Paraffin, white	13268421	1
Noweda	Paraffin, white	13380721	1
Noweda	Paraffin, white	15339806	1
Noweda	Paraffin, white	16138004	1
Noweda	Paraffin, white	307661	1
Noweda	Paraffin, white	16272018	1
Noweda	Paraffin, white	17038213	1
Noweda/ Bombatus	Paraffin, white	18003484	1
Bombastus	Paraffin, white	12/2019	1
Bombastus	Paraffin, white	287149	5
Caelo	Paraffin, white	14200901	4
Caelo	Paraffin, white	16138002	1
Fagron	Paraffin, white	12K01-T52	1
Fagron	Paraffin, white	13/19-T05-008452	1
Pharmachem GmbH	Paraffin, white	1038202	1
Phoenix	Paraffin, white	270491	1
Phoenix	Paraffin, white	13084906	1
Phoenix	Paraffin, white	13268423	1
Phoenix	Paraffin, white	15349706	1
Phoenix	Paraffin, white	16029210	1
Phoenix	Paraffin, white	16272010	1
Phoenix	Paraffin, white	16326706	1
Phoenix	Paraffin, white	17106001	1
Phoenix 18.03.2014	Paraffin, white	12337709	1
Phoenix am 10.03.2014	Paraffin, white	13338703	1
Phoenix am 22.04.2014	Paraffin, white	270981	1
Caelo	Paraffin, white	17347901/2110418	1
Caelo	Paraffin, white	280702	1
Caelo	Paraffin, white	13095701	5
Caelo	Paraffin, white	13D02-T02-002660	1
Phonix	Paraffin, white	13341604	1
phönix	Paraffin, white	16138003	1
Phönix	Paraffin, white	12032413	1
Phönix	Paraffin, white	12115107	1
Phönix	Paraffin, white	12209210	1
Phönix	Paraffin, white	5489700	1
Phönix	Paraffin, white	277987	1
Phönix	Paraffin, white	277986	1
Phönix	Paraffin, white	280451	1
Phönix	Paraffin, white	281291	1
Phönix	Paraffin, white	13268410	1
PHÖNIX	Paraffin, white	16227402	1

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Supplier	Substance	Batch	Spectra
PHÖNIX	Paraffin, white	17204204	1
PHÖNIX	Paraffin, white	17350007	1
PHÖNIX	Paraffin, white	1811025-01	1
Phönix 08.04.2013	Paraffin, white	12/17-T01	1
Phönix 16.10.12	Paraffin, white	12D16-T01	1
Phönix Gotha	Paraffin, white	270633	1
Phönix Gotha	Paraffin, white	12032413	1
Phönix Gotha	Paraffin, white	270634	1
Phönix Gotha	Paraffin, white	14087402	1
Phönix Gotha	Paraffin, white	289344	1
Phönix Gotha	Paraffin, white	15060012	1
Caelo	Paraffin, white	13185514	2
Caelo	Paraffin, white	306020	2
Phönix/Caesar & Loretz ...	Paraffin, white	18174305	1
Fagron	Paraffin, white	12B20-T02	1
Sana 21.03.16 EK 4,96	Paraffin, white	15336810	1
Sanacorp	Paraffin, white	12190401	1
Sanacorp	Paraffin, white	12115107	1
Sanacorp	Paraffin, white	1215107	1
Sanacorp	Paraffin, white	12374502	1
Sanacorp	Paraffin, white	12337704	2
Sanacorp	Paraffin, white	12311010	1
Sanacorp	Paraffin, white	13130909	2
Sanacorp	Paraffin, white	12337708	1
Sanacorp	Paraffin, white	12031506	1
Sanacorp	Paraffin, white	13084906	2
Sanacorp	Paraffin, white	13338712	1
Sanacorp	Paraffin, white	102/AKD1	1
Sanacorp	Paraffin, white	16AKD2	1
Sanacorp	Paraffin, white	13268420	1
Sanacorp	Paraffin, white	14087410	1
Sanacorp	Paraffin, white	13380709	1
Sanacorp	Paraffin, white	13380707	1
Sanacorp	Paraffin, white	106/AKD4	1
Sanacorp	Paraffin, white	107/AKD6	1
Sanacorp	Paraffin, white	15204301	1
Sanacorp	Paraffin, white	15441504	1
Sanacorp	Paraffin, white	16227412	1
Sanacorp	Paraffin, white	17106002	1
Sanacorp	Paraffin, white	17204201	2
Sanacorp	Paraffin, white	17204209	1
Sanacorp	Paraffin, white	309563	1
Sanacorp	Paraffin, white	16181907	1
Sanacorp	Paraffin, white	18174301	1
Sanacorp E.K:5,64 -100...	Paraffin, white	309564	1
Caelo	Paraffin, white	13338713	12
Caelo	Paraffin, white	13380707	11
Sanacorp 05.07.14 EK: 6...	Paraffin, white	13365104	2
Sanacorp 37.03.2017 ek:...	Paraffin, white	16272002	1
Sanacorp, 21.07.2016	Paraffin, white	1605019-01	2
sanacorp, 6,08EUR, 29.08....	Paraffin, white	16138003	1
Sanacorp,04.04.17, 6,08EUR	Paraffin, white	16181904	1
Caelo	Paraffin, white	11060209	3
Caelo	Paraffin, white	11104910	5
Caelo	Paraffin, white	11104901	1
Caelo	Paraffin, white	12071804	1
Caelo	Paraffin, white	100/AKD8	1
Caelo	Paraffin, white	AKD50	1
Caelo	Paraffin, white	13380706	3

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	18005698	1
Caelo	Paraffin, white	18314809	2
Caelo	Paraffin, white	13338712	7
Vaselinumm album	Paraffin, white	18006401	1
vdl	Paraffin, white	11265710	1
VDL;13.06.14	Paraffin, white	13268421	1
WE:Phönix 02.09.2016 E...	Paraffin, white	302037	2
wollff/AHD	Paraffin, white	5538300	1
21.03.2017	Paraffin, yellow	12321902	1
Bombastus	Paraffin, yellow	306182	13
Fagron	Paraffin, yellow	13K20-T05-009125	2
Euro OTC	Paraffin, yellow	1503036-01	19
Alliance Healthcare	Paraffin, yellow	303809	1
Bombastus	Paraffin, yellow	290713	2
Bombastus	Paraffin, yellow	28270	1
Bombastus	Paraffin, yellow	296654	11
Bombastus	Paraffin, yellow	300422	1
Bombastus	Paraffin, yellow	303809	5
Bombastus	Paraffin, yellow	15330401	1
Bombastus	Paraffin, yellow	106429	1
Bombastus	Paraffin, yellow	303871	1
Bombastus	Paraffin, yellow	180000670	1
Bombastus	Paraffin, yellow	18006803	6
Bombastus	Paraffin, yellow	19001881	1
Bombastus	Paraffin, yellow	300423	9
Bombastus	Paraffin, yellow	310192	10
Bombastus	Paraffin, yellow	18004334	8
Bombastus	Paraffin, yellow	307079	12
Bombastus	Paraffin, yellow	293629	11
Bombastus	Paraffin, yellow	16181902	1
Bombastus	Paraffin, yellow	18000669	1
Bombastus	Paraffin, yellow	304847	5
Bombastus	Paraffin, yellow	301908	11
Bombastus	Paraffin, yellow	1709015-01	1
Bombastus	Paraffin, yellow	18005701	5
Caelo	Paraffin, yellow	28071509	1
Caelo	Paraffin, yellow	17082015E	1
Caelo	Paraffin, yellow	1432501	1
Caelo	Paraffin, yellow	16032502	3
Caelo	Paraffin, yellow	15063904	4
Caelo	Paraffin, yellow	16032602	10
Caelo	Paraffin, yellow	150717VF	1
Caelo	Paraffin, yellow	16281001	19
Caelo	Paraffin, yellow	16187702	5
Caelo	Paraffin, yellow	16096905	1
Caelo	Paraffin, yellow	1041701	1
Caelo	Paraffin, yellow	8061714	1
Caelo	Paraffin, yellow	17052401	17
Caelo	Paraffin, yellow	17052402	4
Caelo	Paraffin, yellow	6111703	1
Caelo	Paraffin, yellow	1606029-01	1
Caelo	Paraffin, yellow	17223102	10
Caelo	Paraffin, yellow	26051810	1
Caelo	Paraffin, yellow	9061818	1
Caelo	Paraffin, yellow	22091804	1
Caelo	Paraffin, yellow	1804012-01	1
Caelo	Paraffin, yellow	13163606	1
Caelo	Paraffin, yellow	304847	1
Caelo	Paraffin, yellow	16096904	5
Caelo	Paraffin, yellow	17223103	2

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, yellow	15330402	4
Caelo	Paraffin, yellow	16032603	5
Caelo	Paraffin, yellow	14324501	11
Caelo	Paraffin, yellow	134 (16096910)	1
Caelo	Paraffin, yellow	1609603	1
Caelo	Paraffin, yellow	1606029	1
Caelo	Paraffin, yellow	132 (16096904)	1
Caelo	Paraffin, yellow	133 (16096910)	1
Caelo	Paraffin, yellow	19001803	4
Caelo	Paraffin, yellow	1503036-01	1
Caelo	Paraffin, yellow	1618701	1
Caelo	Paraffin, yellow	307079	1
Caelo	Paraffin, yellow	1052401	1
Caelo	Paraffin, yellow	17303501	23
Caelo	Paraffin, yellow	161587801	1
Caelo	Paraffin, yellow	16096908	2
Caelo	Paraffin, yellow	16281002	1
Caelo	Paraffin, yellow	17130402	3
Caelo	Paraffin, yellow	17162906	1
Caelo	Paraffin, yellow	18296802	4
Caelo	Paraffin, yellow	17303503	2
Caelo	Paraffin, yellow	17303401	5
Caelo	Paraffin, yellow	15219904	1
Caelo	Paraffin, yellow	16187801	6
Caelo	Paraffin, yellow	6895914	1
Caesar & Loretz GmbH	Paraffin, yellow	17303501	1
Caesar & Loretz GmbH	Paraffin, yellow	18191503	1
Caesar & Loretz GmbH Hi...	Paraffin, yellow	14324601	1
Caesar & Loretz/ Noweda	Paraffin, yellow	1606913	1
Caesar & Loretz/Noweda	Paraffin, yellow	15330401	1
Caesar&Loretz	Paraffin, yellow	16096903	1
Caesar&Loretz/Noweda	Paraffin, yellow	14324301	1
Cealo	Paraffin, yellow	17052401	1
Eplus	Paraffin, yellow	16187702	1
Euro OTC	Paraffin, yellow	1705016-01	1
Euro OTC	Paraffin, yellow	1709015-01	3
Euro OTC	Paraffin, yellow	1804012-01	3
Euro OTC	Paraffin, yellow	289344	1
Euro OTC	Paraffin, yellow	1606029-01	4
Fagron	Paraffin, yellow	14K27-T29-019303	2
Fagron	Paraffin, yellow	1705016-01	1
Fagron	Paraffin, yellow	19001803	1
Fagron	Paraffin, yellow	16E17-T01-035266	1
Gehe	Paraffin, yellow	16281001	1
Gehe	Paraffin, yellow	310191	1
GEHE	Paraffin, yellow	17223102	2
GEHE	Paraffin, yellow	17303401	2
GEHE	Paraffin, yellow	19001804	1
Euro OTC	Paraffin, yellow	180401201	1
Caelo	Paraffin, yellow	18191503	5
L12	Paraffin, yellow	17052401	5
L12	Paraffin, yellow	17303501	1
Noweda	Paraffin, yellow	15330402	1
Noweda	Paraffin, yellow	16032502	1
Caelo	Paraffin, yellow	15063902	2
Caelo	Paraffin, yellow	16096903	5
Euro OTC	Paraffin, yellow	12321908	1
Pharmachem	Paraffin, yellow	150303-01	1
Phoenix	Paraffin, yellow	57/AKD7	1
Phönix	Paraffin, yellow	14324301	1

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Supplier	Substance	Batch	Spectra
Phönix	Paraffin, yellow	16032602	1
Phönix	Paraffin, yellow	17303501	2
Sana 29.11.Ek.6,95	Paraffin, yellow	15063904	1
Sanacorp	Paraffin, yellow	57/AKD4	1
Sanacorp	Paraffin, yellow	58/AKD12	1
Sanacorp	Paraffin, yellow	16096904	1
Sanacorp	Paraffin, yellow	310192	2
Sanacorp	Paraffin, yellow	18296802	1
Caelo	Paraffin, yellow	60081202	1
WE:Sanacorp 05.09.2016...	Paraffin, yellow	15330601	2
A.H.D.	Unguentum Cordes®	15A060	1
AHC	Unguentum Cordes®	15A192	1
Caelo	Unguentum Cordes®	16A102	4
AHD	Unguentum Cordes®	14A117	1
AHD	Unguentum Cordes®	15A021	1
AHD	Unguentum Cordes®	16A085	1
AHD	Unguentum Cordes®	16A140	1
AHD	Unguentum Cordes®	16A070	1
AHD	Unguentum Cordes®	17A045	1
AHD	Unguentum Cordes®	18A113	1
Euro OTC	Unguentum Cordes®	16A139	1
AHD/Ichthyol	Unguentum Cordes®	18A051	1
AHD/Ichthyol-Gesellschaft	Unguentum Cordes®	16A101	2
AHL	Unguentum Cordes®	16A143	1
AHL	Unguentum Cordes®	17A049	1
AHL	Unguentum Cordes®	17A056	1
ALH	Unguentum Cordes®	16A061	1
Allianc. Health. / Icht...	Unguentum Cordes®	16A184	1
Alliance	Unguentum Cordes®	12A184	1
Alliance	Unguentum Cordes®	15A020	1
Alliance health	Unguentum Cordes®	14A079	1
Alliance health	Unguentum Cordes®	15A023	1
Alliance Health	Unguentum Cordes®	13A032	1
Alliance Health 11.03.14	Unguentum Cordes®	13A090	1
Allianz	Unguentum Cordes®	18A002	1
Anza	Unguentum Cordes®	16A181	1
anzag	Unguentum Cordes®	14A079	1
anzag	Unguentum Cordes®	15A062	1
anzag	Unguentum Cordes®	15a192	1
Anzag	Unguentum Cordes®	12A055	1
Anzag	Unguentum Cordes®	12A115	1
Anzag	Unguentum Cordes®	13A172	1
Anzag	Unguentum Cordes®	15A021	1
Anzag	Unguentum Cordes®	15A023	1
Anzag	Unguentum Cordes®	16A014	1
Anzag	Unguentum Cordes®	16A178	1
Anzag	Unguentum Cordes®	17A008	1
Anzag 26.09.2012	Unguentum Cordes®	11A202	1
Anzag 29.10.12	Unguentum Cordes®	12A007	1
Euro OTC	Unguentum Cordes®	17A085	1
Anzag/ Ichthyol	Unguentum Cordes®	13A029	1
Fagron	Unguentum Cordes®	12A152	1
Anzag/Ichthyol	Unguentum Cordes®	13A180	1
Anzag/Ichthyol	Unguentum Cordes®	17A045	1
Beiersdorf AG	Unguentum Cordes®	62932210	2
Berkel AHK	Unguentum Cordes®	13A158	1
Berkel AHK	Unguentum Cordes®	14A056	1
Bombastus	Unguentum Cordes®	15a020	1
Bombastus	Unguentum Cordes®	12A102	1
Bombastus	Unguentum Cordes®	12A123	1

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Supplier	Substance	Batch	Spectra
Bombastus	Unguentum Cordes [®]	15A149	1
Bombastus	Unguentum Cordes [®]	16A083	1
Bombastus	Unguentum Cordes [®]	16A184	1
Bombastus	Unguentum Cordes [®]	16A176170613-6	1
Bombastus	Unguentum Cordes [®]	14A060	1
Bombastus	Unguentum Cordes [®]	18A050	1
Bombastus	Unguentum Cordes [®]	17A005	2
Bombastus	Unguentum Cordes [®]	16A183	1
Caelo	Unguentum Cordes [®]	12A183	2
Caelo	Unguentum Cordes [®]	13A047	1
Caelo	Unguentum Cordes [®]	13a043	1
Caelo	Unguentum Cordes [®]	13A090	2
Caelo	Unguentum Cordes [®]	11A162	1
Caelo	Unguentum Cordes [®]	12A056	1
Caelo	Unguentum Cordes [®]	9A163	1
Caelo	Unguentum Cordes [®]	12A141	1
Caelo	Unguentum Cordes [®]	12A206	4
Caelo	Unguentum Cordes [®]	Ichtyo1	1
Caelo	Unguentum Cordes [®]	13A157	1
Caelo	Unguentum Cordes [®]	13A136	1
Caelo	Unguentum Cordes [®]	13A113	1
Caelo	Unguentum Cordes [®]	14A079	1
Caelo	Unguentum Cordes [®]	14A143	1
Caelo	Unguentum Cordes [®]	15A091	1
Caelo	Unguentum Cordes [®]	15A073	2
Caelo	Unguentum Cordes [®]	16A074	1
Caelo	Unguentum Cordes [®]	14A095	1
Caelo	Unguentum Cordes [®]	14A172	1
Caelo	Unguentum Cordes [®]	15a020	1
Caelo	Unguentum Cordes [®]	15A042	1
Caelo	Unguentum Cordes [®]	15a073	1
Caelo	Unguentum Cordes [®]	15A137	2
Caelo	Unguentum Cordes [®]	15A139	1
Caelo	Unguentum Cordes [®]	15a124	1
Caelo	Unguentum Cordes [®]	15A125	1
Caelo	Unguentum Cordes [®]	16A010	1
Caelo	Unguentum Cordes [®]	16A077	1
Caelo	Unguentum Cordes [®]	16A085	4
Caelo	Unguentum Cordes [®]	16a085	1
Caelo	Unguentum Cordes [®]	16A122	3
Caelo	Unguentum Cordes [®]	16A099	4
Caelo	Unguentum Cordes [®]	16A137	3
Caelo	Unguentum Cordes [®]	16A140	2
Caelo	Unguentum Cordes [®]	16A141	1
Caelo	Unguentum Cordes [®]	16A101	1
Caelo	Unguentum Cordes [®]	16A143	1
Caelo	Unguentum Cordes [®]	16A176	3
Caelo	Unguentum Cordes [®]	17A053	1
Caelo	Unguentum Cordes [®]	17A070	3
Caelo	Unguentum Cordes [®]	17A0025376	1
Caelo	Unguentum Cordes [®]	17A164	1
Caelo	Unguentum Cordes [®]	17a004	1
Caelo	Unguentum Cordes [®]	1717004	1
Caelo	Unguentum Cordes [®]	17A004	2
Caelo	Unguentum Cordes [®]	17a005	1
Caelo	Unguentum Cordes [®]	17A202	1
Caelo	Unguentum Cordes [®]	3051804	1
Caelo	Unguentum Cordes [®]	17A007	1
Caelo	Unguentum Cordes [®]	18A049	2
Caelo	Unguentum Cordes [®]	18167702	1

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Supplier	Substance	Batch	Spectra
Caelo	Unguentum Cordes®	17A105	1
Caelo	Unguentum Cordes®	18A070	1
Caelo	Unguentum Cordes®	17a085	1
Caelo	Unguentum Cordes®	17a087	1
Caelo	Unguentum Cordes®	17A142	2
Caelo	Unguentum Cordes®	18A110	2
Caelo	Unguentum Cordes®	18a131	1
Caelo	Unguentum Cordes®	19141001	1
Caelo	Unguentum Cordes®	16A083	3
Caelo	Unguentum Cordes®	18A105	2
Caelo	Unguentum Cordes®	13A141	1
Caelo	Unguentum Cordes®	16A045	1
Caelo	Unguentum Cordes®	13A172	1
Caelo	Unguentum Cordes®	15A061	3
Caelo	Unguentum Cordes®	17A127	2
Caelo	Unguentum Cordes®	12A078	1
Caelo	Unguentum Cordes®	14A173	1
Caelo	Unguentum Cordes®	17a055	1
Caelo	Unguentum Cordes®	12A156	1
Caelo	Unguentum Cordes®	13A042	2
Caelo	Unguentum Cordes®	13A181	3
Caelo	Unguentum Cordes®	12A131	1
Caelo	Unguentum Cordes®	14A312	1
Caelo	Unguentum Cordes®	15A123	2
Caelo	Unguentum Cordes®	17A112	1
Caelo	Unguentum Cordes®	18A067	2
Caelo	Unguentum Cordes®	16A144	2
Caelo	Unguentum Cordes®	16A183	2
Caelo	Unguentum Cordes®	13A049	1
Caelo	Unguentum Cordes®	15A192	1
Caelo	Unguentum Cordes®	16A142	1
Caelo	Unguentum Cordes®	18A112	1
Caelo	Unguentum Cordes®	18A111	2
Caelo	Unguentum Cordes®	15A149	1
Caelo	Unguentum Cordes®	15A089	1
Caelo	Unguentum Cordes®	16A123	2
Caelo	Unguentum Cordes®	12A185	1
Caelo	Unguentum Cordes®	12A211	1
Caelo	Unguentum Cordes®	17A005	4
Caelo	Unguentum Cordes®	15A040	1
Caelo	Unguentum Cordes®	15A124	2
Caelo	Unguentum Cordes®	15A191	5
Caelo	Unguentum Cordes®	17A084	2
Caelo	Unguentum Cordes®	15A159	1
Caelo	Unguentum Cordes®	16A047	1
Caelo	Unguentum Cordes®	16A119	1
Caelo	Unguentum Cordes®	18A190	1
Caelo	Unguentum Cordes®	11A202	1
Caelo	Unguentum Cordes®	12A021	1
Caelo	Unguentum Cordes®	13A171	2
Caelo	Unguentum Cordes®	14A063	2
Caelo	Unguentum Cordes®	16/082/C	1
Caelo	Unguentum Cordes®	16A013	1
Caelo	Unguentum Cordes®	17A051	1
Caelo	Unguentum Cordes®	17A101	1
Caelo	Unguentum Cordes®	17A055	1
Caelo	Unguentum Cordes®	17A085	2
Caelo	Unguentum Cordes®	18A007	1
Caelo	Unguentum Cordes®	17A113	5
Caelo	Unguentum Cordes®	17A045	3

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Supplier	Substance	Batch	Spectra
Caelo	Unguentum Cordes [®]	17A003	3
Caelo	Unguentum Cordes [®]	15A106	1
Caelo	Unguentum Cordes [®]	16A051	2
Caelo	Unguentum Cordes [®]	16A058	5
Caelo	Unguentum Cordes [®]	17A002	1
Caelo	Unguentum Cordes [®]	17A087	1
Caelo	Unguentum Cordes [®]	18A101	1
Caelo	Unguentum Cordes [®]	13A004	1
Caelo	Unguentum Cordes [®]	15A020	1
Caelo	Unguentum Cordes [®]	15A092	2
Caelo	Unguentum Cordes [®]	17A163	2
Caelo	Unguentum Cordes [®]	17A104	1
Caelo	Unguentum Cordes [®]	17A054	1
Caelo	Unguentum Cordes [®]	14A009	1
Caelo	Unguentum Cordes [®]	15A062	3
Caelo	Unguentum Cordes [®]	14A114	1
Caelo	Unguentum Cordes [®]	16A210	2
Caelo	Unguentum Cordes [®]	17A217	2
Caelo	Unguentum Cordes [®]	15a149	1
Caelo	Unguentum Cordes [®]	17A126	2
Caelo	Unguentum Cordes [®]	17A067	4
Caelo	Unguentum Cordes [®]	18A052	3
Caelo	Unguentum Cordes [®]	15A150	1
Caelo	Unguentum Cordes [®]	12A022	1
Caelo	Unguentum Cordes [®]	12A140	1
Caelo	Unguentum Cordes [®]	12A146	1
Caelo	Unguentum Cordes [®]	13A138	3
Caelo	Unguentum Cordes [®]	13A153	2
Caelo	Unguentum Cordes [®]	14A113	2
Caelo	Unguentum Cordes [®]	14A116	1
Caelo	Unguentum Cordes [®]	14A213	2
Caelo	Unguentum Cordes [®]	15A023	2
Caelo	Unguentum Cordes [®]	15A060	2
Caelo	Unguentum Cordes [®]	16A022	1
Caelo	Unguentum Cordes [®]	18A050	1
Caelo	Unguentum Cordes [®]	16A044	1
Caelo	Unguentum Cordes [®]	13A043	1
Caelo	Unguentum Cordes [®]	913M-02532	1
Caelo	Unguentum Cordes [®]	3112A-02532	1
Caelo	Unguentum Cordes [®]	16A072	1
Caeolo/Gehe	Unguentum Cordes [®]	17A004	1
Caesar & Loretz GmbH Hi...	Unguentum Cordes [®]	13A090	1
Cealo	Unguentum Cordes [®]	14A113	1
CIchthyol/K	Unguentum Cordes [®]	11A199	1
Cordes	Unguentum Cordes [®]	12A155	1
Cordes	Unguentum Cordes [®]	12A079	1
Cordes	Unguentum Cordes [®]	13A052	1
Cordes	Unguentum Cordes [®]	13a025	1
Cordes	Unguentum Cordes [®]	13A106	1
Cordes	Unguentum Cordes [®]	14A055	1
Cordes	Unguentum Cordes [®]	14A062	1
Cordes	Unguentum Cordes [®]	15A060	1
Cordes	Unguentum Cordes [®]	14A117	2
Cordes	Unguentum Cordes [®]	15A040	2
Cordes	Unguentum Cordes [®]	15A106	1
Cordes	Unguentum Cordes [®]	16A046	1
Cordes	Unguentum Cordes [®]	16A051	1
Cordes	Unguentum Cordes [®]	16A122	1
Cordes	Unguentum Cordes [®]	16A137	1
Cordes	Unguentum Cordes [®]	16A184	1

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Supplier	Substance	Batch	Spectra
Cordes	Unguentum Cordes®	17A004	1
Cordes	Unguentum Cordes®	17A005	1
Cordes	Unguentum Cordes®	18A048	1
Cordes	Unguentum Cordes®	17A045	1
Cordes	Unguentum Cordes®	17A067	1
Cordes	Unguentum Cordes®	18A051	1
Cordes	Unguentum Cordes®	17A087	1
Cordes / Gehe	Unguentum Cordes®	17A085	1
Cordes Hermann	Unguentum Cordes®	15A020	1
Cordes Hermann	Unguentum Cordes®	16A085	1
Cordes Phönix	Unguentum Cordes®	17A051	1
Cordes, Hermanni / Gehe	Unguentum Cordes®	14A112	1
Cordes, Hermanni / Gehe	Unguentum Cordes®	14A171	1
Cordes/gehe	Unguentum Cordes®	17A084	1
Cordes/Gehe	Unguentum Cordes®	13A172	1
Cordes/Gehe	Unguentum Cordes®	13A157	1
Cordes/Gehe	Unguentum Cordes®	16A155	1
Cordes/Gehe	Unguentum Cordes®	17A098	1
Cordes/Noweda	Unguentum Cordes®	16A121	1
Cordes/Noweda	Unguentum Cordes®	16A101	1
Cordes/Noweda	Unguentum Cordes®	16A140	2
Cordes/Noweda	Unguentum Cordes®	17A106	1
cordes/phoenix	Unguentum Cordes®	13A047	1
Cordes/Phönix	Unguentum Cordes®	13A050	1
Cordes/Phönix	Unguentum Cordes®	15A124	1
Cordes/Phönix	Unguentum Cordes®	16A142	2
Cordes/Phönix	Unguentum Cordes®	17A055	2
Cordes/Phönix	Unguentum Cordes®	18A215	1
Cordes/Sanacorp	Unguentum Cordes®	17A045	1
Cordesl/Phönix	Unguentum Cordes®	17A142	1
Delta	Unguentum Cordes®	17A045	1
E Plus	Unguentum Cordes®	17A051	1
E Plus	Unguentum Cordes®	17A163	1
E Plus	Unguentum Cordes®	17A101	1
Ebert 17.08.16 KKH	Unguentum Cordes®	16A048	1
Ebert/Ichthyol	Unguentum Cordes®	13A052	1
Ebert-Jacobi	Unguentum Cordes®	17A008	1
E-Plus	Unguentum Cordes®	16A101	1
eurho	Unguentum Cordes®	14a079	1
Euro OTC	Unguentum Cordes®	14A079	1
Euro OTC	Unguentum Cordes®	15A155	1
Euro OTC	Unguentum Cordes®	13A068	1
Euro OTC	Unguentum Cordes®	16A074	1
Euro OTC	Unguentum Cordes®	15A159	1
Euro OTC	Unguentum Cordes®	14A078	2
Euro OTC	Unguentum Cordes®	16A101	1
Euro OTC	Unguentum Cordes®	17A007	1
Euro OTC	Unguentum Cordes®	14A172	1
Euro OTC	Unguentum Cordes®	16A123	1
Fagron	Unguentum Cordes®	17A005	1
Fagron	Unguentum Cordes®	Ichthyol/Phoenix	1
Fagron	Unguentum Cordes®	17A052	1
Fagron	Unguentum Cordes®	15A010	1
Fagron	Unguentum Cordes®	17a054	1
Fagron	Unguentum Cordes®	15A073	1
Fiebig/Ichthyol	Unguentum Cordes®	15A124	1
Förster/Phönix	Unguentum Cordes®	158142	1
Galderma/Phönix	Unguentum Cordes®	16A077	1
gebepfarm	Unguentum Cordes®	913I-02532	1
Gehe	Unguentum Cordes®	11A223	2

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Supplier	Substance	Batch	Spectra
Gehe	Unguentum Cordes [®]	11A161	1
Gehe	Unguentum Cordes [®]	12A054	1
Gehe	Unguentum Cordes [®]	11A234	1
Gehe	Unguentum Cordes [®]	12A056	2
Gehe	Unguentum Cordes [®]	12A087	1
Gehe	Unguentum Cordes [®]	12A079	1
Gehe	Unguentum Cordes [®]	12A075	1
Gehe	Unguentum Cordes [®]	12A124	1
Gehe	Unguentum Cordes [®]	12a155	2
Gehe	Unguentum Cordes [®]	12A155	1
Gehe	Unguentum Cordes [®]	12A205	2
Gehe	Unguentum Cordes [®]	13A031	3
Gehe	Unguentum Cordes [®]	13A054	1
Gehe	Unguentum Cordes [®]	13A106	1
Gehe	Unguentum Cordes [®]	13A136	2
Gehe	Unguentum Cordes [®]	13A153	1
Gehe	Unguentum Cordes [®]	13A141	1
Gehe	Unguentum Cordes [®]	13A156	1
Gehe	Unguentum Cordes [®]	15A062	3
Gehe	Unguentum Cordes [®]	15A091	1
Gehe	Unguentum Cordes [®]	15A150	1
Gehe	Unguentum Cordes [®]	15A142	1
Gehe	Unguentum Cordes [®]	16A101	1
Gehe	Unguentum Cordes [®]	16A143	1
Gehe	Unguentum Cordes [®]	16A184	1
Gehe	Unguentum Cordes [®]	17A004	1
GEHE	Unguentum Cordes [®]	16A099	1
GEHE	Unguentum Cordes [®]	17A113	1
GEHE	Unguentum Cordes [®]	17A127	2
GEHE	Unguentum Cordes [®]	18A048	2
GEHE	Unguentum Cordes [®]	18A049	1
GEHE	Unguentum Cordes [®]	18A050	2
GEHE	Unguentum Cordes [®]	18A067	1
GEHE	Unguentum Cordes [®]	18A147	2
GEHE	Unguentum Cordes [®]	17A053	1
GEHE	Unguentum Cordes [®]	18A215	1
GEHE	Unguentum Cordes [®]	18A107	1
Gehe - Ichthyol	Unguentum Cordes [®]	12A183	1
Gehe - Ichthyol	Unguentum Cordes [®]	13A136	1
Gehe - Ichthyol	Unguentum Cordes [®]	15A027	1
Gehe Kassel	Unguentum Cordes [®]	15A021	1
Gehe,11.05.15/Cordes	Unguentum Cordes [®]	15A040	1
Bombastus	Unguentum Cordes [®]	16A099	1
Caelo	Unguentum Cordes [®]	15A027	1
Gehe/Ichthyol	Unguentum Cordes [®]	13A090	1
Gehe/Ichthyol	Unguentum Cordes [®]	14A061	1
Gehe/Ichthyol	Unguentum Cordes [®]	15A124	4
Gehe/Ichthyol	Unguentum Cordes [®]	15A191	4
Gehe/Ichthyol	Unguentum Cordes [®]	15A141	1
Gehe/Ichthyol	Unguentum Cordes [®]	15A192	1
Gehe/Ichthyol	Unguentum Cordes [®]	16A099	3
Gehe/Ichthyol	Unguentum Cordes [®]	16A085	1
Gehe/Ichthyol	Unguentum Cordes [®]	16A139	1
Gehe-Ichthyol	Unguentum Cordes [®]	15A060	2
Gehe-Ichthyol	Unguentum Cordes [®]	15A073	1
Gehe-Ichthyol	Unguentum Cordes [®]	15A123	1
Gehe-Ichthyol	Unguentum Cordes [®]	16A083	2
Hedinger	Unguentum Cordes [®]	13A053	1
hedinger/Noweda	Unguentum Cordes [®]	khuhfhk	1
Henry Lamotte	Unguentum Cordes [®]	16A102	1

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Supplier	Substance	Batch	Spectra
Heyl	Unguentum Cordes®	17A008	1
hjahf	Unguentum Cordes®	19A004	1
Ichhyol	Unguentum Cordes®	12A078	1
Ichth/Noweda	Unguentum Cordes®	16A144	1
Ichthiol	Unguentum Cordes®	2112212532	1
Ichthiol	Unguentum Cordes®	13A110	1
Ichthiol/Sanacorp	Unguentum Cordes®	17A202	1
Ichthol/ gehe 31.01.19	Unguentum Cordes®	18A105	1
Ichthol/ Phönix	Unguentum Cordes®	10A070	1
Ichthol/Anzag	Unguentum Cordes®	16A102	1
Ichthol-Gesellschaft/Sa...	Unguentum Cordes®	15A037	1
Ichthtyol	Unguentum Cordes®	12a152	1
Ichthtyol	Unguentum Cordes®	12A185	1
Ichthtyol	Unguentum Cordes®	13A178	1
Ichthtyol	Unguentum Cordes®	15A089	1
Ichthy	Unguentum Cordes®	12A185	1
Ichthyl Phönix	Unguentum Cordes®	12A129	1
Ichthyl Phönix	Unguentum Cordes®	13A053	1
Ichthyl-Gesellschaft/Ph...	Unguentum Cordes®	15A141	1
Ichthylo Gesellschaft/N...	Unguentum Cordes®	18A110	1
ichthyol	Unguentum Cordes®	12A129	1
ichthyol	Unguentum Cordes®	20201112-1	1
ichthyol	Unguentum Cordes®	12A060	1
ichthyol	Unguentum Cordes®	12A102	1
ichthyol	Unguentum Cordes®	12A115	1
ichthyol	Unguentum Cordes®	1413M-02532	1
ichthyol	Unguentum Cordes®	12A190	1
ichthyol	Unguentum Cordes®	12A152	1
ichthyol	Unguentum Cordes®	12A139	1
ichthyol	Unguentum Cordes®	12A206	1
ichthyol	Unguentum Cordes®	13A032	1
ichthyol	Unguentum Cordes®	13A1008	1
ichthyol	Unguentum Cordes®	13A090	1
ichthyol	Unguentum Cordes®	14a113	1
ichthyol	Unguentum Cordes®	14A172	1
ichthyol	Unguentum Cordes®	15A139	1
ichthyol	Unguentum Cordes®	15A061	1
ichthyol	Unguentum Cordes®	15A124	2
ichthyol	Unguentum Cordes®	15A125	1
ichthyol	Unguentum Cordes®	16A119	1
ichthyol	Unguentum Cordes®	16A101	3
ichthyol	Unguentum Cordes®	16A143	1
ichthyol	Unguentum Cordes®	16A176	1
ichthyol	Unguentum Cordes®	17A051	1
ichthyol	Unguentum Cordes®	17a003	1
ichthyol	Unguentum Cordes®	17A163	2
ichthyol	Unguentum Cordes®	17A003	1
ichthyol	Unguentum Cordes®	17A0075535	1
ichthyol	Unguentum Cordes®	18A001	1
ichthyol	Unguentum Cordes®	18A003	1
ichthyol	Unguentum Cordes®	18A084	2
ichthyol	Unguentum Cordes®	18A132	1
Ichthyol	Unguentum Cordes®	11A150	1
Ichthyol	Unguentum Cordes®	11A120	1
Ichthyol	Unguentum Cordes®	11A118	2
Ichthyol	Unguentum Cordes®	11A153	1
Ichthyol	Unguentum Cordes®	11A085	3
Ichthyol	Unguentum Cordes®	26101201	1
Ichthyol	Unguentum Cordes®	14121203	1
Ichthyol	Unguentum Cordes®	12A120	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes [®]	12A064	1
Ichthyol	Unguentum Cordes [®]	12A131	2
Ichthyol	Unguentum Cordes [®]	12A139	1
Ichthyol	Unguentum Cordes [®]	12a145	1
Ichthyol	Unguentum Cordes [®]	12A115	2
Ichthyol	Unguentum Cordes [®]	12A157	1
Ichthyol	Unguentum Cordes [®]	12A160	1
Ichthyol	Unguentum Cordes [®]	12A152	3
Ichthyol	Unguentum Cordes [®]	11A233	1
Ichthyol	Unguentum Cordes [®]	12A190	1
Ichthyol	Unguentum Cordes [®]	12A121	2
Ichthyol	Unguentum Cordes [®]	12A211	1
Ichthyol	Unguentum Cordes [®]	13A029	2
Ichthyol	Unguentum Cordes [®]	12A205	3
Ichthyol	Unguentum Cordes [®]	13A003	1
Ichthyol	Unguentum Cordes [®]	13A005	1
Ichthyol	Unguentum Cordes [®]	13A030	2
Ichthyol	Unguentum Cordes [®]	13A031	2
Ichthyol	Unguentum Cordes [®]	12A185	1
Ichthyol	Unguentum Cordes [®]	13A032	2
Ichthyol	Unguentum Cordes [®]	13A034	1
Ichthyol	Unguentum Cordes [®]	13A006	1
Ichthyol	Unguentum Cordes [®]	13A047	2
Ichthyol	Unguentum Cordes [®]	13A048	1
Ichthyol	Unguentum Cordes [®]	13092013D	1
Ichthyol	Unguentum Cordes [®]	13A050	5
Ichthyol	Unguentum Cordes [®]	13A042	2
Ichthyol	Unguentum Cordes [®]	13A043	2
Ichthyol	Unguentum Cordes [®]	13A052	1
Ichthyol	Unguentum Cordes [®]	13A053	1
Ichthyol	Unguentum Cordes [®]	13A055	2
Ichthyol	Unguentum Cordes [®]	13A107	1
Ichthyol	Unguentum Cordes [®]	13A106	2
Ichthyol	Unguentum Cordes [®]	13A089	1
Ichthyol	Unguentum Cordes [®]	13A109	1
Ichthyol	Unguentum Cordes [®]	13A111	1
Ichthyol	Unguentum Cordes [®]	13A068	1
Ichthyol	Unguentum Cordes [®]	24022014B	1
Ichthyol	Unguentum Cordes [®]	13A138	3
Ichthyol	Unguentum Cordes [®]	13A140	1
Ichthyol	Unguentum Cordes [®]	13A112	2
Ichthyol	Unguentum Cordes [®]	14031409	1
Ichthyol	Unguentum Cordes [®]	13A136	1
Ichthyol	Unguentum Cordes [®]	13A090	1
Ichthyol	Unguentum Cordes [®]	13A141	1
Ichthyol	Unguentum Cordes [®]	13A015	1
Ichthyol	Unguentum Cordes [®]	414022-2-P	1
Ichthyol	Unguentum Cordes [®]	13A142	1
Ichthyol	Unguentum Cordes [®]	5052014B	1
Ichthyol	Unguentum Cordes [®]	13A153	1
Ichthyol	Unguentum Cordes [®]	13A171	1
Ichthyol	Unguentum Cordes [®]	13A159	2
Ichthyol	Unguentum Cordes [®]	13A178	2
Ichthyol	Unguentum Cordes [®]	13A172	3
Ichthyol	Unguentum Cordes [®]	13A180	1
Ichthyol	Unguentum Cordes [®]	13A166	1
Ichthyol	Unguentum Cordes [®]	30092014C	1
Ichthyol	Unguentum Cordes [®]	14A057	3
Ichthyol	Unguentum Cordes [®]	14A095	2
Ichthyol	Unguentum Cordes [®]	14A061	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes®	14A005	1
Ichthyol	Unguentum Cordes®	14A060	1
Ichthyol	Unguentum Cordes®	7011501	1
Ichthyol	Unguentum Cordes®	14A172	3
Ichthyol	Unguentum Cordes®	14A171	2
Ichthyol	Unguentum Cordes®	15A075	1
Ichthyol	Unguentum Cordes®	15A123	1
Ichthyol	Unguentum Cordes®	14A113	1
Ichthyol	Unguentum Cordes®	14A063	1
Ichthyol	Unguentum Cordes®	14A098	1
Ichthyol	Unguentum Cordes®	13012015B	1
Ichthyol	Unguentum Cordes®	14A114	1
Ichthyol	Unguentum Cordes®	14A132	1
Ichthyol	Unguentum Cordes®	14A179	1
Ichthyol	Unguentum Cordes®	14A173	2
Ichthyol	Unguentum Cordes®	14A116	1
Ichthyol	Unguentum Cordes®	13041504	1
Ichthyol	Unguentum Cordes®	15A021	2
Ichthyol	Unguentum Cordes®	15A042	3
Ichthyol	Unguentum Cordes®	15A023	1
Ichthyol	Unguentum Cordes®	15A-042	1
Ichthyol	Unguentum Cordes®	15A020	1
Ichthyol	Unguentum Cordes®	15A060	2
Ichthyol	Unguentum Cordes®	15A089	2
Ichthyol	Unguentum Cordes®	15A040	1
Ichthyol	Unguentum Cordes®	4091516	1
Ichthyol	Unguentum Cordes®	15A091	2
Ichthyol	Unguentum Cordes®	15A092	2
Ichthyol	Unguentum Cordes®	15A074	1
Ichthyol	Unguentum Cordes®	15A093	2
Ichthyol	Unguentum Cordes®	15A106	1
Ichthyol	Unguentum Cordes®	14A079	1
Ichthyol	Unguentum Cordes®	15A062	1
Ichthyol	Unguentum Cordes®	15A107	2
Ichthyol	Unguentum Cordes®	15A108	2
Ichthyol	Unguentum Cordes®	15A073	2
Ichthyol	Unguentum Cordes®	15A140	3
Ichthyol	Unguentum Cordes®	15A148	5
Ichthyol	Unguentum Cordes®	15A079	3
Ichthyol	Unguentum Cordes®	15A087	1
Ichthyol	Unguentum Cordes®	15A142	1
Ichthyol	Unguentum Cordes®	15A124	1
Ichthyol	Unguentum Cordes®	15A155	1
Ichthyol	Unguentum Cordes®	15a159	1
Ichthyol	Unguentum Cordes®	15A159	1
Ichthyol	Unguentum Cordes®	15A191	5
Ichthyol	Unguentum Cordes®	16A011	1
Ichthyol	Unguentum Cordes®	16A047	1
Ichthyol	Unguentum Cordes®	15A156	1
Ichthyol	Unguentum Cordes®	16A048	2
Ichthyol	Unguentum Cordes®	15A192	1
Ichthyol	Unguentum Cordes®	Ungt5/16	1
Ichthyol	Unguentum Cordes®	16A045	1
Ichthyol	Unguentum Cordes®	16A077	1
Ichthyol	Unguentum Cordes®	16A058	3
Ichthyol	Unguentum Cordes®	16A083	1
Ichthyol	Unguentum Cordes®	16A173	3
Ichthyol	Unguentum Cordes®	16A123	2
Ichthyol	Unguentum Cordes®	16A085	3
Ichthyol	Unguentum Cordes®	16A122	2

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes [®]	16A023	1
Ichthyol	Unguentum Cordes [®]	16A124	1
Ichthyol	Unguentum Cordes [®]	16A099	4
Ichthyol	Unguentum Cordes [®]	16A082	1
Ichthyol	Unguentum Cordes [®]	16A140	2
Ichthyol	Unguentum Cordes [®]	16A119	1
Ichthyol	Unguentum Cordes [®]	16A022	1
Ichthyol	Unguentum Cordes [®]	16A178	1
Ichthyol	Unguentum Cordes [®]	16A176	3
Ichthyol	Unguentum Cordes [®]	16A183	4
Ichthyol	Unguentum Cordes [®]	16A102	3
Ichthyol	Unguentum Cordes [®]	16A184	5
Ichthyol	Unguentum Cordes [®]	16A16	1
Ichthyol	Unguentum Cordes [®]	16A142	1
Ichthyol	Unguentum Cordes [®]	17A051	1
Ichthyol	Unguentum Cordes [®]	16A210	1
Ichthyol	Unguentum Cordes [®]	16A061	1
Ichthyol	Unguentum Cordes [®]	17A053	2
Ichthyol	Unguentum Cordes [®]	17A002	1
Ichthyol	Unguentum Cordes [®]	17A052	1
Ichthyol	Unguentum Cordes [®]	17A019	1
Ichthyol	Unguentum Cordes [®]	17A164	3
Ichthyol	Unguentum Cordes [®]	17A003	2
Ichthyol	Unguentum Cordes [®]	17A216	1
Ichthyol	Unguentum Cordes [®]	17A055	1
Ichthyol	Unguentum Cordes [®]	17A004	3
Ichthyol	Unguentum Cordes [®]	17A056	2
Ichthyol	Unguentum Cordes [®]	17A217	1
Ichthyol	Unguentum Cordes [®]	17A069	2
Ichthyol	Unguentum Cordes [®]	17A005	4
Ichthyol	Unguentum Cordes [®]	17A098	1
Ichthyol	Unguentum Cordes [®]	17a005	1
Ichthyol	Unguentum Cordes [®]	17A105	2
Ichthyol	Unguentum Cordes [®]	17A007	6
Ichthyol	Unguentum Cordes [®]	17A106	1
Ichthyol	Unguentum Cordes [®]	17A112	2
Ichthyol	Unguentum Cordes [®]	17A045	3
Ichthyol	Unguentum Cordes [®]	17A113	2
Ichthyol	Unguentum Cordes [®]	18A049	2
Ichthyol	Unguentum Cordes [®]	17A067	1
Ichthyol	Unguentum Cordes [®]	18A006	1
Ichthyol	Unguentum Cordes [®]	17A084	4
Ichthyol	Unguentum Cordes [®]	18A007	1
Ichthyol	Unguentum Cordes [®]	18A215	2
Ichthyol	Unguentum Cordes [®]	17A085	2
Ichthyol	Unguentum Cordes [®]	18A105	2
Ichthyol	Unguentum Cordes [®]	18A110	1
Ichthyol	Unguentum Cordes [®]	18A051	1
Ichthyol	Unguentum Cordes [®]	19A005	1
ICHTHYOL	Unguentum Cordes [®]	13A135	1
ICHTHYOL	Unguentum Cordes [®]	14A114	1
ICHTHYOL	Unguentum Cordes [®]	14A171	1
ICHTHYOL	Unguentum Cordes [®]	15a089	1
ICHTHYOL	Unguentum Cordes [®]	17A057	1
ICHTHYOL	Unguentum Cordes [®]	10A216	1
ICHTHYOL	Unguentum Cordes [®]	18A130	1
ICHTHYOL	Unguentum Cordes [®]	17A084	1
ICHTHYOL	Unguentum Cordes [®]	18A112	1
Ichthyol / Gehe	Unguentum Cordes [®]	18A049	1
Ichthyol / Gehe	Unguentum Cordes [®]	16A102	1

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Supplier	Substance	Batch	Spectra
Ichthyol / Gehe	Unguentum Cordes®	17A005	1
Ichthyol / Gehe	Unguentum Cordes®	10A111	1
Ichthyol - Gesellschaft	Unguentum Cordes®	11A085	1
Ichthyol Jenne	Unguentum Cordes®	12A211	1
ICHTHYOL / 20	Unguentum Cordes®	17A106	1
Ichthyol / AHD	Unguentum Cordes®	17A002	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A099	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A139	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A144	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A163	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A053	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A049	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A069	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	18A048	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A085	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	18A067	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	18A215	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	18A112	1
Ichthyol / Anzag	Unguentum Cordes®	12A079	1
Ichthyol / E	Unguentum Cordes®	14A079	1
Ichthyol / Fiebig	Unguentum Cordes®	15A062	1
Ichthyol / G	Unguentum Cordes®	15A020	1
Ichthyol / G	Unguentum Cordes®	16A184	1
Ichthyol / Gehe	Unguentum Cordes®	11A202	1
Ichthyol / Gehe	Unguentum Cordes®	12A102	1
Ichthyol / Gehe	Unguentum Cordes®	12A115	1
Ichthyol / Gehe	Unguentum Cordes®	12A152	2
Ichthyol / Gehe	Unguentum Cordes®	12A184	1
Ichthyol / Gehe	Unguentum Cordes®	13A054	1
Ichthyol / Gehe	Unguentum Cordes®	13A042	1
Ichthyol / Gehe	Unguentum Cordes®	13A106	1
Ichthyol / Gehe	Unguentum Cordes®	13A138	1
Ichthyol / Gehe	Unguentum Cordes®	13A142	3
Ichthyol / Gehe	Unguentum Cordes®	13A068	2
Ichthyol / Gehe	Unguentum Cordes®	13A153	1
Ichthyol / Gehe	Unguentum Cordes®	13A181	1
Ichthyol / Gehe	Unguentum Cordes®	13A156	1
Ichthyol / Gehe	Unguentum Cordes®	13A166	1
Ichthyol / Gehe	Unguentum Cordes®	15A162	1
Ichthyol / Gehe	Unguentum Cordes®	16A173	1
Ichthyol / Gehe	Unguentum Cordes®	17A049	2
Ichthyol / Gehe	Unguentum Cordes®	17A106	2
Ichthyol / Gehe	Unguentum Cordes®	17A113	1
Ichthyol / Gehe	Unguentum Cordes®	18A049	1
Ichthyol / Gehe	Unguentum Cordes®	17A084	1
Ichthyol / Gehe	Unguentum Cordes®	18A051	1
Ichthyol / Gehe	Unguentum Cordes®	18A067	1
Ichthyol / Gehe	Unguentum Cordes®	18A166	1
Ichthyol / Gehe	Unguentum Cordes®	18A191	1
Ichthyol / Gehe	Unguentum Cordes®	19A006	1
Ichthyol / Gehe	Unguentum Cordes®	19A008	1
Ichthyol / K	Unguentum Cordes®	15A191	1
Ichthyol / Noweda	Unguentum Cordes®	11A146	1
Ichthyol / Noweda	Unguentum Cordes®	12A152	2
Ichthyol / Noweda	Unguentum Cordes®	13A042	1
Ichthyol / Noweda	Unguentum Cordes®	13A051	1
Ichthyol / Noweda	Unguentum Cordes®	13A043	1
Ichthyol / Noweda	Unguentum Cordes®	11A042	1
Ichthyol / Noweda	Unguentum Cordes®	14A172	1
Ichthyol / Noweda	Unguentum Cordes®	14A173	1

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Supplier	Substance	Batch	Spectra
Ichthyol / Noweda	Unguentum Cordes [®]	15A021	1
Ichthyol / Noweda	Unguentum Cordes [®]	15A073	3
Ichthyol / Noweda	Unguentum Cordes [®]	16A123	1
Ichthyol / Phoenix	Unguentum Cordes [®]	15A123	2
Ichthyol / Phoenix	Unguentum Cordes [®]	15A125	1
Ichthyol / Phoenix	Unguentum Cordes [®]	16A099	1
Ichthyol / Phoenix	Unguentum Cordes [®]	16A139	1
Ichthyol / Phoenix	Unguentum Cordes [®]	18A130	1
Ichthyol / Phoenix Leip...	Unguentum Cordes [®]	12A118	1
Ichthyol / Phönix	Unguentum Cordes [®]	15A156	1
Ichthyol / Phönix	Unguentum Cordes [®]	16A122	1
Ichthyol / Phönix	Unguentum Cordes [®]	16A210	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A164	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A098	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A007	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A113	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A127	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A06	1
Ichthyol / Phönix	Unguentum Cordes [®]	17A067	1
Ichthyol / Phönix	Unguentum Cordes [®]	18A051	1
Ichthyol / Phönix	Unguentum Cordes [®]	19A128	1
Ichthyol / Sanacorp	Unguentum Cordes [®]	12A183	1
Ichthyol / Sanacorp	Unguentum Cordes [®]	14A172	1
Ichthyol / Sanacorp	Unguentum Cordes [®]	15A062	1
Ichthyol / AHD	Unguentum Cordes [®]	15A155	1
Ichthyol / Anzag	Unguentum Cordes [®]	62(18A051)	1
Ichthyol / Anzag	Unguentum Cordes [®]	63(18A107)	1
Ichthyol / Anzag	Unguentum Cordes [®]	64(18A130)	1
Ichthyol / Anzag	Unguentum Cordes [®]	65(18A166)	1
Ichthyol / Jenne	Unguentum Cordes [®]	66(18A248)	1
Ichthyol / Noweda	Unguentum Cordes [®]	12A152	1
Ichthyol / Noweda	Unguentum Cordes [®]	13A090	2
Ichthyol / Noweda	Unguentum Cordes [®]	13A181	1
Ichthyol / Noweda	Unguentum Cordes [®]	13A067	1
Ichthyol / Noweda	Unguentum Cordes [®]	15A060	1
Ichthyol / Noweda	Unguentum Cordes [®]	15a073	1
Ichthyol / Noweda	Unguentum Cordes [®]	12A118	1
Ichthyol / Noweda	Unguentum Cordes [®]	15A123	3
Ichthyol / Noweda	Unguentum Cordes [®]	15A148	1
Ichthyol / Noweda	Unguentum Cordes [®]	15A159	1
Ichthyol / Noweda	Unguentum Cordes [®]	15A191	1
Ichthyol / Noweda	Unguentum Cordes [®]	16A085	1
Ichthyol AG / Alliance ...	Unguentum Cordes [®]	17A002	1
Ichthyol AG / Anzag	Unguentum Cordes [®]	16A085	2
Ichthyol Cordes	Unguentum Cordes [®]	12A075	1
Ichthyol cordes / Noweda	Unguentum Cordes [®]	14A079	1
Ichthyol Cordes/Gehe	Unguentum Cordes [®]	17A005	1
Ichthyol Cordes/Gehe	Unguentum Cordes [®]	17A045	1
Ichthyol Cordes/Gehe	Unguentum Cordes [®]	17A087	1
Ichthyol Cordes/Gehe	Unguentum Cordes [®]	18A110	1
Ichthyol G/Alliance	Unguentum Cordes [®]	18A051	1
Ichthyol G/Alliance	Unguentum Cordes [®]	18A131	1
Ichthyol G/Noweda	Unguentum Cordes [®]	17A053	1
Ichthyol G/Noweda	Unguentum Cordes [®]	17A056	1
Ichthyol GEHE	Unguentum Cordes [®]	17A054	1
Ichthyol Ges. / Gehe	Unguentum Cordes [®]	17A069	1
Ichthyol Gesellsch./Pho...	Unguentum Cordes [®]	15A123	1
Ichthyol Gesellsch./Pho...	Unguentum Cordes [®]	16A183	1
ichthyol gesellschaft	Unguentum Cordes [®]	13A051	1
ichthyol gesellschaft	Unguentum Cordes [®]	13A055	1

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Supplier	Substance	Batch	Spectra
ichthyol gesellschaft	Unguentum Cordes®	14A143	1
ichthyol gesellschaft	Unguentum Cordes®	15A022	1
ichthyol gesellschaft	Unguentum Cordes®	15A076	1
ichthyol gesellschaft	Unguentum Cordes®	15A041	1
ichthyol gesellschaft	Unguentum Cordes®	15A159	1
ichthyol gesellschaft	Unguentum Cordes®	16A011	1
ichthyol gesellschaft	Unguentum Cordes®	16A143	1
ichthyol gesellschaft	Unguentum Cordes®	17A054	1
ichthyol gesellschaft	Unguentum Cordes®	17A069	1
ichthyol gesellschaft	Unguentum Cordes®	17A105	2
ichthyol Gesellschaft	Unguentum Cordes®	17A087	1
ichthyol Gesellschaft	Unguentum Cordes®	18A110	1
Ichthyol gesellschaft	Unguentum Cordes®	16A044	1
Ichthyol gesellschaft	Unguentum Cordes®	17A005	1
Ichthyol Gesellschaft	Unguentum Cordes®	11A234	1
Ichthyol Gesellschaft	Unguentum Cordes®	12A058	1
Ichthyol Gesellschaft	Unguentum Cordes®	12A087	1
Ichthyol Gesellschaft	Unguentum Cordes®	11A202	1
Ichthyol Gesellschaft	Unguentum Cordes®	12A152	1
Ichthyol Gesellschaft	Unguentum Cordes®	12A183	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A055	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A135	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A156	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A159	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A170	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A171	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A172	1
Ichthyol Gesellschaft	Unguentum Cordes®	14A061	2
Ichthyol Gesellschaft	Unguentum Cordes®	14A173	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A011	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A022	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A041	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A020	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A074	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A106	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A107	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A137	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A142	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A124	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A159	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A119	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A099	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A124	3
Ichthyol Gesellschaft	Unguentum Cordes®	16A123	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A139	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A101	3
Ichthyol Gesellschaft	Unguentum Cordes®	16A140	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A102	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A184	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A163	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A051	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A004	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A069	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A106	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A104	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A126	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A127	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A007	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A049	1
Ichthyol Gesellschaft	Unguentum Cordes®	18A049	1

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Supplier	Substance	Batch	Spectra
Ichthyol Gesellschaft	Unguentum Cordes [®]	17A084	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	18A101	1
Ichthyol -Gesellschaft	Unguentum Cordes [®]	12A064	1
Ichthyol -Gesellschaft	Unguentum Cordes [®]	13A091	1
Ichthyol -Gesellschaft	Unguentum Cordes [®]	13A181	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	15A149	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	16A083	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	16A155	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	17A007	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	17A045	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	18A112	1
ICHTHYOL GESELLSCHAFT	Unguentum Cordes [®]	17A005	1
ICHTHYOL GESELLSCHAFT	Unguentum Cordes [®]	17A085	2
Ichthyol Gesellschaft /...	Unguentum Cordes [®]	15A125	1
Ichthyol Gesellschaft /...	Unguentum Cordes [®]	171107UC/17A109	1
ICHTHYOL Gesellschaft /...	Unguentum Cordes [®]	15A020	1
Ichthyol Gesellschaft /...	Unguentum Cordes [®]	17A045	1
ichthyol- gesellschaft ...	Unguentum Cordes [®]	11A202	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	13A166	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A079	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A056	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A060	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A168	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A095	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A063	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A062	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A113	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A116	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A130	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A027	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A038	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A090	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A076	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A092	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A080	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A137	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A140	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A150	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A047	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A121	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A140	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A061	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A099	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16a099	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	17A003	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	17A004	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	17A045	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	17A085	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	18A110	1
Ichthyol- Gesellschaft ...	Unguentum Cordes [®]	14A172	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	11A171	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	11A233	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A041	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A054	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A058	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A077	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A129	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A130	1

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Supplier	Substance	Batch	Spectra
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A156	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A206	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A031	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A034	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A050	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A051	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A054	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A055	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A062	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	16A058	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A184	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	18A112	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	17A003	1
Ichthyol Gesellschaft- ...	Unguentum Cordes®	15A192	1
Ichthyol Gesellschaft- ...	Unguentum Cordes®	16A099	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	15A087	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	14A047	1
ichthyol gesellschaft/ ...	Unguentum Cordes®	17a003	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	13A181	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	15A090	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	16A144	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	16A102	1
Ichthyol Gesellschaft/AHD	Unguentum Cordes®	13A180	1
Ichthyol Gesellschaft/AHD	Unguentum Cordes®	17A054	1
Ichthyol Gesellschaft/G...	Unguentum Cordes®	13A089	1
Ichthyol Gesellschaft/G...	Unguentum Cordes®	16A141	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	13A067	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	16a011	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	16A101	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	17A142	1
Ichthyol Gesellschaft/P...	Unguentum Cordes®	16A184	1
Ichthyol- Gesellschaft/...	Unguentum Cordes®	14A095	1
Ichthyol Gesellschaft/S...	Unguentum Cordes®	15A060	2
Ichthyol Gesellschaft-C...	Unguentum Cordes®	17A084	2
Ichthyol Gesellschaft-C...	Unguentum Cordes®	16A085	1
Ichthyol Gesllschaft	Unguentum Cordes®	15A093	1
Ichthyol Gesllschaft	Unguentum Cordes®	16A045	1
Ichthyol Gesllschaft/Ph...	Unguentum Cordes®	18A048	1
Ichthyol gmbH	Unguentum Cordes®	17a003	1
Ichthyol GmbH	Unguentum Cordes®	13A137	1
Ichthyol GmbH	Unguentum Cordes®	15A041	1
Ichthyol GmbH	Unguentum Cordes®	16A045	1
Ichthyol GmbH/Alliance	Unguentum Cordes®	15A124	1
Ichthyol GmbH/Noweda	Unguentum Cordes®	16A061	2
Ichthyol GmbH/Noweda	Unguentum Cordes®	17A002	1
Ichthyol GmbH/Noweda	Unguentum Cordes®	17A003	1
Ichthyol Pharma	Unguentum Cordes®	15A011	1
Ichthyol Pharma	Unguentum Cordes®	15A042	1
Ichthyol Pharma	Unguentum Cordes®	15A139	1
Ichthyol Pharma	Unguentum Cordes®	15A141	1
Ichthyol Pharma	Unguentum Cordes®	15A155	1
Ichthyol über Phoenix	Unguentum Cordes®	13A166	1
Ichthyol über Phoenix	Unguentum Cordes®	14A062	1
Ichthyol über Phoenix	Unguentum Cordes®	14A114	1
Ichthyol über Phoenix	Unguentum Cordes®	15A042	1
Ichthyol über Phoenix	Unguentum Cordes®	15A092	1
Ichthyol über Phoenix	Unguentum Cordes®	15A142	1
Ichthyol über Phoenix	Unguentum Cordes®	16A044	1
Ichthyol über Phoenix	Unguentum Cordes®	16A058	1

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Supplier	Substance	Batch	Spectra
Ichthyol über Phoenix	Unguentum Cordes [®]	16A119	1
Ichthyol, Noweda	Unguentum Cordes [®]	15A023	1
ichthyol,Anzag	Unguentum Cordes [®]	12A124	1
Ichthyol,Noweda	Unguentum Cordes [®]	12A142	1
Ichthyol,Noweda	Unguentum Cordes [®]	13a009	2
Ichthyol/ AHD	Unguentum Cordes [®]	15A091	1
Ichthyol/ Alliance Heal...	Unguentum Cordes [®]	17A003	1
Ichthyol/ Anzag	Unguentum Cordes [®]	15A139	1
Ichthyol/ Anzag	Unguentum Cordes [®]	15A141	2
Ichthyol/ Anzag	Unguentum Cordes [®]	15A155	1
Ichthyol/ Anzag	Unguentum Cordes [®]	16A046	2
Ichthyol/ Anzag	Unguentum Cordes [®]	16A119	1
Ichthyol/ Anzag	Unguentum Cordes [®]	16A141	1
Ichthyol/ Anzag	Unguentum Cordes [®]	16A155	1
Ichthyol/ Anzag	Unguentum Cordes [®]	17A005	1
Ichthyol/ Cordes	Unguentum Cordes [®]	12A139	1
Ichthyol/ Cordes	Unguentum Cordes [®]	12A205	1
Ichthyol/ E+J	Unguentum Cordes [®]	17A009	1
Ichthyol/ E+J	Unguentum Cordes [®]	17A192	1
Ichthyol/ E+J	Unguentum Cordes [®]	18A005	1
Ichthyol/ Fiebig	Unguentum Cordes [®]	16A124	1
Ichthyol/ Fiebig	Unguentum Cordes [®]	17A1050	1
Ichthyol/ Gehe	Unguentum Cordes [®]	14A056	1
Ichthyol/ Gehe	Unguentum Cordes [®]	15A020	2
Ichthyol/ Gehe	Unguentum Cordes [®]	16A139	1
Ichthyol/ Krieger	Unguentum Cordes [®]	16A044	1
Ichthyol/ Krieger	Unguentum Cordes [®]	16A139	1
Ichthyol/ Now	Unguentum Cordes [®]	16A144	1
Ichthyol/ Noweda	Unguentum Cordes [®]	12A053	1
Ichthyol/ Noweda	Unguentum Cordes [®]	13A034	1
Ichthyol/ Noweda	Unguentum Cordes [®]	12A183	1
Ichthyol/ Noweda	Unguentum Cordes [®]	13A043	1
Ichthyol/ Noweda	Unguentum Cordes [®]	14A099	1
Ichthyol/ Noweda	Unguentum Cordes [®]	14A172	1
Ichthyol/ Noweda	Unguentum Cordes [®]	15A040	1
Ichthyol/ Noweda	Unguentum Cordes [®]	15a021	1
Ichthyol/ Noweda	Unguentum Cordes [®]	15A108	1
Ichthyol/ Noweda	Unguentum Cordes [®]	15A148	1
Ichthyol/ Noweda	Unguentum Cordes [®]	13A067	1
Ichthyol/ Noweda	Unguentum Cordes [®]	16A061	2
Ichthyol/ Noweda	Unguentum Cordes [®]	16A137	1
Ichthyol/ Noweda	Unguentum Cordes [®]	16A099	1
Ichthyol/ Noweda	Unguentum Cordes [®]	16A184	1
Ichthyol/ Noweda	Unguentum Cordes [®]	17A002	2
Ichthyol/ Noweda	Unguentum Cordes [®]	17A0005	1
Ichthyol/ Noweda	Unguentum Cordes [®]	18A002	1
Ichthyol/ Noweda	Unguentum Cordes [®]	18A110	1
Ichthyol/ Phoenix	Unguentum Cordes [®]	16A155	1
Ichthyol/ Phoenix	Unguentum Cordes [®]	17A069	1
Ichthyol/ Phoenix	Unguentum Cordes [®]	17A126	1
Ichthyol/ Phönix	Unguentum Cordes [®]	15A150	4
Ichthyol/ Phönix	Unguentum Cordes [®]	16A101	1
ICHTHYOL/ Phönix	Unguentum Cordes [®]	16A083	1
Ichthyol/ Sanacorp	Unguentum Cordes [®]	16A044	1
ICHTHYOL/11	Unguentum Cordes [®]	13A031	1
Ichthyol/14.01.14/K	Unguentum Cordes [®]	13A026	1
Ichthyol/AHC	Unguentum Cordes [®]	15A089	1
Ichthyol/AHC	Unguentum Cordes [®]	17A084	1
ichthyol/AHD	Unguentum Cordes [®]	13A109	1
Ichthyol/AHD	Unguentum Cordes [®]	12A185	1

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Supplier	Substance	Batch	Spectra
Ichthyol/AHD	Unguentum Cordes®	17A005	2
Ichthyol/AHD	Unguentum Cordes®	61(17A113	1
Ichthyol/AHD	Unguentum Cordes®	17A067	1
Ichthyol/AHD	Unguentum Cordes®	18A049	1
Ichthyol/AHD	Unguentum Cordes®	17A084	1
Ichthyol/AHD	Unguentum Cordes®	18A101	1
Ichthyol/AHP	Unguentum Cordes®	154141	1
Ichthyol/Alliance	Unguentum Cordes®	16A083	2
Ichthyol/Alliance	Unguentum Cordes®	16A176	1
Ichthyol/Alliance	Unguentum Cordes®	17A055	1
Ichthyol/Alliance	Unguentum Cordes®	17A057	1
Ichthyol/Alliance	Unguentum Cordes®	17A126	2
Ichthyol/Alliance	Unguentum Cordes®	18A048	1
Ichthyol/Alliance	Unguentum Cordes®	18A051	1
Ichthyol/Alliance	Unguentum Cordes®	18A216	1
Ichthyol/Alliance	Unguentum Cordes®	18A248	1
Ichthyol/Alliance healt...	Unguentum Cordes®	13A047	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	16A099	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	17A003	2
Ichthyol/Alliance Healt...	Unguentum Cordes®	17A126	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	18A049	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	18A051	2
Ichthyol/Alliance Healt...	Unguentum Cordes®	17A127	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	18A147	2
Ichthyol/AllianceHealth...	Unguentum Cordes®	16A101	1
Ichthyol/AllianceHealth...	Unguentum Cordes®	16A183	1
Ichthyol/AllianceHealth...	Unguentum Cordes®	17A052	1
Ichthyol/AllianceHealth...	Unguentum Cordes®	17A113	1
ichthyol/ANZAG	Unguentum Cordes®	13A047	1
Ichthyol/Anzag	Unguentum Cordes®	12A055	1
Ichthyol/Anzag	Unguentum Cordes®	12A124	1
Ichthyol/Anzag	Unguentum Cordes®	12A130	1
Ichthyol/Anzag	Unguentum Cordes®	11A187	1
Ichthyol/Anzag	Unguentum Cordes®	13A067	1
Ichthyol/Anzag	Unguentum Cordes®	13A049/13A050	1
Ichthyol/Anzag	Unguentum Cordes®	15A020	1
Ichthyol/Anzag	Unguentum Cordes®	1415A-02532	1
Ichthyol/Anzag	Unguentum Cordes®	15A123	1
Ichthyol/Anzag	Unguentum Cordes®	1713M-02532	1
Ichthyol/Anzag	Unguentum Cordes®	15A195	1
Ichthyol/Anzag	Unguentum Cordes®	16A048	1
Ichthyol/Anzag	Unguentum Cordes®	16A083	1
Ichthyol/Anzag	Unguentum Cordes®	16A183	1
Ichthyol/Anzag	Unguentum Cordes®	16A184	2
Ichthyol/Anzag	Unguentum Cordes®	17A003	1
Ichthyol/Anzag	Unguentum Cordes®	18A110	1
Caelo	Unguentum Cordes®	131A043	1
Ichthyol/ebert	Unguentum Cordes®	13A034	1
Ichthyol/Ebert	Unguentum Cordes®	13A159	1
Ichthyol/Ebert	Unguentum Cordes®	14A060	1
Ichthyol/Fiebig	Unguentum Cordes®	13A166	1
Ichthyol/Fiebig	Unguentum Cordes®	14A179	1
Ichthyol/Fiebig	Unguentum Cordes®	15A040	1
Ichthyol/Fiebig	Unguentum Cordes®	15A043	1
Ichthyol/Fiebig	Unguentum Cordes®	15A140	1
Ichthyol/Fiebig	Unguentum Cordes®	16A184	1
Ichthyol/Fiebig	Unguentum Cordes®	17A018	1
Ichthyol/Fiebig	Unguentum Cordes®	17A045	1
ichthyol/gehe	Unguentum Cordes®	17A005	1
ichthyol/Gehe	Unguentum Cordes®	13A109	1

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Supplier	Substance	Batch	Spectra
ichthyol/Gehe	Unguentum Cordes [®]	13A091	1
Ichthyol/gehe	Unguentum Cordes [®]	13A114	1
Ichthyol/gehe	Unguentum Cordes [®]	14A005	1
Ichthyol/gehe	Unguentum Cordes [®]	14A099	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A060	2
Ichthyol/Gehe	Unguentum Cordes [®]	12A079	1
Ichthyol/Gehe	Unguentum Cordes [®]	11A043	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A156	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A190	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A006	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A051	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A106	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A109	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A181	2
Ichthyol/Gehe	Unguentum Cordes [®]	13A178	3
Ichthyol/Gehe	Unguentum Cordes [®]	14A055	2
Ichthyol/Gehe	Unguentum Cordes [®]	13A216	1
Ichthyol/Gehe	Unguentum Cordes [®]	4913Q-02532	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A056	2
Ichthyol/Gehe	Unguentum Cordes [®]	14A062	3
Ichthyol/Gehe	Unguentum Cordes [®]	14A006	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A130	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A027	4
Ichthyol/Gehe	Unguentum Cordes [®]	14A112	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A117	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A040	2
Ichthyol/Gehe	Unguentum Cordes [®]	15A023	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A060	2
Ichthyol/Gehe	Unguentum Cordes [®]	15A043	2
Ichthyol/Gehe	Unguentum Cordes [®]	15A106	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A042	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A139	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A148	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A156	2
Ichthyol/Gehe	Unguentum Cordes [®]	16A083	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A051	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A058	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A123	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A070	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A102	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A183	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A210	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A002	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A164	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A004	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A057	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A045	1
Ichthyol/Gehe	Unguentum Cordes [®]	18A048	1
Ichthyol/Gehe	Unguentum Cordes [®]	18A083	1
Ichthyol/Gehe	Unguentum Cordes [®]	18A105	1
Ichthyol/Gehe	Unguentum Cordes [®]	18A190	1
Ichthyol/GEHE	Unguentum Cordes [®]	13A034	1
Ichthyol/GEHE	Unguentum Cordes [®]	13a138	1
Ichthyol/GEHE	Unguentum Cordes [®]	13A142	1
Ichthyol/GEHE	Unguentum Cordes [®]	14a113	1
Ichthyol/GEHE	Unguentum Cordes [®]	15A061	1
Ichthyol/GEHE	Unguentum Cordes [®]	16A143	1
Ichthyol/GEHE	Unguentum Cordes [®]	17A127	1
ICHTHYOL/GEHE	Unguentum Cordes [®]	15A011	1
Ichthyol/Geilenkirchen	Unguentum Cordes [®]	14A095	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Kehr	Unguentum Cordes®	17A113	1
Ichthyol/Krieger	Unguentum Cordes®	11A146	1
Ichthyol/Krieger	Unguentum Cordes®	11A202	1
Ichthyol/Krieger	Unguentum Cordes®	12A102	1
Ichthyol/Krieger	Unguentum Cordes®	12A184	1
Ichthyol/Krieger	Unguentum Cordes®	17A005	2
Ichthyol/Krieger/23.05...	Unguentum Cordes®	13A209	1
Ichthyol/N	Unguentum Cordes®	16A046	1
Ichthyol/N/14.02.13	Unguentum Cordes®	12A131	1
ichthyol/N/PZN:01062983	Unguentum Cordes®	13A050	1
Ichthyol/Noweda	Unguentum Cordes®	17A002	1
Ichthyol/Noweda	Unguentum Cordes®	12A064	1
Ichthyol/Noweda	Unguentum Cordes®	13A042	1
Ichthyol/Noweda	Unguentum Cordes®	13A106	1
Ichthyol/Noweda	Unguentum Cordes®	13A055	1
Ichthyol/Noweda	Unguentum Cordes®	13A043	1
Ichthyol/Noweda	Unguentum Cordes®	13A090	2
Ichthyol/Noweda	Unguentum Cordes®	13A089	2
Ichthyol/Noweda	Unguentum Cordes®	13A158	1
Ichthyol/Noweda	Unguentum Cordes®	13A172	1
Ichthyol/Noweda	Unguentum Cordes®	14A047	1
Ichthyol/Noweda	Unguentum Cordes®	14A009	1
Ichthyol/Noweda	Unguentum Cordes®	15A023	1
Ichthyol/Noweda	Unguentum Cordes®	15A079	1
Ichthyol/Noweda	Unguentum Cordes®	15A124	1
Ichthyol/Noweda	Unguentum Cordes®	15A123	1
Ichthyol/Noweda	Unguentum Cordes®	16A045	2
Ichthyol/Noweda	Unguentum Cordes®	15A192	2
Ichthyol/Noweda	Unguentum Cordes®	16A085	1
Ichthyol/Noweda	Unguentum Cordes®	16A139	2
Ichthyol/Noweda	Unguentum Cordes®	16A142	2
Ichthyol/Noweda	Unguentum Cordes®	16A101	1
Ichthyol/Noweda	Unguentum Cordes®	16A143	1
Ichthyol/Noweda	Unguentum Cordes®	16A153	2
Ichthyol/Noweda	Unguentum Cordes®	16A176	2
Ichthyol/Noweda	Unguentum Cordes®	16A15501062983	1
Ichthyol/Noweda	Unguentum Cordes®	16A210	1
Ichthyol/Noweda	Unguentum Cordes®	17A050	1
Ichthyol/Noweda	Unguentum Cordes®	17A054	2
Ichthyol/Noweda	Unguentum Cordes®	17A002	1
Ichthyol/Noweda	Unguentum Cordes®	17A164	1
Ichthyol/Noweda	Unguentum Cordes®	17A003	1
Ichthyol/Noweda	Unguentum Cordes®	17A049	1
Ichthyol/Noweda	Unguentum Cordes®	17A057	3
Ichthyol/Noweda	Unguentum Cordes®	17A069	1
Ichthyol/Noweda	Unguentum Cordes®	17A004	1
Ichthyol/Noweda	Unguentum Cordes®	17A105	1
Ichthyol/Noweda	Unguentum Cordes®	17A007	1
Ichthyol/Noweda	Unguentum Cordes®	15A060	1
Ichthyol/Noweda	Unguentum Cordes®	17A112	1
Ichthyol/Noweda	Unguentum Cordes®	17A045	2
Ichthyol/Noweda	Unguentum Cordes®	1A048	1
Ichthyol/Noweda	Unguentum Cordes®	18A052	2
Ichthyol/Noweda	Unguentum Cordes®	17A084	1
Ichthyol/Noweda	Unguentum Cordes®	18A051	1
Ichthyol/Noweda	Unguentum Cordes®	17A0852ma1250g	1
Ichthyol/Noweda	Unguentum Cordes®	18A073	1
Ichthyol/Noweda	Unguentum Cordes®	18A105	1
Ichthyol/Noweda	Unguentum Cordes®	18A049	1
Ichthyol/Noweda	Unguentum Cordes®	18A191	1

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Supplier	Substance	Batch	Spectra
Ichthyol/O.G.	Unguentum Cordes [®]	16A140	1
Ichthyol/O.G.	Unguentum Cordes [®]	16A153	1
Ichthyol/O.G.	Unguentum Cordes [®]	16A210	1
Ichthyol/OG	Unguentum Cordes [®]	17A003	2
Ichthyol/OG	Unguentum Cordes [®]	17A067	1
Ichthyol/Otto	Unguentum Cordes [®]	12A020	1
Ichthyol/Otto	Unguentum Cordes [®]	12A130	2
Ichthyol/Otto	Unguentum Cordes [®]	12A130	1
Ichthyol/Otto	Unguentum Cordes [®]	13A055	1
Ichthyol/Otto	Unguentum Cordes [®]	13A136	1
Ichthyol/Otto	Unguentum Cordes [®]	13A159	1
Ichthyol/Otto	Unguentum Cordes [®]	14A113	1
Ichthyol/Otto	Unguentum Cordes [®]	15A010	1
Ichthyol/Otto	Unguentum Cordes [®]	15A107	1
Ichthyol/P	Unguentum Cordes [®]	17A069	1
Ichthyol/P	Unguentum Cordes [®]	19A001	1
Ichthyol/P	Unguentum Cordes [®]	19A004	1
Ichthyol/Phoenix	Unguentum Cordes [®]	13A049	1
Ichthyol/Phoenix	Unguentum Cordes [®]	13A135	1
Ichthyol/Phoenix	Unguentum Cordes [®]	13A054	1
Ichthyol/Phoenix	Unguentum Cordes [®]	13A166	1
Ichthyol/Phoenix	Unguentum Cordes [®]	14A079	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A022	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A042	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A011	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A090	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A106	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A107	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A141	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A156	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A191	1
Ichthyol/Phoenix	Unguentum Cordes [®]	16A047	1
Ichthyol/Phoenix	Unguentum Cordes [®]	16A047	1
Ichthyol/Phoenix	Unguentum Cordes [®]	16A121	4
Ichthyol/Phoenix	Unguentum Cordes [®]	16A140	3
Ichthyol/Phoenix	Unguentum Cordes [®]	16A102	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A163	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A003	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A101	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A104	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A044	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A105	1
Ichthyol/Phoenix	Unguentum Cordes [®]	18A052	1
Ichthyol/Phoenix	Unguentum Cordes [®]	17A045	1
Ichthyol/Phoenix	Unguentum Cordes [®]	18A215	1
Ichthyol/Phoenix	Unguentum Cordes [®]	18A107	1
Ichthyol/Phoenix WE:02...	Unguentum Cordes [®]	15A137	1
Ichthyol/phönix	Unguentum Cordes [®]	13A034	1
Ichthyol/phönix	Unguentum Cordes [®]	15A020	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A030	1
Ichthyol/Phönix	Unguentum Cordes [®]	12A184	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A010	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A033	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A054	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A140	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A089	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A166	3
Ichthyol/Phönix	Unguentum Cordes [®]	14A057	1
Ichthyol/Phönix	Unguentum Cordes [®]	14A095	1
Ichthyol/Phönix	Unguentum Cordes [®]	14A062	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Unguentum Cordes®	14A172	2
Ichthyol/Phönix	Unguentum Cordes®	14A116	1
Ichthyol/Phönix	Unguentum Cordes®	15A123	1
Ichthyol/Phönix	Unguentum Cordes®	15A142	1
Ichthyol/Phönix	Unguentum Cordes®	15A020	2
Ichthyol/Phönix	Unguentum Cordes®	14A179	1
Ichthyol/Phönix	Unguentum Cordes®	15A023	1
Ichthyol/Phönix	Unguentum Cordes®	15A042	1
Ichthyol/Phönix	Unguentum Cordes®	15A062	1
Ichthyol/Phönix	Unguentum Cordes®	15A092	1
Ichthyol/Phönix	Unguentum Cordes®	15A061	1
Ichthyol/Phönix	Unguentum Cordes®	15A108	3
Ichthyol/Phönix	Unguentum Cordes®	15A073	1
Ichthyol/Phönix	Unguentum Cordes®	15A124	1
Ichthyol/Phönix	Unguentum Cordes®	15A162	1
Ichthyol/Phönix	Unguentum Cordes®	15A150	1
Ichthyol/Phönix	Unguentum Cordes®	15A125	1
Ichthyol/Phönix	Unguentum Cordes®	16A044	1
Ichthyol/Phönix	Unguentum Cordes®	16A048	1
Ichthyol/Phönix	Unguentum Cordes®	16A119	1
Ichthyol/Phönix	Unguentum Cordes®	16A023	1
Ichthyol/Phönix	Unguentum Cordes®	16A141	1
Ichthyol/Phönix	Unguentum Cordes®	16A142	1
Ichthyol/Phönix	Unguentum Cordes®	16A102	1
Ichthyol/Phönix	Unguentum Cordes®	16A101	1
Ichthyol/Phönix	Unguentum Cordes®	16A155	1
Ichthyol/Phönix	Unguentum Cordes®	16A184	1
Ichthyol/Phönix	Unguentum Cordes®	17A002	2
Ichthyol/Phönix	Unguentum Cordes®	17A054	1
Ichthyol/Phönix	Unguentum Cordes®	17A164	2
Ichthyol/Phönix	Unguentum Cordes®	17A049	2
Ichthyol/Phönix	Unguentum Cordes®	17A003	1
Ichthyol/Phönix	Unguentum Cordes®	17A101	1
Ichthyol/Phönix	Unguentum Cordes®	17A056	1
Ichthyol/Phönix	Unguentum Cordes®	17A057	2
Ichthyol/Phönix	Unguentum Cordes®	17A005	1
Ichthyol/Phönix	Unguentum Cordes®	17A0058	1
Ichthyol/Phönix	Unguentum Cordes®	17A069	2
Ichthyol/Phönix	Unguentum Cordes®	17A104	2
Ichthyol/Phönix	Unguentum Cordes®	17A112	2
Ichthyol/Phönix	Unguentum Cordes®	17A007	1
Ichthyol/Phönix	Unguentum Cordes®	17A127	1
Ichthyol/Phönix	Unguentum Cordes®	17A067	3
Ichthyol/Phönix	Unguentum Cordes®	18A049	1
Ichthyol/Phönix	Unguentum Cordes®	17A084	2
Ichthyol/Phönix	Unguentum Cordes®	18A107	1
Ichthyol/Phönix	Unguentum Cordes®	18A13	1
Ichthyol/Phönix	Unguentum Cordes®	18A191	2
ICHTHYOL/Phönix	Unguentum Cordes®	10A070	1
ichthyol/Sanacorp	Unguentum Cordes®	12A183	1
ichthyol/Sanacorp	Unguentum Cordes®	13A090	1
Ichthyol/Sanacorp	Unguentum Cordes®	12A006	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A010	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A048	1
Ichthyol/Sanacorp	Unguentum Cordes®	12A211	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A106	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A108	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A140	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A142	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A214	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A055	2
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A060	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A079	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A171	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A179	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A098	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A037	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A061	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A093	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A106	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A074	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A123	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A149	2
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A164	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A191	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A142	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A026	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A176	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A002	2
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A184	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A005	3
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A106	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A007	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A045	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A104	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	18A107	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	15A041	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	15A156	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	17A003	1
Ichthyol/Spangro	Unguentum Cordes [®]	17A004	1
Spangropharm	Unguentum Cordes [®]	18A105	1
Ichthyol/VDL	Unguentum Cordes [®]	13A136	1
IchthyolAnzag 10.05.2012	Unguentum Cordes [®]	11A234	1
ichthyol-G.	Unguentum Cordes [®]	16A099	1
ICHTHYOL-G./Noweda	Unguentum Cordes [®]	17A098	1
ICHTHYOL-G./Noweda	Unguentum Cordes [®]	17A-126	1
ICHTHYOL-G./Noweda	Unguentum Cordes [®]	18A050	1
Ichthyol-Ges	Unguentum Cordes [®]	12A184	1
ICHTHYOL-GES/GEHE	Unguentum Cordes [®]	11A040	1
ICHTHYOL-GES/GEHE	Unguentum Cordes [®]	10A016	1
ICHTHYOL-GES/GEHE	Unguentum Cordes [®]	12A152	1
Ichthyol-Gesellsch. Cor. . .	Unguentum Cordes [®]	17A045	2
Ichthyol-Gesellsch. Cor. . .	Unguentum Cordes [®]	17A142	1
Ichthyol-Gesellsch. Cor. . .	Unguentum Cordes [®]	18A111	1
ichthyol-gesellschaft	Unguentum Cordes [®]	13A068	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	11A085	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A102	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A130	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A115	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A053	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A205	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A123	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A206	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A034	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A183	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	11A177	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A055	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A142	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A180	3
Ichthyol-Gesellschaft	Unguentum Cordes [®]	14A057	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft	Unguentum Cordes®	14A063	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A079	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A095	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13A172	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A114	2
Ichthyol-Gesellschaft	Unguentum Cordes®	15A089	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A139	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A073	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A153	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A056	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A115	2
Ichthyol-Gesellschaft	Unguentum Cordes®	14A172	2
Ichthyol-Gesellschaft	Unguentum Cordes®	5052015A	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A021	1
Ichthyol-Gesellschaft	Unguentum Cordes®	31072015A	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A062	2
Ichthyol-Gesellschaft	Unguentum Cordes®	15A091	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A090	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A106	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A141	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15a142	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A140	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A124	4
Ichthyol-Gesellschaft	Unguentum Cordes®	15A042	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A148	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A142	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A044	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A156	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A191	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A046	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A048	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A047	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A083	4
Ichthyol-Gesellschaft	Unguentum Cordes®	16a173	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A122	4
Ichthyol-Gesellschaft	Unguentum Cordes®	160726UC	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A058	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A121	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A085	3
Ichthyol-Gesellschaft	Unguentum Cordes®	16A022/170117UC	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A137	3
Ichthyol-Gesellschaft	Unguentum Cordes®	16a139	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A101	4
Ichthyol-Gesellschaft	Unguentum Cordes®	16A140	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A139	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A022	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A124	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A142	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A102	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A144	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A143	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A155	2
Ichthyol-Gesellschaft	Unguentum Cordes®	17A051	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A210	3
Ichthyol-Gesellschaft	Unguentum Cordes®	6071714	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A184	2
Ichthyol-Gesellschaft	Unguentum Cordes®	17A054	3
Ichthyol-Gesellschaft	Unguentum Cordes®	17A070	2
Ichthyol-Gesellschaft	Unguentum Cordes®	17A164	2

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A003	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A055	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	23121702	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A004	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A049	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A056	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A057	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A069	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A005	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A105	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A126	3
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A112	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12051805	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A113	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A045	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A007	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A106	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A127	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	21071806	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	23071802	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A049	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A084	3
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13101802	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A006	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A067	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A070	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	181221-E02	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18a067	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A105	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A110	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	18A111	1
ICHTHYOL-Gesellschaft	Unguentum Cordes [®]	12A184	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	12A155	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	11A202	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	12A184	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	13A043	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	14A179	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A043	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A091	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A042	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A156	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A191	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16a048	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A12	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16A123	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16A141	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16a141	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16A102	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A052	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A053	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A002	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A163	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A049	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A127	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	18A166	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	19A004	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	10A026	1
Ichthyol-Gesellschaft /...	Unguentum Cordes [®]	17A007	1
Ichthyol-Gesellschaft /...	Unguentum Cordes [®]	17A087	1
Ichthyol-Gesellschaft / E	Unguentum Cordes [®]	12A152	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft / G	Unguentum Cordes®	12A064	1
Ichthyol-Gesellschaft / G	Unguentum Cordes®	12A123	1
Ichthyol-Gesellschaft / G	Unguentum Cordes®	12A118	2
Ichthyol-Gesellschaft / G	Unguentum Cordes®	13A042	1
Ichthyolgesellschaft / ...	Unguentum Cordes®	17A019	1
Ichthyol-Gesellschaft / K	Unguentum Cordes®	11A202	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	15A061	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	15A020	2
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	16A085	2
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	18A101	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	15A023	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	15A124	1
Ichthyol-Gesellschaft / ...	Unguentum Cordes®	17A004	2
IchthyolGesellschaft Co...	Unguentum Cordes®	12A152	1
IchthyolGesellschaft Co...	Unguentum Cordes®	12A183	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A115	3
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A184	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A183	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A004	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A061	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A123	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A124	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A083	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A143	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A102	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A155	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A210	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A101	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A005	3
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A104	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A113	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A007	3
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A045	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A048	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A067	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A084	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A087	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A110	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A132	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A112	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A232	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A073	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A108	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A173	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A121	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A124	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A143	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	13A089	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A123	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A124	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A083	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A004	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A101	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A084-U20181115Ma4	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A184	1
ichthyol-Gesellschaft C...	Unguentum Cordes®	17A004	1
ichthyol-Gesellschaft C...	Unguentum Cordes®	17A045	1
ichthyol-Gesellschaft C...	Unguentum Cordes®	18A110	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A085	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	13A138	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	13A180	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	14A063	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	15A043	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A047	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A046	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A216	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	18A005	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A202	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	11A187	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	12A185	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A176	2
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	15A062	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	15A023	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A099	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A007	2
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A085	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A087	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A083	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A003	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	15A060	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	13A172	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes [®]	11A162	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes [®]	11A122	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes [®]	13A034	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes [®]	13A050	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	17A049	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	14A005	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	16A013	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	16A143	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	17A106	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	16A061	2
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	18A131	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	16A141	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	17A056	1
Ichthyol-Gesellschaft/AHD	Unguentum Cordes [®]	17A112	1
Ichthyol-Gesellschaft/AHD	Unguentum Cordes [®]	17A142	1
Ichthyol-Gesellschaft/A...	Unguentum Cordes [®]	15A139	1
Ichthyol-Gesellschaft/A...	Unguentum Cordes [®]	17A049	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	15A020	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	15A073	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	15A125	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	16A085	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	17A007	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes [®]	18A110	1
Ichthyol-Gesellschaft/K...	Unguentum Cordes [®]	16A101	1
Ichthyol-Gesellschaft/K...	Unguentum Cordes [®]	16A184	1
Ichthyol-Gesellschaft/N...	Unguentum Cordes [®]	17A051	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	13A053	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	14A114	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	16A083	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	17A007	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	18A048	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes [®]	16A173	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes [®]	16A140	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	14A095	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	14A179	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	17A049	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	17A004	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft/P...	Unguentum Cordes®	17A084	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	17A126	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	15A148	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A121	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A144	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A210	2
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	18A048	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	18A130	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	18A166	1
Ichthyol-Gesellschaft/S...	Unguentum Cordes®	17A007	1
Ichthyol-Gesellschaft/S...	Unguentum Cordes®	18A190	1
Ichthyol-Gesellschaft/S...	Unguentum Cordes®	19A004	1
Ichthyol-Gesellschaft/V...	Unguentum Cordes®	12A183	1
Ichthyol-Gesellschaft/GEHE	Unguentum Cordes®	17A007	1
Ichthyol-Gesellschaft/Ph...	Unguentum Cordes®	18A110	1
Ichthyol-Noweda	Unguentum Cordes®	17A105	1
IchthyolSanacorp	Unguentum Cordes®	13A025	1
IchthyolSanacorp	Unguentum Cordes®	13A110	1
IchthyolSanacorp	Unguentum Cordes®	15A076	1
Ichtiol-Gesellschaft,Cor...	Unguentum Cordes®	16A144	1
Ichtiol-Gesellschaft,Cor...	Unguentum Cordes®	17A126	1
Ichtyhol Gesellschaft	Unguentum Cordes®	16a045	1
Ichtyhol Gesellschaft	Unguentum Cordes®	16A140	1
Ichtyhol Gesellschaft	Unguentum Cordes®	16A142	1
Ichtyhol Gesellschaft	Unguentum Cordes®	16A183	1
Ichtyhol Gesellschaft//...	Unguentum Cordes®	17A052	1
ichtyhol gmbh/Alliance ...	Unguentum Cordes®	16A183	1
ichtyol	Unguentum Cordes®	15a195	1
ichtyol	Unguentum Cordes®	16A058	1
Ichtyol	Unguentum Cordes®	12A157	1
Ichtyol	Unguentum Cordes®	13A067	1
Ichtyol	Unguentum Cordes®	11A038	1
Ichtyol	Unguentum Cordes®	13A043	2
Ichtyol	Unguentum Cordes®	12A106	1
Ichtyol	Unguentum Cordes®	13A054	1
Ichtyol	Unguentum Cordes®	13A137	1
Ichtyol	Unguentum Cordes®	13A111	1
Ichtyol	Unguentum Cordes®	300316-250-1314	1
Ichtyol	Unguentum Cordes®	15A125	1
Ichtyol	Unguentum Cordes®	15A192	1
Ichtyol	Unguentum Cordes®	16A184	1
Ichtyol	Unguentum Cordes®	16A181	1
Ichtyol	Unguentum Cordes®	17A003	1
Ichtyol - Gehe	Unguentum Cordes®	14A1115	1
Ichtyol - Gesellschaft	Unguentum Cordes®	15A108	1
Ichtyol / Alliance Heal...	Unguentum Cordes®	17A104	1
Ichtyol / Alliance Heal...	Unguentum Cordes®	17A098	1
Ichtyol / Noweda	Unguentum Cordes®	17A084	1
Ichtyol 004	Unguentum Cordes®	12A059	1
Ichtyol Gesells./AHD	Unguentum Cordes®	17A005	1
Ichtyol Gesellschaft	Unguentum Cordes®	15A027	1
Ichtyol Gesellschaft	Unguentum Cordes®	15A060	1
Ichtyol Gesellschaft	Unguentum Cordes®	16A099	1
Ichtyol Gesellschaft	Unguentum Cordes®	17A002	1
Ichtyol Gesellschaft	Unguentum Cordes®	17A007	1
Ichtyol Gesellschaft Co...	Unguentum Cordes®	16A085	1
Ichtyol Gesellschaft Co...	Unguentum Cordes®	16A1010	1
Ichtyol Gesellschaft Co...	Unguentum Cordes®	17A084	2
Ichtyol gesellschaft GmbH	Unguentum Cordes®	16A085	1
Ichtyol Gesellschaft	Unguentum Cordes®	16A048	1

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Supplier	Substance	Batch	Spectra
Ichtyol Gesellschaft	Unguentum Cordes [®]	17A098	1
Ichtyol, Noweda	Unguentum Cordes [®]	12A147	1
Ichtyol,Noweda	Unguentum Cordes [®]	12A139	1
Ichtyol,Noweda	Unguentum Cordes [®]	13A047	1
Ichtyol/ Phönix	Unguentum Cordes [®]	13A135	1
Ichtyol/AHD	Unguentum Cordes [®]	16A184	1
Ichtyol/Anzag	Unguentum Cordes [®]	15A074	1
Ichtyol/Gehe	Unguentum Cordes [®]	15A78	1
Ichtyol/Gehe	Unguentum Cordes [®]	15A150	2
Ichtyol/Gehe	Unguentum Cordes [®]	18A003	1
Ichtyol/Kehr	Unguentum Cordes [®]	16A101	1
Ichtyol/Noweda	Unguentum Cordes [®]	13A042	1
Ichtyol/Noweda	Unguentum Cordes [®]	13A053	1
Ichtyol/Noweda	Unguentum Cordes [®]	15A124	1
Ichtyol/Noweda	Unguentum Cordes [®]	16A119	1
Ichtyol/Noweda	Unguentum Cordes [®]	16A099	1
Ichtyol/Noweda	Unguentum Cordes [®]	16A176	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A049	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A004	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A005	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A007	1
Ichtyol/Noweda 31.01.2017	Unguentum Cordes [®]	16A140	1
Ichtyol/Phoenix	Unguentum Cordes [®]	15A137	1
Ichtyol/Phoenix	Unguentum Cordes [®]	17A105	1
Ichtyol/Phoenix	Unguentum Cordes [®]	17A045	1
Ichtyol/Phönix	Unguentum Cordes [®]	4113Q-02532	1
Ichtyol/Phönix	Unguentum Cordes [®]	15A029	1
Ichtyol/Phönix	Unguentum Cordes [®]	15A140	1
Ichtyol/Phönix	Unguentum Cordes [®]	16A048	1
Ichtyol/Phönix	Unguentum Cordes [®]	17A084	1
Ichtyol/Phönix	Unguentum Cordes [®]	18A191	1
Ichtyol/sana EK: EUR 13,5...	Unguentum Cordes [®]	18A110	1
Ichtyol/Sanacorp	Unguentum Cordes [®]	14A097	1
Ichtyolan/Noweda	Unguentum Cordes [®]	16A139	1
Ichtyol-Ges HH/Kehr	Unguentum Cordes [®]	17A007	1
Ichtyol-Ges HH/Sanacorp	Unguentum Cordes [®]	17A142	1
ICHTYOL-Gesellsch./Sana...	Unguentum Cordes [®]	17A004	1
ichtyol-gesellschaft	Unguentum Cordes [®]	15A191	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	12A184	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	13A053	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	13A178	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	14A079	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	15A020	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	15A061	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	15A137	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	15A107	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	15A191	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	16A099	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	17A055	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	17A049	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	18A215	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	17A005	1
Ichtyol-Gesellschaft / G	Unguentum Cordes [®]	18A112	1
Ichtyol-Gesellschaft / Ph	Unguentum Cordes [®]	17A105	1
Ichtyol-Gesellschaft / Ph	Unguentum Cordes [®]	18A110	1
Ichtyol-Gesellschaft / Ph	Unguentum Cordes [®]	18A166	1
Ichtyol-Gesellschaft / ...	Unguentum Cordes [®]	17A112	2
Ichtyol-Gesellschaft / ...	Unguentum Cordes [®]	17A126	1
Ichtyol-Gesellschaft / ...	Unguentum Cordes [®]	18A191	1
Ichtyol-Gesellschaft Co...	Unguentum Cordes [®]	16A085	1

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Supplier	Substance	Batch	Spectra
ICHTYOL-GESELLSCHAFT Co...	Unguentum Cordes®	16A085	1
Ichtyol-Gesellschaft/ P...	Unguentum Cordes®	17A112	1
Ichtyol-Gesellschaft/Ph...	Unguentum Cordes®	12A058	1
Ichtyol-Gesellschaft/Ph...	Unguentum Cordes®	14A095	1
InfectoPharm	Unguentum Cordes®	16A085	1
Jenne	Unguentum Cordes®	13A049	1
Jenne	Unguentum Cordes®	16A183	1
Kehr	Unguentum Cordes®	17A002	1
Kehr	Unguentum Cordes®	17A003	1
Kehr	Unguentum Cordes®	17A004	1
Kehr	Unguentum Cordes®	17A007	1
Kehr / Ichthyol-Geselsc...	Unguentum Cordes®	17A126	1
Kehr/Ichthyol	Unguentum Cordes®	17A005	1
Kehr/Ichthyol	Unguentum Cordes®	17A087	1
Kehr/Ichthyol	Unguentum Cordes®	17A142	1
Krieger	Unguentum Cordes®	18A004	1
Krieger/ Ichthyol	Unguentum Cordes®	16A153	1
Krieger/ Ichthyol	Unguentum Cordes®	18A050	1
Caelo	Unguentum Cordes®	16A184	6
L10	Unguentum Cordes®	17A087	2
L10/Cordes	Unguentum Cordes®	18A112	1
L12	Unguentum Cordes®	16A101	1
L12	Unguentum Cordes®	17A002	1
L12	Unguentum Cordes®	17A004	3
L12	Unguentum Cordes®	17A045	2
L12/Ichthyol	Unguentum Cordes®	16A085	2
L12/Ichthyol- Gesellsch...	Unguentum Cordes®	17A067	1
Nachprüfung	Unguentum Cordes®	12a124	1
Noweda	Unguentum Cordes®	11a199	1
Noweda	Unguentum Cordes®	12A123	1
Noweda	Unguentum Cordes®	12A184	1
Noweda	Unguentum Cordes®	12A183	2
Noweda	Unguentum Cordes®	13A091	1
Noweda	Unguentum Cordes®	15A062	1
Noweda	Unguentum Cordes®	15A123	1
Noweda	Unguentum Cordes®	15A060	1
Noweda	Unguentum Cordes®	15A191	1
Noweda	Unguentum Cordes®	15A192	1
Noweda	Unguentum Cordes®	16A101	1
Noweda	Unguentum Cordes®	16A085	1
Noweda	Unguentum Cordes®	16A153	1
Noweda	Unguentum Cordes®	17A101	1
Noweda	Unguentum Cordes®	17A005	1
Noweda	Unguentum Cordes®	17A104	1
Noweda	Unguentum Cordes®	16A047	1
Noweda / Ichthyol	Unguentum Cordes®	16A101	1
Noweda / Ichthyol	Unguentum Cordes®	16A102	1
Noweda / Ichthyol Gesel...	Unguentum Cordes®	15A060	1
Noweda / Ichthyol-Gesel...	Unguentum Cordes®	17A004	1
Noweda / Ichthyol-Gesel...	Unguentum Cordes®	17A007	1
Noweda/ Ichtyol	Unguentum Cordes®	12A124	1
Noweda/Ichthyol	Unguentum Cordes®	13A106	1
Noweda/Ichthyol	Unguentum Cordes®	14A113	1
Noweda/Ichthyol	Unguentum Cordes®	15A020	2
Noweda/Ichthyol	Unguentum Cordes®	14A173	1
Noweda/Ichthyol	Unguentum Cordes®	15A125	3
Noweda/Ichthyol	Unguentum Cordes®	15A191	1
Noweda/Ichthyol	Unguentum Cordes®	15A123	1
Noweda/Ichthyol	Unguentum Cordes®	16A099	1
Noweda/Ichthyol	Unguentum Cordes®	16A102	1

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Supplier	Substance	Batch	Spectra
Noweda/Ichthyol	Unguentum Cordes [®]	17A127	1
Noweda/Ichthyol-Gesells. ...	Unguentum Cordes [®]	15A123	1
noweda/Ichthyol	Unguentum Cordes [®]	13A043	1
Noweda/Ichthyol	Unguentum Cordes [®]	16A184	1
Noweda-Ichthyol	Unguentum Cordes [®]	17A054	1
Occasio/ Ichthyol	Unguentum Cordes [®]	18A105	1
Phoenix	Unguentum Cordes [®]	12A056	1
Phoenix	Unguentum Cordes [®]	12A087	1
Phoenix	Unguentum Cordes [®]	15A027	1
Phoenix	Unguentum Cordes [®]	15ao93	1
Phoenix	Unguentum Cordes [®]	15A149	1
Phoenix	Unguentum Cordes [®]	16A046	1
Phoenix	Unguentum Cordes [®]	16A045	1
Phoenix	Unguentum Cordes [®]	16A121	1
Phoenix	Unguentum Cordes [®]	16A102	1
Phoenix	Unguentum Cordes [®]	17A218	1
Phoenix	Unguentum Cordes [®]	17A104	1
Phoenix	Unguentum Cordes [®]	17A112	1
Phoenix	Unguentum Cordes [®]	17A084	1
phoenix Ichthyol	Unguentum Cordes [®]	15A106	1
phoenix / ichthyol	Unguentum Cordes [®]	15A108	1
Phoenix 26.11.12	Unguentum Cordes [®]	12A185	1
Fagron	Unguentum Cordes [®]	1744	1
Phoenix/Cealo	Unguentum Cordes [®]	17A007	1
Phoenix/Ichthyol	Unguentum Cordes [®]	13A055	1
Phoenix/Ichthyol	Unguentum Cordes [®]	13A140	1
Phoenix/Ichthyol	Unguentum Cordes [®]	17A055	1
Phoenix/Ichthyol-Gesell. ...	Unguentum Cordes [®]	17A055	1
PhoenixWE:7.02.2017 E...	Unguentum Cordes [®]	16A141	1
phönix	Unguentum Cordes [®]	13A051	1
phönix	Unguentum Cordes [®]	14A116	1
Phönix	Unguentum Cordes [®]	12A131	1
Phönix	Unguentum Cordes [®]	12A129	1
Phönix	Unguentum Cordes [®]	13A034	1
Phönix	Unguentum Cordes [®]	12A049	1
Phönix	Unguentum Cordes [®]	16A048	1
Phönix	Unguentum Cordes [®]	16A141	1
Phönix	Unguentum Cordes [®]	17A101	1
Phönix	Unguentum Cordes [®]	17A069	1
Phönix	Unguentum Cordes [®]	17A127	1
Phönix	Unguentum Cordes [®]	18A067	1
Phönix	Unguentum Cordes [®]	17A084	1
Phönix	Unguentum Cordes [®]	18A131	1
PHÖNIX	Unguentum Cordes [®]	16A124	1
PHÖNIX	Unguentum Cordes [®]	17A056	1
PHÖNIX	Unguentum Cordes [®]	17A098	1
PHÖNIX	Unguentum Cordes [®]	17A105	1
Phönix / Ichthyol	Unguentum Cordes [®]	16A176	1
Phönix Gotha	Unguentum Cordes [®]	13A032	1
Phönix W.E:09.03.18 E...	Unguentum Cordes [®]	17A098	1
Phönix/Cordes	Unguentum Cordes [®]	17A104	1
Fagron	Unguentum Cordes [®]	15A020	1
Fagron	Unguentum Cordes [®]	14A079	1
Phönix/Ichthyol	Unguentum Cordes [®]	12A139	1
Phönix/Ichthyol	Unguentum Cordes [®]	15A123	1
Phönix/Ichthyol	Unguentum Cordes [®]	17A069	1
Phönix/Ichthyol	Unguentum Cordes [®]	17A005	1
Phönix/Ichthyol	Unguentum Cordes [®]	18A050	1
Phönix/Ichthyol	Unguentum Cordes [®]	17A084	1

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Supplier	Substance	Batch	Spectra
sanacorp	Unguentum Cordes®	14A060	1
Sanacorp	Unguentum Cordes®	12A129	1
Sanacorp	Unguentum Cordes®	12A160	1
Sanacorp	Unguentum Cordes®	12a184	1
Sanacorp	Unguentum Cordes®	2/AKD2	1
Sanacorp	Unguentum Cordes®	13A042	1
Sanacorp	Unguentum Cordes®	13A068	1
Sanacorp	Unguentum Cordes®	13A136	1
Sanacorp	Unguentum Cordes®	103/AKD1	1
Sanacorp	Unguentum Cordes®	13A159	1
Sanacorp	Unguentum Cordes®	15A043	1
Sanacorp	Unguentum Cordes®	14A172	1
Sanacorp	Unguentum Cordes®	15A137	1
Sanacorp	Unguentum Cordes®	16A048	2
Sanacorp	Unguentum Cordes®	16A085	1
Sanacorp	Unguentum Cordes®	16a184	1
Sanacorp	Unguentum Cordes®	17A045	1
SANACORP	Unguentum Cordes®	18A190	1
SANACORP	Unguentum Cordes®	19A004	1
Caelo	Unguentum Cordes®	13A055	1
Caelo	Unguentum Cordes®	13A159	1
Caelo	Unguentum Cordes®	14A055	2
Caelo	Unguentum Cordes®	15A155	1
Caelo	Unguentum Cordes®	16A153	3
Sanacorp / Ichthyol	Unguentum Cordes®	12A206	1
Sanacorp, 15.08.2016, 3...	Unguentum Cordes®	16A048	1
Sanacorp/ Sanova	Unguentum Cordes®	11A187	1
Caelo	Unguentum Cordes®	12A060	1
Caelo	Unguentum Cordes®	12A130	1
sanacorp/ichthyol	Unguentum Cordes®	14A061	2
sanacorp/ichthyol	Unguentum Cordes®	14A117	1
sanacorp/ichthyol	Unguentum Cordes®	15A022	1
sanacorp/ichthyol	Unguentum Cordes®	15A042	1
sanacorp/ichthyol	Unguentum Cordes®	15A044	1
sanacorp/ichthyol	Unguentum Cordes®	15A108	1
sanacorp/ichthyol	Unguentum Cordes®	15A156	1
sanacorp/ichthyol	Unguentum Cordes®	16A121	1
sanacorp/ichthyol	Unguentum Cordes®	16A139	2
sanacorp/ichthyol	Unguentum Cordes®	16A142	1
Sanacorp/Ichthyol-Gesel...	Unguentum Cordes®	15A062	1
Sanova	Unguentum Cordes®	11A040	1
Sanova	Unguentum Cordes®	12A130	1
SANOVA	Unguentum Cordes®	15A044	1
SANOVA	Unguentum Cordes®	16A045	1
Sanova Pharma	Unguentum Cordes®	13A166	1
Sanova Pharma/Gehe	Unguentum Cordes®	16A102	2
Bombastus	Unguentum Cordes®	13A042	1
Stumpf/Ichthyol	Unguentum Cordes®	12A115	1
Stumpf/Ichthyol	Unguentum Cordes®	12A190	1
Stumpf/Ichthyol-Gesells...	Unguentum Cordes®	15A089	1
Stumpf/Ichtyol	Unguentum Cordes®	13A051	1
Stumpf/Ichtyol	Unguentum Cordes®	13A142	1
Stumpf/Ichtyol	Unguentum Cordes®	13A166	1
Stumpf/Ichtyol	Unguentum Cordes®	14A057	1
Stumpf/Ichtyol	Unguentum Cordes®	14A063	1
VDL	Unguentum Cordes®	15A140	1
ychthyol	Unguentum Cordes®	16A184	1
Ychtyol/Phönix	Unguentum Cordes®	16A045	1
A.H. 05.06.13 ek: 3,33EUR	Wool alcohol ointment DAB	13067101	1
AHD	Wool alcohol ointment DAB	72915810	1

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Supplier	Substance	Batch	Spectra
AHD	Wool alcohol ointment DAB	74017010	2
AHD	Wool alcohol ointment DAB	305879	1
AHD	Wool alcohol ointment DAB	81939510	1
AHD	Wool alcohol ointment DAB	84132310	1
AHD	Wool alcohol ointment DAB	18005545	1
AHD 06.02.17 EK.9,28	Wool alcohol ointment DAB	16198401	1
Caelo	Wool alcohol ointment DAB	16066401	2
AHD, 05.04.2013	Wool alcohol ointment DAB	30831410	1
ALH	Wool alcohol ointment DAB	15407001	1
Allianc. Health. /Beier...	Wool alcohol ointment DAB	62031710	1
Alliance Health 30.10.2...	Wool alcohol ointment DAB	14H19-T02-011354	1
Alliance Healthcare	Wool alcohol ointment DAB	13114001	1
alliance Healthcare/Bei...	Wool alcohol ointment DAB	30851510	1
Alliance Healthcare/Bei...	Wool alcohol ointment DAB	50454710	1
Alliance Healthcare/Bei...	Wool alcohol ointment DAB	84222410	1
Anzag	Wool alcohol ointment DAB	11335101	1
Anzag	Wool alcohol ointment DAB	22412510	2
Anzag	Wool alcohol ointment DAB	24254010	1
Anzag	Wool alcohol ointment DAB	3312E-01370	1
Anzag	Wool alcohol ointment DAB	51015610	1
Anzag	Wool alcohol ointment DAB	16007201	1
Anzag	Wool alcohol ointment DAB	16198502	1
Anzag	Wool alcohol ointment DAB	16331702	1
Anzag 25.02.2014 Ek 8...	Wool alcohol ointment DAB	13255001	1
Anzag Ek: 3,24EUR 11.09.12	Wool alcohol ointment DAB	12076601	1
Anzag/	Wool alcohol ointment DAB	23223410	1
Anzag/Beiersdorf	Wool alcohol ointment DAB	40930610	1
Anzag/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Caelo	Wool alcohol ointment DAB	12340001	4
Caelo	Wool alcohol ointment DAB	17206001	16
Apo Ident/ Noweda	Wool alcohol ointment DAB	83241810	1
apomix	Wool alcohol ointment DAB	1A180215	1
Apomix	Wool alcohol ointment DAB	1A170214	1
Apomix	Wool alcohol ointment DAB	285950	1
athensteadt/Noweda	Wool alcohol ointment DAB	180041	1
Baiersdorf	Wool alcohol ointment DAB	4833010	1
Baiersdorf AG	Wool alcohol ointment DAB	40726610	1
Bären Apotheke	Wool alcohol ointment DAB	16198502	1
Bayersdorf	Wool alcohol ointment DAB	54137710	1
Bayersdorf	Wool alcohol ointment DAB	61149910	1
BDF	Wool alcohol ointment DAB	33343310	1
BDF	Wool alcohol ointment DAB	43142910	1
BDF Beiersdorf AG	Wool alcohol ointment DAB	31322010	1
BDF Phoenix	Wool alcohol ointment DAB	22422510	1
BDF/ Noweda	Wool alcohol ointment DAB	33343310	1
bei	Wool alcohol ointment DAB	73035910	1
Beidersdorf/Kehr	Wool alcohol ointment DAB	72915810	1
Beieersdorf/ Noweda	Wool alcohol ointment DAB	61841610	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	60839310	1
beiersdorf	Wool alcohol ointment DAB	34424610	1
beiersdorf	Wool alcohol ointment DAB	40726610	1
beiersdorf	Wool alcohol ointment DAB	50815310	1
beiersdorf	Wool alcohol ointment DAB	64833610	1
beiersdorf	Wool alcohol ointment DAB	71274810	1
beiersdorf	Wool alcohol ointment DAB	74017010	1
beiersdorf	Wool alcohol ointment DAB	83031710	1
Beiersdorf	Wool alcohol ointment DAB	14939610	1
Beiersdorf	Wool alcohol ointment DAB	14349010	1
Beiersdorf	Wool alcohol ointment DAB	21241410	1
Beiersdorf	Wool alcohol ointment DAB	23223410	4

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Supplier	Substance	Batch	Spectra
Beiersdorf	Wool alcohol ointment DAB	23753710	1
Beiersdorf	Wool alcohol ointment DAB	20271211-3	1
Beiersdorf	Wool alcohol ointment DAB	21431810	1
Beiersdorf	Wool alcohol ointment DAB	24233910	2
Beiersdorf	Wool alcohol ointment DAB	33111110	1
Beiersdorf	Wool alcohol ointment DAB	24113810	1
Beiersdorf	Wool alcohol ointment DAB	30831410	1
Beiersdorf	Wool alcohol ointment DAB	24635410	3
Beiersdorf	Wool alcohol ointment DAB	24655410	1
Beiersdorf	Wool alcohol ointment DAB	31322010	1
Beiersdorf	Wool alcohol ointment DAB	30851510	1
Beiersdorf	Wool alcohol ointment DAB	11235310	1
Beiersdorf	Wool alcohol ointment DAB	33323210	1
Beiersdorf	Wool alcohol ointment DAB	33343310	3
Beiersdorf	Wool alcohol ointment DAB	30821610	1
Beiersdorf	Wool alcohol ointment DAB	33723610	2
Beiersdorf	Wool alcohol ointment DAB	31241810	2
Beiersdorf	Wool alcohol ointment DAB	31121710	1
Beiersdorf	Wool alcohol ointment DAB	11856010	1
Beiersdorf	Wool alcohol ointment DAB	34224110	1
Beiersdorf	Wool alcohol ointment DAB	14021301	1
Beiersdorf	Wool alcohol ointment DAB	34554710	5
Beiersdorf	Wool alcohol ointment DAB	34414610	2
Beiersdorf	Wool alcohol ointment DAB	40956810	2
Beiersdorf	Wool alcohol ointment DAB	41026910	2
Beiersdorf	Wool alcohol ointment DAB	41047010	2
Beiersdorf	Wool alcohol ointment DAB	41839810	2
Beiersdorf	Wool alcohol ointment DAB	41940610	1
Beiersdorf	Wool alcohol ointment DAB	41910710	1
Beiersdorf	Wool alcohol ointment DAB	42541910	1
Beiersdorf	Wool alcohol ointment DAB	40726610	1
Beiersdorf	Wool alcohol ointment DAB	42531910	1
Beiersdorf	Wool alcohol ointment DAB	45054410	1
Beiersdorf	Wool alcohol ointment DAB	50414810	1
Beiersdorf	Wool alcohol ointment DAB	50955510	1
Beiersdorf	Wool alcohol ointment DAB	50845210	1
Beiersdorf	Wool alcohol ointment DAB	60919510	2
Beiersdorf	Wool alcohol ointment DAB	62922210	1
Beiersdorf	Wool alcohol ointment DAB	64342810	3
Beiersdorf	Wool alcohol ointment DAB	50324610	2
Beiersdorf	Wool alcohol ointment DAB	50454710	2
Beiersdorf	Wool alcohol ointment DAB	50444710	4
Beiersdorf	Wool alcohol ointment DAB	50855310	1
Beiersdorf	Wool alcohol ointment DAB	50925410	9
Beiersdorf	Wool alcohol ointment DAB	50815310	1
Beiersdorf	Wool alcohol ointment DAB	50935410	3
Beiersdorf	Wool alcohol ointment DAB	51946010	1
Beiersdorf	Wool alcohol ointment DAB	51015610	1
Beiersdorf	Wool alcohol ointment DAB	51125710	2
Beiersdorf	Wool alcohol ointment DAB	53437010	2
Beiersdorf	Wool alcohol ointment DAB	54127710	2
Beiersdorf	Wool alcohol ointment DAB	60419110	3
Beiersdorf	Wool alcohol ointment DAB	54157810	2
Beiersdorf	Wool alcohol ointment DAB	60539210	3
Beiersdorf	Wool alcohol ointment DAB	54147810	2
Beiersdorf	Wool alcohol ointment DAB	61079710	1
Beiersdorf	Wool alcohol ointment DAB	62031710	2
Beiersdorf	Wool alcohol ointment DAB	62041710	1
Beiersdorf	Wool alcohol ointment DAB	62932210	1
Beiersdorf	Wool alcohol ointment DAB	63052310	3

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Supplier	Substance	Batch	Spectra
Beiersdorf	Wool alcohol ointment DAB	64332810	4
Beiersdorf	Wool alcohol ointment DAB	64713510	4
Beiersdorf	Wool alcohol ointment DAB	64833610	2
Beiersdorf	Wool alcohol ointment DAB	70314010	1
Beiersdorf	Wool alcohol ointment DAB	51115710	1
Beiersdorf	Wool alcohol ointment DAB	648336105291	1
Beiersdorf	Wool alcohol ointment DAB	71114510	5
Beiersdorf	Wool alcohol ointment DAB	71274810	5
Beiersdorf	Wool alcohol ointment DAB	73035910	1
Beiersdorf	Wool alcohol ointment DAB	72915810	1
Beiersdorf	Wool alcohol ointment DAB	74017010	3
Beiersdorf	Wool alcohol ointment DAB	730035910	1
Beiersdorf	Wool alcohol ointment DAB	74747510	3
Beiersdorf	Wool alcohol ointment DAB	747577510	1
Beiersdorf	Wool alcohol ointment DAB	74757510	1
Beiersdorf	Wool alcohol ointment DAB	81819410	3
Beiersdorf	Wool alcohol ointment DAB	81328810	2
Beiersdorf	Wool alcohol ointment DAB	82721410	3
Beiersdorf	Wool alcohol ointment DAB	82541010	1
Beiersdorf	Wool alcohol ointment DAB	82350810	1
Beiersdorf	Wool alcohol ointment DAB	83742110	4
Beiersdorf	Wool alcohol ointment DAB	83241810	1
Beiersdorf	Wool alcohol ointment DAB	84222410	1
Beiersdorf	Wool alcohol ointment DAB	84232410	2
Beiersdorf	Wool alcohol ointment DAB	93436310	1
Beiersdorf - Noweda	Wool alcohol ointment DAB	54157810	1
Beiersdorf (DAB 2010)	Wool alcohol ointment DAB	13658410	1
Beiersdorf (DAB 2010)	Wool alcohol ointment DAB	22412510	1
Beiersdorf / AEP	Wool alcohol ointment DAB	81819410	1
Beiersdorf / AHD	Wool alcohol ointment DAB	71214810	1
Beiersdorf / Alliance H...	Wool alcohol ointment DAB	83031710	1
Beiersdorf / E	Wool alcohol ointment DAB	41940610	1
Beiersdorf / Fiebig	Wool alcohol ointment DAB	50815310	1
Beiersdorf / G	Wool alcohol ointment DAB	71114510	1
Beiersdorf / G	Wool alcohol ointment DAB	84232410	1
Beiersdorf / Gehe	Wool alcohol ointment DAB	71274810	1
Beiersdorf / K	Wool alcohol ointment DAB	22142410	1
Beiersdorf / Kehr	Wool alcohol ointment DAB	61149910	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	24233910	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	33343310	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	34414610	2
Beiersdorf / Noweda	Wool alcohol ointment DAB	414610	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	41910710	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	50444710	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	50925410	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	50845210	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	51115710	2
Beiersdorf / Noweda	Wool alcohol ointment DAB	54147810	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	54157810	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	74737410	2
Beiersdorf / Noweda	Wool alcohol ointment DAB	74757510	1
Beiersdorf / Phoenix	Wool alcohol ointment DAB	50935410	1
Beiersdorf / Phoenix	Wool alcohol ointment DAB	62031710	2
Beiersdorf / Phoenix	Wool alcohol ointment DAB	71114510	1
Beiersdorf / Sanacorp	Wool alcohol ointment DAB	53457110	1
Beiersdorf /Alliance He...	Wool alcohol ointment DAB	54127710	1
Beiersdorf /Sanacorp	Wool alcohol ointment DAB	51025610	1
Beiersdorf Ag	Wool alcohol ointment DAB	34554710	1
Beiersdorf AG	Wool alcohol ointment DAB	21111310	1
Beiersdorf AG	Wool alcohol ointment DAB	22532810	1

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Supplier	Substance	Batch	Spectra
Beiersdorf AG	Wool alcohol ointment DAB	23223410	1
Beiersdorf AG	Wool alcohol ointment DAB	14549310	1
Beiersdorf AG	Wool alcohol ointment DAB	31231810	2
Beiersdorf AG	Wool alcohol ointment DAB	24254010	1
Beiersdorf AG	Wool alcohol ointment DAB	31251910	1
Beiersdorf AG	Wool alcohol ointment DAB	30731210	2
Beiersdorf AG	Wool alcohol ointment DAB	30721310	1
Beiersdorf AG	Wool alcohol ointment DAB	33343310	1
Beiersdorf AG	Wool alcohol ointment DAB	33323210	1
Beiersdorf AG	Wool alcohol ointment DAB	6022014A	1
Beiersdorf AG	Wool alcohol ointment DAB	34344210	1
Beiersdorf AG	Wool alcohol ointment DAB	11062014A	1
Beiersdorf AG	Wool alcohol ointment DAB	33753710	1
Beiersdorf AG	Wool alcohol ointment DAB	41930610	2
Beiersdorf AG	Wool alcohol ointment DAB	10112014A	1
Beiersdorf AG	Wool alcohol ointment DAB	60419110	1
Beiersdorf AG	Wool alcohol ointment DAB	51946010	1
Beiersdorf AG	Wool alcohol ointment DAB	50444710	2
Beiersdorf AG	Wool alcohol ointment DAB	13042015D	1
Beiersdorf AG	Wool alcohol ointment DAB	11052015B	1
Beiersdorf AG	Wool alcohol ointment DAB	50845210	1
Beiersdorf AG	Wool alcohol ointment DAB	51025610	1
Beiersdorf AG	Wool alcohol ointment DAB	15362002	1
Beiersdorf AG	Wool alcohol ointment DAB	60919510	2
Beiersdorf AG	Wool alcohol ointment DAB	61841610	1
Beiersdorf AG	Wool alcohol ointment DAB	61149910	1
Beiersdorf AG	Wool alcohol ointment DAB	63052310	1
Beiersdorf AG	Wool alcohol ointment DAB	64312910	1
Beiersdorf AG	Wool alcohol ointment DAB	64713510	1
Beiersdorf AG	Wool alcohol ointment DAB	71274810	1
Beiersdorf AG / Noweda	Wool alcohol ointment DAB	33753710	1
Beiersdorf AG / Phönix	Wool alcohol ointment DAB	40956810	1
Beiersdorf AG / Phönix	Wool alcohol ointment DAB	41940610	1
Beiersdorf AG/ GEHE	Wool alcohol ointment DAB	41829810	1
Beiersdorf AG/Geilenkir. ...	Wool alcohol ointment DAB	40726610	1
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	33323210	2
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	34414610	1
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	50815310	1
Beiersdorf AG/NOWEDA	Wool alcohol ointment DAB	30831410	1
Beiersdorf AG/NOWEDA	Wool alcohol ointment DAB	50845210	1
Beiersdorf AG/Sanacorp	Wool alcohol ointment DAB	50444710	1
Beiersdorf direkt	Wool alcohol ointment DAB	52056110	1
Beiersdorf Gehe	Wool alcohol ointment DAB	3841	1
Beiersdorf Manufacturing	Wool alcohol ointment DAB	30731210	1
Beiersdorf SA	Wool alcohol ointment DAB	41950710	1
Beiersdorf SA	Wool alcohol ointment DAB	44824310	1
Beiersdorf über Phoenix	Wool alcohol ointment DAB	53437010	1
Beiersdorf über Sanacorp	Wool alcohol ointment DAB	50444710	1
Beiersdorf, Phönix	Wool alcohol ointment DAB	30721310	1
Beiersdorf, Phönix	Wool alcohol ointment DAB	31121710	1
Beiersdorf/ AEP	Wool alcohol ointment DAB	74757510	1
Beiersdorf/ AHC	Wool alcohol ointment DAB	71274810	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	40916810	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	41930610	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	41950710	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	50414810	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	64312910	1
Beiersdorf/ Nowea	Wool alcohol ointment DAB	45054410	1
beiersdorf/ Noweda	Wool alcohol ointment DAB	71214810	1
Beiersdorf/ Noweda	Wool alcohol ointment DAB	31322010	1

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Supplier	Substance	Batch	Spectra
Beiersdorf/ Noweda	Wool alcohol ointment DAB	33323210	2
Beiersdorf/ Noweda	Wool alcohol ointment DAB	43142910	1
Beiersdorf/ Noweda	Wool alcohol ointment DAB	64833610	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	814Q1270	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	54127710	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	81819410	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	93436310	1
Beiersdorf/ Sanacorp	Wool alcohol ointment DAB	34344210	1
Beiersdorf/ Sanacorp	Wool alcohol ointment DAB	44824310	1
Beiersdorf/AEP	Wool alcohol ointment DAB	70434110	1
Beiersdorf/AHC	Wool alcohol ointment DAB	62932210	1
Beiersdorf/AHD	Wool alcohol ointment DAB	22412510	1
Beiersdorf/AHD	Wool alcohol ointment DAB	61149910	1
Beiersdorf/Alliance Hea...	Wool alcohol ointment DAB	74737410	1
Beiersdorf/Anzag	Wool alcohol ointment DAB	63052310	1
Beiersdorf/Anzag	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Beiersdorf/Beiersdorf	Wool alcohol ointment DAB	50955510	1
Beiersdorf/E	Wool alcohol ointment DAB	60419110	1
Beiersdorf/Ebert	Wool alcohol ointment DAB	72435610	1
Beiersdorf/Ebert	Wool alcohol ointment DAB	83321910	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	64833610	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	74017010	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	84122310	1
beiersdorf/gehe	Wool alcohol ointment DAB	71114510	1
beiersdorf/Gehe	Wool alcohol ointment DAB	30721310	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	22412510	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	23223410	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	30731210	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	30831410	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	24123810	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	32352710	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	33753710	2
Beiersdorf/Gehe	Wool alcohol ointment DAB	34554710	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	41930610	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	41940610	2
Beiersdorf/Gehe	Wool alcohol ointment DAB	43142910	2
Beiersdorf/Gehe	Wool alcohol ointment DAB	40726610	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	50955510	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	53447010	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	60539210	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	62922210	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	64342810	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	82721410	1
Beiersdorf/GEHE	Wool alcohol ointment DAB	72915810	1
Beiersdorf/Gehe 11.04.17	Wool alcohol ointment DAB	62932210	1
Beiersdorf/Gumo	Wool alcohol ointment DAB	33323210	1
Beiersdorf/Holdermann	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Kehr	Wool alcohol ointment DAB	4104701008/16	1
Beiersdorf/Kehr	Wool alcohol ointment DAB	64312910	1
Beiersdorf/Krieger/06.1...	Wool alcohol ointment DAB	33323210	1
Beiersdorf/N	Wool alcohol ointment DAB	50845210	1
Beiersdorf/N	Wool alcohol ointment DAB	50925410	1
Beiersdorf/N	Wool alcohol ointment DAB	51015610	1
Beiersdorf/N	Wool alcohol ointment DAB	53437010	1
Beiersdorf/N	Wool alcohol ointment DAB	54147810	1
Beiersdorf/N	Wool alcohol ointment DAB	53457110	1
Beiersdorf/N	Wool alcohol ointment DAB	60839310	1
Beiersdorf/N/22.03.2013...	Wool alcohol ointment DAB	24635410	1

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Supplier	Substance	Batch	Spectra
Beiersdorf/Nnoweda	Wool alcohol ointment DAB	71274810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	31322010	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	34424610	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	41910710	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	50324610	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	45054410	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	50815310	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	53437010	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	54127710	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	54147810	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	54157810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62031710	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62922210	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62041710	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	64332810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	72915810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	64312910	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	7477510	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74737410	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74747510	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74757510	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	81819410	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	81328810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	83241810	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	83742110	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	84132310	1
Beiersdorf/NOWEDA	Wool alcohol ointment DAB	93917110	1
Beiersdorf/Otto	Wool alcohol ointment DAB	23033310	1
Beiersdorf/Otto	Wool alcohol ointment DAB	31251910	1
Beiersdorf/Otto	Wool alcohol ointment DAB	33753710	1
Beiersdorf/Otto	Wool alcohol ointment DAB	41047010	1
Beiersdorf/P	Wool alcohol ointment DAB	83241810	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	30711310	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	33723610	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	41930610	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	41910710	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	50935410	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	52656810	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	53447010	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	61149910	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	60539210	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	62932210	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	63052310	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	64713510	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	70314010	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	81819410	2
Beiersdorf/Phoenix	Wool alcohol ointment DAB	81859410	2
Beiersdorf/Phoenix	Wool alcohol ointment DAB	74747510	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	83321910	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	30841410	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	33723610	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	33343310	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	34554710	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	50935410	2
Beiersdorf/Phönix	Wool alcohol ointment DAB	51015610	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	60429110	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	61149910	1

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Supplier	Substance	Batch	Spectra
Beiersdorf/Phönix	Wool alcohol ointment DAB	61079710	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	61841610	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	62031710	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	64312910	2
Beiersdorf/Phönix	Wool alcohol ointment DAB	64342810	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	72915810	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	83241810	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	83321910	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	93436310	1
Beiersdorf/Sana	Wool alcohol ointment DAB	54137710	1
Beiersdorf/sanacorp	Wool alcohol ointment DAB	81819410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	31231810	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	34254110	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	50815310	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	54157810	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	53437010	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	60539210	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	62041710	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	62932210	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	64342810	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	70314010	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74017010	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74737410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74757510	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74747510	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	82721410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	92515310	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	92125210	1
Beiersdorf/V.d.L.	Wool alcohol ointment DAB	33723610	1
BeiersdorfAG/Kehr	Wool alcohol ointment DAB	84232410	1
Beierssdorf	Wool alcohol ointment DAB	81819410	1
Beiersdorf	Wool alcohol ointment DAB	74747510	1
Beiersdorf Manufacturing	Wool alcohol ointment DAB	54147810	1
Berkel AHK	Wool alcohol ointment DAB	14067201	1
Biersdorf	Wool alcohol ointment DAB	64342810	1
Bomastus	Wool alcohol ointment DAB	293093	2
Bombastus	Wool alcohol ointment DAB	291797	2
Bombastus	Wool alcohol ointment DAB	1109210014	1
Bombastus	Wool alcohol ointment DAB	270780	2
Bombastus	Wool alcohol ointment DAB	272171	1
Bombastus	Wool alcohol ointment DAB	274282	2
Bombastus	Wool alcohol ointment DAB	262037	1
Bombastus	Wool alcohol ointment DAB	270640	2
Bombastus	Wool alcohol ointment DAB	275999	3
Bombastus	Wool alcohol ointment DAB	277191	1
Bombastus	Wool alcohol ointment DAB	277190	1
Bombastus	Wool alcohol ointment DAB	277192	3
Bombastus	Wool alcohol ointment DAB	283619	3
Bombastus	Wool alcohol ointment DAB	279927	3
Bombastus	Wool alcohol ointment DAB	287619	2
Bombastus	Wool alcohol ointment DAB	287012	1
Bombastus	Wool alcohol ointment DAB	1211018-01	1
Bombastus	Wool alcohol ointment DAB	60080203	2
Bombastus	Wool alcohol ointment DAB	291796	3
Bombastus	Wool alcohol ointment DAB	293376	2
Bombastus	Wool alcohol ointment DAB	293956	13
Bombastus	Wool alcohol ointment DAB	296436	3
Bombastus	Wool alcohol ointment DAB	298578	4
Bombastus	Wool alcohol ointment DAB	300283	3

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment DAB	300282	6
Bombastus	Wool alcohol ointment DAB	301199	1
Bombastus	Wool alcohol ointment DAB	30226	2
Bombastus	Wool alcohol ointment DAB	302207	3
Bombastus	Wool alcohol ointment DAB	302208	2
Bombastus	Wool alcohol ointment DAB	16198502	1
Bombastus	Wool alcohol ointment DAB	305880	5
Bombastus	Wool alcohol ointment DAB	307776	2
Bombastus	Wool alcohol ointment DAB	311387	3
Bombastus	Wool alcohol ointment DAB	311389	2
Bombastus	Wool alcohol ointment DAB	308843	4
Bombastus	Wool alcohol ointment DAB	17001875	11
Bombastus	Wool alcohol ointment DAB	18001094	11
Bombastus	Wool alcohol ointment DAB	18002497	4
Bombastus	Wool alcohol ointment DAB	18004090	5
Bombastus	Wool alcohol ointment DAB	18004091	1
Bombastus	Wool alcohol ointment DAB	18002496	1
Bombastus	Wool alcohol ointment DAB	18005546	1
Bombastus	Wool alcohol ointment DAB	265502	1
Bombastus	Wool alcohol ointment DAB	305879	17
Bombastus	Wool alcohol ointment DAB	281690	5
Bombastus	Wool alcohol ointment DAB	283618	7
Bombastus	Wool alcohol ointment DAB	285423	1
Bombastus	Wool alcohol ointment DAB	116684	1
Bombastus	Wool alcohol ointment DAB	17001876	4
Bombastus	Wool alcohol ointment DAB	278684	4
Bombastus	Wool alcohol ointment DAB	256518	1
Bombastus	Wool alcohol ointment DAB	293092	6
Bombastus	Wool alcohol ointment DAB	303848	2
Bombastus	Wool alcohol ointment DAB	307775	6
Bombastus	Wool alcohol ointment DAB	17001877	1
Bombastus	Wool alcohol ointment DAB	283175	1
Bombastus	Wool alcohol ointment DAB	18001096	1
Bombastus	Wool alcohol ointment DAB	18004092	2
Bombastus	Wool alcohol ointment DAB	18005547	3
Bombastus	Wool alcohol ointment DAB	279934	4
Bombastus	Wool alcohol ointment DAB	288834	8
Bombastus	Wool alcohol ointment DAB	289509	7
Bombastus	Wool alcohol ointment DAB	293091	2
Bombastus	Wool alcohol ointment DAB	296235	1
Bombastus	Wool alcohol ointment DAB	261436	1
Bombastus	Wool alcohol ointment DAB	267675	2
Bombastus	Wool alcohol ointment DAB	270643	5
Bombastus	Wool alcohol ointment DAB	293093	5
Bombastus	Wool alcohol ointment DAB	287013	4
Bombastus	Wool alcohol ointment DAB	279928	4
Bombastus	Wool alcohol ointment DAB	18005545	2
Bombastus	Wool alcohol ointment DAB	291795	4
Bombastus	Wool alcohol ointment DAB	297129	1
Bombastus	Wool alcohol ointment DAB	301200	3
Bombastus	Wool alcohol ointment DAB	915M-01370	1
Bombastus	Wool alcohol ointment DAB	303846	12
Bombastus	Wool alcohol ointment DAB	298577	11
Bombastus	Wool alcohol ointment DAB	305878	2
Bombastus	Wool alcohol ointment DAB	307774	6
Bombastus	Wool alcohol ointment DAB	307773	1
Bombastus	Wool alcohol ointment DAB	311386	1
Bombastus	Wool alcohol ointment DAB	18002495	1
Bombastus	Wool alcohol ointment DAB	18005544	1
Bombastus	Wool alcohol ointment DAB	29309932ma1	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment DAB	302206	10
Bombastus	Wool alcohol ointment DAB	18002498	3
Bombastus	Wool alcohol ointment DAB	19002479	1
Bombastus	Wool alcohol ointment DAB	18250402	1
Bombastus	Wool alcohol ointment DAB	298579	5
Bombastus	Wool alcohol ointment DAB	1211017-01	1
Bombastus	Wool alcohol ointment DAB	295357	1
Bombastus	Wool alcohol ointment DAB	104374	1
Bombastus	Wool alcohol ointment DAB	304998	3
Bombastus	Wool alcohol ointment DAB	288766	2
Bombastus	Wool alcohol ointment DAB	289510	3
Bombastus	Wool alcohol ointment DAB	16007201	2
Bombastus	Wool alcohol ointment DAB	303996	3
Bombastus	Wool alcohol ointment DAB	303847	5
Bombastus	Wool alcohol ointment DAB	18001095	4
Bombastus	Wool alcohol ointment DAB	17206001	1
Bombastus	Wool alcohol ointment DAB	291794	1
Bombastus	Wool alcohol ointment DAB	311388	4
Bombastus	Wool alcohol ointment DAB	263456	1
Bombastus	Wool alcohol ointment DAB	254685	1
Bombastus	Wool alcohol ointment DAB	265139	1
Bombastus	Wool alcohol ointment DAB	290735	2
Bombastus	Wool alcohol ointment DAB	295218	3
Bombastus	Wool alcohol ointment DAB	296437	2
Bombastus	Wool alcohol ointment DAB	301202	5
Bombastus	Wool alcohol ointment DAB	305881	1
Bombastus	Wool alcohol ointment DAB	308845	2
Bombastus	Wool alcohol ointment DAB	308844	1
Bombastus	Wool alcohol ointment DAB	300281	1
Bombastus	Wool alcohol ointment DAB	60080202	2
Bombastus	Wool alcohol ointment DAB	296435	11
Caeanlo	Wool alcohol ointment DAB	16198501	1
Caelo	Wool alcohol ointment DAB	4061204	1
Caelo	Wool alcohol ointment DAB	20061204	1
Caelo	Wool alcohol ointment DAB	13114102	8
Caelo	Wool alcohol ointment DAB	305881	1
Caelo	Wool alcohol ointment DAB	83321910	1
Caelo	Wool alcohol ointment DAB	11335003	1
Caelo	Wool alcohol ointment DAB	11335002	6
Caelo	Wool alcohol ointment DAB	11185001	1
Caelo	Wool alcohol ointment DAB	11185201	1
Caelo	Wool alcohol ointment DAB	11335201	1
Caelo	Wool alcohol ointment DAB	12016203	6
Caelo	Wool alcohol ointment DAB	12151801	2
Caelo	Wool alcohol ointment DAB	12076701	2
Caelo	Wool alcohol ointment DAB	12151802	2
Caelo	Wool alcohol ointment DAB	11184902	1
Caelo	Wool alcohol ointment DAB	12151901	5
Caelo	Wool alcohol ointment DAB	12152001	4
Caelo	Wool alcohol ointment DAB	7121202	1
Caelo	Wool alcohol ointment DAB	20271211-1	1
Caelo	Wool alcohol ointment DAB	24243910	1
Caelo	Wool alcohol ointment DAB	12339901	4
Caelo	Wool alcohol ointment DAB	11184901	1
Caelo	Wool alcohol ointment DAB	12340002	3
Caelo	Wool alcohol ointment DAB	12340003	1
Caelo	Wool alcohol ointment DAB	12340101	6
Caelo	Wool alcohol ointment DAB	12076601	2
Caelo	Wool alcohol ointment DAB	13067102	13
Caelo	Wool alcohol ointment DAB	30731210	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	1234002	1
Caelo	Wool alcohol ointment DAB	13093202	1
Caelo	Wool alcohol ointment DAB	10136901	1
Caelo	Wool alcohol ointment DAB	25051306	1
Caelo	Wool alcohol ointment DAB	U-240513-3	1
Caelo	Wool alcohol ointment DAB	13114001	8
Caelo	Wool alcohol ointment DAB	30841410	1
Caelo	Wool alcohol ointment DAB	11068001	1
Caelo	Wool alcohol ointment DAB	13126101	1
Caelo	Wool alcohol ointment DAB	30111302	1
Caelo	Wool alcohol ointment DAB	13242901	5
Caelo	Wool alcohol ointment DAB	13067101	1
Caelo	Wool alcohol ointment DAB	13242401	1
Caelo	Wool alcohol ointment DAB	13355202	1
Caelo	Wool alcohol ointment DAB	13255201	9
Caelo	Wool alcohol ointment DAB	14022902	1
Caelo	Wool alcohol ointment DAB	14067301	1
Caelo	Wool alcohol ointment DAB	14024701	15
Caelo	Wool alcohol ointment DAB	9365602	1
Caelo	Wool alcohol ointment DAB	14067101	5
Caelo	Wool alcohol ointment DAB	41910710	1
Caelo	Wool alcohol ointment DAB	286882	1
Caelo	Wool alcohol ointment DAB	14282901	5
Caelo	Wool alcohol ointment DAB	15034901	5
Caelo	Wool alcohol ointment DAB	15228202	20
Caelo	Wool alcohol ointment DAB	16007201	9
Caelo	Wool alcohol ointment DAB	308844	1
Caelo	Wool alcohol ointment DAB	14153602	3
Caelo	Wool alcohol ointment DAB	50324610	1
Caelo	Wool alcohol ointment DAB	14283001	14
Caelo	Wool alcohol ointment DAB	291175	1
Caelo	Wool alcohol ointment DAB	14283102	10
Caelo	Wool alcohol ointment DAB	15035503	3
Caelo	Wool alcohol ointment DAB	21051510	1
Caelo	Wool alcohol ointment DAB	4051505	1
Caelo	Wool alcohol ointment DAB	293093	1
Caelo	Wool alcohol ointment DAB	15225501	7
Caelo	Wool alcohol ointment DAB	154035502	1
Caelo	Wool alcohol ointment DAB	16007202	8
Caelo	Wool alcohol ointment DAB	15362001	27
Caelo	Wool alcohol ointment DAB	15361901	11
Caelo	Wool alcohol ointment DAB	60429110	1
Caelo	Wool alcohol ointment DAB	16066801	10
Caelo	Wool alcohol ointment DAB	298578	1
Caelo	Wool alcohol ointment DAB	16066701	4
Caelo	Wool alcohol ointment DAB	54157810	1
Caelo	Wool alcohol ointment DAB	160905EA	1
Caelo	Wool alcohol ointment DAB	16198101	18
Caelo	Wool alcohol ointment DAB	16198501	13
Caelo	Wool alcohol ointment DAB	62932210	2
Caelo	Wool alcohol ointment DAB	62922210	1
Caelo	Wool alcohol ointment DAB	16177603	1
Caelo	Wool alcohol ointment DAB	16198601	25
Caelo	Wool alcohol ointment DAB	16295101	14
Caelo	Wool alcohol ointment DAB	16248802	3
Caelo	Wool alcohol ointment DAB	16331701	10
Caelo	Wool alcohol ointment DAB	307775	3
Caelo	Wool alcohol ointment DAB	16331802	4
Caelo	Wool alcohol ointment DAB	16331901	14
Caelo	Wool alcohol ointment DAB	17105001	20

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	28101703	1
Caelo	Wool alcohol ointment DAB	163317025398	1
Caelo	Wool alcohol ointment DAB	17105401	24
Caelo	Wool alcohol ointment DAB	1116756	1
Caelo	Wool alcohol ointment DAB	17411202	1
Caelo	Wool alcohol ointment DAB	17301101	16
Caelo	Wool alcohol ointment DAB	171412035537	1
Caelo	Wool alcohol ointment DAB	17300901	1
Caelo	Wool alcohol ointment DAB	81819410	1
Caelo	Wool alcohol ointment DAB	83031710	1
Caelo	Wool alcohol ointment DAB	27101806	1
Caelo	Wool alcohol ointment DAB	1832501	1
Caelo	Wool alcohol ointment DAB	81328810	1
Caelo	Wool alcohol ointment DAB	18250403	4
Caelo	Wool alcohol ointment DAB	18250401	10
Caelo	Wool alcohol ointment DAB	18250701	6
Caelo	Wool alcohol ointment DAB	18250801	6
Caelo	Wool alcohol ointment DAB	18250402	14
Caelo	Wool alcohol ointment DAB	18250901	8
Caelo	Wool alcohol ointment DAB	18005546	1
Caelo	Wool alcohol ointment DAB	16331801	2
Caelo	Wool alcohol ointment DAB	19006204	4
Caelo	Wool alcohol ointment DAB	19006302	1
Caelo	Wool alcohol ointment DAB	19007001	2
Caelo	Wool alcohol ointment DAB	19041004	1
Caelo	Wool alcohol ointment DAB	19041101	6
Caelo	Wool alcohol ointment DAB	143020402	1
Caelo	Wool alcohol ointment DAB	11335101	5
Caelo	Wool alcohol ointment DAB	15361801	16
Caelo	Wool alcohol ointment DAB	15362002	12
Caelo	Wool alcohol ointment DAB	16198401	16
Caelo	Wool alcohol ointment DAB	18132606	1
Caelo	Wool alcohol ointment DAB	31251910	1
Caelo	Wool alcohol ointment DAB	14153603	8
Caelo	Wool alcohol ointment DAB	17300902	9
Caelo	Wool alcohol ointment DAB	70444110	1
Caelo	Wool alcohol ointment DAB	1483101	1
Caelo	Wool alcohol ointment DAB	307776	1
Caelo	Wool alcohol ointment DAB	17141601	1
Caelo	Wool alcohol ointment DAB	11232902	1
Caelo	Wool alcohol ointment DAB	13114103	4
Caelo	Wool alcohol ointment DAB	13242902	6
Caelo	Wool alcohol ointment DAB	14153101	13
Caelo	Wool alcohol ointment DAB	1428801	1
Caelo	Wool alcohol ointment DAB	22532810	1
Caelo	Wool alcohol ointment DAB	12076602	1
Caelo	Wool alcohol ointment DAB	13066903	1
Caelo	Wool alcohol ointment DAB	74057010	1
Caelo	Wool alcohol ointment DAB	13242601	11
Caelo	Wool alcohol ointment DAB	13067201	10
Caelo	Wool alcohol ointment DAB	18132603-W20181115Ma	1
Caelo	Wool alcohol ointment DAB	16295102	4
Caelo	Wool alcohol ointment DAB	53(18132501)	1
Caelo	Wool alcohol ointment DAB	74747510	2
Caelo	Wool alcohol ointment DAB	19007101	3
Caelo	Wool alcohol ointment DAB	54(18132501)	1
Caelo	Wool alcohol ointment DAB	14283101	4
Caelo	Wool alcohol ointment DAB	300283	1
Caelo	Wool alcohol ointment DAB	63052310	2
Caelo	Wool alcohol ointment DAB	74017010	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	17141201	3
Caelo	Wool alcohol ointment DAB	11335001	1
Caelo	Wool alcohol ointment DAB	13242603	5
Caelo	Wool alcohol ointment DAB	33753710	1
Caelo	Wool alcohol ointment DAB	50414810	1
Caelo	Wool alcohol ointment DAB	15225601	14
Caelo	Wool alcohol ointment DAB	53437010	1
Caelo	Wool alcohol ointment DAB	17105101	4
Caelo	Wool alcohol ointment DAB	17141203	27
Caelo	Wool alcohol ointment DAB	70434110	1
Caelo	Wool alcohol ointment DAB	30831410	1
Caelo	Wool alcohol ointment DAB	15407001	1
Caelo	Wool alcohol ointment DAB	23023210	1
Caelo	Wool alcohol ointment DAB	1367101	1
Caelo	Wool alcohol ointment DAB	13242602	16
Caelo	Wool alcohol ointment DAB	13255001	9
Caelo	Wool alcohol ointment DAB	14067201	14
Caelo	Wool alcohol ointment DAB	14067002	5
Caelo	Wool alcohol ointment DAB	41047010	1
Caelo	Wool alcohol ointment DAB	41026910	1
Caelo	Wool alcohol ointment DAB	15034801	8
Caelo	Wool alcohol ointment DAB	16198301	3
Caelo	Wool alcohol ointment DAB	64342810	3
Caelo	Wool alcohol ointment DAB	19006902	2
Caelo	Wool alcohol ointment DAB	12151903	5
Caelo	Wool alcohol ointment DAB	13067103	7
Caelo	Wool alcohol ointment DAB	1325501	1
Caelo	Wool alcohol ointment DAB	17141401	20
Caelo	Wool alcohol ointment DAB	16298502	1
Caelo	Wool alcohol ointment DAB	16331704	4
Caelo	Wool alcohol ointment DAB	15225401	3
Caelo	Wool alcohol ointment DAB	51 (17104903)	1
Caelo	Wool alcohol ointment DAB	52 (17141401)	1
Caelo	Wool alcohol ointment DAB	55 (18250901)	1
Caelo	Wool alcohol ointment DAB	56 (19007001)	1
Caelo	Wool alcohol ointment DAB	16331702	21
Caelo	Wool alcohol ointment DAB	16198502	36
Caelo	Wool alcohol ointment DAB	15035501	5
Caelo	Wool alcohol ointment DAB	15228201	9
Caelo	Wool alcohol ointment DAB	12016202	2
Caelo	Wool alcohol ointment DAB	13126001	10
Caelo	Wool alcohol ointment DAB	259166	1
Caelo	Wool alcohol ointment DAB	41940610	1
Caelo	Wool alcohol ointment DAB	14152901	1
Caelo	Wool alcohol ointment DAB	50815310	1
Caelo	Wool alcohol ointment DAB	293091	1
Caelo	Wool alcohol ointment DAB	16198503	8
Caelo	Wool alcohol ointment DAB	70314010	3
Caelo	Wool alcohol ointment DAB	170531811	1
Caelo	Wool alcohol ointment DAB	17141202	20
Caelo	Wool alcohol ointment DAB	17141404	1
Caelo	Wool alcohol ointment DAB	81348810	1
Caelo	Wool alcohol ointment DAB	17206202	5
Caelo	Wool alcohol ointment DAB	17301001	20
Caelo	Wool alcohol ointment DAB	24655410	1
Caelo	Wool alcohol ointment DAB	1406701	1
Caelo	Wool alcohol ointment DAB	14207702	1
Caelo	Wool alcohol ointment DAB	1522802	1
Caelo	Wool alcohol ointment DAB	15362003	10
Caelo	Wool alcohol ointment DAB	18251001	4

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	15035502	14
Caelo	Wool alcohol ointment DAB	16066501	9
Caelo	Wool alcohol ointment DAB	17104903	13
Caelo	Wool alcohol ointment DAB	17104902	18
Caelo	Wool alcohol ointment DAB	74737410	1
Caelo	Wool alcohol ointment DAB	18132604	10
Caelo	Wool alcohol ointment DAB	19041002	2
Caelo	Wool alcohol ointment DAB	14067401	4
Caelo	Wool alcohol ointment DAB	13255101	24
Caelo	Wool alcohol ointment DAB	31121710	1
Caelo	Wool alcohol ointment DAB	4067201	1
Caelo	Wool alcohol ointment DAB	14152902	1
Caelo	Wool alcohol ointment DAB	14282801	8
Caelo	Wool alcohol ointment DAB	14153601	10
Caelo	Wool alcohol ointment DAB	15035301	10
Caelo	Wool alcohol ointment DAB	50835210	1
Caelo	Wool alcohol ointment DAB	50/AKD7	1
Caelo	Wool alcohol ointment DAB	53457110	1
Caelo	Wool alcohol ointment DAB	16007203	1
Caelo	Wool alcohol ointment DAB	71124510	1
Caelo	Wool alcohol ointment DAB	1704903	1
Caelo	Wool alcohol ointment DAB	18132603	12
Caelo	Wool alcohol ointment DAB	18132501	15
Caelo	Wool alcohol ointment DAB	1212M-01370	1
Caelo	Wool alcohol ointment DAB	2313E-01370	1
Caecolo	Wool alcohol ointment DAB	14067101	1
Caecolo/Krieger	Wool alcohol ointment DAB	16331802	1
Caecolo/Noweda	Wool alcohol ointment DAB	15361901	1
Caesar & Loretz	Wool alcohol ointment DAB	16198401	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	41930610	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	16198401	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	18250701	3
Caesar & Loretz GmbH	Wool alcohol ointment DAB	18250801	2
Caesar & Loretz GmbH	Wool alcohol ointment DAB	18250403	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	18250901	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	18251001	2
Caesar & Loretz GmbH	Wool alcohol ointment DAB	19007102	1
Caesar & Loretz GmbH 40...	Wool alcohol ointment DAB	11185101	1
Caesar & Loretz GmbH Hi...	Wool alcohol ointment DAB	14283001	1
Caesar & Loretz GmbH, P...	Wool alcohol ointment DAB	17105001	1
Caesar & Loretz GmbH/ M...	Wool alcohol ointment DAB	19007102	1
Caesar & Loretz/Noweda	Wool alcohol ointment DAB	16066601	1
Caesar & Loretz/Noweda	Wool alcohol ointment DAB	16295102	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	12340003	1
Caesar und Loretz	Wool alcohol ointment DAB	293092	2
caesar&llorenz	Wool alcohol ointment DAB	16331702	1
Caesar&Loretz GmbH	Wool alcohol ointment DAB	15362002	1
caesar&llorenz,Phönix	Wool alcohol ointment DAB	15225601	1
Caleo	Wool alcohol ointment DAB	17104903	1
Cealo	Wool alcohol ointment DAB	17301001	1
Cealo/Gehe	Wool alcohol ointment DAB	16331704	2
DAB 2008	Wool alcohol ointment DAB	13255101	1
DAC 2011	Wool alcohol ointment DAB	268471	1
Defektur	Wool alcohol ointment DAB	3812	1
Defektur	Wool alcohol ointment DAB	2/13	1
Defektur	Wool alcohol ointment DAB	40/13	1
Defektur	Wool alcohol ointment DAB	47/13	1
Defektur	Wool alcohol ointment DAB	53/13	1
Defektur	Wool alcohol ointment DAB	3/14	1
Defektur	Wool alcohol ointment DAB	6/14	1

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Supplier	Substance	Batch	Spectra
Defektur	Wool alcohol ointment DAB	18/14	1
Defektur	Wool alcohol ointment DAB	26/14	1
Defektur	Wool alcohol ointment DAB	38/14	1
Defektur	Wool alcohol ointment DAB	41/14	1
Defektur	Wool alcohol ointment DAB	42/14	1
Defektur	Wool alcohol ointment DAB	45/14	1
Defektur	Wool alcohol ointment DAB	5/15	1
Defektur	Wool alcohol ointment DAB	10/15	1
Ebert	Wool alcohol ointment DAB	13242602	1
Ebert 18.10.16	Wool alcohol ointment DAB	62031710	1
eucerinum	Wool alcohol ointment DAB	33753710	1
eucerinum	Wool alcohol ointment DAB	34554710	1
Eurho/Noweda	Wool alcohol ointment DAB	1211017-01	1
Euro OTC	Wool alcohol ointment DAB	70434110	1
Euro OTC	Wool alcohol ointment DAB	1608040-01	1
Euro OTC	Wool alcohol ointment DAB	270642	1
Euro OTC	Wool alcohol ointment DAB	16331901	1
Euro OTC	Wool alcohol ointment DAB	1204030-01	1
EuroOTV	Wool alcohol ointment DAB	1608040-01	1
Fagron	Wool alcohol ointment DAB	13D09-T04-003308	4
Fagron	Wool alcohol ointment DAB	281690	1
Fagron	Wool alcohol ointment DAB	40956810	1
Fagron	Wool alcohol ointment DAB	13D09-T04-007315	1
Fagron	Wool alcohol ointment DAB	14H19T02018184	1
Fagron	Wool alcohol ointment DAB	15225601	1
Fagron	Wool alcohol ointment DAB	305881	1
Fagron	Wool alcohol ointment DAB	17001877	1
Fagron	Wool alcohol ointment DAB	18132604	1
Fagron	Wool alcohol ointment DAB	18B09-T12-0002	1
Fagron	Wool alcohol ointment DAB	13D09-T04	1
Fagron	Wool alcohol ointment DAB	23033310	1
Fagron	Wool alcohol ointment DAB	14819510	1
Fagron	Wool alcohol ointment DAB	15E18-T20-021463	2
Fagron	Wool alcohol ointment DAB	1234	1
Fagron	Wool alcohol ointment DAB	51946010	3
Fagron	Wool alcohol ointment DAB	16066601	1
Fagron	Wool alcohol ointment DAB	16H03-T01-032569	1
Fagron	Wool alcohol ointment DAB	13D09T04003308	2
Fagron	Wool alcohol ointment DAB	14H19-T01-011354	1
Fagron	Wool alcohol ointment DAB	14H19-T02-011354	1
Fagron	Wool alcohol ointment DAB	14H19-T02-018184	2
Fagron	Wool alcohol ointment DAB	53437010	1
Fagron	Wool alcohol ointment DAB	16H3-T01-035269	1
Fagron	Wool alcohol ointment DAB	15E18-20-021463	1
Fargon	Wool alcohol ointment DAB	16H03-T01-035270	1
fragon	Wool alcohol ointment DAB	12345	1
Gehe	Wool alcohol ointment DAB	11335003	1
Gehe	Wool alcohol ointment DAB	13357910	1
Gehe	Wool alcohol ointment DAB	21241410	2
Gehe	Wool alcohol ointment DAB	22412510	2
Gehe	Wool alcohol ointment DAB	22532710	1
Gehe	Wool alcohol ointment DAB	23033310	1
Gehe	Wool alcohol ointment DAB	23753710	1
Gehe	Wool alcohol ointment DAB	30711310	1
Gehe	Wool alcohol ointment DAB	30831410	2
Gehe	Wool alcohol ointment DAB	31231810	1
Gehe	Wool alcohol ointment DAB	31322010	1
Gehe	Wool alcohol ointment DAB	33323210	1
Gehe	Wool alcohol ointment DAB	13126001	1
Gehe	Wool alcohol ointment DAB	280061	1

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Supplier	Substance	Batch	Spectra
Gehe	Wool alcohol ointment DAB	33753710	3
Gehe	Wool alcohol ointment DAB	30851510	1
Gehe	Wool alcohol ointment DAB	41026910	1
Gehe	Wool alcohol ointment DAB	41950710	1
Gehe	Wool alcohol ointment DAB	43142910	1
Gehe	Wool alcohol ointment DAB	50444710	1
Gehe	Wool alcohol ointment DAB	45054410	1
Gehe	Wool alcohol ointment DAB	50414810	1
Gehe	Wool alcohol ointment DAB	50815310	1
Gehe	Wool alcohol ointment DAB	50925410	1
Gehe	Wool alcohol ointment DAB	54127710	1
Gehe	Wool alcohol ointment DAB	53457110	1
Gehe	Wool alcohol ointment DAB	60419110	1
Gehe	Wool alcohol ointment DAB	16198601	1
Gehe	Wool alcohol ointment DAB	71124510	1
Gehe	Wool alcohol ointment DAB	74747510	1
GEHE	Wool alcohol ointment DAB	1633170	1
GEHE	Wool alcohol ointment DAB	17141202	1
GEHE	Wool alcohol ointment DAB	93556410	1
Gehe / Beiersdorf	Wool alcohol ointment DAB	63052310	1
GEHE 17.06.2014	Wool alcohol ointment DAB	23033310	1
Gehe/ Beiersdorf AG	Wool alcohol ointment DAB	41940610	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	41930610	2
Gehe/Beiersdorf	Wool alcohol ointment DAB	50414810	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	50444710	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	40726610	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	60429110	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	64342810	1
Caelo	Wool alcohol ointment DAB	50845210	1
Caelo	Wool alcohol ointment DAB	16066601	8
Caelo	Wool alcohol ointment DAB	64713510	2
Henry Lamotte Oils GmbH	Wool alcohol ointment DAB	5860600	1
Holdermann/Beiersdorf	Wool alcohol ointment DAB	22532710	1
Ichtyol / Noweda	Wool alcohol ointment DAB	82721410	1
Infectopharm/ Sanacorp	Wool alcohol ointment DAB	50334610	1
JENNE	Wool alcohol ointment DAB	82721410	1
Caelo	Wool alcohol ointment DAB	14152803	1
Kehr	Wool alcohol ointment DAB	307775	1
Kehr	Wool alcohol ointment DAB	311387	1
Kehr	Wool alcohol ointment DAB	18002496	1
Kehr/Beiersdorf	Wool alcohol ointment DAB	71114510	1
Kehr/Beiersdorf	Wool alcohol ointment DAB	93456310	1
Klosterring	Wool alcohol ointment DAB	18250801	1
Caelo	Wool alcohol ointment DAB	19007102	1
L10	Wool alcohol ointment DAB	70314010	1
L12	Wool alcohol ointment DAB	64713510	2
L12	Wool alcohol ointment DAB	72915810	1
L12	Wool alcohol ointment DAB	17105401	1
L12	Wool alcohol ointment DAB	181232501	1
L12/Beiersdorf	Wool alcohol ointment DAB	62041710	1
L12/Beiersdorf	Wool alcohol ointment DAB	62932210	2
L12/Beiersdorf	Wool alcohol ointment DAB	71124510	1
Midas	Wool alcohol ointment DAB	71114510	1
Midas	Wool alcohol ointment DAB	17206001	1
Midas	Wool alcohol ointment DAB	17141401	2
Midas	Wool alcohol ointment DAB	17301011	1
Midas	Wool alcohol ointment DAB	17300902	1
Noweda	Wool alcohol ointment DAB	22532710	1
Noweda	Wool alcohol ointment DAB	23223410	1

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Supplier	Substance	Batch	Spectra
Noweda	Wool alcohol ointment DAB	12151901	1
Noweda	Wool alcohol ointment DAB	270642	2
Noweda	Wool alcohol ointment DAB	24635410	1
Noweda	Wool alcohol ointment DAB	34414610	1
Noweda	Wool alcohol ointment DAB	287013	1
Noweda	Wool alcohol ointment DAB	34554710	1
Noweda	Wool alcohol ointment DAB	50845210	2
Noweda	Wool alcohol ointment DAB	15361801	1
Noweda	Wool alcohol ointment DAB	15362002	1
Noweda	Wool alcohol ointment DAB	16198502	1
Noweda	Wool alcohol ointment DAB	17104902	1
Noweda / Beiersdorf	Wool alcohol ointment DAB	82721410	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	34424610	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	41930610	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	45054410	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	50815310	1
Caelo	Wool alcohol ointment DAB	73035910	2
Noweda/Beiersdorf	Wool alcohol ointment DAB	50324610	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	60539210	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	71214810	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	74747510	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	74757510	1
Caelo	Wool alcohol ointment DAB	1324602	1
Caelo	Wool alcohol ointment DAB	17104901	7
Euro OTC	Wool alcohol ointment DAB	1211018-01	2
P.W. Beyvers GmbH/Phönix	Wool alcohol ointment DAB	15225501	3
Pharmachem	Wool alcohol ointment DAB	18005546	1
Pharmachem/Phönix	Wool alcohol ointment DAB	90812	1
Phoenix	Wool alcohol ointment DAB	22532710	1
Phoenix	Wool alcohol ointment DAB	30831410	1
Phoenix	Wool alcohol ointment DAB	32344210	1
Phoenix	Wool alcohol ointment DAB	283619	1
Phoenix	Wool alcohol ointment DAB	14153101	1
Phoenix	Wool alcohol ointment DAB	41940610	1
Phoenix	Wool alcohol ointment DAB	80848610	1
Phoenix/Beiersdorf	Wool alcohol ointment DAB	74017010	1
phönix	Wool alcohol ointment DAB	16198501	1
phönix	Wool alcohol ointment DAB	16331701	2
Phönix	Wool alcohol ointment DAB	23733710	1
Phönix	Wool alcohol ointment DAB	275999	1
Phönix	Wool alcohol ointment DAB	31322010	1
Phönix	Wool alcohol ointment DAB	30821610	1
Phönix	Wool alcohol ointment DAB	13114103	1
Phönix	Wool alcohol ointment DAB	14067001	1
Phönix	Wool alcohol ointment DAB	61149910	1
Phönix	Wool alcohol ointment DAB	64833610	1
Phönix	Wool alcohol ointment DAB	17104901	2
PHÖNIX	Wool alcohol ointment DAB	63052310	1
PHÖNIX	Wool alcohol ointment DAB	74017010	1
Phönix Gotha	Wool alcohol ointment DAB	12152001	2
Phönix Gotha	Wool alcohol ointment DAB	31231810	1
Phönix Gotha	Wool alcohol ointment DAB	34554710	1
Phönix Gotha	Wool alcohol ointment DAB	41930610	1
Phönix Gotha	Wool alcohol ointment DAB	286884	1
Phönix Gotha	Wool alcohol ointment DAB	14282801	1
Phönix Gotha	Wool alcohol ointment DAB	288688	1
Phönix Gotha	Wool alcohol ointment DAB	15225601	1
Phönix/ Beiersdorf Werke	Wool alcohol ointment DAB	64833610	1
Phönix/Beiersdorf	Wool alcohol ointment DAB	82721410	1
Fagron	Wool alcohol ointment DAB	14153601	1

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Supplier	Substance	Batch	Spectra
Sana 13.11.14 EK 8,96	Wool alcohol ointment DAB	14153101	1
Sanacoro W.E:22.02.18 ...	Wool alcohol ointment DAB	17104902	1
Sanacorp	Wool alcohol ointment DAB	274283	1
Sanacorp	Wool alcohol ointment DAB	12151801	1
Sanacorp	Wool alcohol ointment DAB	24254010	1
Sanacorp	Wool alcohol ointment DAB	277190	2
Sanacorp	Wool alcohol ointment DAB	30851510	1
Sanacorp	Wool alcohol ointment DAB	279927	1
Sanacorp	Wool alcohol ointment DAB	44/AKD10	1
Sanacorp	Wool alcohol ointment DAB	13255001	1
Sanacorp	Wool alcohol ointment DAB	41047010	1
Sanacorp	Wool alcohol ointment DAB	289509	1
Sanacorp	Wool alcohol ointment DAB	43112910	1
Sanacorp	Wool alcohol ointment DAB	28/AKD12	1
Sanacorp	Wool alcohol ointment DAB	16198401	1
Sanacorp	Wool alcohol ointment DAB	73035910	1
Sanacorp	Wool alcohol ointment DAB	17001876	1
Sanacorp	Wool alcohol ointment DAB	82541010	1
Sanacorp	Wool alcohol ointment DAB	18002497	1
Sanacorp	Wool alcohol ointment DAB	181362604	1
SANACORP	Wool alcohol ointment DAB	84232410	1
Sanacorp 31.10.15	Wool alcohol ointment DAB	15228202	2
Sanacorp/ Beiersdorf	Wool alcohol ointment DAB	33723610	1
Bombastus	Wool alcohol ointment DAB	270642	3
Caelo	Wool alcohol ointment DAB	44/AKD9	1
Caelo	Wool alcohol ointment DAB	46/AKD2	1
Schärer & Schläpfer AG/...	Wool alcohol ointment DAB	50955510	1
Sonnen-Apotheke Wefensl...	Wool alcohol ointment DAB	1/16	1
Sonnen-Apotheke Wefensl...	Wool alcohol ointment DAB	9/17	1
Spangro	Wool alcohol ointment DAB	17411203	1
Stumpf	Wool alcohol ointment DAB	23223410	1
Stumpf	Wool alcohol ointment DAB	30851510	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	33323210	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	33343310	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	40956810	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	41910710	1
Caelo	Wool alcohol ointment DAB	14283103	12
UNISAN	Wool alcohol ointment DAB	289509	1
Bombastus	Wool alcohol ointment SR wit...	295360	4
Bombastus	Wool alcohol ointment SR wit...	288688	2
Apomix	Wool alcohol ointment SR wit...	6A110912	1
Apomix	Wool alcohol ointment SR wit...	5231213	1
Apomix	Wool alcohol ointment SR wit...	6A290714	1
Apomix	Wool alcohol ointment SR wit...	2A070515	1
Apomix/Gehe	Wool alcohol ointment SR wit...	302599	3
Apomix/Noweda	Wool alcohol ointment SR wit...	2A080713	1
Apomix/Noweda	Wool alcohol ointment SR wit...	1A180215	1
Apomix/Noweda	Wool alcohol ointment SR wit...	1A110416	1
Bomba/ Kehr	Wool alcohol ointment SR wit...	288689	1
Bombastus	Wool alcohol ointment SR wit...	284379	1
Bombastus	Wool alcohol ointment SR wit...	270784	2
Bombastus	Wool alcohol ointment SR wit...	276135	1
Bombastus	Wool alcohol ointment SR wit...	270781	1
Bombastus	Wool alcohol ointment SR wit...	274521	1
Bombastus	Wool alcohol ointment SR wit...	279105	4
Bombastus	Wool alcohol ointment SR wit...	280058	3
Bombastus	Wool alcohol ointment SR wit...	280059	1
Bombastus	Wool alcohol ointment SR wit...	283176	5
Bombastus	Wool alcohol ointment SR wit...	284378	2
Bombastus	Wool alcohol ointment SR wit...	286884	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment SR wit...	285952	2
Bombastus	Wool alcohol ointment SR wit...	291177	2
Bombastus	Wool alcohol ointment SR wit...	288686	1
Bombastus	Wool alcohol ointment SR wit...	295358	3
Bombastus	Wool alcohol ointment SR wit...	30079	1
Bombastus	Wool alcohol ointment SR wit...	17001147	3
Bombastus	Wool alcohol ointment SR wit...	18000621	2
Bombastus	Wool alcohol ointment SR wit...	106236	1
Bombastus	Wool alcohol ointment SR wit...	308145	8
Bombastus	Wool alcohol ointment SR wit...	291176	1
Bombastus	Wool alcohol ointment SR wit...	295359	2
Bombastus	Wool alcohol ointment SR wit...	277022	3
Bombastus	Wool alcohol ointment SR wit...	277024	6
Bombastus	Wool alcohol ointment SR wit...	277023	2
Bombastus	Wool alcohol ointment SR wit...	279104	1
Bombastus	Wool alcohol ointment SR wit...	283174	1
Bombastus	Wool alcohol ointment SR wit...	297125	1
Bombastus	Wool alcohol ointment SR wit...	297127	1
Bombastus	Wool alcohol ointment SR wit...	270776	1
Bombastus	Wool alcohol ointment SR wit...	297128	4
Bombastus	Wool alcohol ointment SR wit...	280061	3
Bombastus	Wool alcohol ointment SR wit...	291175	1
Bombastus	Wool alcohol ointment SR wit...	300083	2
Bombastus	Wool alcohol ointment SR wit...	18003449	2
Bombastus	Wool alcohol ointment SR wit...	19001994	1
Bombastus	Wool alcohol ointment SR wit...	300084	4
Bombastus	Wool alcohol ointment SR wit...	297130	1
Bombastus	Wool alcohol ointment SR wit...	293374	1
Bombastus	Wool alcohol ointment SR wit...	286880	1
Bombastus	Wool alcohol ointment SR wit...	274518	3
Bombastus	Wool alcohol ointment SR wit...	280060	1
Caele/ Jenne	Wool alcohol ointment SR wit...	13340003	1
Caelo	Wool alcohol ointment SR wit...	15047101	6
Caelo	Wool alcohol ointment SR wit...	15047004	1
Caelo	Wool alcohol ointment SR wit...	15269303	1
Caelo	Wool alcohol ointment SR wit...	15334702	1
Caelo	Wool alcohol ointment SR wit...	15269302	1
Caelo	Wool alcohol ointment SR wit...	14251402	1
Caelo	Wool alcohol ointment SR wit...	16251303	2
Caelo	Wool alcohol ointment SR wit...	18189901	1
Caelo	Wool alcohol ointment SR wit...	19004203	1
Caelo	Wool alcohol ointment SR wit...	13264102	2
Caelo	Wool alcohol ointment SR wit...	19004202	1
Caelo	Wool alcohol ointment SR wit...	12078201	1
Caelo	Wool alcohol ointment SR wit...	16142802	2
Caelo	Wool alcohol ointment SR wit...	15047002	2
Caelo	Wool alcohol ointment SR wit...	15334703	1
Caelo	Wool alcohol ointment SR wit...	18074502	4
Caelo	Wool alcohol ointment SR wit...	17319102	2
Caelo	Wool alcohol ointment SR wit...	14032502	1
Caelo	Wool alcohol ointment SR wit...	15047003	1
Caelo	Wool alcohol ointment SR wit...	16251302	5
Caelo	Wool alcohol ointment SR wit...	1625102	1
Caelo	Wool alcohol ointment SR wit...	16142803	1
Caelo	Wool alcohol ointment SR wit...	13077302	1
Caelo	Wool alcohol ointment SR wit...	13077301	1
Gehe	Wool alcohol ointment SR wit...	276135	1
GEHE	Wool alcohol ointment SR wit...	310488	2
Bombastus	Wool alcohol ointment SR wit...	274517	2
Bombastus	Wool alcohol ointment SR wit...	293378	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oels GmbH	Wool alcohol ointment SR wit...	7A111214	2
medphano AM GmbH	Wool alcohol ointment SR wit...	6550115	1
medphano Arzneimittel	Wool alcohol ointment SR wit...	6550118	1
Medphano Arzneimittel /...	Wool alcohol ointment SR wit...	6550115	1
medphano Arzneimittel G...	Wool alcohol ointment SR wit...	6550118	1
medphano Arzneimittel G...	Wool alcohol ointment SR wit...	6550115	1
medphano Arzneimittel G...	Wool alcohol ointment SR wit...	6550118	1
medphano Arzneimittel/ ...	Wool alcohol ointment SR wit...	6550118	1
medphano Arzneimittel/S...	Wool alcohol ointment SR wit...	6550115	1
medphano/Gehe	Wool alcohol ointment SR wit...	6550115	1
medphano/Phönix	Wool alcohol ointment SR wit...	6550118	1
Medphano/Phönix	Wool alcohol ointment SR wit...	6550118	1
Noweda	Wool alcohol ointment SR wit...	12078301	1
Noweda	Wool alcohol ointment SR wit...	12244302	1
Noweda	Wool alcohol ointment SR wit...	12078201	1
Bombastus	Wool alcohol ointment SR wit...	284381	1
Bombastus	Wool alcohol ointment SR wit...	280057	2
Pharmachem	Wool alcohol ointment SR wit...	250116	2
Phoenix 27.11.14 EK 6,08	Wool alcohol ointment SR wit...	288688	1
Phönix	Wool alcohol ointment SR wit...	270781	1
Phönix Gotha	Wool alcohol ointment SR wit...	284381	1
Sanacop	Wool alcohol ointment SR wit...	288688	1
Bombastus	Wool alcohol ointment SR/DAC	303995	4
Bombastus	Wool alcohol ointment SR/DAC	302598	4
Bombastus	Wool alcohol ointment SR/DAC	300081	1
Bombastus	Wool alcohol ointment SR/DAC	60089603	1
Bombastus	Wool alcohol ointment SR/DAC	305546	1
Bombastus	Wool alcohol ointment SR/DAC	302600	1
Bombastus	Wool alcohol ointment SR/DAC	308144	3
Bombastus	Wool alcohol ointment SR/DAC	308142	5
Bombastus	Wool alcohol ointment SR/DAC	17001148	3
Bombastus	Wool alcohol ointment SR/DAC	17001146	2
Bombastus	Wool alcohol ointment SR/DAC	18000625	2
Bombastus	Wool alcohol ointment SR/DAC	18003448	2
Bombastus	Wool alcohol ointment SR/DAC	18005346	1
Bombastus	Wool alcohol ointment SR/DAC	18005347	2
Bombastus	Wool alcohol ointment SR/DAC	303993	1
Bombastus	Wool alcohol ointment SR/DAC	308143	2
Bombastus	Wool alcohol ointment SR/DAC	310488	1
Bombastus	Wool alcohol ointment SR/DAC	300080	1
Bombastus	Wool alcohol ointment SR/DAC	300082	3
Bombastus	Wool alcohol ointment SR/DAC	17001149	4
Bombastus	Wool alcohol ointment SR/DAC	305548	4
Bombastus	Wool alcohol ointment SR/DAC	18005349	3
Bombastus	Wool alcohol ointment SR/DAC	301937	1
Bombastus	Wool alcohol ointment SR/DAC	108187	1
Bombastus	Wool alcohol ointment SR/DAC	303994	1
Bombastus	Wool alcohol ointment SR/DAC	301935	1
Bombastus	Wool alcohol ointment SR/DAC	310489	1
Bombastus	Wool alcohol ointment SR/DAC	18003445	1
Bombastus	Wool alcohol ointment SR/DAC	19001992	1
Bombastus	Wool alcohol ointment SR/DAC	19001991	1
Bombastus	Wool alcohol ointment SR/DAC	302599	6
Bombastus	Wool alcohol ointment SR/DAC	308146	1
Bombastus	Wool alcohol ointment SR/DAC	18003446	2
Bombastus	Wool alcohol ointment SR/DAC	18003447	1
Bombastus	Wool alcohol ointment SR/DAC	18000622	1
Bombastus	Wool alcohol ointment SR/DAC	19001993	1
Bombastus	Wool alcohol ointment SR/DAC	18000623	4
Bombatus/Phönix	Wool alcohol ointment SR/DAC	303995	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment SR/DAC	18001094	1
Caelo	Wool alcohol ointment SR/DAC	308141	1
Caelo	Wool alcohol ointment SR/DAC	17133102	1
Euro OTC	Wool alcohol ointment SR/DAC	310489	1
Fagron	Wool alcohol ointment SR/DAC	308145	1
Bombastus	Wool alcohol ointment SR/DAC	301938	2
medphano Arzneimittel	Wool alcohol ointment SR/DAC	6550115	1
medphano/AHD	Wool alcohol ointment SR/DAC	6550115	1
Bombastus	Wool alcohol ointment SR/DAC	301940	1
Pharmachem	Wool alcohol ointment SR/DAC	220517	1
Pharmachem/ Phönix	Wool alcohol ointment SR/DAC	220517	1
Bombastus	Wool alcohol ointment SR/DAC	3505546	1
Caelo	Emulsifying hydrophobic base...	12229003	7
Caelo	Emulsifying hydrophobic base...	12343501	4
Caelo	Emulsifying hydrophobic base...	14276401	17
Caelo	Emulsifying hydrophobic base...		22
	Eye ointment, emulsifying DAC	68150317	1
apomix	Eye ointment, emulsifying DAC	10A041016	1
Caelo	Eye paraffin	13338711	4
Caelo	Eye paraffin	13338710	13
Sanacorp	Eye paraffin		4
Caelo	Hydrophilic ointment DAB	14024802	5
Caelo	Hydrophilic ointment DAB	13245302	5
Fagron	Hydrophilic ointment DAB		2
Fagron	Hydrophilic ointment DAB	14G08-T08-013954	5
Caelo	Hydrophobic base gel DAC	13299604	10
Caelo	Hydrophobic base gel DAC	14044601	12
Euro OTC	Paraffin, white	1405014-01	9
Euro OTC	Paraffin, white	1401017-01	4
	Paraffin, white	279969	2
Bombastus	Paraffin, white	290271	4
Bombastus	Paraffin, white	19001675	2
Bombastus	Paraffin, white		1
	Paraffin, white	162720105299	1
Caelo	Paraffin, white	12374502	12
Caelo	Paraffin, white	12032413	20
Caelo	Paraffin, white	13268421	13
Caelo	Paraffin, white	12321908	4
Phagron	Paraffin, white		1
Phoenix	Paraffin, white		1
	Paraffin, white	13341606	1
Euro OTC	Paraffin, yellow	1811024-01	1
ichthyol	Unguentum Cordes®		1
Ichthyol	Unguentum Cordes®	13A067	1
Ichthyol	Unguentum Cordes®	15A137	1
Ichthyol	Unguentum Cordes®	15A150	1
Ichthyol Gesellschaft /...	Unguentum Cordes®		1
Ichthyol/Otto	Unguentum Cordes®		1
	Unguentum Cordes®	13A034	1
	Unguentum Cordes®	16A099	2
Apotheke/Defekturabfüll...	Wool alcohol ointment DAB		1
Caelo	Wool alcohol ointment DAB	14067001	5
Euro OTC	Wool alcohol ointment DAB	1211017-01	3
phönix	Wool alcohol ointment DAB		1
	Wool alcohol ointment SR wit...	291175	2
Caelo	Wool alcohol ointment SR wit...	16251301	2

- 125 967 spectra from 702 *Apo-Ident* customers from a total of 32 470 batches from a further 329

substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Paraffin classification* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Paraffin classification* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	3940	0	52 419
Type B	0	4551	0	64 778
Type C	0	12 293	93	123 736

The substance/substance group *Paraffin classification* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.8477 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.8682 %)
Type C	100.0000 % (> 99.6407 %)	99.2492 % (> 99.2249 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Paraffin classification* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Wool fat	9.44	—
Squalane	16.13	—
Softisan® 649	17.55	—
Macrogol 8 stearate type I	18.51	—
Triglycerides, medium-chain	19.70	—
Softisan® 378	20.11	—
Decyl oleate	21.34	—
Shea butter, refined	23.38	—
Olive oil, native	23.40	—
Pasta Cordes®	25.34	—
Apricot kernel oil, refined	25.37	—
2-ethylhexyl laurate	25.50	—

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Substanz	Distance in main model	Distance in second-stage model
Avocado oil, refined	25.96	—
Peanut oil, refined	25.99	—
Joboba oil, native	29.33	—
Laurel oil	30.56	—
Permethrin 25% solution	33.14	—
Triglycerol diisostearate	34.12	—
Oleyl oleate (stabilised)	34.42	—
Isopropyl palmitate	35.07	—
Camphor ointment	35.45	—
Almond oil, refined	40.15	—
Lauromacrogol 400	42.23	—
Macroglycerol hydroxystearate 40	43.00	—
Sunflower oil, refined	43.82	—
Soy lecithin, liquid	44.96	—
Pumpkin seed oil, pressed	45.03	—
Guaiazulene 25%, water-soluble	48.22	—
Isopropyl myristate	48.47	—
Metronidazole 25% in white petrolatum	49.07	—
Sesame oil, refined	49.79	—
Octyldodecanol	50.05	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Paraffin classification* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31744	31744	0.00	25.42
31009	31941	3.37	24.28
31949	31744	1.44	24.42
31010	31940	3.84	24.60
34679	34498	5.20	30.14
31437	31916	1.86	25.64
31468	31916	3.54	24.89
31590	31736	8.45	27.12
31601	32495	3.26	23.68
31736	31736	0.00	24.28
31916	31916	0.00	24.22
31917	31917	0.00	25.22
31918	31918	0.00	25.24
32495	32495	0.00	30.06
34509	31917	3.96	31.30
34510	34498	8.85	29.77
34511	31744	3.81	27.17
34550	34550	0.00	19.10
34551	34552	2.99	22.26

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34552	34552	0.00	20.44
34553	34553	0.00	16.35
30932	30932	0.00	17.43
34555	34555	0.00	18.20
31168	31446	3.14	21.96
31445	31610	3.48	26.75
34559	34552	3.62	21.15
31292	31446	3.58	22.47
31610	31610	0.00	27.61
31446	31446	0.00	21.13
32900	32900	0.00	27.91
31473	31473	0.00	20.11
31541	31736	9.37	26.53
31586	31736	9.92	26.82
31940	31940	0.00	21.47
31941	31941	0.00	21.64
34433	31736	12.90	28.03
34498	34498	0.00	30.55
31602	31602	0.00	32.11
31807	31602	4.60	33.03
31954	31602	2.50	31.98
31228	31228	0.00	31.76
31441	32017	7.22	29.87
31522	31522	0.00	26.00
31999	31999	0.00	25.57
32017	32017	0.00	31.90
32777	32777	0.00	26.93
30933	30933	0.00	15.62
31570	31570	0.00	18.75
31920	31920	0.00	15.31
32518	32518	0.00	23.79
32519	32519	0.00	24.42
33124	33124	0.00	24.56
33132	33132	0.00	24.47
33133	33133	0.00	25.07
33396	33396	0.00	15.63
33398	33398	0.00	16.59
33399	33399	0.00	16.08
33545	33545	0.00	24.07
34545	34545	0.00	24.03
31456	31456	0.00	36.41
31567	31909	7.38	35.64
31611	31909	5.43	36.62
31612	31456	5.85	36.74
31909	31909	0.00	36.81
31910	31910	0.00	37.43
34675	31456	7.40	40.26
31174	31174	0.00	25.48
32946	31174	6.41	24.03
32947	31999	8.33	24.65
34678	31921	8.51	28.36

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31272	31272	0.00	31.77
31921	31921	0.00	32.40
32517	32517	0.00	29.44
33614	32517	5.88	33.01
34542	34542	0.00	34.04
34858	34859	4.56	24.81
34859	34859	0.00	25.76
34860	34860	0.00	27.39
34861	34861	0.00	27.71
34865	34865	0.00	28.10
34867	34865	4.06	27.56

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Pasta Cordes®**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30633-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Pasta Cordes®

Special notes

When selecting the *Pasta Cordes®* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Pasta Cordes®	4	2	29

Second-stage model

For differentiation of the substance/substance group *Pasta Cordes*[®] the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Pasta Cordes*[®]:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Ichthyol	Pasta Cordes [®]	12A008	30633	40	20121017
Ichthyol	Pasta Cordes [®]	13A056	31084	40	1406053
Ichthyol	Pasta Cordes [®]	13A056	31673	60	20130411
Ichthyol	Pasta Cordes [®]	16A063	33285	40	20160427
Ichthyol	Pasta Cordes [®]	18A129	34484	40	20180816

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Pasta Cordes*[®]. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 139 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Pasta Cordes*[®].
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Pasta Cordes [®]	17A173	34046	40
Ichthyol	Pasta Cordes [®]	17A021	34321	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 258 spectra from 86 *Apo-Ident* customers from 36 batches from the substance/substance group *Pasta Cordes[®]*.
- Among them are spectra of independent samples from 29 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Euro OTC	Pasta Cordes [®]	15A173	1
Euro OTC	Pasta Cordes [®]	16A098	1
AHL	Pasta Cordes [®]	17A021	1
Caelo	Pasta Cordes [®]	12AD43	1
Caelo	Pasta Cordes [®]	12A182	2
Caelo	Pasta Cordes [®]	160822PC	2
Caelo	Pasta Cordes [®]	15a173	1
Caelo	Pasta Cordes [®]	15A173	4
Caelo	Pasta Cordes [®]	11A206	2
Caelo	Pasta Cordes [®]	16A063	3
Caelo	Pasta Cordes [®]	17A021	2
Caelo	Pasta Cordes [®]	16A098	1
Caelo	Pasta Cordes [®]	13A056	4
Cordes / Phönix	Pasta Cordes [®]	15A173	1
cordes hermann & co	Pasta Cordes [®]	18A129	1
Cordes Noweda	Pasta Cordes [®]	17A021	2
Cordes/AHD	Pasta Cordes [®]	13A056	1
Cordes/Gehe	Pasta Cordes [®]	14A025	1
Cordes/Gehe	Pasta Cordes [®]	17A021	1
Euro OTC	Pasta Cordes [®]	17A172	1
Fischer/Gehe	Pasta Cordes [®]	14A142	2
GEHE	Pasta Cordes [®]	17A173	1
Gehe/Ichthyol	Pasta Cordes [®]	15A173	1
ichthyol	Pasta Cordes [®]	15A1735338	1
ichthyol	Pasta Cordes [®]	17A0215503	1
Ichthyol	Pasta Cordes [®]	12a182	1
Ichthyol	Pasta Cordes [®]	14A025	1
Ichthyol	Pasta Cordes [®]	14A142	1
Ichthyol	Pasta Cordes [®]	14A124	2
Ichthyol	Pasta Cordes [®]	15A121	3
Ichthyol	Pasta Cordes [®]	15A173	2
Ichthyol	Pasta Cordes [®]	14A199	1
Ichthyol	Pasta Cordes [®]	16A064	1
Ichthyol	Pasta Cordes [®]	17A173	2
Ichthyol	Pasta Cordes [®]	17A021	1
ICHTHYOL	Pasta Cordes [®]	10A187	1

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Supplier	Substance	Batch	Spectra
ICHTHYOL	Pasta Cordes [®]	15A121	1
Ichthyol / AHD	Pasta Cordes [®]	14A142	1
Ichthyol / Gehe	Pasta Cordes [®]	12A182	1
Ichthyol / Gehe	Pasta Cordes [®]	18A129	1
Ichthyol / Noweda	Pasta Cordes [®]	14A142	1
ichthyol /AHD	Pasta Cordes [®]	17A0215744	1
Ichthyol /Gehe	Pasta Cordes [®]	12A182	1
Ichthyol /Noweda	Pasta Cordes [®]	12A182	1
Ichthyol /Noweda	Pasta Cordes [®]	13A056	3
Ichthyol Cordes/Phoenix	Pasta Cordes [®]	15A173	3
ichthyol gesellschaft	Pasta Cordes [®]	13A098	1
Ichthyol Gesellschaft	Pasta Cordes [®]	13A056	2
Ichthyol- Gesellschaft	Pasta Cordes [®]	15A173	2
Ichthyol- Gesellschaft	Pasta Cordes [®]	16A098	2
Ichthyol Gesellschaft /...	Pasta Cordes [®]	17A173	1
Ichthyol Gesellschaft /...	Pasta Cordes [®]	180308PC/16A064	1
Ichthyol Gesellschaft C...	Pasta Cordes [®]	16A098	1
Ichthyol Gesellschaft C...	Pasta Cordes [®]	14A124	1
Ichthyol Gesellschaft/K...	Pasta Cordes [®]	15A121	1
Ichthyol Gesellschaft	Pasta Cordes [®]	17A173	1
Ichthyol GmbH	Pasta Cordes [®]	16A098	1
Ichthyol/ Gehe	Pasta Cordes [®]	19A115	1
Ichthyol/ Krieger	Pasta Cordes [®]	15A173	1
Ichthyol/ Noweda	Pasta Cordes [®]	14A025	1
Ichthyol/ Phönix	Pasta Cordes [®]	14A142	1
Ichthyol/AHD	Pasta Cordes [®]	16A063	1
Ichthyol/Alliance Healt...	Pasta Cordes [®]	17A058	1
Ichthyol/Ebert	Pasta Cordes [®]	13A098	1
Ichthyol/Fiebig	Pasta Cordes [®]	14A124	2
Ichthyol/Fiebig	Pasta Cordes [®]	13A056	1
Ichthyol/Fiebig	Pasta Cordes [®]	14A142	2
Ichthyol/Fiebig	Pasta Cordes [®]	17A021	1
Ichthyol/Fiebig	Pasta Cordes [®]	17A173	2
ichthyol/Gehe	Pasta Cordes [®]	12A182	2
ichthyol/Gehe	Pasta Cordes [®]	13A098	3
ichthyol/Gehe	Pasta Cordes [®]	13A146	1
Ichthyol/Gehe	Pasta Cordes [®]	12A043	2
Ichthyol/Gehe	Pasta Cordes [®]	11A206	1
Ichthyol/Gehe	Pasta Cordes [®]	13A098	1
Ichthyol/Gehe	Pasta Cordes [®]	14A124	1
Ichthyol/Gehe	Pasta Cordes [®]	14A199	14
Ichthyol/Gehe	Pasta Cordes [®]	16A064	21
Ichthyol/Gehe	Pasta Cordes [®]	17A173	1
Ichthyol/Noedea	Pasta Cordes [®]	17A021	1
Ichthyol/Noweda	Pasta Cordes [®]	13A098	3
Ichthyol/Noweda	Pasta Cordes [®]	16A098	1
Ichthyol/Noweda	Pasta Cordes [®]	17A021	1
Ichthyol/Noweda	Pasta Cordes [®]	17A173	1
Ichthyol/Noweda	Pasta Cordes [®]	17A058	1
Ichthyol/OG	Pasta Cordes [®]	15A173	1
Ichthyol/P	Pasta Cordes [®]	17A058	1
Ichthyol/Phoenix	Pasta Cordes [®]	12A182	1
Ichthyol/Phoenix	Pasta Cordes [®]	14A025	1
Ichthyol/Phoenix	Pasta Cordes [®]	15A121	1
Ichthyol/Phoenix	Pasta Cordes [®]	16A063	3
Ichthyol/Phoenix	Pasta Cordes [®]	17A021	2
Ichthyol/Phoenix	Pasta Cordes [®]	17A058	1
Ichthyol/Phönix	Pasta Cordes [®]	14A025	1
Ichthyol/Phönix	Pasta Cordes [®]	14A124	1
Ichthyol/Phönix	Pasta Cordes [®]	14A142	8

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Pasta Cordes®	17A173	1
Ichthyol/Phönix WE:2804...	Pasta Cordes®	15A121	1
Ichthyol/Sanacorp	Pasta Cordes®	12A138	1
Ichthyol/Sanacorp	Pasta Cordes®	12A182	1
Ichthyol/Sanacorp	Pasta Cordes®	14A142	1
Ichthyol/Sanacorp	Pasta Cordes®	15A121	1
Ichthyol/Sanacorp	Pasta Cordes®	15A173	2
Ichthyol/Sanacorp	Pasta Cordes®	16A098	1
Ichthyol/Virchow	Pasta Cordes®	17A173	1
ICHTHYOL-GESELLSCHAFT	Pasta Cordes®	15A121	1
Ichthyol-Gesellschaft	Pasta Cordes®	13A056	1
Ichthyol-Gesellschaft	Pasta Cordes®	14A025	1
Ichthyol-Gesellschaft	Pasta Cordes®	15A121	1
Ichthyol-Gesellschaft	Pasta Cordes®	170102PC/15A173	1
Ichthyol-Gesellschaft	Pasta Cordes®	14A124	1
Ichthyol-Gesellschaft	Pasta Cordes®	15A173	1
Ichthyol-Gesellschaft	Pasta Cordes®	17A021	2
Ichthyol-Gesellschaft /...	Pasta Cordes®	17A173	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	18A129	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A124	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	13A098	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	13A146	3
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A025	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A124	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A199	4
Ichthyol-Gesellschaft C...	Pasta Cordes®	14a124	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	15A173	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	16A064	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	17A021	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	17A173	1
Ichthyol-Gesellschaft/s...	Pasta Cordes®	16A063	5
Ichthyol-Gesellschaft/Ph...	Pasta Cordes®	17A173	1
Ichthyol Gesellschaft	Pasta Cordes®	14A142	1
ICHTYOL GESELLSCHAFT Co...	Pasta Cordes®	16A063	1
Ichtyol/Noweda	Pasta Cordes®	15A121	1
Ichtyol/Phoenix	Pasta Cordes®	16A063	1
Ichtyol/Phoenix	Pasta Cordes®	17A021	4
Ichtyol-Gesellschaft	Pasta Cordes®	14A142	1
Ichtyol-Gesellschaft	Pasta Cordes®	17A021	2
Ichtyol-Gesellschaft	Pasta Cordes®	17A173	2
Ichtyol-Gesellschaft	Pasta Cordes®	17A172	1
ichthyol-gesellschaft co...	Pasta Cordes®	17A021	3
jchthyol / Ahd	Pasta Cordes®	17A0215656	1
Noweda	Pasta Cordes®	13A056	1
Noweda/Ichthyol	Pasta Cordes®	17A021	2
Noweda-Ichthyol	Pasta Cordes®	15A121	1
Phoenix	Pasta Cordes®	12A043	1
Phönix	Pasta Cordes®	12A182	1
Phönix/Ichthyol	Pasta Cordes®	15A121	2
Phönix/Ichthyol	Pasta Cordes®	16A098	1
Sanacorp / Ichthyolgese...	Pasta Cordes®	14A124	1
WE 28.11.16 Cordes/Phoe...	Pasta Cordes®	15A173	1
Ichthyol	Pasta Cordes®	12A008	1
Ichthyol	Pasta Cordes®	13A056	1
Ichthyol	Pasta Cordes®	16A063	1
Ichthyol	Pasta Cordes®	18A129	4

- 138 095 spectra from 703 *Apo-Ident* customers from a total of 35 259 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Pasta Cordes*[®] can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Pasta Cordes*[®] and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 380
Type C	0	238	20	137 913

The substance/substance group *Pasta Cordes*[®] can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6414 %)	92.2481 % (> 91.0853 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Pasta Cordes*[®] in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Guaiazulene 25%, water-soluble	28.04	—
Permethrin 25% solution	47.67	—
Softisan [®] 649	47.76	—
Shea butter, refined	49.37	—
Wool fat	50.09	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Pasta Cordes*[®] is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31084	31084	0.00	31.97
31673	31084	6.79	32.77
33285	31084	4.82	32.52
30633	31084	4.59	32.50
34484	31084	4.85	33.54

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Permethrin 25% solution**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31177-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Permethrin 25% solution

Special notes

When selecting the *Permethrin 25% solution* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Permethrin 25% solution	6	1	68

Second-stage model

For differentiation of the substance/substance group *Permethrin 25% solution* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Permethrin 25% solution*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Infectopharm	Permethrin 25% s...	S031301.1	31177	40	1405128
Infectopharm	Permethrin 25% s...	S061401.1	31563	60	1508108
Infectopharm	Permethrin 25% s...	S021601.1	32262	40	20160310
Infectopharm	Permethrin 25% s...	S021601.1	32263	40	20160310
Infectopharm	Permethrin 25% s...	S071602.1	33246	40	20160728
Infectopharm	Permethrin 25% s...	S071602.1	33247	40	20160728
Infectopharm	Permethrin 25% s...	S071602.1	33301	40	20160728
Infectopharm	Permethrin 25% s...	S071602.1	33302	40	20160728
Infectopharm	Permethrin 25% s...	S071602.1	33328	40	20160728
Infectopharm	Permethrin 25% s...	S021801.1	34120	40	20180301
Infectopharm	Permethrin 25% s...	S021801.1	34121	40	20180301
Infectopharm	Permethrin 25% s...	S041901.1	34692	40	20190426
Infectopharm	Permethrin 25% s...	S041901.1	34693	40	20190426

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 540 spectra of 13 reference samples from the substance/substance group *Permethrin 25% solution*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 6 different batches.
- 55 819 spectra from a total of 1110 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Permethrin 25% solution*.

- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Infectopharm	Permethrin 25% solution	S041701.2	33940	40
Infectopharm	Permethrin 25% solution	S041701.2	33941	40

- 69 394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 308 spectra from 122 *Apo-Ident* customers from 80 batches from the substance/substance group *Permethrin 25% solution*.
- Among them are spectra of independent samples from 43 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD / Infectopharm	Permethrin 25% solution	S0216011	1
biomo	Permethrin 25% solution	171201	1
Biomio	Permethrin 25% solution	170503	2
biomo / Noweda	Permethrin 25% solution	160202	1
biomo / Noweda	Permethrin 25% solution	171201	1
Biomio Pharma GmbH	Permethrin 25% solution	160202	1
Biomio Pharma GmbH	Permethrin 25% solution	170503	1
Biomio/AHD	Permethrin 25% solution	171201	2
Biomio/Noweda	Permethrin 25% solution	150901	1
Biomio/Noweda	Permethrin 25% solution	160202	2
Caelo	Permethrin 25% solution	12091811	1
Caelo	Permethrin 25% solution	S0216011	1
Caelo	Permethrin 25% solution	S071802	1
infecto pharm	Permethrin 25% solution	s121402	1
Infecto Pharm / Phönix	Permethrin 25% solution	S072018	1
Infectoph./Gehe	Permethrin 25% solution	S0313011	1
infectopharm	Permethrin 25% solution	23071414	1
Infectopharm	Permethrin 25% solution	S081202	1
Infectopharm	Permethrin 25% solution	S0313011	1
Infectopharm	Permethrin 25% solution	S0614011	1
Infectopharm	Permethrin 25% solution	S1214021	1
Infectopharm	Permethrin 25% solution	S0218011	1
InfectoPharm	Permethrin 25% solution	2510210212011	1
InfectoPharm	Permethrin 25% solution	23111205	1
InfectoPharm	Permethrin 25% solution	21121202	1
InfectoPharm	Permethrin 25% solution	25021307	1
InfectoPharm	Permethrin 25% solution	11061302	1
InfectoPharm	Permethrin 25% solution	6011407	1
InfectoPharm	Permethrin 25% solution	8011424	1
InfectoPharm	Permethrin 25% solution	14041401	1
InfectoPharm	Permethrin 25% solution	20081401	1

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Supplier	Substance	Batch	Spectra
InfectoPharm	Permethrin 25% solution	31071402	1
InfectoPharm	Permethrin 25% solution	11091403	1
InfectoPharm	Permethrin 25% solution	2091402	1
InfectoPharm	Permethrin 25% solution	9101406	1
InfectoPharm	Permethrin 25% solution	25111401	1
InfectoPharm	Permethrin 25% solution	17121403	1
InfectoPharm	Permethrin 25% solution	5011501	1
InfectoPharm	Permethrin 25% solution	28011504	1
InfectoPharm	Permethrin 25% solution	4071506	1
InfectoPharm	Permethrin 25% solution	1072015A	1
InfectoPharm	Permethrin 25% solution	S0216011	1
InfectoPharm	Permethrin 25% solution	23021717	1
InfectoPharm	Permethrin 25% solution	S021601	1
InfectoPharm	Permethrin 25% solution	28041708	1
Infectopharm Arzneimittel	Permethrin 25% solution	S0216011	1
Infectopharm/Gehe	Permethrin 25% solution	S0313011	1
Infectopharm/Gehe	Permethrin 25% solution	Infectopharm	1
INFECTOPHARM/GEHE 20.06. ...	Permethrin 25% solution	s071602-1	2
InfectoPharm/Kehr	Permethrin 25% solution	S0417012	4
Infectopharm/Phönix	Permethrin 25% solution	S0313011	1
Phoenix	Permethrin 25% solution	So4701	1
Phoenix	Permethrin 25% solution	170504	1
SANACORP	Permethrin 25% solution	171201	1
AHD / Infectopharm	Permethrin 25% solution		1
Anzag	Permethrin 25% solution		1
Anzag (Hersteller: Infe...	Permethrin 25% solution		1
Bombastus	Permethrin 25% solution		1
Caelo	Permethrin 25% solution		12
Dermapharm	Permethrin 25% solution		2
Euro OTC	Permethrin 25% solution		1
Fagron	Permethrin 25% solution		1
Gehe	Permethrin 25% solution		1
GEHE	Permethrin 25% solution		3
Gehe Infectopharma	Permethrin 25% solution		1
Ichthyol/Phönix	Permethrin 25% solution		2
Infect Pharm	Permethrin 25% solution		2
Infecto Pharm	Permethrin 25% solution		2
infecto Pharma	Permethrin 25% solution		4
Infecto/Ebert	Permethrin 25% solution		1
Infecto/Phönix	Permethrin 25% solution		1
Infectopahrm/Phoenix	Permethrin 25% solution		2
infectopharm	Permethrin 25% solution		3
Infectopharm	Permethrin 25% solution		44
InfectoPharm	Permethrin 25% solution		11
INFECTOPHARM	Permethrin 25% solution		2
Infectopharm / 20	Permethrin 25% solution		1
Infectopharm / Alliance...	Permethrin 25% solution		1
InfectoPharm / Anzag	Permethrin 25% solution		1
Infectopharm / Gehe	Permethrin 25% solution		1
InfectoPharm / Gehe	Permethrin 25% solution		17
Infectopharm / Kehr	Permethrin 25% solution		2
Infectopharm / Noweda	Permethrin 25% solution		2
InfectoPharm / Phönix	Permethrin 25% solution		2
infectopharm / Sanacorp	Permethrin 25% solution		1
Infectopharm AM / Allia...	Permethrin 25% solution		2
Infectopharm Arzneimittel	Permethrin 25% solution		6
Infectopharm, von Humbo...	Permethrin 25% solution		3
InfectoPharm/ Alliance ...	Permethrin 25% solution		1
InfectoPharm/ G	Permethrin 25% solution		1
Infectopharm/ Gehe	Permethrin 25% solution		2

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Supplier	Substance	Batch	Spectra
Infectopharm/ Now	Permethrin 25% solution		1
Infectopharm/ Noweda	Permethrin 25% solution		5
Infectopharm/ Phönix	Permethrin 25% solution		2
Infectopharm/ Sanacorp	Permethrin 25% solution		2
Infectopharm/AHD	Permethrin 25% solution		9
InfectoPharm/AHD	Permethrin 25% solution		6
Infectopharm/Alliance	Permethrin 25% solution		2
Infectopharm/Anzag	Permethrin 25% solution		2
InfectoPharm/Anzag	Permethrin 25% solution		2
Infectopharm/APEG	Permethrin 25% solution		1
Infectopharm/Ebert	Permethrin 25% solution		4
Infectopharm/Fiebig	Permethrin 25% solution		1
Infectopharm/Gehe	Permethrin 25% solution		4
InfectoPharm/Gehe	Permethrin 25% solution		6
INFECTOPHARM/GEHE 22.09...	Permethrin 25% solution		1
infectopharm/Jenne	Permethrin 25% solution		1
InfectoPharm/Kehr	Permethrin 25% solution		1
Infectopharm/noweda	Permethrin 25% solution		1
Infectopharm/Noweda	Permethrin 25% solution		5
INFECTOPHARM/NOWEDA 11...	Permethrin 25% solution		1
Infectopharm/Phoenix	Permethrin 25% solution		11
Infectopharm/Phönix	Permethrin 25% solution		5
InfectoPharm/Phönix	Permethrin 25% solution		1
Infectopharm/Sana	Permethrin 25% solution		1
Infectopharm/Sanacorp	Permethrin 25% solution		4
INFECTOPHARM/Sanacorp	Permethrin 25% solution		1
Infectopharm-Gehe	Permethrin 25% solution		1
Infvctopharm/Fiebig	Permethrin 25% solution		2
Jenne	Permethrin 25% solution		1
JENNE	Permethrin 25% solution		1
Krieger	Permethrin 25% solution		2
Löwen City-Apotheke Bar...	Permethrin 25% solution		1
	Permethrin 25% solution		1
Noweda/ Infectopharm	Permethrin 25% solution		1
Noweda/Infectopharm	Permethrin 25% solution		1
Noweda/InfectoPharm	Permethrin 25% solution		1
Phoenix/Infectopharma	Permethrin 25% solution		5
Phoenix	Permethrin 25% solution		3
Phönix/Infectopharm	Permethrin 25% solution		1
Sanacorp	Permethrin 25% solution		4

- 138 045 spectra from 703 *Apo-Ident* customers from a total of 35 217 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Permethrin 25% solution* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Permethrin 25% solution* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	538	2	55 819
Type B	0	80	0	69 394
Type C	0	308	0	138 045

The substance/substance group *Permethrin 25% solution* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	99.6296 % (> 99.0741 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 98.0519 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Permethrin 25% solution* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Metronidazole 25% in white petrolatum	56.83	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Permethrin 25% solution* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31177	31177	0.00	83.45
31563	31563	0.00	81.36
32262	31563	6.04	99.27
32263	31563	3.85	94.60
33246	31563	15.38	98.05
33247	31177	8.50	84.43
33301	31177	18.74	82.75

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33302	31177	16.37	87.61
33328	31563	9.58	104.73
34120	31177	19.70	90.47
34121	31177	14.23	93.29
34692	31563	4.25	93.89
34693	31177	17.85	87.15

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Petroleum ether DAB**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30899-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Petroleum ether DAB; Benzinum DAB

Special notes

When selecting the *Petroleum ether DAB* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Petroleum ether DAB	3	3	289

Second-stage model

For differentiation of the substance/substance group *Petroleum ether DAB* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Petroleum ether DAB*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Petroleum ether ...	12279604	30899	60	1503677
Caelo	Petroleum ether ...	13141304	31283	40	1412255
Otto Fischar	Petroleum ether ...	6323042	31253	40	1505436

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 140 spectra of 3 reference samples from the substance/substance group *Petroleum ether DAB*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 219 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Petroleum ether DAB*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Petroleum ether DAB	91883269	30102	40
Caelo	Petroleum ether DAB	171715	33329	40
Hedinger	Petroleum ether DAB	028175B	32955	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1245 spectra from 354 *Apo-Ident* customers from 296 batches from the substance/substance group *Petroleum ether DAB*.
- Among them are spectra of independent samples from 286 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
A. Hedinger / Noweda	Petroleum ether DAB	281728	1
A.H.Hedinger vdL	Petroleum ether DAB	28172B	1
A.Hedinger / Kehr	Petroleum ether DAB	281708	1
ACM	Petroleum ether DAB	KNC0833J15	1
AEP/ Fischar	Petroleum ether DAB	6325105	1
AEP/Fischar	Petroleum ether DAB	6326092	1
AHC/Fischar	Petroleum ether DAB	6328064	1
AHD	Petroleum ether DAB	28176B	1
AHD	Petroleum ether DAB	28178B	1
ALH/Hedinger	Petroleum ether DAB	28177B	1
Alliance	Petroleum ether DAB	6326027	1
Alliance Healthcare/Fis...	Petroleum ether DAB	6324025	1
AllianceHealthcare	Petroleum ether DAB	28172b	1
anzag	Petroleum ether DAB	6324063	1
Anzag	Petroleum ether DAB	6324092	1
anzag 15.11.12	Petroleum ether DAB	28167B	1
Anzag 16.10.14	Petroleum ether DAB	28171B	1
Anzag/Fischar	Petroleum ether DAB	6323017	1
Anzag/Fischar	Petroleum ether DAB	6324064	1
Anzag/Hedinger	Petroleum ether DAB	28167B	2
Anzag/Hedinger	Petroleum ether DAB	28172B	1
Apoth. Dr. P. Hünerbei	Petroleum ether DAB	28176B	1
Bären Apotheke	Petroleum ether DAB	6327019	1
Bären Apotheke	Petroleum ether DAB	6327018	1
Barthel	Petroleum ether DAB	28171B	2
Bombastus	Petroleum ether DAB	6326063	1
Caelo	Petroleum ether DAB	28165B	3
Caelo	Petroleum ether DAB	6322097	1
Caelo	Petroleum ether DAB	4031404	1
Caelo	Petroleum ether DAB	28171B	2
Caelo	Petroleum ether DAB	28172B	2
Caelo	Petroleum ether DAB	11357104	1
Caelo	Petroleum ether DAB	6325109	1
Caelo	Petroleum ether DAB	6326055	1
Caelo	Petroleum ether DAB	28176B	5
Caelo	Petroleum ether DAB	6327114	1
Caelo	Petroleum ether DAB	28177b	2
Caelo	Petroleum ether DAB	632711A	1
Caelo	Petroleum ether DAB	16111002	1
Caelo	Petroleum ether DAB	17171505	1
Caelo	Petroleum ether DAB	28174B	2

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Supplier	Substance	Batch	Spectra
Caelo	Petroleum ether DAB	28175B	8
Caelo	Petroleum ether DAB	28170B	1
Caelo	Petroleum ether DAB	16111005	1
Caelo	Petroleum ether DAB	6326031	2
Caelo	Petroleum ether DAB	28178B	3
Caelo	Petroleum ether DAB	28180B	1
Caelo	Petroleum ether DAB	5013J-01170	1
Caelo	Petroleum ether DAB	6326063	1
Caelo	Petroleum ether DAB	6327016	1
Caelo	Petroleum ether DAB	6325119	1
Caelo	Petroleum ether DAB	281698	1
Caelo	Petroleum ether DAB	28173B	4
Caelo	Petroleum ether DAB	6327054	2
Caelo	Petroleum ether DAB	2816B	1
Caelo	Petroleum ether DAB	6327115	1
Caelo	Petroleum ether DAB	16111007	1
Caelo	Petroleum ether DAB	6326027	1
Caelo	Petroleum ether DAB	6326061	1
Caelo	Petroleum ether DAB	6325021	1
Caelo	Petroleum ether DAB	28167B	3
Caelo	Petroleum ether DAB	13141302	1
Caelo	Petroleum ether DAB	6324082	2
Caelo	Petroleum ether DAB	6324113	1
Caelo	Petroleum ether DAB	6325055	2
Caelo	Petroleum ether DAB	6325111	2
Caelo	Petroleum ether DAB	6326014	1
Caelo	Petroleum ether DAB	6326104	1
Caelo	Petroleum ether DAB	28168B	3
Caelo	Petroleum ether DAB	6323033	2
Caelo	Petroleum ether DAB	6324025	1
Caelo	Petroleum ether DAB	6324044	1
Caelo	Petroleum ether DAB	6326015	1
Caelo	Petroleum ether DAB	6328111	1
Caelo	Petroleum ether DAB	281748	1
Calo/AHD	Petroleum ether DAB	28175B	1
Delta	Petroleum ether DAB	28176B	2
Dr. Seeger/ Phönix	Petroleum ether DAB	28169B	1
Ebert/Fischar	Petroleum ether DAB	6323093	1
Euro OTC	Petroleum ether DAB	23o4123	1
Euro OTC	Petroleum ether DAB	6326104	1
Euro OTC	Petroleum ether DAB	6325087	1
FA.Hedinger	Petroleum ether DAB	28174B	3
Fiebig	Petroleum ether DAB	6324123	1
Fiebig	Petroleum ether DAB	6327017	2
Fiebig	Petroleum ether DAB	6327116	1
Fiebig/Fischer	Petroleum ether DAB	6328014	1
fischar	Petroleum ether DAB	6324035	1
fischar	Petroleum ether DAB	6326021	2
fischar	Petroleum ether DAB	6325023	1
fischar	Petroleum ether DAB	6325024	1
fischar	Petroleum ether DAB	6325109	1
fischar	Petroleum ether DAB	616331022	1
fischar	Petroleum ether DAB	6327055	1
fischar	Petroleum ether DAB	6328041	1
Fischar	Petroleum ether DAB	6322061	1
Fischar	Petroleum ether DAB	6322079	1
Fischar	Petroleum ether DAB	6321111	1
Fischar	Petroleum ether DAB	6322076	1
Fischar	Petroleum ether DAB	6322074	2
Fischar	Petroleum ether DAB	6322051	1

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Supplier	Substance	Batch	Spectra
Fischar	Petroleum ether DAB	632207A	1
Fischar	Petroleum ether DAB	6322073	1
Fischar	Petroleum ether DAB	6322114	1
Fischar	Petroleum ether DAB	6323016	1
Fischar	Petroleum ether DAB	6322113	1
Fischar	Petroleum ether DAB	6323017	1
Fischar	Petroleum ether DAB	6323033	1
Fischar	Petroleum ether DAB	6323063	3
Fischar	Petroleum ether DAB	6322119	1
Fischar	Petroleum ether DAB	6323066	1
Fischar	Petroleum ether DAB	6323068	1
Fischar	Petroleum ether DAB	412062-2-P	1
Fischar	Petroleum ether DAB	6323111	1
Fischar	Petroleum ether DAB	6324016	1
Fischar	Petroleum ether DAB	632401A	1
Fischar	Petroleum ether DAB	6323099	1
Fischar	Petroleum ether DAB	6323097	1
Fischar	Petroleum ether DAB	6324041	3
Fischar	Petroleum ether DAB	6324064	1
Fischar	Petroleum ether DAB	6324082	15
Fischar	Petroleum ether DAB	6324034	2
Fischar	Petroleum ether DAB	6324074	1
Fischar	Petroleum ether DAB	6324091	1
Fischar	Petroleum ether DAB	6324075	1
Fischar	Petroleum ether DAB	6324092	1
Fischar	Petroleum ether DAB	6324055	1
Fischar	Petroleum ether DAB	6324103	2
Fischar	Petroleum ether DAB	6324114	2
Fischar	Petroleum ether DAB	6324013	1
Fischar	Petroleum ether DAB	6324115	1
Fischar	Petroleum ether DAB	6325025	1
Fischar	Petroleum ether DAB	6326012	1
Fischar	Petroleum ether DAB	6324072	2
Fischar	Petroleum ether DAB	6324105	4
Fischar	Petroleum ether DAB	6324083	1
Fischar	Petroleum ether DAB	6325012	3
Fischar	Petroleum ether DAB	6325024	2
Fischar	Petroleum ether DAB	6325023	2
Fischar	Petroleum ether DAB	24061501	1
Fischar	Petroleum ether DAB	6325022	2
Fischar	Petroleum ether DAB	6324123	1
Fischar	Petroleum ether DAB	6325034	1
Fischar	Petroleum ether DAB	6325063	3
Fischar	Petroleum ether DAB	6325042	1
Fischar	Petroleum ether DAB	6325052	3
Fischar	Petroleum ether DAB	6325081	3
Fischar	Petroleum ether DAB	6325051	2
Fischar	Petroleum ether DAB	6325065	1
Fischar	Petroleum ether DAB	6325101	2
Fischar	Petroleum ether DAB	6325106	1
Fischar	Petroleum ether DAB	6326011	3
Fischar	Petroleum ether DAB	6325119	1
Fischar	Petroleum ether DAB	6325109	2
Fischar	Petroleum ether DAB	6326026	1
Fischar	Petroleum ether DAB	6326027	1
Fischar	Petroleum ether DAB	55780	1
Fischar	Petroleum ether DAB	6326031	2
Fischar	Petroleum ether DAB	6326032	1
Fischar	Petroleum ether DAB	6326047	2
Fischar	Petroleum ether DAB	6326071	2

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Supplier	Substance	Batch	Spectra
Fischar	Petroleum ether DAB	6326061	2
Fischar	Petroleum ether DAB	6326084	2
Fischar	Petroleum ether DAB	6326072	1
Fischar	Petroleum ether DAB	6326092	1
Fischar	Petroleum ether DAB	6326075	1
Fischar	Petroleum ether DAB	6326095	1
Fischar	Petroleum ether DAB	632701	1
Fischar	Petroleum ether DAB	6327017	2
Fischar	Petroleum ether DAB	6327013	1
Fischar	Petroleum ether DAB	6327034	1
Fischar	Petroleum ether DAB	6327024	1
Fischar	Petroleum ether DAB	6327054	2
Fischar	Petroleum ether DAB	6327019	1
Fischar	Petroleum ether DAB	6327072	1
Fischar	Petroleum ether DAB	6327102	2
Fischar	Petroleum ether DAB	6327074	1
Fischar	Petroleum ether DAB	6327101	1
Fischar	Petroleum ether DAB	6327105	1
Fischar	Petroleum ether DAB	6327115	1
Fischar	Petroleum ether DAB	632801A	1
Fischar	Petroleum ether DAB	6327112	1
Fischar	Petroleum ether DAB	6328105	1
Fischar	Petroleum ether DAB	6329051	1
Fischar / Anzag	Petroleum ether DAB	6322095	1
Fischar / Gehe	Petroleum ether DAB	6325055	1
Fischar / Gehe	Petroleum ether DAB	6326014	1
Fischar / Gehe	Petroleum ether DAB	6326075	1
Fischar / Gehe	Petroleum ether DAB	6326061	1
Fischar / Gehe	Petroleum ether DAB	6327033	1
Fischar / Gehe	Petroleum ether DAB	6327021	1
Fischar / Noweda	Petroleum ether DAB	6322112	1
Fischar / Noweda	Petroleum ether DAB	6323069	1
Fischar / Phönix	Petroleum ether DAB	3412I-01170	1
Fischar / Phönix	Petroleum ether DAB	3413J-01170	1
Fischar / Sanacorp	Petroleum ether DAB	6323062	1
Fischar Anzag	Petroleum ether DAB	6327102	1
Fischar GmbH	Petroleum ether DAB	6323066	1
Fischar GmbH	Petroleum ether DAB	6325044	1
Fischar GmbH	Petroleum ether DAB	6328035	1
Fischar GmbH	Petroleum ether DAB	6328124	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6325117	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6326052	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6326113	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6327051	1
Fischar Phönix	Petroleum ether DAB	6323094	1
Fischar Phönix	Petroleum ether DAB	6324018	1
Fischar Phönix	Petroleum ether DAB	6323112	1
Fischar Phönix	Petroleum ether DAB	6328014	1
Fischar Phönix	Petroleum ether DAB	6328064	1
Fischar/ AHD	Petroleum ether DAB	6327093	1
Fischar/ Now	Petroleum ether DAB	6323064	1
Fischar/ Noweda	Petroleum ether DAB	6324104	1
Fischar/ Noweda	Petroleum ether DAB	632704	1
Fischar/ Phönix	Petroleum ether DAB	6325106	1
Fischar/ Sanacorp	Petroleum ether DAB	6325108	1
Fischar/ Sanacorp	Petroleum ether DAB	6327102	2
Fischar/Alliance H.	Petroleum ether DAB	6325104	1
Fischar/Alliance Health...	Petroleum ether DAB	6326027	2
Fischar/Alliance Health...	Petroleum ether DAB	6328064	1
Fischar/Alliance Heathc...	Petroleum ether DAB	6324064	1

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Supplier	Substance	Batch	Spectra
Fischar/Anzag	Petroleum ether DAB	6323016	1
Fischar/Anzag	Petroleum ether DAB	6323024	1
Fischar/Anzag	Petroleum ether DAB	6323099	1
Fischar/Anzag	Petroleum ether DAB	6323095	1
Fischar/Anzag	Petroleum ether DAB	6323062	1
Fischar/Anzag	Petroleum ether DAB	6324063	1
Fischar/Anzag	Petroleum ether DAB	6325053	1
Fischar/Fiebig	Petroleum ether DAB	6325065	1
Fischar/Fiebig	Petroleum ether DAB	6325109	2
fischar/gehe	Petroleum ether DAB	6327053	1
Fischar/Gehe	Petroleum ether DAB	6322117	1
Fischar/Gehe	Petroleum ether DAB	6322061	1
Fischar/Gehe	Petroleum ether DAB	6322053	1
Fischar/Gehe	Petroleum ether DAB	6323093	1
Fischar/Gehe	Petroleum ether DAB	632309A	1
Fischar/Gehe	Petroleum ether DAB	6323113	1
Fischar/Gehe	Petroleum ether DAB	3623111	1
Fischar/Gehe	Petroleum ether DAB	6324062	1
Fischar/Gehe	Petroleum ether DAB	6325089	1
Fischar/Gerx	Petroleum ether DAB	6327053	1
Fischar/Jenne	Petroleum ether DAB	6327114	1
Fischar/Kehr	Petroleum ether DAB	6328122	1
Fischar/Noweda	Petroleum ether DAB	6323017	1
Fischar/Noweda	Petroleum ether DAB	6323065	1
Fischar/Noweda	Petroleum ether DAB	6323069	1
Fischar/Noweda	Petroleum ether DAB	6326011	1
Fischar/Noweda	Petroleum ether DAB	6326012	1
Fischar/Noweda	Petroleum ether DAB	6326095	1
Fischar/Noweda	Petroleum ether DAB	6326081	1
Fischar/Noweda	Petroleum ether DAB	6326112	1
Fischar/Noweda	Petroleum ether DAB	6327072	1
Fischar/Noweda	Petroleum ether DAB	6328014	1
Fischar/Noweda	Petroleum ether DAB	632711A	1
Fischar/Nowenda	Petroleum ether DAB	6323112	1
fischar/phoenix	Petroleum ether DAB	6323064	1
Fischar/phoenix	Petroleum ether DAB	6326061	5
Fischar/Phoenix	Petroleum ether DAB	6323069	1
Fischar/Phoenix	Petroleum ether DAB	6324018	1
Fischar/Phoenix	Petroleum ether DAB	6325051	1
Fischar/Phoenix	Petroleum ether DAB	6326047	1
Fischar/Phoenix	Petroleum ether DAB	6326085	1
Fischar/Phoenix	Petroleum ether DAB	6328105	1
Fischar/Phoenix	Petroleum ether DAB	6328074	1
Fischar/Phönix	Petroleum ether DAB	6323063	1
Fischar/Phönix	Petroleum ether DAB	6324105	1
Fischar/Phönix	Petroleum ether DAB	6324123	1
Fischar/Phönix	Petroleum ether DAB	6325081	3
Fischar/Phönix	Petroleum ether DAB	6326011	2
Fischar/Phönix	Petroleum ether DAB	6325086	1
Fischar/Phönix	Petroleum ether DAB	6325105	1
Fischar/Phönix	Petroleum ether DAB	6326092	1
Fischar/Phönix	Petroleum ether DAB	6326083	1
Fischar/Phönix	Petroleum ether DAB	6327093	1
Fischar/Phönix	Petroleum ether DAB	6327102	1
Fischar/Phönix	Petroleum ether DAB	6328063	1
Fischar/Phönix	Petroleum ether DAB	6328104	2
Fischar/Phönix	Petroleum ether DAB	6328105	1
Fischar/Phönix	Petroleum ether DAB	6329023	1
Fischar/Phönix	Petroleum ether DAB	6329025	1
fischar/Sanacorp	Petroleum ether DAB	6325021	1

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Supplier	Substance	Batch	Spectra
fischar/Sanacorp	Petroleum ether DAB	6326026	1
Fischar/Sanacorp	Petroleum ether DAB	6322116	1
Fischar/Sanacorp	Petroleum ether DAB	6324033	1
Fischar/Sanacorp	Petroleum ether DAB	6324065	1
Fischar/Sanacorp	Petroleum ether DAB	6324103	1
Fischar/Sanacorp	Petroleum ether DAB	6326047	1
Fischar/Sanacorp	Petroleum ether DAB	6326081	1
Fischar/Sanacorp	Petroleum ether DAB	6327018	2
Fischar/Sanacorp	Petroleum ether DAB	6327072	1
Fischar/Sanacorp	Petroleum ether DAB	6328013	1
Fischar/Sanacorp	Petroleum ether DAB	6327013	1
Fischar/Sanacorp	Petroleum ether DAB	6328045	1
Fischar/Sanacorp	Petroleum ether DAB	6328051	1
Fischar/Sanacorp	Petroleum ether DAB	6328065	1
Fischar/Spangro	Petroleum ether DAB	6326026	1
Fischbar	Petroleum ether DAB	6324103	1
Fischbar	Petroleum ether DAB	6326112	1
fischer	Petroleum ether DAB	6325087	1
Fischer	Petroleum ether DAB	6323064	1
Fischer	Petroleum ether DAB	6324062	1
Fischer	Petroleum ether DAB	6324102	1
Fischer	Petroleum ether DAB	6324095	1
Fischer	Petroleum ether DAB	6324103	1
Fischer	Petroleum ether DAB	6325081	1
Fischer	Petroleum ether DAB	6325107	1
Fischer	Petroleum ether DAB	6325105	1
Fischer	Petroleum ether DAB	6327024	1
Fischer	Petroleum ether DAB	6323066	1
Fischer / Anzag	Petroleum ether DAB	6328035	1
FISCHER GMBH / GEHE	Petroleum ether DAB	6323094	1
FISCHER GMBH / GEHE	Petroleum ether DAB	6324091	1
FISCHER GMBH / GEHE	Petroleum ether DAB	6324104	1
Fischer GmbH/Phönix	Petroleum ether DAB	6328035	1
Fischer Saarbrücken/GEHE	Petroleum ether DAB	6323043	1
Fischer Saarbrücken/GEHE	Petroleum ether DAB	6322041	1
Fischer/Noweda	Petroleum ether DAB	6328013	1
Fischer/Phönix	Petroleum ether DAB	6325014	1
Fischer/Phönix	Petroleum ether DAB	6325034	3
Fischer/Phönix	Petroleum ether DAB	6327018	1
Fischer/Phönix	Petroleum ether DAB	6327034	2
Fischer/Phönix	Petroleum ether DAB	6327061	1
Fischer/Sanacorp	Petroleum ether DAB	6323099	1
Fischer/Sanacorp	Petroleum ether DAB	6325105	1
Fischer/Sanacorp	Petroleum ether DAB	637013	1
Frau Brinn-Holtz	Petroleum ether DAB	6325109	1
Gehe	Petroleum ether DAB	28166B	1
Gehe	Petroleum ether DAB	6322061	1
Gehe	Petroleum ether DAB	6322095	1
Gehe	Petroleum ether DAB	28173b	1
Gehe	Petroleum ether DAB	28176B	1
GEHE	Petroleum ether DAB	6322119	1
GEHE	Petroleum ether DAB	28176B	1
Gehe - Hedinger	Petroleum ether DAB	28171B	1
Gehe/ Hedinger	Petroleum ether DAB	28167B	1
Caelo	Petroleum ether DAB	1110516	1
Euro OTC	Petroleum ether DAB	28174B	1
Gehe/Fischar	Petroleum ether DAB	13373701	1
Gehe/Fischar	Petroleum ether DAB	6327062	3
Gehe/Hedinger	Petroleum ether DAB	28175B	1
Gehe-Hedinger	Petroleum ether DAB	28167B	1

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Supplier	Substance	Batch	Spectra
Gehe-Hedinger	Petroleum ether DAB	28172B	1
Hedinger/Noweda	Petroleum ether DAB	28177B	2
hedinger	Petroleum ether DAB	28167B	2
hedinger	Petroleum ether DAB	28168B	1
hedinger	Petroleum ether DAB	298171B	1
hedinger	Petroleum ether DAB	6326011	1
hedinger	Petroleum ether DAB	28175	1
hedinger	Petroleum ether DAB	28176B	1
hedinger	Petroleum ether DAB	28178B	2
Hedinger	Petroleum ether DAB	2071202	1
Hedinger	Petroleum ether DAB	28166B	9
Hedinger	Petroleum ether DAB	28165B	2
Hedinger	Petroleum ether DAB	31101203	1
Hedinger	Petroleum ether DAB	28167B	15
Hedinger	Petroleum ether DAB	2411Q-01170	1
Hedinger	Petroleum ether DAB	25021302	1
Hedinger	Petroleum ether DAB	204311170	1
Hedinger	Petroleum ether DAB	28168B	20
Hedinger	Petroleum ether DAB	281658	1
Hedinger	Petroleum ether DAB	3071304	1
Hedinger	Petroleum ether DAB	13081309	1
Hedinger	Petroleum ether DAB	281688	3
Hedinger	Petroleum ether DAB	28169B	14
Hedinger	Petroleum ether DAB	30101310	1
Hedinger	Petroleum ether DAB	281698	2
Hedinger	Petroleum ether DAB	28170B	14
Hedinger	Petroleum ether DAB	28171B	27
Hedinger	Petroleum ether DAB	3071401	1
Hedinger	Petroleum ether DAB	281718	1
Hedinger	Petroleum ether DAB	6324041	2
Hedinger	Petroleum ether DAB	15091402	1
Hedinger	Petroleum ether DAB	28172B	39
Hedinger	Petroleum ether DAB	12121401	1
Hedinger	Petroleum ether DAB	28011506	1
Hedinger	Petroleum ether DAB	281748	4
Hedinger	Petroleum ether DAB	2817SB	1
Hedinger	Petroleum ether DAB	29041501	1
Hedinger	Petroleum ether DAB	28173B	18
Hedinger	Petroleum ether DAB	281738	6
Hedinger	Petroleum ether DAB	28172b	1
Hedinger	Petroleum ether DAB	28174B	30
Hedinger	Petroleum ether DAB	28174	1
Hedinger	Petroleum ether DAB	28174b	2
Hedinger	Petroleum ether DAB	28175B	25
Hedinger	Petroleum ether DAB	2B175B	1
Hedinger	Petroleum ether DAB	281758	3
Hedinger	Petroleum ether DAB	28176B	20
Hedinger	Petroleum ether DAB	11051703	1
Hedinger	Petroleum ether DAB	(028)028	1
Hedinger	Petroleum ether DAB	281768	3
Hedinger	Petroleum ether DAB	7091707	1
Hedinger	Petroleum ether DAB	170323184	1
Hedinger	Petroleum ether DAB	28176B5395	1
Hedinger	Petroleum ether DAB	18111701	1
Hedinger	Petroleum ether DAB	28177B	12
Hedinger	Petroleum ether DAB	281778	3
Hedinger	Petroleum ether DAB	14051804	1
Hedinger	Petroleum ether DAB	9071803	1
Hedinger	Petroleum ether DAB	7081801	1
Hedinger	Petroleum ether DAB	28178B	5

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Supplier	Substance	Batch	Spectra
Hedinger	Petroleum ether DAB	5121815	1
Hedinger	Petroleum ether DAB	28180B	1
Hedinger	Petroleum ether DAB	28179B	1
HEDINGER	Petroleum ether DAB	28166B	2
HEDINGER	Petroleum ether DAB	28167B	1
HEDINGER	Petroleum ether DAB	281688	2
HEDINGER	Petroleum ether DAB	28173B	1
Hedinger vdL	Petroleum ether DAB	28171B	2
Hedinger , Stuttgart	Petroleum ether DAB	28170B	1
HEDINGER / 20	Petroleum ether DAB	28168B	1
HEDINGER / 20	Petroleum ether DAB	28170B	1
HEDINGER / 30	Petroleum ether DAB	28172B	2
Hedinger / AHD 01.08.2017	Petroleum ether DAB	28176B	1
Hedinger / AHD 08.03.2017	Petroleum ether DAB	28175B	1
Hedinger / AHD 23.08.2018	Petroleum ether DAB	28177B	1
Hedinger / Alliance HC	Petroleum ether DAB	28171B	1
Hedinger / Alliance Hea...	Petroleum ether DAB	28174B	1
Hedinger / Alliance Hea...	Petroleum ether DAB	28175B	1
Hedinger / Anzag	Petroleum ether DAB	28163B	1
Hedinger / Anzag	Petroleum ether DAB	28168B	1
Hedinger / Gehe	Petroleum ether DAB	28167B	1
Hedinger / Gehe	Petroleum ether DAB	28169B	6
Hedinger / Gehe	Petroleum ether DAB	1301401	1
Hedinger / Gehe	Petroleum ether DAB	28170B	5
Hedinger / Gehe	Petroleum ether DAB	28171B	1
Hedinger / Gehe	Petroleum ether DAB	28174B	2
Hedinger / Gehe	Petroleum ether DAB	28176B	1
Hedinger / Gehe	Petroleum ether DAB	28178B	3
Hedinger / Gehe	Petroleum ether DAB	28180B	2
Hedinger / NOW	Petroleum ether DAB	28170B	1
Hedinger / Noweda	Petroleum ether DAB	28169B	1
Hedinger / Noweda	Petroleum ether DAB	28172B	2
Hedinger / Noweda	Petroleum ether DAB	28174B	2
Hedinger / Noweda	Petroleum ether DAB	28175B	2
HEDINGER / NOWEDA	Petroleum ether DAB	28175B	1
Hedinger / Phoenix	Petroleum ether DAB	3966/V02/17	1
Hedinger / Phönix	Petroleum ether DAB	28172B	1
hedinger /AHD	Petroleum ether DAB	28176B5449	1
Hedinger GmbH	Petroleum ether DAB	281738	1
Hedinger GmbH	Petroleum ether DAB	28174B	1
Hedinger GmbH	Petroleum ether DAB	28175B	1
Hedinger GmbH &Co KG	Petroleum ether DAB	28176B	2
Hedinger GmbH &Co KG	Petroleum ether DAB	28177B	1
Hedinger GmbH &Co KG	Petroleum ether DAB	28178B	1
Hedinger GmbH/ NOWEDA	Petroleum ether DAB	28174B	1
Hedinger GmbH/ NOWEDA	Petroleum ether DAB	28175B	1
Hedinger GmbH/ NOWEDA	Petroleum ether DAB	28179B	1
Hedinger Phönix	Petroleum ether DAB	28167B	1
Hedinger Phönix	Petroleum ether DAB	28168B	2
Hedinger Phönix	Petroleum ether DAB	28174B	1
Hedinger über Sanacorp	Petroleum ether DAB	28173B	1
Hedinger(Gehe)	Petroleum ether DAB	28170B	3
Hedinger, Heiligenwiese...	Petroleum ether DAB	28166B	2
Hedinger, Noweda	Petroleum ether DAB	28166B	2
Hedinger, Noweda	Petroleum ether DAB	28167B	3
Hedinger, Noweda	Petroleum ether DAB	28168B	2
Hedinger/ Alliance Heal...	Petroleum ether DAB	28176B	1
Hedinger/ Fiebig	Petroleum ether DAB	28028	1
Hedinger/ Gehe	Petroleum ether DAB	28168B	1
Hedinger/ Gehe	Petroleum ether DAB	28173B	3

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Supplier	Substance	Batch	Spectra
Hedinger/ Gehe	Petroleum ether DAB	28174B	1
Hedinger/ Gehe	Petroleum ether DAB	28178B	2
Hedinger/ Jenne	Petroleum ether DAB	28171B	4
Hedinger/ Kehr	Petroleum ether DAB	28180B	1
Hedinger/ Noweda	Petroleum ether DAB	28171B	1
Hedinger/ Noweda	Petroleum ether DAB	28172B	1
Hedinger/ NOWEDA	Petroleum ether DAB	28176B	3
Hedinger/ Phoenix WE...	Petroleum ether DAB	28172B	1
Hedinger/ Phönix	Petroleum ether DAB	(028)028	1
Hedinger/ Phönix	Petroleum ether DAB	28171B	1
Hedinger/ Phönix	Petroleum ether DAB	28178B	2
Hedinger/ Sanacorp	Petroleum ether DAB	28173B	2
Hedinger/AHD	Petroleum ether DAB	28169B	1
Hedinger/AHD	Petroleum ether DAB	28173B	1
Hedinger/AHD	Petroleum ether DAB	28174B	1
Hedinger/AHD	Petroleum ether DAB	28177B	1
Hedinger/AHD	Petroleum ether DAB	28178B	2
Hedinger/AHD	Petroleum ether DAB	28179B	1
Hedinger/Alliance Healt...	Petroleum ether DAB	28174B	1
Hedinger/Alliance Healt...	Petroleum ether DAB	28177B	4
Hedinger/AllianceHC	Petroleum ether DAB	28172B	1
Hedinger/AllianceHC	Petroleum ether DAB	28173B	1
hedinger/anzag	Petroleum ether DAB	28169B	1
Hedinger/Anzag	Petroleum ether DAB	28167B	2
Hedinger/Anzag	Petroleum ether DAB	28171B	2
Hedinger/Anzag	Petroleum ether DAB	28174B	1
Hedinger/Anzag 11.06.2012	Petroleum ether DAB	28166B	1
Hedinger/Anzag 20.11.2012	Petroleum ether DAB	28167B	2
Hedinger/Ebert	Petroleum ether DAB	28176B	2
hedinger/gehe	Petroleum ether DAB	28171B	1
Hedinger/Gehe	Petroleum ether DAB	28167B	2
Hedinger/Gehe	Petroleum ether DAB	28168B	2
Hedinger/Gehe	Petroleum ether DAB	28169B	3
Hedinger/Gehe	Petroleum ether DAB	1231234	1
Hedinger/Gehe	Petroleum ether DAB	28170B	2
Hedinger/Gehe	Petroleum ether DAB	28171B	6
Hedinger/Gehe	Petroleum ether DAB	28172B	9
Hedinger/Gehe	Petroleum ether DAB	28173B	5
Hedinger/Gehe	Petroleum ether DAB	28173B	1
Hedinger/Gehe	Petroleum ether DAB	28172b	1
Hedinger/Gehe	Petroleum ether DAB	28174B	1
Hedinger/Gehe	Petroleum ether DAB	28175B	1
Hedinger/Gehe	Petroleum ether DAB	28175B	4
Hedinger/Gehe	Petroleum ether DAB	28176B	2
Hedinger/Gehe	Petroleum ether DAB	28178B	3
Hedinger/Gehe	Petroleum ether DAB	28177B	4
Hedinger/Gehe	Petroleum ether DAB	28179B	1
Hedinger/GEHE	Petroleum ether DAB	1914M1170	1
Hedinger/GEHE	Petroleum ether DAB	28171B	1
Hedinger/Geilenkirchen	Petroleum ether DAB	28176B	1
Hedinger/Holdermann	Petroleum ether DAB	28170B	1
Hedinger/Jenne	Petroleum ether DAB	28170B	1
Hedinger/Jenne	Petroleum ether DAB	28177B	1
Hedinger/Kehr	Petroleum ether DAB	28176B	1
Hedinger/Kehr	Petroleum ether DAB	28178B	2
Hedinger/N/08.05.13/PZN...	Petroleum ether DAB	28167B	1
hedinger/noweda	Petroleum ether DAB	28169B	1
hedinger/noweda	Petroleum ether DAB	28169B	1
hedinger/noweda	Petroleum ether DAB	28176B	1
hedinger/Noweda	Petroleum ether DAB	28177B	1

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Supplier	Substance	Batch	Spectra
Hedinger/noweda	Petroleum ether DAB	28176B	1
Hedinger/Noweda	Petroleum ether DAB	28170B	2
Hedinger/Noweda	Petroleum ether DAB	28171B	2
Hedinger/Noweda	Petroleum ether DAB	21728	1
Hedinger/Noweda	Petroleum ether DAB	28173B	3
Hedinger/Noweda	Petroleum ether DAB	28174B	5
Hedinger/Noweda	Petroleum ether DAB	28175B	2
Hedinger/Noweda	Petroleum ether DAB	28176B	5
Hedinger/Noweda	Petroleum ether DAB	28177B	1
Hedinger/Noweda	Petroleum ether DAB	28178B	1
Hedinger/Otto	Petroleum ether DAB	281678	1
Hedinger/Otto	Petroleum ether DAB	281698	1
Hedinger/Phoenix	Petroleum ether DAB	28168B	1
Hedinger/Phoenix	Petroleum ether DAB	28174B	1
Hedinger/Phoenix	Petroleum ether DAB	28175B	1
Hedinger/Phoenix	Petroleum ether DAB	28176B	1
Hedinger/Phoenix	Petroleum ether DAB	28177B	4
Hedinger/Phoenix	Petroleum ether DAB	28178B	1
Hedinger/Phoenix	Petroleum ether DAB	28179B	1
hedinger/phönix	Petroleum ether DAB	28167b	1
Hedinger/Phönix	Petroleum ether DAB	28168B	3
Hedinger/Phönix	Petroleum ether DAB	28169B	3
Hedinger/Phönix	Petroleum ether DAB	28171B	1
Hedinger/Phönix	Petroleum ether DAB	28172B	1
Hedinger/Phönix	Petroleum ether DAB	28173B	1
Hedinger/Phönix	Petroleum ether DAB	28174B	6
Hedinger/Phönix	Petroleum ether DAB	28175B	2
Hedinger/Phönix	Petroleum ether DAB	28176B	6
Hedinger/Phönix	Petroleum ether DAB	28177B	4
Hedinger/Phönix	Petroleum ether DAB	281778	2
Hedinger/Phönix	Petroleum ether DAB	28178B	4
Hedinger/Phönix	Petroleum ether DAB	28180B	1
HEDINGER/Phönix	Petroleum ether DAB	28174B	2
Hedinger/Sanacorp	Petroleum ether DAB	28166B	1
Hedinger/Sanacorp	Petroleum ether DAB	28168B	2
Hedinger/Sanacorp	Petroleum ether DAB	28169B	4
Hedinger/Sanacorp	Petroleum ether DAB	281698	1
Hedinger/Sanacorp	Petroleum ether DAB	28170B	1
Hedinger/Sanacorp	Petroleum ether DAB	28172B	3
Hedinger/Sanacorp	Petroleum ether DAB	28172b	1
Hedinger/Sanacorp	Petroleum ether DAB	28173b	1
Hedinger/Sanacorp	Petroleum ether DAB	28174B	1
Hedinger/Sanacorp	Petroleum ether DAB	28175B	3
Hedinger/Sanacorp	Petroleum ether DAB	28176B	1
Hedinger/Sanacorp	Petroleum ether DAB	281748	1
Hedinger/Sanacorp	Petroleum ether DAB	28178B	1
Hedinger/Sanacorp	Petroleum ether DAB	28177B	1
Hedinger/Stumpf	Petroleum ether DAB	28167B	1
Hedinger/Stumpf	Petroleum ether DAB	28168B	1
Hedinger/V.d.L.	Petroleum ether DAB	28170B	1
Hedinger/V.d.L.	Petroleum ether DAB	28171B	1
Hedinger1	Petroleum ether DAB	28170B	1
Hediniger	Petroleum ether DAB	28167B	1
heidinger/anzag	Petroleum ether DAB	28174B	1
Heidinger/Anzag	Petroleum ether DAB	28174B	1
Heidinger/Anzag	Petroleum ether DAB	28176B	1
heidinger/gehe	Petroleum ether DAB	28167B	1
heidinger/gehe	Petroleum ether DAB	28172B	2
heidinger/gehe	Petroleum ether DAB	28175B	1
Hubertus Apotheke	Petroleum ether DAB	6325055	1

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Supplier	Substance	Batch	Spectra
Jenne	Petroleum ether DAB	28171B	1
Jenne	Petroleum ether DAB	28173B	1
Jenne	Petroleum ether DAB	15045203	1
Kehr/Hedinger	Petroleum ether DAB	28175B	1
Klenk	Petroleum ether DAB	28167b	1
Klenk	Petroleum ether DAB	28171B	1
Kögl	Petroleum ether DAB	1801320	1
Kost/kost	Petroleum ether DAB	4065061213	1
Kruger/Hedinger/06.01.14	Petroleum ether DAB	28167B	1
L 20/Hedinger	Petroleum ether DAB	28175B	1
L10	Petroleum ether DAB	28174B	1
L10/Fischar	Petroleum ether DAB	632801A	1
L12	Petroleum ether DAB	28175B	1
L12	Petroleum ether DAB	28179B	1
Midas	Petroleum ether DAB	28178B	1
Noweda	Petroleum ether DAB	28164B	1
Noweda	Petroleum ether DAB	28166B	1
Noweda	Petroleum ether DAB	28169B	1
Noweda	Petroleum ether DAB	281698	1
Noweda	Petroleum ether DAB	28171B	2
Noweda	Petroleum ether DAB	28175B	1
Noweda	Petroleum ether DAB	6327021	1
Noweda	Petroleum ether DAB	28176B	1
Noweda	Petroleum ether DAB	6327062	2
Noweda	Petroleum ether DAB	6327105	1
Noweda	Petroleum ether DAB	6327093	1
Noweda	Petroleum ether DAB	28178B	1
Noweda / Fischer	Petroleum ether DAB	6324075	1
Noweda/hedinger	Petroleum ether DAB	28175B	1
Noweda/Hedinger	Petroleum ether DAB	28166B	1
Noweda/Hedinger	Petroleum ether DAB	28168B	2
Noweda/Hedinger	Petroleum ether DAB	28170B	1
Noweda/Hedinger	Petroleum ether DAB	28174B	1
Noweda/Hedinger	Petroleum ether DAB	281748	1
Noweda/Hedinger	Petroleum ether DAB	28176B	1
Otto Fischar	Petroleum ether DAB	6322116	1
Otto Fischar	Petroleum ether DAB	6323063	1
Otto Fischar	Petroleum ether DAB	6325063	1
Otto Fischar	Petroleum ether DAB	6325051	1
Otto Fischar	Petroleum ether DAB	6326085	1
Otto Fischar	Petroleum ether DAB	6327072	1
Otto Fischar	Petroleum ether DAB	6327092	1
Otto Fischar	Petroleum ether DAB	6322042	1
Otto Fischar GmbH	Petroleum ether DAB	6323094	1
Otto Fischar GmbH	Petroleum ether DAB	6324063	1
Otto Fischar GmbH	Petroleum ether DAB	6324115	1
Otto Fischar GmbH	Petroleum ether DAB	6327114	1
Otto Fischar GmbH	Petroleum ether DAB	6328065	2
Otto Fischar GmbH & Co...	Petroleum ether DAB	X81A41	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	6326101	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	6327091	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	6325111	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	6327013	1
Otto Fischar Phönix	Petroleum ether DAB	6323069	1
Otto Fischar Phönix	Petroleum ether DAB	6323111	1
Otto Fischar/Alliance	Petroleum ether DAB	632801A	1
Otto Fischar/Alliance	Petroleum ether DAB	6328105	1
Otto Fischar/Gehe	Petroleum ether DAB	6324035	1
Otto Fischar/Gehe	Petroleum ether DAB	6324044	2
Otto Fischar/Gehe	Petroleum ether DAB	6326027	1

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Supplier	Substance	Batch	Spectra
Otto Fischar/Now	Petroleum ether DAB	6327091	1
Otto Fischar/Noweda	Petroleum ether DAB	6325119	1
otto fischar/Phoenix	Petroleum ether DAB	6325044	1
Otto Fischar/Phönix	Petroleum ether DAB	6327092	1
Otto Fischar/Phönix	Petroleum ether DAB	6328019	2
Otto Fischar/Phönix	Petroleum ether DAB	6328065	1
Otto Fischar/Phönix	Petroleum ether DAB	6328111	1
Otto Fischar/Phönix	Petroleum ether DAB	6328114	1
Otto Fischar/Phönix	Petroleum ether DAB	6329024	3
otto fischar/Sana	Petroleum ether DAB	6323065	1
Otto Fischar/Sanacorp	Petroleum ether DAB	6325051	1
Otto Fischar/Sanacorp	Petroleum ether DAB	6327116	1
otto fischer	Petroleum ether DAB	15081602	1
otto fischer	Petroleum ether DAB	6326035	1
Otto Fischer	Petroleum ether DAB	6323069	1
Otto Fischer	Petroleum ether DAB	6326052	1
Otto Fischer	Petroleum ether DAB	6326105	1
Otto Fischer	Petroleum ether DAB	6328015	1
Otto Fischer / Sanacorp	Petroleum ether DAB	6325083	1
Otto Fischer GmbH	Petroleum ether DAB	15031402	1
Otto Fischer GmbH & co...	Petroleum ether DAB	6327019	1
Otto Fischer GmbH & co...	Petroleum ether DAB	6327105	1
Otto Fischer GmbH & co...	Petroleum ether DAB	6328044	2
Otto Fischer GmbH & co...	Petroleum ether DAB	6328074	1
Otto Fischer GmbH / Gehe	Petroleum ether DAB	6328072	1
Otto Fischer GmbH / Phö...	Petroleum ether DAB	6328113	1
Otto Fischer/Noweda	Petroleum ether DAB	6325108	1
Otto Fischer/Noweda	Petroleum ether DAB	6327024	1
Otto Fischer/Phönix	Petroleum ether DAB	6326026	4
Otto Fischer/Phönix	Petroleum ether DAB	6326047	1
Phoenix	Petroleum ether DAB	28171B	1
Phoenix	Petroleum ether DAB	6326072	1
Phoenix	Petroleum ether DAB	28176B	1
Phoenix	Petroleum ether DAB	28178B	1
Phoenix/ Otto Fischer G...	Petroleum ether DAB	6328014	1
Phoenix/Cealo	Petroleum ether DAB	28176B/0818E-01170	1
phoenix/hedinger	Petroleum ether DAB	28172B	1
Phoenix/hedinger	Petroleum ether DAB	28168B	1
Phoenix/hedinger	Petroleum ether DAB	28169B	2
phönix	Petroleum ether DAB	6326112	1
phönix	Petroleum ether DAB	28175B	1
phönix	Petroleum ether DAB	6327062	1
Phönix	Petroleum ether DAB	28168B	1
Phönix	Petroleum ether DAB	28169B	1
Phönix	Petroleum ether DAB	6327093	1
Phönix EK:6,26 EUR -11	Petroleum ether DAB	28176B	1
Caelo	Petroleum ether DAB	6327072	3
Euro OTC	Petroleum ether DAB	6327019	2
Fagron	Petroleum ether DAB	6324114	1
Phönix/Fischar	Petroleum ether DAB	6328013	1
Phönix/Fischar	Petroleum ether DAB	6328072	3
Phönix/Fischer	Petroleum ether DAB	6327034	1
Sanacorp	Petroleum ether DAB	28166B	1
Sanacorp	Petroleum ether DAB	6322096	1
Sanacorp	Petroleum ether DAB	6323068	1
Sanacorp	Petroleum ether DAB	28169B	1
Sanacorp	Petroleum ether DAB	28171B	5
Sanacorp	Petroleum ether DAB	632510A	1
Sanacorp	Petroleum ether DAB	28175B	1
Sanacorp	Petroleum ether DAB	28177B	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Petroleum ether DAB	28174B	1
Sanacorp	Petroleum ether DAB	28178B	1
Sanacorp 8.12.15	Petroleum ether DAB	28174B	2
Caelo	Petroleum ether DAB	6323095	1
Sanacorp WE:04.02.2017 ...	Petroleum ether DAB	28175B	1
Caelo	Petroleum ether DAB	281668	3
Caelo	Petroleum ether DAB	28169B	5
Caelo	Petroleum ether DAB	64/AKD53	1
Spangr/Hedinger	Petroleum ether DAB	28169B	1
Spangro/Hedinger	Petroleum ether DAB	28171B	1
Stumpf / Hedinger	Petroleum ether DAB	28169B	1
Stumpf/Hedinger	Petroleum ether DAB	281718	1
Stumpf/Hedinger	Petroleum ether DAB	28172B	1
Taoasis	Petroleum ether DAB	6328063	1
tob	Petroleum ether DAB	6326092	1
Unisan	Petroleum ether DAB	28174B	1
wepa/Sanaco	Petroleum ether DAB	6326031	1
Hedinger, Heiligenwiese...	Petroleum ether DAB		1
Hedinger/Otto	Petroleum ether DAB		1
Hedinger/Sanacorp	Petroleum ether DAB		1
Noweda	Petroleum ether DAB		1
Sanacorp	Petroleum ether DAB		2
	Petroleum ether DAB		1

- 137 108 spectra from 703 *Apo-Ident* customers from a total of 35 006 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Petroleum ether DAB* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Petroleum ether DAB* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	140	0	56 219
Type B	0	119	1	69 354
Type C	0	1234	11	137 108

The substance/substance group *Petroleum ether DAB* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9653 %)	99.1667 % (> 96.6667 %)
Type C	100.0000 % (> 99.6452 %)	99.1165 % (> 98.8755 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Petroleum ether DAB* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Myrtle oil	17.98	—
Verbena oil, nature-identical	25.85	—
Petroleum oil, white, cohobated	28.15	—
Matricaria oil, rich in (-)-alpha-bisa...	32.17	—
Peppermint oil	34.89	—
Turpentine oil	35.73	—
Mint oil	38.97	—
Cajeput (essentiel oil)	42.52	—
Cypress oil	43.32	—
Juniper wood oil	48.23	—
Melissa oil	48.41	—
Geranium oil, genuine	48.56	—
Cedar wood oil	50.26	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Petroleum ether DAB* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30899	30899	0.00	34.89
31253	31253	0.00	28.15
31283	31283	0.00	34.94

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Petroleum oil, white, cohobated
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	31212-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Petroleum oil, white, cohobated; Oleum petrae album rectific.

Special notes

When selecting the *Petroleum oil, white, cohobated* substance/substance group, the following information is displayed to the user:

- Advice for the identification of petroleum oil: According to the German BfArM, petroleum oil is considered as critical pharmaceutical in compliance to German § 5 AMG. Critical pharmaceuticals must not be placed on the market or be applied to humans.

Applicable documents

978-3-7692-6679-5	<i>European Pharmacopoeia 9th Edition, Basic Version 2017</i> [3]
Komm2.2.40	<i>Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident</i> [4]
AA004	<i>Erstellung und Validierung eines IdentModul-Updates</i>

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Petroleum oil, white, cohobated	3	2	12

Second-stage model

For differentiation of the substance/substance group *Petroleum oil, white, cohobated* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Petroleum oil, white, cohobated*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Petroleum oil, w...	13146704	31212	40	1403110
Caelo	Petroleum oil, w...	14019607	31387	60	20140124
Caelo	Petroleum oil, w...	173331	34324	40	20180129*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 140 spectra of 3 reference samples from the substance/substance group *Petroleum oil, white, cohobated*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 219 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Petroleum oil, white, cohobated*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Petroleum oil, white, cohoba...	163278	33109	40
Caelo	Petroleum oil, white, cohoba...	182344	34238	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 18 spectra from 12 *Apo-Ident* customers from 13 batches from the substance/substance group *Petroleum oil, white, cohobated*.
- Among them are spectra of independent samples from 12 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Petroleum oil, white, cohoba...	14242203	2
Caelo	Petroleum oil, white, cohoba...	12173103	1
Caelo	Petroleum oil, white, cohoba...	13146702	2
Caelo	Petroleum oil, white, cohoba...	2306921	1
Caelo	Petroleum oil, white, cohoba...	16327804	1
Caelo	Petroleum oil, white, cohoba...	16165201	1
Caelo	Petroleum oil, white, cohoba...	13086402	1
Caelo	Petroleum oil, white, cohoba...	13086401	1
Caelo	Petroleum oil, white, cohoba...	16327803	1
Caelo	Petroleum oil, white, cohoba...	11198403	1
Caelo	Petroleum oil, white, cohoba...	113791	1
Caelo	Petroleum oil, white, cohoba...	13303603	2
Caelo	Petroleum oil, white, cohoba...	14019607	3

- 138 335 spectra from 703 *Apo-Ident* customers from a total of 35 282 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Petroleum oil, white, cohobated* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Petroleum oil, white, cohobated* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	140	0	56 219
Type B	0	80	0	69 394
Type C	0	18	0	138 335

The substance/substance group *Petroleum oil, white, cohobated* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6457 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Petroleum oil, white, cohobated* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Petroleum ether DAB	15.61	—
Triglycerides, medium-chain	30.73	—
Verbena oil, nature-identical	32.56	—
Myrtle oil	32.94	—
Peppermint oil	33.52	—
Matricaria oil, rich in (-)-alpha-bisa...	33.89	—
All-rac-alpha-tocopheryl acetate	34.50	—
Mint oil	37.72	—
Guaiazulene 25%, water-soluble	40.16	—
Camphor oil 20%	41.34	—
Turpentine oil	45.28	—
Geranium oil, genuine	45.58	—
Citronella oil	46.59	—
Melissa oil	49.26	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Petroleum oil, white, cohobated* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34324	34324	0.00	16.94
31212	31212	0.00	34.87
31387	31212	4.31	34.65

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Phytomenadione**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30747-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Phytomenadione; Phytomenadionum

Special notes

When selecting the *Phytomenadione* substance/substance group, the following information is displayed to the user:

- Distinction to Phytomenadione, racemic: The monography Phytomenadione has been discontinued in Ph. Eur. 9.6. At the same time, Phytomenadione, racemic has been published. Decide, if a supplementary test is necessary.

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Phytomenadione	3	2	8

Second-stage model

For differentiation of the substance/substance group *Phytomenadione* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Phytomenadione*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Phytomenadione	12H31-N02	30747	40	1405178
Fagron	Phytomenadione	16D07-B03-328576	33303	40	20160603
Fagron	Phytomenadione	16D07-B03-328730	33304	40	20160603

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 3 reference samples from the substance/substance group *Phytomenadione*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 239 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 100 spectra of 2 reference samples from the substance/substance group *Phytomenadione*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Phytomenadione	14I02-B04-301537	31621	60
Fagron	Phytomenadione	17F12-B12-344796	34086	40

- 69 374 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 8 spectra from 6 *Apo-Ident* customers from 8 batches from the substance/substance group *Phytomenadione*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Fagron	Phytomenadione	13C25-N07	1
Fagron	Phytomenadione	13D26-B07-286714	1
Fagron	Phytomenadione	17F28-H10-00239	1
Fagron	Phytomenadione	17F12-B12-344795	1
Merck	Phytomenadione	EH13000590	1
Merck	Phytomenadione	EH14000190	1
Merck	Phytomenadione	L017134390	1
Merck	Phytomenadione	L016067990	1

- 138 345 spectra from 703 *Apo-Ident* customers from a total of 35 287 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Phytomenadione* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Phytomenadione* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	100	0	69 374
Type C	0	6	2	138 345

The substance/substance group *Phytomenadione* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6463 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Phytomenadione* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Permethrin 25% solution	65.25	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Phytomenadione* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30747	30747	0.00	102.95
33303	30747	4.76	103.17
33304	30747	7.70	102.91

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Pine silvestris oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31183-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Pine silvestris oil; Oleum pini silvestris

Special notes

When selecting the *Pine silvestris oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Pine silvestris oil	4	1	36

Second-stage model

For differentiation of the substance/substance group *Pine silvestris oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Pine silvestris oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Pine silvestris ...	13334502	31202	40	1403168
Caelo	Pine silvestris ...	13334501	31405	40	20131009
Caelo	Pine silvestris ...	180752	34452	40	20180309*
Fagron	Pine silvestris ...	13E24-N05	31183	40	1403166

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Pine silvestris oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Pine silvestris oil*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Pine silvestris oil	16298401	33250	40
Caelo	Pine silvestris oil	16298401	33424	40

- 69394 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 86 spectra from 47 *Apo-Ident* customers from 37 batches from the substance/substance group *Pine silvestris oil*.
- Among them are spectra of independent samples from 36 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bergland	Pine silvestris oil	C502587	1
Bergland	Pine silvestris oil	C700086	1
Caelo	Pine silvestris oil	11161605	2
Caelo	Pine silvestris oil	11024602	1
Caelo	Pine silvestris oil	12080504	5
Caelo	Pine silvestris oil	12246907	2
Caelo	Pine silvestris oil	26091404	1
Caelo	Pine silvestris oil	14252202	4
Caelo	Pine silvestris oil	14252203	2
Caelo	Pine silvestris oil	24061710	1
Caelo	Pine silvestris oil	16298401	7
Caelo	Pine silvestris oil	1713001	1
Caelo	Pine silvestris oil	18075201	6
Caelo	Pine silvestris oil	17133001	7
Caelo	Pine silvestris oil	11024603	1
Caelo	Pine silvestris oil	12246905	1
Caelo	Pine silvestris oil	16007406	1
Caelo	Pine silvestris oil	15239102	2
Caelo	Pine silvestris oil	15239101	7
Fagron	Pine silvestris oil	12G20-N04	1
Fagron	Pine silvestris oil	12L03-N05	1
Fagron	Pine silvestris oil	14J27-B06	1
Fagron	Pine silvestris oil	15F12-B02-308878	1
Fagron	Pine silvestris oil	15F12_B02_308878	1
Fagron	Pine silvestris oil	15F12-B02-323109	1
noweda	Pine silvestris oil	13334501	1
Noweda	Pine silvestris oil	11161605	1
Phönix	Pine silvestris oil	13334501	2
Taoasis	Pine silvestris oil	30600-18490	1
Taoasis	Pine silvestris oil	33717-112501	2
Taoasis	Pine silvestris oil	8169-117244	4
Taoasis	Pine silvestris oil	28663-119029	1
Taoasis	Pine silvestris oil	20017-118846	1
Taoasis	Pine silvestris oil	28663-120876	2
Taoasis	Pine silvestris oil	28663-119531	1
Taoasis	Pine silvestris oil	35808-123038	2

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Supplier	Substance	Batch	Spectra
Taoasis	Pine silvestris oil	49977-12442	1
Taoasis	Pine silvestris oil	49977-125240	2
Taoasis/Phönix	Pine silvestris oil	32372-110382	1
Caelo	Pine silvestris oil	13334501	5

- 138 267 spectra from 703 *Apo-Ident* customers from a total of 35 258 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Pine silvestris oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Pine silvestris oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	84	2	138 267

The substance/substance group *Pine silvestris oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	97.6744 % (> 94.1860 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Pine silvestris oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Cypress oil	21.74	—
Dwarf pine oil	24.11	—

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Substanz	Distance in main model	Distance in second-stage model
Juniper wood oil	29.18	—
Turpentine oil	34.32	—
Spearmint oil	34.68	—
Eucalyptus oil	35.12	—
Caraway oil	35.46	—
Juniper oil	39.90	—
Citric oil	41.90	—
Bitter orange oil	44.20	—
Grapefruit oil	46.85	—
Bergamot oil	47.57	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Pine silvestris oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31183	31183	0.00	21.74
31202	31202	0.00	22.33
31405	31202	2.46	22.18
34452	34452	0.00	22.88

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Pine tar**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31221-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Pine tar; Pix liquida

Special notes

When selecting the *Pine tar* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Pine tar	3	1	0

Second-stage model

For differentiation of the substance/substance group *Pine tar* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Pine tar*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Pine tar	13008302	31221	40	1403320
Caelo	Pine tar	16017905	33442	40	20160217
Caelo	Pine tar	180594	34085	40	20180227*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 3 reference samples from the substance/substance group *Pine tar*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 239 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 60 spectra of 1 reference samples from the substance/substance group *Pine tar*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Pine tar	13008309	31614	60

- 69 414 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 0 spectra from 0 *Apo-Ident* customers from 0 batches from the substance/substance group *Pine tar*.
- Among them are spectra of independent samples from 0 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.
- 138 353 spectra from 703 *Apo-Ident* customers from a total of 35 295 batches from a further 340 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Pine tar* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Pine tar* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	60	0	69 414
Type C	0	0	0	138 353

The substance/substance group *Pine tar* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 90.0000 %)
Type C	100.0000 % (> 99.6479 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Pine tar* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
(s)-Lactic acid	157.92	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Pine tar* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31221	31221	0.00	159.50
33442	31221	22.26	197.74
34085	34085	0.00	263.47

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50% greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Polyhexanide solution 20%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30596-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Polyhexanide solution 20%; Solutio polyhexanidi 20%

Special notes

When selecting the *Polyhexanide solution 20%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Polyhexanide solution 20%	4	2	102

Second-stage model

For differentiation of the substance/substance group *Polyhexanide solution 20%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Polyhexanide solution 20%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Polyhexanide sol...	13H05-N04	31180	40	1403256
Fagron	Polyhexanide sol...	13K29-B30-288935	31571	60	20131217
Fagron	Polyhexanide sol...	16B16-B04-322720	32733	40	20160229
Fagron	Polyhexanide sol...	18B16-B10-345748	34087	40	20180306

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Polyhexanide solution 20%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56179 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Polyhexanide solution 20%*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Polyhexanide solution 20%	12A04-N06	30596	40
Fagron	Polyhexanide solution 20%	15H28-B11-313603	32276	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 398 spectra from 213 *Apo-Ident* customers from 111 batches from the substance/substance group *Polyhexanide solution 20%*.
- Among them are spectra of independent samples from 103 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Fagron	Polyhexanide solution 20%	15H28-B11-313603	11
Anzag	Polyhexanide solution 20%	16B16-B04-325487	1
Anzag	Polyhexanide solution 20%	16G29-B01-335336	2
Caelo	Polyhexanide solution 20%	12GR227646	1
Fagron	Polyhexanide solution 20%	335336	1
B.Braun / Gehe	Polyhexanide solution 20%	13103M18	3
Beiersdorf	Polyhexanide solution 20%	18816-810-345748	1
bergland	Polyhexanide solution 20%	18D09-B01-348161	1
Bombastus	Polyhexanide solution 20%	18b16b10435748	1
Caelo	Polyhexanide solution 20%	12B09-N01	1
Caelo	Polyhexanide solution 20%	13K29-B30-288938	2
Caelo	Polyhexanide solution 20%	14F25-B06-300093	2
Caelo	Polyhexanide solution 20%	14F25-B06-305013	1
Caelo	Polyhexanide solution 20%	15H28-B11-313603	1
Caelo	Polyhexanide solution 20%	15H28-B11-315703	1
Caelo	Polyhexanide solution 20%	16B16B04322720	1
Caelo	Polyhexanide solution 20%	16B16-B04-325487	1
Caelo	Polyhexanide solution 20%	17L14-B02-343990	1
Caelo	Polyhexanide solution 20%	17GR185627	1
Caelo	Polyhexanide solution 20%	16GR025056	1
Caelo	Polyhexanide solution 20%	13351M28	2
Caelo	Polyhexanide solution 20%	14F25-B06-296291	1
Caelo	Polyhexanide solution 20%	12K20N01	1
Caelo	Polyhexanide solution 20%	16B16-B04-318789	2
Caelo	Polyhexanide solution 20%	13K29-B30-288934	1
Caelo	Polyhexanide solution 20%	14F25-B06	1
Caelo	Polyhexanide solution 20%	18G02-B01-353296	1
Caelo	Polyhexanide solution 20%	14F25-B06-296292	2
Caelo	Polyhexanide solution 20%	17L14-B02-343991	1
Caelo	Polyhexanide solution 20%	14GR132285	1
Caelo	Polyhexanide solution 20%	AKD17	1
Caelo	Polyhexanide solution 20%	16G29-B01-335336	1
Caelo	Polyhexanide solution 20%	18G02-B01	1
Caelo	Polyhexanide solution 20%	15H28-B11	1
Fagron	Polyhexanide solution 20%	18G02-B01-353297	4
Ebert-Jacobi	Polyhexanide solution 20%	16G29-B01-328171	1

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Supplier	Substance	Batch	Spectra
Ebert-Jacobi	Polyhexanide solution 20%	16G29-B01-330629	1
Euro OTC	Polyhexanide solution 20%	16B16-B04-320854	1
Euro OTC	Polyhexanide solution 20%	15H28-B11-313603	1
Euro OTC	Polyhexanide solution 20%	15H28-B11-313604	1
Euro OTC	Polyhexanide solution 20%	18D09-B01348161	1
Fagron	Polyhexanide solution 20%	12K20-N01	5
Fagron	Polyhexanide solution 20%	12k20-n01	2
Fagron	Polyhexanide solution 20%	11GR180545	1
Fagron	Polyhexanide solution 20%	13H05-No4	1
Fagron	Polyhexanide solution 20%	13K29-B30	1
Fagron	Polyhexanide solution 20%	13K29-B30-288934	5
Fagron	Polyhexanide solution 20%	14F25-B06-296291	2
Fagron	Polyhexanide solution 20%	14F25-B06	11
Fagron	Polyhexanide solution 20%	14F25B06300092	1
Fagron	Polyhexanide solution 20%	14F25-B06-305013	4
Fagron	Polyhexanide solution 20%	18071501	1
Fagron	Polyhexanide solution 20%	15H28-B11-312309	4
Fagron	Polyhexanide solution 20%	15H28-B11	6
Fagron	Polyhexanide solution 20%	15H28-B11-315703	5
Fagron	Polyhexanide solution 20%	16B16-B04-318789	7
Fagron	Polyhexanide solution 20%	15H28	1
Fagron	Polyhexanide solution 20%	15H28-B11_313603	1
Fagron	Polyhexanide solution 20%	15h28-b11-312309	1
Fagron	Polyhexanide solution 20%	16B16-B04-325487	9
Fagron	Polyhexanide solution 20%	25021712	1
Fagron	Polyhexanide solution 20%	16G29-B01-328171	7
Fagron	Polyhexanide solution 20%	16G29-B01-330630	3
Fagron	Polyhexanide solution 20%	16GR180497	2
Fagron	Polyhexanide solution 20%	16G-29-B01	1
Fagron	Polyhexanide solution 20%	16G29-B01-334336	1
Fagron	Polyhexanide solution 20%	16G29-B01-337612	3
Fagron	Polyhexanide solution 20%	16g29-b01-335336	1
Fagron	Polyhexanide solution 20%	17GR1856627	1
Fagron	Polyhexanide solution 20%	17GR185627	10
Fagron	Polyhexanide solution 20%	17114b02143990	1
Fagron	Polyhexanide solution 20%	17L14-B02-343991	7
Fagron	Polyhexanide solution 20%	7051803	1
Fagron	Polyhexanide solution 20%	18B16-B10	2
Fagron	Polyhexanide solution 20%	18B16	1
Fagron	Polyhexanide solution 20%	18D09-B01-348161	14
Fagron	Polyhexanide solution 20%	18G02-B01-353296	4
Fagron	Polyhexanide solution 20%	2021906	1
Fagron	Polyhexanide solution 20%	19A16-B04	3
Fagron	Polyhexanide solution 20%	8GR038066	1
Fagron	Polyhexanide solution 20%	13H05-N040339/904	1
Fagron	Polyhexanide solution 20%	16G29-B01	6
Fagron	Polyhexanide solution 20%	13H05-N01	8
Fagron	Polyhexanide solution 20%	19A16-B04-357983	2
Fagron	Polyhexanide solution 20%	19A16-B04-359557	2
Fagron	Polyhexanide solution 20%	18J18-B05	1
Fagron	Polyhexanide solution 20%	14F25-b06-296292	1
Fagron	Polyhexanide solution 20%	18I18-B05-355791	1
Fagron	Polyhexanide solution 20%	16G29-B01-330629	7
Fagron	Polyhexanide solution 20%	18D09-B01-348160	10
Fagron	Polyhexanide solution 20%	16gr025056	1
Fagron	Polyhexanide solution 20%	13K29-B30_288934	1
Fagron	Polyhexanide solution 20%	14F25-B06-296292	11
Fagron	Polyhexanide solution 20%	18816-B10-345748	1
Fagron	Polyhexanide solution 20%	14GR274618	1
Fagron	Polyhexanide solution 20%	19D03-01-360931	1

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Supplier	Substance	Batch	Spectra
Fagron	Polyhexanide solution 20%	3714M-03580	1
Fagron	Polyhexanide solution 20%	2215I-03580	1
Fagron	Polyhexanide solution 20%	16B16-B04-320854	8
Fagron	Polyhexanide solution 20%	12D27-N07	1
Fagron	Polyhexanide solution 20%	12A04-N06	1
Fagron	Polyhexanide solution 20%	14F25-B06-300092	7
Fagron	Polyhexanide solution 20%	16B16-b04	1
Fagron	Polyhexanide solution 20%	16GR025056	5
Fagron	Polyhexanide solution 20%	701823_00004	1
Fagron	Polyhexanide solution 20%	19A16_B04	1
Fagron	Polyhexanide solution 20%	19003-B01-360931	1
Fagron	Polyhexanide solution 20%	18G02-B01	3
Fagron	Polyhexanide solution 20%	16B16-B04	5
Fagron	Polyhexanide solution 20%	14GR132285	2
Fagron	Polyhexanide solution 20%	15H28-B11313603	1
Fagron	Polyhexanide solution 20%	17L14-B02-343990	6
Fagron	Polyhexanide solution 20%	18d09b01348160	1
Fagron	Polyhexanide solution 20%	18816B10345748	1
Fagron	Polyhexanide solution 20%	15H28-B11-313604	5
Fagron	Polyhexanide solution 20%	16816-B04	1
Fagron	Polyhexanide solution 20%	18D09-B01	3
Fagron	Polyhexanide solution 20%	18D09-B01348160	1
Fagron	Polyhexanide solution 20%	15C20-B06-309678	4
Fagron	Polyhexanide solution 20%	15GR209540	1
Fagron	Polyhexanide solution 20%	16G259-B01-328171	1
Fagron	Polyhexanide solution 20%	16G29-B01-335336	13
Fagron	Polyhexanide solution 20%	18B10-345748	1
Fagron	Polyhexanide solution 20%	18GR038066	1
Fagron	Polyhexanide solution 20%	18J18-B05-355791	2
Fargom	Polyhexanide solution 20%	116B16-B04-320854	1
Fargon	Polyhexanide solution 20%	16G29-B01-328171	1
Fargon	Polyhexanide solution 20%	16G29-B01-0004	1
Fargon/ Gehe	Polyhexanide solution 20%	15H28-B11-312309	1
Fragon	Polyhexanide solution 20%	12K20-N01	1
Fragon GmbH	Polyhexanide solution 20%	16GR025056	1
Fragon/Noweda	Polyhexanide solution 20%	16G29-B01-328171	1
GEHE	Polyhexanide solution 20%	18G02-B01	1
GEHE 14.04.2014	Polyhexanide solution 20%	13K29-B30_288934	1
Gehe 16.12.14	Polyhexanide solution 20%	14F25-B06-296292	1
Fagron	Polyhexanide solution 20%	16GR1-B01-330629	1
Gehe/Fagaron	Polyhexanide solution 20%	16B16-B04-320854	1
Gepepharm	Polyhexanide solution 20%	17061709	1
Ichthyol Gesellschaft/AHD	Polyhexanide solution 20%	14F25-B06-296292	1
Noweda	Polyhexanide solution 20%	12K20-N01	1
Noweda	Polyhexanide solution 20%	15H28-B11-312309	2
Noweda	Polyhexanide solution 20%	14F25B06305013	1
Fagron	Polyhexanide solution 20%	13K29-B30-288938	4
Phagron	Polyhexanide solution 20%	17L14-B02-343990	1
Phoenix	Polyhexanide solution 20%	12K20-N01	1
Phoenix	Polyhexanide solution 20%	16B16-B04	1
Fagron	Polyhexanide solution 20%	14F25-B06-300093	7
Phönix	Polyhexanide solution 20%	18B16-B10-345748	1
PHÖNIX	Polyhexanide solution 20%	17L14-B02	1
PHÖNIX	Polyhexanide solution 20%	18D09-B01-348160	1
Phytocomm	Polyhexanide solution 20%	27803278	1
Sanacorp	Polyhexanide solution 20%	14f25-b06-2962291	1
Sanacorp	Polyhexanide solution 20%	17L14-B02-343990	1
Sanacorp	Polyhexanide solution 20%	18D09-B01-348160	1
Sanacorp	Polyhexanide solution 20%	18GR038066	1
Fagron	Polyhexanide solution 20%	13H05-N04	9

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Supplier	Substance	Batch	Spectra
Fagron	Polyhexanide solution 20%	16B16-B04-322720	7
Fagron	Polyhexanide solution 20%	18B16-B10-345748	12

- 137 955 spectra from 703 *Apo-Ident* customers from a total of 35 186 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Polyhexanide solution 20%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Polyhexanide solution 20%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	376	22	137 955

The substance/substance group *Polyhexanide solution 20%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	94.4724 % (> 93.7186 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Polyhexanide solution 20%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydrophilic base emulsion (NRF p.25)	22.09	—
Liquorice juice purified, diluted	30.15	—
Dextrorotary lactic acid 20%	31.14	—
Aluminium acetotartrate solution	31.94	—

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Substanz	Distance in main model	Distance in second-stage model
Non-ionic hydrous liniment SR/DAC (NRF...	36.48	—
Chlorhexidine digluconate solution 20%	37.58	—
Condurango wine	39.49	—
Hydrophilic cream, non-ionic SR (NRF p...	42.16	—
Chest elixir	42.70	—
Hydrated liniment SR/DAC (NRF p.40)	43.80	—
Gel basis Audor [®]	44.07	—
Hydrophilic cream, non-ionic without p...	48.27	—
Water	50.57	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Polyhexanide solution 20%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34087	31180	4.93	25.17
32733	31180	11.80	30.12
31571	31180	7.76	29.61
31180	31180	0.00	28.82

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Polyol fatty acid ester
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30755-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Polyol fatty acid ester; Cetiol® HE

Special notes

When selecting the *Polyol fatty acid ester* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Polyol fatty acid ester	4	2	24

Second-stage model

For differentiation of the substance/substance group *Polyol fatty acid ester* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Polyol fatty acid ester*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Polyol fatty aci...	11162809	30755	40	20110616
Caelo	Polyol fatty aci...	13292302	31179	40	1402589
Caelo	Polyol fatty aci...	13357702	31366	40	20131112
Caelo	Polyol fatty aci...	16254506	33459	40	20160901
Caelo	Polyol fatty aci...	16254506	33460	40	20160901

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 5 reference samples from the substance/substance group *Polyol fatty acid ester*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Polyol fatty acid ester*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Polyol fatty acid ester	161120	32196	40
Caelo	Polyol fatty acid ester	172830	33676	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 81 spectra from 52 *Apo-Ident* customers from 28 batches from the substance/substance group *Polyol fatty acid ester*.
- Among them are spectra of independent samples from 24 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Bombastus	Polyol fatty acid ester	16254506	1
Caelo	Polyol fatty acid ester	12361804	4
Caelo	Polyol fatty acid ester	12361808	4
Caelo	Polyol fatty acid ester	13158901	1
Caelo	Polyol fatty acid ester	13158902	5
Caelo	Polyol fatty acid ester	13158904	1
Caelo	Polyol fatty acid ester	11081403	1
Caelo	Polyol fatty acid ester	15298004	4
Caelo	Polyol fatty acid ester	16254502	3
Caelo	Polyol fatty acid ester	143033502	1
Caelo	Polyol fatty acid ester	16254504	3
Caelo	Polyol fatty acid ester	4111711	1
Caelo	Polyol fatty acid ester	17283001	1
Caelo	Polyol fatty acid ester	17072203	4
Caelo	Polyol fatty acid ester	17283008	1
Caelo	Polyol fatty acid ester	16254508	1
Caelo	Polyol fatty acid ester	14322407	1
Caelo	Polyol fatty acid ester	13357703	4
Caelo	Polyol fatty acid ester	14322405	3
Caelo	Polyol fatty acid ester	11162811	1
Caelo	Polyol fatty acid ester	13158903	5
Caelo	Polyol fatty acid ester	14033502	8
Caesar/ Noweda	Polyol fatty acid ester	2613E-01243	1
GEHE	Polyol fatty acid ester	12361804	1
Noweda	Polyol fatty acid ester	13158903	1
Caelo	Polyol fatty acid ester	17283006	1
Phönix	Polyol fatty acid ester	13357702	1
Phönix	Polyol fatty acid ester	14033502	2
Sanacorp	Polyol fatty acid ester	1/AKD14	1
Caelo	Polyol fatty acid ester	13292302	5
Caelo	Polyol fatty acid ester	13357702	5
Caelo	Polyol fatty acid ester	16254506	4
Caelo	Polyol fatty acid ester	11162809	1

- 138 272 spectra from 703 *Apo-Ident* customers from a total of 35 267 batches from a further 339

substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Polyol fatty acid ester* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Polyol fatty acid ester* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	80	0	69 394
Type C	0	81	0	138 272

The substance/substance group *Polyol fatty acid ester* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 92.5926 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Polyol fatty acid ester* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Polysorbate 80	14.97	—
Macrogolglycerol ricinoleate	19.10	—
Polysorbate 20	21.48	—
Macrogol 20 glycerol monostearate type...	24.52	—
Polysorbate 60	25.22	—
Macrogolglycerol hydroxystearate 40	25.36	—
Macrogol 8 stearate type I	32.55	—
Lauromacrogol 400	35.23	—
Macrogol 4 lauryl ether	36.04	—
Macrogol ointment	36.35	—
Macrogols 400	44.96	—
Macrogol-2-laurylether	45.53	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Polyol fatty acid ester* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30755	31179	7.92	17.04
31179	31179	0.00	19.03
31366	31179	5.73	18.60
33459	31179	5.65	17.47
33460	31179	7.23	16.54

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Polysorbate 80 / Macroglycerolricinoleat**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30766-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Polysorbate 80 / Macroglycerolricinoleat; Macroglycerol ricinoleate; Macroglyceroli ricinoleas; Polysorbate 80; Polysorbatum 80

Special notes

When selecting the *Polysorbate 80 / Macroglycerolricinoleat* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Macroglycerol ricinoleate	4	2	30
Polysorbate 80	4	3	88

Second-stage model

For differentiation of the substance/substance group *Polysorbate 80* / *Macrogolglycerolricinoleat* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Polysorbate 80* / *Macrogolglycerolricinoleat*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Macrogolglycerol...	13272708	31368	39	1505503
Caelo	Macrogolglycerol...	161303	32297	40	20160523*
Fagron	Macrogolglycerol...	12E29-N02	30766	60	20120612
Fagron	Macrogolglycerol...	12H08-N01	31015	40	20120827
Caelo	Polysorbate 80	12116009	30893	90	20120427
Caelo	Polysorbate 80	13372015	31325	40	AR-15-FG-008176-01
Fagron	Polysorbate 80	17A23-B09-331594	33300	40	20170208
Fagron	Polysorbate 80	18H01-B04-357189	34673	40	20180828

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 389 spectra of 8 reference samples from the substance/substance group *Polysorbate 80* / *Macrogolglycerolricinoleat*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55 970 spectra from a total of 1108 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 200 spectra of 5 reference samples from the substance/substance group *Polysorbate 80* / *Macrogolglycerolricinoleat*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogolglycerol ricinoleate	161545	32338	40
Caelo	Macrogolglycerol ricinoleate	172238	33707	40
Caelo	Polysorbate 80	16260201	33296	40
Caelo	Polysorbate 80	173048	33887	40
Caelo	Polysorbate 80	191639	34624	40

- 69 274 spectra from a total of 1497 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 413 spectra from 216 *Apo-Ident* customers from 121 batches from the substance/substance group *Polysorbate 80* / *Macrogolglycerolricinoleat*.
- Among them are spectra of independent samples from 118 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
BASF Chem trade GmbH/Ph...	Macrogolglycerol ricinoleate	13B08-N03	1
Caelo	Macrogolglycerol ricinoleate	44242575L0	1
Caelo	Macrogolglycerol ricinoleate	14195501	1
Caelo	Macrogolglycerol ricinoleate	16130304	2
Caelo	Macrogolglycerol ricinoleate	16154501	1
Caelo	Macrogolglycerol ricinoleate	16154504	2
Caelo	Macrogolglycerol ricinoleate	6101806	1
Caelo	Macrogolglycerol ricinoleate	17223802	1
Caelo	Macrogolglycerol ricinoleate	17348304	1
Caelo	Macrogolglycerol ricinoleate	15312307	1
E-plus	Macrogolglycerol ricinoleate	18C16-B03-347906	1
Fagron	Macrogolglycerol ricinoleate	12G02-N11	1
Fagron	Macrogolglycerol ricinoleate	13B08-N03	2
Fagron	Macrogolglycerol ricinoleate	13B28-N01	1
Fagron	Macrogolglycerol ricinoleate	13E13-N11	1
Fagron	Macrogolglycerol ricinoleate	13J24-B03-287433	1
Fagron	Macrogolglycerol ricinoleate	13J24-B03-296052	1
Fagron	Macrogolglycerol ricinoleate	14L08-B04	1
Fagron	Macrogolglycerol ricinoleate	13F12-N17	2
Fagron	Macrogolglycerol ricinoleate	17J10-B02-342613	1
Fagron	Macrogolglycerol ricinoleate	17J10-B02-340819	2
Fagron	Macrogolglycerol ricinoleate	17J10B02	1
Fagron	Macrogolglycerol ricinoleate	13B08-No3	1
Fagron	Macrogolglycerol ricinoleate	14L08-B04-302328	1
Fagron	Macrogolglycerol ricinoleate	16B08-B01-322893	1
Fagron	Macrogolglycerol ricinoleate	67100156P0	1
Fagron	Macrogolglycerol ricinoleate	14L08B04	1
Fagron	Macrogolglycerol ricinoleate	16B08B01	1

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Supplier	Substance	Batch	Spectra
Fagron	Macrogolglycerol ricinoleate	17J10-B02-343252	3
Phoenix	Macrogolglycerol ricinoleate	73353136W0	1
Phönix	Macrogolglycerol ricinoleate	16B08-B01-328228	1
Alliance Healthcare	Polysorbate 80	12315308	1
Alte Apotheke	Polysorbate 80	16059402	1
Bären Apotheke	Polysorbate 80	16260201	1
Bombastus	Polysorbate 80	11347907	1
Caelo	Polysorbate 80	11179606	1
Caelo	Polysorbate 80	3212I-02527	1
Caelo	Polysorbate 80	20210312-2	1
Caelo	Polysorbate 80	12116005	4
Caelo	Polysorbate 80	11347909	1
Caelo	Polysorbate 80	12315305	1
Caelo	Polysorbate 80	12315308	9
Caelo	Polysorbate 80	21061301	1
Caelo	Polysorbate 80	123125308	1
Caelo	Polysorbate 80	12315317	10
Caelo	Polysorbate 80	3213E2527	1
Caelo	Polysorbate 80	12116014	1
Caelo	Polysorbate 80	4512A-02527	1
Caelo	Polysorbate 80	13152219	1
Caelo	Polysorbate 80	27111308	1
Caelo	Polysorbate 80	13152223	11
Caelo	Polysorbate 80	13152218	1
Caelo	Polysorbate 80	14190306	5
Caelo	Polysorbate 80	15121404	1
Caelo	Polysorbate 80	1419026	1
Caelo	Polysorbate 80	42175394	2
Caelo	Polysorbate 80	14190316	19
Caelo	Polysorbate 80	14190317	1
Caelo	Polysorbate 80	4513M	1
Caelo	Polysorbate 80	2772013	1
Caelo	Polysorbate 80	15104121	14
Caelo	Polysorbate 80	16260210	14
Caelo	Polysorbate 80	15104103	11
Caelo	Polysorbate 80	25062015C	1
Caelo	Polysorbate 80	18081502	1
Caelo	Polysorbate 80	16059403	1
Caelo	Polysorbate 80	1609402	1
Caelo	Polysorbate 80	1709947	1
Caelo	Polysorbate 80	16260202	1
Caelo	Polysorbate 80	18236801	10
Caelo	Polysorbate 80	18236805	3
Caelo	Polysorbate 80	15104126	7
Caelo	Polysorbate 80	11179618	1
Caelo	Polysorbate 80	16053402	1
Caelo	Polysorbate 80	16260201	19
Caelo	Polysorbate 80	15104112	18
Caelo	Polysorbate 80	18236808	2
Caelo	Polysorbate 80	18045803	7
Caelo	Polysorbate 80	10235202	1
Caelo	Polysorbate 80	13372012	11
Caelo	Polysorbate 80	18236810	3
Caelo	Polysorbate 80	515I-02527	1
Caelo	Polysorbate 80	2915A-02527	1
Caelo	Polysorbate 80	15104113	1
Caelo	Polysorbate 80	1220616	1
Caelo	Polysorbate 80	17A23-B09	1
Caelo	Polysorbate 80	18236813	1
Caelo	Polysorbate 80	12116013	6

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Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 80	16059408	1
Caelo	Polysorbate 80	16260206	1
Caelo	Polysorbate 80	16059402	37
Caelo	Polysorbate 80	17064705	13
Caelo	Polysorbate 80	11347907	2
Caelo	Polysorbate 80	12315328	14
Caelo	Polysorbate 80	13152216	13
Caelo	Polysorbate 80	12315324	1
Caelo	Polysorbate 80	1612B08327237	1
Caesar & Loretz GmbH	Polysorbate 80	18236801	1
Caesar & Loretz GmbH	Polysorbate 80	18236805	1
Caesar & Loretz/Noweda	Polysorbate 80	16260201	1
Cealo	Polysorbate 80	16260210	1
Cealo	Polysorbate 80	18236801	2
Cealo/AHD	Polysorbate 80	16059402	1
Devesa/ Phönix	Polysorbate 80	14K27-Bo1-307106	1
Ebert u. Jacobi 24.06...	Polysorbate 80	15104112	1
Fagron	Polysorbate 80	908ND3714	2
Fagron	Polysorbate 80	11L22-N12	1
Fagron	Polysorbate 80	13C19-N01	1
Fagron	Polysorbate 80	808ND3713	1
Fagron	Polysorbate 80	13C19N01	1
Fagron	Polysorbate 80	14C24-B07-296371	3
Fagron	Polysorbate 80	14C24-B07	1
Fagron	Polysorbate 80	226953-0002	1
Fagron	Polysorbate 80	14K27-B01-307106	2
Fagron	Polysorbate 80	16I12-B02-327237	1
Fagron	Polysorbate 80	12K05-N04	4
Fagron	Polysorbate 80	13A10-N03	2
Fagron	Polysorbate 80	813I-02527	1
Fagron	Polysorbate 80	16059402	1
Fagron	Polysorbate 80	17A23-B09-334347	1
Fagron	Polysorbate 80	18B17-B07-346922	1
Fargon	Polysorbate 80	10114N07	1
Fargon/Kehr	Polysorbate 80	14K27-B01-307106	1
Gehe	Polysorbate 80	12K05-N04	1
Gehe	Polysorbate 80	14190316	1
Gehe	Polysorbate 80	15104111	1
GEHE	Polysorbate 80	16B17-B09	1
Gehe 01.07.2014	Polysorbate 80	13372015	1
gehe 28.12.2013	Polysorbate 80	13152216	3
Caelo	Polysorbate 80	1190318/16260210	1
Ichthyol /Anzag	Polysorbate 80	20(18236808)	1
ICHTHYOL/ahp	Polysorbate 80	14190310	1
Kögl	Polysorbate 80	1700293	2
Krieger	Polysorbate 80	131522232x	1
L12	Polysorbate 80	16260201	1
Nachprüfung 3008	Polysorbate 80	13152223	1
Noweda	Polysorbate 80	16260210	1
Phoenix	Polysorbate 80	12116005	1
Fagron	Polysorbate 80	12D02-N02	1
Phönix	Polysorbate 80	17064705	1
Phönix	Polysorbate 80	18236801	1
PHÖNIX	Polysorbate 80	18045803	2
Sanacorp	Polysorbate 80	7/AKD20	1
Sanacorp, 4,52, 18.1.17	Polysorbate 80	16059402	1
VDL Nachliefer; 2.7.15;...	Polysorbate 80	15104103	1
Caelo	Polysorbate 80	12116009	7
Caelo	Polysorbate 80	13372015	1
VDL 17.04.14	Polysorbate 80		1

- 137 940 spectra from 703 *Apo-Ident* customers from a total of 35 176 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Polysorbate 80 / Macrogolglycerolricinoleat* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Polysorbate 80 / Macrogolglycerolricinoleat* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	389	0	55 970
Type B	0	200	0	69 274
Type C	0	412	1	137 940

The substance/substance group *Polysorbate 80 / Macrogolglycerolricinoleat* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.4576 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.7579 % (> 99.0315 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Polysorbate 80 / Macrogolglycerolricinoleat* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Polysorbate 60	13.82	—
Polysorbate 20	16.36	—
Macrogol 20 glycerol monostearate type...	16.47	—
Polyol fatty acid ester	17.46	—
Macrogolglycerol hydroxystearate 40	18.77	—
Lauromacrogol 400	27.42	—
Macrogol 8 stearate type I	27.44	—
Macrogol ointment	32.01	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Polysorbate 80 / Macrogolglycerolricinoleat* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30893	31325	4.46	12.95
31325	31325	0.00	12.53
33300	31325	5.74	13.57
34673	31325	4.43	12.71
30766	32297	2.42	23.31
31015	32297	4.97	25.22
31368	31368	0.00	23.38
32297	32297	0.00	24.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Potash soap DAC**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30987-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Potash soap DAC; Sapo kalinus DAC

Special notes

When selecting the *Potash soap DAC* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Potash soap DAC	10	6	38

Second-stage model

For differentiation of the substance/substance group *Potash soap DAC* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Potash soap DAC*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Potash soap DAC	13008101	30987	40	1402565
Caelo	Potash soap DAC	14143401	31480	40	20140520
Caelo	Potash soap DAC	14240801	31561	60	20140815
Caelo	Potash soap DAC	14289101	31650	60	20141017
Caelo	Potash soap DAC	160908	32392	40	20160606*
Caelo	Potash soap DAC	160909	32393	40	20160606*
Caelo	Potash soap DAC	160910	32394	40	20160606*
Caelo	Potash soap DAC	171575	33408	40	20170620*
Caelo	Potash soap DAC	170461	33409	40	20170620*
Caelo	Potash soap DAC	170462	33410	40	20170620*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 440 spectra of 10 reference samples from the substance/substance group *Potash soap DAC*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55 919 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 240 spectra of 6 reference samples from the substance/substance group *Potash soap DAC*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Potash soap DAC	13322201	31125	40
Caelo	Potash soap DAC	173023	34016	40
Caelo	Potash soap DAC	180707	34149	40
Caelo	Potash soap DAC	190048	34528	40
Caelo	Potash soap DAC	190049	34529	40
Caelo	Potash soap DAC	190050	34530	40

- 69 234 spectra from a total of 1496 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 58 spectra from 32 *Apo-Ident* customers from 40 batches from the substance/substance group *Potash soap DAC*.
- Among them are spectra of independent samples from 38 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Potash soap DAC	17045801	3
Caelo	Potash soap DAC	19062201	2
Caelo	Potash soap DAC	13161901	2
Caelo	Potash soap DAC	12060401	1
Caelo	Potash soap DAC	12060701	1
Caelo	Potash soap DAC	13322601	1
Caelo	Potash soap DAC	13322401	1
Caelo	Potash soap DAC	14143601	1
Caelo	Potash soap DAC	14240701	1
Caelo	Potash soap DAC	14241101	2
Caelo	Potash soap DAC	16091201	1
Caelo	Potash soap DAC	16091101	1
Caelo	Potash soap DAC	16257001	1
Caelo	Potash soap DAC	17221701	2
Caelo	Potash soap DAC	17302201	1
Caelo	Potash soap DAC	14033001	1
Caelo	Potash soap DAC	14241001	2
Caelo	Potash soap DAC	17221901	1
Caelo	Potash soap DAC	11276401	1
Caelo	Potash soap DAC	18070801	1
Caelo	Potash soap DAC	11198901	1
Caelo	Potash soap DAC	15435201	2
Caelo	Potash soap DAC	14289201	1
Caelo	Potash soap DAC	16256901	2
Caelo	Potash soap DAC	13322201	1

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Supplier	Substance	Batch	Spectra
Caelo	Potash soap DAC	15240401	1
Caelo	Potash soap DAC	13161401	1
Caelo	Potash soap DAC	14032801	1
Caelo	Potash soap DAC	14240901	1
Caelo	Potash soap DAC	15/134/KS	1
Caelo	Potash soap DAC	19159301	2
Caelo	Potash soap DAC	15182001	1
Caelo	Potash soap DAC	17157501	2
Caelo	Potash soap DAC	15240501	4
Caesar & Loretz GmbH	Potash soap DAC	19062201	1
GEHE	Potash soap DAC	17221901	1
Caelo	Potash soap DAC	18060501	2
Klenk	Potash soap DAC	14143401	1
Caelo	Potash soap DAC	14032901	1
Sanacorp	Potash soap DAC	17302101	1
Sanacorp	Potash soap DAC	18211501	1
Caelo	Potash soap DAC	14289101	2

- 138 295 spectra from 703 *Apo-Ident* customers from a total of 35 255 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Potash soap DAC* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Potash soap DAC* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	440	0	55 919
Type B	0	240	0	69 234
Type C	0	57	1	138 295

The substance/substance group *Potash soap DAC* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.6364 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.5000 %)
Type C	100.0000 % (> 99.6453 %)	98.2759 % (> 93.1034 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Potash soap DAC* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Psorisol base cream Audor [®]	57.18	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Potash soap DAC* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30987	30987	0.00	60.24
31480	32394	2.13	62.25
31561	32394	5.43	64.72
31650	33409	11.52	66.96
32392	32392	0.00	62.50
32393	32393	0.00	61.27
32394	32394	0.00	63.35
33408	33408	0.00	58.12
33409	33409	0.00	57.70
33410	33410	0.00	57.18

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Potash soap Ph.Helv.**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 34278-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Potash soap Ph.Helv.; Sapo kalinus Ph.Helv.

Special notes

When selecting the *Potash soap Ph.Helv.* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Potash soap Ph.Helv.	2	1	0

Second-stage model

For differentiation of the substance/substance group *Potash soap Ph.Helv.* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Potash soap Ph.Helv.*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Hänseler AG	Potash soap Ph.H...	2018080637	34278	40	1812453
Hänseler AG	Potash soap Ph.H...	2017080141	34279	40	1812452

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 80 spectra of 2 reference samples from the substance/substance group *Potash soap Ph.Helv.*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 279 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Potash soap Ph.Helv.*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Hänseler AG	Potash soap Ph.Helv.	2017120020	34280	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 0 spectra from 0 *Apo-Ident* customers from 0 batches from the substance/substance group *Potash soap Ph.Helv.*.
- Among them are spectra of independent samples from 0 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.
- 138 353 spectra from 703 *Apo-Ident* customers from a total of 35 295 batches from a further 340 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Potash soap Ph.Helv.* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Potash soap Ph.Helv.* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	80	0	56 279
Type B	0	40	0	69 434
Type C	0	0	0	138 353

The substance/substance group *Potash soap Ph.Helv.* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9784 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6479 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Potash soap Ph.Helv.* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Clotrimazole 10% Cordes [®] RK	70.91	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Potash soap Ph.Helv.* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34278	34278	0.00	93.83
34279	34279	0.00	68.52

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Propylene glycol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30872-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Propylene glycol; Propylenglycolum

Special notes

When selecting the *Propylene glycol* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Propylene glycol	13	8	586

Second-stage model

For differentiation of the substance/substance group *Propylene glycol* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Propylene glycol*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Propylene glycol	301162	32728	40	20160323
Bombastus	Propylene glycol	18003480	34516	40	20180627
Caelo	Propylene glycol	12372405	30872	40	20130107
Caelo	Propylene glycol	14346604	31663	60	1508143
Caelo	Propylene glycol	15335403	32074	40	20150930
Caelo	Propylene glycol	15355108	32486	40	20151021
Euro OTC	Propylene glycol	1509031	31738	60	20151005*
Euro OTC	Propylene glycol	1603034	32190	40	20160425*
Euro OTC	Propylene glycol	1606014	32466	40	20160617*
Fagron	Propylene glycol	18J03-B07-356433	34514	40	20181107
Fagron	Propylene glycol	19A28-B09-361175	34515	40	20190513
Henry Lamotte	Propylene glycol	0123095	30920	40	1502554
Henry Lamotte	Propylene glycol	6012897001	34513	40	20180808

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 560 spectra of 13 reference samples from the substance/substance group *Propylene glycol*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 13 different batches.
- 55799 spectra from a total of 1103 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 320 spectra of 8 reference samples from the substance/substance group *Propylene glycol*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Propylene glycol	1610031	32836	40
Euro OTC	Propylene glycol	1703024	33447	40
Euro OTC	Propylene glycol	1708002	33665	40
Euro OTC	Propylene glycol	1711023	33923	40
Euro OTC	Propylene glycol	1803023	34093	40
Euro OTC	Propylene glycol	1809007	34302	40
Euro OTC	Propylene glycol	1901018	34431	40
Euro OTC	Propylene glycol	1906034	34654	40

- 69 154 spectra from a total of 1494 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 4183 spectra from 627 *Apo-Ident* customers from 611 batches from the substance/substance group *Propylene glycol*.
- Among them are spectra of independent samples from 584 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
/Phoenix	Propylene glycol	17053806	1
19.04.2016 Phoenix 2,84EUR	Propylene glycol	15335403	1
A.H.D.	Propylene glycol	1112004-01	1
ACM	Propylene glycol	KNC0776J15	1
Adler	Propylene glycol	18064908	2
AHD	Propylene glycol	13100907	1
AHD	Propylene glycol	29775B	1
AHD	Propylene glycol	1000001132	1
AHD	Propylene glycol	17053809	1
AHD / Lamotte	Propylene glycol	1000002992	2
AHD 26.01.15	Propylene glycol	14248707	1
AHD Lamotte GmbH	Propylene glycol	8002520002	1
AHD/Henry Lamotte Oils ...	Propylene glycol	1000007047	1
AHL	Propylene glycol	17H03-B04-340573	2
Alliance 05.2.15	Propylene glycol	14113105	1
Alliance H.	Propylene glycol	15430513	1
Alliance Healthcare	Propylene glycol	272684	1
Alliance Healthcare	Propylene glycol	12372403	1
Alliance Healthcare	Propylene glycol	10274303	1

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Supplier	Substance	Batch	Spectra
Alliance Healthcare	Propylene glycol	15430508	1
Fagron	Propylene glycol	19G04-B03	1
Alliance Healthcare/Hen. . .	Propylene glycol	125099	2
Alliance/Caeolo	Propylene glycol	18219105	1
Alliance/Henry	Propylene glycol	8002520002	1
Allianz	Propylene glycol	8003093001	2
Allianz	Propylene glycol	1000007047	1
Anzag	Propylene glycol	12G13N07	1
Anzag	Propylene glycol	13E22-B03-283450	1
Anzag	Propylene glycol	1000002768	1
Anzag	Propylene glycol	8002520002	4
ANZAG	Propylene glycol	123095	8
Anzag 19.03.13 ek: 3,03EUR	Propylene glycol	12372404	2
ANZAG 20.01.2014	Propylene glycol	13256704	1
Anzag 25.01.2013	Propylene glycol	12169802	2
Fagron	Propylene glycol	26021320	5
Anzag/Henry Lotte	Propylene glycol	8003093001	1
Apo-ident	Propylene glycol	1509031-01	1
Apo-ident	Propylene glycol	1603034-01	2
Apotheke/Defektur Misch. . .	Propylene glycol	35/15	1
Apotheke-Ansatz	Propylene glycol	19/15	1
Bambustus/Noweda	Propylene glycol	299106	10
BASF	Propylene glycol	1501013-01	1
BASF AG	Propylene glycol	140802001	1
BASF AG Deutschland	Propylene glycol	1901018-01	1
BASF/Gehe	Propylene glycol	1610031-01	1
Beiersdorf AG	Propylene glycol	15335404	1
Bombastus	Propylene glycol	265358	1
Bombastus	Propylene glycol	268295	1
Bombastus	Propylene glycol	286382	4
Bombastus	Propylene glycol	299106	6
Bombastus	Propylene glycol	303788	25
Bombastus	Propylene glycol	306364	1
Bombastus	Propylene glycol	309031	5
Bombastus	Propylene glycol	311417	6
Bombastus	Propylene glycol	17H03-B04-340573	1
Bombastus	Propylene glycol	18005449	4
Bombastus	Propylene glycol	19003049	2
Bombastus	Propylene glycol	123095	1
Bombastus	Propylene glycol	16251201	1
Bombastus	Propylene glycol	18000424	7
Bombastus	Propylene glycol	270359	1
Bombastus	Propylene glycol	281569	3
Bombastus	Propylene glycol	7/14	1
Bombastus	Propylene glycol	296424	4
Bombastus	Propylene glycol	277548	4
Bombastus	Propylene glycol	283937	1
Bombastus	Propylene glycol	289078	4
Bombastus	Propylene glycol	291103	1
Bombastus	Propylene glycol	293947	9
Bombastus	Propylene glycol	295111	5
Bombastus	Propylene glycol	2983947	1
Bombastus	Propylene glycol	15430504	2
Bombastus	Propylene glycol	309030	3
Bombastus	Propylene glycol	311416	3
Bombastus	Propylene glycol	297626	11
Bombastus	Propylene glycol	19001346	4
Bombastus	Propylene glycol	17275502	1
Bombastus	Propylene glycol	307185	11
Bombastuts/Gehe	Propylene glycol	307185	2

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Supplier	Substance	Batch	Spectra
cae	Propylene glycol	15430514	1
Caelo	Propylene glycol	5061201	1
Caelo	Propylene glycol	20111203	1
Caelo	Propylene glycol	14113102	16
Caelo	Propylene glycol	14113103	5
Caelo	Propylene glycol	1804212110	1
Caelo	Propylene glycol	10371307	1
Caelo	Propylene glycol	11300505	2
Caelo	Propylene glycol	11372006	14
Caelo	Propylene glycol	20071201	1
Caelo	Propylene glycol	11H04-N01	1
Caelo	Propylene glycol	11372010	5
Caelo	Propylene glycol	12088207	11
Caelo	Propylene glycol	611211	1
Caelo	Propylene glycol	3512M-02110	1
Caelo	Propylene glycol	12088205	3
Caelo	Propylene glycol	20140612-6	1
Caelo	Propylene glycol	1288205	1
Caelo	Propylene glycol	113Q-02110	1
Caelo	Propylene glycol	12169802	16
Caelo	Propylene glycol	25011302	1
Caelo	Propylene glycol	6021301	1
Caelo	Propylene glycol	12169804	8
Caelo	Propylene glycol	28021301	1
Caelo	Propylene glycol	12372404	14
Caelo	Propylene glycol	25031301	1
Caelo	Propylene glycol	150771	1
Caelo	Propylene glycol	18041302	1
Caelo	Propylene glycol	19041307	1
Caelo	Propylene glycol	12372403	7
Caelo	Propylene glycol	31051317	1
Caelo	Propylene glycol	13100907	22
Caelo	Propylene glycol	12372402	2
Caelo	Propylene glycol	26061302	1
Caelo	Propylene glycol	12100907	1
Caelo	Propylene glycol	13100906	11
Caelo	Propylene glycol	13071303	1
Caelo	Propylene glycol	13167006	7
Caelo	Propylene glycol	42488055	1
Caelo	Propylene glycol	2101302	1
Caelo	Propylene glycol	12111304	1
Caelo	Propylene glycol	13256709	14
Caelo	Propylene glycol	13167005	1
Caelo	Propylene glycol	24121301	1
Caelo	Propylene glycol	70214PJK02	1
Caelo	Propylene glycol	11021404	1
Caelo	Propylene glycol	14051804	13
Caelo	Propylene glycol	26041402	1
Caelo	Propylene glycol	13G09-B01283456	1
Caelo	Propylene glycol	140101001	2
Caelo	Propylene glycol	123095	1
Caelo	Propylene glycol	3071402	1
Caelo	Propylene glycol	12071403	1
Caelo	Propylene glycol	14051805	22
Caelo	Propylene glycol	27091402	2
Caelo	Propylene glycol	29091403	1
Caelo	Propylene glycol	13E22-B03	1
Caelo	Propylene glycol	1051805	1
Caelo	Propylene glycol	14A09-B04-289598	1
Caelo	Propylene glycol	1405180	1

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	13111405	1
Caelo	Propylene glycol	12345	1
Caelo	Propylene glycol	14113105	12
Caelo	Propylene glycol	14248706	4
Caelo	Propylene glycol	14346608	13
Caelo	Propylene glycol	14346606	8
Caelo	Propylene glycol	15A07-B04-302969	1
Caelo	Propylene glycol	1518601	1
Caelo	Propylene glycol	15181601	24
Caelo	Propylene glycol	15262401	17
Caelo	Propylene glycol	15262402	10
Caelo	Propylene glycol	12101701	1
Caelo	Propylene glycol	14C05-B02-295787	2
Caelo	Propylene glycol	14248707	10
Caelo	Propylene glycol	125099	16
Caelo	Propylene glycol	16021506	1
Caelo	Propylene glycol	14288707	1
Caelo	Propylene glycol	17041501	1
Caelo	Propylene glycol	14346609	18
Caelo	Propylene glycol	8051503	1
Caelo	Propylene glycol	1436604	1
Caelo	Propylene glycol	1071502	1
Caelo	Propylene glycol	15181604	8
Caelo	Propylene glycol	28071503	1
Caelo	Propylene glycol	15181603	13
Caelo	Propylene glycol	15081501	1
Caelo	Propylene glycol	15181605	10
Caelo	Propylene glycol	15262407	12
Caelo	Propylene glycol	151816055	1
Caelo	Propylene glycol	15335407	20
Caelo	Propylene glycol	1518602	1
Caelo	Propylene glycol	15262408	9
Caelo	Propylene glycol	15262409	13
Caelo	Propylene glycol	1000001132	5
Caelo	Propylene glycol	15G28-B03-311889	1
Caelo	Propylene glycol	15335405	30
Caelo	Propylene glycol	1526409	1
Caelo	Propylene glycol	153565101	1
Caelo	Propylene glycol	29814B	1
Caelo	Propylene glycol	15430505	6
Caelo	Propylene glycol	15430506	9
Caelo	Propylene glycol	15430513	10
Caelo	Propylene glycol	153335405	1
Caelo	Propylene glycol	6071520	1
Caelo	Propylene glycol	15430502	24
Caelo	Propylene glycol	15355107	1
Caelo	Propylene glycol	15413409	1
Caelo	Propylene glycol	15340502	1
Caelo	Propylene glycol	15439502	1
Caelo	Propylene glycol	154305	1
Caelo	Propylene glycol	16C10-B04	1
Caelo	Propylene glycol	1540502	1
Caelo	Propylene glycol	16105403	52
Caelo	Propylene glycol	15430511	1
Caelo	Propylene glycol	15430512	10
Caelo	Propylene glycol	16C10-B04-323302	2
Caelo	Propylene glycol	16251202	47
Caelo	Propylene glycol	170131PG/16105403	1
Caelo	Propylene glycol	1615403	1
Caelo	Propylene glycol	16C10B04323302	1

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	16251207	8
Caelo	Propylene glycol	18031704	1
Caelo	Propylene glycol	11051707	1
Caelo	Propylene glycol	16G04B01328151	1
Caelo	Propylene glycol	10061712	1
Caelo	Propylene glycol	162251207	1
Caelo	Propylene glycol	17061707	1
Caelo	Propylene glycol	16551207	1
Caelo	Propylene glycol	6071718	1
Caelo	Propylene glycol	307185	1
Caelo	Propylene glycol	161003101	1
Caelo	Propylene glycol	17053804	51
Caelo	Propylene glycol	29879B	1
Caelo	Propylene glycol	17a06-b03-332091	1
Caelo	Propylene glycol	1140817	1
Caelo	Propylene glycol	18081702	1
Caelo	Propylene glycol	1053801	1
Caelo	Propylene glycol	170538015378	1
Caelo	Propylene glycol	17053803	1
Caelo	Propylene glycol	4111708	1
Caelo	Propylene glycol	13111703	1
Caelo	Propylene glycol	17053810	3
Caelo	Propylene glycol	170538065447	1
Caelo	Propylene glycol	11121702	1
Caelo	Propylene glycol	17423HH431	1
Caelo	Propylene glycol	17053805	1
Caelo	Propylene glycol	7053806	1
Caelo	Propylene glycol	12021823	1
Caelo	Propylene glycol	2021801	1
Caelo	Propylene glycol	17321703	53
Caelo	Propylene glycol	17321704	24
Caelo	Propylene glycol	17275504	1
Caelo	Propylene glycol	17A06B03_334896	1
Caelo	Propylene glycol	18064901	83
Caelo	Propylene glycol	5051802	1
Caelo	Propylene glycol	7051807	1
Caelo	Propylene glycol	9061811	1
Caelo	Propylene glycol	1711023-01	2
Caelo	Propylene glycol	7071806	1
Caelo	Propylene glycol	18000424	1
Caelo	Propylene glycol	18064907	19
Caelo	Propylene glycol	18A19-B01	1
Caelo	Propylene glycol	18064905	1
Caelo	Propylene glycol	16081802	1
Caelo	Propylene glycol	18A19-B01-348338	1
Caelo	Propylene glycol	1803023-01	1
Caelo	Propylene glycol	19091801	1
Caelo	Propylene glycol	27101805	1
Caelo	Propylene glycol	18064908	23
Caelo	Propylene glycol	18A19-B01-351227	3
Caelo	Propylene glycol	28111814	1
Caelo	Propylene glycol	22121810	1
Caelo	Propylene glycol	22121811	1
Caelo	Propylene glycol	1809007-01	3
Caelo	Propylene glycol	18064915	30
Caelo	Propylene glycol	1064907	1
Caelo	Propylene glycol	18064917	13
Caelo	Propylene glycol	18219101	8
Caelo	Propylene glycol	18219102	9
Caelo	Propylene glycol	19230102	1

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	1316003	1
Caelo	Propylene glycol	17053809	50
Caelo	Propylene glycol	13167003	19
Caelo	Propylene glycol	31256708	1
Caelo	Propylene glycol	19230101	1
Caelo	Propylene glycol	11300502	1
Caelo	Propylene glycol	13256706	20
Caelo	Propylene glycol	12K13-N05	1
Caelo	Propylene glycol	15A07-B04-302970	3
Caelo	Propylene glycol	13100908	35
Caelo	Propylene glycol	16105404	10
Caelo	Propylene glycol	1428704	2
Caelo	Propylene glycol	171106PG/16251202	1
Caelo	Propylene glycol	18064904	38
Caelo	Propylene glycol	13100905	2
Caelo	Propylene glycol	300915	1
Caelo	Propylene glycol	1703024-01	2
Caelo	Propylene glycol	11125811	1
Caelo	Propylene glycol	11K28-N01	1
Caelo	Propylene glycol	18003480	1
Caelo	Propylene glycol	13256708	8
Caelo	Propylene glycol	11300506	3
Caelo	Propylene glycol	24041221	2
Caelo	Propylene glycol	6509HH9041	1
Caelo	Propylene glycol	210718064901	1
Caelo	Propylene glycol	15181602	14
Caelo	Propylene glycol	11372011	3
Caelo	Propylene glycol	1610540	1
Caelo	Propylene glycol	17H03-B04-344395	1
Caelo	Propylene glycol	1526407	1
Caelo	Propylene glycol	15L23-B01-318036	1
Caelo	Propylene glycol	1606014-01	1
Caelo	Propylene glycol	1610031-01	1
Caelo	Propylene glycol	1651206	1
Caelo	Propylene glycol	170808PG/16251206	1
Caelo	Propylene glycol	1705804	1
Caelo	Propylene glycol	17053814	10
Caelo	Propylene glycol	83/2014	1
Caelo	Propylene glycol	12088206	5
Caelo	Propylene glycol	13256707	29
Caelo	Propylene glycol	17053806	56
Caelo	Propylene glycol	14346602	5
Caelo	Propylene glycol	1793451	1
Caelo	Propylene glycol	15430504	21
Caelo	Propylene glycol	1625120	1
Caelo	Propylene glycol	12G13-N07	4
Caelo	Propylene glycol	140510804	1
Caelo	Propylene glycol	514E-02110	1
Caelo	Propylene glycol	15335408	13
Caelo	Propylene glycol	16251208	3
Caelo	Propylene glycol	1000002768	1
Caelo	Propylene glycol	16851205	1
Caelo	Propylene glycol	1316Q-02110	1
Caelo	Propylene glycol	18064920	5
Caelo	Propylene glycol	13256704	29
Caelo	Propylene glycol	11372009	5
Caelo	Propylene glycol	26021320	2
Caelo	Propylene glycol	1000002992	2
Caelo	Propylene glycol	1304C009-281100	2
Caelo	Propylene glycol	13256705	18

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	14051802	18
Caelo	Propylene glycol	5671401	2
Caelo	Propylene glycol	15F25-B02-311890	1
Caelo	Propylene glycol	16251201	66
Caelo	Propylene glycol	1708002-01	1
Caelo	Propylene glycol	18046912	1
Caelo	Propylene glycol	2021621	1
Caelo	Propylene glycol	14248702	12
Caelo	Propylene glycol	15430514	5
Caelo	Propylene glycol	16251203	10
Caelo	Propylene glycol	11300504	1
Caelo	Propylene glycol	16251205	43
Caelo	Propylene glycol	14248703	19
Caelo	Propylene glycol	4248702	1
Caelo	Propylene glycol	14346605	2
Caelo	Propylene glycol	15262403	23
Caelo	Propylene glycol	1540513	1
Caelo	Propylene glycol	1605403	1
Caelo	Propylene glycol	7053802	1
Caelo	Propylene glycol	170729184	1
Caelo	Propylene glycol	17053802	6
Caelo	Propylene glycol	17053188	1
Caelo	Propylene glycol	170323182	1
Caelo	Propylene glycol	17275502	33
Caelo	Propylene glycol	180130PG/17275502	1
Caelo	Propylene glycol	181016185	1
Caelo	Propylene glycol	18064906	12
Caelo	Propylene glycol	1301C004-277798	2
Caelo	Propylene glycol	1301C003-277799	1
Caelo	Propylene glycol	14248704	7
Caelo	Propylene glycol	15262404	15
Caelo	Propylene glycol	15335406	27
Caelo	Propylene glycol	17053807	6
Caelo	Propylene glycol	17E22-B10	1
Caelo	Propylene glycol	1113102	1
Caelo	Propylene glycol	15335404	31
Caelo	Propylene glycol	1310098	1
Caelo	Propylene glycol	1405003-01	1
Caelo	Propylene glycol	2310070	1
Caelo	Propylene glycol	14346603	11
Caelo	Propylene glycol	15069201	5
Caelo	Propylene glycol	15262406	5
Caelo	Propylene glycol	3615U-02110	1
Caelo	Propylene glycol	1562408	1
Caelo	Propylene glycol	1603034-01	3
Caelo	Propylene glycol	16C10-B04-321659	1
Caelo	Propylene glycol	1562404	1
Caelo	Propylene glycol	30718	1
Caelo	Propylene glycol	8003093001	3
Caelo	Propylene glycol	1725502	1
Caelo	Propylene glycol	17321705	4
Caelo	Propylene glycol	18064912	31
Caelo	Propylene glycol	18H07-B01-352703	1
Caelo	Propylene glycol	18219107	1
Caelo	Propylene glycol	18219106	4
Caelo	Propylene glycol	12169803	10
Caelo	Propylene glycol	13167004	24
Caelo	Propylene glycol	1272404	1
Caelo	Propylene glycol	14051803	7
Caelo	Propylene glycol	14346607	23

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	15069202	17
Caelo	Propylene glycol	54/AKD7	1
Caelo	Propylene glycol	150903101	1
Caelo	Propylene glycol	15430503	37
Caelo	Propylene glycol	16251206	51
Caelo	Propylene glycol	8002520002	5
Caelo	Propylene glycol	58/AKD16	1
Caelo	Propylene glycol	17321708	7
Caelo	Propylene glycol	18064902	20
Caelo	Propylene glycol	17053815	1
Caelo	Propylene glycol	1321704	1
Caelo	Propylene glycol	18064913	5
Caelo	Propylene glycol	18064918	5
Caelo	Propylene glycol	18219110	4
Caelo	Propylene glycol	11372005	3
Caelo	Propylene glycol	2913M-02110	1
Caelo	Propylene glycol	5262402	1
Caeolo / Phönix	Propylene glycol	17053806	2
Caeolo/Sanacorp	Propylene glycol	18064916	1
caesar	Propylene glycol	14248707	1
Caesar & Lorenz GmbH	Propylene glycol	18064901	2
Caesar & Loretz GmbH	Propylene glycol	11372006	1
Caesar & Loretz GmbH	Propylene glycol	12372404	1
Caesar & Loretz GmbH	Propylene glycol	14051804	2
Caesar & Loretz GmbH	Propylene glycol	15262403	1
Caesar & Loretz GmbH	Propylene glycol	16251201	1
Caesar & Loretz GmbH	Propylene glycol	18064904	1
Caesar & Loretz GmbH	Propylene glycol	18064917	2
Caesar & Loretz GmbH	Propylene glycol	18064915	1
Caesar & Loretz GmbH	Propylene glycol	18219102	1
Caesar & Loretz GmbH Hi...	Propylene glycol	13256705	1
Caesar & Loretz GmbH Hi...	Propylene glycol	14248706	1
Caesar & Loretz GmbH Hi...	Propylene glycol	14248707	1
Caesar & Loretz GmbH Hi...	Propylene glycol	15335403	1
Caesar & Loretz GmbH Hi...	Propylene glycol	15335404	1
Caesar & Loretz GmbH Hi...	Propylene glycol	15430508	1
Caesar & Loretz GmbH, 4...	Propylene glycol	11300505	1
Caesar & Loretz GmbH, 4...	Propylene glycol	11372007	1
Caesar & Loretz GmbH, 4...	Propylene glycol	12169802	5
Caesar & Loretz GmbH/ P...	Propylene glycol	18219105	1
Caesar & Loretz/Noweda	Propylene glycol	16105403	1
Caesar /phönix	Propylene glycol	13167003	1
Caesar und Loretz GmbH	Propylene glycol	17053806	2
caesar&lorenz	Propylene glycol	15262406	1
Caesar&Loretz GmbH	Propylene glycol	15335405	1
caesar&lorenz GmbH,Phön...	Propylene glycol	16251201	1
Caesar&Loretz GmbH/Anzag	Propylene glycol	15181605	2
Caesar&lorenz,Phoenix	Propylene glycol	15069202	1
Caesar/Noweda	Propylene glycol	13100906	1
Caesar/Noweda	Propylene glycol	13167006	2
Caesar/Noweda	Propylene glycol	14051803	2
Calo/Sanacorp	Propylene glycol	16105403	1
canea, anzag	Propylene glycol	13167003	3
Carlo/ Gehe	Propylene glycol	16105403	1
Cealo	Propylene glycol	13100907	2
Cealo / Noweda	Propylene glycol	13256708	2
Cealo/Phönix	Propylene glycol	15430502	1
Celo	Propylene glycol	11607-2	1
Celo/Phönix	Propylene glycol	17053804	3
Delta	Propylene glycol	17A06-B03-332091	1

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Supplier	Substance	Batch	Spectra
Delta	Propylene glycol	17H03-B04-344395	1
Eigenherstellung	Propylene glycol	120912PML01	1
EuRho	Propylene glycol	1302002-01	1
EuRho	Propylene glycol	1206038-01	1
EuRho	Propylene glycol	1509031-01	2
EuRho/Noweda	Propylene glycol	140020-01	1
EuRho/Noweda	Propylene glycol	1504031-01	1
Euro OTC	Propylene glycol	130200201	1
Euro OTC	Propylene glycol	1307021-01	7
Euro OTC	Propylene glycol	130702101	1
Euro OTC	Propylene glycol	140500301	3
Euro OTC	Propylene glycol	140802001	1
Euro OTC	Propylene glycol	150101301	2
Euro OTC	Propylene glycol	15262403	1
Euro OTC	Propylene glycol	160303401	2
Euro OTC	Propylene glycol	1509031-02	1
Euro OTC	Propylene glycol	6509HH9041	3
Euro OTC	Propylene glycol	16C10-B04-321081	1
Euro OTC	Propylene glycol	1703024-01	14
Euro OTC	Propylene glycol	309031	1
Euro OTC	Propylene glycol	17538H61471	1
Euro OTC	Propylene glycol	18064901	1
Euro OTC	Propylene glycol	1051821	1
Euro OTC	Propylene glycol	1408020-01	11
Euro OTC	Propylene glycol	16G04-B01-328151	2
Euro OTC	Propylene glycol	17008002-01	1
Euro OTC	Propylene glycol	1206038-01	4
Euro OTC	Propylene glycol	1109015-01	1
Euro OTC	Propylene glycol	140101001	1
Euro OTC	Propylene glycol	1501013-01	17
Euro OTC	Propylene glycol	150403101	3
Euro OTC	Propylene glycol	15040301-01	1
Euro OTC	Propylene glycol	150903101	1
Euro OTC	Propylene glycol	1803023-01	1
Euro OTC	Propylene glycol	1809007	1
Euro OTC	Propylene glycol	11C07-N06	1
Euro OTC	Propylene glycol	1504031-01	21
Euro OTC	Propylene glycol	5315HH9041	2
Euro OTC	Propylene glycol	1906034-01	3
Euro OTC	Propylene glycol	1401010-01	7
Euro OTC	Propylene glycol	1711023-01	14
Euro OTC	Propylene glycol	1809007-01	12
Euro OTC	Propylene glycol	1302002-01	9
Euro OTC	Propylene glycol	171102301	2
Euro OTC	Propylene glycol	1000007047	2
Euro OTC	Propylene glycol	17423HH431	2
Euro OTC	Propylene glycol	1901018-01	11
Euro OTC	Propylene glycol	289078	1
Euro OTC	Propylene glycol	1509031-031	1
Euro OTC	Propylene glycol	1509031-01	21
Euro OTC	Propylene glycol	15355108	1
Euro OTC	Propylene glycol	1405003-01	2
Euro OTC	Propylene glycol	1606014-01	15
Euro OTC	Propylene glycol	1000002992	1
Euro PTC Pharma GmbH/Sa...	Propylene glycol	1504031-01	1
Euro/ Sanacorp	Propylene glycol	14248704	1
Euro/ Sanacorp	Propylene glycol	1610031-01	1
Euro/Noweda	Propylene glycol	1703024-01	1
Euro OTC	Propylene glycol	q603034-01	1
Euro OTC	Propylene glycol	200749	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Propylene glycol	125099	7
Euro OTC	Propylene glycol	17538HH431	1
Euro OTC	Propylene glycol	1603034-01	23
Euro OTC	Propylene glycol	160303401-01	1
Euro OTC	Propylene glycol	1610031	1
Europ. AB	Propylene glycol	5671401	1
EuroPTC/Phönix	Propylene glycol	15901013-01	1
Fagro / G	Propylene glycol	17H03-B04-344395	1
Fagron	Propylene glycol	15G28-B03-314768	22
Fagron	Propylene glycol	12C06-N04	6
Fagron	Propylene glycol	8121120	1
Fagron	Propylene glycol	18081121	1
Fagron	Propylene glycol	12G13-N07	29
Fagron	Propylene glycol	12G13-N07	4
Fagron	Propylene glycol	12g13-n07	1
Fagron	Propylene glycol	2112212110	1
Fagron	Propylene glycol	12088205	1
Fagron	Propylene glycol	1301C004	5
Fagron	Propylene glycol	9051220	6
Fagron	Propylene glycol	1304C009	6
Fagron	Propylene glycol	1304C010281099	1
Fagron	Propylene glycol	181013prop	1
Fagron	Propylene glycol	1304c009-281100	1
Fagron	Propylene glycol	20122013B	1
Fagron	Propylene glycol	13E22-B03-283450	22
Fagron	Propylene glycol	1304C009-28	1
Fagron	Propylene glycol	13E22B03	1
Fagron	Propylene glycol	13040010-281099	1
Fagron	Propylene glycol	13E22-B03-283451	2
Fagron	Propylene glycol	14A09-B04-289600	1
Fagron	Propylene glycol	200749-B04-289597	1
Fagron	Propylene glycol	280714C	1
Fagron	Propylene glycol	13G09B01	2
Fagron	Propylene glycol	14A09B04	4
Fagron	Propylene glycol	1405003-01	1
Fagron	Propylene glycol	14A09-B04-289598	5
Fagron	Propylene glycol	14A09-B04-289599	3
Fagron	Propylene glycol	14C05-B02-295787	10
Fagron	Propylene glycol	14C05-B02	4
Fagron	Propylene glycol	16C10-B04-319299	2
Fagron	Propylene glycol	17A06-B03-332091	12
Fagron	Propylene glycol	14C09-B02-289597	1
Fagron	Propylene glycol	270114A	1
Fagron	Propylene glycol	14H22-B02	1
Fagron	Propylene glycol	15A07-B04-302969	7
Fagron	Propylene glycol	14H22-B02-302506	6
Fagron	Propylene glycol	15A07B04	3
Fagron	Propylene glycol	15A07-B04-302970	20
Fagron	Propylene glycol	14346608	1
Fagron	Propylene glycol	15A07-B04	4
Fagron	Propylene glycol	14C05B02295787	1
Fagron	Propylene glycol	17082015A	1
Fagron	Propylene glycol	15A07-B04_302970	1
Fagron	Propylene glycol	15G28-B03-311889	4
Fagron	Propylene glycol	15A07_B04_302970	1
Fagron	Propylene glycol	15G28-B03	4
Fagron	Propylene glycol	15B24-B40-307379	4
Fagron	Propylene glycol	5021520	2
Fagron	Propylene glycol	15L26-B01	1
Fagron	Propylene glycol	15L23-B01-318036	14

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Supplier	Substance	Batch	Spectra
Fagron	Propylene glycol	15G28-803-314758	1
Fagron	Propylene glycol	18091521	1
Fagron	Propylene glycol	16C10-Bo4-321081	1
Fagron	Propylene glycol	16C10-B04-323302	4
Fagron	Propylene glycol	15430503	1
Fagron	Propylene glycol	8021621	2
Fagron	Propylene glycol	16E09-B02-324	2
Fagron	Propylene glycol	16G04-B01-328151	13
Fagron	Propylene glycol	16E09-B02-3024843	1
Fagron	Propylene glycol	15L23	1
Fagron	Propylene glycol	16G04-B01-329687	3
Fagron	Propylene glycol	16G04B01328151	3
Fagron	Propylene glycol	16C10-B04-321082	1
Fagron	Propylene glycol	17E22-B10-336830	9
Fagron	Propylene glycol	17E22-B-10-336830	1
Fagron	Propylene glycol	17W22-B10	1
Fagron	Propylene glycol	336830	1
Fagron	Propylene glycol	17a06b03332091	1
Fagron	Propylene glycol	17E22	1
Fagron	Propylene glycol	17H03-B04-340573	12
Fagron	Propylene glycol	17A06-B03-334896	3
Fagron	Propylene glycol	17E22-B10-3365666	1
Fagron	Propylene glycol	1708002-01	1
Fagron	Propylene glycol	17A06B03334896	1
Fagron	Propylene glycol	17E22-B10336830	1
Fagron	Propylene glycol	17h03b04344395	1
Fagron	Propylene glycol	18A19-B01	2
Fagron	Propylene glycol	17H03-B04_344395	1
Fagron	Propylene glycol	17H03-B04	3
Fagron	Propylene glycol	18A19-B01-348338	4
Fagron	Propylene glycol	18H07B01352662	2
Fagron	Propylene glycol	18a19-b01-351127	1
Fagron	Propylene glycol	1811028-05	1
Fagron	Propylene glycol	18J03B07355043	1
Fagron	Propylene glycol	18j03b07355043	2
Fagron	Propylene glycol	18j03-b07-356433	1
Fagron	Propylene glycol	19G04-B03-363220	1
Fagron	Propylene glycol	17E22B10336830	2
Fagron	Propylene glycol	11K28-N01	9
Fagron	Propylene glycol	11L22-N14	6
Fagron	Propylene glycol	24041221	8
Fagron	Propylene glycol	19A28-B09-361193	1
Fagron	Propylene glycol	18J03-B07	1
Fagron	Propylene glycol	11H04-N01	2
Fagron	Propylene glycol	1304C010	1
Fagron	Propylene glycol	3959/V02/15	1
Fagron	Propylene glycol	1304c010-281099	3
Fagron	Propylene glycol	1304C-010	1
Fagron	Propylene glycol	1304C009-281100	3
Fagron	Propylene glycol	6071520	3
Fagron	Propylene glycol	18J03-B07-355043	4
Fagron	Propylene glycol	15262407	1
Fagron	Propylene glycol	14H03-B04-340573	1
Fagron	Propylene glycol	1301C004-277798	15
Fagron	Propylene glycol	15F25-B02-311890	5
Fagron	Propylene glycol	18A19-B01-351227	3
Fagron	Propylene glycol	18H07-B01-352662	3
Fagron	Propylene glycol	11372007	2
Fagron	Propylene glycol	13E22-B03	11
Fagron	Propylene glycol	12k13-n05	1

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Supplier	Substance	Batch	Spectra
Fagron	Propylene glycol	18061321	1
Fagron	Propylene glycol	18061311	1
Fagron	Propylene glycol	TQ131410	2
Fagron	Propylene glycol	19111421	4
Fagron	Propylene glycol	15L23-B01-3108036	1
Fagron	Propylene glycol	13G09-B01	5
Fagron	Propylene glycol	14C05-B02-295788	4
Fagron	Propylene glycol	2021621	2
Fagron	Propylene glycol	1301C003-277799	1
Fagron	Propylene glycol	1314Q2110	1
Fagron	Propylene glycol	13G09-B01-283456	24
Fagron	Propylene glycol	14A09-B04	15
Fagron	Propylene glycol	16C10-B04-321081	23
Fagron	Propylene glycol	200749-0001	1
Fagron	Propylene glycol	30041621	1
Fagron	Propylene glycol	1610031-01	1
Fagron	Propylene glycol	17H03-B04-344395	4
Fagron	Propylene glycol	1304C010-281099	21
Fagron	Propylene glycol	13G09B01283456	1
Fagron	Propylene glycol	13E22B0328345	1
Fagron	Propylene glycol	23011420	1
Fagron	Propylene glycol	50515PJK01	1
Fagron	Propylene glycol	16E09-B02	2
Fagron	Propylene glycol	16c10-b04-321081	1
Fagron	Propylene glycol	17E22-B10-338768	1
Fagron	Propylene glycol	17A06-B03	3
Fagron	Propylene glycol	12J04-N06	11
Fagron	Propylene glycol	9031321	1
Fagron	Propylene glycol	14A09-B04-289597	21
Fagron	Propylene glycol	1307021-01	1
Fagron	Propylene glycol	15G28-B03-314769	2
Fagron	Propylene glycol	15335407	1
Fagron	Propylene glycol	16C10-B04	7
Fagron	Propylene glycol	16E09-B02-324843	12
Fagron	Propylene glycol	16C-10-B04	1
Fagron	Propylene glycol	16E09-B02-325331	2
Fagron	Propylene glycol	6031720	1
Fagron	Propylene glycol	18A19-B01-346655	1
Fagron	Propylene glycol	12K13-N05	13
Fagron	Propylene glycol	12372403	1
Fagron	Propylene glycol	13G09-B01-283452	1
Fagron	Propylene glycol	15B24-B40	3
Fagron	Propylene glycol	15051721	1
Fagron	Propylene glycol	18H07-B01-352703	4
Fagron	Propylene glycol	18H07-B01	1
Fagron	Propylene glycol	1301C003	3
Fagron	Propylene glycol	150403101	1
Fagron	Propylene glycol	5115Q-02110	1
Fagron	Propylene glycol	18064904	1
Fagron	Propylene glycol	1304C010	10
Fargon	Propylene glycol	12K13-N05	2
Fargon	Propylene glycol	16C10-B04-321081	1
Fargon	Propylene glycol	17A06-B03-332091	1
Fgron / Alliance Healthc.	Propylene glycol	17A06-B03-334896	1
Fiebig	Propylene glycol	8002520002	4
Fiebig	Propylene glycol	1000007047	2
Fiebig	Propylene glycol	6012897001	2
Fischbar	Propylene glycol	18091201	1
Fragon/Phoenix	Propylene glycol	18A19-B01	1
Fragon/Sana	Propylene glycol	18H07-B01	1

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Supplier	Substance	Batch	Spectra
Gatt-Koller	Propylene glycol	1801516	3
gehe	Propylene glycol	8002520002	1
Gehe	Propylene glycol	11300506	1
Gehe	Propylene glycol	11372007	3
Gehe	Propylene glycol	12088207	1
Gehe	Propylene glycol	11372009	1
Gehe	Propylene glycol	12169802	1
Gehe	Propylene glycol	12372405	2
Gehe	Propylene glycol	13100908	3
Gehe	Propylene glycol	13167003	2
Gehe	Propylene glycol	13256704	2
Gehe	Propylene glycol	14051802	1
Gehe	Propylene glycol	14C05-B02-295787	1
Gehe	Propylene glycol	15A07-B04-302969	1
Gehe	Propylene glycol	14346602	2
Gehe	Propylene glycol	15069202	1
Gehe	Propylene glycol	15181605	1
Gehe	Propylene glycol	1000002992	2
Gehe	Propylene glycol	16251202	2
Gehe	Propylene glycol	8002520002	2
Gehe	Propylene glycol	16251207	1
Gehe	Propylene glycol	17321705	1
GEHE	Propylene glycol	11372007	1
GEHE	Propylene glycol	16G04-B01-328151	1
GEHE	Propylene glycol	17A06-B03-332091	1
GEHE	Propylene glycol	17053804	1
GEHE	Propylene glycol	17053809	2
GEHE	Propylene glycol	17321703	1
GEHE	Propylene glycol	17H03-B04-340573	1
GEHE	Propylene glycol	1000007047	2
GEHE	Propylene glycol	6012897001	7
GEHE	Propylene glycol	6016860001	1
GEHE 06.05.2014	Propylene glycol	13256705	2
Gehe 3.3.15	Propylene glycol	14C05-B02-295787	1
Caelo	Propylene glycol	1428706	1
Caelo	Propylene glycol	19111421	1
Caelo	Propylene glycol	16251201/1060217	1
Caelo	Propylene glycol	1070318/17053809	1
Caelo	Propylene glycol	11372007	9
Euro OTC	Propylene glycol	14346602	2
Euro OTC	Propylene glycol	16060114-01	1
Euro OTC	Propylene glycol	16016014-01	1
Fagron	Propylene glycol	16G04-B01	2
Fagron	Propylene glycol	23021320	1
Gehe/Henry Lamotte	Propylene glycol	8002520002	1
Gehe/Lamotte	Propylene glycol	8003093001	2
H.Lamotte	Propylene glycol	1000002768	2
H.Lamotte	Propylene glycol	8002520002	2
H.Lamotte	Propylene glycol	8003093001	1
H.Lamotte	Propylene glycol	1000007047	2
H.Lamotte/Anzag 16.05.17	Propylene glycol	8002520002	2
H.Lamotte/Anzag 21.11.17	Propylene glycol	8003093001	1
H.Lamotte/anzag 30.12.16	Propylene glycol	1000002992	1
Hedinger	Propylene glycol	29625B	1
Hedinger	Propylene glycol	29702B	1
Hedinger	Propylene glycol	29775B	1
Hedinger	Propylene glycol	29797B	2
Hedinger	Propylene glycol	29823B	1
Hedinger	Propylene glycol	29837B	1
Hedinger	Propylene glycol	29859B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Propylene glycol	29897B	1
Hedinger	Propylene glycol	29905B	1
Hedinger	Propylene glycol	29859BP	1
Hedinger	Propylene glycol	29930B	2
Hedinger	Propylene glycol	29945B	1
Hedinger vdl	Propylene glycol	16251202	2
Hedinger GmbH	Propylene glycol	29905b	1
Hedinger/ Sanacorp	Propylene glycol	29743B	1
Hedinger/Alliance Heath...	Propylene glycol	29775B	1
Hedinger/Phoenix	Propylene glycol	29762B	2
Hedinger/Sanacorp	Propylene glycol	29823B	1
Hedinger/VDL	Propylene glycol	29847B	1
Hedinger/VDL	Propylene glycol	29859B	1
Henr	Propylene glycol	1000002768	1
Henry Lam./ Phönix	Propylene glycol	123095	1
henry lamotte	Propylene glycol	125099	1
henry lamotte	Propylene glycol	1000001132	1
Henry Lamotte	Propylene glycol	123095	14
Henry Lamotte	Propylene glycol	5671401	4
Henry Lamotte	Propylene glycol	125099	2
Henry Lamotte	Propylene glycol	1000001132	16
Henry Lamotte	Propylene glycol	1000002768	5
Henry Lamotte	Propylene glycol	2992	1
Henry Lamotte	Propylene glycol	1000002992	5
Henry Lamotte	Propylene glycol	8002520002	8
Henry Lamotte	Propylene glycol	8003093001	7
Henry Lamotte	Propylene glycol	800252002	1
Henry Lamotte	Propylene glycol	1000007047	2
Henry Lamotte / Allianc...	Propylene glycol	125099	1
Henry Lamotte / Allianc...	Propylene glycol	1000001132	2
Henry Lamotte / Anzag	Propylene glycol	120(6012897001)	1
henry lamotte / Gehe	Propylene glycol	1000007047	3
Henry Lamotte / Jenne	Propylene glycol	118(1000007047)	1
Henry Lamotte / Noweda	Propylene glycol	1000002768	1
Henry Lamotte / Noweda	Propylene glycol	8002520002	1
Henry Lamotte / Noweda	Propylene glycol	1000007047	1
Henry Lamotte / Sanacorp	Propylene glycol	8002520002	1
Henry Lamotte / Sanacorp	Propylene glycol	8003093001	1
Henry Lamotte /Jenne	Propylene glycol	117(1000007047)	1
Henry Lamotte /Jenne	Propylene glycol	119(6012897001)	1
Henry Lamotte /Jenne	Propylene glycol	121(6012897001)	1
Henry Lamotte GmbH	Propylene glycol	1000002768	1
Henry Lamotte GmbH	Propylene glycol	1000002992	1
Henry Lamotte GmbH	Propylene glycol	125099	1
Henry Lamotte GmbH/Phönix	Propylene glycol	8002520002	1
Henry Lamotte Oels GmbH	Propylene glycol	6012897001	1
Henry Lamotte Oils	Propylene glycol	122880	1
Henry Lamotte Oils	Propylene glycol	123095	3
Henry Lamotte Oils	Propylene glycol	7021401	1
Henry Lamotte Oils	Propylene glycol	8002520002	2
Henry Lamotte Oils	Propylene glycol	1000007047	1
Henry Lamotte Oils / No...	Propylene glycol	125099	2
Henry Lamotte Oils / No...	Propylene glycol	1000001132	1
henry lamotte oils gmbh	Propylene glycol	8002520002	1
Henry Lamotte oils GmbH	Propylene glycol	123095	1
Henry Lamotte oils GmbH	Propylene glycol	125099	1
Henry Lamotte oils GmbH	Propylene glycol	8003093001	1
Henry Lamotte oils GmbH	Propylene glycol	1000007047	1
Henry Lamotte oils GmbH	Propylene glycol	6012897001	1
Henry Lamotte Oils GmbH	Propylene glycol	123095	2

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Propylene glycol	5671401	10
Henry Lamotte Oils GmbH	Propylene glycol	5471401	1
Henry Lamotte Oils GmbH	Propylene glycol	125099	4
Henry Lamotte Oils GmbH	Propylene glycol	1000001132	6
Henry Lamotte Oils GmbH	Propylene glycol	1000002768	4
Henry Lamotte Oils GmbH	Propylene glycol	1000002992	3
Henry Lamotte Oils GmbH	Propylene glycol	8002520002	4
Henry Lamotte Oils GmbH	Propylene glycol	1000007047	3
Henry Lamotte Oils GmbH	Propylene glycol	8003093001	1
Henry Lamotte Oils GmbH	Propylene glycol	6012897001	4
Henry Lamotte Oils GmbH...	Propylene glycol	125099	1
Henry Lamotte Oils GmbH...	Propylene glycol	123095	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000002992	1
Henry Lamotte Oils GmbH...	Propylene glycol	8002520002	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000007047	1
Henry Lamotte Oils GmbH...	Propylene glycol	125099	2
Henry Lamotte Oils GmbH...	Propylene glycol	6012897001	1
Henry Lamotte Oils GmbH...	Propylene glycol	8002520002	1
Henry Lamotte Oils GmbH...	Propylene glycol	6012897001	2
Henry Lamotte Oils GmbH/	Propylene glycol	8003093001	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000007047	3
Henry Lamotte Oils GMBH...	Propylene glycol	8002520002	4
Henry Lamotte Oils GmbH...	Propylene glycol	6012897001	2
Henry Lamotte Oils GmbH...	Propylene glycol	8002520002	1
Henry Lamotte Oils GmbH...	Propylene glycol	6012897001	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000001132	2
Henry Lamotte Oils GmbH...	Propylene glycol	8003093001	1
Henry Lamotte Oils GmbH...	Propylene glycol	5671401	1
Henry Lamotte Oils GmbH...	Propylene glycol	123095	1
Henry Lamotte Oils GmbH...	Propylene glycol	8002520002	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000007047	4
Henry Lamotte Oils GmbH...	Propylene glycol	6012897001	3
Henry Lamotte Oils/ Gehe	Propylene glycol	1000002992	1
Henry Lamotte Oils/ Gehe	Propylene glycol	8002520002	1
Henry Lamotte Oils/ Gehe	Propylene glycol	8003093001	1
Henry Lamotte Oils/ Gehe	Propylene glycol	1000007047	1
Henry Lamotte Oils/ NOW...	Propylene glycol	8003093001	1
Henry Lamotte Oils/Phönix	Propylene glycol	8002520002	2
Henry Lamotte Oils/Phönix	Propylene glycol	1000007047	2
Henry Lamotte Oils GmbH...	Propylene glycol	10000001132	1
Henry Lamotte,Gehe 08.1...	Propylene glycol	1000007047-P20190115	1
Henry Lamotte,Gehe 3.4.18	Propylene glycol	8003093001-20180404M	1
Henry Lamotte,Phönix	Propylene glycol	123095	2
Henry Lamotte/ AHD	Propylene glycol	8002520002	1
Henry Lamotte/ AHD	Propylene glycol	1000007047	1
Henry Lamotte/ Alliance	Propylene glycol	1000002768	1
Henry Lamotte/ Alliance	Propylene glycol	1000002992	1
Henry Lamotte/ Alliance	Propylene glycol	8002520002	1
Henry Lamotte/ Alliance	Propylene glycol	8003093001	1
Henry Lamotte/ Alliance	Propylene glycol	1000007047	1
Henry Lamotte/ Gehe	Propylene glycol	6012897001	2
Henry Lamotte/ Noweda	Propylene glycol	1000001132	2
Henry Lamotte/AHD	Propylene glycol	113(8003093001)	1
Henry Lamotte/AHD	Propylene glycol	448(8003093001)	1
Henry Lamotte/Alliance	Propylene glycol	8002520002	1
Henry Lamotte/Anzag	Propylene glycol	5671401	1
henry lamotte/gehe	Propylene glycol	8002520002	1
Henry Lamotte/Jenne	Propylene glycol	111(8003093001)	1
Henry Lamotte/Jenne	Propylene glycol	112(8003093001)	1
Henry Lamotte/Jenne	Propylene glycol	115(1000007047)	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Jenne	Propylene glycol	6012897001	1
Henry Lamotte/Noweda	Propylene glycol	125099	2
Henry Lamotte/Noweda	Propylene glycol	8002520002	1
Henry Lamotte/Phoenix	Propylene glycol	125099	2
Henry Lamotte/Sanacorp	Propylene glycol	100001132	1
Henry/Geibo	Propylene glycol	125099	1
Henry/Phoenix	Propylene glycol	8002520002	1
Henry/Phoenix	Propylene glycol	6012897001	1
HenryLamotteOilsGmbH	Propylene glycol	123095	1
Herbasinica	Propylene glycol	12088206	2
Caelo	Propylene glycol	122882	1
Hubertus Apotheke	Propylene glycol	16G04-B01-328151	1
Ichthyol-Gesellschaft	Propylene glycol	18064902	1
Jenne	Propylene glycol	18219102	1
Kehr	Propylene glycol	17053801	1
Kehr	Propylene glycol	17275502	2
Kehr	Propylene glycol	18064908	1
Kehr	Propylene glycol	18264908	1
Klosterring	Propylene glycol	1625121	1
Klosterring	Propylene glycol	18064915	1
Kögl	Propylene glycol	399511164816	1
Kögl	Propylene glycol	4796011170417	1
Kögl	Propylene glycol	23302171117	1
Kögl	Propylene glycol	1700381	3
Kögl	Propylene glycol	1702176	1
Kögl	Propylene glycol	1800370	1
Krieger	Propylene glycol	18064901	1
Euro OTC	Propylene glycol	1708002-01	16
Fagron	Propylene glycol	17E22-B10	1
L10	Propylene glycol	16251206	4
L10	Propylene glycol	17053801	1
L12	Propylene glycol	17053806	2
L12	Propylene glycol	18064901	4
L12	Propylene glycol	18064902	1
L12	Propylene glycol	18064908	1
L12	Propylene glycol	180648913	1
L30	Propylene glycol	16251202	1
lamotte	Propylene glycol	5671401	2
lamotte	Propylene glycol	8003093001	1
Lamotte	Propylene glycol	123095	1
Lamotte	Propylene glycol	5671401	13
Lamotte	Propylene glycol	125099	2
Lamotte	Propylene glycol	1000001132	3
Lamotte	Propylene glycol	1000002768	2
Lamotte	Propylene glycol	1000002992	1
Lamotte	Propylene glycol	8002520002	3
Lamotte	Propylene glycol	8003093001	3
Lamotte / AHD	Propylene glycol	1000001132	1
Lamotte / Noweda	Propylene glycol	1000002768	1
Lamotte / Noweda	Propylene glycol	15430512	2
Lamotte / Phönix	Propylene glycol	8003093001	1
Lamotte 004	Propylene glycol	122882	1
Lamotte GmbH	Propylene glycol	125099	1
Lamotte GmbH/ Kehr	Propylene glycol	8003093001	1
Lamotte Oils GmbH	Propylene glycol	123095	1
Lamotte Sanacorp	Propylene glycol	1000001132	1
Lamotte/ AHD	Propylene glycol	6012897001	1
lamotte/ Phoenix	Propylene glycol	15335405	2
Lamotte/ Phönix	Propylene glycol	15430503	1
Lamotte/ Vedono	Propylene glycol	8003093001	2

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Supplier	Substance	Batch	Spectra
Lamotte/AHD	Propylene glycol	8002520002	2
Lamotte/AHD	Propylene glycol	8003093001	3
Lamotte/AHD	Propylene glycol	1000007047	1
Lamotte/Alliance Health...	Propylene glycol	10000007047	1
Lamotte/Anzag	Propylene glycol	5671401	1
Lamotte/Anzag	Propylene glycol	8002520002	1
Lamotte/Anzag	Propylene glycol	8003093001	4
Lamotte/Anzag	Propylene glycol	1000007047	3
Lamotte/Anzag11	Propylene glycol	1000001132	3
Lamotte/Ebert	Propylene glycol	8003093001	1
Lamotte/Ebert+Jacobi	Propylene glycol	1000007047	1
Lamotte/Kehr	Propylene glycol	8002520002	1
Lamotte/Noweda	Propylene glycol	5671401	1
Lamotte/NOWEDA	Propylene glycol	8003093001	1
Lamotte/Phoenix	Propylene glycol	1000002768	1
Lamotte/Phönix	Propylene glycol	2768	2
Lamotte/Phönix	Propylene glycol	1000002768	2
Lamotte/Sana	Propylene glycol	8003093001	1
Lamotte/Sanacorp	Propylene glycol	8002520002	2
Linden-Apo	Propylene glycol	1501013-01	1
Midas	Propylene glycol	17053809	1
Midas	Propylene glycol	17321703	2
Midas	Propylene glycol	18064904	1
noweda	Propylene glycol	14051802	1
Noweda	Propylene glycol	1313HH9041	1
Noweda	Propylene glycol	1112004-01	2
Noweda	Propylene glycol	11372005	2
Noweda	Propylene glycol	12088205	3
Noweda	Propylene glycol	1302002-01	1
Noweda	Propylene glycol	13167003	1
Noweda	Propylene glycol	13256704	1
Noweda	Propylene glycol	13256705	3
Noweda	Propylene glycol	15069202	1
Noweda	Propylene glycol	15262402	1
Noweda	Propylene glycol	15262409	1
Noweda	Propylene glycol	15335405	1
Noweda	Propylene glycol	17053804	1
Noweda	Propylene glycol	15430508	1
Noweda	Propylene glycol	16251202	1
Noweda	Propylene glycol	17275502	1
Noweda	Propylene glycol	1809007-01	1
Noweda / Henry Lamotte	Propylene glycol	122882	1
Noweda 29.09.2014	Propylene glycol	1304C010-281099	1
Noweda/Euro	Propylene glycol	1610031-01	1
Noweda/Euro	Propylene glycol	1603034-01	1
Euro OTC	Propylene glycol	1610031-01	19
Euro OTC	Propylene glycol	15430508	2
Otto FischerGmbH / Alli...	Propylene glycol	5671401	1
Pharmachem GmbH / Phönix	Propylene glycol	18J03-B07-355043	1
phoenix	Propylene glycol	16251201	1
Phoenix	Propylene glycol	13100907	1
Phoenix	Propylene glycol	1301C004-277798	1
Phoenix	Propylene glycol	1304C010-281099	1
Phoenix	Propylene glycol	13256705	1
Phoenix	Propylene glycol	13E22B03283450	1
Phoenix	Propylene glycol	18061321	1
Phoenix	Propylene glycol	14a09-b04-289597	1
Phoenix	Propylene glycol	29722B	1
Phoenix	Propylene glycol	14051805	1
Phoenix	Propylene glycol	14A09-B04-289597	1

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Supplier	Substance	Batch	Spectra
Phoenix	Propylene glycol	15181602	1
Phoenix	Propylene glycol	125099	1
Phoenix	Propylene glycol	1000001132	1
Phoenix	Propylene glycol	16251205	1
Phoenix	Propylene glycol	17053801	1
Phoenix	Propylene glycol	307185	1
Phoenix	Propylene glycol	1711023-01	1
Phoenix am 10.03.2014	Propylene glycol	13256709	1
Phoenix/Cealo	Propylene glycol	16C10-B04-319299	1
Fagron	Propylene glycol	120C004-277798	1
Fagron	Propylene glycol	15081620	2
phönix	Propylene glycol	AKD30	1
phönix	Propylene glycol	15335405	1
phönix	Propylene glycol	15430502	1
phönix	Propylene glycol	15430504	2
phönix	Propylene glycol	16251202	4
phönix	Propylene glycol	17053801	1
phönix	Propylene glycol	17053806	2
Phönix	Propylene glycol	29595B	1
Phönix	Propylene glycol	12372405	1
Phönix	Propylene glycol	Retest03083	1
Phönix	Propylene glycol	13167004	1
Phönix	Propylene glycol	13167006	1
Phönix	Propylene glycol	13167003	2
Phönix	Propylene glycol	114113102	1
Phönix	Propylene glycol	141113102	1
Phönix	Propylene glycol	14113102	1
Phönix	Propylene glycol	16E09-B02-324843	1
Phönix	Propylene glycol	1708002-01	1
Phönix	Propylene glycol	1809007-01	1
PHÖNIX	Propylene glycol	8003093001	2
Cealo	Propylene glycol	17053801	39
Phönix 4.3.15	Propylene glycol	1405003-01	1
Phönix Gotha	Propylene glycol	11372011	1
Phönix Gotha	Propylene glycol	1301C004-277798	1
Phönix Gotha	Propylene glycol	14C05-B02-295787	1
Phönix Gotha	Propylene glycol	15A07-B04-302970	2
Cealo	Propylene glycol	1533405	2
Phytocomm	Propylene glycol	12088207	1
Rondell Apotheke	Propylene glycol	29797B	2
Sanacorp	Propylene glycol	1206038-01	1
Sanacorp	Propylene glycol	1302002-01	1
Sanacorp	Propylene glycol	123095	3
Sanacorp	Propylene glycol	1307021-01	3
Sanacorp	Propylene glycol	13167006	1
Sanacorp	Propylene glycol	13256706	1
Sanacorp	Propylene glycol	AKD70	1
Sanacorp	Propylene glycol	49/AKD1	1
Sanacorp	Propylene glycol	14113103	1
Sanacorp	Propylene glycol	14346607	1
Sanacorp	Propylene glycol	14248706	1
Sanacorp	Propylene glycol	14248703	1
Sanacorp	Propylene glycol	50/AKD3	1
Sanacorp	Propylene glycol	125099	5
Sanacorp	Propylene glycol	5671401	1
Sanacorp	Propylene glycol	15069201	1
Sanacorp	Propylene glycol	15335405	1
Sanacorp	Propylene glycol	15335404	1
Sanacorp	Propylene glycol	17053802	1
Sanacorp	Propylene glycol	8003093001	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Propylene glycol	17053814	1
Sanacorp	Propylene glycol	1000007047	3
Sanacorp	Propylene glycol	18064902	1
Sanacorp	Propylene glycol	10000007047	1
Sanacorp	Propylene glycol	18064906	1
Sanacorp	Propylene glycol	6012897001	3
Sanacorp	Propylene glycol	18064913	1
Caelo	Propylene glycol	15430508	22
sanacorp, 3,87EUR , 12.09...	Propylene glycol	154305025	1
Bombastus	Propylene glycol	18000423	1
Caelo	Propylene glycol	12C06-N04	1
Caelo	Propylene glycol	1206038-01	1
siehe Protokoll	Propylene glycol	303788	1
Sonnen-Apotheke Wefensl...	Propylene glycol	20/16	1
Sonnen-Apotheke Wefensl...	Propylene glycol	Defektur03/18	1
Sonnen-Apotheke Wefensl...	Propylene glycol	11/18	1
Sonnen-Apotheke Wefensl...	Propylene glycol	7/19	1
Fagron	Propylene glycol	12G13-No7	1
Fagron	Propylene glycol	13E22-B03-28350	1
Taoasis	Propylene glycol	18064916	1
VDL	Propylene glycol	13256709	1
VDL	Propylene glycol	14113103	1
VDL 14.05.14; Preis 3.07	Propylene glycol	14051804	2
VDL Nachliefer; 11.7.15...	Propylene glycol	15181602	1
Wepa/Jenne	Propylene glycol	18064908	1
Wolf-Apotheke	Propylene glycol	15430506	1
Bombastus	Propylene glycol	301162	19
Bombastus	Propylene glycol	18003480	6
Caelo	Propylene glycol	12372405	15
Caelo	Propylene glycol	14346604	15
Caelo	Propylene glycol	15335403	31
Caelo	Propylene glycol		2
Caelo	Propylene glycol	15355108	13
Euro OTC	Propylene glycol	1603034	1
Fagron	Propylene glycol	19A28-B09-361175	1
Fagron	Propylene glycol	18J03-B07-356433	1
Henry Lamotte	Propylene glycol	6012897001	2
Henry Lamotte /Jenne	Propylene glycol		1
Henry Lamotte,Gehe 4.4.17	Propylene glycol		1
Phagron	Propylene glycol		1
Sanacorp	Propylene glycol		1
Fagron	Propylene glycol		2
Sonnen-Apotheke Wefensl...	Propylene glycol		1
VDL 14.05.14; Preis 3.07	Propylene glycol		1

- 134170 spectra from 703 *Apo-Ident* customers from a total of 34697 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Propylene glycol* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Propylene glycol* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following

table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	560	0	55 799
Type B	0	320	0	69 154
Type C	0	4149	34	134 170

The substance/substance group *Propylene glycol* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 98.9286 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.1250 %)
Type C	100.0000 % (> 99.6452 %)	99.1872 % (> 99.1155 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Propylene glycol* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol concentrate 50%	16.74	–
Dexpanthenol	37.24	–
Ethanol 90%	112.27	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Propylene glycol* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30872	31738	3.34	49.94
30920	30920	0.00	50.12
31663	31663	0.00	51.81

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31738	31738	0.00	47.88
32074	31663	3.71	54.86
32190	32190	0.00	48.72
32466	32466	0.00	51.32
32486	31663	5.17	57.61
32728	31663	5.14	47.88
34513	31738	4.36	49.01
34514	32466	4.21	49.17
34515	31738	4.69	48.58
34516	31663	4.84	48.87

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Psorisol base cream Audor [®]
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	31109-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Psorisol base cream Audor[®]

Special notes

When selecting the *Psorisol base cream Audor[®]* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Psorisol base cream Audor [®]	2	3	13

Second-stage model

For differentiation of the substance/substance group *Psorisol base cream Audor®* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Psorisol base cream Audor®*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Audor Pharma	Psorisol base cr...	AP101943PB	31109	40	1404015
Audor Pharma	Psorisol base cr...	AP101943PB	31233	40	20130522
Audor Pharma	Psorisol base cr...	AP45001.2PB	31674	60	20141230
Audor Pharma	Psorisol base cr...	AP45001.2PB	32274	40	20141230

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Psorisol base cream Audor®*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56179 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Psorisol base cream Audor®*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Audor Pharma	Psorisol base cream Audor [®]	AP55201PB	32275	40
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB	34037	40
Audor Pharma	Psorisol base cream Audor [®]	AP81601PB	34662	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 29 spectra from 12 *Apo-Ident* customers from 17 batches from the substance/substance group *Psorisol base cream Audor[®]*.
- Among them are spectra of independent samples from 13 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag	Psorisol base cream Audor [®]	AP102891PB	2
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB5451	1
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB5516	1
Audor Pharma	Psorisol base cream Audor [®]	AP11943PB	1
Audor Pharma	Psorisol base cream Audor [®]	AP100472PB	2
Audor Pharma	Psorisol base cream Audor [®]	102844	2
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB	1
Audor Pharma	Psorisol base cream Audor [®]	AP102844PB	1
Audor Pharma	Psorisol base cream Audor [®]	101943	1
Audor Pharma	Psorisol base cream Audor [®]	102891	1
Audor Pharma	Psorisol base cream Audor [®]	102891PB	1
Audor Pharma	Psorisol base cream Audor [®]	Ap102891PB	1
Audor Pharma	Psorisol base cream Audor [®]	1417E-07016	1
Audor Pharma	Psorisol base cream Audor [®]	AP55201PB	6
Caelo	Psorisol base cream Audor [®]	AP102844PB	2
Audor Pharma	Psorisol base cream Audor [®]	AP101943PB	3
Audor Pharma	Psorisol base cream Audor [®]		2

- 138 324 spectra from 703 *Apo-Ident* customers from a total of 35 278 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Psorisol base cream Audor[®]* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Psorisol base cream Audor[®]* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	120	0	69 354
Type C	0	18	11	138 324

The substance/substance group *Psorisol base cream Audor*[®] can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6455 %)	62.0690 % (> 51.7241 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Psorisol base cream Audor*[®] in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Non-ionic hydrophil ointment	19.89	—
Base cream DAC	23.70	—
Eucerin [®] cum Aqua	35.64	—
Anionic hydrophilic cream with propyle...	35.67	—
Lanette [®] ointment (conserved)	37.00	—
Base cream, hydrophobic DAC	37.09	—
Anionic hydrophilic cream SR (NRF p.27)	43.06	—
Anionic hydrophilic cream DAB	45.60	—
Potash soap DAC	45.80	—
Wool alcohol cream SR	47.23	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Psorisol base cream Audor*[®] is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31674	31109	4.80	24.31
32274	31109	6.95	19.89
31233	31109	4.49	23.24
31109	31109	0.00	23.26

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Rose oil (genuine / artificial)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30111-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Rose oil (genuine / artificial); Oleum rosae (verum / artificiale)

Special notes

When selecting the *Rose oil (genuine / artificial)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Rose oil (genuine / artificial)	6	2	69

Second-stage model

For differentiation of the substance/substance group *Rose oil (genuine / artificial)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Rose oil (genuine / artificial)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Rose oil (genuin...	12164308	31021	40	1502254
Caelo	Rose oil (genuin...	11287117	31022	40	20111011
Caelo	Rose oil (genuin...	13335012	31301	20	20131009
Caelo	Rose oil (genuin...	13252710	31412	40	1502252
Caelo	Rose oil (genuin...	13335012	31425	60	20131009
Caelo	Rose oil (genuin...	13335012	31426	60	20131009
Fagron	Rose oil (genuin...	13J17-B01	31290	40	1507614
Fagron	Rose oil (genuin...	14I25-B01-302286	31752	60	20141006
Fagron	Rose oil (genuin...	14I25-B01-302286	31842	60	20141006

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 420 spectra of 9 reference samples from the substance/substance group *Rose oil (genuine / artificial)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 6 different batches.
- 55 939 spectra from a total of 1110 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Rose oil (genuine / artificial)*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Rose oil (genuine / artifici...	162311	32332	40
Caelo	Rose oil (genuine / artifici...	173537	33907	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 155 spectra from 81 *Apo-Ident* customers from 73 batches from the substance/substance group *Rose oil (genuine / artificial)*.
- Among them are spectra of independent samples from 69 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Rose oil (genuine / artifici...	15G29-B12-327364	1
AHD	Rose oil (genuine / artifici...	16H16-B04-342284	1
Caelo	Rose oil (genuine / artifici...	17101412	1
Caelo	Rose oil (genuine / artifici...	1352710	1
Caelo	Rose oil (genuine / artifici...	19011502	1
Caelo	Rose oil (genuine / artifici...	13252723	1
Caelo	Rose oil (genuine / artifici...	14300712	4
Caelo	Rose oil (genuine / artifici...	887963	1
Caelo	Rose oil (genuine / artifici...	15197206	2
Caelo	Rose oil (genuine / artifici...	15197211	8
Caelo	Rose oil (genuine / artifici...	15187202	1
Caelo	Rose oil (genuine / artifici...	16231113	4
Caelo	Rose oil (genuine / artifici...	16231112	2
Caelo	Rose oil (genuine / artifici...	17353703	1
Caelo	Rose oil (genuine / artifici...	17353705	1
Caelo	Rose oil (genuine / artifici...	11178601	1
Caelo	Rose oil (genuine / artifici...	14300719	1
Caelo	Rose oil (genuine / artifici...	15197202	11
Caelo	Rose oil (genuine / artifici...	13252701	2
Caelo	Rose oil (genuine / artifici...	17353709	2
Caelo	Rose oil (genuine / artifici...	15G29-B12-314833	1
Caelo	Rose oil (genuine / artifici...	17111411	1
Caelo	Rose oil (genuine / artifici...	54(17353703)	1
Caelo	Rose oil (genuine / artifici...	11287114	1
Caelo	Rose oil (genuine / artifici...	19022501	1
Caelo	Rose oil (genuine / artifici...	14300703	1
Caelo	Rose oil (genuine / artifici...	13252722	4
Caelo	Rose oil (genuine / artifici...	16231111	1
Caelo	Rose oil (genuine / artifici...	15G29-B12-312961	1
Caelo	Rose oil (genuine / artifici...	11287123	1
Caelo	Rose oil (genuine / artifici...	14300704	1
Caelo	Rose oil (genuine / artifici...	12164306	1
Caelo	Rose oil (genuine / artifici...	13044608	2
Caeolo	Rose oil (genuine / artifici...	779579	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-312961	1
Fagron	Rose oil (genuine / artifici...	11E04-N04	1

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Supplier	Substance	Batch	Spectra
Fagron	Rose oil (genuine / artifici...	12C19-N05	3
Fagron	Rose oil (genuine / artifici...	11H05-N02	1
Fagron	Rose oil (genuine / artifici...	12G25-N02	8
Fagron	Rose oil (genuine / artifici...	511I-02011	1
Fagron	Rose oil (genuine / artifici...	7091301	1
Fagron	Rose oil (genuine / artifici...	12H16-B01-286704	3
Fagron	Rose oil (genuine / artifici...	713371	1
Fagron	Rose oil (genuine / artifici...	2188	1
Fagron	Rose oil (genuine / artifici...	13J17-B01-293574	1
Fagron	Rose oil (genuine / artifici...	836899	2
Fagron	Rose oil (genuine / artifici...	14125-B01	1
Fagron	Rose oil (genuine / artifici...	14I25-B01	5
Fagron	Rose oil (genuine / artifici...	14/25-B01-302286	1
Fagron	Rose oil (genuine / artifici...	1425-01-309676	1
Fagron	Rose oil (genuine / artifici...	887963	1
Fagron	Rose oil (genuine / artifici...	15G29-B12	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-327263	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-332931	2
Fagron	Rose oil (genuine / artifici...	1951824	1
Fagron	Rose oil (genuine / artifici...	12H16-B01	2
Fagron	Rose oil (genuine / artifici...	13J17-B01-296955	1
Fagron	Rose oil (genuine / artifici...	13J17-801	1
Fagron	Rose oil (genuine / artifici...	698884	3
Fagron	Rose oil (genuine / artifici...	18I17-B08-359738	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-342284	1
Fagron	Rose oil (genuine / artifici...	1425-B01-302287	1
Fagron	Rose oil (genuine / artifici...	13C21-N04	10
Fagron	Rose oil (genuine / artifici...	15G29-B12-314833	1
Fagron	Rose oil (genuine / artifici...	14I25-B01-309676	1
Fagron	Rose oil (genuine / artifici...	15/25-B01-302286	1
Fagron	Rose oil (genuine / artifici...	14/25-B01-309675	1
Fagron	Rose oil (genuine / artifici...	12G25-N01	1
Fiebig	Rose oil (genuine / artifici...	15197202	2
Frey & Lau GmbH/Noweda	Rose oil (genuine / artifici...	15G29-B12	1
Kehr	Rose oil (genuine / artifici...	16H16-B04-332931	1
Klosterring	Rose oil (genuine / artifici...	15G29-B12	1
Caelo	Rose oil (genuine / artifici...	16h16b04348745	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-348745	1
Caelo	Rose oil (genuine / artifici...	13335006	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-351564	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-321984	4
Phönix	Rose oil (genuine / artifici...	12G25-N02	2
Phönix	Rose oil (genuine / artifici...	12C19-N05	1
Phönix	Rose oil (genuine / artifici...	13C21-N04	2
Fagron	Rose oil (genuine / artifici...	15G29-B12-327364	1
Caelo	Rose oil (genuine / artifici...	13252710	3
Caelo	Rose oil (genuine / artifici...	11287117	2
Fagron	Rose oil (genuine / artifici...	13J17-B01	2
Fagron	Rose oil (genuine / artifici...		1

- 138 198 spectra from 703 *Apo-Ident* customers from a total of 35 222 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Rose oil (genuine / artificial)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Rose oil (genuine / artificial)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	420	0	55 939
Type B	0	80	0	69 394
Type C	0	151	4	138 198

The substance/substance group *Rose oil (genuine / artificial)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.5714 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	97.4194 % (> 95.4839 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Rose oil (genuine / artificial)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Geranium oil, genuine	30.01	—
Citronella oil	45.95	—
Melissa oil	102.62	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Rose oil (genuine / artificial)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31021	31021	0.00	51.47
31301	31021	9.78	50.14
31412	31412	0.00	37.44
31425	31021	5.63	47.95
31426	31021	4.39	48.67
31022	31412	9.38	40.48
31290	31290	0.00	142.64
31752	31290	3.35	139.33
31842	31290	4.30	137.24

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Sage oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30578-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Sage oil; Oleum salviae

Special notes

When selecting the *Sage oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Sage oil	3	2	49

Second-stage model

For differentiation of the substance/substance group *Sage oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Sage oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Sage oil	305303	33292	40	1709470
Bombastus	Sage oil	305303	33453	40	20161025
Bombastus	Sage oil	17001385	34524	40	117774
Caelo	Sage oil	13146901	31597	60	20130522

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 180 spectra of 4 reference samples from the substance/substance group *Sage oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56179 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Sage oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sage oil	16051006	33601	40
Caelo	Sage oil	16051012	33949	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 135 spectra from 78 *Apo-Ident* customers from 51 batches from the substance/substance group *Sage oil*.
- Among them are spectra of independent samples from 49 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag 10.8.12 ek:4,42	Sage oil	11287305	1
Bombastus	Sage oil	274447	1
Bombastus	Sage oil	298189	1
Caelo	Sage oil	11287311	2
Caelo	Sage oil	11287315	1
Caelo	Sage oil	11287312	1
Caelo	Sage oil	10248206	1
Caelo	Sage oil	28051312	1
Caelo	Sage oil	5x11287317	1
Caelo	Sage oil	11287320	4
Caelo	Sage oil	11287314	2
Caelo	Sage oil	21111301	1
Caelo	Sage oil	13146904	1
Caelo	Sage oil	31011401	1
Caelo	Sage oil	14345505	7
Caelo	Sage oil	14345506	1
Caelo	Sage oil	14345512	2
Caelo	Sage oil	14345518	1
Caelo	Sage oil	1702080S/14345517	1
Caelo	Sage oil	16051009	3
Caelo	Sage oil	16051006	6
Caelo	Sage oil	16051012	5
Caelo	Sage oil	17310004	2
Caelo	Sage oil	17310001	6
Caelo	Sage oil	1024214	1
Caelo	Sage oil	13146918	1
Caelo	Sage oil	1704030S/14345517	1
Caelo	Sage oil	11287323	6
Caelo	Sage oil	14345517	12
Caelo	Sage oil	10(17310001)	1
Caelo	Sage oil	14345511	3
Caelo	Sage oil	160510125684	1
Caelo	Sage oil	1731001	1
Caelo	Sage oil	14345514	1
Caelo	Sage oil	16051016	1
Caelo	Sage oil	305303	1
Caelo	Sage oil	1435517	1
Caelo	Sage oil	13146903	2
Caelo	Sage oil	11287306	1
Caelo	Sage oil	11287317	9
Caelo	Sage oil	17310007	2

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Sage oil	17310004	1
Caesar & Loretz GmbH	Sage oil	17310007	1
Caesar & Loretz GmbH, 4...	Sage oil	11287317	1
Cealo	Sage oil	14345517	1
Cealo/ Noweda	Sage oil	13146901	3
Gehe	Sage oil	11287318	1
gehe 19.11.2013	Sage oil	13146901	2
Caelo	Sage oil	13146914	6
L12	Sage oil	16051012	2
L12	Sage oil	17310007	1
L30	Sage oil	17310001	1
Caelo	Sage oil	11287318	1
Caelo	Sage oil	13146908	2
Phönix	Sage oil	16051006	1
Phönix	Sage oil	17310007	1
Sanacorp	Sage oil	282545	1
Caelo	Sage oil	13146907	1
Taoasis	Sage oil	498780-106211	1
Taoasis	Sage oil	530771-108279	1
Taoasis	Sage oil	526975-111295	1
Taoasis GmbH	Sage oil	526975-110409	1
Toasis	Sage oil	526975-110409	1
Caelo	Sage oil	13146901	5

- 138 218 spectra from 703 *Apo-Ident* customers from a total of 35 244 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Sage oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Sage oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	180	0	56 179
Type B	0	80	0	69 394
Type C	0	128	7	138 218

The substance/substance group *Sage oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.6667 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	94.8148 % (> 92.5926 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Sage oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Spruce needle oil	11.32	—
Eucalyptus oil	31.35	—
Myrtle oil	32.06	—
Turpentine oil	34.70	—
Rosemary oil	38.07	—
Juniper wood oil	52.72	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Sage oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31597	33292	11.39	20.26
33292	33292	0.00	11.49
33453	33292	5.24	13.59
34524	33292	5.60	11.32

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Salicylic acid 50% (paraffin)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30496-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Salicylic acid 50% (paraffin); Acidum salicylicum cum vaselino alba 50%

Special notes

When selecting the *Salicylic acid 50% (paraffin)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Salicylic acid 50% (paraffin)	8	8	200

Second-stage model

For differentiation of the substance/substance group *Salicylic acid 50% (paraffin)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Salicylic acid 50% (paraffin)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Salicylic acid 5...	12305902	30883	40	20121107
Caelo	Salicylic acid 5...	15231801	31727	60	AR-15-FG-015411-01
Caelo	Salicylic acid 5...	153729	31901	60	20151029*
Caelo	Salicylic acid 5...	153730	31902	60	20151029*
Caelo	Salicylic acid 5...	153731	31903	60	20151103*
Caelo	Salicylic acid 5...	162761	32520	40	20160923*
Henry Lamotte	Salicylic acid 5...	5375300	30927	40	20121003
Henry Lamotte	Salicylic acid 5...	6001023001	32176	40	20150630

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 400 spectra of 8 reference samples from the substance/substance group *Salicylic acid 50% (paraffin)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 8 different batches.
- 55959 spectra from a total of 1108 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 380 spectra of 8 reference samples from the substance/substance group *Salicylic acid 50% (paraffin)*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Salicylic acid 50% (paraffin)	14107901	31357	60
Caelo	Salicylic acid 50% (paraffin)	153732	31904	60
Caelo	Salicylic acid 50% (paraffin)	153733	31905	60
Caelo	Salicylic acid 50% (paraffin)	171454	33357	40
Caelo	Salicylic acid 50% (paraffin)	171055	33358	40
Caelo	Salicylic acid 50% (paraffin)	171727	33359	40
Caelo	Salicylic acid 50% (paraffin)	182109	34266	40
Caelo	Salicylic acid 50% (paraffin)	182864	34309	40

- 69 094 spectra from a total of 1494 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1030 spectra from 328 *Apo-Ident* customers from 204 batches from the substance/substance group *Salicylic acid 50% (paraffin)*.
- Among them are spectra of independent samples from 199 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
A.H.D.	Salicylic acid 50% (paraffin)	1228301	1
AHD 04.07.14 EK 5,91	Salicylic acid 50% (paraffin)	14107901	1
AHD/ Henry Lamotte	Salicylic acid 50% (paraffin)	5763800	2
AHD/ Henry Lamotte	Salicylic acid 50% (paraffin)	6001023001	4
AHDE08.05.2015	Salicylic acid 50% (paraffin)	5763800	1
Allianz Healthcare	Salicylic acid 50% (paraffin)	17017401	1
Anzag	Salicylic acid 50% (paraffin)	6001023001	2
Anzag	Salicylic acid 50% (paraffin)	6001862002	1
Anzag	Salicylic acid 50% (paraffin)	6004854001	2
Anzag	Salicylic acid 50% (paraffin)	6007886001	2
Anzag 15.10.12	Salicylic acid 50% (paraffin)	12201901	1
apomix	Salicylic acid 50% (paraffin)	2A260115	2
apomix	Salicylic acid 50% (paraffin)	7A230615	1
apomix	Salicylic acid 50% (paraffin)	9A150715	1
apomix	Salicylic acid 50% (paraffin)	12A130815	1
apomix	Salicylic acid 50% (paraffin)	13A240915	1
apomix	Salicylic acid 50% (paraffin)	1A150116	2
apomix	Salicylic acid 50% (paraffin)	2A280116	2
apomix	Salicylic acid 50% (paraffin)	5A070416	1
apomix	Salicylic acid 50% (paraffin)	6A270416	1
apomix	Salicylic acid 50% (paraffin)	9A140716	1
apomix	Salicylic acid 50% (paraffin)	11A290716	1
apomix	Salicylic acid 50% (paraffin)	12A050916	1
apomix	Salicylic acid 50% (paraffin)	14A121016	1
apomix	Salicylic acid 50% (paraffin)	13A121016	1

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Supplier	Substance	Batch	Spectra
apomix	Salicylic acid 50% (paraffin)	16A281118	1
Apomix	Salicylic acid 50% (paraffin)	1A240113	1
Apomix	Salicylic acid 50% (paraffin)	5A250713	1
Apomix	Salicylic acid 50% (paraffin)	6A150615	1
Apomix	Salicylic acid 50% (paraffin)	14A031115	1
Apomix	Salicylic acid 50% (paraffin)	10A290716	1
Apomix	Salicylic acid 50% (paraffin)	16A131217	1
Apomix	Salicylic acid 50% (paraffin)	5A230418	1
Apomix	Salicylic acid 50% (paraffin)	17A121218	1
Apomix	Salicylic acid 50% (paraffin)	6A170719	1
Apomix / 11	Salicylic acid 50% (paraffin)	4A200613	1
Apomix / 11	Salicylic acid 50% (paraffin)	1A180214	2
Apomix / 11	Salicylic acid 50% (paraffin)	10A181114	1
Apomix / 11	Salicylic acid 50% (paraffin)	4A080515	1
Apomix / 11	Salicylic acid 50% (paraffin)	8A240616	1
apomix / Gehe	Salicylic acid 50% (paraffin)	13A210818	1
Apomix / Phönix	Salicylic acid 50% (paraffin)	6B110714	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	8A240616	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	15A251116	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	1A080217	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	10A110817	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	17A131217	1
apomix AMH Niemann GmbH...	Salicylic acid 50% (paraffin)	2A200219	1
Apomix PKH	Salicylic acid 50% (paraffin)	15A251116	1
apomix, PKH GmbH	Salicylic acid 50% (paraffin)	7A160913	1
Apomix/AHD	Salicylic acid 50% (paraffin)	12A050916	1
Apomix/Gehe	Salicylic acid 50% (paraffin)	11A290716	1
Apomix/Gehe	Salicylic acid 50% (paraffin)	2A200219	1
Apomix/N/PZN:6639275	Salicylic acid 50% (paraffin)	9A171213	1
apomix/Noweda	Salicylic acid 50% (paraffin)	162796101	1
Bombastus	Salicylic acid 50% (paraffin)	12228301	1
Bombastus	Salicylic acid 50% (paraffin)	16197401	1
Bombastus	Salicylic acid 50% (paraffin)	60091680001	1
Brückenapotheke	Salicylic acid 50% (paraffin)	1715Q-07018	1
Caeanlo	Salicylic acid 50% (paraffin)	16197401	1
Caelo	Salicylic acid 50% (paraffin)	13278701	12
Caelo	Salicylic acid 50% (paraffin)	14205001	3
Caelo	Salicylic acid 50% (paraffin)	15373101	1
Caelo	Salicylic acid 50% (paraffin)	15373001	14
Caelo	Salicylic acid 50% (paraffin)	11226801	3
Caelo	Salicylic acid 50% (paraffin)	1506211046	1
Caelo	Salicylic acid 50% (paraffin)	1309211046	1
Caelo	Salicylic acid 50% (paraffin)	126061201	1
Caelo	Salicylic acid 50% (paraffin)	12201901	4
Caelo	Salicylic acid 50% (paraffin)	20310812-6	1
Caelo	Salicylic acid 50% (paraffin)	2002311046	1
Caelo	Salicylic acid 50% (paraffin)	613I-01046	1
Caelo	Salicylic acid 50% (paraffin)	13052502	9
Caelo	Salicylic acid 50% (paraffin)	12061301	1
Caelo	Salicylic acid 50% (paraffin)	12305901	2
Caelo	Salicylic acid 50% (paraffin)	12228402	1
Caelo	Salicylic acid 50% (paraffin)	13087201	2
Caelo	Salicylic acid 50% (paraffin)	11333602	1
Caelo	Salicylic acid 50% (paraffin)	13160101	5
Caelo	Salicylic acid 50% (paraffin)	13278601	7
Caelo	Salicylic acid 50% (paraffin)	13278501	12
Caelo	Salicylic acid 50% (paraffin)	14017501	18
Caelo	Salicylic acid 50% (paraffin)	13278801	3
Caelo	Salicylic acid 50% (paraffin)	14108201	3
Caelo	Salicylic acid 50% (paraffin)	14205101	10

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Supplier	Substance	Batch	Spectra
Caelo	Salicylic acid 50% (paraffin)	14337301	12
Caelo	Salicylic acid 50% (paraffin)	14204902	1
Caelo	Salicylic acid 50% (paraffin)	15231501	1
Caelo	Salicylic acid 50% (paraffin)	17105501	5
Caelo	Salicylic acid 50% (paraffin)	s-100513-1	1
Caelo	Salicylic acid 50% (paraffin)	13067201	1
Caelo	Salicylic acid 50% (paraffin)	14337701	4
Caelo	Salicylic acid 50% (paraffin)	14337101	1
Caelo	Salicylic acid 50% (paraffin)	15231601	13
Caelo	Salicylic acid 50% (paraffin)	15305901	13
Caelo	Salicylic acid 50% (paraffin)	1612301	1
Caelo	Salicylic acid 50% (paraffin)	16121301	5
Caelo	Salicylic acid 50% (paraffin)	16121203	1
Caelo	Salicylic acid 50% (paraffin)	6121401	1
Caelo	Salicylic acid 50% (paraffin)	16197302	3
Caelo	Salicylic acid 50% (paraffin)	15373201	1
Caelo	Salicylic acid 50% (paraffin)	17014401	1
Caelo	Salicylic acid 50% (paraffin)	171017501	1
Caelo	Salicylic acid 50% (paraffin)	17172702	9
Caelo	Salicylic acid 50% (paraffin)	17145401	15
Caelo	Salicylic acid 50% (paraffin)	17105602	2
Caelo	Salicylic acid 50% (paraffin)	17145502	5
Caelo	Salicylic acid 50% (paraffin)	171454015424	1
Caelo	Salicylic acid 50% (paraffin)	18034301	25
Caelo	Salicylic acid 50% (paraffin)	18034201	8
Caelo	Salicylic acid 50% (paraffin)	18114901	13
Caelo	Salicylic acid 50% (paraffin)	18115101	5
Caelo	Salicylic acid 50% (paraffin)	18211002	1
Caelo	Salicylic acid 50% (paraffin)	19010901	5
Caelo	Salicylic acid 50% (paraffin)	19010802	1
Caelo	Salicylic acid 50% (paraffin)	16197401	19
Caelo	Salicylic acid 50% (paraffin)	13052401	4
Caelo	Salicylic acid 50% (paraffin)	17017401	18
Caelo	Salicylic acid 50% (paraffin)	13087301	9
Caelo	Salicylic acid 50% (paraffin)	16276101	26
Caelo	Salicylic acid 50% (paraffin)	17017301	11
Caelo	Salicylic acid 50% (paraffin)	15373301	14
Caelo	Salicylic acid 50% (paraffin)	13160102	9
Caelo	Salicylic acid 50% (paraffin)	11226601	1
Caelo	Salicylic acid 50% (paraffin)	13087401	7
Caelo	Salicylic acid 50% (paraffin)	16121404	1
Caelo	Salicylic acid 50% (paraffin)	170801SV/17172701	1
Caelo	Salicylic acid 50% (paraffin)	19082801	1
Caelo	Salicylic acid 50% (paraffin)	14204302	1
Caelo	Salicylic acid 50% (paraffin)	107105801	1
Caelo	Salicylic acid 50% (paraffin)	11333801	4
Caelo	Salicylic acid 50% (paraffin)	19082701	3
Caelo	Salicylic acid 50% (paraffin)	5375300	1
Caelo	Salicylic acid 50% (paraffin)	15305801	10
Caelo	Salicylic acid 50% (paraffin)	15247201	9
Caelo	Salicylic acid 50% (paraffin)	6001862001	1
Caelo	Salicylic acid 50% (paraffin)	15247101	26
Caelo	Salicylic acid 50% (paraffin)	17172701	6
Caelo	Salicylic acid 50% (paraffin)	14017601	2
Caelo	Salicylic acid 50% (paraffin)	16197202	1
Caelo	Salicylic acid 50% (paraffin)	17105801	21
Caelo	Salicylic acid 50% (paraffin)	17326201	12
Caelo	Salicylic acid 50% (paraffin)	12201701	1
Caelo	Salicylic acid 50% (paraffin)	12061201	7
Caelo	Salicylic acid 50% (paraffin)	180342201	1

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Supplier	Substance	Batch	Spectra
Caelo	Salicylic acid 50% (paraffin)	1401761	1
Caelo	Salicylic acid 50% (paraffin)	14337201	10
Caelo	Salicylic acid 50% (paraffin)	5809400	1
Caelo	Salicylic acid 50% (paraffin)	16121401	19
Caelo	Salicylic acid 50% (paraffin)	6001023001	1
Caelo	Salicylic acid 50% (paraffin)	1710501	1
Caelo	Salicylic acid 50% (paraffin)	17326301	1
Caelo	Salicylic acid 50% (paraffin)	17261301	7
Caelo	Salicylic acid 50% (paraffin)	14108402	1
Caelo	Salicylic acid 50% (paraffin)	6001023002	1
Caelo	Salicylic acid 50% (paraffin)	1117M-01046	1
Caelo	Salicylic acid 50% (paraffin)	14107901	17
Caelo	Salicylic acid 50% (paraffin)	6001862002	3
Caelo	Salicylic acid 50% (paraffin)	15394602	1
Caelo	Salicylic acid 50% (paraffin)	18034402	6
Caelo	Salicylic acid 50% (paraffin)	18210903	12
Caelo	Salicylic acid 50% (paraffin)	18286401	7
Caelo	Salicylic acid 50% (paraffin)	18286301	1
Caelo	Salicylic acid 50% (paraffin)	19167302	1
Caelo	Salicylic acid 50% (paraffin)	13160002	2
Caelo	Salicylic acid 50% (paraffin)	14108101	3
Caelo	Salicylic acid 50% (paraffin)	14108001	18
Caelo	Salicylic acid 50% (paraffin)	14337601	2
Caelo	Salicylic acid 50% (paraffin)	15277001	5
Caelo	Salicylic acid 50% (paraffin)	15372901	10
Caelo	Salicylic acid 50% (paraffin)	AKD9	1
Caelo	Salicylic acid 50% (paraffin)	15305601	1
Caelo	Salicylic acid 50% (paraffin)	17017501	2
Caelo	Salicylic acid 50% (paraffin)	17261401	23
Caelo	Salicylic acid 50% (paraffin)	17105702	1
Caeo AHDE 25.11.2014	Salicylic acid 50% (paraffin)	14205101	1
Caesar & Loretz GmbH	Salicylic acid 50% (paraffin)	19010901	1
Caesar & Loretz GmbH	Salicylic acid 50% (paraffin)	18286301	1
Caesar & Loretz GmbH	Salicylic acid 50% (paraffin)	18115101	1
Caesar & Loretz GmbH /G	Salicylic acid 50% (paraffin)	19010901	1
Caesar & Loretz GmbH Hi...	Salicylic acid 50% (paraffin)	14108001	3
Caesar & Loretz/ Noweda	Salicylic acid 50% (paraffin)	17326201	1
Caelo	Salicylic acid 50% (paraffin)	15231701	6
Caesar&Loretz GmbH	Salicylic acid 50% (paraffin)	15305901	1
Caesar&Loretz GmbH	Salicylic acid 50% (paraffin)	17105801	1
Caleo	Salicylic acid 50% (paraffin)	17261401	1
Cealo	Salicylic acid 50% (paraffin)	14107901	2
Cealo	Salicylic acid 50% (paraffin)	17172701	1
DAC 2005	Salicylic acid 50% (paraffin)	4960200	1
Defektur	Salicylic acid 50% (paraffin)	46/13	1
Ebert-Jacobi	Salicylic acid 50% (paraffin)	17105501	1
Euro OTC	Salicylic acid 50% (paraffin)	11333801	1
Euro OTC	Salicylic acid 50% (paraffin)	15305801	1
Fagron	Salicylic acid 50% (paraffin)	14108301	1
Fagron	Salicylic acid 50% (paraffin)	15373301	1
Fiebig	Salicylic acid 50% (paraffin)	5763800	1
Fiebig	Salicylic acid 50% (paraffin)	18034402	1
Fiebig	Salicylic acid 50% (paraffin)	18286301	1
Gehe	Salicylic acid 50% (paraffin)	12228301	1
Gehe	Salicylic acid 50% (paraffin)	12305902	1
Gehe	Salicylic acid 50% (paraffin)	4313M-07018	1
Gehe	Salicylic acid 50% (paraffin)	13278501	2
Gehe	Salicylic acid 50% (paraffin)	17105801	2
Gehe	Salicylic acid 50% (paraffin)	17145401	1
GEHE	Salicylic acid 50% (paraffin)	2A270217	1

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Supplier	Substance	Batch	Spectra
GEHE	Salicylic acid 50% (paraffin)	3A070417	1
GEHE	Salicylic acid 50% (paraffin)	10A110817	1
GEHE	Salicylic acid 50% (paraffin)	13A041017	1
GEHE	Salicylic acid 50% (paraffin)	4A050318	1
GEHE	Salicylic acid 50% (paraffin)	3A050318	1
GEHE	Salicylic acid 50% (paraffin)	18034301	1
GEHE	Salicylic acid 50% (paraffin)	18286502	1
GEHE	Salicylic acid 50% (paraffin)	19082601	1
Euro OTC	Salicylic acid 50% (paraffin)	17105801	1
Gehe/Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
Gehe/Lamotte	Salicylic acid 50% (paraffin)	6009168001	1
Henry Lamotte	Salicylic acid 50% (paraffin)	4960200	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5253300	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5448100	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5763800	3
Henry Lamotte	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte	Salicylic acid 50% (paraffin)	6001023002	1
Henry Lamotte	Salicylic acid 50% (paraffin)	6001862002	1
Henry Lamotte	Salicylic acid 50% (paraffin)	6004854001	4
Henry Lamotte	Salicylic acid 50% (paraffin)	6007886001	1
Henry Lamotte / Kehr	Salicylic acid 50% (paraffin)	6001023002	2
henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6004854001	1
henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6007886001	1
Henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6001023002	1
Henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6001862001	1
Henry Lamotte / Sana	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte / Jenne	Salicylic acid 50% (paraffin)	19(8004748001)	1
Henry Lamotte GmbH	Salicylic acid 50% (paraffin)	6010004001	2
henry lamotte oils gmbh	Salicylic acid 50% (paraffin)	6004854001	2
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001862002	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5253300	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5375300	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5763800	2
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5448100	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001023001	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001023002	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001862002	4
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6004854001	2
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6009168001	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6010101001	2
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6001862001/161014SV	1
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6001862001/170307SV	1
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6007886001	1
HENRY LAMOTTE OILS GmbH	Salicylic acid 50% (paraffin)	5375300	2
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6010101001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6010101001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	8004748001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6009168001	1
Henry Lamotte Oils/ Gehe	Salicylic acid 50% (paraffin)	6010101001	1
Henry Lamotte Oils/Ebert	Salicylic acid 50% (paraffin)	6010004001	2
Henry Lamotte Oils/Noweda	Salicylic acid 50% (paraffin)	6007886002	2
Henry Lamotte Olis GmbH...	Salicylic acid 50% (paraffin)	5763800	1
Henry Lamotte Olis GmbH...	Salicylic acid 50% (paraffin)	6001023001	1
Henry Lamotte Olis GmbH...	Salicylic acid 50% (paraffin)	6001862002	1
Henry Lamotte/ AHD	Salicylic acid 50% (paraffin)	6010101001	1
Henry Lamotte/ Anzag	Salicylic acid 50% (paraffin)	5065800	1
Henry Lamotte/ Gehe	Salicylic acid 50% (paraffin)	6010101001	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/ Noweda	Salicylic acid 50% (paraffin)	6001023001	1
Henry Lamotte/ Sanacorp	Salicylic acid 50% (paraffin)	6009168001	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	5253300	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	5448100	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	17(6009168001)	1
Henry Lamotte/Ebert	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte/Jenne	Salicylic acid 50% (paraffin)	16(6007886001)	1
Henry Lamotte/Kehr	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte/Kehr	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte/L12	Salicylic acid 50% (paraffin)	3917822	1
Henry Lamotte/L12	Salicylic acid 50% (paraffin)	6001023002	1
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6001862002	1
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6004854001	2
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6007886001	1
Henry Lamotte/Sanacorp	Salicylic acid 50% (paraffin)	5809400	1
HenryLamotte	Salicylic acid 50% (paraffin)	5763800	1
HenryLamotte	Salicylic acid 50% (paraffin)	6001023001	1
HenryLamotte/Noweda	Salicylic acid 50% (paraffin)	6004854001	2
Hochhaus-Apotheke	Salicylic acid 50% (paraffin)	16197302	1
Kehr	Salicylic acid 50% (paraffin)	6007886002	1
Kehr/Henry Lamotte	Salicylic acid 50% (paraffin)	5809400	1
L12	Salicylic acid 50% (paraffin)	6001862001	1
L12	Salicylic acid 50% (paraffin)	17105801	1
L12	Salicylic acid 50% (paraffin)	18034402	2
L12/Henry Lamotte	Salicylic acid 50% (paraffin)	5809400	1
lamotte	Salicylic acid 50% (paraffin)	5809400	1
Lamotte	Salicylic acid 50% (paraffin)	5375300	1
Lamotte	Salicylic acid 50% (paraffin)	5065800	1
Lamotte	Salicylic acid 50% (paraffin)	5763800	1
Lamotte	Salicylic acid 50% (paraffin)	5809400	1
Lamotte	Salicylic acid 50% (paraffin)	6001023002	3
Lamotte	Salicylic acid 50% (paraffin)	6001023001	1
Lamotte	Salicylic acid 50% (paraffin)	6001862002	9
Lamotte	Salicylic acid 50% (paraffin)	60011862002	1
Lamotte	Salicylic acid 50% (paraffin)	6001862001	2
Lamotte	Salicylic acid 50% (paraffin)	6004854001	2
Lamotte	Salicylic acid 50% (paraffin)	6007886001	1
Lamotte	Salicylic acid 50% (paraffin)	6007886002	1
Lamotte	Salicylic acid 50% (paraffin)	8004748001	2
lamotte phönix	Salicylic acid 50% (paraffin)	6009168001	1
Lamotte / AHC	Salicylic acid 50% (paraffin)	6004854001	1
Lamotte / AHC	Salicylic acid 50% (paraffin)	8004748001	2
Lamotte/AHD	Salicylic acid 50% (paraffin)	6004854001	3
Lamotte/AHD	Salicylic acid 50% (paraffin)	6007886001	2
Lamotte/AHD	Salicylic acid 50% (paraffin)	6009168001	2
Lamotte/AHD	Salicylic acid 50% (paraffin)	6010101001	3
Lamotte/Anzag	Salicylic acid 50% (paraffin)	5809400	1
Lamotte/Anzag	Salicylic acid 50% (paraffin)	60007886002	1
Lamotte/Anzag	Salicylic acid 50% (paraffin)	6007886002	3
Lamotte/Ebert	Salicylic acid 50% (paraffin)	6001862001	1
Lamotte/Gehe	Salicylic acid 50% (paraffin)	5763800	1
Lamotte/K	Salicylic acid 50% (paraffin)	6001023001	1
Lamotte/Kehr	Salicylic acid 50% (paraffin)	6004854001	1
Lamotte/Kehr	Salicylic acid 50% (paraffin)	8004748001	2
Lamotte/Noweda	Salicylic acid 50% (paraffin)	6004854001	1
Lamotte/Noweda	Salicylic acid 50% (paraffin)	6009168001	2
Lamotte/NOWEDA	Salicylic acid 50% (paraffin)	6009168001	1
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6004854001	2
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6007886001	2

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Supplier	Substance	Batch	Spectra
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6009168001	1
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6010101001	1
Lamotte/Phönix	Salicylic acid 50% (paraffin)	8004748001	1
Lamotte/PX	Salicylic acid 50% (paraffin)	5809400	1
Lamotte/Sanacorp	Salicylic acid 50% (paraffin)	6009168001	1
Lamotte/VDL	Salicylic acid 50% (paraffin)	5375300	1
Linden-Apo	Salicylic acid 50% (paraffin)	2615M-01046	1
Midas	Salicylic acid 50% (paraffin)	17105501	1
Midas	Salicylic acid 50% (paraffin)	17261301	1
Midas	Salicylic acid 50% (paraffin)	18034201	1
Midas	Salicylic acid 50% (paraffin)	18286301	1
Noweda	Salicylic acid 50% (paraffin)	12201901	1
Noweda	Salicylic acid 50% (paraffin)	6001023002	1
Noweda	Salicylic acid 50% (paraffin)	16276101	1
noweda / lamotte	Salicylic acid 50% (paraffin)	5809400	1
Noweda 26.08.15	Salicylic acid 50% (paraffin)	15231801	1
Noweda/apomix	Salicylic acid 50% (paraffin)	5A020615	1
Noweda/Apomix	Salicylic acid 50% (paraffin)	8A250914	1
Noweda/Apomix	Salicylic acid 50% (paraffin)	7A230615	1
Caelo	Salicylic acid 50% (paraffin)	6004854001	2
Caelo	Salicylic acid 50% (paraffin)	14354101	3
Noweda/Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
P. W. Beyvers GmbH	Salicylic acid 50% (paraffin)	17017301	1
Phoenix	Salicylic acid 50% (paraffin)	15373101	1
Phoenix	Salicylic acid 50% (paraffin)	6010101001	1
Phoenix (PKH Halle)	Salicylic acid 50% (paraffin)	2A040313	1
Phoenix 2.07.14	Salicylic acid 50% (paraffin)	14107901	1
Caelo	Salicylic acid 50% (paraffin)	12228301	12
Phoenix/ Henry Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
Phönix	Salicylic acid 50% (paraffin)	12201801	1
Phönix	Salicylic acid 50% (paraffin)	5375300	1
Phönix	Salicylic acid 50% (paraffin)	11274301	1
Phönix	Salicylic acid 50% (paraffin)	17261401	1
PHÖNIX	Salicylic acid 50% (paraffin)	17326301	2
Phönix Gotha	Salicylic acid 50% (paraffin)	13052401	1
Phönix Gotha	Salicylic acid 50% (paraffin)	14017601	1
Phönix/Apomix	Salicylic acid 50% (paraffin)	17A131217	1
Caelo	Salicylic acid 50% (paraffin)	14108301	4
Euro OTC	Salicylic acid 50% (paraffin)	17017401	1
PKH / 11	Salicylic acid 50% (paraffin)	2A280116	1
PKH GmbH/ Alliance Heal...	Salicylic acid 50% (paraffin)	15A281118	1
PKH Halle/Noweda	Salicylic acid 50% (paraffin)	9A171213	1
PKH Halle/Phönix	Salicylic acid 50% (paraffin)	14A031115	1
Raben-Apotheke Mildenau	Salicylic acid 50% (paraffin)	14108201	1
sanacorp	Salicylic acid 50% (paraffin)	14337301	1
Sanacorp	Salicylic acid 50% (paraffin)	1305202	1
Sanacorp	Salicylic acid 50% (paraffin)	5809400	1
Sanacorp	Salicylic acid 50% (paraffin)	17261401	1
Sanacorp	Salicylic acid 50% (paraffin)	18034301	1
Sanacorp, 22.09.2016	Salicylic acid 50% (paraffin)	16197401	1
Caelo	Salicylic acid 50% (paraffin)	AKD2	1
SanacorpWE:18.10.17 EK...	Salicylic acid 50% (paraffin)	17172702	1
WE:Sanacorp 29.10.2016 ...	Salicylic acid 50% (paraffin)	1612401	1
Wolf Apotheke	Salicylic acid 50% (paraffin)	18(6010101001)	1
Caelo	Salicylic acid 50% (paraffin)	15231801	15
Caelo	Salicylic acid 50% (paraffin)		1
Henry Lamotte	Salicylic acid 50% (paraffin)	5375300	2
Henry Lamotte	Salicylic acid 50% (paraffin)	6001023001	1
	Salicylic acid 50% (paraffin)	6004854001	1

- 137 323 spectra from 703 *Apo-Ident* customers from a total of 35 094 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Salicylic acid 50% (paraffin)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Salicylic acid 50% (paraffin)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	400	0	55 959
Type B	0	380	0	69 094
Type C	0	1028	2	137 323

The substance/substance group *Salicylic acid 50% (paraffin)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 98.4211 %)
Type C	100.0000 % (> 99.6452 %)	99.8058 % (> 99.5146 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Salicylic acid 50% (paraffin)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Permethrin 25% solution	112.87	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Salicylic acid 50% (paraffin)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30883	31903	1.77	142.94
30927	31727	5.79	152.39
31727	31727	0.00	150.37
31901	31901	0.00	138.46
31902	31902	0.00	144.02
31903	31903	0.00	140.67
32176	31727	4.82	152.63
32520	32520	0.00	137.26

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Sodium lactate solution 50%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30136-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Sodium lactate solution 50%; Natrium lacticum solutum 50%

Special notes

When selecting the *Sodium lactate solution 50%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Sodium lactate solution 50%	4	2	125

Second-stage model

For differentiation of the substance/substance group *Sodium lactate solution 50%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Sodium lactate solution 50%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Sodium lactate s...	12027310	30621	80	20120131
Caelo	Sodium lactate s...	14039503	31321	40	20140207
Caelo	Sodium lactate s...	16056201	32586	40	20160315
Caelo	Sodium lactate s...	16056201	32839	40	AR-17-FG-006366-01
Caelo	Sodium lactate s...	16056201	32917	40	20160315
Caelo	Sodium lactate s...	191667	34729	40	20190829*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 280 spectra of 6 reference samples from the substance/substance group *Sodium lactate solution 50%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 079 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Sodium lactate solution 50%*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sodium lactate solution 50%	170977	33319	40
Caelo	Sodium lactate solution 50%	173153	34231	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 938 spectra from 412 *Apo-Ident* customers from 130 batches from the substance/substance group *Sodium lactate solution 50%*.
- Among them are spectra of independent samples from 125 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD 19.02.15	Sodium lactate solution 50%	14353202	1
Alliance health	Sodium lactate solution 50%	14353205	1
Anzag	Sodium lactate solution 50%	16056201	1
Anzag 27.02.2013	Sodium lactate solution 50%	12294603	1
Bombastus	Sodium lactate solution 50%	13111704	1
Caelo	Sodium lactate solution 50%	3041410	1
Caelo	Sodium lactate solution 50%	17315307	5
Caelo	Sodium lactate solution 50%	11238712	2
Caelo	Sodium lactate solution 50%	507213157	1
Caelo	Sodium lactate solution 50%	3111Q-03157	1
Caelo	Sodium lactate solution 50%	12180404	4
Caelo	Sodium lactate solution 50%	11238707	2
Caelo	Sodium lactate solution 50%	20310511-1	1
Caelo	Sodium lactate solution 50%	11024009	5
Caelo	Sodium lactate solution 50%	12294603	6
Caelo	Sodium lactate solution 50%	1218407	1
Caelo	Sodium lactate solution 50%	12294604	6
Caelo	Sodium lactate solution 50%	11024001	1
Caelo	Sodium lactate solution 50%	12294605	6
Caelo	Sodium lactate solution 50%	12027301	1
Caelo	Sodium lactate solution 50%	12180406	2
Caelo	Sodium lactate solution 50%	13111704	11
Caelo	Sodium lactate solution 50%	12294610	5
Caelo	Sodium lactate solution 50%	N-260313-3	1
Caelo	Sodium lactate solution 50%	13267001	22
Caelo	Sodium lactate solution 50%	13267003	7
Caelo	Sodium lactate solution 50%	13267009	10
Caelo	Sodium lactate solution 50%	13267005	1
Caelo	Sodium lactate solution 50%	13330302	5
Caelo	Sodium lactate solution 50%	14011301	1
Caelo	Sodium lactate solution 50%	13330304	2

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Supplier	Substance	Batch	Spectra
Caelo	Sodium lactate solution 50%	13330305	11
Caelo	Sodium lactate solution 50%	13330306	1
Caelo	Sodium lactate solution 50%	133305	1
Caelo	Sodium lactate solution 50%	14039507	3
Caelo	Sodium lactate solution 50%	13330308	1
Caelo	Sodium lactate solution 50%	14271901	17
Caelo	Sodium lactate solution 50%	14271906	2
Caelo	Sodium lactate solution 50%	14271907	5
Caelo	Sodium lactate solution 50%	14271903	1
Caelo	Sodium lactate solution 50%	14271904	10
Caelo	Sodium lactate solution 50%	14353201	4
Caelo	Sodium lactate solution 50%	1435207	1
Caelo	Sodium lactate solution 50%	14271908	2
Caelo	Sodium lactate solution 50%	15251102	11
Caelo	Sodium lactate solution 50%	15135508	2
Caelo	Sodium lactate solution 50%	14271902	1
Caelo	Sodium lactate solution 50%	15135501	1
Caelo	Sodium lactate solution 50%	15375805	1
Caelo	Sodium lactate solution 50%	15375808	12
Caelo	Sodium lactate solution 50%	1537806	1
Caelo	Sodium lactate solution 50%	16056206	28
Caelo	Sodium lactate solution 50%	16321004	1
Caelo	Sodium lactate solution 50%	16056207	6
Caelo	Sodium lactate solution 50%	16321003	6
Caelo	Sodium lactate solution 50%	16321008	26
Caelo	Sodium lactate solution 50%	163210	1
Caelo	Sodium lactate solution 50%	170977045365	1
Caelo	Sodium lactate solution 50%	17097704	49
Caelo	Sodium lactate solution 50%	17097709	35
Caelo	Sodium lactate solution 50%	170977095567	1
Caelo	Sodium lactate solution 50%	3051805	1
Caelo	Sodium lactate solution 50%	18135702	18
Caelo	Sodium lactate solution 50%	18135803	19
Caelo	Sodium lactate solution 50%	180135803	1
Caelo	Sodium lactate solution 50%	19135702	1
Caelo	Sodium lactate solution 50%	18314501	14
Caelo	Sodium lactate solution 50%	18135806	3
Caelo	Sodium lactate solution 50%	18314505	8
Caelo	Sodium lactate solution 50%	14271905	1
Caelo	Sodium lactate solution 50%	11238701	4
Caelo	Sodium lactate solution 50%	14353202	10
Caelo	Sodium lactate solution 50%	16321001	7
Caelo	Sodium lactate solution 50%	16321002	16
Caelo	Sodium lactate solution 50%	18173903	1
Caelo	Sodium lactate solution 50%	18135802	2
Caelo	Sodium lactate solution 50%	14039508	1
Caelo	Sodium lactate solution 50%	12294607	6
Caelo	Sodium lactate solution 50%	12180408	2
Caelo	Sodium lactate solution 50%	12180407	5
Caelo	Sodium lactate solution 50%	14353210	11
Caelo	Sodium lactate solution 50%	14182903	2
Caelo	Sodium lactate solution 50%	18135702-N20190115Ma	1
Caelo	Sodium lactate solution 50%	16056201-20170704Ma1	1
Caelo	Sodium lactate solution 50%	1525110	1
Caelo	Sodium lactate solution 50%	13267002	2
Caelo	Sodium lactate solution 50%	14182904	5
Caelo	Sodium lactate solution 50%	15135505	28
Caelo	Sodium lactate solution 50%	14353207	12
Caelo	Sodium lactate solution 50%	13330303	2
Caelo	Sodium lactate solution 50%	13330307	10

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Supplier	Substance	Batch	Spectra
Caelo	Sodium lactate solution 50%	2014U-03157	1
Caelo	Sodium lactate solution 50%	17097701	7
Caelo	Sodium lactate solution 50%	16321009	3
Caelo	Sodium lactate solution 50%	14039511	4
Caelo	Sodium lactate solution 50%	17097708	8
Caelo	Sodium lactate solution 50%	14353205	20
Caelo	Sodium lactate solution 50%	5(17315301)	1
Caelo	Sodium lactate solution 50%	15251101	54
Caelo	Sodium lactate solution 50%	11238706	2
Caelo	Sodium lactate solution 50%	13267006	2
Caelo	Sodium lactate solution 50%	14A21-B10-295977	1
Caelo	Sodium lactate solution 50%	1414Q03157	1
Caelo	Sodium lactate solution 50%	17315301	37
Caelo	Sodium lactate solution 50%	173153065758	1
Caelo	Sodium lactate solution 50%	14182902	9
Caelo	Sodium lactate solution 50%	10/AKD7	1
Caelo	Sodium lactate solution 50%	11/AKD16	1
Caelo	Sodium lactate solution 50%	17315302	9
Caelo	Sodium lactate solution 50%	13111705	5
Caelo	Sodium lactate solution 50%	12027303	2
Caesar & Lorenz GmbH	Sodium lactate solution 50%	71014/1	1
Caesar & Lorenz GmbH	Sodium lactate solution 50%	177097704	1
Caesar & Loretz	Sodium lactate solution 50%	16056206	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	14271901	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	14353205	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	17097704	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	18135702	2
Caesar & Loretz GmbH	Sodium lactate solution 50%	18314507	1
Caesar & Loretz GmbH/ P...	Sodium lactate solution 50%	18135806	1
Caesar & Loretz GmbH/Ph...	Sodium lactate solution 50%	18135803	1
Caesar & Loretz/Noweda	Sodium lactate solution 50%	15375806	1
Caesar & Loretz/Sanacorp	Sodium lactate solution 50%	15251101	1
Caesar&Loretz	Sodium lactate solution 50%	15251101	1
Caesar&Loretz GmbH	Sodium lactate solution 50%	15375806	1
Caesar&lorenz,Phoenix	Sodium lactate solution 50%	14182902	1
Caesar/Lorenz	Sodium lactate solution 50%	12294610	1
Cealo/Phönix	Sodium lactate solution 50%	17315301	1
Cealo/Sanacorp	Sodium lactate solution 50%	18135803	1
Ebert 02.08.2016	Sodium lactate solution 50%	15375808	1
Euro OTC	Sodium lactate solution 50%	14271907	1
Fagron	Sodium lactate solution 50%	14/13	1
Fagron	Sodium lactate solution 50%	14A21-B10	4
Fagron	Sodium lactate solution 50%	14A21-B10-290492	2
Fagron	Sodium lactate solution 50%	14A21-810-295977	1
Fagron	Sodium lactate solution 50%	1453202	1
Fagron	Sodium lactate solution 50%	12J18-M04	6
Fagron	Sodium lactate solution 50%	14a21-b10-295977	1
Fagron	Sodium lactate solution 50%	K40875122	1
Gehe	Sodium lactate solution 50%	13267009	1
Gehe	Sodium lactate solution 50%	10094060	1
Gehe	Sodium lactate solution 50%	17097709	1
GEHE	Sodium lactate solution 50%	17315301	1
GEHE	Sodium lactate solution 50%	18135702	1
GEHE	Sodium lactate solution 50%	17315306	1
GEHE	Sodium lactate solution 50%	18135803	3
GEHE	Sodium lactate solution 50%	18314501	1
Fagron	Sodium lactate solution 50%	1311002383	1
Gehe 12.1.15	Sodium lactate solution 50%	14271907	1
Caelo	Sodium lactate solution 50%	15375806	27
Euro OTC	Sodium lactate solution 50%	14039503	1

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Supplier	Substance	Batch	Spectra
Fagron	Sodium lactate solution 50%	14271901	1
Henry Lamotte Oils GmbH	Sodium lactate solution 50%	16321001	1
Kehr	Sodium lactate solution 50%	17097709	1
Kehr/Sanacorp	Sodium lactate solution 50%	17315301	1
Caelo	Sodium lactate solution 50%	17315306	42
L30	Sodium lactate solution 50%	17315301	1
Lamotte/Phönix	Sodium lactate solution 50%	16056201	1
Noweda	Sodium lactate solution 50%	12294604	1
Noweda	Sodium lactate solution 50%	13267001	1
Caelo	Sodium lactate solution 50%	14353204	2
Noweda 18.05.2015	Sodium lactate solution 50%	14353205	1
Otto Fischar	Sodium lactate solution 50%	16056201	1
phoenix	Sodium lactate solution 50%	14271901	1
Phoenix	Sodium lactate solution 50%	14353210	1
Phoenix	Sodium lactate solution 50%	15251101	1
Phoenix	Sodium lactate solution 50%	16056201	1
Phoenix	Sodium lactate solution 50%	17097704	1
Phonix	Sodium lactate solution 50%	17097701	1
phönix	Sodium lactate solution 50%	12180404/8	1
phönix	Sodium lactate solution 50%	9/AKD56	1
Phönix	Sodium lactate solution 50%	12180407	1
Phönix	Sodium lactate solution 50%	14271901	1
Phönix	Sodium lactate solution 50%	17097704	2
Phönix Gotha	Sodium lactate solution 50%	K40875122	1
Phönix, 20.09.2013	Sodium lactate solution 50%	13111705	1
Fagron	Sodium lactate solution 50%	14271907	1
PKH Halle	Sodium lactate solution 50%	17315306	1
Sanacorp	Sodium lactate solution 50%	12180407	1
Sanacorp	Sodium lactate solution 50%	14039508	1
Sanacorp	Sodium lactate solution 50%	11/AKD13	1
Sanacorp	Sodium lactate solution 50%	16056206	1
Sanacorp	Sodium lactate solution 50%	17097708	1
Sanacorp	Sodium lactate solution 50%	18135702	1
Caelo	Sodium lactate solution 50%	14353208	1
	Sodium lactate solution 50%	14182904	2
Caelo	Sodium lactate solution 50%	14039503	14
Caelo	Sodium lactate solution 50%	16056201	43
Caelo	Sodium lactate solution 50%	12027310	1
Euro OTC	Sodium lactate solution 50%		1
Caelo	Sodium lactate solution 50%		1

- 137 415 spectra from 703 *Apo-Ident* customers from a total of 35 169 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Sodium lactate solution 50%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Sodium lactate solution 50%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	280	0	56 079
Type B	0	80	0	69 394
Type C	0	934	4	137 415

The substance/substance group *Sodium lactate solution 50%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.5736 % (> 99.2537 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Sodium lactate solution 50%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Liquorice juice purified, diluted	35.25	–
Condurango wine	43.03	–
Lotio Cordes®	44.02	–
Chest elixir	50.02	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Sodium lactate solution 50%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30621	32839	2.98	44.65
31321	32839	2.09	45.49
32586	34729	7.32	51.66
32839	32839	0.00	45.74
32917	32839	2.54	44.02
34729	34729	0.00	48.05

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Sodium laureth sulfate solution 27%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30936-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Sodium laureth sulfate solution 27%; Sodium laureth sulphate solution 27%; Solutio natrii laurylaethersulfurici 27 %

Special notes

When selecting the *Sodium laureth sulfate solution 27%* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Sodium laureth sulfate solution 27%	9	2	34

Second-stage model

For differentiation of the substance/substance group *Sodium laureth sulfate solution 27%* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Sodium laureth sulfate solution 27%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Sodium laureth s...	12315211	30936	50	20121029
Caelo	Sodium laureth s...	13069915	31114	39	20130402
Caelo	Sodium laureth s...	14049902	31349	60	8930
Caelo	Sodium laureth s...	161968	32696	30	20161010*
Caelo	Sodium laureth s...	16196801	32818	30	20161010
Caelo	Sodium laureth s...	163071	33090	40	20161121*
Caelo	Sodium laureth s...	190124	34464	40	20190211*
Caelo	Sodium laureth s...	190656	34633	40	20190510*
Caelo	Sodium laureth s...	192336	34725	40	20190916*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 369 spectra of 9 reference samples from the substance/substance group *Sodium laureth sulfate solution 27%*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 9 different batches.
- 55 990 spectra from a total of 1107 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 140 spectra of 5 reference samples from the substance/substance group *Sodium laureth sulfate solution 27%*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sodium laureth sulfate solut...	171210	33335	40
Caelo	Sodium laureth sulfate solut...	172233	33698	40
Caelo	Sodium laureth sulfate solut...	161968	32696 [†]	10
Caelo	Sodium laureth sulfate solut...	16196801	32818 [†]	10
Caelo	Sodium laureth sulfate solut...	172233	33883	40

- 69 334 spectra from a total of 1498 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 69 spectra from 29 *Apo-Ident* customers from 37 batches from the substance/substance group *Sodium laureth sulfate solution 27%*.
- Among them are spectra of independent samples from 34 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Sodium laureth sulfate solut...	12044307	1
Caelo	Sodium laureth sulfate solut...	13069911	1
Caelo	Sodium laureth sulfate solut...	13241001	1
Caelo	Sodium laureth sulfate solut...	11322611	1
Caelo	Sodium laureth sulfate solut...	14197916	1
Caelo	Sodium laureth sulfate solut...	14355304	2
Caelo	Sodium laureth sulfate solut...	14355308	1
Caelo	Sodium laureth sulfate solut...	14355314	7
Caelo	Sodium laureth sulfate solut...	17318601	1
Caelo	Sodium laureth sulfate solut...	18118901	1
Caelo	Sodium laureth sulfate solut...	14197920	1
Caelo	Sodium laureth sulfate solut...	12341104	1
Caelo	Sodium laureth sulfate solut...	15145004	1
Caelo	Sodium laureth sulfate solut...	13241101	1
Caelo	Sodium laureth sulfate solut...	16307104	1
Caelo	Sodium laureth sulfate solut...	17121005	1
Caelo	Sodium laureth sulfate solut...	18199701	4
Caelo	Sodium laureth sulfate solut...	12044308	4
Caelo	Sodium laureth sulfate solut...	13069903	1
Caelo	Sodium laureth sulfate solut...	13069905	1
Caelo	Sodium laureth sulfate solut...	14049904	1

continued on the next page

[†]These spectra were recorded from material of the same package as the corresponding calibration spectra (*Type A*). Hence, these spectra are not independent and are not of *Type B*.

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Supplier	Substance	Batch	Spectra
Caelo	Sodium laureth sulfate solut...	13241004	1
Caelo	Sodium laureth sulfate solut...	14355310	1
Caelo	Sodium laureth sulfate solut...	15145017	3
Caelo	Sodium laureth sulfate solut...	17223302	2
Caelo	Sodium laureth sulfate solut...	17121004	6
Caelo	Sodium laureth sulfate solut...	17121002	1
Caelo	Sodium laureth sulfate solut...	16354801	1
Caelo	Sodium laureth sulfate solut...	12315203	1
Caelo	Sodium laureth sulfate solut...	2613M-01907	1
Caelo	Sodium laureth sulfate solut...	15145010	1
Caesar & Loretz GmbH Hi...	Sodium laureth sulfate solut...	14049913	1
Caesar & Loretz GmbH, 4...	Sodium laureth sulfate solut...	12315211	1
Fontapharm	Sodium laureth sulfate solut...	15145017	2
Caelo	Sodium laureth sulfate solut...	14197915	6
Caelo	Sodium laureth sulfate solut...	14355315	1
Phönix	Sodium laureth sulfate solut...	14355314	1
Sanacorp	Sodium laureth sulfate solut...	14049902	1
Caelo	Sodium laureth sulfate solut...	12315211	1
Caelo	Sodium laureth sulfate solut...	14049902	1
Caelo	Sodium laureth sulfate solut...	16196801	2

- 138 284 spectra from 703 *Apo-Ident* customers from a total of 35 259 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Sodium laureth sulfate solution 27%* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Sodium laureth sulfate solution 27%* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	369	0	55 990
Type B	0	120	20	69 334
Type C	0	66	3	138 284

The substance/substance group *Sodium laureth sulfate solution 27%* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.3740 %)
Type B	100.0000 % (> 99.9653 %)	85.7143 % (> 83.5714 %)
Type C	100.0000 % (> 99.6453 %)	95.6522 % (> 91.3043 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to

exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.
Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Sodium laureth sulfate solution 27%* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Non-ionic hydrous liniment SR/DAC (NRF...	18.79	—
Hydrophilic cream, non-ionic SR (NRF p...	19.93	—
Hydrated liniment SR/DAC (NRF p.40)	20.41	—
Hydrophilic cream, non-ionic without p...	27.01	—
Anionic hydrophilic cream without prese...	28.93	—
Anionic hydrophilic cream SR (NRF p.27)	30.90	—
Glycolic acid 70%	33.65	—
Wolff® base half-fat cream	47.69	—
Gel Cordes®	49.94	—
Base cream, hydrophobic DAC	53.75	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Sodium laureth sulfate solution 27%* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32696	32696	0.00	19.34
30936	31349	2.91	25.66
31114	31349	4.48	24.20
31349	31349	0.00	22.80
32818	33090	2.37	20.41
33090	33090	0.00	20.74
34725	34725	0.00	22.05
34464	34464	0.00	19.42
34633	34633	0.00	19.01

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Soft ointment**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30896-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Soft ointment; Unguentum molle

Special notes

When selecting the *Soft ointment* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Soft ointment	7	19	367

Second-stage model

For differentiation of the substance/substance group *Soft ointment* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Soft ointment*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Soft ointment	12353301	30896	80	20121218
Caelo	Soft ointment	14080501	31452	40	AR-15-FG-000142-01
Caelo	Soft ointment	153768	31984	60	20151103*
Caelo	Soft ointment	160833	32097	40	20160322*
Caelo	Soft ointment	163134	32871	40	20161116*
Henry Lamotte	Soft ointment	5215100	30924	50	20111111
Henry Lamotte	Soft ointment	8005213003	34687	40	20190318

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 350 spectra of 7 reference samples from the substance/substance group *Soft ointment*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 7 different batches.
- 56 009 spectra from a total of 1109 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1050 spectra of 24 reference samples from the substance/substance group *Soft ointment*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 19 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Soft ointment	153770	31985	60
Caelo	Soft ointment	153772	31987	60
Caelo	Soft ointment	160830	32094	40
Caelo	Soft ointment	160831	32095	30
Caelo	Soft ointment	160832	32096	40
Caelo	Soft ointment	161463	32406	40
Caelo	Soft ointment	161464	32407	40
Caelo	Soft ointment	162452	32496	40
Caelo	Soft ointment	162453	32497	40
Caelo	Soft ointment	162454	32498	40
Caelo	Soft ointment	162455	32499	40
Caelo	Soft ointment	171969	33560	40
Caelo	Soft ointment	171971	33561	40
Caelo	Soft ointment	171972	33562	40
Caelo	Soft ointment	172631	33748	40
Caelo	Soft ointment	172632	33749	40
Caelo	Soft ointment	180021	34012	40
Caelo	Soft ointment	182012	34258	40
Caelo	Soft ointment	182511	34356	40
Caelo	Soft ointment	12353301	30882	40
Caelo	Soft ointment	153768	31983	60
Caelo	Soft ointment	153770	31986	60
Caelo	Soft ointment	153772	31988	60
Caelo	Soft ointment	172632	33750	40

- 68 424 spectra from a total of 1481 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2318 spectra from 502 *Apo-Ident* customers from 376 batches from the substance/substance group *Soft ointment*.
- Among them are spectra of independent samples from 366 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHC/Lamotte	Soft ointment	8002875005	1
AHD	Soft ointment	17076601	1
AHD 02.09.14 EK 5,03	Soft ointment	5691800	1
AHD 17.11.14 EK 5,51	Soft ointment	13124-T01-006925	1
Euro OTC	Soft ointment	16313401	1
ahd/lamotte	Soft ointment	5789000	1
AHDE 03.06.2015	Soft ointment	14375602	2
AHL	Soft ointment	6001368001	2
AHL	Soft ointment	8002320004	1

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	16313402	2
ALH/ Henry	Soft ointment	8002875006	1
Caelo	Soft ointment	17197201	7
Allianc 03.02.15	Soft ointment	14375601	1
Fagron	Soft ointment	15A30-T02-018955	3
Alliance Healthcare	Soft ointment	14080201	1
Alliance Healthcare	Soft ointment	298070	1
Alliance Healthcare Hen...	Soft ointment	8004399002	1
Alliance Healthcare/Hed...	Soft ointment	281897	1
Allianz Healthcare 11.0...	Soft ointment	14375602	1
Alte Apotheke	Soft ointment	16146103	1
Anzag	Soft ointment	267553	1
Anzag	Soft ointment	269470	1
Anzag	Soft ointment	15377101	1
Anzag	Soft ointment	16A21-T05-029597	1
Anzag	Soft ointment	17A03-T01-039997	1
Anzag	Soft ointment	18000135	1
Anzag	Soft ointment	18002039	1
Anzag 18.04.14 EK:3,87	Soft ointment	1324-T02-006929	1
Anzag 23.01.2013	Soft ointment	12353301	1
Anzag 31.01.13 ek: 5,10EUR	Soft ointment	12353201	1
Anzag ek:5,12EUR 19.09.12	Soft ointment	12091402	1
Anzag;21.03.15;3,53EUR	Soft ointment	14375601	1
Anzag;27.10.14;3,28EUR	Soft ointment	14202301	1
ApoAmKlini	Soft ointment	1118Q-02542	2
BASF AG	Soft ointment	291333	1
Berkel AHK	Soft ointment	13387402	1
Berkel AHK	Soft ointment	14007601	1
Berkel AHK	Soft ointment	14202201	2
Berkel AHK	Soft ointment	14202001	1
Bomastus	Soft ointment	291333	1
Bomastus	Soft ointment	269468	1
Bomastus	Soft ointment	271430	1
Bomastus	Soft ointment	275422	4
Bomastus	Soft ointment	261106	1
Bomastus	Soft ointment	275424	1
Bomastus	Soft ointment	254399	1
Bomastus	Soft ointment	284057	1
Bomastus	Soft ointment	286012	7
Bomastus	Soft ointment	281897	1
Bomastus	Soft ointment	288013	4
Bomastus	Soft ointment	291333	3
Bomastus	Soft ointment	293336	3
Bomastus	Soft ointment	295313	4
Bomastus	Soft ointment	15377001	1
Bomastus	Soft ointment	16083001	1
Bomastus	Soft ointment	6862381	2
Bomastus	Soft ointment	304548	5
Bomastus	Soft ointment	308038	2
Bomastus	Soft ointment	3099727	1
Bomastus	Soft ointment	262274	1
Bomastus	Soft ointment	297077	9
Bomastus	Soft ointment	18004473	1
Bomastus	Soft ointment	19002112	1
Bomastus	Soft ointment	18000136	3
Bomastus	Soft ointment	305451	3
Bomastus	Soft ointment	18002978	2
Bomastus	Soft ointment	280166	2
Bomastus	Soft ointment	300642	1
Bomastus	Soft ointment	302326	1

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Supplier	Substance	Batch	Spectra
Bombastus	Soft ointment	288704	7
Bombastus	Soft ointment	304546	1
Bombastus	Soft ointment	305449	4
Bombastus	Soft ointment	299869	7
Bombastus	Soft ointment	309727	4
Bombastus	Soft ointment	276854	1
Bombastus	Soft ointment	278047	1
Bombastus	Soft ointment	309726	2
Bombastus	Soft ointment	308040	2
Bombastus	Soft ointment	18004475	2
Bombastus	Soft ointment	305450	4
Bombastus	Soft ointment	8002875005	1
Bombastus	Soft ointment	18002040	2
Bombastus	Soft ointment	298070	3
Bombastus	Soft ointment	278048	2
Bombastus	Soft ointment	16146301	1
Bombastus	Soft ointment	18000135	2
Bombastus	Soft ointment	18002038	2
Bombastus	Soft ointment	18000134	1
Bombastus	Soft ointment	18002039	4
Bombastus	Soft ointment	18006882	2
Bombastus	Soft ointment	5317100	1
Bombastus	Soft ointment	284056	1
Bombastus	Soft ointment	288702	1
Bombastus	Soft ointment	298069	1
Bombastus	Soft ointment	302327	4
Bombastus	Soft ointment	17000369	2
Bombastus	Soft ointment	17000370	5
Bombastus	Soft ointment	18163001	2
Bombastus	Soft ointment	19002114	4
Bombastus	Soft ointment	16083101	1
Bombastus	Soft ointment	269469	1
Caela	Soft ointment	15376801	1
Caelo	Soft ointment	14375901	9
Caelo	Soft ointment	92810389	1
Caelo	Soft ointment	11282201	7
Caelo	Soft ointment	12045401	1
Caelo	Soft ointment	7071202	1
Caelo	Soft ointment	1097697	2
Caelo	Soft ointment	12194501	8
Caelo	Soft ointment	12091402	6
Caelo	Soft ointment	12194601	12
Caelo	Soft ointment	12045501	2
Caelo	Soft ointment	612212542	1
Caelo	Soft ointment	18121206	1
Caelo	Soft ointment	12194502	4
Caelo	Soft ointment	20230712-4	1
Caelo	Soft ointment	12353201	14
Caelo	Soft ointment	1253201	1
Caelo	Soft ointment	1294502	1
Caelo	Soft ointment	13053601	14
Caelo	Soft ointment	13053801	17
Caelo	Soft ointment	13053901	7
Caelo	Soft ointment	3213E2542	1
Caelo	Soft ointment	13192901	18
Caelo	Soft ointment	13192601	33
Caelo	Soft ointment	13192701	6
Caelo	Soft ointment	13387402	19
Caelo	Soft ointment	8012014C	1
Caelo	Soft ointment	13375503	2

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	10111201	1
Caelo	Soft ointment	14007601	27
Caelo	Soft ointment	5448300	1
Caelo	Soft ointment	13387403	3
Caelo	Soft ointment	14007501	11
Caelo	Soft ointment	10377201	1
Caelo	Soft ointment	23061403	1
Caelo	Soft ointment	1097763	2
Caelo	Soft ointment	5081405	1
Caelo	Soft ointment	15092014C	1
Caelo	Soft ointment	14202302	7
Caelo	Soft ointment	14202201	20
Caelo	Soft ointment	14202301	35
Caelo	Soft ointment	14201801	2
Caelo	Soft ointment	1420220	1
Caelo	Soft ointment	5011504	1
Caelo	Soft ointment	14375603	1
Caelo	Soft ointment	15059402	2
Caelo	Soft ointment	15204402	4
Caelo	Soft ointment	16083301	9
Caelo	Soft ointment	16146201	9
Caelo	Soft ointment	8012015C	1
Caelo	Soft ointment	14375601	14
Caelo	Soft ointment	Caelo	1
Caelo	Soft ointment	31031503	1
Caelo	Soft ointment	15059301	21
Caelo	Soft ointment	14375602	24
Caelo	Soft ointment	7051510	1
Caelo	Soft ointment	15204401	31
Caelo	Soft ointment	15059501	1
Caelo	Soft ointment	15e14-t01-022366	1
Caelo	Soft ointment	15377101	53
Caelo	Soft ointment	15377001	25
Caelo	Soft ointment	16083002	28
Caelo	Soft ointment	160830	1
Caelo	Soft ointment	16083101	27
Caelo	Soft ointment	15E14-T02-022369	1
Caelo	Soft ointment	16083001	41
Caelo	Soft ointment	1614620	1
Caelo	Soft ointment	16146301	16
Caelo	Soft ointment	160620UM	1
Caelo	Soft ointment	16245301	31
Caelo	Soft ointment	16083003	1
Caelo	Soft ointment	161111UM/16146103	1
Caelo	Soft ointment	16146502	24
Caelo	Soft ointment	15108t02025891	1
Caelo	Soft ointment	161465	1
Caelo	Soft ointment	16146302	2
Caelo	Soft ointment	20011702	1
Caelo	Soft ointment	16313401	35
Caelo	Soft ointment	16F03-T02-033989	2
Caelo	Soft ointment	17076402	1
Caelo	Soft ointment	161465025263	1
Caelo	Soft ointment	17076501	29
Caelo	Soft ointment	16G18-T02-035248	1
Caelo	Soft ointment	17076701	6
Caelo	Soft ointment	170764	1
Caelo	Soft ointment	20170815-02542	1
Caelo	Soft ointment	170764015337	1
Caelo	Soft ointment	23101705	1

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	17104902	1
Caelo	Soft ointment	17263201	59
Caelo	Soft ointment	17196901	3
Caelo	Soft ointment	17203101	1
Caelo	Soft ointment	17076051	1
Caelo	Soft ointment	18002303	7
Caelo	Soft ointment	18061806	1
Caelo	Soft ointment	18002320	1
Caelo	Soft ointment	1814501	1
Caelo	Soft ointment	180002401	2
Caelo	Soft ointment	29091804	1
Caelo	Soft ointment	18001801	4
Caelo	Soft ointment	182014202	1
Caelo	Soft ointment	26011904	1
Caelo	Soft ointment	1800251	1
Caelo	Soft ointment	VFM002-1C	1
Caelo	Soft ointment	18251301	12
Caelo	Soft ointment	19082302	10
Caelo	Soft ointment	19191501	1
Caelo	Soft ointment	12194701	1
Caelo	Soft ointment	11282102	2
Caelo	Soft ointment	12091403	1
Caelo	Soft ointment	15204501	22
Caelo	Soft ointment	299869	1
Caelo	Soft ointment	15204602	6
Caelo	Soft ointment	17076601	42
Caelo	Soft ointment	17263302	5
Caelo	Soft ointment	17263202	8
Caelo	Soft ointment	17263302-20180404Ma8	1
Caelo	Soft ointment	17197103-20180112Ma6	1
Caelo	Soft ointment	170509UM/16245202	1
Caelo	Soft ointment	13192502	2
Caelo	Soft ointment	18140502	3
Caelo	Soft ointment	19082301	4
Caelo	Soft ointment	11256701	5
Caelo	Soft ointment	101/AKD13	1
Caelo	Soft ointment	18251102	1
Caelo	Soft ointment	1324-T01-006925	1
Caelo	Soft ointment	12353401	10
Caelo	Soft ointment	16245502	1
Caelo	Soft ointment	18002001	5
Caelo	Soft ointment	12045601	1
Caelo	Soft ointment	12194401	3
Caelo	Soft ointment	15059601	5
Caelo	Soft ointment	17076801-20171106Ma6	1
Caelo	Soft ointment	12353302	2
Caelo	Soft ointment	18001901-W20190115Ma	1
Caelo	Soft ointment	18002401	31
Caelo	Soft ointment	14007301	22
Caelo	Soft ointment	16024401	1
Caelo	Soft ointment	18152901	13
Caelo	Soft ointment	16146503	3
Caelo	Soft ointment	17263101	36
Caelo	Soft ointment	19082401	3
Caelo	Soft ointment	16245402	5
Caelo	Soft ointment	17197102	6
Caelo	Soft ointment	19015101	14
Caelo	Soft ointment	12045702	5
Caelo	Soft ointment	18002302	9
Caelo	Soft ointment	18201402	24

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	13375402	10
Caelo	Soft ointment	11132901	1
Caelo	Soft ointment	16045301	1
Caelo	Soft ointment	18002501	31
Caelo	Soft ointment	1402201	1
Caelo	Soft ointment	11256302	1
Caelo	Soft ointment	12091401	1
Caelo	Soft ointment	13192501	24
Caelo	Soft ointment	1319201	1
Caelo	Soft ointment	17076301	12
Caelo	Soft ointment	18163001	11
Caelo	Soft ointment	1314I-02542	1
Caelo	Soft ointment	1603001	1
Caelo	Soft ointment	19014902	1
Caelo	Soft ointment	14080301	5
Caelo	Soft ointment	18140501	7
Caelo	Soft ointment	10(18002303)	1
Caelo	Soft ointment	13375501	13
Caelo	Soft ointment	51123/1Sie	1
Caelo	Soft ointment	15376901	13
Caelo	Soft ointment	16A21-T05-029597	1
Caelo	Soft ointment	13053701	1
Caelo	Soft ointment	13192801	2
Caelo	Soft ointment	14080101	1
Caelo	Soft ointment	11282101	2
Caelo	Soft ointment	12045701	5
Caelo	Soft ointment	16A21T05029597	1
Caelo	Soft ointment	16146401	9
Caelo	Soft ointment	16146103	6
Caelo	Soft ointment	16245401	27
Caelo	Soft ointment	16245202	6
Caelo	Soft ointment	17064402	1
Caelo	Soft ointment	170926UM/17076301	1
Caelo	Soft ointment	170318183	1
Caelo	Soft ointment	181102183	1
Caelo	Soft ointment	181016187	1
Caelo	Soft ointment	180320UM/17263302	1
Caelo	Soft ointment	18002101	8
Caelo	Soft ointment	18140503	1
Caelo	Soft ointment	17H28-T03-047827	1
Caelo	Soft ointment	18251101	22
Caelo	Soft ointment	14080201	14
Caelo	Soft ointment	13053602	6
Caelo	Soft ointment	13192902	3
Caelo	Soft ointment	1314I2542	1
Caelo	Soft ointment	286011	1
Caelo	Soft ointment	15204801	3
Caelo	Soft ointment	16245502-20170818Ma7	1
Caelo	Soft ointment	18521301	1
Caelo	Soft ointment	118282301	1
Caelo	Soft ointment	14202011	1
Caelo	Soft ointment	15376801	23
Caelo	Soft ointment	17076801	4
Caelo	Soft ointment	17076901	9
Caelo	Soft ointment	17A03-T01-039997	1
Caelo	Soft ointment	1631351	1
Caelo	Soft ointment	18162901	9
Caelo	Soft ointment	18201201	28
Caelo	Soft ointment	18201301	22
Caelo	Soft ointment	17076401/5440	1

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	172632015583	1
Caelo	Soft ointment	14201901	7
Caelo	Soft ointment	1437591	1
Caelo	Soft ointment	15204701	6
Caelo	Soft ointment	100/AKD7	1
Caelo	Soft ointment	101/AKD12	1
Caelo	Soft ointment	17197101	5
Caelo	Soft ointment	18201204	1
Caelo	Soft ointment	19015202	11
Caelo	Soft ointment	19015001	1
Caelo	Soft ointment	17076401	44
Caelo	Soft ointment	I3192502	1
Caelo	Soft ointment	14007302	2
Caelo	Soft ointment	14007402	3
Caelo	Soft ointment	2513A-02542	1
Caelo	Soft ointment	1912A-02542	1
Caecolo/Gehe	Soft ointment	17263201	2
Caecolo/Phönix	Soft ointment	17076401	1
Caecolo/Noweda	Soft ointment	17076401	1
Caesar & Lorenz GmbH	Soft ointment	18002302	1
Caesar & Loretz	Soft ointment	16245201	1
Caesar & Loretz GmbH	Soft ointment	18152901	1
Caesar & Loretz GmbH	Soft ointment	18251101	1
Caesar & Loretz GmbH	Soft ointment	18201402	1
Caesar & Loretz GmbH	Soft ointment	18201301	2
Caesar & Loretz GmbH	Soft ointment	18251301	1
Caesar & Loretz GmbH	Soft ointment	19015101	1
Caesar & Loretz GmbH	Soft ointment	19015202	1
Caesar & Loretz GmbH	Soft ointment	19082301	1
Caesar & Loretz GmbH, 4...	Soft ointment	13053601	1
Caesar & Loretz GmbH/Gehe	Soft ointment	18251101	1
Caesar & Loretz GmbH	Soft ointment	14080501	1
Caesar u Loretz	Soft ointment	13053601	1
caesar&lorenz GmbH,Phönix	Soft ointment	12194502	1
caesar&lorenz GmbH,Phönix	Soft ointment	15959301	1
Caesar&Loretz GmbH/Sana...	Soft ointment	14375602	1
Caesar&lorenz,Phoenix	Soft ointment	12045401	1
Caesar&lorenz,Phoenix	Soft ointment	12045501	1
Caesar&lorenz,Phoenix	Soft ointment	12091303	1
Caesar&lorenz,Phoenix	Soft ointment	12194502	1
Cealo	Soft ointment	17076401	1
Cealo/Gehe	Soft ointment	18163001	1
Cealo/Sanacorp	Soft ointment	15059301	1
Ebert & Jacobi 19.07...	Soft ointment	16083101	1
Euro OTC	Soft ointment	14375602	1
Euro OTC	Soft ointment	14080201	1
Euro OTC	Soft ointment	13192902	1
Euro OTC	Soft ointment	16313501	4
Euro/ Phönix	Soft ointment	4517A-02542	1
euro//Noweda	Soft ointment	18001901	1
Euro/Phönix	Soft ointment	17076501	1
Fagron	Soft ointment	13C04-T04-001710	2
Fagron	Soft ointment	13A08-T12-000186	1
Fagron	Soft ointment	13C04-T04-0002	1
Fagron	Soft ointment	13C04-T05	1
Fagron	Soft ointment	13E13-T14-003679	1
Fagron	Soft ointment	4113A-02542	1
Fagron	Soft ointment	13387402	1
Fagron	Soft ointment	14202301	1
Fagron	Soft ointment	13I24-T04-006936	1

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Supplier	Substance	Batch	Spectra
Fagron	Soft ointment	1324-t03-006933	1
Fagron	Soft ointment	15059601	1
Fagron	Soft ointment	15I08-T01-025888	1
Fagron	Soft ointment	15I08-T02-025891	1
Fagron	Soft ointment	15I08-T01-0205888	1
Fagron	Soft ointment	16F03-T01-033986	2
Fagron	Soft ointment	17076401	1
Fagron	Soft ointment	701878-0002	1
Fagron	Soft ointment	17076501	1
Fagron	Soft ointment	17A03-T01-039998	3
Fagron	Soft ointment	17263101	2
Fagron	Soft ointment	17H28-T03-047827	2
Fagron	Soft ointment	18E07T09055703	2
Fagron	Soft ointment	13E13-T12-003670	3
Fagron	Soft ointment	14e16-t03-012548	1
Fagron	Soft ointment	16G18-T02-035247	3
Fagron	Soft ointment	16245401	1
Fagron	Soft ointment	13A08-T13-000189	1
Fagron	Soft ointment	13C04-T04-001709	3
Fagron	Soft ointment	5869200	1
Fagron	Soft ointment	15F24T16023904	1
Fagron	Soft ointment	13I24-T02-006930	1
Fagron	Soft ointment	12E23-T01	1
Fagron	Soft ointment	12G09-T02	1
Fagron	Soft ointment	2514M-02542	1
Fagron	Soft ointment	14E16-T03-012547	1
Fagron	Soft ointment	15E14-T02-022369	2
Fagron	Soft ointment	13I24-T01-006925	2
Fagron	Soft ointment	13I24-T01-006925	1
Fagron	Soft ointment	14E16-T03-012548	1
Fagron	Soft ointment	15f24-t16-023904	1
Fagron	Soft ointment	16G18-T02-035248	6
Fagron	Soft ointment	15A30	1
Fagron	Soft ointment	15F24-T16-023904	6
Fagron	Soft ointment	14201901	1
Fagron	Soft ointment	15377001	1
Fagron	Soft ointment	299868	1
Fagron	Soft ointment	16a21-t05-029597	1
Fagron	Soft ointment	16A21-T06-029597	1
Fagron	Soft ointment	17A03-T01-039997	7
Fagron	Soft ointment	17A03-T01_039997	1
Fagron	Soft ointment	18E07-T09-055703	1
fargon/Sanacorp	Soft ointment	12353301	1
Fargron/ Noweda	Soft ointment	15A30-T02-018955	2
Fiebig	Soft ointment	16245201	1
Fiebig	Soft ointment	16313401	1
Fiebig	Soft ointment	17263201	2
Fiebig	Soft ointment	18162901	1
Fiebig	Soft ointment	18201402	1
Fiebig	Soft ointment	18201301	2
Fiebig	Soft ointment	18251101	3
Fiebig 32.01.13 ek:4,84EUR	Soft ointment	5317100	1
Finze	Soft ointment	5215100	1
Frau Brinn-Holtz	Soft ointment	1577001	1
Gehe	Soft ointment	5375800	1
Gehe	Soft ointment	14202301	1
Gehe	Soft ointment	16146401	1
Gehe	Soft ointment	16146103	1
Gehe	Soft ointment	16245202	1
Gehe	Soft ointment	305449	1

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Supplier	Substance	Batch	Spectra
Gehe	Soft ointment	17076402	1
Gehe	Soft ointment	16313402	1
GEHE	Soft ointment	16313501	1
GEHE	Soft ointment	17197102	1
GEHE	Soft ointment	17263101	1
GEHE	Soft ointment	18002501	1
GEHE	Soft ointment	18152901	1
gehe 04.12.13	Soft ointment	13192601	1
Gehe am 04.02.2014	Soft ointment	13387402	1
Gehe am 25.02.14	Soft ointment	13375402	1
Caelo	Soft ointment	284057	1
Gehe/04.12.14	Soft ointment	12353301	1
Caelo	Soft ointment	16313501	36
Euro OTC	Soft ointment	16083101	1
Gutenberg-Apotheke	Soft ointment	5600500	3
H.Lamotte	Soft ointment	8004399002	1
H.Lamotte / Anzag	Soft ointment	5317100	1
Hedinger/Gehe	Soft ointment	18140501	1
Henra Lamotte	Soft ointment	5321600	1
Henry Lam./ Sanacorp	Soft ointment	5215100	1
Henry Lamotte	Soft ointment	5067500	1
Henry Lamotte	Soft ointment	5317100	1
Henry Lamotte	Soft ointment	6001368015	2
Henry Lamotte	Soft ointment	8002875005	1
Henry Lamotte	Soft ointment	8002320004	1
Henry Lamotte Oils	Soft ointment	5317100	1
Henry Lamotte Oils / Gehe	Soft ointment	8002320003	1
Henry lamotte Oils GmbH	Soft ointment	802875005	1
Henry Lamotte oils GmbH	Soft ointment	5321600	2
Henry Lamotte Oils GmbH	Soft ointment	5317100	3
Henry Lamotte Oils GmbH	Soft ointment	5496100	1
Henry Lamotte Oils GmbH	Soft ointment	5600500	2
Henry Lamotte Oils GmbH	Soft ointment	5691800	1
Henry Lamotte Oils GmbH	Soft ointment	5789000	2
Henry Lamotte Oils GmbH	Soft ointment	6001368015	1
Henry Lamotte Oils GmbH	Soft ointment	8002320003	1
Henry Lamotte Oils GMBH	Soft ointment	5496100	1
HENRY LAMOTTE OILS GmbH	Soft ointment	6001368015	2
Henry Lamotte Oils GmbH...	Soft ointment	8002320003	2
Henry Lamotte Oils GmbH...	Soft ointment	8004399002	1
Henry Lamotte Oils GmbH...	Soft ointment	5496100	2
Henry Lamotte Oils GmbH...	Soft ointment	5448300	1
Henry Lamotte oils gmbh...	Soft ointment	8004399002	1
Henry Lamotte oils GmbH...	Soft ointment	5448300	1
Henry Lamotte oils GmbH...	Soft ointment	5691000	1
Henry Lamotte Oils GmbH...	Soft ointment	8004399002	1
Henry Lamotte Oils/ Gehe	Soft ointment	61580	1
Henry Lamotte Oils GmbH...	Soft ointment	5789000	3
Henry Lamotte Oils GmbH...	Soft ointment	6001368015	2
Henry Lamotte,Anzag	Soft ointment	5189900	2
Henry Lamotte,Phönix	Soft ointment	5067500	1
Henry Lamotte/ AHD	Soft ointment	8002320003	1
Henry Lamotte/Anzag	Soft ointment	5448300	1
Henry Lamotte/Anzag	Soft ointment	6001368001	1
Henry Lamotte/Anzag	Soft ointment	6001368015	1
Henry Lamotte/GEHE	Soft ointment	5215100	1
Henry Lamotte/GEHE	Soft ointment	5317100	1
Henry Lamotte/GEHE	Soft ointment	5375800	1
Henry Lamotte/Geilenkir...	Soft ointment	8002320003	1
HenryLamotte/Phoenix	Soft ointment	5189900	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Soft ointment	15059401	1
Ichthyol-Gesellschaft	Soft ointment	16245201	1
InfectoPharm/Noweda	Soft ointment	15377001	1
Kehr	Soft ointment	17076501	1
Kehr	Soft ointment	18002302	1
Kehr	Soft ointment	18140501	1
Kehr	Soft ointment	18162901	1
Klosterring	Soft ointment	18251101	2
Krieger/ Henry Lamotte	Soft ointment	8002320003	1
L12/Apomix	Soft ointment	16146401	1
Lamotte	Soft ointment	5215100	1
Lamotte	Soft ointment	5375800	1
Lamotte	Soft ointment	5448300	1
Lamotte	Soft ointment	5789000	3
Lamotte	Soft ointment	8002875005	1
Lamotte /Noweda	Soft ointment	8002875005	2
Lamotte GmbH	Soft ointment	8002320003	1
Lamotte/ Anzag	Soft ointment	5375800	1
Lamotte/ Anzag	Soft ointment	5496100	1
Lamotte/Alliance	Soft ointment	5691000	1
Lamotte/Alliance	Soft ointment	8002875005	1
lamotte/anzag	Soft ointment	5265300	2
lamotte/Kehr	Soft ointment	8002875005	1
Lamotte/Kehr	Soft ointment	5789000	1
Lamotte/Kehr	Soft ointment	6001368015	2
Lamotte/Kehr	Soft ointment	5869200	1
Lamotte/Kehr	Soft ointment	6001368001	1
Lamotte/Kehr	Soft ointment	8002320004	1
Lamotte/Krieger/20.05.2...	Soft ointment	5496100	1
Lamotte/Phoenix	Soft ointment	18201201	1
lamotte7anzag	Soft ointment	5294600	1
Midas	Soft ointment	17076401	1
Midas	Soft ointment	17197201	1
Midas	Soft ointment	18002001	1
Noweda	Soft ointment	60089901	1
Noweda	Soft ointment	11256701	1
Noweda	Soft ointment	11133001	1
Noweda	Soft ointment	14007601	1
Noweda	Soft ointment	15059301	1
Noweda	Soft ointment	15376901	2
Noweda	Soft ointment	15377001	2
Noweda	Soft ointment	16245202	1
Noweda	Soft ointment	17076401	1
Noweda	Soft ointment	18002101	1
Noweda	Soft ointment	18004473	1
Caelo	Soft ointment	14375801	8
Fagron	Soft ointment	13I24-T03-006933	1
Caelo	Soft ointment	18001701	4
Caelo	Soft ointment	15059401	10
phoenix	Soft ointment	17076401	1
Phoenix	Soft ointment	12045701	1
Phoenix	Soft ointment	13192601	1
Phoenix	Soft ointment	14007601	1
Phoenix	Soft ointment	13387403	1
Phoenix	Soft ointment	16083002	1
Phoenix	Soft ointment	17197102	1
Phoenix	Soft ointment	16313501	1
PHOENIX 10.03.2014	Soft ointment	14007302	1
Phoenix/Cealo	Soft ointment	17263201	1
phönix	Soft ointment	12194701	1

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Supplier	Substance	Batch	Spectra
phönix	Soft ointment	16083002	1
phönix	Soft ointment	16083001	1
phönix	Soft ointment	17076401	1
Phönix	Soft ointment	11256301	1
Phönix	Soft ointment	13053801	1
Phönix	Soft ointment	13192901	1
Phönix	Soft ointment	14264301	1
Phönix	Soft ointment	16245201	1
Phönix	Soft ointment	17197101	1
Phönix	Soft ointment	17000370	1
Phönix	Soft ointment	18201402	1
Phönix Gotha	Soft ointment	271425	1
Phönix Gotha	Soft ointment	278046	1
Phönix Gotha	Soft ointment	286010	1
Phönix Gotha	Soft ointment	291331	1
Caelo	Soft ointment	16245201	31
Caelo	Soft ointment	17197103	1
Caelo	Soft ointment	18001901	4
Fagron	Soft ointment	16A21-T05-029597	10
Sana 18.12.14 EK 5,39	Soft ointment	14202201	1
sanacoro	Soft ointment	15376801	1
sanacorp	Soft ointment	14202301	1
Sanacorp	Soft ointment	12194501	1
Sanacorp	Soft ointment	13192901	1
Sanacorp	Soft ointment	13192701	1
Sanacorp	Soft ointment	13375402	1
Sanacorp	Soft ointment	94/AKD1	1
Sanacorp	Soft ointment	14080301	1
Sanacorp	Soft ointment	96/AKD3	1
Sanacorp	Soft ointment	14375801	1
Sanacorp	Soft ointment	97/AKD4	1
Sanacorp	Soft ointment	15059301	1
Sanacorp	Soft ointment	15376801	1
Sanacorp	Soft ointment	100/AKD10	1
Sanacorp	Soft ointment	16313501	1
Sanacorp	Soft ointment	17076801	1
Sanacorp	Soft ointment	17076401	3
Sanacorp	Soft ointment	17076501	1
Sanacorp	Soft ointment	17263201	2
Sanacorp	Soft ointment	17197102	1
Sanacorp	Soft ointment	17H28-T03-047827	5
Sanacorp	Soft ointment	18002302	1
Sanacorp	Soft ointment	18002501	2
Sanacorp	Soft ointment	18163001	1
Sanacorp	Soft ointment	18201402	1
Sanacorp 19.01.15 EK 5,39	Soft ointment	14202001	1
Caelo	Soft ointment	14202001	13
Caelo	Soft ointment	11282301	2
Caelo	Soft ointment	1422001	1
SanacorpWE:28.01.2017 ...	Soft ointment	16245201	1
THC Rezeptur-Set	Soft ointment	17076401	1
VDL	Soft ointment	14202301	1
Caelo	Soft ointment	12091303	3
Wolf-Apotheke	Soft ointment	16083101	1
	Soft ointment	16G18-T02-035248	1
Caelo	Soft ointment	12353301	9
Caelo	Soft ointment	14080501	9
Caelo	Soft ointment		4
	Soft ointment	14007601	1
	Soft ointment	15059301	1

- 136 035 spectra from 703 *Apo-Ident* customers from a total of 34 927 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Soft ointment* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Soft ointment* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	350	0	56 009
Type B	0	1035	15	68 424
Type C	0	2253	65	136 035

The substance/substance group *Soft ointment* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.2857 %)
Type B	100.0000 % (> 99.9653 %)	98.5714 % (> 98.2857 %)
Type C	100.0000 % (> 99.6452 %)	97.1959 % (> 97.0664 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Soft ointment* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Macrogols 300	43.71	—
Macrogol ointment	56.35	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Soft ointment* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30896	31984	5.17	94.10
30924	31984	7.49	102.09
31452	31452	0.00	93.62
31984	31984	0.00	94.34
32097	32097	0.00	88.12
32871	32871	0.00	93.77
34687	31984	4.48	90.83

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Softisan® 378 / Wool fat**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30743-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Softisan® 378 / Wool fat; Adeps lanae; Softisan® 378; Wool fat

Special notes

When selecting the *Softisan® 378 / Wool fat* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Softisan® 378	5	1	121
Wool fat	9	7	424

Second-stage model

For differentiation of the substance/substance group *Softisan*[®] 378 / *Wool fat* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Softisan*[®] 378 / *Wool fat*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	<i>Softisan</i> [®] 378	13370104	31472	40	20131119
Caelo	<i>Softisan</i> [®] 378	14301114	32298	40	20141118
Fagron	<i>Softisan</i> [®] 378	12K27-N05	30887	60	20121204
Fagron	<i>Softisan</i> [®] 378	13D26-N12	31117	40	1407632
Fagron	<i>Softisan</i> [®] 378	15G20-B10-326361	32964	40	1704407
Caelo	Wool fat	12122403	30743	40	20120514
Caelo	Wool fat	14086904	31479	40	20140321
Caelo	Wool fat	15050902	31742	60	20150223
Caelo	Wool fat	15198802	31952	60	20150625
Euro OTC	Wool fat	1403023-01	31533	60	AR-14-FG-012696-01
Euro OTC	Wool fat	1502024-01	31743	60	AR-16-FG-003762-01
Euro OTC	Wool fat	1601040	31847	60	20160127*
Henry Lamotte	Wool fat	5320900	30925	40	20120608
Henry Lamotte	Wool fat	8003158002	33939	40	20170628

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 680 spectra of 14 reference samples from the substance/substance group *Softisan*[®] 378 / *Wool fat*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 14 different batches.
- 55 679 spectra from a total of 1102 batches from further 217 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 400 spectra of 10 reference samples from the substance/substance group *Softisan*® 378 / *Wool fat*.
- Among them are spectra of independent samples from 8 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Softisan [®] 378	162686	33078	40
Caelo	Wool fat	152923	31998	40
Caelo	Wool fat	16221907	33111	40
Caelo	Wool fat	173075	34017	40
Euro OTC	Wool fat	1607001	32459	40
Euro OTC	Wool fat	1701051	33245	40
Euro OTC	Wool fat	1807008-01	34212	40
Euro OTC	Wool fat	1907027	34660	40
Caelo	Softisan [®] 378	14301114	32299	40
Caelo	Softisan [®] 378	162686	33101	40

- 69 074 spectra from a total of 1493 batches from further 359 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 3189 spectra from 552 *Apo-Ident* customers from 560 batches from the substance/substance group *Softisan*® 378 / *Wool fat*.
- Among them are spectra of independent samples from 542 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Aallianc. Healthc. / TH...	Softisan [®] 378	98561	7
AHD	Softisan [®] 378	17I07-B01-338745	1
AHD	Softisan [®] 378	17I07-B01-340337	1
AHD	Softisan [®] 378	701203-0001	1
AHD	Softisan [®] 378	17J06-B01-349162	1
AHD	Softisan [®] 378	18G30-B05-355402	1
AHD	Softisan [®] 378	18G-B05-358235	1
Caelo	Softisan [®] 378	98561	1
Allianc. Health. / THC ...	Softisan [®] 378	92456	1
Bionorica	Softisan [®] 378	107075	2
Bionorica	Softisan [®] 378	109779	4
Bionorica	Softisan [®] 378	109778	3
Bionorica	Softisan [®] 378	113358	3
Bionorica / Alliance	Softisan [®] 378	103897	1
Bionorica / Alliance	Softisan [®] 378	107075	1

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Supplier	Substance	Batch	Spectra
Bionorica / Alliance	Softisan [®] 378	113358	1
Bionorica / Alliance He...	Softisan [®] 378	109779	3
Bionorica ethics	Softisan [®] 378	118060	1
Bionorica Ethics	Softisan [®] 378	109779	1
Bionorica ethics / AHD	Softisan [®] 378	113358	1
Bionorica ethics / Allia...	Softisan [®] 378	113358	1
Bionorica Ethics / Noweda	Softisan [®] 378	98561	1
Bionorica ethics / Allian...	Softisan [®] 378	118060	1
Bionorica ethics / Noweda	Softisan [®] 378	107075	1
Bionorica SE	Softisan [®] 378	107075	1
Bionorica SE	Softisan [®] 378	113358	1
Bionorica / Noweda	Softisan [®] 378	118060	1
Bionorica / Sanacorp	Softisan [®] 378	118060	1
Bionorica / Fiebig	Softisan [®] 378	109779	1
Bionorica / Gehe	Softisan [®] 378	75850	3
Bionorica / Gehe	Softisan [®] 378	107075	1
Bionorica / Kehr	Softisan [®] 378	103897	1
Bionorica / Kehr	Softisan [®] 378	107075	1
Bionorica / Noweda	Softisan [®] 378	98561	1
Bionorica / Noweda	Softisan [®] 378	103897	2
Bionorica / phoenix	Softisan [®] 378	318E-02911	1
Bionorica Ethics / GEHE	Softisan [®] 378	130243	1
Bionorica ethics / Gehe	Softisan [®] 378	118060	1
Bombastus	Softisan [®] 378	17B16-B06-331749	1
Bombastus	Softisan [®] 378	17816-806-331749	1
Bombastus	Softisan [®] 378	302709	1
Caelo	Softisan [®] 378	13012703	1
Caelo	Softisan [®] 378	10310003	1
Caelo	Softisan [®] 378	10310008	1
Caelo	Softisan [®] 378	11359302	1
Caelo	Softisan [®] 378	3071201	1
Caelo	Softisan [®] 378	18011302	1
Caelo	Softisan [®] 378	21031310	1
Caelo	Softisan [®] 378	27091306	1
Caelo	Softisan [®] 378	57657	1
Caelo	Softisan [®] 378	14111312	1
Caelo	Softisan [®] 378	11121304	1
Caelo	Softisan [®] 378	73059	1
Caelo	Softisan [®] 378	28031401	1
Caelo	Softisan [®] 378	1081408	1
Caelo	Softisan [®] 378	14301103	2
Caelo	Softisan [®] 378	14301112	1
Caelo	Softisan [®] 378	15G20-B10-310231	1
Caelo	Softisan [®] 378	14101712	1
Caelo	Softisan [®] 378	16021507	1
Caelo	Softisan [®] 378	4041501	1
Caelo	Softisan [®] 378	22062015B	1
Caelo	Softisan [®] 378	103897	2
Caelo	Softisan [®] 378	107075	2
Caelo	Softisan [®] 378	21071707	1
Caelo	Softisan [®] 378	19021811	1
Caelo	Softisan [®] 378	25041804	1
Caelo	Softisan [®] 378	12051807	1
Caelo	Softisan [®] 378	23051811	1
Caelo	Softisan [®] 378	17I07-B01-340337	1
Caelo	Softisan [®] 378	20101804	1
Caelo	Softisan [®] 378	17J06-B01-348073	1
Caelo	Softisan [®] 378	190560102	1
Caelo	Softisan [®] 378	19056102	4
Caelo	Softisan [®] 378	14301104	2

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Supplier	Substance	Batch	Spectra
Caelo	Softisan [®] 378	13012707	5
Caelo	Softisan [®] 378	14301113	1
Caelo	Softisan [®] 378	19056196	1
Caelo	Softisan [®] 378	17247109	1
Caelo	Softisan [®] 378	15G20B10320309	1
Caelo	Softisan [®] 378	113358	1
Caelo	Softisan [®] 378	16010402	2
Caelo	Softisan [®] 378	16268611	2
Caelo	Softisan [®] 378	209602	1
Caelo	Softisan [®] 378	15gb10326361	1
Caelo	Softisan [®] 378	3/2017	1
Caelo	Softisan [®] 378	15G20-B10-316518	2
Caelo	Softisan [®] 378	13012704	1
Caelo	Softisan [®] 378	13370102	2
Caelo	Softisan [®] 378	13370112	1
Caelo	Softisan [®] 378	18146401	4
Caelo	Softisan [®] 378	18146409	2
Delta	Softisan [®] 378	17J06-B01-525706	2
Fagron	Softisan [®] 378	12/24-N01	1
Fagron	Softisan [®] 378	13B11-N01	1
Fagron	Softisan [®] 378	13D26-N02	1
Fagron	Softisan [®] 378	209602	4
Fagron	Softisan [®] 378	13H22-N01	5
Fagron	Softisan [®] 378	12I24-N01	1
Fagron	Softisan [®] 378	303624	2
Fagron	Softisan [®] 378	311662	2
Fagron	Softisan [®] 378	14F11-B04-296083	3
Fagron	Softisan [®] 378	14F11B04-296083	1
Fagron	Softisan [®] 378	14F11-B04-299298	5
Fagron	Softisan [®] 378	15G20-B10-310231	1
Fagron	Softisan [®] 378	15G20-B10-311893	2
Fagron	Softisan [®] 378	15G20-10-316518	1
Fagron	Softisan [®] 378	14F11-B04	3
Fagron	Softisan [®] 378	15G20-B10-316518	2
Fagron	Softisan [®] 378	15G20-B10_316518	1
Fagron	Softisan [®] 378	15G20-B10	2
Fagron	Softisan [®] 378	15G20-B10-525116	2
Fagron	Softisan [®] 378	17B16-B06-525441	1
Fagron	Softisan [®] 378	17B16-B06-334707	2
Fagron	Softisan [®] 378	17F15-B05-336058	2
Fagron	Softisan [®] 378	17F-15-B05-336058	1
Fagron	Softisan [®] 378	17B16-B06-333147	1
Fagron	Softisan [®] 378	17I07-B01-338745	3
Fagron	Softisan [®] 378	17/07-B01-340337	1
Fagron	Softisan [®] 378	17J06-B01_342646	1
Fagron	Softisan [®] 378	17J06-B01-342646	2
Fagron	Softisan [®] 378	17F15-B05-336059	2
Fagron	Softisan [®] 378	17J06-B01-346209	2
Fagron	Softisan [®] 378	17J06-B01-348073	4
Fagron	Softisan [®] 378	17J06-B01-349162	3
Fagron	Softisan [®] 378	170828	1
Fagron	Softisan [®] 378	18G30-B05-352747	2
Fagron	Softisan [®] 378	19A30-B04526060	1
Fagron	Softisan [®] 378	505717	3
Fagron	Softisan [®] 378	18G30-B05-358235	1
Fagron	Softisan [®] 378	11520	2
Fagron	Softisan [®] 378	13H22-N01	1
Fagron	Softisan [®] 378	17F15-B05-525528	1
Fagron	Softisan [®] 378	17I07-B01-525611	2
Fagron	Softisan [®] 378	17B16-B06-331749	1

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Supplier	Substance	Batch	Spectra
Fagron	Softisan [®] 378	17107-B01-340337	1
Fagron	Softisan [®] 378	15G20-B10-525379	1
Fagron	Softisan [®] 378	514E-02911	1
Fagron	Softisan [®] 378	17J06-B01-525718	3
Fargon	Softisan [®] 378	17I07-B01-338745	1
Fragon	Softisan [®] 378	17F15-B05-525528	1
GEHE	Softisan [®] 378	17B16-B06	1
Gehe Kassel 09.02.2015	Softisan [®] 378	75850	1
Caelo	Softisan [®] 378	16268605	1
Noweda	Softisan [®] 378	2012060444	1
Noweda	Softisan [®] 378	109704	1
Caelo	Softisan [®] 378	17247103	1
Phoenix Goettin	Softisan [®] 378	2013091014	2
Fagron	Softisan [®] 378	15G20-B10-525272	1
Sanacorp	Softisan [®] 378	3/AKD1	1
Sanacorp	Softisan [®] 378	12A18-N11	1
Caelo	Softisan [®] 378	13H22-N01	1
Thc	Softisan [®] 378	2012060444	1
THC Pharm GmbH	Softisan [®] 378	113358	1
THC Pharma	Softisan [®] 378	88154	1
THC Pharma	Softisan [®] 378	92456	1
THC Pharma	Softisan [®] 378	98561	1
THC Pharma / Phoenix	Softisan [®] 378	103897	2
THC Pharma/Phönix	Softisan [®] 378	95076	1
Caelo	Softisan [®] 378	16010408	1
ACM	Wool fat	KNC1879J13	2
AHD	Wool fat	14238002	2
AHD 29.01.15 EK 7,67	Wool fat	14238006	1
AHD;15.12.14;4,82EUR	Wool fat	14238002	2
AHD;9.7.15; 4,78EUR	Wool fat	15050902	1
AHDE 19,05, 2015	Wool fat	14238002	1
Alliance healthcare	Wool fat	5528000	1
Alliance Healthcare	Wool fat	12224404	1
Alliance Healthcare	Wool fat	13039403	1
Alliance Healthcare	Wool fat	8004748003	2
Allianz Healthcare 22.0...	Wool fat	14238008	1
Alte Apotheke	Wool fat	16221904	1
Anzag	Wool fat	5375400	2
Anzag	Wool fat	15050906	1
Anzag	Wool fat	15198804	1
Anzag	Wool fat	16003905	1
Anzag	Wool fat	8002112003	1
Anzag	Wool fat	8002320010	1
Anzag	Wool fat	8002760003	1
Anzag	Wool fat	8003158003	1
Anzag 25.02.13 ek: 14,44EUR	Wool fat	5264700	1
Anzag/13.02.2013	Wool fat	12122403	1
Anzag/Beiersdorf	Wool fat	15050902	1
Fagron	Wool fat	14086906	1
Apo Ident/ Noweda	Wool fat	18139302	2
apomix/Noweda	Wool fat	311019	1
Bergchemie	Wool fat	14086904	1
Berkel AHK	Wool fat	14086905	1
Bionorica ethics/Allian...	Wool fat	8004134015	1
Bomastus direkt	Wool fat	60081303	1
Bombastus	Wool fat	305553	1
Bombastus	Wool fat	260535	1
Bombastus	Wool fat	254683	1
Bombastus	Wool fat	272421	1
Bombastus	Wool fat	275701	3

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Supplier	Substance	Batch	Spectra
Bombastus	Wool fat	273197	1
Bombastus	Wool fat	275888	2
Bombastus	Wool fat	272422	1
Bombastus	Wool fat	277470	1
Bombastus	Wool fat	280167	2
Bombastus	Wool fat	271419	2
Bombastus	Wool fat	281849	1
Bombastus	Wool fat	286361	1
Bombastus	Wool fat	288711	2
Bombastus	Wool fat	290972	1
Bombastus	Wool fat	296321	4
Bombastus	Wool fat	301843	1
Bombastus	Wool fat	16345104	1
Bombastus	Wool fat	17307503	1
Bombastus	Wool fat	17002020	2
Bombastus	Wool fat	18005684	1
Bombastus	Wool fat	286362	3
Bombastus	Wool fat	303927	1
Bombastus	Wool fat	267377	2
Bombastus	Wool fat	288712	4
Bombastus	Wool fat	291339	1
Bombastus	Wool fat	290878	1
Bombastus	Wool fat	18029902	1
Bombastus	Wool fat	299653	2
Bombastus	Wool fat	14147902	1
Bombastus	Wool fat	295371	1
Bombastus	Wool fat	294438	3
Bombastus	Wool fat	301844	2
Bombastus	Wool fat	311019	1
Bombastus	Wool fat	297572	1
Bombastus	Wool fat	275889	3
Bombastus	Wool fat	18002043	3
Bombastus	Wool fat	281850	3
Bombastus	Wool fat	305552	5
Bombastus	Wool fat	308893	2
Bombastus	Wool fat	18002044	1
Bombastus	Wool fat	303928	9
Bombastus	Wool fat	17248107	1
Bombastus	Wool fat	180003425	1
Bombastus	Wool fat	291336	2
Bombastus	Wool fat	299568	1
Bombastus	Wool fat	303926	3
Bombastus	Wool fat	279840	1
Bombastus	Wool fat	18003426	7
Bombastus	Wool fat	268668	2
Bombastus	Wool fat	283526	3
Bombastus	Wool fat	308894	1
Bombastus	Wool fat	17002018	1
Bombastus	Wool fat	17000437	5
Caelo	Wool fat	13398202	8
Caelo	Wool fat	14147903	18
Caelo	Wool fat	1505906	1
Caelo	Wool fat	17307503	18
Caelo	Wool fat	18139302	17
Caelo	Wool fat	11261102	1
Caelo	Wool fat	11261103	1
Caelo	Wool fat	11097402	1
Caelo	Wool fat	11261106	2
Caelo	Wool fat	11203902	2
Caelo	Wool fat	1603211056	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	12015605	5
Caelo	Wool fat	12015603	6
Caelo	Wool fat	26061205	1
Caelo	Wool fat	12015604	3
Caelo	Wool fat	13081206	1
Caelo	Wool fat	12074502	4
Caelo	Wool fat	1309211056	1
Caelo	Wool fat	27091204	1
Caelo	Wool fat	6111212	1
Caelo	Wool fat	5211E-01056	1
Caelo	Wool fat	24422111203903	1
Caelo	Wool fat	612211056	1
Caelo	Wool fat	12006702	1
Caelo	Wool fat	14121204	1
Caelo	Wool fat	5212Q-01056	1
Caelo	Wool fat	5253400	1
Caelo	Wool fat	12224405	14
Caelo	Wool fat	12122406	7
Caelo	Wool fat	12224404	18
Caelo	Wool fat	31011302	1
Caelo	Wool fat	5264700	3
Caelo	Wool fat	5375400	2
Caelo	Wool fat	11031302	1
Caelo	Wool fat	12224403	4
Caelo	Wool fat	12321805	9
Caelo	Wool fat	15041306	1
Caelo	Wool fat	13039403	27
Caelo	Wool fat	13039402	15
Caelo	Wool fat	2113U01056	1
Caelo	Wool fat	12321803	12
Caelo	Wool fat	8061304	1
Caelo	Wool fat	12091301	1
Caelo	Wool fat	16102013D	1
Caelo	Wool fat	30101311	1
Caelo	Wool fat	13213108	19
Caelo	Wool fat	13213105	8
Caelo	Wool fat	16121308	1
Caelo	Wool fat	5520800	4
Caelo	Wool fat	1321308	1
Caelo	Wool fat	13306206	18
Caelo	Wool fat	14022014A	1
Caelo	Wool fat	13306203	12
Caelo	Wool fat	412062-1-P	1
Caelo	Wool fat	13303208	1
Caelo	Wool fat	15031401	1
Caelo	Wool fat	3x13398202	1
Caelo	Wool fat	29041407	1
Caelo	Wool fat	5052014A	1
Caelo	Wool fat	7051401	1
Caelo	Wool fat	4061402	1
Caelo	Wool fat	14086906	19
Caelo	Wool fat	14086903	16
Caelo	Wool fat	14086907	7
Caelo	Wool fat	5081406	1
Caelo	Wool fat	14147902	21
Caelo	Wool fat	4101404	1
Caelo	Wool fat	6102014C	1
Caelo	Wool fat	5763900	2
Caelo	Wool fat	14111402	1
Caelo	Wool fat	1423006	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	8011509	1
Caelo	Wool fat	14238010	6
Caelo	Wool fat	14304502	16
Caelo	Wool fat	15050904	11
Caelo	Wool fat	15292311	4
Caelo	Wool fat	16044306	8
Caelo	Wool fat	23091704	1
Caelo	Wool fat	14238006	16
Caelo	Wool fat	23012015A	1
Caelo	Wool fat	11041312036703	1
Caelo	Wool fat	14238008	22
Caelo	Wool fat	14238001	2
Caelo	Wool fat	18021502	1
Caelo	Wool fat	4032015A	1
Caelo	Wool fat	1321305	1
Caelo	Wool fat	18041503	1
Caelo	Wool fat	15050906	16
Caelo	Wool fat	2061509	1
Caelo	Wool fat	1505090	1
Caelo	Wool fat	21071502	1
Caelo	Wool fat	1518405	2
Caelo	Wool fat	15158405	23
Caelo	Wool fat	1518401	1
Caelo	Wool fat	15198803	22
Caelo	Wool fat	15292313	1
Caelo	Wool fat	15421401	1
Caelo	Wool fat	16003902	33
Caelo	Wool fat	16044302	50
Caelo	Wool fat	16163002	17
Caelo	Wool fat	161630	1
Caelo	Wool fat	16221905	12
Caelo	Wool fat	16221903	20
Caelo	Wool fat	16221906	14
Caelo	Wool fat	6221903	1
Caelo	Wool fat	23021709	1
Caelo	Wool fat	9041706	1
Caelo	Wool fat	16267204	15
Caelo	Wool fat	16345104	64
Caelo	Wool fat	16051701	1
Caelo	Wool fat	16345107	15
Caelo	Wool fat	16345106	13
Caelo	Wool fat	15071705	1
Caelo	Wool fat	163451045377	1
Caelo	Wool fat	17167702	6
Caelo	Wool fat	17167701	20
Caelo	Wool fat	23101703	1
Caelo	Wool fat	17139301	38
Caelo	Wool fat	16345108	1
Caelo	Wool fat	171677001	1
Caelo	Wool fat	13011801	1
Caelo	Wool fat	1739301	1
Caelo	Wool fat	19021801	1
Caelo	Wool fat	17000437	1
Caelo	Wool fat	23041801	1
Caelo	Wool fat	18029902	18
Caelo	Wool fat	17284103	1
Caelo	Wool fat	17307506	21
Caelo	Wool fat	24051801	1
Caelo	Wool fat	17307902	1
Caelo	Wool fat	17248106	2

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	17307508	15
Caelo	Wool fat	29061802	1
Caelo	Wool fat	17307906	1
Caelo	Wool fat	22091801	1
Caelo	Wool fat	8004134001	1
Caelo	Wool fat	173057506	1
Caelo	Wool fat	18029901	4
Caelo	Wool fat	17111802	1
Caelo	Wool fat	18029905	2
Caelo	Wool fat	9011901	1
Caelo	Wool fat	18224304	9
Caelo	Wool fat	18168701	1
Caelo	Wool fat	18224305	17
Caelo	Wool fat	18314702	6
Caelo	Wool fat	19043401	3
Caelo	Wool fat	19100505	5
Caelo	Wool fat	19100508	1
Caelo	Wool fat	18224302	29
Caelo	Wool fat	14238002	11
Caelo	Wool fat	16221907	41
Caelo	Wool fat	14304501	23
Caelo	Wool fat	11203903	1
Caelo	Wool fat	18131302	1
Caelo	Wool fat	13094905	17
Caelo	Wool fat	1309405	1
Caelo	Wool fat	17307505	14
Caelo	Wool fat	12321807	2
Caelo	Wool fat	75798803	1
Caelo	Wool fat	18224204	1
Caelo	Wool fat	1701051-01	1
Caelo	Wool fat	13398201	15
Caelo	Wool fat	16221904	29
Caelo	Wool fat	18139304	7
Caelo	Wool fat	AKD17	1
Caelo	Wool fat	5163200	1
Caelo	Wool fat	20160727Ma6	1
Caelo	Wool fat	17139303	38
Caelo	Wool fat	13306204	7
Caelo	Wool fat	12321802	8
Caelo	Wool fat	12036704	6
Caelo	Wool fat	12224402	1
Caelo	Wool fat	12321801	2
Caelo	Wool fat	5727500	1
Caelo	Wool fat	18139306-W20181115Ma	1
Caelo	Wool fat	13398291	1
Caelo	Wool fat	16044303	27
Caelo	Wool fat	167(18139302)	1
Caelo	Wool fat	168(18224304)	1
Caelo	Wool fat	172488107	1
Caelo	Wool fat	18139303	10
Caelo	Wool fat	13094903	13
Caelo	Wool fat	13094904	1
Caelo	Wool fat	14147905	1
Caelo	Wool fat	17307502	19
Caelo	Wool fat	14086902	1
Caelo	Wool fat	166(18029903)	1
Caelo	Wool fat	14147901	13
Caelo	Wool fat	16163006	31
Caelo	Wool fat	1613001	1
Caelo	Wool fat	15158402	44

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	17307501	9
Caelo	Wool fat	1303403	1
Caelo	Wool fat	1336205	1
Caelo	Wool fat	15158401	25
Caelo	Wool fat	1613006	1
Caelo	Wool fat	18003426	1
Caelo	Wool fat	5860600	1
Caelo	Wool fat	1206702	1
Caelo	Wool fat	3112U-01056	1
Caelo	Wool fat	13213104	16
Caelo	Wool fat	3513U-01056	1
Caelo	Wool fat	2814U-01056	1
Caelo	Wool fat	316E-01056	1
Caelo	Wool fat	165 (17307505)	1
Caelo	Wool fat	140713c	1
Caelo	Wool fat	1231802	1
Caelo	Wool fat	19043402	3
Caelo	Wool fat	311201702	1
Caelo	Wool fat	4013Q1056	1
Caelo	Wool fat	13213107	17
Caelo	Wool fat	13306208	15
Caelo	Wool fat	13306205	7
Caelo	Wool fat	13306207	16
Caelo	Wool fat	1914M1056	1
Caelo	Wool fat	286362	1
Caelo	Wool fat	14238009	18
Caelo	Wool fat	14238007	7
Caelo	Wool fat	15292309	5
Caelo	Wool fat	8002112001	1
Caelo	Wool fat	8002760001	2
Caelo	Wool fat	1713901	2
Caelo	Wool fat	1713903	1
Caelo	Wool fat	17167704	9
Caelo	Wool fat	8004134015	2
Caelo	Wool fat	18139305	9
Caelo	Wool fat	19174604	1
Caelo	Wool fat	1206703	1
Caelo	Wool fat	15158404	1
Caelo	Wool fat	164 (17307505)	1
Caelo	Wool fat	18314703	4
Caelo	Wool fat	169 (18314702)	1
Caelo	Wool fat	170 (18314702)	1
Caelo	Wool fat	13039405	10
Caelo	Wool fat	1321307	1
Caelo	Wool fat	5528000	1
Caelo	Wool fat	15050903	15
Caelo	Wool fat	294643	1
Caelo	Wool fat	15292316	16
Caelo	Wool fat	8002144001	3
Caelo	Wool fat	16328201	1
Caelo	Wool fat	171339301	1
Caelo	Wool fat	1167701	1
Caelo	Wool fat	1767704	1
Caelo	Wool fat	180808184	1
Caelo	Wool fat	17307507	30
Caelo	Wool fat	1730750	1
Caelo	Wool fat	18139306	11
Caelo	Wool fat	18224301	16
Caelo	Wool fat	8004748002	1
Caelo	Wool fat	133062707	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	14238003	7
Caelo	Wool fat	14238005	7
Caelo	Wool fat	16003901	33
Caelo	Wool fat	16044304	1
Caelo	Wool fat	16163005	1
Caelo	Wool fat	17139302	12
Caelo	Wool fat	17248103	38
Caelo	Wool fat	181393007	1
Caelo	Wool fat	17139301-20171106Ma4	1
Caelo	Wool fat	82325376	1
Caelo	Wool fat	142383	1
Caelo	Wool fat	1434502	1
Caelo	Wool fat	14304504	7
Caelo	Wool fat	17248105	17
Caelo	Wool fat	17248107	16
Caelo	Wool fat	18224306	6
Caelo	Wool fat	19100504	5
Caelo	Wool fat	19100506	1
Caelo	Wool fat	171677045622	1
Caelo	Wool fat	173075025782	1
Caelo	Wool fat	13094902	2
Caelo	Wool fat	132131104	1
Caelo	Wool fat	1094641	1
Caelo	Wool fat	16267203	2
Caelo	Wool fat	1267201	2
Caelo	Wool fat	308893	1
Caelo	Wool fat	17248102	1
Caelo	Wool fat	18139308	12
Caelo	Wool fat	19100502	4
Caelo	Wool fat	151458402	1
Caelo	Wool fat	17248104	19
Caelo	Wool fat	1213E-01056	1
Caeol/Stumpf	Wool fat	15292316	2
caesar	Wool fat	14304501	1
caesar	Wool fat	16044302	1
Caesar & Loretz GmbH	Wool fat	12036703	1
Caesar & Loretz GmbH	Wool fat	12122403	1
Caesar & Loretz GmbH	Wool fat	13213104	1
Caesar & Loretz GmbH	Wool fat	13306205	1
Caesar & Loretz GmbH	Wool fat	14086903	1
Caesar & Loretz GmbH	Wool fat	14238002	1
Caesar & Loretz GmbH	Wool fat	14304501	1
Caesar & Loretz GmbH	Wool fat	15050902	1
Caesar & Loretz GmbH	Wool fat	15050903	1
Caesar & Loretz GmbH	Wool fat	16345106	1
Caesar & Loretz GmbH	Wool fat	18029902	1
Caesar & Loretz GmbH	Wool fat	18224304	2
Caesar & Loretz GmbH	Wool fat	18224305	3
Caesar & Loretz GmbH	Wool fat	18139303	1
Caesar & Loretz GmbH	Wool fat	18314703	1
Caesar & Loretz GmbH	Wool fat	19100505	1
Caesar & Loretz GmbH	Wool fat	19100504	1
Caesar & Loretz GmbH Hi...	Wool fat	16163001	1
Caesar & Loretz GmbH, 4...	Wool fat	12036703	1
Caesar & Loretz GmbH, 4...	Wool fat	13039402	1
Caesar & Loretz GmbH/AHD	Wool fat	18224305	1
Caesar & Loretz GmbH/Mi...	Wool fat	19100504	1
Caesar & Loretz/Noweda	Wool fat	16345104	1
Caesar und Loretz GmbH	Wool fat	17167701	1
Caesar&Loretz	Wool fat	15050903	1

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Supplier	Substance	Batch	Spectra
Caesar&Loretz	Wool fat	15198802	1
Caesar&Loretz GmbH	Wool fat	16003901	1
Caesar&Loretz GmbH,25.0...	Wool fat	16267201	2
Caesar&Loretz GmbH/Anzag	Wool fat	13213105	1
Caesar&Loretz,AHC	Wool fat	14238002	1
Caesar&Loretz/Alliance	Wool fat	17307507	1
Caesar&Loretz/Noweda	Wool fat	15198802	1
Caleo	Wool fat	15050903	1
Cealo/Gehe	Wool fat	18029902	1
Cealo/Sanacorp	Wool fat	16221905	2
cesar&lorentz/Phönix	Wool fat	12321805	1
chaelo/gehe	Wool fat	17248103	1
Cordes	Wool fat	11203908	1
Delta Apotheke	Wool fat	18139306	2
E Plus	Wool fat	17002020	1
EuRho	Wool fat	15198803	1
Euro OTC	Wool fat	1701051-01	2
Euro OTC	Wool fat	14238007	1
Euro OTC	Wool fat	1701051-02	1
Euro OTC	Wool fat	16345107	1
Euro OTC	Wool fat	1601040-01	2
Euro OTC	Wool fat	16345104	1
Euro OTC	Wool fat	1607001-01	1
Euro OTC	Wool fat	1305037-01	1
Euro OTC	Wool fat	301843	1
Euro OTC	Wool fat	14147902	1
Euro OTC	Wool fat	17248103	1
Euro OTC	Wool fat	13398201	1
Euro OTC	Wool fat	17002019	1
Euro OTC	Wool fat	17307501	1
Fagron	Wool fat	11L07-T01	1
Fagron	Wool fat	5264700	1
Fagron	Wool fat	12H31-T01	1
Fagron	Wool fat	12K07-T51-00357	1
Fagron	Wool fat	15050904	1
Fagron	Wool fat	15B27-T27-023866	1
Fagron	Wool fat	8002112002	1
Fagron	Wool fat	17248106	1
Fagron	Wool fat	14B14-T03	1
Fagron	Wool fat	18029902	1
Fagron	Wool fat	14304502	1
Fagron	Wool fat	6001861002	1
Fagron	Wool fat	8004748002	1
Fiebig	Wool fat	16003902	1
Fiebig	Wool fat	16345106	1
Fiebig	Wool fat	17167702	1
Fiebig	Wool fat	17248104	1
Fiebig	Wool fat	18139305	1
Caelo	Wool fat	16267201	45
Finze	Wool fat	5264700	2
Gatt-Koller	Wool fat	1803528	1
Gatt-Koller	Wool fat	1803868	1
Gatt-Koller	Wool fat	1804107	1
Gehe	Wool fat	12036703	2
Gehe	Wool fat	1230113	1
Gehe	Wool fat	12224404	1
Gehe	Wool fat	5375400	2
Gehe	Wool fat	13039403	1
Gehe	Wool fat	14147901	1
Gehe	Wool fat	5763900	1

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Supplier	Substance	Batch	Spectra
Gehe	Wool fat	5908900	1
Gehe	Wool fat	16044306	1
Gehe	Wool fat	8002112002	3
Gehe	Wool fat	16267201	1
Gehe	Wool fat	8002320010	3
Gehe	Wool fat	16221906	1
Gehe	Wool fat	16163006	1
Gehe	Wool fat	17248104	1
GEHE	Wool fat	14086903	1
GEHE	Wool fat	16221905	2
GEHE	Wool fat	16163006	1
GEHE	Wool fat	16221902	1
GEHE	Wool fat	18029903	1
GEHE	Wool fat	18029902	1
GEHE	Wool fat	17307508	1
GEHE	Wool fat	18139302	1
GEHE	Wool fat	18314702	1
GEHE	Wool fat	19100505	2
Bombastus	Wool fat	305553	7
Gehe / Lamotte	Wool fat	8002760002	1
GEHE 02.12.2014	Wool fat	5528000	1
Gehe 26.2.14	Wool fat	13306205	2
Gehe/ Lamotte	Wool fat	5375400	1
Bombastus	Wool fat	303929	1
Caelo	Wool fat	16221902	12
Caelo	Wool fat	16221907/1160117	1
Caelo	Wool fat	14086905	16
Gehe/Lamotte	Wool fat	8002112002	3
Gehe/Lamotte	Wool fat	8002760002	1
Gehe/Lamotte	Wool fat	8003158002	1
H. Lamotte	Wool fat	8003158002	1
Hedinger	Wool fat	11261105	2
Hennry Lamotte/Krieger	Wool fat	6001861002	2
Henry Lamotte	Wool fat	5448200	4
Henry Lamotte	Wool fat	5264700	1
Henry Lamotte	Wool fat	5520800	1
Henry Lamotte	Wool fat	5528000	1
Henry Lamotte	Wool fat	5650500	1
Henry Lamotte	Wool fat	5690800	2
Henry Lamotte	Wool fat	5763900	2
Henry Lamotte	Wool fat	5908900	2
Henry Lamotte	Wool fat	5909000	2
Henry Lamotte	Wool fat	5860600	1
Henry Lamotte	Wool fat	6001861002	2
Henry Lamotte	Wool fat	59090000	1
Henry Lamotte	Wool fat	55908900	1
Henry Lamotte	Wool fat	6001861001	1
Henry Lamotte	Wool fat	6001861003	1
Henry Lamotte	Wool fat	8002112001	2
Henry Lamotte	Wool fat	8002144001	4
Henry Lamotte	Wool fat	8002320010	1
Henry Lamotte	Wool fat	8002112002	1
Henry Lamotte	Wool fat	2002112002	1
Henry Lamotte	Wool fat	8002760002	1
Henry Lamotte	Wool fat	8002760001	2
Henry Lamotte	Wool fat	8003158001	2
Henry Lamotte	Wool fat	8004134002	3
Henry Lamotte	Wool fat	8004748002	1
Henry Lamotte	Wool fat	8004134003	1
Henry Lamotte / Anzag	Wool fat	5690800	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte / Anzag	Wool fat	5650500	1
Henry Lamotte / Noweda	Wool fat	8002112002	1
Henry Lamotte / Noweda	Wool fat	8003158002	1
Henry Lamotte / Phoenix	Wool fat	5860600	2
Henry Lamotte / Phoenix	Wool fat	5909000	1
Henry Lamotte / Phoenix	Wool fat	6001861002	1
Henry Lamotte / Phoenix	Wool fat	8002112002	1
Henry Lamotte /Phoenix	Wool fat	8003158002	1
Henry Lamotte GmbH	Wool fat	8002760002	1
Henry Lamotte GmbH	Wool fat	8003158002	4
Henry Lamotte GmbH	Wool fat	8004134002	3
Henry Lamotte GmbH	Wool fat	8004134015	1
henry lamotte oils	Wool fat	5264700	1
henry lamotte oils	Wool fat	6001861002	1
henry lamotte oils	Wool fat	6991861002	1
Henry Lamotte Oils	Wool fat	5198200	2
Henry Lamotte Oils	Wool fat	5253400	1
Henry Lamotte Oils	Wool fat	5264700	1
Henry Lamotte Oils	Wool fat	5448200	3
Henry Lamotte Oils	Wool fat	5520800	1
Henry Lamotte Oils	Wool fat	5787700	1
Henry Lamotte Oils	Wool fat	8002320010	2
Henry Lamotte Oils	Wool fat	8003158002	1
Henry Lamotte Oils	Wool fat	8003158001	1
Henry Lamotte Oils	Wool fat	8004748002	1
Henry Lamotte Oils / Gehe	Wool fat	8002144001	1
Henry Lamotte Oils / No...	Wool fat	5763900	1
Henry Lamotte oils GmbH	Wool fat	17248106	1
Henry Lamotte Oils GmbH	Wool fat	5264700	1
Henry Lamotte Oils GmbH	Wool fat	5448200	2
Henry Lamotte Oils GmbH	Wool fat	5528000	2
Henry Lamotte Oils GmbH	Wool fat	56908000	1
Henry Lamotte Oils GmbH	Wool fat	5763900	6
Henry Lamotte Oils GmbH	Wool fat	5650500	1
Henry Lamotte Oils GmbH	Wool fat	5860600	1
Henry Lamotte Oils GmbH	Wool fat	5908900	2
Henry Lamotte Oils GmbH	Wool fat	5909100	1
Henry Lamotte Oils GmbH	Wool fat	6001861001	1
Henry Lamotte Oils GmbH	Wool fat	8002112002	3
Henry Lamotte Oils GmbH	Wool fat	8002144001	2
Henry Lamotte Oils GmbH	Wool fat	8002320010	1
Henry Lamotte Oils GmbH	Wool fat	8002760001	2
Henry Lamotte Oils GmbH	Wool fat	8003158001	2
Henry Lamotte Oils GmbH	Wool fat	8003158002	1
Henry Lamotte Oils GmbH	Wool fat	8004134001	1
Henry Lamotte Oils GmbH	Wool fat	8004134015	1
Henry Lamotte Oils GMBH	Wool fat	160915ALA	1
Henry Lamotte Oils GmbH...	Wool fat	8002112002	1
Henry Lamotte Oils GmbH...	Wool fat	8002320010	1
Henry Lamotte Oils GmbH...	Wool fat	8003158002	1
Henry Lamotte Oils GmbH...	Wool fat	8004134002	2
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Henry Lamotte Oils GmbH...	Wool fat	180109AL/8003158003	1
Henry Lamotte Oils GmbH...	Wool fat	180320AL/8003158003	1
Henry Lamotte Oils GmbH...	Wool fat	8004134002	1
Henry Lamotte Oils GmbH...	Wool fat	8004134001	1
Henry Lamotte Oils GMBH...	Wool fat	170303AL/800232001	1
Henry Lamotte Oils GmbH...	Wool fat	5528000	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	2
Henry Lamotte Oils GmbH...	Wool fat	8003158002	4

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH...	Wool fat	8004134002	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Henry Lamotte Oils GmbH...	Wool fat	8002760001	1
Henry Lamotte Oils GmbH...	Wool fat	8004748002	1
Henry Lamotte Oils GmbH...	Wool fat	6001861001	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Henry Lamotte Oils GmbH...	Wool fat	8002112002	1
Henry Lamotte Oils GmbH...	Wool fat	5908900	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Henry Lamotte Oils GmbH...	Wool fat	8003158001	1
Henry Lamotte Oils GmbH...	Wool fat	5520800	1
henry lamotte oils Gmh/N	Wool fat	5908900	1
Henry Lamotte Oils/ Gehe	Wool fat	5520800	2
Henry Lamotte Oils/ Gehe	Wool fat	8002760002	1
Henry Lamotte Oils/ San...	Wool fat	8002112002	1
Henry Lamotte Oils/Fiebig	Wool fat	8003158002	3
Henry Lamotte Oils/Fiebig	Wool fat	8004134002	1
Henry Lamotte Oils/Noweda	Wool fat	6001861002	1
Henry Lamotte Oils/Noweda	Wool fat	8002112002	1
Henry Lamotte Oils/Noweda	Wool fat	8004748003	1
Henry Lamotte Oils/Phönix	Wool fat	6001861001	1
Henry Lamotte Oils/Sana...	Wool fat	5320900	1
Henry Lamotte Oils GmbH...	Wool fat	5528000	1
Henry Lamotte Oils GmbH...	Wool fat	5650500	1
Henry Lamotte/ Alliance	Wool fat	8002320010	1
Henry Lamotte/ Gehe	Wool fat	5908900	1
Henry Lamotte/ Krieger	Wool fat	8002112002	1
Henry Lamotte/ Noweda	Wool fat	8002320010	7
Henry Lamotte/ Noweda	Wool fat	8003158002	3
Henry Lamotte/ Phoenix	Wool fat	8002320010	1
Henry Lamotte/ Phönix	Wool fat	6001861002	3
Henry Lamotte/ Phönix	Wool fat	8002112002	1
Henry Lamotte/Alliance	Wool fat	8002760001	1
Henry Lamotte/Anzag	Wool fat	2908900	1
Henry Lamotte/Anzag	Wool fat	5908900	1
Henry Lamotte/Anzag	Wool fat	6001861001	1
Henry Lamotte/Anzag	Wool fat	8002112001	3
Henry Lamotte/Anzag	Wool fat	8002144001	1
Henry Lamotte/Anzag	Wool fat	800244001	1
henry lamotte/gehe	Wool fat	16345104	1
Henry Lamotte/GEHE	Wool fat	5375400	1
Henry Lamotte/Jenne	Wool fat	163 (8003158003)	1
Henry Lamotte/Kehr	Wool fat	5909000	2
Henry Lamotte/Kehr	Wool fat	5860700	1
Henry Lamotte/Noweda	Wool fat	5520800	1
Henry Lamotte/Noweda	Wool fat	5787700	1
Henry Lamotte/Noweda	Wool fat	8002112002	2
Henry Lamotte/Noweda	Wool fat	8002144001	1
Henry Lamotte/Noweda	Wool fat	8002760001	2
Henry Lamotte/Noweda	Wool fat	8003158002	1
Henry Lamotte/Phoenix	Wool fat	8003158002	1
Henry Lamotte/Phönix	Wool fat	6001861002	1
Henry Lamotte/Phönix	Wool fat	8002320010	1
Henry Lamotte/Phönix	Wool fat	8004134002	1
Henry Lamotte/Sanacorp	Wool fat	5528000	1
Henry Lamotte/Sanacorp	Wool fat	5727500	2
Henry Lamotte/Sanacorp	Wool fat	60160	1
Henry Lamotte/Sanacorp	Wool fat	5909100	5
Henry Lamotte/VDL	Wool fat	8002112002	1
Henry Lamotte/VDL	Wool fat	8002144002	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte-Phönix	Wool fat	8002144001	1
HenryLamotte	Wool fat	5528000	1
HenryLamotte	Wool fat	5860700	1
HenryLamotte	Wool fat	5909100	2
HenryLamotte	Wool fat	8002320011	1
Hubertus Apotheke	Wool fat	29022016	1
Hubertus Apotheke	Wool fat	165221907	1
Ichthyol/Sanacorp	Wool fat	5448200	7
Ichthyol-Gesellschaft	Wool fat	16221907	2
Jenne	Wool fat	17248104	2
Jenne	Wool fat	17248106	1
Jenne	Wool fat	17307506	2
Jenne	Wool fat	18139303	1
Kehr	Wool fat	17248103	1
Kehr / Lamotte	Wool fat	8002320010	4
Caelo	Wool fat	1716701	1
Klosterring	Wool fat	17139303	1
Kögl	Wool fat	402411160317	1
Kögl	Wool fat	474001171017	1
Kögl	Wool fat	4024111650317	1
Kögl	Wool fat	402411165016	1
Kögl	Wool fat	20172116	1
Kögl	Wool fat	1701216	1
Kögl	Wool fat	1702222	1
Kögl	Wool fat	1800576	1
Krieger	Wool fat	16345106	1
Krieger	Wool fat	8003158003	1
Krieger/ Lamotte	Wool fat	8002760003	2
L12	Wool fat	16345106	1
L12	Wool fat	17139303	1
Caelo	Wool fat	17248109	1
lamotte	Wool fat	8002760001	1
lamotte	Wool fat	8003158001	2
lamotte	Wool fat	800315001	1
lamotte	Wool fat	8004134001	1
lamotte	Wool fat	8004748002	1
Lamotte	Wool fat	5198200	1
Lamotte	Wool fat	5320900	1
Lamotte	Wool fat	5375400	2
Lamotte	Wool fat	5448400	1
Lamotte	Wool fat	5528000	2
Lamotte	Wool fat	5650500	1
Lamotte	Wool fat	5909000	1
Lamotte	Wool fat	6001861001	1
Lamotte	Wool fat	6001861002	1
Lamotte	Wool fat	8002112003	1
Lamotte	Wool fat	8002112001	1
Lamotte	Wool fat	8002112002	3
Lamotte	Wool fat	8002320011	1
Lamotte	Wool fat	8002760001	1
Lamotte	Wool fat	8002760002	2
Lamotte	Wool fat	8002320010	2
Lamotte	Wool fat	8003158002	1
Lamotte	Wool fat	8004134002	1
Lamotte / Alliance Heal...	Wool fat	8002144001	1
Lamotte / Gehe	Wool fat	5763900	1
Lamotte Noweda	Wool fat	8004134002	3
Lamotte Sanacorp	Wool fat	5264700	1
Lamotte Sanacorp	Wool fat	5448200	1
Lamotte Sanacorp	Wool fat	8002760002	2

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Supplier	Substance	Batch	Spectra
Lamotte/ Gehe	Wool fat	8002760002	1
lamotte/ Phoenix	Wool fat	8002320011	1
Lamotte/ Sanacorp	Wool fat	5198200	2
Lamotte/AHD	Wool fat	8002760001	1
Lamotte/AHD	Wool fat	8003158001	2
Lamotte/Alliance	Wool fat	8003158002	1
Lamotte/Alliance Health...	Wool fat	8003158002	2
lamotte/anzag	Wool fat	5264700	1
lamotte/anzag	Wool fat	6001861003	1
Lamotte/Anzag	Wool fat	5264700-3384310110	1
Lamotte/Anzag	Wool fat	6001861001	2
Lamotte/Ebert	Wool fat	5787700	1
Lamotte/Fiebig	Wool fat	5528000	1
Lamotte/Fiebig	Wool fat	5787700	1
Lamotte/Fiebig	Wool fat	5860600	1
Lamotte/Fiebig	Wool fat	5909000	2
Lamotte/Fiebig	Wool fat	8002112002	1
Lamotte/gehe	Wool fat	5528000	1
Lamotte/Gehe	Wool fat	5909000	1
Lamotte/Gehe	Wool fat	8002320011	1
Lamotte/Gehe	Wool fat	8002112002	1
Lamotte/Jenne	Wool fat	5909000	1
Lamotte/Jenne 30.10.2014	Wool fat	5528000	1
Lamotte/Krieger	Wool fat	5264700	2
Lamotte/Nowed	Wool fat	5520800	1
Lamotte/Noweda	Wool fat	5860700	1
Lamotte/Noweda	Wool fat	8002144002	2
Lamotte/Noweda	Wool fat	8002112002	1
Lamotte/Noweda	Wool fat	8002320010	2
Lamotte/Noweda	Wool fat	8002760002	1
Lamotte/Otto	Wool fat	5264700	1
Lamotte/Otto	Wool fat	5375400	3
Lamotte/Otto	Wool fat	5787700	1
Lamotte/Phoenix	Wool fat	5448200	1
Lamotte/Phoenix	Wool fat	8004134001	1
Lamotte/Phönix	Wool fat	5650500	1
Lamotte/Phönix	Wool fat	8003158001	1
Lamotte/Phönix	Wool fat	8004134001	2
Lamotte/Sanacorp	Wool fat	5253400	1
Lamotte/Sanacorp	Wool fat	5448200	1
Lamotte/Sanacorp	Wool fat	5520800	1
Lamotte/Sanacorp	Wool fat	5860700	4
Lamotte/Sanacorp	Wool fat	6001861002	2
Lamotte/Sanacorp	Wool fat	8002112003	2
Lamotte/Spangro	Wool fat	8003158002	1
Midas	Wool fat	17307507	1
Midas	Wool fat	18139302	1
noweda	Wool fat	13398202	1
Noweda	Wool fat	11203903	2
Noweda	Wool fat	12036702	1
Noweda	Wool fat	5375400	1
Noweda	Wool fat	12224404	4
Noweda	Wool fat	5448200	1
Noweda	Wool fat	13213107	1
Noweda	Wool fat	14086905	1
Noweda	Wool fat	16003901	1
Noweda	Wool fat	16267201	2
Noweda	Wool fat	16345107	1
Noweda	Wool fat	16345104	1
Noweda	Wool fat	17167702	1

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Supplier	Substance	Batch	Spectra
Noweda	Wool fat	17139303	1
Noweda	Wool fat	17248103	1
Noweda	Wool fat	17248104	2
Noweda/ 18.06.12 Caela	Wool fat	12015605	1
Caelo	Wool fat	16003905	21
Noweda/Caesar & Loretz ...	Wool fat	15198802	1
noweda/lamotte	Wool fat	5763900	1
NW/ Lamotte	Wool fat	5375400	1
Euro OTC	Wool fat	16221903	3
Euro OTC	Wool fat	1807008-01	1
Euro OTC	Wool fat	16003905	1
Phoenix	Wool fat	5216400	1
Phoenix	Wool fat	5375400	2
Phoenix	Wool fat	13039403	1
Phoenix	Wool fat	13398201	1
Phoenix	Wool fat	13398202	1
Phoenix	Wool fat	15292316	1
Phoenix	Wool fat	16221907	1
Phonix	Wool fat	18139302	1
phönix	Wool fat	8002112001	2
phönix	Wool fat	8002112002	1
phönix	Wool fat	8002144001	2
Phönix	Wool fat	5100700	1
Phönix	Wool fat	13213104	1
Phönix	Wool fat	5520800	1
Phönix	Wool fat	1336206	1
Phönix	Wool fat	13306205	1
Phönix	Wool fat	16003905	1
Phönix	Wool fat	16221907	1
Phönix	Wool fat	308894	2
PHÖNIX	Wool fat	17167701	1
PHÖNIX	Wool fat	1728105	1
Caelo	Wool fat	18139307	11
Caelo	Wool fat	16163001	25
Phönix/Phönix	Wool fat	16221907	1
Purren Apotheke	Wool fat	11261106	1
Sana 31.01.17	Wool fat	16267201	1
Sanacorp	Wool fat	12122404	3
Sanacorp	Wool fat	12224405	1
Sanacorp	Wool fat	5448200	3
Sanacorp	Wool fat	13213104	1
Sanacorp	Wool fat	13039405	1
Sanacorp	Wool fat	13398202	1
Sanacorp	Wool fat	46/AKD1	1
Sanacorp	Wool fat	14086904	1
Sanacorp	Wool fat	14238004	1
Sanacorp	Wool fat	13306206	1
Sanacorp	Wool fat	14304502	1
Sanacorp	Wool fat	46/AKD6	1
Sanacorp	Wool fat	16221906	1
Sanacorp	Wool fat	8002320010	1
Sanacorp	Wool fat	17139303	1
Sanacorp	Wool fat	8003158002	7
Sanacorp	Wool fat	17167702	1
Sanacorp	Wool fat	8004134002	1
Sanacorp	Wool fat	17307505	1
Sanacorp	Wool fat	18139305	1
Sanacorp EK:8,10 EUR...	Wool fat	16345107	2
Caelo	Wool fat	14238004	15
Caelo	Wool fat	12036703	7

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	12074501	2
Caelo	Wool fat	12036702	4
Caelo	Wool fat	46/AKD3	1
Sanaorp	Wool fat	305553	1
Sanocorp WE:18.04.16 EK...	Wool fat	16003902	2
Spirig (Galderma)	Wool fat	16044302	1
Caelo	Wool fat	12122404	17
Caelo	Wool fat	13213106	15
Caelo	Wool fat	13389202	1
Caelo	Wool fat	15198804	21
vdl	Wool fat	12224404	1
Alliance Health.14.08.2...	Softisan [®] 378		1
Caelo	Softisan [®] 378	13370104	3
Fagron	Softisan [®] 378	13D26-N12	9
Fagron	Softisan [®] 378	12K27-N05	1
THC Pharma	Softisan [®] 378		1
Caelo	Wool fat	12122403	10
Caelo	Wool fat		2
Caelo	Wool fat	14086904	13
Caelo	Wool fat	15198802	20
Caelo	Wool fat	15050902	10
Euro OTC	Wool fat	1403023-01	1
Euro OTC	Wool fat	1502024-01	2
Euro OTC	Wool fat		1
Henry Lamotte	Wool fat	8003158002	2
Henry Lamotte Oils GmbH	Wool fat		1
Henry Lamotte Oils GmbH...	Wool fat		1
Sanacorp	Wool fat		1
VDL 17.04.14;Preis 4,50	Wool fat		1

- 135 164 spectra from 703 *Apo-Ident* customers from a total of 34 746 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Softisan[®] 378 / Wool fat* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Softisan[®] 378 / Wool fat* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	680	0	55 679
Type B	0	400	0	68 992
Type C	0	3141	48	135 156

The substance/substance group *Softisan[®] 378 / Wool fat* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.1176 %)
Type B	100.0000 % (> 99.9652 %)	100.0000 % (> 98.5000 %)
Type C	100.0000 % (> 99.6443 %)	98.4948 % (> 98.4008 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Softisan*[®] 378 / *Wool fat* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Shea butter, refined	13.85	—
Emulsifying hydrophobic base gel DAC	14.40	—
Pasta Cordes [®]	16.25	—
Paraffin, yellow	16.34	—
Softisan [®] 649	18.42	—
Wool alcohol ointment DAB	20.52	—
Paraffin, white	20.98	—
Laurel oil	22.41	—
Triglycerides, medium-chain	26.25	—
Olive oil, native	26.32	—
Squalane	26.37	—
Apricot kernel oil, refined	27.45	—
Paraffin, light liquid	27.65	—
Isopropyl palmitate	28.91	—
Unguentum Cordes [®]	30.51	—
Wool alcohol ointment SR with white pa...	30.58	—
Permethrin 25% solution	31.93	—
Paraffin, liquid	32.01	—
Peanut oil, refined	32.06	—
Hydrophilic ointment DAB	32.27	—
Eye ointment, emulsifying DAC	33.28	—
Hydrophobic base gel DAC	33.87	—
Avocado oil, refined	35.45	—
Wool alcohol ointment SR/DAC	35.48	—
Isopropyl myristate	36.01	—
2-ethylhexyl laurate	36.39	—
Decyl oleate	37.10	—
Eye paraffin	38.17	—
Camphor ointment	38.86	—
Metronidazole 25% in white petrolatum	41.18	—
Triglycerol diisostearate	44.11	—
Macrogol 8 stearate type I	45.86	—
Jojoba oil, native	48.44	—
Soy lecithin, liquid	48.65	—
Sorbitan trioleate	49.26	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Softisan*[®] 378 / *Wool fat* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30887	31117	7.72	14.33
30743	31743	5.03	19.03
30925	31847	5.53	18.33
31479	31743	2.12	16.25
31533	31533	0.00	17.36
31742	31743	3.37	18.49
31743	31743	0.00	17.60
31847	31847	0.00	19.10
31952	31743	1.80	18.07
33939	31743	3.51	18.83
32964	32964	0.00	15.51
31117	31117	0.00	12.87
31472	31117	3.97	12.60
32298	31117	2.62	12.52

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Softisan[®] 649**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30770-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Softisan[®] 649

Special notes

When selecting the *Softisan[®] 649* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Softisan [®] 649	2	3	10

Second-stage model

For differentiation of the substance/substance group *Softisan*[®] 649 the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Softisan*[®] 649:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	<i>Softisan</i> [®] 649	12I10-N12	30770	40	1407601
Fagron	<i>Softisan</i> [®] 649	15E13-B01-307859	31699	60	20150527

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 100 spectra of 2 reference samples from the substance/substance group *Softisan*[®] 649. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 259 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 117 spectra of 3 reference samples from the substance/substance group *Softisan*[®] 649.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	<i>Softisan</i> [®] 649	13C19-N03	31118	37
Fagron	<i>Softisan</i> [®] 649	16H30-B03-325618	33249	40
Fagron	<i>Softisan</i> [®] 649	18H13-B02-352761	34273	40

- 69 357 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 18 spectra from 13 *Apo-Ident* customers from 10 batches from the substance/substance group *Softisan® 649*.
- Among them are spectra of independent samples from 10 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Apotheke Leutenberg	Softisan® 649	605218	1
Apotheke Leutenberg	Softisan® 649	801297	1
Apotheke Leutenberg/AHD	Softisan® 649	605218	1
Apotheke Leutenberg/All...	Softisan® 649	801297	1
Cremer	Softisan® 649	605218	1
cremer oleo GmbH	Softisan® 649	703250	1
Cremer Oleo GmbH	Softisan® 649	150430	1
Cremer Oleo/Anzag	Softisan® 649	409134	1
Cremer Oleo/Anzag	Softisan® 649	150430	1
Fa. Cremer Oleon GmbH	Softisan® 649	9041803	1
Fagron	Softisan® 649	105945	1
Fagron	Softisan® 649	708279	1
Fagron	Softisan® 649	15E13-B01-315602	1
Fagron	Softisan® 649	503154	1
Noweda /938705 / IOI Ol...	Softisan® 649	801297	1
Oleo/Sanacorp	Softisan® 649	801297	1
Oleochemicals	Softisan® 649	605218	1
Pharmachem	Softisan® 649	605218	1

- 138 335 spectra from 703 *Apo-Ident* customers from a total of 35 285 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Softisan® 649* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Softisan® 649* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	100	0	56 259
Type B	0	117	0	69 357
Type C	0	18	0	138 335

The substance/substance group *Softisan*[®] 649 can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 94.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 94.8718 %)
Type C	100.0000 % (> 99.6457 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Softisan*[®] 649 in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Softisan [®] 378	22.89	—
Pasta Cordes [®]	27.37	—
Shea butter, refined	27.38	—
Wool fat	32.57	—
Triglycerol diisostearate	35.94	—
Hydrophilic ointment DAB	40.41	—
Paraffin, yellow	41.33	—
Permethrin 25% solution	43.21	—
Olive oil, native	46.30	—
Macrogol 8 stearate type I	47.46	—
Apricot kernel oil, refined	47.58	—
Emulsifying hydrophobic base gel DAC	48.82	—
Laurel oil	49.08	—
Castor oil	49.17	—
Paraffin, white	50.57	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Softisan*[®] 649 is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30770	30770	0.00	27.04
31699	30770	10.03	22.89

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Sorbitan trioleate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31031-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Sorbitan trioleate; Sorbitani trioleas

Special notes

When selecting the *Sorbitan trioleate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Sorbitan trioleate	5	2	29

Second-stage model

For differentiation of the substance/substance group *Sorbitan trioleate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Sorbitan trioleate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Sorbitan trioleate	12171410	31031	40	1407273
Caelo	Sorbitan trioleate	13317202	31130	40	20131017
Caelo	Sorbitan trioleate	13317212	31459	60	20131017
Caelo	Sorbitan trioleate	15337406	33441	40	20151110
Caelo	Sorbitan trioleate	190812	34467	40	20190510*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Sorbitan trioleate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Sorbitan trioleate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sorbitan trioleate	17056001	33461	40
Caelo	Sorbitan trioleate	180779	34080	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 68 spectra from 33 *Apo-Ident* customers from 31 batches from the substance/substance group *Sorbitan trioleate*.
- Among them are spectra of independent samples from 29 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Sorbitan trioleate	11284603	1
Caelo	Sorbitan trioleate	10109108	1
Caelo	Sorbitan trioleate	11284608	1
Caelo	Sorbitan trioleate	1217408	1
Caelo	Sorbitan trioleate	11117102	1
Caelo	Sorbitan trioleate	13317204	1
Caelo	Sorbitan trioleate	13317209	1
Caelo	Sorbitan trioleate	14218205	1
Caelo	Sorbitan trioleate	14218202	1
Caelo	Sorbitan trioleate	15064909	1
Caelo	Sorbitan trioleate	15064908	1
Caelo	Sorbitan trioleate	15337403	3
Caelo	Sorbitan trioleate	15337405	3
Caelo	Sorbitan trioleate	15064905	1
Caelo	Sorbitan trioleate	15337404	5
Caelo	Sorbitan trioleate	17056004	5
Caelo	Sorbitan trioleate	18077906	3
Caelo	Sorbitan trioleate	18077908	1
Caelo	Sorbitan trioleate	11284601	1
Caelo	Sorbitan trioleate	12171405	1
Caelo	Sorbitan trioleate	17056001	5
Caelo	Sorbitan trioleate	15182502	2
Caelo	Sorbitan trioleate	13317213	1
Caelo	Sorbitan trioleate	18077905	4
Caelo	Sorbitan trioleate	15064903	2
Caelo	Sorbitan trioleate	12171408	3
Caelo	Sorbitan trioleate	11284607	1
Caelo	Sorbitan trioleate	15064901	1
Caesar & Lorenz GmbH	Sorbitan trioleate	15337404	1
Caesar & Lorenz GmbH	Sorbitan trioleate	17056004	1
Caesar & Loretz GmbH	Sorbitan trioleate	12171405	1
Caesar&Loretz GmbH	Sorbitan trioleate	15064903	1
Caesar/Lorenz	Sorbitan trioleate	13317210	1
Gehe	Sorbitan trioleate	12171408	1
GEHE	Sorbitan trioleate	15337404	1
GEHE	Sorbitan trioleate	17056001	1
Caelo	Sorbitan trioleate	15337406	2
Caelo	Sorbitan trioleate	13317212	5

- 138 285 spectra from 703 *Apo-Ident* customers from a total of 35 264 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Sorbitan trioleate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Sorbitan trioleate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	79	1	69 394
Type C	0	65	3	138 285

The substance/substance group *Sorbitan trioleate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	98.7500 % (> 95.0000 %)
Type C	100.0000 % (> 99.6453 %)	95.5882 % (> 91.1765 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Sorbitan trioleate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Almond oil, refined	12.76	—
Apricot kernel oil, refined	18.36	—
Castor oil	18.58	—
Soy lecithin, liquid	24.56	—
Olive oil, native	25.09	—
Avocado oil, refined	25.47	—
Laurel oil	27.67	—
Shea butter, refined	29.28	—
Peanut oil, refined	30.95	—

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Substanz	Distance in main model	Distance in second-stage model
Sorbitan- and glycerol monooleate	33.73	—
Soy oil, refined	35.31	—
Pumpkin seed oil, pressed	36.11	—
Sunflower oil, refined	37.65	—
Sesame oil, refined	38.36	—
Grape seed oil, refined	39.88	—
Rapeseed oil, refined	40.97	—
Safflower oil, refined type I	41.03	—
Corn oil, refined	42.76	—
Oleyl oleate (stabilised)	43.37	—
Decyl oleate	43.48	—
Softisan [®] 649	43.67	—
Wheatgerm oil, refined	46.40	—
Triglycerol diisostearate	47.96	—
Jojoba oil, native	48.50	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Sorbitan trioleate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34467	34467	0.00	27.04
31130	34467	3.75	24.74
31459	34467	4.00	23.70
33441	34467	4.97	24.76
31031	31031	0.00	21.66

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Spearmint oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30668-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Spearmint oil; Oleum menthae crispae

Special notes

When selecting the *Spearmint oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Spearmint oil	7	2	16

Second-stage model

For differentiation of the substance/substance group *Spearmint oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Spearmint oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Spearmint oil	11346805	30668	40	20111206
Caelo	Spearmint oil	13363904	31303	40	1407357
Caelo	Spearmint oil	13363904	31419	60	20131118
Caelo	Spearmint oil	181837	34446	40	20180628*
Caelo	Spearmint oil	191137	34447	40	20190430*
Caelo	Spearmint oil	181935	34448	40	20180718*
Caelo	Spearmint oil	191961	34621	40	20190717*
Caelo	Spearmint oil	192456	34709	40	20190927*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 340 spectra of 8 reference samples from the substance/substance group *Spearmint oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 7 different batches.
- 56 019 spectra from a total of 1109 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Spearmint oil*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spearmint oil	161284	32205	40
Caelo	Spearmint oil	172396	33912	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 23 spectra from 14 *Apo-Ident* customers from 17 batches from the substance/substance group *Spearmint oil*.
- Among them are spectra of independent samples from 16 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Spearmint oil	14147608	2
Caelo	Spearmint oil	12206910	1
Caelo	Spearmint oil	25062015B	1
Caelo	Spearmint oil	15013921	1
Caelo	Spearmint oil	150013904	1
Caelo	Spearmint oil	15013909	1
Caelo	Spearmint oil	16128405	1
Caelo	Spearmint oil	16128408	1
Caelo	Spearmint oil	16128404	1
Caelo	Spearmint oil	17239605	1
Caelo	Spearmint oil	17239608	1
Caelo	Spearmint oil	16128409	1
Caelo	Spearmint oil	17239602	1
Caelo	Spearmint oil	16128402	1
L12	Spearmint oil	16128405	1
L12	Spearmint oil	17239602	1
Noweda	Spearmint oil	11346805	1
Caelo	Spearmint oil	12206913	1
Caelo	Spearmint oil	13093402	1
Sanacorp	Spearmint oil	13093402	1
Sanacorp	Spearmint oil	16128409	1
Sanacorp	Spearmint oil	17239602	1

- 138 330 spectra from 703 *Apo-Ident* customers from a total of 35 278 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Spearmint oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Spearmint oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	340	0	56 019
Type B	0	80	0	69 394
Type C	0	22	1	138 330

The substance/substance group *Spearmint oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.2353 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6456 %)	95.6522 % (> 82.6087 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Spearmint oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Caraway oil	19.63	—
Dwarf pine oil	22.50	—
Bergamot oil	42.62	—
Juniper oil	49.42	—
Pine silvestris oil	51.17	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Spearmint oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31419	34447	2.98	41.78
34448	34448	0.00	37.96
31303	31303	0.00	39.69
34446	34446	0.00	40.86
34447	34447	0.00	39.00
34709	34709	0.00	38.60
30668	31303	11.92	39.29
34621	34621	0.00	37.15

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Spirit of ether**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30707-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Spirit of ether; Spiritus aethereus

Special notes

When selecting the *Spirit of ether* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Spirit of ether	4	2	5

Second-stage model

For differentiation of the substance/substance group *Spirit of ether* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Spirit of ether*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Spirit of ether	12074603	30707	40	20120320
Caelo	Spirit of ether	13131805	31207	40	1403111
Caelo	Spirit of ether	181156	34065	40	20180427*
Caelo	Spirit of ether	191998	34703	40	20190731*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 4 reference samples from the substance/substance group *Spirit of ether*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56 199 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Spirit of ether*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spirit of ether	15442201	32566	40
Caelo	Spirit of ether	15442203	33218	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 10 spectra from 4 *Apo-Ident* customers from 7 batches from the substance/substance group *Spirit of ether*.
- Among them are spectra of independent samples from 5 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Spirit of ether	13131807	1
Caelo	Spirit of ether	14339702	2
Caelo	Spirit of ether	11375512	1
Caelo	Spirit of ether	11375509	1
Gehe	Spirit of ether	15442203	1
Caelo	Spirit of ether	12074603	2
Caelo	Spirit of ether	13131805	2

- 138 343 spectra from 703 *Apo-Ident* customers from a total of 35 288 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Spirit of ether* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Spirit of ether* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	9	1	138 343

The substance/substance group *Spirit of ether* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6461 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Spirit of ether* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dexpanthenol	78.07	–

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Spirit of ether* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30707	34065	5.56	129.95
31207	31207	0.00	140.42
34065	34065	0.00	134.39
34703	34703	0.00	131.38

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Spirit soap**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30546-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Spirit soap; Spiritus saponatus

Special notes

When selecting the *Spirit soap* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Spirit soap	4	2	53

Second-stage model

For differentiation of the substance/substance group *Spirit soap* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Spirit soap*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Spirit soap	12247110	31153	40	1403401
Caelo	Spirit soap	13278409	31393	40	20130829
Caelo	Spirit soap	16130209	33443	40	20160510
Caelo	Spirit soap	16130209	33456	40	20160510
Caelo	Spirit soap	173045	33893	40	20171204*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 5 reference samples from the substance/substance group *Spirit soap*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56159 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Spirit soap*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spirit soap	182955	34332	40
Caelo	Spirit soap	183012	34333	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 128 spectra from 48 *Apo-Ident* customers from 56 batches from the substance/substance group *Spirit soap*.
- Among them are spectra of independent samples from 53 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
AHD	Spirit soap	16130209	1
AHD	Spirit soap	17304502	1
AHD	Spirit soap	18295503	1
AHD	Spirit soap	18295504	1
Anzag	Spirit soap	13278409	1
Anzag 8.10.14 EK 4.88	Spirit soap	13278403	1
Caelo	Spirit soap	12247105	2
Caelo	Spirit soap	12247108	7
Caelo	Spirit soap	12247104	2
Caelo	Spirit soap	3091306	1
Caelo	Spirit soap	10121303	1
Caelo	Spirit soap	12121402	1
Caelo	Spirit soap	9031501	1
Caelo	Spirit soap	14212712	1
Caelo	Spirit soap	6081516	1
Caelo	Spirit soap	14364902	4
Caelo	Spirit soap	14364905	1
Caelo	Spirit soap	27072013	1
Caelo	Spirit soap	14364904	3
Caelo	Spirit soap	16130204	3
Caelo	Spirit soap	16130205	2
Caelo	Spirit soap	11051704	1
Caelo	Spirit soap	17304503	2
Caelo	Spirit soap	17304504	1
Caelo	Spirit soap	19011801	1
Caelo	Spirit soap	7071805	1
Caelo	Spirit soap	7111804	1
Caelo	Spirit soap	17304507	1
Caelo	Spirit soap	1829505	1
Caelo	Spirit soap	12247102	1
Caelo	Spirit soap	14364906	5
Caelo	Spirit soap	18295502	1
Caelo	Spirit soap	18295504	1
Caelo	Spirit soap	17304501	2
Caelo	Spirit soap	9172002	1
Caelo	Spirit soap	2712Q-02323	1

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Supplier	Substance	Batch	Spectra
Caelo	Spirit soap	3913U-02323	1
Caelo	Spirit soap	16130202	4
Caelo	Spirit soap	16069902	1
Caelo	Spirit soap	13278403	8
Caelo	Spirit soap	14212703	1
Caelo	Spirit soap	14364909	1
Caelo	Spirit soap	13278408	2
Caelo	Spirit soap	14212714	1
Caelo	Spirit soap	14364901	1
Caelo	Spirit soap	14364907	2
Caelo	Spirit soap	16130201	4
Caelo	Spirit soap	16130207	2
Caelo	Spirit soap	1730453	1
Caelo	Spirit soap	17304502	2
Caelo	Spirit soap	14212710	1
Caelo	Spirit soap	12247107	1
Caelo	Spirit soap	12247109	2
Caelo	Spirit soap	13278402	4
Caelo	Spirit soap	13278405	3
Caesar & Loretz GmbH	Spirit soap	16130209	1
Caesar&Lorenz	Spirit soap	14364906	1
GEHE	Spirit soap	17304502	1
Caelo	Spirit soap	14212706	6
Caelo	Spirit soap	14212716	1
Sanacorp	Spirit soap	12247102	1
Caelo	Spirit soap	14212705	1
Fagron	Spirit soap	16130201	1
Caelo	Spirit soap	12247110	7
Caelo	Spirit soap	13278409	6
Caelo	Spirit soap	16130209	2

- 138 225 spectra from 703 *Apo-Ident* customers from a total of 35 240 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Spirit soap* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Spirit soap* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	80	0	69 394
Type C	0	127	1	138 225

The substance/substance group *Spirit soap* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.2188 % (> 96.8750 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Spirit soap* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Isopropyl alcohol 70%	41.15	—
Camphor spirit	60.58	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Spirit soap* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31153	31153	0.00	36.79
31393	31153	3.01	37.71
33443	31153	6.76	36.31
33456	31153	2.80	37.79
33893	33893	0.00	41.10

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Spruce needle oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31414-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Spruce needle oil; Oleum pini sibiricum

Special notes

When selecting the *Spruce needle oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Spruce needle oil	2	2	9

Second-stage model

For differentiation of the substance/substance group *Spruce needle oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Spruce needle oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Spruce needle oil	13152004	31414	40	1412281
Caelo	Spruce needle oil	13152004	31618	60	20130617
Caelo	Spruce needle oil	14348607	31787	60	20141202

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 160 spectra of 3 reference samples from the substance/substance group *Spruce needle oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56 199 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Spruce needle oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spruce needle oil	163511	33095	40
Caelo	Spruce needle oil	171966	33682	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 15 spectra from 11 *Apo-Ident* customers from 10 batches from the substance/substance group *Spruce needle oil*.
- Among them are spectra of independent samples from 9 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Spruce needle oil	13389508	1
Caelo	Spruce needle oil	15418210	2
Caelo	Spruce needle oil	3071717	1
Caelo	Spruce needle oil	8051802	1
Caelo	Spruce needle oil	17196602	3
Caelo	Spruce needle oil	17196601	1
Caelo	Spruce needle oil	15418209	1
Gehe	Spruce needle oil	15418209	1
Nachprüfung	Spruce needle oil	2914A-02006	1
Sanacorp	Spruce needle oil	17196601	1
Taoasis	Spruce needle oil	22336-122331	1
Caelo	Spruce needle oil	14348607	1

- 138 338 spectra from 703 *Apo-Ident* customers from a total of 35 285 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Spruce needle oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Spruce needle oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	160	0	56 199
Type B	0	80	0	69 394
Type C	0	13	2	138 338

The substance/substance group *Spruce needle oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6458 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Spruce needle oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Sage oil	15.71	—
Eucalyptus oil	32.19	—
Turpentine oil	33.14	—
Myrtle oil	34.10	—
Rosemary oil	40.98	—
Juniper wood oil	42.66	—
Dwarf pine oil	62.86	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Spruce needle oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31414	31414	0.00	20.65
31618	31414	2.14	19.33
31787	31414	5.39	19.47

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical

variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Squalane**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31327-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Squalane; Squalanum

Special notes

When selecting the *Squalane* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Squalane	5	1	3

Second-stage model

For differentiation of the substance/substance group *Squalane* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Squalane*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Squalane	13202603	31327	40	1504359
Caelo	Squalane	13202603	31328	40	20130809
Caelo	Squalane	13202603	31329	40	20130809
Caelo	Squalane	14330704	32075	40	9465
Caelo	Squalane	16030504	32302	40	20160205
Caelo	Squalane	171380	33317	40	20170609*
Caelo	Squalane	19232102	34684	40	20190923

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 280 spectra of 7 reference samples from the substance/substance group *Squalane*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 079 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 40 spectra of 1 reference samples from the substance/substance group *Squalane*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Squalane	17138001	33422	40

- 69 434 spectra from a total of 1501 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 4 spectra from 2 *Apo-Ident* customers from 4 batches from the substance/substance group *Squalane*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Euro OTC	Squalane	316001302	1
L12	Squalane	117001301	1
Spinnrad/Noweda	Squalane	116001301	1
Caelo	Squalane	16030504	1

- 138 349 spectra from 703 *Apo-Ident* customers from a total of 35 291 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Squalane* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Squalane* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	280	0	56 079
Type B	0	40	0	69 434
Type C	0	4	0	138 349

The substance/substance group *Squalane* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9654 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6474 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Squalane* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Triglycerides, medium-chain	11.89	—
Wool fat	14.17	—
2-ethylhexyl laurate	18.92	104.37
Emulsifying hydrophobic base gel DAC	20.87	—
Softisan® 649	26.99	—
Hydrophobic base gel DAC	28.14	—
Pasta Cordes®	29.06	—
Camphor ointment	31.75	—
Paraffin, light liquid	32.37	—
Olive oil, native	33.13	—
Laurel oil	33.90	—
Shea butter, refined	34.03	—
Apricot kernel oil, refined	34.55	—
Isopropyl palmitate	37.81	—
Decyl oleate	39.52	—
Avocado oil, refined	40.07	—
Soy lecithin, liquid	40.14	—
Peanut oil, refined	40.99	—
Paraffin, liquid	43.37	—
Guaiazulene 25%, water-soluble	43.64	—
Sorbitan trioleate	45.07	—
Sunflower oil, refined	45.21	—
Wheatgerm oil, refined	45.81	—
Isopropyl myristate	46.93	—
Soy oil, refined	51.21	—
⋮	⋮	⋮
Wool alcohol cream SR	>50	39.11
Base cream DAC	>50	62.56
Eucerin® cum Aqua	>50	63.68
Wool alcohol cream DAB	>50	76.87
Lanette® ointment (conserved)	>50	86.22
Non-ionic hydrophil ointment	>50	93.35

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the sub-

stance/substance group *Squalane* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31327	31327	0.00	12.52
31328	31327	1.02	11.96
31329	31327	1.81	12.25
33317	33317	0.00	14.01
32075	32075	0.00	13.84
32302	32075	2.89	12.00
34684	31327	5.51	14.27

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Syrups**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30753-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Syrups; Althae sirupus (konserviert); Cherry syrup (conserved); Fennel honey (conserved); Ipecacuanha syrup (NRF 19.1); Marshmallow syrup (conserved); Mel foeniculi (konserviert); Raspberry syrup (conserved); Ribwort plantain syrup (conserved); Sirupus cerasi (konserviert); Sirupus ipecacuanhae; Sirupus plantaginis lanceolatae; Sirupus rubi idaei; Sirupus simplex; Sorbitol solution 70% (non-crystallizing); Sorbitolum liquidum non cristallisabile; Sugar syrup DAB

Special notes

When selecting the *Syrups* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cherry syrup (conserved)	3	2	13
Fennel honey (conserved)	4	2	5

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Substance	Type A	Type B	Type C
Ipecacuanha syrup (NRF 19.1)	4	2	6
Marshmallow syrup (conserved)	7	2	21
Raspberry syrup (conserved)	6	18	133
Ribwort plantain syrup (conserved)	4	2	17
Sorbitol solution 70% (non-crystallizing)	5	7	97
Sugar syrup DAB	5	4	328

Second-stage model

For differentiation of the substance/substance group *Syrups* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Syrups*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cherry syrup (co...	13278301	31155	40	1402568
Caelo	Cherry syrup (co...	14034503	31359	60	20140131
Caelo	Cherry syrup (co...	163453	33099	40	20161221*
Caelo	Fennel honey (co...	12247203	30900	60	1402574
Caelo	Fennel honey (co...	14045202	31598	60	20140317
Caelo	Fennel honey (co...	181580	34233	40	20180704*
Caelo	Fennel honey (co...	192389	34734	40	20190918*
apomix	Ipecacuanha syru...	03A171016	33420	40	20161019
apomix	Ipecacuanha syru...	02A200616	33421	40	20160627
Fagron	Ipecacuanha syru...	13G23-M02	31181	40	1404013
Fagron	Ipecacuanha syru...	02B200616	33263	40	20160627
Caelo	Marshmallow syru...	12067103	30753	40	20120312
Caelo	Marshmallow syru...	12303106	31147	40	1404662
Caelo	Marshmallow syru...	13410907	31365	40	20140318
Caelo	Marshmallow syru...	161233	32210	40	20160427*
Caelo	Marshmallow syru...	171283	33331	40	20170511*
Caelo	Marshmallow syru...	190100	34477	40	20190206*
Caelo	Marshmallow syru...	192181	34664	40	20190819*
Caelo	Raspberry syrup ...	13122003	31051	40	1402567
Caelo	Raspberry syrup ...	14114303	31467	60	20140411
Euro OTC	Raspberry syrup ...	1508015	31773	60	20150814*
Euro OTC	Raspberry syrup ...	1511024	31802	60	20150511*
Euro OTC	Raspberry syrup ...	1605008	32284	40	20160513*
Euro OTC	Raspberry syrup ...	1701022	32984	40	20170126*
Caelo	Ribwort plantain...	11380011	30897	60	20120112
Caelo	Ribwort plantain...	13152307	31218	40	1404663
Caelo	Ribwort plantain...	182898	34329	40	20181211*
Caelo	Ribwort plantain...	191483	34600	40	20190618*
Caelo	Sorbitol solutio...	12124910	30870	40	20120525
Caelo	Sorbitol solutio...	13060206	31124	40	20130306
Caelo	Sorbitol solutio...	14034706	31353	60	8780
Euro OTC	Sorbitol solutio...	1604020	32277	40	20160511*
Euro OTC	Sorbitol solutio...	1702011	33228	40	20170220*
apomix	Sugar syrup DAB	73A101013	31175	40	1403164
apomix	Sugar syrup DAB	30A130617	33505	40	20170616
apomix	Sugar syrup DAB	31A030619	34526	40	20190603
Caelo	Sugar syrup DAB	14134301	31355	60	20140514
Caelo	Sugar syrup DAB	153348	31877	60	20151014*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1720 spectra of 38 reference samples from the substance/substance group *Syrups*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 38 different batches.
- 54 639 spectra from a total of 1078 batches from further 211 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1600 spectra of 40 reference samples from the substance/substance group *Syrups*.
- Among them are spectra of independent samples from 39 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cherry syrup (conserved)	16345303	33837	40
Caelo	Cherry syrup (conserved)	173511	33891	40
Caelo	Fennel honey (conserved)	16039406	33153	40
Caelo	Fennel honey (conserved)	190514	34454	40
apomix	Ipecacuanha syrup (NRF 19.1)	03B291118	34527	40
Fagron	Ipecacuanha syrup (NRF 19.1)	01A070817	33642	40
Caelo	Marshmallow syrup (conserved)	160775	32215	40
Caelo	Marshmallow syrup (conserved)	162136	32335	40
Caelo	Raspberry syrup (conserved)	161516	32213	40
Caelo	Raspberry syrup (conserved)	163454	33092	40
Caelo	Raspberry syrup (conserved)	171284	33332	40
Caelo	Raspberry syrup (conserved)	181909	34222	40
Caelo	Raspberry syrup (conserved)	190098	34476	40
Caelo	Raspberry syrup (conserved)	191533	34626	40
Caelo	Raspberry syrup (conserved)	192399	34706	40
Euro OTC	Raspberry syrup (conserved)	1603007	32193	40
Euro OTC	Raspberry syrup (conserved)	1608003	32705	40

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*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

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Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Raspberry syrup (conserved)	1610026	32833	40
Euro OTC	Raspberry syrup (conserved)	1705037	33450	40
Euro OTC	Raspberry syrup (conserved)	1709003	33660	40
Euro OTC	Raspberry syrup (conserved)	1712004	33930	40
Euro OTC	Raspberry syrup (conserved)	1803009	34092	40
Euro OTC	Raspberry syrup (conserved)	1807026	34190	40
Euro OTC	Raspberry syrup (conserved)	1810021	34299	40
Euro OTC	Raspberry syrup (conserved)	1901049	34432	40
Euro OTC	Raspberry syrup (conserved)	1908010	34696	40
Caelo	Ribwort plantain syrup (cons...	16335301	33457	40
Caelo	Ribwort plantain syrup (cons...	18078901	34048	40
Caelo	Sorbitol solution 70% (non-c...	160788	32217	40
Caelo	Sorbitol solution 70% (non-c...	173054	33895	40
Caelo	Sorbitol solution 70% (non-c...	190223	34462	40
Caelo	Sorbitol solution 70% (non-c...	192342	34733	40
Euro OTC	Sorbitol solution 70% (non-c...	1802020	34006	40
Euro OTC	Sorbitol solution 70% (non-c...	1804019	34182	40
Euro OTC	Sorbitol solution 70% (non-c...	1905010	34492	40
Caelo	Sugar syrup DAB	170581	33126	40
Caelo	Sugar syrup DAB	181757	34246	40
Caelo	Sugar syrup DAB	182278	34247	40
Caelo	Sugar syrup DAB	182964	34314	40
Caelo	Ribwort plantain syrup (cons...	16335301	33458	40

- 67 874 spectra from a total of 1463 batches from further 353 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1482 spectra from 263 *Apo-Ident* customers from 641 batches from the substance/substance group *Syrups*.
- Among them are spectra of independent samples from 618 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag	Cherry syrup (conserved)	11291603	1
Caelo	Cherry syrup (conserved)	11168902	1
Caelo	Cherry syrup (conserved)	109212258	1
Caelo	Cherry syrup (conserved)	13166201	1
Caelo	Cherry syrup (conserved)	12367501	2
Caelo	Cherry syrup (conserved)	14034502	2
Caelo	Cherry syrup (conserved)	16195502	1
Caelo	Cherry syrup (conserved)	16029301	2
Caelo	Cherry syrup (conserved)	14371001	1
Caelo	Cherry syrup (conserved)	15149402	1
Caelo	Cherry syrup (conserved)	16345301	2
Caelo	Cherry syrup (conserved)	17351101	2
Phönix	Cherry syrup (conserved)	14114304	1
Caelo	Fennel honey (conserved)	16039406	2
Caelo	Fennel honey (conserved)	13152605	1

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Supplier	Substance	Batch	Spectra
Caelo	Fennel honey (conserved)	13152606	1
Sanacorp	Fennel honey (conserved)	17032805	2
Sanacorp	Fennel honey (conserved)	18158002	2
Apomix	Ipecacuanha syrup (NRF 19.1)	01A090218	1
Apomix/Gehe	Ipecacuanha syrup (NRF 19.1)	3A170915	1
Apomix/PKH Halle/Noweda	Ipecacuanha syrup (NRF 19.1)	1A070817	1
Caelo	Ipecacuanha syrup (NRF 19.1)	13G23-M02	1
Fagron	Ipecacuanha syrup (NRF 19.1)	14D17-M01	1
Fagron	Ipecacuanha syrup (NRF 19.1)	11B10-M01	1
Fagron	Ipecacuanha syrup (NRF 19.1)	15C11-M08	3
ACM	Marshmallow syrup (conserved)	1015	1
Caelo	Marshmallow syrup (conserved)	13410909	1
Caelo	Marshmallow syrup (conserved)	13212910	1
Caelo	Marshmallow syrup (conserved)	12303101	1
Caelo	Marshmallow syrup (conserved)	14364804	1
Caelo	Marshmallow syrup (conserved)	15418604	2
Caelo	Marshmallow syrup (conserved)	16213606	1
Caelo	Marshmallow syrup (conserved)	16123301	1
Caelo	Marshmallow syrup (conserved)	13212909	1
Caelo	Marshmallow syrup (conserved)	17128301	1
Caelo	Marshmallow syrup (conserved)	1 (19010003)	1
Caelo	Marshmallow syrup (conserved)	13212908	1
Caelo	Marshmallow syrup (conserved)	16077502	1
Caelo	Marshmallow syrup (conserved)	1548604	1
Gehe	Marshmallow syrup (conserved)	16213604	1
Caelo	Marshmallow syrup (conserved)	15418605	1
Caelo	Marshmallow syrup (conserved)	14102602	2
Sanacorp	Marshmallow syrup (conserved)	13212909	1
Sanacorp	Marshmallow syrup (conserved)	17357505	1
Sanacorp	Marshmallow syrup (conserved)	17249904	1
Sanacorp	Marshmallow syrup (conserved)	17128301	2
Sanacorp	Marshmallow syrup (conserved)	18155106	2
A.H.D.	Raspberry syrup (conserved)	12367602	2
AHD	Raspberry syrup (conserved)	13122001	1
Anzag	Raspberry syrup (conserved)	1306006-01	1
Anzag 13.11.12	Raspberry syrup (conserved)	12283101	1
Anzag 31.10.12	Raspberry syrup (conserved)	1205001-01	1
Caelo	Raspberry syrup (conserved)	24071802	1
Caelo	Raspberry syrup (conserved)	12038502	2
Caelo	Raspberry syrup (conserved)	4071203	1
Caelo	Raspberry syrup (conserved)	24081201	1
Caelo	Raspberry syrup (conserved)	11291404	1
Caelo	Raspberry syrup (conserved)	1081201	1
Caelo	Raspberry syrup (conserved)	12038501	1
Caelo	Raspberry syrup (conserved)	12161705	4
Caelo	Raspberry syrup (conserved)	17101202	1
Caelo	Raspberry syrup (conserved)	12121203	1
Caelo	Raspberry syrup (conserved)	3011301	1
Caelo	Raspberry syrup (conserved)	12283103	2
Caelo	Raspberry syrup (conserved)	8021301	1
Caelo	Raspberry syrup (conserved)	12283101	2
Caelo	Raspberry syrup (conserved)	12367602	7
Caelo	Raspberry syrup (conserved)	15051312	1
Caelo	Raspberry syrup (conserved)	15071302	1
Caelo	Raspberry syrup (conserved)	13122002	1
Caelo	Raspberry syrup (conserved)	13194302	1
Caelo	Raspberry syrup (conserved)	24091302	1
Caelo	Raspberry syrup (conserved)	18111308	1
Caelo	Raspberry syrup (conserved)	11021405	1
Caelo	Raspberry syrup (conserved)	14114302	1

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Supplier	Substance	Batch	Spectra
Caelo	Raspberry syrup (conserved)	14243401	1
Caelo	Raspberry syrup (conserved)	4101405	1
Caelo	Raspberry syrup (conserved)	3121404	1
Caelo	Raspberry syrup (conserved)	14243403	1
Caelo	Raspberry syrup (conserved)	5021510	1
Caelo	Raspberry syrup (conserved)	140903901	1
Caelo	Raspberry syrup (conserved)	14371105	1
Caelo	Raspberry syrup (conserved)	14371106	1
Caelo	Raspberry syrup (conserved)	13051501	1
Caelo	Raspberry syrup (conserved)	15149205	8
Caelo	Raspberry syrup (conserved)	15320801	1
Caelo	Raspberry syrup (conserved)	15320804	1
Caelo	Raspberry syrup (conserved)	15320803	3
Caelo	Raspberry syrup (conserved)	11031705	1
Caelo	Raspberry syrup (conserved)	161002601	1
Caelo	Raspberry syrup (conserved)	16345401	4
Caelo	Raspberry syrup (conserved)	24061707	1
Caelo	Raspberry syrup (conserved)	7091702	1
Caelo	Raspberry syrup (conserved)	18121706	1
Caelo	Raspberry syrup (conserved)	7051802	1
Caelo	Raspberry syrup (conserved)	17111805	1
Caelo	Raspberry syrup (conserved)	18190901	4
Caelo	Raspberry syrup (conserved)	18190903	2
Caelo	Raspberry syrup (conserved)	3961/V07/14	1
Caelo	Raspberry syrup (conserved)	1712004-01	1
Caelo	Raspberry syrup (conserved)	1608003-01	1
Caelo	Raspberry syrup (conserved)	1105022-01	1
Caelo	Raspberry syrup (conserved)	13338001	10
Caelo	Raspberry syrup (conserved)	13393601	3
Caelo	Raspberry syrup (conserved)	16003601	13
Caelo	Raspberry syrup (conserved)	14371108	1
Caelo	Raspberry syrup (conserved)	13122001	10
Caelo	Raspberry syrup (conserved)	1210004-01	1
Caelo	Raspberry syrup (conserved)	1803009-01	2
Caelo	Raspberry syrup (conserved)	14114306	1
Caelo	Raspberry syrup (conserved)	14243405	3
Caelo	Raspberry syrup (conserved)	14371107	1
Caelo	Raspberry syrup (conserved)	17128402	1
Caelo	Raspberry syrup (conserved)	13194301	6
Caelo	Raspberry syrup (conserved)	151102401	1
Caelo	Raspberry syrup (conserved)	249(CH30045626/001)	1
Caelo	Raspberry syrup (conserved)	19009801	2
Caelo	Raspberry syrup (conserved)	17128404	5
Caelo	Raspberry syrup (conserved)	17128405	3
Caelo	Raspberry syrup (conserved)	18096701	12
Caelo	Raspberry syrup (conserved)	18096703	2
Caelo	Raspberry syrup (conserved)	15149202	2
Caelo	Raspberry syrup (conserved)	11169003	1
Caelo	Raspberry syrup (conserved)	15320813	1
Caelo	Raspberry syrup (conserved)	2x13122001	1
Caelo	Raspberry syrup (conserved)	13393602	4
Caelo	Raspberry syrup (conserved)	14114304	5
Caelo	Raspberry syrup (conserved)	14114305	3
Caelo	Raspberry syrup (conserved)	14371104	1
Caelo	Raspberry syrup (conserved)	15149201	2
Caesar & Loretz	Raspberry syrup (conserved)	15149203	1
Caesar & Loretz	Raspberry syrup (conserved)	16151602	2
Caesar & Loretz	Raspberry syrup (conserved)	16345403	3
Caesar & Loretz GmbH	Raspberry syrup (conserved)	18190903	2
Caesar & Loretz GmbH	Raspberry syrup (conserved)	18190905	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz/ Caesar...	Raspberry syrup (conserved)	17128409	1
Caesar & Loretz/ Caesar...	Raspberry syrup (conserved)	18080601	1
Caesar & Loretz/ Noweda	Raspberry syrup (conserved)	13122003	1
Caesar & Loretz/ Noweda	Raspberry syrup (conserved)	18096702	1
Caesar & Loretz/ Noweda	Raspberry syrup (conserved)	16151603	1
Caesar&Loretz	Raspberry syrup (conserved)	15320804	1
Caesar&Loretz	Raspberry syrup (conserved)	15320801	1
Caesar&Loretz	Raspberry syrup (conserved)	16003602	1
Cealo	Raspberry syrup (conserved)	15149202	3
Cealo/ Noweda	Raspberry syrup (conserved)	1712004-01	1
Dr. Wolff	Raspberry syrup (conserved)	1310016-01	1
EuRho	Raspberry syrup (conserved)	1205001-01	3
EuRho	Raspberry syrup (conserved)	1603007-01	1
Eurho / Sanacorp	Raspberry syrup (conserved)	1110025-01	2
Eurho / Sanacorp	Raspberry syrup (conserved)	1302026-01	2
EuRho Anzag	Raspberry syrup (conserved)	1210004-01	1
EuRho/ Anzag	Raspberry syrup (conserved)	253(1901049-01)	1
Eurho/Phönix	Raspberry syrup (conserved)	1409039-01	1
EuRho/Sanacorp	Raspberry syrup (conserved)	1302026-01	1
Euro OTC	Raspberry syrup (conserved)	1608003-01	6
Euro OTC	Raspberry syrup (conserved)	140300201	1
Euro OTC	Raspberry syrup (conserved)	11081402	1
Euro OTC	Raspberry syrup (conserved)	1508015-01	4
Euro OTC	Raspberry syrup (conserved)	1603007-01	10
Euro OTC	Raspberry syrup (conserved)	1605008-01	10
Euro OTC	Raspberry syrup (conserved)	30039701/001	1
Euro OTC	Raspberry syrup (conserved)	171200401	1
Euro OTC	Raspberry syrup (conserved)	180300901	1
Euro OTC	Raspberry syrup (conserved)	160500801	1
Euro OTC	Raspberry syrup (conserved)	1901049-01	1
Euro OTC	Raspberry syrup (conserved)	1205001-01	4
Euro OTC	Raspberry syrup (conserved)	1511023-01	1
Euro OTC	Raspberry syrup (conserved)	1406031-01	5
Euro OTC	Raspberry syrup (conserved)	1210004-01	14
Euro OTC	Raspberry syrup (conserved)	121000401	1
Euro OTC	Raspberry syrup (conserved)	13802025-01	1
Euro OTC	Raspberry syrup (conserved)	250(1807026-01)	1
Euro OTC	Raspberry syrup (conserved)	251(1807026-01)	1
Euro OTC	Raspberry syrup (conserved)	252(1310021-01)	1
Euro OTC	Raspberry syrup (conserved)	1709003-01	6
Euro OTC	Raspberry syrup (conserved)	1709004-01	1
Euro OTC	Raspberry syrup (conserved)	CH30041714/001	1
Euro OTC	Raspberry syrup (conserved)	1302023-01	2
Euro OTC	Raspberry syrup (conserved)	1306006-01	2
Euro OTC	Raspberry syrup (conserved)	1302026-01	1
Euro OTC	Raspberry syrup (conserved)	1310016-01	9
Euro OTC	Raspberry syrup (conserved)	160508-01	1
Euro OTC	Raspberry syrup (conserved)	1511024-01	5
Euro OTC	Raspberry syrup (conserved)	1701022-02	1
Euro OTC	Raspberry syrup (conserved)	1610026-01	4
Euro OTC	Raspberry syrup (conserved)	1504011-01	3
Euro OTC	Raspberry syrup (conserved)	1810021-01	2
EurRho/Fiebig	Raspberry syrup (conserved)	1511023-01	2
Fagron	Raspberry syrup (conserved)	1501011-01	1
Euro OTC	Raspberry syrup (conserved)	1712004-01	7
Euro OTC	Raspberry syrup (conserved)	1803009-01	5
Euro OTC	Raspberry syrup (conserved)	1807026-01	6
Fiebig/Europharm	Raspberry syrup (conserved)	1610026-01	1
Fiebig/Europharm	Raspberry syrup (conserved)	1701022-01	10
Gehe	Raspberry syrup (conserved)	12161702	1

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Supplier	Substance	Batch	Spectra
Gehe	Raspberry syrup (conserved)	12367602	1
jenne eurho	Raspberry syrup (conserved)	1302026-01	1
Caelo	Raspberry syrup (conserved)	1302026-01	3
L10	Raspberry syrup (conserved)	17128402	4
L10	Raspberry syrup (conserved)	18096701	5
Caelo	Raspberry syrup (conserved)	16151601	9
Caelo	Raspberry syrup (conserved)	16345404	6
L12	Raspberry syrup (conserved)	16345401	1
L12	Raspberry syrup (conserved)	18190901	3
Midas	Raspberry syrup (conserved)	17128404	6
Midas	Raspberry syrup (conserved)	18096703	3
MIDAS	Raspberry syrup (conserved)	190009801	1
MIDAS	Raspberry syrup (conserved)	19009801	4
noweda	Raspberry syrup (conserved)	13393605	1
Euro OTC	Raspberry syrup (conserved)	1705037-01	9
Noweda 04.08.15	Raspberry syrup (conserved)	1501011-01	1
Caelo	Raspberry syrup (conserved)	1615101	1
Euro OTC	Raspberry syrup (conserved)	1701022-01	3
Euro OTC	Raspberry syrup (conserved)	1302026-01-335031904	1
Phoenix	Raspberry syrup (conserved)	13338001	1
Phoenix	Raspberry syrup (conserved)	1807026-01	2
phoenix 14.11.14	Raspberry syrup (conserved)	14114306	1
phönix	Raspberry syrup (conserved)	12038501	1
Phönix	Raspberry syrup (conserved)	14114303	2
Phönix	Raspberry syrup (conserved)	141114303	1
Sanacorp	Raspberry syrup (conserved)	12283103	3
Sanacorp	Raspberry syrup (conserved)	13194301	1
Sanacorp	Raspberry syrup (conserved)	14243405	1
Caelo	Ribwort plantain syrup (cons...	12347506	2
Caelo	Ribwort plantain syrup (cons...	12347501	1
Caelo	Ribwort plantain syrup (cons...	13152308	3
Caelo	Ribwort plantain syrup (cons...	13152304	1
Caelo	Ribwort plantain syrup (cons...	14125702	2
Caelo	Ribwort plantain syrup (cons...	16029009	8
Caelo	Ribwort plantain syrup (cons...	16029007	1
Caelo	Ribwort plantain syrup (cons...	16335301	1
Caelo	Ribwort plantain syrup (cons...	18289801	9
Caelo	Ribwort plantain syrup (cons...	13152305	1
Caelo	Ribwort plantain syrup (cons...	15076003	1
L12	Ribwort plantain syrup (cons...	16335302	5
L12	Ribwort plantain syrup (cons...	16335305	1
L12	Ribwort plantain syrup (cons...	18078902	9
Caelo	Ribwort plantain syrup (cons...	16029002	2
L31	Ribwort plantain syrup (cons...	16335305	1
Sanacorp	Ribwort plantain syrup (cons...	13152303	1
Sanacorp	Ribwort plantain syrup (cons...	16029009	1
Sanacorp	Ribwort plantain syrup (cons...	16335302	1
Sanacorp	Ribwort plantain syrup (cons...	16335305	1
Sanacorp	Ribwort plantain syrup (cons...	18078902	3
Sanacorp	Ribwort plantain syrup (cons...	18289801	2
Caelo	Sorbitol solution 70% (non-c...	15175307	1
Anzag	Sorbitol solution 70% (non-c...	120701201	1
Euro OTC	Sorbitol solution 70% (non-c...	170201102	1
apo-ident/Phönix	Sorbitol solution 70% (non-c...	1702011-02	1
Caelo	Sorbitol solution 70% (non-c...	26071209	1
Caelo	Sorbitol solution 70% (non-c...	12124903	2
Caelo	Sorbitol solution 70% (non-c...	12124906	2
Caelo	Sorbitol solution 70% (non-c...	22011306	1
Caelo	Sorbitol solution 70% (non-c...	12124908	2
Caelo	Sorbitol solution 70% (non-c...	12124912	4

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Supplier	Substance	Batch	Spectra
Caelo	Sorbitol solution 70% (non-c...	8051306	1
Caelo	Sorbitol solution 70% (non-c...	12124914	5
Caelo	Sorbitol solution 70% (non-c...	2071305	1
Caelo	Sorbitol solution 70% (non-c...	13060204	5
Caelo	Sorbitol solution 70% (non-c...	28081301	1
Caelo	Sorbitol solution 70% (non-c...	3031404	1
Caelo	Sorbitol solution 70% (non-c...	14298101	7
Caelo	Sorbitol solution 70% (non-c...	14298102	3
Caelo	Sorbitol solution 70% (non-c...	14169401	1
Caelo	Sorbitol solution 70% (non-c...	15175306	3
Caelo	Sorbitol solution 70% (non-c...	16078806	5
Caelo	Sorbitol solution 70% (non-c...	25021706	1
Caelo	Sorbitol solution 70% (non-c...	16078810	5
Caelo	Sorbitol solution 70% (non-c...	15437900	1
Caelo	Sorbitol solution 70% (non-c...	1702011-01	1
Caelo	Sorbitol solution 70% (non-c...	17027005	6
Caelo	Sorbitol solution 70% (non-c...	21041803	1
Caelo	Sorbitol solution 70% (non-c...	17027014	1
Caelo	Sorbitol solution 70% (non-c...	18322005	1
Caelo	Sorbitol solution 70% (non-c...	16078807	1
Caelo	Sorbitol solution 70% (non-c...	20(17305409)	1
Caelo	Sorbitol solution 70% (non-c...	1207012-02	2
Caelo	Sorbitol solution 70% (non-c...	1804019-01	3
Caelo	Sorbitol solution 70% (non-c...	17305412	3
Caelo	Sorbitol solution 70% (non-c...	1804019-02	1
Caelo	Sorbitol solution 70% (non-c...	14169403	4
Caelo	Sorbitol solution 70% (non-c...	1207012-01	1
Caelo	Sorbitol solution 70% (non-c...	17305409	2
Caelo	Sorbitol solution 70% (non-c...	19(17027010)	1
Caelo	Sorbitol solution 70% (non-c...	17305401	9
Caelo	Sorbitol solution 70% (non-c...	15437906	6
Caelo	Sorbitol solution 70% (non-c...	13233801	2
Caelo	Sorbitol solution 70% (non-c...	14034702	1
Caelo	Sorbitol solution 70% (non-c...	11255613	1
Caelo	Sorbitol solution 70% (non-c...	13060203	5
Caelo	Sorbitol solution 70% (non-c...	13060211	1
Caelo	Sorbitol solution 70% (non-c...	13233810	6
Caelo	Sorbitol solution 70% (non-c...	15437907	4
Caelo	Sorbitol solution 70% (non-c...	123456789	1
Caelo	Sorbitol solution 70% (non-c...	1702011-02	1
Caelo	Sorbitol solution 70% (non-c...	18322001	1
Caelo	Sorbitol solution 70% (non-c...	1519302	1
Caelo	Sorbitol solution 70% (non-c...	17027011	2
Caelo	Sorbitol solution 70% (non-c...	19163403	1
Caelo	Sorbitol solution 70% (non-c...	16078811	1
Caelo	Sorbitol solution 70% (non-c...	1412031-01	1
Caelo	Sorbitol solution 70% (non-c...	17027010	6
Caelo	Sorbitol solution 70% (non-c...	12/18-N09	1
Caelo	Sorbitol solution 70% (non-c...	1309026-01	1
Caelo	Sorbitol solution 70% (non-c...	15159301	6
Caelo	Sorbitol solution 70% (non-c...	15175301	1
Caelo	Sorbitol solution 70% (non-c...	15175309	5
Caelo	Sorbitol solution 70% (non-c...	17305406	2
Caelo	Sorbitol solution 70% (non-c...	18322002	1
Caelo	Sorbitol solution 70% (non-c...	13233808	3
Caelo	Sorbitol solution 70% (non-c...	13233807	3
Caelo	Sorbitol solution 70% (non-c...	14169409	2
Caelo	Sorbitol solution 70% (non-c...	15159302	6
Caelo	Sorbitol solution 70% (non-c...	19022301	1
Caelo	Sorbitol solution 70% (non-c...	15175310	3

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Supplier	Substance	Batch	Spectra
Caesar & Lorenz GmbH	Sorbitol solution 70% (non-c...	17027010	1
Caesar & Loretz GmbH	Sorbitol solution 70% (non-c...	14298101	1
Caesar u Loretz	Sorbitol solution 70% (non-c...	13060206	1
EuRho	Sorbitol solution 70% (non-c...	1207012-02	1
EuRho	Sorbitol solution 70% (non-c...	1309026-02	1
EuRho/Phönix	Sorbitol solution 70% (non-c...	1412031-02	1
Euro OTC	Sorbitol solution 70% (non-c...	141203101	1
Euro OTC	Sorbitol solution 70% (non-c...	1604020-02	1
Euro OTC	Sorbitol solution 70% (non-c...	1604020-03	2
Euro OTC	Sorbitol solution 70% (non-c...	1702011-01	3
Euro OTC	Sorbitol solution 70% (non-c...	21041804	1
Euro OTC	Sorbitol solution 70% (non-c...	1102001-02	1
Euro OTC	Sorbitol solution 70% (non-c...	1207012-01	4
Euro OTC	Sorbitol solution 70% (non-c...	1804019-01	8
Euro OTC	Sorbitol solution 70% (non-c...	1207012-02	3
Euro OTC	Sorbitol solution 70% (non-c...	1804019-02	2
Euro OTC	Sorbitol solution 70% (non-c...	1309026-01	4
Euro OTC	Sorbitol solution 70% (non-c...	1412031-01	10
Euro OTC	Sorbitol solution 70% (non-c...	1412031-02	4
Euro OTC	Sorbitol solution 70% (non-c...	1905010-01	2
Euro OTC	Sorbitol solution 70% (non-c...	1604020-01	9
Euro/Noweda	Sorbitol solution 70% (non-c...	170201102	1
Euro OTC	Sorbitol solution 70% (non-c...	130902602	1
Euro OTC	Sorbitol solution 70% (non-c...	1702011-02	2
Fagron	Sorbitol solution 70% (non-c...	11G18-N14	1
Fagron	Sorbitol solution 70% (non-c...	12E08-N09	1
Fagron	Sorbitol solution 70% (non-c...	13E24-B01	2
Fagron	Sorbitol solution 70% (non-c...	21081406	1
Fagron	Sorbitol solution 70% (non-c...	139026	1
Fagron	Sorbitol solution 70% (non-c...	29081505	1
Fagron	Sorbitol solution 70% (non-c...	23021702	1
Fagron	Sorbitol solution 70% (non-c...	16078810	1
Fagron	Sorbitol solution 70% (non-c...	26081708	1
Fagron	Sorbitol solution 70% (non-c...	3041801	1
Fagron	Sorbitol solution 70% (non-c...	16G06-B08	1
Fagron	Sorbitol solution 70% (non-c...	2013M-02299	1
Gehe	Sorbitol solution 70% (non-c...	10323008	1
Gehe	Sorbitol solution 70% (non-c...	12E08-N09	1
Gehe	Sorbitol solution 70% (non-c...	1207012-01	1
Gehe	Sorbitol solution 70% (non-c...	12124910	1
Gehe	Sorbitol solution 70% (non-c...	12K07-N04	1
Gehe	Sorbitol solution 70% (non-c...	1207012-02	1
Gehe	Sorbitol solution 70% (non-c...	120701202	1
Gehe	Sorbitol solution 70% (non-c...	12118-N09	1
GEHE	Sorbitol solution 70% (non-c...	17305409	1
Fagron	Sorbitol solution 70% (non-c...	13J04-B01-289676	1
Ichthyol/Gehe	Sorbitol solution 70% (non-c...	1309026-01	1
Caelo	Sorbitol solution 70% (non-c...	17027006	1
Noweda	Sorbitol solution 70% (non-c...	17305401	1
Euro OTC	Sorbitol solution 70% (non-c...	1309026-02	4
Phoenix	Sorbitol solution 70% (non-c...	1309026-02	1
Caelo	Sorbitol solution 70% (non-c...	13233803	3
AHD / apomix	Sugar syrup DAB	24A180316	1
Alliance H.	Sugar syrup DAB	37/A030616	1
Alliance health	Sugar syrup DAB	11A280115	1
AMH Niemann	Sugar syrup DAB	1A130114	1
AMH Niemann GmbH	Sugar syrup DAB	74A241014	1
AMH Niemann GmbH	Sugar syrup DAB	30A200415	1
AMH Niemann GmbH	Sugar syrup DAB	50A020715	1
AMH Niemann GmbH	Sugar syrup DAB	70A051015	1

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Supplier	Substance	Batch	Spectra
AMH Niemann GmbH	Sugar syrup DAB	85A261115	1
AMH Niemann GmbH & Co.KG	Sugar syrup DAB	22A130315	1
AMH Niemann GmbH & Co.K...	Sugar syrup DAB	7A250116	1
AMH Niemann GmbH & Co.K...	Sugar syrup DAB	33A170516	1
AMH Niemann GmbH / Sana...	Sugar syrup DAB	49A290716	1
AMH Niemann/Sanacorp	Sugar syrup DAB	23A280318	1
AMH Niemann/Sanacorp	Sugar syrup DAB	78A221118	1
Anzag	Sugar syrup DAB	44A260612	1
Anzag	Sugar syrup DAB	58A210813	1
Anzag 17.01.2013	Sugar syrup DAB	88A051212	1
Anzag 25.01.2013	Sugar syrup DAB	71A091012	1
Apom/Noweda	Sugar syrup DAB	28A010617	1
apomix	Sugar syrup DAB	46A030712	1
apomix	Sugar syrup DAB	23081202	1
apomix	Sugar syrup DAB	35A250512	1
apomix	Sugar syrup DAB	43A260612	1
apomix	Sugar syrup DAB	67A240912	1
apomix	Sugar syrup DAB	20021307	1
apomix	Sugar syrup DAB	58A270712	1
apomix	Sugar syrup DAB	16A210213	1
apomix	Sugar syrup DAB	66A210912	1
apomix	Sugar syrup DAB	27A200313	1
apomix	Sugar syrup DAB	45A050613	1
apomix	Sugar syrup DAB	11121305	1
apomix	Sugar syrup DAB	95A111213	1
apomix	Sugar syrup DAB	19A040314	1
apomix	Sugar syrup DAB	36A140414	1
apomix	Sugar syrup DAB	49A220714	1
apomix	Sugar syrup DAB	13101405	1
apomix	Sugar syrup DAB	57A140814	1
apomix	Sugar syrup DAB	76A061114	1
apomix	Sugar syrup DAB	1A140115	1
apomix	Sugar syrup DAB	26A080415	1
apomix	Sugar syrup DAB	20A270215	1
apomix	Sugar syrup DAB	71A091015	1
apomix	Sugar syrup DAB	83A191115	1
apomix	Sugar syrup DAB	59A010914	1
apomix	Sugar syrup DAB	59A070814	1
apomix	Sugar syrup DAB	55A130814	1
apomix	Sugar syrup DAB	21A130315	1
apomix	Sugar syrup DAB	41A120615	1
apomix	Sugar syrup DAB	18081517	1
apomix	Sugar syrup DAB	37A220515	1
apomix	Sugar syrup DAB	2A130116	1
apomix	Sugar syrup DAB	22A170316	2
apomix	Sugar syrup DAB	23A180316	1
apomix	Sugar syrup DAB	35A300516	4
apomix	Sugar syrup DAB	41A040716	1
apomix	Sugar syrup DAB	24041801	1
apomix	Sugar syrup DAB	44A040718	1
apomix	Sugar syrup DAB	35A310518	1
apomix	Sugar syrup DAB	23A280318	1
apomix	Sugar syrup DAB	26011907	1
apomix	Sugar syrup DAB	69A241018	2
apomix	Sugar syrup DAB	75A151118	1
apomix	Sugar syrup DAB	3A210119	1
apomix	Sugar syrup DAB	80A261118	1
Apomix	Sugar syrup DAB	47A050712	1
Apomix	Sugar syrup DAB	12A010212	1
Apomix	Sugar syrup DAB	25A200412	1

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Supplier	Substance	Batch	Spectra
Apomix	Sugar syrup DAB	1A140113	1
Apomix	Sugar syrup DAB	81A-081112	1
Apomix	Sugar syrup DAB	5A210113	1
Apomix	Sugar syrup DAB	10A3000113	1
Apomix	Sugar syrup DAB	17A270213	1
Apomix	Sugar syrup DAB	94A281212	1
Apomix	Sugar syrup DAB	32A120413	1
Apomix	Sugar syrup DAB	25A110313	1
Apomix	Sugar syrup DAB	93A111213	1
Apomix	Sugar syrup DAB	22A050314	1
Apomix	Sugar syrup DAB	99A201213	1
Apomix	Sugar syrup DAB	21A050314	3
Apomix	Sugar syrup DAB	39A050614	1
Apomix	Sugar syrup DAB	48A210714	1
Apomix	Sugar syrup DAB	55A130814	1
Apomix	Sugar syrup DAB	24A180316	1
Apomix	Sugar syrup DAB	37A030616	1
Apomix	Sugar syrup DAB	55a220816	1
Apomix	Sugar syrup DAB	58A19816	1
Apomix	Sugar syrup DAB	58A190816	1
Apomix	Sugar syrup DAB	53A120816	3
Apomix	Sugar syrup DAB	71A031116	1
Apomix	Sugar syrup DAB	65A041016	1
Apomix	Sugar syrup DAB	56A220816	1
Apomix	Sugar syrup DAB	8A230117	1
Apomix	Sugar syrup DAB	35A200617	1
Apomix	Sugar syrup DAB	50A240817	1
Apomix	Sugar syrup DAB	56A041017	1
Apomix	Sugar syrup DAB	66A101018	1
Apomix	Sugar syrup DAB	12A190218	1
Apomix / Alliance Healt...	Sugar syrup DAB	28A270519	1
Apomix / Gehe	Sugar syrup DAB	87A071215	1
Apomix / Gehe	Sugar syrup DAB	69A241018	1
Apomix / Kehr	Sugar syrup DAB	18A030314	1
Apomix / Kehr	Sugar syrup DAB	48A210714	1
Apomix / Kehr	Sugar syrup DAB	74A241014	2
Apomix / Kehr	Sugar syrup DAB	86A051214	1
Apomix / Kehr	Sugar syrup DAB	88A12124	1
Apomix / Kehr	Sugar syrup DAB	88A121214	1
Apomix / Kehr	Sugar syrup DAB	5A220115	1
Apomix / Kehr	Sugar syrup DAB	50A020715	1
Apomix / Kehr	Sugar syrup DAB	11A120216	2
Apomix / Kehr	Sugar syrup DAB	27A110416	3
Apomix / Kehr	Sugar syrup DAB	49A290716	3
Apomix / Kehr	Sugar syrup DAB	63A260916	4
Apomix / Kehr	Sugar syrup DAB	7A230117	1
Apomix / Kehr	Sugar syrup DAB	70328/4Hk	1
Apomix / Kehr	Sugar syrup DAB	72A041116	1
Apomix / Noweda	Sugar syrup DAB	41A230513	1
Apomix / Noweda	Sugar syrup DAB	51A090713	1
Apomix / Noweda	Sugar syrup DAB	93A231214	1
Apomix / Noweda	Sugar syrup DAB	30A190416	1
Apomix / Noweda	Sugar syrup DAB	67A131016	1
Apomix / Alliance	Sugar syrup DAB	85A191113	1
Apomix Anzag	Sugar syrup DAB	47A050712	2
Apomix Anzag	Sugar syrup DAB	49A100712	1
apomix Fiebig	Sugar syrup DAB	77A261015	1
Apomix Noweda	Sugar syrup DAB	41A310717	1
apomix PKH GmbH Halle	Sugar syrup DAB	13A290115	1
Apomix PKH Halle	Sugar syrup DAB	60A120916	1

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Supplier	Substance	Batch	Spectra
Apomix PKH Halle	Sugar syrup DAB	52A110917	1
Apomix PKH Halle	Sugar syrup DAB	34A300518	1
Apomix PKH/V.d.L.	Sugar syrup DAB	37A240413	2
Apomix PKH/V.d.L.	Sugar syrup DAB	9A290113	1
Apomix PKH/V.d.L.	Sugar syrup DAB	64A050913	1
Apomix PKH/V.d.L.	Sugar syrup DAB	7A310114	1
apomix VDL	Sugar syrup DAB	93A111213	1
Apomix, Noweda	Sugar syrup DAB	43A040613	2
apomix/ AHD 01.03.17	Sugar syrup DAB	86A271216	1
apomix/ AHD 11.01.2019	Sugar syrup DAB	47A130718	1
apomix/ AHD 12.12.17	Sugar syrup DAB	50A240817	1
apomix/ AHD 23.06.17	Sugar syrup DAB	15A200317	1
apomix/ AHD 28.08.2018	Sugar syrup DAB	24A280318	1
apomix/ Fiebig	Sugar syrup DAB	57A180816	3
apomix/ Fiebig	Sugar syrup DAB	67A131016	1
apomix/ Fiebig	Sugar syrup DAB	5A180117	3
apomix/ Fiebig	Sugar syrup DAB	15A200317	1
apomix/ Fiebig	Sugar syrup DAB	28A010617	7
apomix/ Fiebig	Sugar syrup DAB	36A200617	5
apomix/ Fiebig	Sugar syrup DAB	50A240817	3
apomix/ Fiebig	Sugar syrup DAB	52A110917	3
Apomix/ Gehe	Sugar syrup DAB	55A180712	2
apomix/ Noweda	Sugar syrup DAB	72A091015	1
Apomix/ Noweda	Sugar syrup DAB	65A141117	1
apomix/ Phoenix	Sugar syrup DAB	76A301012	1
apomix/ Phoenix	Sugar syrup DAB	21A010313	1
apomix/ Phoenix	Sugar syrup DAB	11A060213	1
apomix/ Phönix	Sugar syrup DAB	93A231214	1
Apomix/ Phönix	Sugar syrup DAB	34A240413	1
Apomix/ Phönix	Sugar syrup DAB	32A240415	1
Apomix/ Phönix	Sugar syrup DAB	40A290515	2
Apomix/ Phönix	Sugar syrup DAB	68A250915	1
Apomix/ Phönix	Sugar syrup DAB	81A161115	4
apomix/AHD	Sugar syrup DAB	63A061117	2
apomix/alliance healthc...	Sugar syrup DAB	76A231015	2
apomix/alliance healthc...	Sugar syrup DAB	3A150116	1
apomix/alliance healthc...	Sugar syrup DAB	3a150116	1
Apomix/Alliance Healthc...	Sugar syrup DAB	25A170314	1
Apomix/Alliance Healthc...	Sugar syrup DAB	7A230115	1
Apomix/Alliance Healthc...	Sugar syrup DAB	68A230914	1
Apomix/Alliance Healthc...	Sugar syrup DAB	58A260815	1
Apomix/Alliance Healthc...	Sugar syrup DAB	71A091015	1
Apomix/Alliance Healthc...	Sugar syrup DAB	1A130116	1
Apomix/Alliance Healthc...	Sugar syrup DAB	14A150216	1
Apomix/Alliance Healthc...	Sugar syrup DAB	22A170316	1
Apomix/Alliance Healthc...	Sugar syrup DAB	44A110716	1
Apomix/Alliance Healthc...	Sugar syrup DAB	68A131016	1
Apomix/Alliance Healthc...	Sugar syrup DAB	47A220817	1
Apomix/Alliance Healthc...	Sugar syrup DAB	43a180618	1
Apomix/Anzag	Sugar syrup DAB	2112I-02263	1
Apomix/Anzag	Sugar syrup DAB	1314I-02263	1
Apomix/Anzag	Sugar syrup DAB	1515Q-02263	1
Apomix/Anzag	Sugar syrup DAB	37A03616	1
Apomix/Anzag	Sugar syrup DAB	50A290716	1
Apomix/Anzag	Sugar syrup DAB	1116E-02263	1
Apomix/Anzag	Sugar syrup DAB	67A131016	1
Apomix/Anzag	Sugar syrup DAB	59A290818	1
Apomix/Fiebig	Sugar syrup DAB	70A281117	3
Apomix/Fiebig	Sugar syrup DAB	1A160118	3
Apomix/Fiebig	Sugar syrup DAB	18095601	3

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Supplier	Substance	Batch	Spectra
apomix/Gehe	Sugar syrup DAB	48A010715	1
apomix/Gehe	Sugar syrup DAB	56A310715	1
apomix/Gehe	Sugar syrup DAB	1A130116	1
Apomix/Gehe	Sugar syrup DAB	93A271212	1
Apomix/Gehe	Sugar syrup DAB	9A030214	2
Apomix/Gehe	Sugar syrup DAB	o9A030214	1
Apomix/Gehe	Sugar syrup DAB	18A030314	1
Apomix/Gehe	Sugar syrup DAB	81A251114	1
Apomix/Gehe	Sugar syrup DAB	60A020914	1
Apomix/Gehe	Sugar syrup DAB	32A240415	1
Apomix/Gehe	Sugar syrup DAB	15A100215	1
Apomix/Gehe	Sugar syrup DAB	49A020715	2
Apomix/Gehe	Sugar syrup DAB	1A140115	2
Apomix/Gehe	Sugar syrup DAB	71A091015	3
Apomix/Gehe	Sugar syrup DAB	89A111215	1
Apomix/Gehe	Sugar syrup DAB	50A290716	1
Apomix/Gehe	Sugar syrup DAB	62A260918	1
Apomix/GEHE	Sugar syrup DAB	17A030314	1
apomix/gehe 04.09.17	Sugar syrup DAB	35a200617	1
apomix/gehe 08.06.17	Sugar syrup DAB	21A160517	1
apomix/gehe 190717	Sugar syrup DAB	25a310517	1
apomix/gehe 28.04.17	Sugar syrup DAB	14a200217	1
apomix/Kehr	Sugar syrup DAB	11A280115	2
apomix/Kehr	Sugar syrup DAB	43A110716	2
Apomix/Kehr	Sugar syrup DAB	30A200415	3
Apomix/Kehr	Sugar syrup DAB	42A120615	1
Apomix/Kehr	Sugar syrup DAB	57A260815	2
Apomix/Kehr	Sugar syrup DAB	72A091015	1
Apomix/Kehr	Sugar syrup DAB	85A261115	1
Apomix/Kehr	Sugar syrup DAB	3A150116	1
Apomix/Kehr	Sugar syrup DAB	51A010816	1
Apomix/Kehr	Sugar syrup DAB	19A150517	1
Apomix/Kehr	Sugar syrup DAB	23A290517	2
Apomix/Kehr	Sugar syrup DAB	29A130617	2
Apomix/Kehr	Sugar syrup DAB	44A070817	2
Apomix/Kehr	Sugar syrup DAB	45A210817	1
Apomix/Kehr	Sugar syrup DAB	63A061117	3
Apomix/Kehr	Sugar syrup DAB	3A180118	5
Apomix/Kehr	Sugar syrup DAB	8A070218	2
Apomix/Kehr	Sugar syrup DAB	27A090418	1
Apomix/Kehr	Sugar syrup DAB	35A310518	2
apomix/L12	Sugar syrup DAB	46A180716	3
apomix/noweda	Sugar syrup DAB	57A131017	1
apomix/Noweda	Sugar syrup DAB	39A050614	2
Apomix/Noweda	Sugar syrup DAB	57A180816	1
Apomix/Noweda	Sugar syrup DAB	41A040716	1
Apomix/Noweda	Sugar syrup DAB	79A241116	1
Apomix/Noweda	Sugar syrup DAB	86A271216	1
Apomix/Noweda	Sugar syrup DAB	9A250117	1
Apomix/Noweda	Sugar syrup DAB	23A290517	1
Apomix/Noweda	Sugar syrup DAB	71A291117	1
Apomix/Noweda	Sugar syrup DAB	51A170718	2
Apomix/Noweda	Sugar syrup DAB	1A160118	1
Apomix/Noweda	Sugar syrup DAB	45A040718	1
Apomix/Noweda	Sugar syrup DAB	68A241018	2
apomix/Phoenix	Sugar syrup DAB	20A280213	1
apomix/Phoenix	Sugar syrup DAB	73A101013	1
apomix/Phoenix	Sugar syrup DAB	25A080415	1
Apomix/Phoenix	Sugar syrup DAB	45A210817	1
Apomix/Phoenix	Sugar syrup DAB	20A120318	2

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Supplier	Substance	Batch	Spectra
Apomix/Phoenix	Sugar syrup DAB	26A09418	1
Apomix/Phoenix	Sugar syrup DAB	74A151118	1
Apomix/Phoenix 03.11.2017	Sugar syrup DAB	50A240817	1
apomix/Phönix	Sugar syrup DAB	214050314	1
apomix/Phönix	Sugar syrup DAB	2A130116	1
apomix/Phönix	Sugar syrup DAB	9A280116	1
Apomix/Phönix	Sugar syrup DAB	59A270815	1
Apomix/Phönix	Sugar syrup DAB	72A091015	1
Apomix/Phönix	Sugar syrup DAB	74A151015	1
Apomix/Phönix	Sugar syrup DAB	29A190416	1
apomix/Sanacorp	Sugar syrup DAB	96A161213	1
Apomix/Sanacorp	Sugar syrup DAB	66A110913-3442311102	1
Apomix/Sanacorp	Sugar syrup DAB	35A070414	1
Apomix/Sanacorp	Sugar syrup DAB	7A230115	1
Apomix/Sanacorp	Sugar syrup DAB	72A041116	1
Apomix/Sanacorp	Sugar syrup DAB	68A281117	1
Apomix/Sancorp	Sugar syrup DAB	21A010313	1
Apomix/Sancorp	Sugar syrup DAB	45A050613	1
Apomix/Sancorp	Sugar syrup DAB	2A130114	1
Apomix/Sancorp	Sugar syrup DAB	55A130814	1
ApomixNoweda	Sugar syrup DAB	5A180117	1
ApomixNoweda	Sugar syrup DAB	36A200617	1
ApomixNoweda	Sugar syrup DAB	67A271117	4
ApomixNoweda	Sugar syrup DAB	11A190218	1
ApomixNoweda	Sugar syrup DAB	40A040618	2
Apommix-Sanacorp	Sugar syrup DAB	51A090713-3399310141	1
Bombastus	Sugar syrup DAB	82A151216	1
Caelo	Sugar syrup DAB	14189102	2
Caelo	Sugar syrup DAB	14299801	3
Caelo	Sugar syrup DAB	93A231214	1
Caelo	Sugar syrup DAB	14337004	1
Caelo	Sugar syrup DAB	15117002	1
Caelo	Sugar syrup DAB	15150602	1
Caelo	Sugar syrup DAB	15427102	2
Caelo	Sugar syrup DAB	16187902	3
Caelo	Sugar syrup DAB	162140	1
Caelo	Sugar syrup DAB	41A040716	1
Caelo	Sugar syrup DAB	161879	1
Caelo	Sugar syrup DAB	29A130617	1
Caelo	Sugar syrup DAB	17129001	4
Caelo	Sugar syrup DAB	17129301	4
Caelo	Sugar syrup DAB	17304302	3
Caelo	Sugar syrup DAB	17260101	1
Caelo	Sugar syrup DAB	17200501	1
Caelo	Sugar syrup DAB	5A240118	1
Caelo	Sugar syrup DAB	18033401	3
Caelo	Sugar syrup DAB	18130001	5
Caelo	Sugar syrup DAB	18227801	1
Caelo	Sugar syrup DAB	66A101018	1
Caelo	Sugar syrup DAB	18247602	1
Caelo	Sugar syrup DAB	19010402	1
Caelo	Sugar syrup DAB	38A190514	1
Caelo	Sugar syrup DAB	22A130315	2
Caelo	Sugar syrup DAB	17028002	5
Caelo	Sugar syrup DAB	81A-251114	1
Caelo	Sugar syrup DAB	35A300516	2
Caelo	Sugar syrup DAB	76A171013	1
Caelo	Sugar syrup DAB	21A010313	1
Caelo	Sugar syrup DAB	23A180316	1
Caelo	Sugar syrup DAB	53A120816	2

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Supplier	Substance	Batch	Spectra
Caelo	Sugar syrup DAB	58A270712	1
Caelo	Sugar syrup DAB	16214101	3
Caelo	Sugar syrup DAB	20A270215	2
Caelo	Sugar syrup DAB	77A061114	1
Caelo	Sugar syrup DAB	79A241116	1
Caelo	Sugar syrup DAB	35A200317	1
Caelo	Sugar syrup DAB	17A240417	1
Caelo	Sugar syrup DAB	42A120615	1
Caelo	Sugar syrup DAB	21A170316	1
Caelo	Sugar syrup DAB	30A190416	1
Caelo	Sugar syrup DAB	17304301	2
Caelo	Sugar syrup DAB	18032801	3
Caelo	Sugar syrup DAB	18095601	10
Caelo	Sugar syrup DAB	20A120318	1
Caelo	Sugar syrup DAB	17275702	6
Caelo	Sugar syrup DAB	9A280116	3
Caelo	Sugar syrup DAB	15315201	2
Caelo	Sugar syrup DAB	16214002	3
Caelo	Sugar syrup DAB	15334802	1
Caelo	Sugar syrup DAB	13A1502216	1
Caelo	Sugar syrup DAB	16345701	2
Caelo	Sugar syrup DAB	18033002	6
Caelo	Sugar syrup DAB	19010602	4
Caelo	Sugar syrup DAB	19085101	1
Caelo	Sugar syrup DAB	44A050613	1
Caelo	Sugar syrup DAB	79A281013	2
Caelo	Sugar syrup DAB	14189101	1
Caelo	Sugar syrup DAB	14246001	1
Caelo	Sugar syrup DAB	16091501	3
Caelo	Sugar syrup DAB	18296402	1
Caesar & Loretz GmbH	Sugar syrup DAB	86A051214	1
Caesar & Loretz GmbH	Sugar syrup DAB	18296402	1
Caesar & Loretz GmbH	Sugar syrup DAB	19085001	1
Euro OTC	Sugar syrup DAB	13A150216	1
Euro OTC	Sugar syrup DAB	80A061115	1
Fagron	Sugar syrup DAB	13089R	1
Fagron	Sugar syrup DAB	38A250413	1
Fiebig	Sugar syrup DAB	64A260916	5
Fiebig/ Apomix	Sugar syrup DAB	60A120916	1
Gehe	Sugar syrup DAB	51A090713	1
GEHE	Sugar syrup DAB	18033401	1
Gehe/ Apomix	Sugar syrup DAB	59A030812	1
Gehe/AMHNiemann	Sugar syrup DAB	27A090418	1
Caelo	Sugar syrup DAB	17129101	2
Caelo	Sugar syrup DAB	18175701	4
Gutenberg-Apotheke	Sugar syrup DAB	18A030314	1
hochhaus-Apotheke	Sugar syrup DAB	67A131016	1
hochhaus-Apotheke	Sugar syrup DAB	67A-131016	1
Hochhaus-Apotheke	Sugar syrup DAB	64A260916	3
Ichthyol/Gehe	Sugar syrup DAB	22A170316	1
JENNE	Sugar syrup DAB	16214101	1
Kehr/Apomix	Sugar syrup DAB	66A160914	2
Kehr/Apomix	Sugar syrup DAB	88A121214	1
Kehr/Apomix	Sugar syrup DAB	66A141117	2
Caelo	Sugar syrup DAB	33A190617	1
Klenk	Sugar syrup DAB	13A150216	2
L10	Sugar syrup DAB	32A140617	1
L10	Sugar syrup DAB	4A240118	3
L10	Sugar syrup DAB	7A050218	3
L10	Sugar syrup DAB	12A190218	4

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Supplier	Substance	Batch	Spectra
L10/apomix	Sugar syrup DAB	62A190916	6
L10apomix	Sugar syrup DAB	70A051118	1
L11	Sugar syrup DAB	58A131017	3
L12	Sugar syrup DAB	85A231216	2
L12	Sugar syrup DAB	12A300117	1
L12	Sugar syrup DAB	22A160517	5
L12	Sugar syrup DAB	39A170717	5
L12	Sugar syrup DAB	49A240817	1
L12	Sugar syrup DAB	74A271217	2
L12	Sugar syrup DAB	50A170718	3
L12	Sugar syrup DAB	57A280818	2
L12	Sugar syrup DAB	82A121218	1
L12	Sugar syrup DAB	81A291118	1
L12	Sugar syrup DAB	60A210918	2
L12/apomix	Sugar syrup DAB	12A120219	1
L12/Apomix	Sugar syrup DAB	56A220816	3
Caelo	Sugar syrup DAB	48A220716	1
L30	Sugar syrup DAB	80A251116	2
L30	Sugar syrup DAB	87A271216	3
Nachprüfung	Sugar syrup DAB	42A220612	1
Niemann GmbH & Co.KG	Sugar syrup DAB	53A080814	1
Nowe/Apom	Sugar syrup DAB	77A101116	2
Noweda	Sugar syrup DAB	11A060213	1
Noweda / Apomix	Sugar syrup DAB	47A120613	1
noweda/Apomix	Sugar syrup DAB	56A160813	1
Noweda/Apomix	Sugar syrup DAB	87A051214	1
Noweda/Apomix	Sugar syrup DAB	9A280116	1
Phoenix	Sugar syrup DAB	43A040613	1
Phoenix	Sugar syrup DAB	59A01914	1
Phoenix/Apomix	Sugar syrup DAB	29A220313	1
Phönix Gotha	Sugar syrup DAB	59A220813	1
Phönix Gotha	Sugar syrup DAB	51A090713	3
Phönix Gotha	Sugar syrup DAB	1A130114	1
Phönix Gotha	Sugar syrup DAB	77A171013	1
Phönix/ apomix	Sugar syrup DAB	66A110913	1
Euro OTC	Sugar syrup DAB	86A271216	1
PhR	Sugar syrup DAB	53a120816	1
PhR	Sugar syrup DAB	41a040716	1
PhR	Sugar syrup DAB	41A040716	1
PhR	Sugar syrup DAB	82a151216	1
PhR	Sugar syrup DAB	82A151216	2
PhR	Sugar syrup DAB	14A200217	1
PhR	Sugar syrup DAB	14a200217	1
PhR	Sugar syrup DAB	30A130617	1
PhR Neidhardt	Sugar syrup DAB	42A310717	1
PhR Neidhardt	Sugar syrup DAB	68A281117	2
PhR Neidhardt	Sugar syrup DAB	73A271217	1
PhR Neidhardt	Sugar syrup DAB	17A060318	2
PhR Neidhardt	Sugar syrup DAB	43A180618	1
PhR Neidhardt	Sugar syrup DAB	38A010618	1
PhR Neidhardt	Sugar syrup DAB	54A010818	1
PhR Neidhardt	Sugar syrup DAB	67A101018	2
PKH	Sugar syrup DAB	41A190612	1
PKH / Phoenix	Sugar syrup DAB	93A231214	1
PKH / Phoenix	Sugar syrup DAB	80A061115	2
pkh Gehe 18,12.17	Sugar syrup DAB	68a281117	1
PKH GmbH	Sugar syrup DAB	30A190416	1
PKH GmbH	Sugar syrup DAB	14A200217	1
PKH GmbH	Sugar syrup DAB	4A240118	1
PKH GmbH	Sugar syrup DAB	68A281117	1

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Supplier	Substance	Batch	Spectra
PKH GmbH / Phoenix	Sugar syrup DAB	49A020715	1
PKH Halle	Sugar syrup DAB	19A040314	1
PKH Halle - Apomix / AH...	Sugar syrup DAB	11A190218	1
PKH Halle (apomix) / AH...	Sugar syrup DAB	43A070817	1
PKH Halle / Phoenix	Sugar syrup DAB	57A180816	1
PKH Halle/ Gehe 27.04.2...	Sugar syrup DAB	5A180117	1
PKH/Phoenix	Sugar syrup DAB	25A310517	1
PKH-Halle/Sanacorp	Sugar syrup DAB	72A041013	2
PKH-Halle/Sanacorp	Sugar syrup DAB	10A030214	1
rPhR Neidhar	Sugar syrup DAB	30A190416	3
Sanacorp	Sugar syrup DAB	58A270712	1
Sanacorp	Sugar syrup DAB	82A081112	1
Sanacorp	Sugar syrup DAB	13A290115	1
Caelo	Sugar syrup DAB	51A070814	1
Sanacorp/ apomix	Sugar syrup DAB	28A110416	1
Sanacorp/ PKH Halle	Sugar syrup DAB	29A110512	1
Sanacorp/AMHNiemann	Sugar syrup DAB	48A160718	2
Caelo	Cherry syrup (conserved)	14034503	1
Caelo	Cherry syrup (conserved)	13278301	2
Fagron	Ipecacuanha syrup (NRF 19.1)	13G23-M02	1
Caelo	Marshmallow syrup (conserved)	13152307	2
Caelo	Marshmallow syrup (conserved)	12303106	2
Caelo	Raspberry syrup (conserved)	13122003	2
Caelo	Raspberry syrup (conserved)	14114303	1
noweda	Raspberry syrup (conserved)		1
Caelo	Sorbitol solution 70% (non-c...	14034706	1
Caelo	Sorbitol solution 70% (non-c...	13060206	2
Phönix Gotha	Sugar syrup DAB		1

- 136 871 spectra from 703 *Apo-Ident* customers from a total of 34 669 batches from a further 332 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Syrups* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Syrups* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1720	0	54 639
Type B	0	1589	11	67 874
Type C	0	1476	6	136 871

The substance/substance group *Syrups* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.6512 %)
Type B	100.0000 % (> 99.9653 %)	99.3125 % (> 99.1250 %)
Type C	100.0000 % (> 99.6452 %)	99.5951 % (> 99.3927 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Syrups* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Honey	14.42	—
Viscous base solution (NRF p. 20)	22.11	—
Rose honey	22.27	—
Glucose syrup	23.85	—
Condurango wine	35.37	—
Glycerine ointment (conserved)	37.03	—
Liquorice juice purified, diluted	39.32	—
Lotio Cordes®	43.23	—
Sodium lactate solution 50%	50.49	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Syrups* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
33421	31181	5.81	42.15
30753	31147	3.38	41.94
31147	31147	0.00	42.83
31365	32210	3.59	45.60
32210	32210	0.00	42.42
33331	33331	0.00	40.34
34477	34477	0.00	35.36
34664	34664	0.00	34.85
30870	32277	5.55	33.36
31124	31353	1.73	33.29
31353	31353	0.00	33.49
32277	32277	0.00	33.30
33228	33228	0.00	35.78

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31155	31155	0.00	35.76
31359	31051	1.43	35.43
33099	33099	0.00	43.13
30900	30900	0.00	30.67
31598	30900	7.30	26.39
34233	34233	0.00	27.72
34734	34734	0.00	27.61
32984	32984	0.00	29.21
30897	31877	3.28	42.62
31218	31218	0.00	39.61
34329	34329	0.00	40.52
34600	34600	0.00	41.49
31051	31051	0.00	37.10
31467	31051	1.70	37.75
31773	31773	0.00	30.57
31802	31802	0.00	31.38
32284	32284	0.00	33.45
31175	31175	0.00	41.86
31355	31175	1.90	42.63
31877	31877	0.00	43.80
33505	34600	3.18	42.23
34526	31877	2.14	43.32
31181	31181	0.00	39.95
33263	31181	5.73	39.01
33420	31181	6.34	41.27

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Tea tree oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31023-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Tea tree oil; Oleum melaleuca alternifolia

Special notes

When selecting the *Tea tree oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Tea tree oil	5	2	57

Second-stage model

For differentiation of the substance/substance group *Tea tree oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Tea tree oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Tea tree oil	12201303	31023	40	1404597
Caelo	Tea tree oil	13288914	31401	40	20130828
Caelo	Tea tree oil	14203203	31960	60	20140703
Caelo	Tea tree oil	15337105	33478	40	20151007
Caelo	Tea tree oil	192425	34712	40	20191002*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Tea tree oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Tea tree oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Tea tree oil	173227	34058	40
Caelo	Tea tree oil	170677	34059	40

- 69394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 108 spectra from 42 *Apo-Ident* customers from 60 batches from the substance/substance group *Tea tree oil*.
- Among them are spectra of independent samples from 54 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Apoth.Bauer&Co,Münch	Tea tree oil	692624	1
apotheker bauer& cie oHG	Tea tree oil	6548331306	1
Bambastus/fiebig	Tea tree oil	18001809	2
Bergland / Noweda	Tea tree oil	P102633	1
Bergland /Noweda	Tea tree oil	K302332	1
Bergland-Pharma/Anzag	Tea tree oil	C101782	1
Bergland-Pharma/Anzag	Tea tree oil	C002685	1
Bombastus	Tea tree oil	302427	1
Bombastus	Tea tree oil	305629	3
Bombastus	Tea tree oil	304033	1
Bombastus	Tea tree oil	19001331	2
Caelo	Tea tree oil	11333516	1
Caelo	Tea tree oil	14111201	1
Caelo	Tea tree oil	12201304	3
Caelo	Tea tree oil	11358910	1
Caelo	Tea tree oil	12201313	1
Caelo	Tea tree oil	11333514	1
Caelo	Tea tree oil	14071604	2
Caelo	Tea tree oil	14203202	1
Caelo	Tea tree oil	14302302	1
Caelo	Tea tree oil	15051806	2
Caelo	Tea tree oil	16007506	3
Caelo	Tea tree oil	16007509	1
Caelo	Tea tree oil	300469	1
Caelo	Tea tree oil	18047610	1
Caelo	Tea tree oil	15337111	2
Caelo	Tea tree oil	12201311	4
Caelo	Tea tree oil	13099506	6
Caelo	Tea tree oil	13099510	4
Caelo	Tea tree oil	14302301	8
Caelo	Tea tree oil	14203201	1
Caelo	Tea tree oil	15051807	2
Caelo	Tea tree oil	15337112	4
Caelo	Tea tree oil	13288902	1
Caelo	Tea tree oil	170667706	3
Caelo	Tea tree oil	15337106	3

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Supplier	Substance	Batch	Spectra
Caelo	Tea tree oil	15337120	1
Cealo	Tea tree oil	12201303	1
Ebert 01.09.2016	Tea tree oil	15337105	1
Gehe	Tea tree oil	K203705	3
L12	Tea tree oil	15337119	1
L12	Tea tree oil	18047602	1
Caelo	Tea tree oil	17067705	2
Melaleuka GmbH	Tea tree oil	MCZWH14	1
Minck	Tea tree oil	1511E-03093	1
Noweda	Tea tree oil	18047603	1
Phönix	Tea tree oil	17067705	1
primavera	Tea tree oil	5604136	1
Sanacorp/Taoasis	Tea tree oil	76283-777	1
Sensient	Tea tree oil	C9663	1
Taoasis	Tea tree oil	516495-108562	1
Taoasis	Tea tree oil	535627-110746	2
Taoasis	Tea tree oil	41015006139	1
Taoasis	Tea tree oil	33152-112369	1
Taoasis	Tea tree oil	556031-114257	2
Taoasis	Tea tree oil	76283-778	1
Taoasis GmbH	Tea tree oil	98546	1
Apoth.Bauer&Co,Münch	Tea tree oil		1
Apotheker bauer	Tea tree oil		1
bauer und cie münchen	Tea tree oil		2
Caelo	Tea tree oil	12201303	3
Caelo	Tea tree oil	14203203	2

- 138 245 spectra from 703 *Apo-Ident* customers from a total of 35 236 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Tea tree oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Tea tree oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 394
Type C	0	107	1	138 245

The substance/substance group *Tea tree oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.0741 % (> 96.2963 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Tea tree oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Citronella oil	35.10	—
Verbena oil, nature-identical	53.67	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Tea tree oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31023	31023	0.00	52.89
31401	34712	14.46	49.20
31960	31023	8.18	54.37
33478	34712	9.18	68.47
34712	34712	0.00	59.81

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Thyme oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30206-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Thyme oil; Oleum thymi

Special notes

When selecting the *Thyme oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Thyme oil	5	3	83

Second-stage model

For differentiation of the substance/substance group *Thyme oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Thyme oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Bombastus	Thyme oil	17001282	33878	40	20171108
Bombastus	Thyme oil	18003401	34519	40	124170
Caelo	Thyme oil	12020518	31018	40	1407220
Caelo	Thyme oil	14225405	31566	60	20140822
Caelo	Thyme oil	15230104	32265	40	20150702

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Thyme oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 120 spectra of 3 reference samples from the substance/substance group *Thyme oil*.
- Among them are spectra of independent samples from 3 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Bombastus	Thyme oil	305865	33877	40
Caelo	Thyme oil	163279	33083	40
Caelo	Thyme oil	16327902	33477	40

- 69 354 spectra from a total of 1499 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 201 spectra from 103 *Apo-Ident* customers from 87 batches from the substance/substance group *Thyme oil*.
- Among them are spectra of independent samples from 82 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Anzag 27.12.12 ek:8,71	Thyme oil	12020510	2
Bombastus	Thyme oil	268010	2
Bombastus	Thyme oil	271263	1
Bombastus	Thyme oil	283494	1
Bombastus	Thyme oil	305865	1
Bombastus	Thyme oil	298188	1
Bombastus	Thyme oil	18002293	1
Caelo	Thyme oil	14225406	5
Caelo	Thyme oil	14071202	1
Caelo	Thyme oil	3211I-02023	1
Caelo	Thyme oil	11275801	1
Caelo	Thyme oil	12020510	6
Caelo	Thyme oil	11275811	1
Caelo	Thyme oil	13021303	1
Caelo	Thyme oil	13044707	4
Caelo	Thyme oil	1202510	1
Caelo	Thyme oil	13044716	3
Caelo	Thyme oil	6081401	1
Caelo	Thyme oil	13044715	2
Caelo	Thyme oil	14225408	1
Caelo	Thyme oil	14225417	2
Caelo	Thyme oil	14381301	1
Caelo	Thyme oil	15402204	1
Caelo	Thyme oil	15402203	1
Caelo	Thyme oil	154022002	1
Caelo	Thyme oil	1540220	1
Caelo	Thyme oil	163279902	1
Caelo	Thyme oil	16327902	2
Caelo	Thyme oil	24061701	1
Caelo	Thyme oil	15402219	1
Caelo	Thyme oil	16327906	1
Caelo	Thyme oil	16327911	1
Caelo	Thyme oil	18087305	1
Caelo	Thyme oil	5121816	1
Caelo	Thyme oil	18087308	1

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Supplier	Substance	Batch	Spectra
Caelo	Thyme oil	14225418	1
Caelo	Thyme oil	12020515	1
Caelo	Thyme oil	13044705	1
Caelo	Thyme oil	13044710	1
Caelo	Thyme oil	14225403	1
Caelo	Thyme oil	14225414	1
Caelo	Thyme oil	16327909	4
Caelo	Thyme oil	12020503	3
Caelo	Thyme oil	15402202	21
Caelo	Thyme oil	13044702	3
Caelo	Thyme oil	14225413	9
Caelo	Thyme oil	12020514	5
Caelo	Thyme oil	18025201	2
Caelo	Thyme oil	18087309	4
Caelo	Thyme oil	12020511	1
Caelo	Thyme oil	3313U-02023	1
Caelo	Thyme oil	2615A-02023	1
Caelo	Thyme oil	13044709	1
Caelo	Thyme oil	18087301	1
Caelo	Thyme oil	16327904	2
Caelo	Thyme oil	16327903	4
Caelo	Thyme oil	18087312	1
Caelo	Thyme oil	15402207	5
Caelo	Thyme oil	14225412	3
Caelo	Thyme oil	14225412	1
Caelo	Thyme oil	10118603	1
Caelo	Thyme oil	14225410	2
Caelo	Thyme oil	14225401	3
Caelo	Thyme oil	11275806	1
Caelo	Thyme oil	12165401	1
Caelo	Thyme oil	12201104	5
Caelo	Thyme oil	13044708	5
Caelo	Thyme oil	1221104	1
Caesar & Loretz/Noweda	Thyme oil	15402202	1
Fagron	Thyme oil	10L20-N09	1
Fagron	Thyme oil	12020518	1
Fiebi 07.11.12 ek:8,48	Thyme oil	12020503	1
Gehe	Thyme oil	15402202	1
GEHE 02.07.2014	Thyme oil	13044715	3
Caelo	Thyme oil	301115	1
Caelo	Thyme oil	15230104/1100516	1
Caelo	Thyme oil	1120917	1
Caelo	Thyme oil	16327910	7
Kögl	Thyme oil	14602170617	1
Caelo	Thyme oil	15402208	3
L12	Thyme oil	18087309	1
Phoenix	Thyme oil	15402202	1
PVL	Thyme oil	271112	1
Sanacorp	Thyme oil	16327910	1
Sanacorp	Thyme oil	18087307	1
Caelo	Thyme oil	14225409	2
Taoasis	Thyme oil	28739-106640	1
Taoasis	Thyme oil	31911-109378	1
Taoasis	Thyme oil	109378	1
Taoasis	Thyme oil	31911-110649	1
Taoasis	Thyme oil	28739-104426	1
VDL	Thyme oil	14225413	1
	Thyme oil	13044708	1
Caelo	Thyme oil	15230104	7
Caelo	Thyme oil	12020518	4

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Supplier	Substance	Batch	Spectra
Caelo	Thyme oil	14225405	1
Euro OTC	Thyme oil		1
Fagron	Thyme oil		1

- 138 152 spectra from 703 *Apo-Ident* customers from a total of 35 210 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Thyme oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Thyme oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	120	0	69 354
Type C	0	195	6	138 152

The substance/substance group *Thyme oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6452 %)	97.0149 % (> 95.5224 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Thyme oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Oregano oil	26.13	—
Coriander oil	65.86	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Thyme oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31018	31018	0.00	47.99
31566	31018	7.19	49.39
32265	31018	13.17	41.15
33878	31018	13.13	43.76
34519	31018	20.93	38.75

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Triglycerides
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30647-2020-03-12
Executing company	HiperScan GmbH Weikeritzstraße 3 01067 Dresden Germany

Relevant substance names

Triglycerides; Almond oil, refined; Apricot kernel oil, refined; Avocado oil, refined; Borage oil, refined, stabilised; Codliver oil (type A); Corn oil, refined; Decyl oleate; Decylis oleas; Evening primrose oil, refined; Flaxseed oil, native; Grape seed oil, refined; Jojoba oil, native; Laurel oil; Lecithinum e sojae, liquidus; Oleum amygdalarum raffinatum; Oleum arachidis raffinatum; Oleum boraginis raffinatum; Oleum carthami; Oleum cucurbita semen; Oleum helianthi raffinatum; Oleum jecoris (Typ A); Oleum juglandis raffinatum; Oleum lauri expressum; Oleum lini; Oleum maydis raffinatum; Oleum oenotherae raffinatum; Oleum olivarum nativum; Oleum omega-3 18/12; Oleum persea americana raffinatum; Oleum pruni armeniaca raffinatum; Oleum rapae raffinatum; Oleum sesami raffinatum; Oleum simmondsia chinensis; Oleum sojae raffinatum; Oleum tritici raffinatum; Oleum vitis viniferae raffinatum; Oleyl oleate (stabilised); Oleylis oleas; Olive oil, native; Omega-3-fish oil; Peanut oil, refined; Pumpkin seed oil, pressed; Rapeseed oil, refined; Safflower oil, refined type I; Sesame oil, refined; Shea butter, refined; Soy lecithin, liquid; Soy oil, refined; Sunflower oil, refined; Walnut oil, refined; Wheatgerm oil, refined

Special notes

When selecting the *Triglycerides* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Almond oil, refined	4	9	579
Apricot kernel oil, refined	6	2	9
Avocado oil, refined	5	2	152
Borage oil, refined, stabilised	5	2	124
Codliver oil (type A)	4	2	145
Corn oil, refined	3	2	12
Decyl oleate	3	3	27
Evening primrose oil, refined	6	8	380
Flaxseed oil, native	5	4	100
Grape seed oil, refined	3	2	33
Jojoba oil, native	5	2	135
Laurel oil	5	3	9
Oleyl oleate (stabilised)	3	2	63
Olive oil, native	7	10	443
Omega-3-fish oil	5	2	7
Peanut oil, refined	5	2	228
Pumpkin seed oil, pressed	5	2	0
Rapeseed oil, refined	3	2	8
Safflower oil, refined type I	3	2	5
Sesame oil, refined	3	3	77
Shea butter, refined	4	1	77
Soy lecithin, liquid	3	2	14
Soy oil, refined	3	1	5
Sunflower oil, refined	5	2	34
Walnut oil, refined	3	2	9
Wheatgerm oil, refined	4	2	83

Second-stage model

For differentiation of the substance/substance group *Triglycerides* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Triglycerides*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Almond oil, refi...	13350007	31250	40	1407348
Caelo	Almond oil, refi...	14042704	31337	40	20140211
Euro OTC	Almond oil, refi...	1510014	31770	60	20151022*
Euro OTC	Almond oil, refi...	1603025	32188	40	20160428*
Caelo	Apricot kernel o...	11346402	30840	40	20111214
Caelo	Apricot kernel o...	13357604	31375	40	1412121
Caelo	Apricot kernel o...	162361	32683	40	20160818*
Caelo	Apricot kernel o...	16236106	32931	40	20160818
Caelo	Apricot kernel o...	170555	33060	30	20170308*
Caelo	Apricot kernel o...	190665	34666	40	20190318*
Caelo	Avocado oil, ref...	13361406	31336	40	AR-15-FG-002721-01

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Avocado oil, ref. ...	14363703	31662	60	20150114
Caelo	Avocado oil, ref. ...	170388	33067	40	20170209*
Euro OTC	Avocado oil, ref. ...	1501015	31801	60	20150121*
Euro OTC	Avocado oil, ref. ...	1605034	32457	40	20160607*
Caelo	Borage oil, refi. ...	13170606	31161	40	1407319
Caelo	Borage oil, refi. ...	14161904	31384	40	20140522
Caelo	Borage oil, refi. ...	16266007	33510	40	20161027
Caelo	Borage oil, refi. ...	182958	34643	40	20181212*
Caelo	Borage oil, refi. ...	192492	34721	40	20190920*
Caelo	Codliver oil (ty. ...)	12062501	30878	40	20120411
Caelo	Codliver oil (ty. ...)	13396403	31361	60	AR-14-FG-012167-01
Fagron	Codliver oil (ty. ...)	14D16-B08-304341	31677	60	20140520
Fagron	Codliver oil (ty. ...)	15A07-B05-304428	31825	60	20150116
Caelo	Corn oil, refined	12141511	31016	40	1407320
Caelo	Corn oil, refined	13249005	31274	40	1407347
Caelo	Corn oil, refined	13249005	31344	40	20130819
Caelo	Corn oil, refined	191129	34437	40	20190424*
Caelo	Decyl oleate	13378403	31382	40	AR-15-FG-000232-01
Caelo	Decyl oleate	170595	33070	40	20170308*
Euro OTC	Decyl oleate	1309018-01	31584	60	20131007
Caelo	Evening primrose. ...	12325103	30855	40	20121107
Caelo	Evening primrose. ...	14010915	31460	60	AR-14-FG-012898-01
Caelo	Evening primrose. ...	14258610	31572	60	AR-15-FG-002720-01
Euro OTC	Evening primrose. ...	1407002-02	31589	60	20140718
Euro OTC	Evening primrose. ...	1506001	31708	60	20150616*
Euro OTC	Evening primrose. ...	1509005	31775	60	20150921*
Bombastus	Flaxseed oil, na. ...	281489	31172	40	1407202
Bombastus	Flaxseed oil, na. ...	309176	33880	40	114126
Bombastus	Flaxseed oil, na. ...	19001510	34522	40	130458
Caelo	Flaxseed oil, na. ...	14087903	31326	40	20140401
Caelo	Flaxseed oil, na. ...	170467	33064	40	20170222*
Caelo	Grape seed oil, ...	13065302	31121	40	1407373
Caelo	Grape seed oil, ...	16092401	32746	40	20160407
Caelo	Grape seed oil, ...	192412	34713	40	20191002*
Caelo	Joboba oil, native	13287709	31322	40	AR-14-FG-012487-01
Caelo	Joboba oil, native	13287709	31482	60	20130920
Caelo	Joboba oil, native	13287709	31519	60	20130920
Caelo	Joboba oil, native	16070602	33254	40	20160316
Euro OTC	Joboba oil, native	1808038	34300	40	20180917*
Henry Lamotte	Joboba oil, native	8002391001	33876	40	20161124
Henry Lamotte	Joboba oil, native	8004998001	34691	40	20190221
Caelo	Laurel oil	13024511	31122	40	1403397
Caelo	Laurel oil	15216401	31833	60	1606485
Caelo	Laurel oil	16275701	33255	40	20161005
Caelo	Laurel oil	190919	34441	40	20190509*
Caelo	Laurel oil	192363	34711	40	20190913*
Caelo	Oleyl oleate (st. ...)	12220205	30754	40	20120803
Caelo	Oleyl oleate (st. ...)	12220207	30863	40	20120803
Caelo	Oleyl oleate (st. ...)	14005001	31496	60	AR-15-FG-001552-01
Bombastus	Olive oil, native	306949	32990	40	20170116
Bombastus	Olive oil, native	306949	32991	40	20170116
Bombastus	Olive oil, native	19001848	34521	40	130315
Caelo	Olive oil, native	14024409	31356	60	20140130
Caelo	Olive oil, native	161446	32195	40	20160524*
Caelo	Olive oil, native	163274	33063	30	20160112*
Euro OTC	Olive oil, native	1407052-02	31585	60	20140812
Euro OTC	Olive oil, native	1602022	32186	40	20160309*
Henry Lamotte	Omega-3-fish oil	0123108	30679	40	20120613
Henry Lamotte	Omega-3-fish oil	0123780	31178	40	20130403
Henry Lamotte	Omega-3-fish oil	0124495	31540	60	20140325

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Henry Lamotte	Omega-3-fish oil	1000000642	31729	60	1601423
Henry Lamotte	Omega-3-fish oil	1000000642	31792	60	20150414
Henry Lamotte	Omega-3-fish oil	1000001175	31875	60	20150626
Caelo	Peanut oil, refi...	13306106	31246	40	1406534
Caelo	Peanut oil, refi...	14115404	31346	60	20140415
Caelo	Peanut oil, refi...	162495	32680	40	20160831*
Caelo	Peanut oil, refi...	170428	33059	40	20170215*
Caelo	Peanut oil, refi...	163553	33085	40	20170106*
Caelo	Pumpkin seed oil...	13358504	31332	40	AR-14-FG-012336-02
Caelo	Pumpkin seed oil...	14199402	31609	60	1507428
Caelo	Pumpkin seed oil...	171379	33917	40	20170606*
Caelo	Pumpkin seed oil...	191450	34663	40	20190605*
Caelo	Pumpkin seed oil...	192743	34718	40	20191008*
Caelo	Rapeseed oil, re...	12054402	30647	40	20120321
Caelo	Rapeseed oil, re...	13011008	31215	40	1406536
Caelo	Rapeseed oil, re...	13236506	31376	40	20130806
Caelo	Safflower oil, r...	13011302	30981	80	1407318
Caelo	Safflower oil, r...	13358705	31362	60	20131122
Caelo	Safflower oil, r...	161849	32334	40	20160623*
Caelo	Sesame oil, refi...	12054508	30873	40	20120323
Caelo	Sesame oil, refi...	13397402	31350	60	AR-14-FG-012338-01
Caelo	Sesame oil, refi...	192560	34716	40	20190924*
Caelo	Shea butter, ref...	13143819	31513	60	1412122
Caelo	Shea butter, ref...	14261107	31582	60	20140923
Caelo	Shea butter, ref...	15303004	31826	60	20151112
Caelo	Shea butter, ref...	15144903	32300	40	20150703
Caelo	Shea butter, ref...	15144903	32301	40	20150703
Euro OTC	Soy lecithin, li...	1305019-01	31034	40	20130603
Euro OTC	Soy lecithin, li...	1404022-01	31523	60	8779
Euro OTC	Soy lecithin, li...	1907035	34753	40	20190911*
Caelo	Soy oil, refined	13361305	31378	40	20131122
Caelo	Soy oil, refined	15239302	31834	60	20150817
Caelo	Soy oil, refined	15239302	32729	40	20150817
Caelo	Soy oil, refined	171217	33309	40	20170509*
Caelo	Sunflower oil, r...	13011411	31217	40	1406538
Caelo	Sunflower oil, r...	13225110	31374	40	20130813
Caelo	Sunflower oil, r...	15422804	32745	40	20151218
Henry Lamotte	Sunflower oil, r...	8002491005	33472	40	20170210
Henry Lamotte	Sunflower oil, r...	1000010859	34701	40	20190503
Caelo	Walnut oil, refi...	13202401	31216	40	1406537
Caelo	Walnut oil, refi...	13364501	31380	40	20131122
Caelo	Walnut oil, refi...	173248	33916	40	20170512*
Caelo	Wheatgerm oil, r...	13011508	31210	40	1407215
Caelo	Wheatgerm oil, r...	13261604	31491	40	1412119
Caelo	Wheatgerm oil, r...	16137403	32730	40	20160708
Caelo	Wheatgerm oil, r...	191432	34602	40	20190605*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- 5320 spectra of 117 reference samples from the substance/substance group *Triglycerides*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 110 different batches.
- 51 039 spectra from a total of 1006 batches from further 193 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a †. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 3075 spectra of 77 reference samples from the substance/substance group *Triglycerides*.
- Among them are spectra of independent samples from 76 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Almond oil, refined	161444	32198	40
Caelo	Almond oil, refined	170422	33066	40
Caelo	Almond oil, refined	171765	33314	40
Caelo	Almond oil, refined	191871	34617	40
Euro OTC	Almond oil, refined	1701036	33231	40
Euro OTC	Almond oil, refined	1801030	33924	40
Euro OTC	Almond oil, refined	1807007	34195	40
Euro OTC	Almond oil, refined	1904007	34493	40
Euro OTC	Almond oil, refined	1909015	34751	40
Caelo	Apricot kernel oil, refined	16236109	33512	40
Caelo	Apricot kernel oil, refined	172518	33700	40
Caelo	Avocado oil, refined	161047	32197	40
Caelo	Avocado oil, refined	161859	32315	40
Caelo	Borage oil, refined, stabili...	162660	32685	40
Caelo	Borage oil, refined, stabili...	17055407	33853	40
Caelo	Codliver oil (type A)	162739	32690	40
Caelo	Codliver oil (type A)	171378	33308	40
Caelo	Corn oil, refined	162603	32689	40
Caelo	Corn oil, refined	170550	33069	40
Caelo	Decyl oleate	161071	32194	40
Caelo	Decyl oleate	172156	33671	40
Caelo	Decyl oleate	190883	34472	40
Caelo	Evening primrose oil, refined	162813	32682	40
Caelo	Evening primrose oil, refined	191644	34604	40
Caelo	Evening primrose oil, refined	191754	34605	40
Euro OTC	Evening primrose oil, refined	1605027	32463	40
Euro OTC	Evening primrose oil, refined	1703020	33227	40
Euro OTC	Evening primrose oil, refined	1710011	33849	40
Euro OTC	Evening primrose oil, refined	1803006	34095	40
Euro OTC	Evening primrose oil, refined	1901046	34423	40
Caelo	Flaxseed oil, native	172364	33677	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Flaxseed oil, native	190994	34439	40
Caelo	Flaxseed oil, native	191645	34610	40
Caelo	Flaxseed oil, native	192554	34719	40
Caelo	Grape seed oil, refined	16092402	32989	40
Caelo	Grape seed oil, refined	16339703	33475	40
Caelo	Jojoba oil, native	170733	33892	40
Caelo	Jojoba oil, native	191529	34611	40
Caelo	Laurel oil	14176301	31657	15
Caelo	Laurel oil	15216402	31745	60
Caelo	Laurel oil	18028202	33948	40
Caelo	Oleyl oleate (stabilised)	161049	32202	40
Caelo	Oleyl oleate (stabilised)	173581	33920	40
Caelo	Olive oil, native	170387	33068	40
Caelo	Olive oil, native	171216	33306	40
Caelo	Olive oil, native	172365	33674	40
Euro OTC	Olive oil, native	1608006	32709	40
Euro OTC	Olive oil, native	1802011	34005	40
Euro OTC	Olive oil, native	1805023	34183	40
Euro OTC	Olive oil, native	1808026	34215	40
Euro OTC	Olive oil, native	1903013	34495	40
Euro OTC	Olive oil, native	1905018	34653	40
Euro OTC	Olive oil, native	1910015	34752	40
Henry Lamotte	Omega-3-fish oil	1000002824	32734	40
Henry Lamotte	Omega-3-fish oil	1000007067	34124	40
Caelo	Peanut oil, refined	161195	32206	40
Caelo	Peanut oil, refined	171690	33315	40
Caelo	Pumpkin seed oil, pressed	15410004	32783	40
Caelo	Pumpkin seed oil, pressed	180837	34061	40
Caelo	Rapeseed oil, refined	161850	32316	40
Caelo	Rapeseed oil, refined	172139	33673	40
Caelo	Safflower oil, refined type I	17092201	33653	40
Caelo	Safflower oil, refined type I	180999	34062	40
Caelo	Sesame oil, refined	163125	33075	40
Caelo	Sesame oil, refined	171777	33313	40
Caelo	Sesame oil, refined	16312505	33618	40
Caelo	Shea butter, refined	17085805	33470	40
Euro OTC	Soy lecithin, liquid	1703001-01	33838	40
Euro OTC	Soy lecithin, liquid	1803030	34094	40
Caelo	Soy oil, refined	16347104	33462	40
Caelo	Sunflower oil, refined	162758	32691	40
Caelo	Sunflower oil, refined	191755	34613	40
Caelo	Walnut oil, refined	161007	32199	40
Caelo	Walnut oil, refined	16100703	33488	40
Caelo	Wheatgerm oil, refined	16321301	33489	40
Caelo	Wheatgerm oil, refined	172903	33915	40
Caelo	Grape seed oil, refined	16339703	33476	40

- 66 399 spectra from a total of 1426 batches from further 335 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 13 143 spectra from 645 *Apo-Ident* customers from 2813 batches from the substance/substance group *Triglycerides*.
- Among them are spectra of independent samples from 2734 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
14215814	Almond oil, refined	14215814	1
ACM	Almond oil, refined	KNC1100J15	1
ACM	Almond oil, refined	KNC0766J15	1
ACM	Almond oil, refined	KNC1364J15	1
ACM	Almond oil, refined	KNC1560J16	1
AHC03.08.13 EK2,36 100ml	Almond oil, refined	5438302	1
AHD	Almond oil, refined	130145	1
AHD	Almond oil, refined	14139305	1
AHD	Almond oil, refined	18015002	1
AHD / H.Lamotte	Almond oil, refined	8000712001	1
Caelo	Almond oil, refined	14215817	7
AHD/ Henry Lamotte	Almond oil, refined	8000915002	1
Caelo	Almond oil, refined	15197409	3
AHL	Almond oil, refined	8003167001	1
ALH	Almond oil, refined	8001497001	1
Aliance Hearthcave 11.0...	Almond oil, refined	13236402	1
Alliance H.	Almond oil, refined	15409704	1
Alte Apotheke	Almond oil, refined	16071007	1
Anzag	Almond oil, refined	5214206	1
ANZAG	Almond oil, refined	5214206	1
Anzag 09.02.2013	Almond oil, refined	12357101	1
Caelo	Almond oil, refined	18184101	18
Anzag, Henry Lamotte	Almond oil, refined	8001497001	1
Anzag/ Henry Lamotte	Almond oil, refined	8004039003	2
Caelo	Almond oil, refined	14215814	4
Caelo	Almond oil, refined	1633327302	1
Anzag/Leyh Pharma am	Almond oil, refined	13236404	1
Apolda/ Sanacorp	Almond oil, refined	14215807	1
Apolda/ Sanacorp	Almond oil, refined	14139309	1
Audor Pharma	Almond oil, refined	304023	1
Bahnhof-Apotheke	Almond oil, refined	-30-160809	1
Beiersdorf	Almond oil, refined	17207905	1
Bionorica/Phönix	Almond oil, refined	18070602	1
biopräp	Almond oil, refined	E1810144	1
BioPräp	Almond oil, refined	E1610090	1
Biopräp / GEHE	Almond oil, refined	E1403027	1
Biopräp / GEHE	Almond oil, refined	E1410088	1
Biopräp/Phönix	Almond oil, refined	E1805161	1
Bombast/Phönix	Almond oil, refined	18000342	1
Bombastu/Phönix	Almond oil, refined	18006808	1
Bombastus	Almond oil, refined	267099	2
Bombastus	Almond oil, refined	270829	1
Bombastus	Almond oil, refined	273578	4
Bombastus	Almond oil, refined	274564	1
Bombastus	Almond oil, refined	277971	4
Bombastus	Almond oil, refined	279230	1
Bombastus	Almond oil, refined	281040	5
Bombastus	Almond oil, refined	282171	1
Bombastus	Almond oil, refined	284968	1
Bombastus	Almond oil, refined	283801	2
Bombastus	Almond oil, refined	14139305	1
Bombastus	Almond oil, refined	288428	3
Bombastus	Almond oil, refined	288471	3
Bombastus	Almond oil, refined	292591	2

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Supplier	Substance	Batch	Spectra
Bombastus	Almond oil, refined	295615	2
Bombastus	Almond oil, refined	297872	3
Bombastus	Almond oil, refined	300840	1
Bombastus	Almond oil, refined	299598	1
Bombastus	Almond oil, refined	1509710	1
Bombastus	Almond oil, refined	302210	4
Bombastus	Almond oil, refined	302209	1
Bombastus	Almond oil, refined	16327302	4
Bombastus	Almond oil, refined	304023	2
Bombastus	Almond oil, refined	306291	2
Bombastus	Almond oil, refined	308918	1
Bombastus	Almond oil, refined	16327311	1
Bombastus	Almond oil, refined	3089195381	1
Bombastus	Almond oil, refined	308920	2
Bombastus	Almond oil, refined	310859	2
Bombastus	Almond oil, refined	17000424	1
Bombastus	Almond oil, refined	18000341	4
Bombastus	Almond oil, refined	180003415618	1
Bombastus	Almond oil, refined	307298	6
Bombastus	Almond oil, refined	294784	4
Bombastus	Almond oil, refined	8004039003	1
Bombastus	Almond oil, refined	18004502	5
Bombastus	Almond oil, refined	18006807	3
Bombastus	Almond oil, refined	19003889	1
Bombastus	Almond oil, refined	15197409	1
Bombastus	Almond oil, refined	307299	9
Bombastus	Almond oil, refined	282093	3
Bombastus	Almond oil, refined	284967	2
Bombastus	Almond oil, refined	286253	2
Bombastus	Almond oil, refined	287416	1
Bombastus	Almond oil, refined	60083010	1
Bombastus	Almond oil, refined	18004503	4
Bombastus	Almond oil, refined	15197412	1
Bombastus	Almond oil, refined	298745	9
Bombastus	Almond oil, refined	300841	3
Bombastus	Almond oil, refined	304024	2
Bombastus	Almond oil, refined	17176507	1
Bombastus	Almond oil, refined	108000342	1
Bombastus	Almond oil, refined	47/2014	1
Bombastus	Almond oil, refined	308919	5
Bombastus	Almond oil, refined	296519	2
Bombastus	Almond oil, refined	18000342	6
Bombastus	Almond oil, refined	6862010	2
Bombastus	Almond oil, refined	18001782	7
Bombastus	Almond oil, refined	17000425	3
Bombastus	Almond oil, refined	18001780	1
Bombastus	Almond oil, refined	283800	2
Bombastus	Almond oil, refined	18006808	1
Bombastus	Almond oil, refined	277912	2
Bombastus	Almond oil, refined	295616	5
Bombastus	Almond oil, refined	306292	5
Bombastus	Almond oil, refined	8002653001	2
Bombastus	Almond oil, refined	292592	6
Bombastus	Almond oil, refined	289709	1
Bombastus	Almond oil, refined	298744	2
Bombastus	Almond oil, refined	302211	6
Bombastus	Almond oil, refined	306290	1
Bombastus	Almond oil, refined	291509	5
Bombastus	Almond oil, refined	290136	1
Bombastus	Almond oil, refined	264164	1

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Supplier	Substance	Batch	Spectra
Bombastus	Almond oil, refined	286254	5
Bombastus	Almond oil, refined	16115303	1
Bombastus	Almond oil, refined	19001702	3
Bombastus	Almond oil, refined	15197407	1
Bombastus	Almond oil, refined	18001781	9
Caelo	Almond oil, refined	4061202	1
Caelo	Almond oil, refined	5438302	3
Caelo	Almond oil, refined	15127304	6
Caelo	Almond oil, refined	11227406	1
Caelo	Almond oil, refined	1602211950	1
Caelo	Almond oil, refined	11314201	1
Caelo	Almond oil, refined	2405211950	1
Caelo	Almond oil, refined	12041802	1
Caelo	Almond oil, refined	6081202	1
Caelo	Almond oil, refined	12080801	3
Caelo	Almond oil, refined	22081205	1
Caelo	Almond oil, refined	7091206	1
Caelo	Almond oil, refined	11314208	1
Caelo	Almond oil, refined	12080803	7
Caelo	Almond oil, refined	13101203	1
Caelo	Almond oil, refined	12080806	6
Caelo	Almond oil, refined	5111208	1
Caelo	Almond oil, refined	1312Q-01950	1
Caelo	Almond oil, refined	12153501	5
Caelo	Almond oil, refined	5214206	3
Caelo	Almond oil, refined	31121205	1
Caelo	Almond oil, refined	20150612-2	1
Caelo	Almond oil, refined	12153506	4
Caelo	Almond oil, refined	1601311950	1
Caelo	Almond oil, refined	21011304	1
Caelo	Almond oil, refined	12357103	7
Caelo	Almond oil, refined	2021303	1
Caelo	Almond oil, refined	2002311950	1
Caelo	Almond oil, refined	21021303	1
Caelo	Almond oil, refined	12357101	11
Caelo	Almond oil, refined	12357111	12
Caelo	Almond oil, refined	12153504	1
Caelo	Almond oil, refined	1131303	1
Caelo	Almond oil, refined	1113E-01950	1
Caelo	Almond oil, refined	11358910	1
Caelo	Almond oil, refined	25041303	1
Caelo	Almond oil, refined	2204130	1
Caelo	Almond oil, refined	2013U01950	1
Caelo	Almond oil, refined	11314210	1
Caelo	Almond oil, refined	0-240513-1	1
Caelo	Almond oil, refined	13178002	12
Caelo	Almond oil, refined	13178004	15
Caelo	Almond oil, refined	2713U1950	1
Caelo	Almond oil, refined	22071303	1
Caelo	Almond oil, refined	20081301	1
Caelo	Almond oil, refined	13091308	1
Caelo	Almond oil, refined	13236401	14
Caelo	Almond oil, refined	22111301	1
Caelo	Almond oil, refined	5415901	6
Caelo	Almond oil, refined	13236402	13
Caelo	Almond oil, refined	13236404	4
Caelo	Almond oil, refined	17121303	1
Caelo	Almond oil, refined	17021405	1
Caelo	Almond oil, refined	13350003	13
Caelo	Almond oil, refined	1350003	1

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	31031403	1
Caelo	Almond oil, refined	14042702	2
Caelo	Almond oil, refined	14042710	1
Caelo	Almond oil, refined	14042703	7
Caelo	Almond oil, refined	14042714	1
Caelo	Almond oil, refined	14042705	6
Caelo	Almond oil, refined	14042707	5
Caelo	Almond oil, refined	17061403	1
Caelo	Almond oil, refined	15071406	1
Caelo	Almond oil, refined	14139034	1
Caelo	Almond oil, refined	14139304	2
Caelo	Almond oil, refined	14042706	8
Caelo	Almond oil, refined	1404206	1
Caelo	Almond oil, refined	18081402	1
Caelo	Almond oil, refined	29081404	1
Caelo	Almond oil, refined	14139305	2
Caelo	Almond oil, refined	2101405	1
Caelo	Almond oil, refined	14042717	3
Caelo	Almond oil, refined	14139311	9
Caelo	Almond oil, refined	123test	1
Caelo	Almond oil, refined	17111402	1
Caelo	Almond oil, refined	14139309	3
Caelo	Almond oil, refined	14139306	2
Caelo	Almond oil, refined	30121416	1
Caelo	Almond oil, refined	15078401	2
Caelo	Almond oil, refined	15078406	3
Caelo	Almond oil, refined	15409703	9
Caelo	Almond oil, refined	16071002	14
Caelo	Almond oil, refined	6101708	1
Caelo	Almond oil, refined	14215806	8
Caelo	Almond oil, refined	16021510	1
Caelo	Almond oil, refined	6031506	1
Caelo	Almond oil, refined	14215815	3
Caelo	Almond oil, refined	14215816	1
Caelo	Almond oil, refined	8041501	1
Caelo	Almond oil, refined	15078402	5
Caelo	Almond oil, refined	10061502	1
Caelo	Almond oil, refined	3714U-01950	1
Caelo	Almond oil, refined	15127305	5
Caelo	Almond oil, refined	15806001	1
Caelo	Almond oil, refined	15080602	1
Caelo	Almond oil, refined	15127306	12
Caelo	Almond oil, refined	15197405	3
Caelo	Almond oil, refined	14D24-b07-302332	1
Caelo	Almond oil, refined	15197412	3
Caelo	Almond oil, refined	15409706	1
Caelo	Almond oil, refined	15409702	7
Caelo	Almond oil, refined	15409704	15
Caelo	Almond oil, refined	15409710	13
Caelo	Almond oil, refined	15409707	5
Caelo	Almond oil, refined	16071008	1
Caelo	Almond oil, refined	15409105	1
Caelo	Almond oil, refined	15409713	10
Caelo	Almond oil, refined	15331611	1
Caelo	Almond oil, refined	15409716	1
Caelo	Almond oil, refined	16071005	8
Caelo	Almond oil, refined	16071001	6
Caelo	Almond oil, refined	16149802	1
Caelo	Almond oil, refined	1000003242	1
Caelo	Almond oil, refined	16327302	40

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	16144404	1
Caelo	Almond oil, refined	25021707	1
Caelo	Almond oil, refined	74176327302	1
Caelo	Almond oil, refined	16327305	6
Caelo	Almond oil, refined	16327308	8
Caelo	Almond oil, refined	16327309	4
Caelo	Almond oil, refined	800149001	1
Caelo	Almond oil, refined	1041703	1
Caelo	Almond oil, refined	1000004431	5
Caelo	Almond oil, refined	21041713	1
Caelo	Almond oil, refined	1527304	1
Caelo	Almond oil, refined	28041732	1
Caelo	Almond oil, refined	16327311	21
Caelo	Almond oil, refined	17176501	20
Caelo	Almond oil, refined	2091708	1
Caelo	Almond oil, refined	17176502	11
Caelo	Almond oil, refined	17176507	5
Caelo	Almond oil, refined	28111705	1
Caelo	Almond oil, refined	14121703	1
Caelo	Almond oil, refined	17176512	3
Caelo	Almond oil, refined	17207908	1
Caelo	Almond oil, refined	17176511	5
Caelo	Almond oil, refined	17176503	8
Caelo	Almond oil, refined	17207905	15
Caelo	Almond oil, refined	171176512	1
Caelo	Almond oil, refined	18015002	17
Caelo	Almond oil, refined	177906	1
Caelo	Almond oil, refined	18015007	27
Caelo	Almond oil, refined	18070604	1
Caelo	Almond oil, refined	18015004	8
Caelo	Almond oil, refined	9061813	1
Caelo	Almond oil, refined	18070602	22
Caelo	Almond oil, refined	30111803	1
Caelo	Almond oil, refined	18184107	10
Caelo	Almond oil, refined	8004548002	3
Caelo	Almond oil, refined	18295901	4
Caelo	Almond oil, refined	18184413	1
Caelo	Almond oil, refined	18295903	6
Caelo	Almond oil, refined	1829503	1
Caelo	Almond oil, refined	18295905	1
Caelo	Almond oil, refined	18295909	4
Caelo	Almond oil, refined	19084505	2
Caelo	Almond oil, refined	11314206	2
Caelo	Almond oil, refined	1421508	1
Caelo	Almond oil, refined	16144403	4
Caelo	Almond oil, refined	13178009	2
Caelo	Almond oil, refined	3236406	1
Caelo	Almond oil, refined	5615001	6
Caelo	Almond oil, refined	15197408	10
Caelo	Almond oil, refined	19084512	3
Caelo	Almond oil, refined	18184115	3
Caelo	Almond oil, refined	13326411	1
Caelo	Almond oil, refined	8001497001	3
Caelo	Almond oil, refined	8003167001	1
Caelo	Almond oil, refined	1716512	1
Caelo	Almond oil, refined	14215807	3
Caelo	Almond oil, refined	1716506	1
Caelo	Almond oil, refined	16071009	1
Caelo	Almond oil, refined	11227407	1
Caelo	Almond oil, refined	17042203	30

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	130145	4
Caelo	Almond oil, refined	12357102	5
Caelo	Almond oil, refined	13178003	15
Caelo	Almond oil, refined	16071006	12
Caelo	Almond oil, refined	8002653001	8
Caelo	Almond oil, refined	5748601	6
Caelo	Almond oil, refined	8000712001	1
Caelo	Almond oil, refined	18000341	1
Caelo	Almond oil, refined	16071003	20
Caelo	Almond oil, refined	17176506	13
Caelo	Almond oil, refined	18015003	15
Caelo	Almond oil, refined	18184114	8
Caelo	Almond oil, refined	17000426	1
Caelo	Almond oil, refined	1807608	1
Caelo	Almond oil, refined	18184109	9
Caelo	Almond oil, refined	1439310	1
Caelo	Almond oil, refined	5703001	1
Caelo	Almond oil, refined	4017A-01950	1
Caelo	Almond oil, refined	13350001	17
Caelo	Almond oil, refined	15078404	11
Caelo	Almond oil, refined	16071004	7
Caelo	Almond oil, refined	12153502	6
Caelo	Almond oil, refined	14139310	12
Caelo	Almond oil, refined	15127307	6
Caelo	Almond oil, refined	14139301	1
Caelo	Almond oil, refined	13236406	8
Caelo	Almond oil, refined	1335006	1
Caelo	Almond oil, refined	13350006	4
Caelo	Almond oil, refined	13178011	12
Caelo	Almond oil, refined	14042708	8
Caelo	Almond oil, refined	15078405	10
Caelo	Almond oil, refined	15127303	2
Caelo	Almond oil, refined	15197407	9
Caelo	Almond oil, refined	15409705	11
Caelo	Almond oil, refined	16071007	10
Caelo	Almond oil, refined	465957	1
Caelo	Almond oil, refined	1080517/16327302	1
Caelo	Almond oil, refined	8003503002	4
Caelo	Almond oil, refined	18070603	9
Caelo	Almond oil, refined	180154004	1
Caelo	Almond oil, refined	4313E1950	1
Caelo	Almond oil, refined	514Q1950	1
Caelo	Almond oil, refined	914E1950	1
Caelo	Almond oil, refined	18015008-20180619Ma7	1
Caelo	Almond oil, refined	14215804	4
Caelo	Almond oil, refined	11314209	2
Caelo	Almond oil, refined	133500006	1
Caelo	Almond oil, refined	40315PML01	1
Caelo	Almond oil, refined	230315HML01	1
Caelo	Almond oil, refined	18184113	17
Caelo	Almond oil, refined	13350002	11
Caelo	Almond oil, refined	13236411	7
Caelo	Almond oil, refined	141215804	1
Caelo	Almond oil, refined	14215805	10
Caelo	Almond oil, refined	15409714	6
Caelo	Almond oil, refined	15409712	12
Caelo	Almond oil, refined	1637302	1
Caelo	Almond oil, refined	1042204	1
Caelo	Almond oil, refined	17207306	1
Caelo	Almond oil, refined	18015008	15

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	18070608	12
Caelo	Almond oil, refined	19001701	1
Caelo	Almond oil, refined	132363403	1
Caelo	Almond oil, refined	15078403	9
Caelo	Almond oil, refined	15197401	12
Caelo	Almond oil, refined	15127302	2
Caelo	Almond oil, refined	4916A-01950	1
Caelo	Almond oil, refined	1632303	1
Caelo	Almond oil, refined	16327303	40
Caelo	Almond oil, refined	8002675001	1
Caelo	Almond oil, refined	7176502	1
Caelo	Almond oil, refined	17207907	6
Caelo	Almond oil, refined	19084503	1
Caelo	Almond oil, refined	14215809	10
Caelo	Almond oil, refined	284968	1
Caelo	Almond oil, refined	15197402	10
Caelo	Almond oil, refined	15197406	5
Caelo	Almond oil, refined	17042204	15
Caelo	Almond oil, refined	17176508	3
Caelo	Almond oil, refined	18295902	6
Caelo	Almond oil, refined	18295908	5
Caelo	Almond oil, refined	18295910	1
Caelo	Almond oil, refined	19084511	1
Caelo	Almond oil, refined	15078407	3
Caelo	Almond oil, refined	15127308	2
Caelo	Almond oil, refined	8000915002	10
Caelo	Almond oil, refined	71/AKD15	1
Caelo	Almond oil, refined	17042206	4
Caelo	Almond oil, refined	72/AKD16	1
Caelo	Almond oil, refined	17042209	8
Caelo	Almond oil, refined	18070605	10
Caelo	Almond oil, refined	18184102	18
Caelo	Almond oil, refined	18184108	8
Caelo	Almond oil, refined	19084510	2
Caelo	Almond oil, refined	15409701	7
Caelo	Almond oil, refined	10131-01950	1
Caelo	Almond oil, refined	15197403	14
Caeolo/Gehe	Almond oil, refined	18006807	1
Caeolo/Noweda	Almond oil, refined	15409703	1
Caesar & Loretz	Almond oil, refined	16071006	1
Caesar & Loretz	Almond oil, refined	17207906	2
Caesar & Loretz GmbH	Almond oil, refined	13178002	1
Caesar & Loretz GmbH	Almond oil, refined	13236404	1
Caesar & Loretz GmbH	Almond oil, refined	13350007	1
Caesar & Loretz GmbH	Almond oil, refined	14215804	1
Caesar & Loretz GmbH	Almond oil, refined	16327302	1
Caesar & Loretz GmbH	Almond oil, refined	16327308	1
Caesar & Loretz GmbH	Almond oil, refined	1000010093	1
Caesar & Loretz GmbH	Almond oil, refined	18295903	2
Caesar & Loretz GmbH	Almond oil, refined	18295901	1
Caesar & Loretz GmbH Hi...	Almond oil, refined	510014-01	1
Caesar & Loretz GmbH/G	Almond oil, refined	18184113	1
Caesar & Loretz/ Noweda	Almond oil, refined	12357101	2
Caesar & Loretz/ Noweda	Almond oil, refined	18015007	1
Caesar & Loretz/Noweda	Almond oil, refined	15409704	1
Caesar & Loretz/Noweda	Almond oil, refined	16071002	1
Caesar & Loretz/Noweda	Almond oil, refined	16071003	1
Caesar & Loretz/Noweda	Almond oil, refined	17176502	1
Caesar&Loretz	Almond oil, refined	16327311	1
caesar&lorenz,Phönix,11...	Almond oil, refined	15127304	1

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Supplier	Substance	Batch	Spectra
Caesar/ Alliance Health...	Almond oil, refined	18015008	1
Caolo- Noweda	Almond oil, refined	15197404	1
Cealo	Almond oil, refined	16071007	3
Cealo/ Noweda	Almond oil, refined	14042704	1
E Plus	Almond oil, refined	1712-5901	1
Eig	Almond oil, refined	80515HML01	1
Eigenherstellung	Almond oil, refined	50612HML01	1
Eigenherstellung	Almond oil, refined	21112HML01	1
Eigenherstellung	Almond oil, refined	140113HML01	1
Eigenherstellung	Almond oil, refined	80213HJK02	1
Eigenherstellung	Almond oil, refined	210313HJK01	2
Eigenherstellung	Almond oil, refined	240513HML01	1
Eigenherstellung	Almond oil, refined	40613PML02	1
Eigenherstellung	Almond oil, refined	40613PML01	1
Eigenherstellung	Almond oil, refined	40613HML01	1
Eigenherstellung	Almond oil, refined	60913HJK01	1
Eigenherstellung	Almond oil, refined	61113HML01	1
Eigenherstellung	Almond oil, refined	240214HJK01	1
Eigenherstellung	Almond oil, refined	160414HML01	1
Eigenherstellung	Almond oil, refined	290714HJK01	1
Eigenherstellung	Almond oil, refined	290714HJK02	1
Eigenherstellung	Almond oil, refined	120814HAS01	1
Eigenherstellung	Almond oil, refined	120914HAS01	1
Eigenherstellung	Almond oil, refined	181114HML01	1
Eigenherstellung	Almond oil, refined	50115PML02	1
Eigenherstellung	Almond oil, refined	270215HJK01	1
Eigenherstellung	Almond oil, refined	260515HML01	1
Eigenherstellung	Almond oil, refined	300615HML01	1
Eigenherstellung	Almond oil, refined	180815HJK01	1
Eigenherstellung	Almond oil, refined	20915HML01	1
Eigenherstellung	Almond oil, refined	180915HML01	1
E-plus	Almond oil, refined	1709-5780	1
E-Plus	Almond oil, refined	307299	2
Bombastus	Almond oil, refined	17000426	5
EuRho/Noweda	Almond oil, refined	8003885002	1
Euro	Almond oil, refined	1510014-01	1
Euro OTC	Almond oil, refined	1310022-01	1
Euro OTC	Almond oil, refined	1701036-01	3
Euro OTC	Almond oil, refined	1407050-02	2
Euro OTC	Almond oil, refined	1510014-01	4
Euro OTC	Almond oil, refined	131002202	1
Euro OTC	Almond oil, refined	16071006	1
Euro OTC	Almond oil, refined	1603025-01	3
Euro OTC	Almond oil, refined	1807007-01	1
Euro OTC	Almond oil, refined	1207014-01	1
Euro OTC	Almond oil, refined	1707007-01	1
Euro OTC	Almond oil, refined	16071002	1
Euro OTC	Almond oil, refined	1407050-01	1
Euro OTC	Almond oil, refined	17001036-01	1
Euro OTC	Almond oil, refined	16071001	2
Euro OTC	Almond oil, refined	1000003242	3
Euro OTC	Almond oil, refined	540014-01	1
Fagron	Almond oil, refined	12A18-N09	1
Fagron	Almond oil, refined	12J26-N05	1
Fagron	Almond oil, refined	12H23-N01	1
Fagron	Almond oil, refined	5438301	2
Fagron	Almond oil, refined	13C25-N20	1
Fagron	Almond oil, refined	126520	1
Fagron	Almond oil, refined	281040	2
Fagron	Almond oil, refined	13236411	1

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Supplier	Substance	Batch	Spectra
Fagron	Almond oil, refined	5615001	3
Fagron	Almond oil, refined	14F04-B01	2
Fagron	Almond oil, refined	14D24-B07	1
Fagron	Almond oil, refined	15F04-B01	1
Fagron	Almond oil, refined	14J01-B03-302327	2
Fagron	Almond oil, refined	14J01-B03	1
Fagron	Almond oil, refined	15127303	1
Fagron	Almond oil, refined	15F04-B01-309291	4
Fagron	Almond oil, refined	12345	1
Fagron	Almond oil, refined	15H03-B07-314457	3
Fagron	Almond oil, refined	1707007-01	1
Fagron	Almond oil, refined	8003167001	1
Fagron	Almond oil, refined	16A05-B02	1
Fagron	Almond oil, refined	14D24-B07-302332	1
Fagron	Almond oil, refined	13350001	2
Fagron	Almond oil, refined	16A05-B02-320278	1
Fagron	Almond oil, refined	13K28-B01-288270	1
Fagron	Almond oil, refined	1000004431	1
Fagron	Almond oil, refined	15127306	1
Fagron	Almond oil, refined	15409702	1
Fagron	Almond oil, refined	15409705	1
Fargon/Gehe	Almond oil, refined	17207905	1
Fiebig 21.02.13 ek: 2,16EUR	Almond oil, refined	130145	1
Finteler Apotheke	Almond oil, refined	8002653001	1
Fischar	Almond oil, refined	5438301	2
Fischer/Gehe	Almond oil, refined	15127306	1
Gatt-Koller	Almond oil, refined	1803713	1
Gatt-Koller	Almond oil, refined	1900551	1
Gehe	Almond oil, refined	13178004	1
Gehe	Almond oil, refined	13236403	1
Gehe	Almond oil, refined	15197409	1
Gehe	Almond oil, refined	16071007	1
Gehe	Almond oil, refined	16327308	1
Gehe	Almond oil, refined	17042204	1
GEHE	Almond oil, refined	13178003	1
GEHE	Almond oil, refined	16327302	1
GEHE	Almond oil, refined	17042203	1
GEHE	Almond oil, refined	17176501	1
GEHE	Almond oil, refined	12019	1
GEHE	Almond oil, refined	18015007	1
GEHE	Almond oil, refined	18015008	1
GEHE	Almond oil, refined	18070602	1
GEHE	Almond oil, refined	18184102	1
GEHE	Almond oil, refined	18184113	3
GEHE	Almond oil, refined	18295902	1
GEHE	Almond oil, refined	19084511	1
Gehe - Lamotte	Almond oil, refined	5438302	1
GEHE 11.05.	Almond oil, refined	15078404	1
Gehe 22.12.14	Almond oil, refined	14215808	1
Gehe Kassel	Almond oil, refined	14215814	1
Caelo	Almond oil, refined	12153505	8
Gehe/henry	Almond oil, refined	8000915002	1
Gehe/Henry Lamotte	Almond oil, refined	1000004431	1
Gehe/Henry Lamotte	Almond oil, refined	8003503002	1
Gehe/Henry Lamotte Oils...	Almond oil, refined	5615001	2
Gehe/Lamotte	Almond oil, refined	8002653001	1
Gehe/Lamotte	Almond oil, refined	8003167001	2
Gehe/Lamotte	Almond oil, refined	8003503001	1
Gehe/Lamotte	Almond oil, refined	8003885002	2
Gehe/Lamotte	Almond oil, refined	8004390001	2

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Supplier	Substance	Batch	Spectra
Gehe/Lamotte	Almond oil, refined	1000010093	1
H. Lamotte	Almond oil, refined	5177001	2
H. Lamotte/Noweda	Almond oil, refined	5615003	1
H. Lamotte/Noweda	Almond oil, refined	1000002454	1
H. Lamotte/Noweda	Almond oil, refined	8000712001	2
H.Lamotte / Anzag	Almond oil, refined	5438302	1
H.Lamotte / Gehe	Almond oil, refined	8003167001	1
H.Lamotte / Gehe	Almond oil, refined	8004548002	1
H.Lamotte/Anzag	Almond oil, refined	5438302	1
H.Lamotte/Noweda	Almond oil, refined	5269301	2
H.Lamotte/Noweda	Almond oil, refined	5214206	1
H.Lamotte/Noweda	Almond oil, refined	130145	2
H.Lamotte/Noweda	Almond oil, refined	5438301	2
H.Lamotte/Noweda	Almond oil, refined	5438302	2
H.Lamotte/Noweda	Almond oil, refined	5415901	1
H.Lamotte/Noweda	Almond oil, refined	5615001	3
H.Lamotte/Noweda	Almond oil, refined	5748601	2
H.Lamotte/Noweda	Almond oil, refined	5919600001	1
Henry Lamotte Oils / No...	Almond oil, refined	8000915001	1
Hedinger	Almond oil, refined	1000004431	1
Hedinger/ Noweda	Almond oil, refined	14139311	1
Klenk	Almond oil, refined	5269301	2
hennry Lamotte oils	Almond oil, refined	8002675001	1
hennry Lamotte oils	Almond oil, refined	8003503001	1
Hennry Lamotte/Noweda	Almond oil, refined	8003503001	1
Henry La Motte	Almond oil, refined	5748601	2
Henry Lam./ Phönix	Almond oil, refined	5438302	1
henry lamotte	Almond oil, refined	5675003	1
henry lamotte	Almond oil, refined	5748601	1
henry lamotte	Almond oil, refined	8000712001	3
henry lamotte	Almond oil, refined	8000915001	1
henry lamotte	Almond oil, refined	8001497001	1
Henry lamotte	Almond oil, refined	8000712001	1
Henry Lamotte	Almond oil, refined	5177001	2
Henry Lamotte	Almond oil, refined	5369301	1
Henry Lamotte	Almond oil, refined	130145	3
Henry Lamotte	Almond oil, refined	5438301	4
Henry Lamotte	Almond oil, refined	12061302	1
Henry Lamotte	Almond oil, refined	543802	1
Henry Lamotte	Almond oil, refined	5438302	3
Henry Lamotte	Almond oil, refined	5493001	3
Henry Lamotte	Almond oil, refined	5415901	6
Henry Lamotte	Almond oil, refined	5615001	4
Henry Lamotte	Almond oil, refined	5615003	3
Henry Lamotte	Almond oil, refined	5669601	1
Henry Lamotte	Almond oil, refined	5703101	3
Henry Lamotte	Almond oil, refined	5748401	2
Henry Lamotte	Almond oil, refined	5748601	8
Henry Lamotte	Almond oil, refined	5919600001	10
Henry Lamotte	Almond oil, refined	8000712001	10
Henry Lamotte	Almond oil, refined	8000725001	2
Henry Lamotte	Almond oil, refined	8000915001	4
Henry Lamotte	Almond oil, refined	1000002454	1
Henry Lamotte	Almond oil, refined	8000915002	3
Henry Lamotte	Almond oil, refined	1000003242	7
Henry Lamotte	Almond oil, refined	8001497001	8
Henry Lamotte	Almond oil, refined	1000004431	2
Henry Lamotte	Almond oil, refined	8002653001	6
Henry Lamotte	Almond oil, refined	8002675001	3
Henry Lamotte	Almond oil, refined	8003167001	7

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Almond oil, refined	18015002	1
Henry Lamotte	Almond oil, refined	8003885002	3
Henry Lamotte	Almond oil, refined	8004039003	2
Henry Lamotte	Almond oil, refined	8004390001	5
Henry Lamotte	Almond oil, refined	8004548002	1
Henry Lamotte	Almond oil, refined	1000010685	1
Henry Lamotte / Allianc...	Almond oil, refined	8000915001	2
Henry Lamotte / Anzag	Almond oil, refined	125(8004039003)	1
Henry Lamotte / Anzag	Almond oil, refined	126(8004390001)	1
Henry Lamotte / Anzag	Almond oil, refined	127(8004548002)	1
Henry Lamotte / Anzag	Almond oil, refined	129(8004548011)	1
Henry Lamotte / Noweda	Almond oil, refined	5415901	1
Henry Lamotte / Noweda	Almond oil, refined	5703001	1
Henry Lamotte / Noweda	Almond oil, refined	8000915002	2
Henry Lamotte / Noweda	Almond oil, refined	8001497001	3
Henry Lamotte / Noweda	Almond oil, refined	8002653001	1
Henry Lamotte / Noweda	Almond oil, refined	8003885002	1
Henry Lamotte / Noweda	Almond oil, refined	8004039003	1
Henry Lamotte / Noweda	Almond oil, refined	8004548002	2
Henry Lamotte / Phoenix	Almond oil, refined	8000915002	1
Henry Lamotte / Phönix	Almond oil, refined	8001497001	3
Henry Lamotte / Sanacorp	Almond oil, refined	8003503001	1
Henry Lamotte /Jenne	Almond oil, refined	128(1000010093)	1
Henry Lamotte GmbH	Almond oil, refined	5269301	1
Henry Lamotte GmbH	Almond oil, refined	8000712001	3
Henry Lamotte GmbH	Almond oil, refined	8001497001	1
Henry Lamotte GmbH	Almond oil, refined	8003167001	1
Henry Lamotte GmbH	Almond oil, refined	8003503001	2
Henry Lamotte GmbH	Almond oil, refined	8003885002	2
Henry Lamotte GmbH	Almond oil, refined	8004039003	1
Henry Lamotte GmbH	Almond oil, refined	8004390001	1
Henry Lamotte GmbH	Almond oil, refined	1000010093	2
Henry Lamotte GmbH, Mer...	Almond oil, refined	130145	1
Henry Lamotte GmbH/ San...	Almond oil, refined	8002653001	1
Henry Lamotte GmbH/Phönix	Almond oil, refined	8003167001	1
Henry Lamotte Oil	Almond oil, refined	8000915002	1
Henry Lamotte Oil	Almond oil, refined	8000915001	1
Henry Lamotte Oils	Almond oil, refined	5438302	5
Henry Lamotte Oils	Almond oil, refined	5214206	1
Henry Lamotte Oils	Almond oil, refined	5438301	1
Henry Lamotte Oils	Almond oil, refined	5415901	2
Henry Lamotte Oils	Almond oil, refined	5748601	3
Henry Lamotte Oils	Almond oil, refined	5919600001	2
Henry Lamotte Oils	Almond oil, refined	8000915001	1
Henry Lamotte Oils	Almond oil, refined	8000725001	1
Henry Lamotte Oils	Almond oil, refined	1000003242	3
Henry Lamotte Oils	Almond oil, refined	8001497001	4
Henry Lamotte Oils	Almond oil, refined	1000004431	3
Henry Lamotte Oils	Almond oil, refined	8002653001	3
Henry Lamotte Oils	Almond oil, refined	8002675001	3
Henry Lamotte Oils	Almond oil, refined	8003167001	1
Henry Lamotte Oils	Almond oil, refined	8004390001	1
Henry Lamotte Oils / Gehe	Almond oil, refined	548302	1
Henry Lamotte Oils / Gehe	Almond oil, refined	5615003	2
Henry Lamotte Oils / Gehe	Almond oil, refined	5919600001	3
Henry Lamotte Oils / Gehe	Almond oil, refined	8000915002	2
Henry Lamotte Oils / Gehe	Almond oil, refined	1000002454	1
Henry Lamotte Oils / Gehe	Almond oil, refined	1000003242	1
Henry Lamotte Oils / Gehe	Almond oil, refined	8001497001	1
Henry Lamotte Oils / Gehe	Almond oil, refined	8002653001	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils / No...	Almond oil, refined	5415901	4
Henry Lamotte Oils / No...	Almond oil, refined	8000712001	1
Henry Lamotte Oils / No...	Almond oil, refined	1000003242	1
Henry Lamotte Oils GmbH	Almond oil, refined	5415901	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000725001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000915002	1
Henry Lamotte Oils GmbH	Almond oil, refined	8001497001	1
Henry Lamotte Oils GmbH	Almond oil, refined	5269301	4
Henry Lamotte Oils GmbH	Almond oil, refined	130145	2
Henry Lamotte Oils GmbH	Almond oil, refined	5214206	1
Henry Lamotte Oils GmbH	Almond oil, refined	5438302	1
Henry Lamotte Oils GmbH	Almond oil, refined	130143	2
Henry Lamotte Oils GmbH	Almond oil, refined	5493001	1
Henry Lamotte Oils GmbH	Almond oil, refined	5415901	2
Henry Lamotte Oils GmbH	Almond oil, refined	5615001	1
Henry Lamotte Oils GmbH	Almond oil, refined	5615003	1
Henry Lamotte Oils GmbH	Almond oil, refined	5703001	2
Henry Lamotte Oils GmbH	Almond oil, refined	5748601	1
Henry Lamotte Oils GmbH	Almond oil, refined	5919600001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000712001	2
Henry Lamotte Oils GmbH	Almond oil, refined	8000725001	6
Henry Lamotte Oils GmbH	Almond oil, refined	8000915001	6
Henry Lamotte Oils GmbH	Almond oil, refined	8000915002	5
Henry Lamotte Oils GmbH	Almond oil, refined	1000003242	3
Henry Lamotte Oils GmbH	Almond oil, refined	8001497001	6
Henry Lamotte Oils GmbH	Almond oil, refined	1000004431	2
Henry Lamotte Oils GmbH	Almond oil, refined	8002653001	3
Henry Lamotte Oils GmbH	Almond oil, refined	8002675001	3
Henry Lamotte Oils GmbH	Almond oil, refined	8003503002	2
Henry Lamotte Oils GmbH	Almond oil, refined	8003503001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8003167001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8003885002	2
Henry Lamotte Oils GmbH	Almond oil, refined	8004039003	4
Henry Lamotte Oils GmbH	Almond oil, refined	8004039001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8004548002	2
Henry Lamotte Oils GmbH	Almond oil, refined	1000010685	2
Henry Lamotte Oils GmbH	Almond oil, refined	16092013B	1
Henry Lamotte Oils GmbH	Almond oil, refined	13032014B	1
Henry Lamotte Oils GmbH	Almond oil, refined	260814A	1
Henry Lamotte Oils GmbH	Almond oil, refined	17082015B	1
Henry Lamotte Oils GMBH	Almond oil, refined	170316M8001497001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8001497001	6
HENRY LAMOTTE OILS GmbH	Almond oil, refined	8001497001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8002653001	3
Henry Lamotte Oils GmbH...	Almond oil, refined	82675001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8003167001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8003885002	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1000010093	2
Henry Lamotte Oils GmbH...	Almond oil, refined	8002653001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8003167001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1000010685	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8004039003	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8003503001	2
Henry Lamotte Oils GmbH...	Almond oil, refined	5438302	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1000010093	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1000010685	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5493001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	130145	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5493001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1714U-01950	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH...	Almond oil, refined	1000004431	2
Henry Lamotte Oils GmbH...	Almond oil, refined	5438301	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5415901	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5615003	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5615001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5748601	3
Henry Lamotte Oils GmbH...	Almond oil, refined	5615001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8002675001	1
henry lamotte oils Gmh/N	Almond oil, refined	8000915001	2
henry lamotte oils Gmh/N	Almond oil, refined	8000915002	1
Henry Lamotte Oils, Gehe	Almond oil, refined	5438302	1
Henry Lamotte Oils/ Gehe	Almond oil, refined	150001526/2	1
Henry Lamotte Oils/Gehe	Almond oil, refined	5438302	2
Henry Lamotte Oils/Gehe	Almond oil, refined	8003885002	1
Henry Lamotte Oils/GEHE	Almond oil, refined	5748601	1
Henry Lamotte Oils/GEHE	Almond oil, refined	8002653001	1
henry lamotte oils/noweda	Almond oil, refined	8004390001	1
Henry Lamotte Oils/Noweda	Almond oil, refined	8000915002	2
Henry Lamotte Oils/Noweda	Almond oil, refined	1000003242	1
Henry Lamotte Oils/Noweda	Almond oil, refined	8002653001	3
Henry Lamotte Oils/Noweda	Almond oil, refined	170318184	1
Henry Lamotte Oils/Noweda	Almond oil, refined	8002675001	1
Henry Lamotte Oils/Noweda	Almond oil, refined	180808182	1
Henry Lamotte Oils/Noweda	Almond oil, refined	8004039003	1
Henry Lamotte Oils/Noweda	Almond oil, refined	1000010093	1
Henry Lamotte Oils/Sana...	Almond oil, refined	130145	1
Henry Lamotte Oils/Sana...	Almond oil, refined	5919600001	3
Henry Lamotte Oils/Sana...	Almond oil, refined	10000010093	1
Henry Lamotte Olis GmbH...	Almond oil, refined	5703001	6
Henry Lamotte Olis GmbH...	Almond oil, refined	5919600001	1
Henry Lamotte Olis GmbH...	Almond oil, refined	8000915001	2
Henry Lamotte Olis GmbH...	Almond oil, refined	8000915002	2
Henry Lamotte Sanacorp	Almond oil, refined	8001497001	1
Henry Lamotte/ 11.05.13...	Almond oil, refined	5438301	1
Henry Lamotte/ Alliance	Almond oil, refined	8003885002	1
Henry Lamotte/ Alliance...	Almond oil, refined	8002675001	1
Henry Lamotte/ Alliance...	Almond oil, refined	8003885002	1
Henry Lamotte/ Gehe	Almond oil, refined	8000712001	1
Henry Lamotte/ Henry La...	Almond oil, refined	8000915001	16
Henry Lamotte/ Henry La...	Almond oil, refined	1000003242	19
Henry Lamotte/ Noweda	Almond oil, refined	5615001	3
Henry Lamotte/ Noweda	Almond oil, refined	5919600001	1
Henry Lamotte/ Noweda	Almond oil, refined	1000004431	1
Henry Lamotte/ Noweda	Almond oil, refined	8002653001	1
Henry Lamotte/ Noweda	Almond oil, refined	8002675001	1
Henry Lamotte/ Noweda	Almond oil, refined	8004390001	1
Henry Lamotte/ Phoenix	Almond oil, refined	8004039003	1
Henry Lamotte/ Phoenix	Almond oil, refined	8004548002	2
Henry Lamotte/ Phönix	Almond oil, refined	1000003242	2
Henry Lamotte/ Phönix	Almond oil, refined	8001497001	2
Henry Lamotte/ Phönix	Almond oil, refined	1000004431	3
Henry Lamotte/ Phönix	Almond oil, refined	8002653001	2
Henry Lamotte/ Phönix	Almond oil, refined	8002675001	3
Henry Lamotte/ Phönix	Almond oil, refined	800275001	1
Henry Lamotte/AHD	Almond oil, refined	8000915001	2
Henry Lamotte/Alliance H	Almond oil, refined	5748601	1
Henry Lamotte/Anzag	Almond oil, refined	416E-01950	1
henry lamotte/gehe	Almond oil, refined	8003503001	2
Henry Lamotte/Gehe	Almond oil, refined	5415901	2
Henry Lamotte/Gehe	Almond oil, refined	1000003242	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Gehe	Almond oil, refined	1000010685	1
Henry Lamotte/Jenne	Almond oil, refined	121(8003167001)	1
Henry Lamotte/Jenne	Almond oil, refined	122(8003503001)	1
Henry Lamotte/Jenne	Almond oil, refined	123(8003503001)	1
Henry Lamotte/Jenne	Almond oil, refined	124(8003885002)	1
Henry Lamotte/Kehr	Almond oil, refined	8000725001	1
Henry Lamotte/N/18.06.1...	Almond oil, refined	5438301	1
Henry Lamotte/N/PZN:731...	Almond oil, refined	5438302	1
Henry Lamotte/Noewda	Almond oil, refined	1000004431	1
Henry Lamotte/Noewda	Almond oil, refined	8003503001	2
henry lamotte/Noweda	Almond oil, refined	8001497001	1
henry lamotte/Noweda	Almond oil, refined	8003167001	1
Henry Lamotte/Noweda	Almond oil, refined	8000712001	1
Henry Lamotte/Noweda	Almond oil, refined	8000725001	1
Henry Lamotte/Noweda	Almond oil, refined	1000003242	1
Henry Lamotte/Noweda	Almond oil, refined	1000004431	1
Henry Lamotte/Noweda	Almond oil, refined	8002653001	4
Henry Lamotte/Noweda	Almond oil, refined	8002675001	1
Henry Lamotte/Noweda	Almond oil, refined	8003885002	6
Henry Lamotte/Noweda	Almond oil, refined	8004390001	1
Henry Lamotte/Noweda	Almond oil, refined	8004039003	1
Henry Lamotte/Phönix	Almond oil, refined	5438301	1
Henry Lamotte/Phönix	Almond oil, refined	8002675001	3
Henry Lamotte/Phönix	Almond oil, refined	8003167001	3
Henry Lamotte/Phönix	Almond oil, refined	8004039003	2
Henry Lamotte/Poenix	Almond oil, refined	8003467001	1
Henry Lamotte/Poenix	Almond oil, refined	8004039003	1
Henry Lamotte/Poenix	Almond oil, refined	1000010093	1
Henry Lamotte/Sanacorp	Almond oil, refined	130145	1
Henry Lamotte/Sanacorp	Almond oil, refined	8000915002	8
Henry Lamotte/Sanacorp	Almond oil, refined	8001497001	3
Henry Lamotte/Sanacorp	Almond oil, refined	8004390001	1
Henry Lamotte/Sanacorp	Almond oil, refined	1000010093	1
Henry Lamotte/Spangro	Almond oil, refined	8003167001	1
HenryLamotte	Almond oil, refined	8001497001	1
HenryLamotte/Alliance H...	Almond oil, refined	8003885002	1
HenryLamotte/Alliance H...	Almond oil, refined	8004548002	1
HenryLamotte/Gehe	Almond oil, refined	130145	3
HenryLamotte/Noweda	Almond oil, refined	8004390001	1
HenryLamotte/Noweda	Almond oil, refined	8004039003	1
HenryLamotte/Noweda	Almond oil, refined	1000010685	1
HenryLamotte/Phoenix	Almond oil, refined	5269301	2
HenryLamotte/Phönix	Almond oil, refined	8002653001	1
HenryLamotteOilsGmbH/Ph...	Almond oil, refined	5438302	2
Herbasinica	Almond oil, refined	14042707	2
Holdermann	Almond oil, refined	15078403	1
Holdermann/Henry Lamott...	Almond oil, refined	5162801	2
J.H.Müller/direkt/01.08...	Almond oil, refined	130327	2
J.H.Müller/direkt/17.05...	Almond oil, refined	130103	1
Jenne	Almond oil, refined	18070602	1
Kehr	Almond oil, refined	8004039003	1
Caelo	Almond oil, refined	21112PML01	1
Caelo	Almond oil, refined	140113PML01	1
Caelo	Almond oil, refined	12357110	1
Kehr / Lamotte	Almond oil, refined	5214206	1
Kehr / Lamotte	Almond oil, refined	50115PML01	1
Caelo	Almond oil, refined	220515PML01	1
Kögl	Almond oil, refined	267608164216	1
Kögl	Almond oil, refined	373411164816	1
Kögl	Almond oil, refined	485801170717	1

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Supplier	Substance	Batch	Spectra
Kögl	Almond oil, refined	65903171117	1
Kögl	Almond oil, refined	109704172417	1
Kögl	Almond oil, refined	20172414	2
Kögl	Almond oil, refined	1701851	1
Kögl	Almond oil, refined	1800278	1
Kögl	Almond oil, refined	1700173	2
Kögl	Almond oil, refined	1701192	1
Kögl	Almond oil, refined	1800813	1
Kögl	Almond oil, refined	1802929	2
Krieger	Almond oil, refined	13350006	1
Krieger/Lamotte	Almond oil, refined	8001497001	1
Krieger/Lamotte/06.01.14	Almond oil, refined	5438302	1
L 20/ Henry Lamotte	Almond oil, refined	1000004431	1
L 20/ Henry Lamotte	Almond oil, refined	8002653001	2
L10/HENRY LAMOTTE	Almond oil, refined	8003167001	1
L12	Almond oil, refined	8002675001	1
L12	Almond oil, refined	8003167001	4
L12	Almond oil, refined	E1712007	1
L12/Henry Lamotte	Almond oil, refined	8001497001	5
L20/ Henry Lamotte	Almond oil, refined	8002675001	1
L20/ Henry Lamotte	Almond oil, refined	8003503002	1
L20/Lamotte	Almond oil, refined	1000003242	1
L30	Almond oil, refined	E1603022	1
lamotte	Almond oil, refined	5438301	1
lamotte	Almond oil, refined	5615003	1
lamotte	Almond oil, refined	8003885002	1
Lamotte	Almond oil, refined	5269301	3
Lamotte	Almond oil, refined	5214206	6
Lamotte	Almond oil, refined	130145	6
Lamotte	Almond oil, refined	5438301	6
Lamotte	Almond oil, refined	5438302	9
Lamotte	Almond oil, refined	548302	1
Lamotte	Almond oil, refined	5415901	11
Lamotte	Almond oil, refined	5615001	2
Lamotte	Almond oil, refined	561001	1
Lamotte	Almond oil, refined	5615003	6
Lamotte	Almond oil, refined	5703001	1
Lamotte	Almond oil, refined	5669601	1
Lamotte	Almond oil, refined	5748601	7
Lamotte	Almond oil, refined	5919600001	6
Lamotte	Almond oil, refined	5713001	1
Lamotte	Almond oil, refined	5703101	1
Lamotte	Almond oil, refined	8000712001	10
Lamotte	Almond oil, refined	8000915001	3
Lamotte	Almond oil, refined	8000725001	2
Lamotte	Almond oil, refined	8000915002	2
Lamotte	Almond oil, refined	1000003242	2
Lamotte	Almond oil, refined	8001497001	2
Lamotte	Almond oil, refined	1000004815	1
Lamotte	Almond oil, refined	8002653001	3
Lamotte	Almond oil, refined	8002675001	5
Lamotte	Almond oil, refined	80031670001	1
Lamotte	Almond oil, refined	8003167001	2
Lamotte	Almond oil, refined	8003503002	4
Lamotte	Almond oil, refined	8003503001	1
Lamotte	Almond oil, refined	8003885002	2
Lamotte	Almond oil, refined	8003885001	1
Lamotte	Almond oil, refined	8003885002	1
Lamotte	Almond oil, refined	8004039003	4
Lamotte	Almond oil, refined	1000010685	4

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Supplier	Substance	Batch	Spectra
Lamotte / AHC	Almond oil, refined	1000003242	1
Lamotte / AHC	Almond oil, refined	1000010093	1
Lamotte / Gehe	Almond oil, refined	3968/V03/14	1
Lamotte / Gehe	Almond oil, refined	5615001	1
Lamotte / Gehe	Almond oil, refined	5703101	2
Lamotte / Gehe	Almond oil, refined	8000725001	2
Lamotte / Gehe	Almond oil, refined	8003885002	2
Lamotte / Noweda	Almond oil, refined	5615001	1
Lamotte / Noweda	Almond oil, refined	5615003	1
Lamotte / Noweda	Almond oil, refined	5748601	2
Lamotte / Noweda	Almond oil, refined	1000003242	2
Lamotte / Noweda	Almond oil, refined	8001497001	2
Lamotte / Noweda	Almond oil, refined	8003167001	1
Lamotte / Phoenix	Almond oil, refined	8004548011	1
Lamotte / Phönix	Almond oil, refined	8004390001	1
lamotte / Sanacorp	Almond oil, refined	5615003	1
Lamotte / Sanacorp	Almond oil, refined	8002675001	4
Lamotte /Phoenix	Almond oil, refined	8003167001	1
Lamotte Henry	Almond oil, refined	1000004431	1
lamotte noweda,	Almond oil, refined	5615001	1
Lamotte Phönix	Almond oil, refined	5214206	1
Lamotte über Phoenix	Almond oil, refined	5703001	1
Lamotte über Phoenix	Almond oil, refined	5748601	3
Lamotte über Phoenix	Almond oil, refined	8000712001	2
Lamotte über Phoenix	Almond oil, refined	8000725001	1
Lamotte über Sanacorp	Almond oil, refined	8000915001	3
Lamotte über Sanacorp	Almond oil, refined	8000915002	1
Lamotte/ Gehe	Almond oil, refined	8004548011	1
Lamotte/ Noweda	Almond oil, refined	5438301	1
Lamotte/ Noweda	Almond oil, refined	5415901	1
Lamotte/ Noweda	Almond oil, refined	8001497001	3
Lamotte/ Noweda	Almond oil, refined	8002675001	1
Lamotte/ Phoenix	Almond oil, refined	5748601	1
Lamotte/ Phönix	Almond oil, refined	5438302	1
Lamotte/ Sana	Almond oil, refined	5669601	1
Lamotte/ Sanacorp	Almond oil, refined	8004039003	1
Lamotte/AHD	Almond oil, refined	1000003242	2
Lamotte/AHD	Almond oil, refined	8003503002	4
Lamotte/AHD	Almond oil, refined	8003885002	1
Lamotte/AHD	Almond oil, refined	8004548007	1
lamotte/anzag	Almond oil, refined	5415901	3
Lamotte/Anzag	Almond oil, refined	130145	1
Lamotte/Anzag	Almond oil, refined	8000712001	4
Lamotte/Anzag	Almond oil, refined	1000004431	1
Lamotte/Anzag	Almond oil, refined	8002675001	1
Lamotte/Anzag	Almond oil, refined	8002653001	1
Lamotte/Anzag 12.06.2012	Almond oil, refined	5177001	1
Caelo	Almond oil, refined	5438301	4
Lamotte/Ebert	Almond oil, refined	5415901	1
Lamotte/Ebert	Almond oil, refined	8003167001	1
Lamotte/Ebert	Almond oil, refined	8003503002	1
Lamotte/Ebert	Almond oil, refined	8004039003	3
Lamotte/Ebert+Jacobi	Almond oil, refined	8004039003	2
lamotte/gehe	Almond oil, refined	8001497001	2
lamotte/gehe	Almond oil, refined	8002653001	2
lamotte/gehe	Almond oil, refined	8003167001	1
lamotte/Gehe	Almond oil, refined	5415901	3
lamotte/Gehe	Almond oil, refined	5615001	1
Lamotte/gehe	Almond oil, refined	5214206	1
Lamotte/gehe	Almond oil, refined	5274206	1

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Supplier	Substance	Batch	Spectra
Lamotte/Gehe	Almond oil, refined	5415901	4
Lamotte/Gehe	Almond oil, refined	5615003	2
Lamotte/Gehe	Almond oil, refined	5615001	1
Lamotte/Gehe	Almond oil, refined	5703101	2
Lamotte/Gehe	Almond oil, refined	1000003242	1
Lamotte/Gehe	Almond oil, refined	5748601	2
Lamotte/Gehe	Almond oil, refined	8000725001	1
Lamotte/Gehe	Almond oil, refined	8000712001	1
Lamotte/Gehe	Almond oil, refined	8000915002	2
Lamotte/Gehe	Almond oil, refined	8001497001	2
Lamotte/Gehe	Almond oil, refined	8003503002	1
Lamotte/Gehe	Almond oil, refined	1000012126	1
Lamotte/GEHE	Almond oil, refined	5269301	2
Lamotte/GEHE	Almond oil, refined	5438302	3
Lamotte/Krieger	Almond oil, refined	5081301	1
Lamotte/Krieger	Almond oil, refined	5177001	1
Lamotte/Krieger	Almond oil, refined	5269301	2
Lamotte/N/31.05.13/PZN:...	Almond oil, refined	5214206	1
lamotte/noweda	Almond oil, refined	8000712001	2
lamotte/noweda	Almond oil, refined	8003503001	1
lamotte/Noweda	Almond oil, refined	74760	1
lamotte/Noweda	Almond oil, refined	5615001	1
Lamotte/Noweda	Almond oil, refined	130145	3
Lamotte/Noweda	Almond oil, refined	5438301	1
Lamotte/Noweda	Almond oil, refined	5438302	1
Lamotte/Noweda	Almond oil, refined	5615003	2
Lamotte/Noweda	Almond oil, refined	8000712001	2
Lamotte/Noweda	Almond oil, refined	8000915001	1
Lamotte/Noweda	Almond oil, refined	8000915002	1
Lamotte/Noweda	Almond oil, refined	1000004431	1
Lamotte/Noweda	Almond oil, refined	8002675001	1
Lamotte/Noweda	Almond oil, refined	8003167001	2
Lamotte/Noweda	Almond oil, refined	8004039003	2
Lamotte/Noweda	Almond oil, refined	8004390001	1
Lamotte/Noweda	Almond oil, refined	1000010685	1
LAMOTTE/NOWEDA	Almond oil, refined	5615003	4
Lamotte/Phoenix	Almond oil, refined	5415901	2
Lamotte/Phoenix	Almond oil, refined	5615003	2
Lamotte/Phoenix	Almond oil, refined	5615001	1
Lamotte/Phoenix	Almond oil, refined	5703001	1
Lamotte/Phoenix	Almond oil, refined	5748601	2
Lamotte/Phoenix	Almond oil, refined	5919600001	1
Lamotte/Phoenix	Almond oil, refined	8000712001	4
lamotte/phönix	Almond oil, refined	5438302	1
lamotte/phönix	Almond oil, refined	5919600001	1
lamotte/Phönix	Almond oil, refined	5748601	1
Lamotte/Phönix	Almond oil, refined	5615003	1
Lamotte/Phönix	Almond oil, refined	3243	1
Lamotte/Phönix	Almond oil, refined	8003167001	1
Lamotte/Phönix	Almond oil, refined	8003675001	1
Lamotte/Phönix	Almond oil, refined	8003503001	1
Lamotte/Phönix	Almond oil, refined	8004039003	2
Lamotte/Phönix	Almond oil, refined	8004548002	1
Lamotte/PPL	Almond oil, refined	8000712001	2
Lamotte/Sanacorp	Almond oil, refined	5214206	1
Lamotte/Sanacorp	Almond oil, refined	5438301	1
Lamotte/Sanacorp	Almond oil, refined	130145	1
Lamotte/Sanacorp	Almond oil, refined	5438302	2
Lamotte/Sanacorp	Almond oil, refined	5615001	3
Lamotte/Sanacorp	Almond oil, refined	5669601	2

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Supplier	Substance	Batch	Spectra
Lamotte/Sanacorp	Almond oil, refined	5703101	1
Lamotte/Sanacorp	Almond oil, refined	5703001	3
Lamotte/Sanacorp	Almond oil, refined	8748401	1
Lamotte/Sanacorp	Almond oil, refined	5748401	1
Lamotte/Sanacorp	Almond oil, refined	5748601	6
Lamotte/Sanacorp	Almond oil, refined	8000712001	4
Lamotte/Sanacorp	Almond oil, refined	1000002454	2
Lamotte/Sanacorp	Almond oil, refined	8000725001	1
Lamotte/Sanacorp	Almond oil, refined	1000003242	2
Lamotte/Sanacorp	Almond oil, refined	8003503002	2
Lamotte/Sanacorp	Almond oil, refined	8004390001	1
Lamotte/Sanacorp 02.11...	Almond oil, refined	5919600001	1
Midas	Almond oil, refined	1000002705	1
Midas	Almond oil, refined	1000004431	2
Midas	Almond oil, refined	8003503001	1
Midas	Almond oil, refined	8004039003	4
Midas	Almond oil, refined	8004390001	4
Midas	Almond oil, refined	8004548002	3
Midas	Almond oil, refined	1000010093	1
MIDAS/Henry Lamotte	Almond oil, refined	1000010685	1
MPK	Almond oil, refined	36480-127127	1
Noweda	Almond oil, refined	11078806	1
Noweda	Almond oil, refined	5177001	4
Noweda	Almond oil, refined	5269301	4
Noweda	Almond oil, refined	12080803	2
Noweda	Almond oil, refined	12357101	1
Noweda	Almond oil, refined	13178003	1
Noweda	Almond oil, refined	13178011	2
Noweda	Almond oil, refined	13H08-N11	1
Noweda	Almond oil, refined	13236411	2
Noweda	Almond oil, refined	5748601	2
Noweda	Almond oil, refined	15197404	1
Noweda	Almond oil, refined	294784	1
Noweda / Henry Lamotte	Almond oil, refined	5214206	3
Noweda / Henry Lamotte	Almond oil, refined	5438301	3
Noweda / Henry Lamotte	Almond oil, refined	130145	1
Noweda / Henry Lamotte	Almond oil, refined	5748601	1
Noweda / Henry Lamotte	Almond oil, refined	8000725001	1
Noweda Lamotte GmbH	Almond oil, refined	5919600001	1
Bombastus	Almond oil, refined	281765	1
Caelo	Almond oil, refined	15197404	4
Fagron	Almond oil, refined	17042203	1
Noweda/Henry	Almond oil, refined	8003503002	1
Noweda/Henry Lamotte	Almond oil, refined	5615003	4
Noweda/Henry Lamotte	Almond oil, refined	5748501	1
Noweda/Henry Lamotte	Almond oil, refined	8000915001	1
noweda/Ichtyol	Almond oil, refined	5438302	2
Noweda/Lamotte	Almond oil, refined	5438302	3
Noweda/Lamotte	Almond oil, refined	5748601	1
Noweda/Lamotte	Almond oil, refined	5919600001	1
Noweda/Lamotte	Almond oil, refined	8000712001	3
Noweda/Lamotte	Almond oil, refined	8000915001	1
Euro OTC	Almond oil, refined	1301001-02	2
Ph.Eur.7.0	Almond oil, refined	13350003	1
Pharmachem/Noweda	Almond oil, refined	8000712001	1
Phoenix	Almond oil, refined	5269301	1
Phoenix	Almond oil, refined	163327303	1
Phoenix	Almond oil, refined	16327304	1
Phoenix	Almond oil, refined	18015007	1
Phoenix (Henry Lamotte ...	Almond oil, refined	5269301	1

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Supplier	Substance	Batch	Spectra
PHOENIX 03.06.2014	Almond oil, refined	14042705	1
Caelo	Almond oil, refined	12357112	2
Phoenix/ Lamotte	Almond oil, refined	5438301	2
Caelo	Almond oil, refined	8000915001	5
Caelo	Almond oil, refined	19084507	2
Phoenix/Lamotte	Almond oil, refined	5214206	1
Phoenix/Lamotte	Almond oil, refined	5415901	1
phönix	Almond oil, refined	12153505	1
phönix	Almond oil, refined	8001497001	1
Phönix	Almond oil, refined	5438301	1
Phönix	Almond oil, refined	13178004	1
Phönix	Almond oil, refined	543801	1
Phönix	Almond oil, refined	8000915001	1
Phönix	Almond oil, refined	15409710	1
Phönix	Almond oil, refined	16071006	2
Phönix	Almond oil, refined	16327303	1
Phönix	Almond oil, refined	17176502	2
Phönix	Almond oil, refined	8003167001	2
Phönix	Almond oil, refined	8004548002	1
PHÖNIX	Almond oil, refined	16327302	1
PHÖNIX	Almond oil, refined	18015002	1
PHÖNIX	Almond oil, refined	18295910	1
Phönix , 03.09.13	Almond oil, refined	13178003	1
Phönix aep	Almond oil, refined	18014402	1
Phönix Gotha	Almond oil, refined	12153501	1
Phönix, 17.06.2013	Almond oil, refined	5438301	1
Caelo	Almond oil, refined	13236403	7
Phönix/ Lamotte	Almond oil, refined	5615001	1
Phönix/ Lamotte	Almond oil, refined	5615003	2
Caelo	Almond oil, refined	1326403	1
Caelo	Almond oil, refined	16327304	17
Caelo	Almond oil, refined	17207906	15
Phönix/Fagon	Almond oil, refined	18015003	1
Phönix/Lamotte	Almond oil, refined	1000003242	1
Phytocomm	Almond oil, refined	15197406	1
Prima Vera	Almond oil, refined	8603152	1
Primavera	Almond oil, refined	3808131	2
Primavera	Almond oil, refined	4811131	1
Primavera	Almond oil, refined	1551041	2
Primavera	Almond oil, refined	15510141	1
Primavera	Almond oil, refined	7708L22	1
Primavera	Almond oil, refined	82B23	2
Primavera	Almond oil, refined	11G23	2
Primavera	Almond oil, refined	480K23	1
Primavera	Almond oil, refined	552K25	1
Primavera	Almond oil, refined	60E26	1
Primavera 19.10.15	Almond oil, refined	944H23	1
Primavera Wareneingang...	Almond oil, refined	792D23	1
Primavera WE 29.03.17 -...	Almond oil, refined	241C25	1
Primavera	Almond oil, refined	21D24	1
Primavera	Almond oil, refined	218D24	1
Resana/Fiebig	Almond oil, refined	1708-5766	1
Sanacoro W.E:16.03.18 ...	Almond oil, refined	8003503002	1
Sanacorp	Almond oil, refined	12080803	1
Sanacorp	Almond oil, refined	5214206	2
Sanacorp	Almond oil, refined	12357102	3
Sanacorp	Almond oil, refined	12357103	1
Sanacorp	Almond oil, refined	5438302	1
Sanacorp	Almond oil, refined	13178004	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Almond oil, refined	5415901	2
Sanacorp	Almond oil, refined	13236406	1
Sanacorp	Almond oil, refined	13350007	1
Sanacorp	Almond oil, refined	1413935	1
Sanacorp	Almond oil, refined	15078401	1
Sanacorp	Almond oil, refined	15078405	1
Sanacorp	Almond oil, refined	17176502	1
Sanacorp	Almond oil, refined	17176507	2
Sanacorp	Almond oil, refined	17176512	2
Sanacorp	Almond oil, refined	8003503002	1
Sanacorp	Almond oil, refined	8003503001	1
Sanacorp	Almond oil, refined	18184113	1
Sanacorp WE:04.02.2017 ...	Almond oil, refined	8001497001	1
Sanacorp, 11.03.17, 5,46EUR	Almond oil, refined	16327309	2
Sanacorp, 4,88EUR, 18.1.17	Almond oil, refined	16327303	1
Caelo	Almond oil, refined	12041803	3
Caelo	Almond oil, refined	13H08-N11	1
Caelo	Almond oil, refined	14215808	6
Sanacorp/Henry Lamotte ...	Almond oil, refined	8003167001	3
Spinnrad	Almond oil, refined	1215048093	1
Spinnrad	Almond oil, refined	316101221	3
Spinnrad	Almond oil, refined	418048091	1
Spinnrad GmbH	Almond oil, refined	913301224	1
Spinnrad GmbH	Almond oil, refined	713301223	1
Stumpf/Henry Lamotte	Almond oil, refined	5438302	4
Stumpf/Henry Lamotte	Almond oil, refined	5493001	4
Stumpf/Henry Lamotte	Almond oil, refined	5415901	2
Stumpf/Henry Lamotte	Almond oil, refined	5748601	2
Stumpf/Henry Lamotte	Almond oil, refined	5919600001	2
Taoasis	Almond oil, refined	118979-108698	1
Taoasis	Almond oil, refined	119249-109910	1
Taoasis	Almond oil, refined	5452701-111421	1
Taoasis	Almond oil, refined	5511701-1113571	1
Taoasis	Almond oil, refined	102235-111893	1
Taoasis	Almond oil, refined	5511701-113571	1
Taoasis	Almond oil, refined	3548810	1
Taoasis	Almond oil, refined	12842-116104	1
Taoasis	Almond oil, refined	130973-116149	1
Taoasis	Almond oil, refined	130973-118607	1
Taoasis	Almond oil, refined	132805-118635	1
Taoasis	Almond oil, refined	133805-120282	1
Taoasis	Almond oil, refined	134032-120671	1
Taoasis	Almond oil, refined	134475-1215919	1
Taoasis	Almond oil, refined	135831-121621	2
Taoasis	Almond oil, refined	31952-123336	1
Taoasis	Almond oil, refined	33489-124674	1
Taoasis	Almond oil, refined	34371-125478	1
Taoasis	Almond oil, refined	35171-125735	1
Taoasis	Almond oil, refined	37293-128349	1
Taoasis	Almond oil, refined	22-896	1
Taoasis	Almond oil, refined	19103325-896	1
Taoasis	Almond oil, refined	103325-1265	1
Taoasis	Almond oil, refined	19103616-1718	1
Taoasis	Almond oil, refined	103944-1719	1
Taoasis	Almond oil, refined	19103325-1991	1
Taoasis	Almond oil, refined	104542-6050	1
Taoasis/Noweda	Almond oil, refined	130973	1
Taoasis/Phoenix	Almond oil, refined	103325-1265	1
VDL 21.05;Preis 9,84	Almond oil, refined	13236406//05R05	1
VDL;22.05.15;11.47EUR	Almond oil, refined	14215807	1

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Supplier	Substance	Batch	Spectra
WE:Phönix 25.08.2016 EK...	Almond oil, refined	1000003242	2
Bombastus	Apricot kernel oil, refined	274930	1
Bombastus	Apricot kernel oil, refined	307653	1
Bombastus	Apricot kernel oil, refined	302095	2
Caelo	Apricot kernel oil, refined	13253203	2
Caelo	Apricot kernel oil, refined	13011804	1
Caelo	Apricot kernel oil, refined	17251802	1
Caelo	Apricot kernel oil, refined	13011805	1
Primavera	Apricot kernel oil, refined	3612131	1
taosis/Phönix	Apricot kernel oil, refined	134933-124392	1
Caelo	Avocado oil, refined	18044913	5
Anzag 06.02.2013	Avocado oil, refined	1208028-01	1
Anzag 16.10.12 ek: 3,90EUR	Avocado oil, refined	1204047-01	1
Audor Pharma	Avocado oil, refined	13361414	1
Bomastus/Phönix	Avocado oil, refined	309826	2
Bombastus	Avocado oil, refined	2091235000130	1
Bombastus	Avocado oil, refined	274935	1
Bombastus	Avocado oil, refined	267660	1
Bombastus	Avocado oil, refined	289240	2
Bombastus	Avocado oil, refined	298491	1
Bombastus	Avocado oil, refined	300403	2
Bombastus	Avocado oil, refined	306789	1
Bombastus	Avocado oil, refined	294183	4
Bombastus	Avocado oil, refined	18002515	3
Bombastus	Avocado oil, refined	18003611	3
Bombastus	Avocado oil, refined	286519	1
Caelo	Avocado oil, refined	5216901	1
Caelo	Avocado oil, refined	12064802	2
Caelo	Avocado oil, refined	12064813	3
Caelo	Avocado oil, refined	12064810	2
Caelo	Avocado oil, refined	13031303	1
Caelo	Avocado oil, refined	11147607	1
Caelo	Avocado oil, refined	12248311	1
Caelo	Avocado oil, refined	12248315	2
Caelo	Avocado oil, refined	2081303	1
Caelo	Avocado oil, refined	1304039-1	1
Caelo	Avocado oil, refined	28111308	1
Caelo	Avocado oil, refined	130172	1
Caelo	Avocado oil, refined	13361407	3
Caelo	Avocado oil, refined	13361441	1
Caelo	Avocado oil, refined	14170105	1
Caelo	Avocado oil, refined	14363704	1
Caelo	Avocado oil, refined	19081501	1
Caelo	Avocado oil, refined	14363706	2
Caelo	Avocado oil, refined	15155203	2
Caelo	Avocado oil, refined	15155206	9
Caelo	Avocado oil, refined	15268205	7
Caelo	Avocado oil, refined	15426305	10
Caelo	Avocado oil, refined	15268213	2
Caelo	Avocado oil, refined	300403	1
Caelo	Avocado oil, refined	16104704	2
Caelo	Avocado oil, refined	16104702	19
Caelo	Avocado oil, refined	16185907	11
Caelo	Avocado oil, refined	1618908	1
Caelo	Avocado oil, refined	17038802	27
Caelo	Avocado oil, refined	1685908	1
Caelo	Avocado oil, refined	17038803	6
Caelo	Avocado oil, refined	17038814	1
Caelo	Avocado oil, refined	18007501	11
Caelo	Avocado oil, refined	18007503	1

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Supplier	Substance	Batch	Spectra
Caelo	Avocado oil, refined	18007502	3
Caelo	Avocado oil, refined	3071802	1
Caelo	Avocado oil, refined	16081811	1
Caelo	Avocado oil, refined	12091807	1
Caelo	Avocado oil, refined	5121805	1
Caelo	Avocado oil, refined	18044909	1
Caelo	Avocado oil, refined	18044914	1
Caelo	Avocado oil, refined	30011904	1
Caelo	Avocado oil, refined	1605034-01	1
Caelo	Avocado oil, refined	12064804	2
Caelo	Avocado oil, refined	14170104	10
Caelo	Avocado oil, refined	13361414	7
Caelo	Avocado oil, refined	12248312	3
Caelo	Avocado oil, refined	36(18044901)	1
Caelo	Avocado oil, refined	17038817	1
Caelo	Avocado oil, refined	18306804	1
Caelo	Avocado oil, refined	15426306	4
Caelo	Avocado oil, refined	17038811	3
Caelo	Avocado oil, refined	15155207	2
Caelo	Avocado oil, refined	15268203	13
Caelo	Avocado oil, refined	12248310	11
Caelo	Avocado oil, refined	11227207	1
Caelo	Avocado oil, refined	15426303	2
Caelo	Avocado oil, refined	35(18007501)	1
Caelo	Avocado oil, refined	12248302	1
Caelo	Avocado oil, refined	13129111	1
Caelo	Avocado oil, refined	12064812	2
Caelo	Avocado oil, refined	15426304	8
Caelo	Avocado oil, refined	18044901	14
Caelo	Avocado oil, refined	18044911	3
Caelo	Avocado oil, refined	4718201	2
Caelo	Avocado oil, refined	13129106	3
Caelo	Avocado oil, refined	3413M-01960	2
Caelo	Avocado oil, refined	14363702	12
Caelo	Avocado oil, refined	17038804	2
Caelo	Avocado oil, refined	18044908	8
Caelo	Avocado oil, refined	16185908	5
Caelo	Avocado oil, refined	14363705	4
Caelo	Avocado oil, refined	1436705	1
Caelo	Avocado oil, refined	2515I-01960	1
Caelo	Avocado oil, refined	16104703	4
Caelo	Avocado oil, refined	13129104	2
Caelo	Avocado oil, refined	13129103	9
Caelo	Avocado oil, refined	13129108	7
Caelo	Avocado oil, refined	13361411	3
Caelo	Avocado oil, refined	18044905	2
Caesar & Loretz GmbH	Avocado oil, refined	12H24-N02	1
Caesar & Loretz GmbH Hi...	Avocado oil, refined	13361414	1
Caesar & Loretz/ Noweda	Avocado oil, refined	12248312	2
Caesar & Loretz/Noweda	Avocado oil, refined	15268203	1
Caesar & Loretz/Noweda	Avocado oil, refined	17038802	1
Caesar & Loretz/Noweda	Avocado oil, refined	17038803	1
Caesar/Noweda	Avocado oil, refined	12064801	1
Caesar/Noweda	Avocado oil, refined	12064812	2
Ebert u. Jacobi 16.0...	Avocado oil, refined	302706	1
EuRho	Avocado oil, refined	4111M-01960	1
Euro OTC	Avocado oil, refined	1410027-01	4
Euro OTC	Avocado oil, refined	1501015-01	3
Euro OTC	Avocado oil, refined	13111404	1
Euro OTC	Avocado oil, refined	30121424	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Avocado oil, refined	1605034-03	4
Euro OTC	Avocado oil, refined	1112018-01	1
Euro OTC	Avocado oil, refined	1304039-01	3
Euro OTC	Avocado oil, refined	1305046-01	5
Euro OTC	Avocado oil, refined	1501015V-01	1
Euro OTC	Avocado oil, refined	1605034-01	7
Euro OTC	Avocado oil, refined	150101501	1
Euro OTC	Avocado oil, refined	160503403	1
Euro OTC	Avocado oil, refined	1301017-01	1
Euro OTC	Avocado oil, refined	1405007-01	3
Euro OTC	Avocado oil, refined	28041506	1
Euro OTC	Avocado oil, refined	1402027-01	6
Fagron	Avocado oil, refined	12F25-N12	1
Fagron	Avocado oil, refined	13361406	1
Fagron	Avocado oil, refined	12H24-N02	1
Gatt-Koller	Avocado oil, refined	1803162	5
Gatt-Koller	Avocado oil, refined	1900505	1
gehe 15.01.2014	Avocado oil, refined	1305046-01	1
Caelo	Avocado oil, refined	14170102	1
H.Lamotte / Gehe	Avocado oil, refined	1000005537	1
Henry Lamotte	Avocado oil, refined	130143	1
Henry Lamotte	Avocado oil, refined	8002616001	1
Henry Lamotte Oils	Avocado oil, refined	122470	1
Henry Lamotte Oils GmbH	Avocado oil, refined	122490	2
Henry Lamotte Oils GmbH	Avocado oil, refined	130243	1
Henry Lamotte Oils GmbH	Avocado oil, refined	125529	2
Henry Lamotte Oils GmbH	Avocado oil, refined	1000001098	1
Henry Lamotte Oils GmbH	Avocado oil, refined	8002616001	1
HENRY LAMOTTE OILS GmbH	Avocado oil, refined	1000001451	1
Henry lamotte Oils GmbH...	Avocado oil, refined	130243	1
Henry Lamotte/AHD	Avocado oil, refined	1000004363	1
Henry Lamotte/Anzag	Avocado oil, refined	1000001098	2
Henry Lamotte/Sana	Avocado oil, refined	1000001098	1
HenryLamotte/Phoenix	Avocado oil, refined	130143	1
Holdermann	Avocado oil, refined	13361406	1
Kögl	Avocado oil, refined	407211164916	1
Kögl	Avocado oil, refined	407211161117	2
Kögl	Avocado oil, refined	159805171917	3
Kögl	Avocado oil, refined	20171598	2
Kögl	Avocado oil, refined	1702199	2
Kögl	Avocado oil, refined	1800426	4
Lamotte	Avocado oil, refined	122490	1
Lamotte	Avocado oil, refined	130143	1
Lamotte	Avocado oil, refined	1000001451	1
Lamotte	Avocado oil, refined	8001641001	2
Lamotte / Gehe	Avocado oil, refined	130193	1
Lamotte / phönix	Avocado oil, refined	1000004363	1
Lamotte /Phönix	Avocado oil, refined	8002616001	1
Lamotte GmbH	Avocado oil, refined	1000001451	1
Lamotte/Sanacorp	Avocado oil, refined	130193	1
Lamotte/Sanacorp	Avocado oil, refined	130214	1
Lamotte/Sanacorp	Avocado oil, refined	124656	1
Lamotte/Sanacorp	Avocado oil, refined	1000001098	1
Nachprüfung	Avocado oil, refined	143637021	1
Noveda	Avocado oil, refined	13129103	1
Euro OTC	Avocado oil, refined	1301039-01	1
Euro OTC	Avocado oil, refined	2041404	1
Phoenix 19.03.2014	Avocado oil, refined	13129102	1
Phoenix 29.04.2014	Avocado oil, refined	13361406	1
phönix	Avocado oil, refined	16185908	1

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Supplier	Substance	Batch	Spectra
phönix	Avocado oil, refined	17038802	1
Phönix / Alliance Healt...	Avocado oil, refined	17038802	1
Phönix 15.01.2014	Avocado oil, refined	279025	1
Caelo	Avocado oil, refined	12248303	2
PVL	Avocado oil, refined	2807133	1
PVL	Avocado oil, refined	2410131	1
Raben-Apotheke Mildena	Avocado oil, refined	1402027-01	1
Sanacorp	Avocado oil, refined	1304039-01	1
Sanacorp	Avocado oil, refined	713301202	1
Sanacorp	Avocado oil, refined	14170104	1
Sanacorp	Avocado oil, refined	18007502	1
Sanacorp, 16.02.17, 3,04EUR	Avocado oil, refined	16104702	1
Sanacorp,31.03.17, 5,20EUR	Avocado oil, refined	16185908	1
Bombastus	Avocado oil, refined	268579	1
Spinnrad	Avocado oil, refined	917301202	1
Spinnrad GmbH	Avocado oil, refined	916301202	1
Taoasis	Avocado oil, refined	92010-105977	1
VDL 06.05.Preis 6,70	Avocado oil, refined	700325//05R06	1
VDL;11.3.16;2,77EUR	Avocado oil, refined	15268203	1
Wepa/ Phoenix	Avocado oil, refined	17038802	1
Anzag 15.10.12	Borage oil, refined, stabili...	965-028	2
Aurica	Borage oil, refined, stabili...	Z13902/A	1
Aurica Vital	Borage oil, refined, stabili...	28/05/15	1
Aurica Vital	Borage oil, refined, stabili...	Z13902/A	1
Aurica/Noweda	Borage oil, refined, stabili...	957-038	1
Bergland	Borage oil, refined, stabili...	H300590	2
Bergland-Pharma	Borage oil, refined, stabili...	H103019	2
Bombastus	Borage oil, refined, stabili...	15305001	1
Caelo	Borage oil, refined, stabili...	1713M-02881	1
Caelo	Borage oil, refined, stabili...	11002607	1
Caelo	Borage oil, refined, stabili...	11260102	2
Caelo	Borage oil, refined, stabili...	12027004	1
Caelo	Borage oil, refined, stabili...	12161202	7
Caelo	Borage oil, refined, stabili...	123118	1
Caelo	Borage oil, refined, stabili...	12161207	4
Caelo	Borage oil, refined, stabili...	12355203	8
Caelo	Borage oil, refined, stabili...	13136504	9
Caelo	Borage oil, refined, stabili...	13170601	4
Caelo	Borage oil, refined, stabili...	13170604	1
Caelo	Borage oil, refined, stabili...	13170610	6
Caelo	Borage oil, refined, stabili...	13170613	4
Caelo	Borage oil, refined, stabili...	26041404	1
Caelo	Borage oil, refined, stabili...	14203012	1
Caelo	Borage oil, refined, stabili...	15063406	2
Caelo	Borage oil, refined, stabili...	15063412	2
Caelo	Borage oil, refined, stabili...	15305002	5
Caelo	Borage oil, refined, stabili...	1534-08	1
Caelo	Borage oil, refined, stabili...	722915305009	1
Caelo	Borage oil, refined, stabili...	16052302	4
Caelo	Borage oil, refined, stabili...	16266002	5
Caelo	Borage oil, refined, stabili...	16266012	1
Caelo	Borage oil, refined, stabili...	6170717	1
Caelo	Borage oil, refined, stabili...	17055402	5
Caelo	Borage oil, refined, stabili...	17307802	11
Caelo	Borage oil, refined, stabili...	17361801	3
Caelo	Borage oil, refined, stabili...	17361804	10
Caelo	Borage oil, refined, stabili...	17361802	1
Caelo	Borage oil, refined, stabili...	18080501	18
Caelo	Borage oil, refined, stabili...	17261805	2
Caelo	Borage oil, refined, stabili...	18080504	10

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Supplier	Substance	Batch	Spectra
Caelo	Borage oil, refined, stabili...	2011906	1
Caelo	Borage oil, refined, stabili...	1808054	1
Caelo	Borage oil, refined, stabili...	18295801	2
Caelo	Borage oil, refined, stabili...	18080511	1
Caelo	Borage oil, refined, stabili...	18295808	3
Caelo	Borage oil, refined, stabili...	13170605	3
Caelo	Borage oil, refined, stabili...	14203005	14
Caelo	Borage oil, refined, stabili...	14161901	4
Caelo	Borage oil, refined, stabili...	15063411	6
Caelo	Borage oil, refined, stabili...	15305001	13
Caelo	Borage oil, refined, stabili...	11260106	2
Caelo	Borage oil, refined, stabili...	12027008	2
Caelo	Borage oil, refined, stabili...	14203011	5
Caelo	Borage oil, refined, stabili...	1316504	1
Caelo	Borage oil, refined, stabili...	5594400002	2
Caelo	Borage oil, refined, stabili...	1 (18295808)	1
Caelo	Borage oil, refined, stabili...	17055401	13
Caelo	Borage oil, refined, stabili...	13170607	1
Caelo	Borage oil, refined, stabili...	14203001	2
Caelo	Borage oil, refined, stabili...	12152108	1
Caelo	Borage oil, refined, stabili...	18080506	3
Caelo	Borage oil, refined, stabili...	18295807	1
Caelo	Borage oil, refined, stabili...	12355205	4
Caelo	Borage oil, refined, stabili...	12161203	1
Caelo	Borage oil, refined, stabili...	1461906	1
Caelo	Borage oil, refined, stabili...	18080509	5
Caelo	Borage oil, refined, stabili...	13170603	1
Caelo	Borage oil, refined, stabili...	13372104	6
Caelo	Borage oil, refined, stabili...	14161906	2
Caelo	Borage oil, refined, stabili...	14203004	10
Caelo	Borage oil, refined, stabili...	15063413	2
Caelo	Borage oil, refined, stabili...	15305009	7
Caelo	Borage oil, refined, stabili...	16052307	12
Caelo	Borage oil, refined, stabili...	16052301	13
Caelo	Borage oil, refined, stabili...	16266011	8
Caelo	Borage oil, refined, stabili...	16266008	1
Caelo	Borage oil, refined, stabili...	16266009	2
Caelo	Borage oil, refined, stabili...	17053189	1
Caelo	Borage oil, refined, stabili...	17361805	10
Caelo	Borage oil, refined, stabili...	173618805	1
Caelo	Borage oil, refined, stabili...	15305003	5
Caelo	Borage oil, refined, stabili...	12161209	1
Caelo	Borage oil, refined, stabili...	1235504	1
Caelo	Borage oil, refined, stabili...	15063402	12
Caelo	Borage oil, refined, stabili...	14203009	1
Caelo	Borage oil, refined, stabili...	15305005	3
Caelo	Borage oil, refined, stabili...	15305006	3
Caelo	Borage oil, refined, stabili...	17307801	18
Caelo	Borage oil, refined, stabili...	18080502	1
Caelo	Borage oil, refined, stabili...	18080507	2
Caelo	Borage oil, refined, stabili...	18295803	1
Caelo	Borage oil, refined, stabili...	15063408	3
Caelo	Borage oil, refined, stabili...	15063409	3
Caesar & Loretz GmbH	Borage oil, refined, stabili...	16266011	1
Caesar & Loretz GmbH / ...	Borage oil, refined, stabili...	15063412	1
Caesar/Noweda	Borage oil, refined, stabili...	12161202	1
Caesar/Noweda	Borage oil, refined, stabili...	13136504	1
Caesar/Noweda	Borage oil, refined, stabili...	13136501	1
Caesar/Noweda	Borage oil, refined, stabili...	13372103	1
Caesar/Noweda	Borage oil, refined, stabili...	15305003	1

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Supplier	Substance	Batch	Spectra
Cealo/Anzag	Borage oil, refined, stabili...	17307801	1
Cealo/Gehe	Borage oil, refined, stabili...	18080501	1
Euro OTC	Borage oil, refined, stabili...	14203012	1
Euro OTC	Borage oil, refined, stabili...	15063407	1
Euro OTC	Borage oil, refined, stabili...	17307801	1
Euro OTC	Borage oil, refined, stabili...	18080501	1
Fagron	Borage oil, refined, stabili...	14A20-B03	1
Gehe	Borage oil, refined, stabili...	12027008	1
Gehe	Borage oil, refined, stabili...	12161203	1
GEHE	Borage oil, refined, stabili...	16266011	1
GEHE	Borage oil, refined, stabili...	17307801	1
Henry Lamotte	Borage oil, refined, stabili...	145678	2
Henry Lamotte	Borage oil, refined, stabili...	5402901	3
Henry Lamotte	Borage oil, refined, stabili...	145579	1
Henry Lamotte	Borage oil, refined, stabili...	12345	1
Henry Lamotte	Borage oil, refined, stabili...	1000006595	1
Henry Lamotte GmbH	Borage oil, refined, stabili...	5594400001	1
Henry Lamotte GmbH Bremen	Borage oil, refined, stabili...	122791	1
Henry Lamotte Oils	Borage oil, refined, stabili...	123118	1
Henry Lamotte Oils GmbH	Borage oil, refined, stabili...	130402	1
Henry Lamotte Oils GmbH...	Borage oil, refined, stabili...	1000004932	1
Henry Lamotte Oils GmbH...	Borage oil, refined, stabili...	1000006205	1
Henry Lamotte Oils/Sana...	Borage oil, refined, stabili...	5402901	1
Henry Lamotte/Anzag	Borage oil, refined, stabili...	125354	1
Henry Lamotte/Anzag	Borage oil, refined, stabili...	1000001388	1
Henry Lamotte/Anzag	Borage oil, refined, stabili...	5594400001	1
Caelo	Borage oil, refined, stabili...	1000006595	1
J.H.Müller/direkt/17.05...	Borage oil, refined, stabili...	130302	1
L12	Borage oil, refined, stabili...	16266007	3
L12	Borage oil, refined, stabili...	17361804	2
Lamotte / Phönix	Borage oil, refined, stabili...	5594400001	1
Lamotte über Sanacorp	Borage oil, refined, stabili...	125354	1
Lamotte/Alliance	Borage oil, refined, stabili...	125354	1
Nachprüfung	Borage oil, refined, stabili...	1503412	1
Noweda	Borage oil, refined, stabili...	12355203	2
Noweda	Borage oil, refined, stabili...	13136504	1
Noweda	Borage oil, refined, stabili...	13170606	1
Noweda	Borage oil, refined, stabili...	13372101	1
Noweda	Borage oil, refined, stabili...	13372104	1
Caelo	Borage oil, refined, stabili...	13372107	8
Caelo	Borage oil, refined, stabili...	13372110	1
Caelo	Borage oil, refined, stabili...	1416906	1
Caelo	Borage oil, refined, stabili...	15063407	16
Caelo	Borage oil, refined, stabili...	15063401	2
Euro OTC	Borage oil, refined, stabili...	16052301	1
PG-Naturpharm	Borage oil, refined, stabili...	397-045	2
PG-Naturpharma/ Phönix	Borage oil, refined, stabili...	202-058	1
Phoenix	Borage oil, refined, stabili...	12355203	1
Phoenix	Borage oil, refined, stabili...	14161906	1
PHOENIX 15.05.2014	Borage oil, refined, stabili...	13372104	1
Caelo	Borage oil, refined, stabili...	13372101	2
Caelo	Borage oil, refined, stabili...	13372106	2
Phönix	Borage oil, refined, stabili...	12161207	1
Phönix / Alliance Healt...	Borage oil, refined, stabili...	16266002	1
Phönix 14.01.15	Borage oil, refined, stabili...	14203004	1
Caelo	Borage oil, refined, stabili...	12161205	3
Sanacorp	Borage oil, refined, stabili...	14203006	1
Sanacorp W.E: 01.02.18 ...	Borage oil, refined, stabili...	17307801	2
Caelo	Borage oil, refined, stabili...	15305011	1
Spinnrad	Borage oil, refined, stabili...	1115204582	1

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Supplier	Substance	Batch	Spectra
Spinnrad / Alliance Hea...	Borage oil, refined, stabili...	1217204583	1
Spinnrad GmbH	Borage oil, refined, stabili...	616204581	1
Stifts-Apotheke	Borage oil, refined, stabili...	15305002	1
ACM	Codliver oil (type A)	KNC0300J15	1
ACM	Codliver oil (type A)	KNC0302J15	1
ACM	Codliver oil (type A)	KNC0303J15	1
AHD	Codliver oil (type A)	8002338002	2
AHD	Codliver oil (type A)	8001765001	1
AHD	Codliver oil (type A)	8003727001	2
Anzag	Codliver oil (type A)	5228001	2
Anzag 17.12.2012	Codliver oil (type A)	12062501	1
anzag, 9,45EUR, 19.11.14	Codliver oil (type A)	5693101	1
Bremen / Noweda	Codliver oil (type A)	5529601	1
BREMER SCHLÜSSEL/ Noweda	Codliver oil (type A)	5437202	1
BremerSchlüssel Phoenix	Codliver oil (type A)	8003727001	2
Caelo	Codliver oil (type A)	5061202	1
Caelo	Codliver oil (type A)	21101401	1
Caelo	Codliver oil (type A)	5228001	2
Caelo	Codliver oil (type A)	26061202	1
Caelo	Codliver oil (type A)	11081202	1
Caelo	Codliver oil (type A)	25091210	1
Caelo	Codliver oil (type A)	10101207	1
Caelo	Codliver oil (type A)	12009308	2
Caelo	Codliver oil (type A)	21111204	1
Caelo	Codliver oil (type A)	3121201	1
Caelo	Codliver oil (type A)	13011301	1
Caelo	Codliver oil (type A)	119929	2
Caelo	Codliver oil (type A)	12148703	10
Caelo	Codliver oil (type A)	6021302	1
Caelo	Codliver oil (type A)	18031308	1
Caelo	Codliver oil (type A)	5437202	13
Caelo	Codliver oil (type A)	12009301	1
Caelo	Codliver oil (type A)	11315302	1
Caelo	Codliver oil (type A)	30041302	1
Caelo	Codliver oil (type A)	121487703	1
Caelo	Codliver oil (type A)	10061302	1
Caelo	Codliver oil (type A)	14061312	1
Caelo	Codliver oil (type A)	5091309	1
Caelo	Codliver oil (type A)	13065503	4
Caelo	Codliver oil (type A)	13277706	7
Caelo	Codliver oil (type A)	3021402	1
Caelo	Codliver oil (type A)	8042014/A	1
Caelo	Codliver oil (type A)	4061403	1
Caelo	Codliver oil (type A)	5081402	1
Caelo	Codliver oil (type A)	13396407	4
Caelo	Codliver oil (type A)	14075015	3
Caelo	Codliver oil (type A)	2121404	1
Caelo	Codliver oil (type A)	23121414	1
Caelo	Codliver oil (type A)	17011503	1
Caelo	Codliver oil (type A)	80000601001	1
Caelo	Codliver oil (type A)	8000918001	6
Caelo	Codliver oil (type A)	19101704	1
Caelo	Codliver oil (type A)	10031501	1
Caelo	Codliver oil (type A)	28041507	1
Caelo	Codliver oil (type A)	15047201	6
Caelo	Codliver oil (type A)	10061501	1
Caelo	Codliver oil (type A)	8071504	1
Caelo	Codliver oil (type A)	28071504	1
Caelo	Codliver oil (type A)	15056802	1
Caelo	Codliver oil (type A)	15047210	1

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Supplier	Substance	Batch	Spectra
Caelo	Codliver oil (type A)	15201203	3
Caelo	Codliver oil (type A)	15325202	1
Caelo	Codliver oil (type A)	16018202	4
Caelo	Codliver oil (type A)	16018301	1
Caelo	Codliver oil (type A)	16304601	1
Caelo	Codliver oil (type A)	1041704	1
Caelo	Codliver oil (type A)	16344001	1
Caelo	Codliver oil (type A)	11051705	1
Caelo	Codliver oil (type A)	2091712	1
Caelo	Codliver oil (type A)	17036701	1
Caelo	Codliver oil (type A)	17295101	2
Caelo	Codliver oil (type A)	19021808	1
Caelo	Codliver oil (type A)	19051807	1
Caelo	Codliver oil (type A)	3111804	1
Caelo	Codliver oil (type A)	18184501	2
Caelo	Codliver oil (type A)	13277707	1
Caelo	Codliver oil (type A)	17137801	1
Caelo	Codliver oil (type A)	18213302	1
Caelo	Codliver oil (type A)	5693101	2
Caelo	Codliver oil (type A)	5529601	10
Caelo	Codliver oil (type A)	12009302	5
Caelo	Codliver oil (type A)	15201201	3
Caelo	Codliver oil (type A)	8001215002	8
Caelo	Codliver oil (type A)	8001176004	5
Caelo	Codliver oil (type A)	17344601	2
Caelo	Codliver oil (type A)	13106201-3392131070	1
Caelo	Codliver oil (type A)	11315303	1
Caelo	Codliver oil (type A)	12126102	1
Caelo	Codliver oil (type A)	13106201	9
Caelo	Codliver oil (type A)	14305701	2
Caelo	Codliver oil (type A)	8000601001	1
Caelo	Codliver oil (type A)	15325201	2
Caelo	Codliver oil (type A)	8001765001	2
Caelo	Codliver oil (type A)	17055303	1
Caelo	Codliver oil (type A)	8003727001	3
Caelo	Codliver oil (type A)	8002338002	1
Caelo	Codliver oil (type A)	16074305	2
Caelo	Codliver oil (type A)	80023380002	1
Caelo	Codliver oil (type A)	14305002	1
Caelo	Codliver oil (type A)	8003906001	5
Caelo	Codliver oil (type A)	13069201	1
Caelo	Codliver oil (type A)	14305003	1
Caelo	Codliver oil (type A)	18080801	2
Caelo	Codliver oil (type A)	8131-01985	1
Caesar & Loretz/Noweda	Codliver oil (type A)	15325201	1
Dr. Paulsen	Codliver oil (type A)	5437202	1
Caelo	Codliver oil (type A)	12346810	8
Euro OTC	Codliver oil (type A)	1506009-01	1
Euro OTC	Codliver oil (type A)	5529601	2
Fagron	Codliver oil (type A)	5029209	1
Fagron	Codliver oil (type A)	12H15-N02	2
Fiebig	Codliver oil (type A)	80000918001	1
Fiebig	Codliver oil (type A)	8001176004	1
Fiebig	Codliver oil (type A)	8002338002	5
Fiebig	Codliver oil (type A)	8002468002	4
Fiebig	Codliver oil (type A)	800372001	1
Fiebig	Codliver oil (type A)	8003906001	1
Fiebig	Codliver oil (type A)	8003906002	2
Gehe	Codliver oil (type A)	2613A-01985	1
Gehe	Codliver oil (type A)	5437202	1

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Supplier	Substance	Batch	Spectra
Gehe	Codliver oil (type A)	8002338002	3
Gehe/Henry Lamotte	Codliver oil (type A)	8002338002	2
Gehe/Henry Lamotte	Codliver oil (type A)	8002468002	1
Gehe/Henry Lamotte Oils...	Codliver oil (type A)	119929	1
H. Lamotte/Noweda	Codliver oil (type A)	119929	2
H.Lamotte	Codliver oil (type A)	8003906002	1
H.Lamotte/Noweda	Codliver oil (type A)	5228001	1
H.Lamotte/Noweda	Codliver oil (type A)	5228004	1
H.Lamotte/Noweda	Codliver oil (type A)	5878701	1
Hanry Lamotte Oils	Codliver oil (type A)	2101204	1
Hedinger	Codliver oil (type A)	8000601001	1
Klenk	Codliver oil (type A)	17344601	1
henry lamotte	Codliver oil (type A)	5693101	1
henry lamotte	Codliver oil (type A)	5529601	1
Henry Lamotte	Codliver oil (type A)	5029207	1
Henry Lamotte	Codliver oil (type A)	5228001	1
Henry Lamotte	Codliver oil (type A)	5228004	1
Henry Lamotte	Codliver oil (type A)	119929	1
Henry Lamotte	Codliver oil (type A)	18101303	1
Henry Lamotte	Codliver oil (type A)	26111303	1
Henry Lamotte	Codliver oil (type A)	5529601	4
Henry Lamotte	Codliver oil (type A)	20021413	1
Henry Lamotte	Codliver oil (type A)	26111402	1
Henry Lamotte	Codliver oil (type A)	8000601001	4
Henry Lamotte	Codliver oil (type A)	75860	1
Henry Lamotte	Codliver oil (type A)	5878701	3
Henry Lamotte	Codliver oil (type A)	8001176004	2
Henry Lamotte	Codliver oil (type A)	8000918001	1
Henry Lamotte	Codliver oil (type A)	8001215002	9
Henry Lamotte	Codliver oil (type A)	800765001	1
Henry Lamotte	Codliver oil (type A)	8001765001	2
Henry Lamotte	Codliver oil (type A)	8002468002	1
Henry Lamotte	Codliver oil (type A)	8003727001	3
Henry Lamotte	Codliver oil (type A)	80037277001	1
Henry Lamotte	Codliver oil (type A)	8003906001	1
Henry Lamotte / Anzag	Codliver oil (type A)	5641901	1
Henry Lamotte / Anzag	Codliver oil (type A)	8000918001	2
Henry Lamotte Anzag	Codliver oil (type A)	8002468002	1
Henry Lamotte Anzag	Codliver oil (type A)	8003727001	1
Henry Lamotte GmbH	Codliver oil (type A)	5437202	1
Henry Lamotte GmbH	Codliver oil (type A)	5228004	1
Henry Lamotte GmbH/Hold...	Codliver oil (type A)	5228001	1
henry lamotte oils	Codliver oil (type A)	5437202	1
Henry Lamotte Oils	Codliver oil (type A)	5437202	2
Henry Lamotte Oils	Codliver oil (type A)	5228001	1
Henry Lamotte Oils	Codliver oil (type A)	5529601	2
Henry Lamotte Oils	Codliver oil (type A)	5693101	1
Henry Lamotte Oils	Codliver oil (type A)	5641901	1
Henry Lamotte Oils	Codliver oil (type A)	8002338002	4
Henry Lamotte Oils	Codliver oil (type A)	8002468002	2
Henry Lamotte Oils	Codliver oil (type A)	16011901	1
henry lamotte oils gmbh	Codliver oil (type A)	8000918001	1
henry lamotte oils gmbh	Codliver oil (type A)	8001176004	1
Henry Lamotte oils GmbH	Codliver oil (type A)	123823	3
Henry Lamotte oils GmbH	Codliver oil (type A)	5529601	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	5029205	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	5228001	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	5228004	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	4931805	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	123108	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Codliver oil (type A)	5437202	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	123420L900	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5529601	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5693101	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	5641901	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8062015A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8000601001	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	5878701	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8000918001	5
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001176004	5
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001765001	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	8002338002	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8003906001	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	6082013A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	280913A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	291013A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	16012014A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	30614A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	18092014A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	301214a	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	29012015A	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001215002	1
Henry Lamotte Oils GmbH...	Codliver oil (type A)	8003906002	1
Henry Lamotte oils GmbH...	Codliver oil (type A)	5641901	1
Henry Lamotte Oils GmbH...	Codliver oil (type A)	123823	1
Henry Lamotte Oils GmbH...	Codliver oil (type A)	5641901	1
Henry Lamotte Oils, Anzag	Codliver oil (type A)	123823	2
Henry Lamotte Oils, Gehe	Codliver oil (type A)	5529601	1
Henry Lamotte Oils/GEHE	Codliver oil (type A)	5693101	1
Henry Lamotte Oils/Noweda	Codliver oil (type A)	5529601	1
Henry Lamotte Oils/Noweda	Codliver oil (type A)	5878701	1
HENRY LAMOTTE OIS GmbH	Codliver oil (type A)	800125002	1
Henry Lamotte/Kehr	Codliver oil (type A)	5529601	1
Henry Lamotte/Noweda	Codliver oil (type A)	5529601	1
Henry Lamotte/Noweda	Codliver oil (type A)	5641901	1
Henry Lamotte/Noweda	Codliver oil (type A)	8001215002	1
Henry Lamotte/Noweda	Codliver oil (type A)	8002338002	1
Henry Lamotte/Phoenix	Codliver oil (type A)	8001176004	1
Henry Lamotte/Phönix	Codliver oil (type A)	8003727001	1
Henry Lamotte/Sanacorp	Codliver oil (type A)	123823	1
Henry Lamotte/Sanacorp	Codliver oil (type A)	5529601	1
Henry Lamotte/V.d.L.	Codliver oil (type A)	5437202	1
Henry Lamotte;VDL; 22,5...	Codliver oil (type A)	8000601001	1
HenryLamotte/Gehe	Codliver oil (type A)	8004742003	1
HenryLamotte/Noweda	Codliver oil (type A)	8002338002	1
Klenk	Codliver oil (type A)	5228004	2
Kögl	Codliver oil (type A)	355510164416	1
Kögl	Codliver oil (type A)	13202170617	2
Kögl	Codliver oil (type A)	242207172717	2
Kögl	Codliver oil (type A)	1700194	2
Kögl	Codliver oil (type A)	1800814	4
Kögl	Codliver oil (type A)	1802500	2
Lam	Codliver oil (type A)	5878701	1
Lam / Now	Codliver oil (type A)	8001765001	1
lamotte	Codliver oil (type A)	5029205	1
Lamotte	Codliver oil (type A)	119929	1
Lamotte	Codliver oil (type A)	5437202	3
Lamotte	Codliver oil (type A)	5529601	1
Lamotte	Codliver oil (type A)	123823	1
Lamotte	Codliver oil (type A)	5693101	6

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Supplier	Substance	Batch	Spectra
Lamotte	Codliver oil (type A)	8001176004	1
Lamotte	Codliver oil (type A)	5878701	5
Lamotte	Codliver oil (type A)	8000601001	3
Lamotte	Codliver oil (type A)	8000918001	4
Lamotte	Codliver oil (type A)	8001215002	1
Lamotte	Codliver oil (type A)	8001765001	1
Lamotte	Codliver oil (type A)	8002338002	1
Lamotte / Sanacorp	Codliver oil (type A)	80024680025600	1
Lamotte Jenne	Codliver oil (type A)	5228004	2
Lamotte / Gehe	Codliver oil (type A)	5693101	1
Lamotte / Gehe	Codliver oil (type A)	8003727001	1
Lamotte Henry	Codliver oil (type A)	8001176004	1
lamotte jenne	Codliver oil (type A)	8000601001	1
Lamotte Oils GmbH / E	Codliver oil (type A)	5437202	2
Lamotte Oils GmbH / G	Codliver oil (type A)	5228004	1
Lamotte über Sanacorp	Codliver oil (type A)	5641901	1
Lamotte/ Noweda	Codliver oil (type A)	5437202	4
Lamotte/ Noweda	Codliver oil (type A)	A458	1
Lamotte/ Noweda	Codliver oil (type A)	8000918001	2
Lamotte/ Phoenix	Codliver oil (type A)	8003906001	1
Lamotte/ Phoenix	Codliver oil (type A)	8003906002	1
Lamotte/ Sanacorp	Codliver oil (type A)	5029207	1
Lamotte/Anzag	Codliver oil (type A)	8000918001	1
Lamotte/Anzag	Codliver oil (type A)	8003727001	1
Lamotte/Anzag	Codliver oil (type A)	8002338002	1
Lamotte/Anzag	Codliver oil (type A)	8003906002	1
Lamotte/Fiebig	Codliver oil (type A)	8001765001	4
lamotte/Gehe	Codliver oil (type A)	123823	1
lamotte/Gehe	Codliver oil (type A)	5529601	4
lamotte/Gehe	Codliver oil (type A)	5641901	3
Lamotte/gehe	Codliver oil (type A)	5437202	4
Lamotte/gehe	Codliver oil (type A)	5693101	3
Lamotte/Gehe	Codliver oil (type A)	8001176004	1
Lamotte/Gehe	Codliver oil (type A)	8001215002	1
Lamotte/GEHE	Codliver oil (type A)	5437202	7
Lamotte/Geibo	Codliver oil (type A)	8000918001	2
Lamotte/L3	Codliver oil (type A)	123823	1
lamotte/Nowe	Codliver oil (type A)	8002468002	1
Lamotte/Noweda	Codliver oil (type A)	5529601	1
Lamotte/Noweda	Codliver oil (type A)	8000601001	3
Lamotte/Phoenix	Codliver oil (type A)	8000918001	1
Lamotte/Phoenix	Codliver oil (type A)	8002338002	6
Lamotte/Phönix	Codliver oil (type A)	123823	1
Lamotte/Phönix	Codliver oil (type A)	8001215002	1
Lamotte/Phönix	Codliver oil (type A)	8000601001	1
Lamotte/Phönix	Codliver oil (type A)	8002338002	3
Lamotte/Phönix	Codliver oil (type A)	8002468002	6
Lamotte/Phönix	Codliver oil (type A)	8003727001	2
Lamotte/Phönix	Codliver oil (type A)	8003906002	2
Lamotte/Phönix	Codliver oil (type A)	8004742002	1
Lamotte/Phönix	Codliver oil (type A)	8004742003	1
LaMotte/Spangro	Codliver oil (type A)	80117604	1
Lamotte/Stumpf	Codliver oil (type A)	5529601	1
Lamotte/V.d.L.	Codliver oil (type A)	123823	1
Lamotte/V.d.L.	Codliver oil (type A)	5529601	4
Midas/Henry Lamotte	Codliver oil (type A)	8001176004	1
Noweda	Codliver oil (type A)	5228001	1
Noweda	Codliver oil (type A)	4537202	1
Noweda	Codliver oil (type A)	5529601	4
Noweda / Henry Lamotte	Codliver oil (type A)	5437202	1

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Supplier	Substance	Batch	Spectra
Noweda/Henry Lamotte	Codliver oil (type A)	5529601	2
Noweda/Henry Lamotte	Codliver oil (type A)	8000601001	2
Phoenix	Codliver oil (type A)	11315303	1
Phoenix	Codliver oil (type A)	8002338002	1
Phoenix	Codliver oil (type A)	8002468002	1
Phoenix	Codliver oil (type A)	8003727001	1
Phoenix	Codliver oil (type A)	8003906002	2
pHOENIX 18.02.2014	Codliver oil (type A)	5529601	1
phönix	Codliver oil (type A)	15201201	1
phönix	Codliver oil (type A)	16074301	1
PHÖNIX	Codliver oil (type A)	17137805	1
Phönix/Henry Lamotte	Codliver oil (type A)	8003906001	1
Sanacorp	Codliver oil (type A)	8002468002	1
Stumpf / Hedinger	Codliver oil (type A)	5878701	1
Stumpf/Henry Lamotte	Codliver oil (type A)	119929	1
Stumpf/Henry Lamotte	Codliver oil (type A)	123823	1
Stumpf/Henry Lamotte	Codliver oil (type A)	5693101	1
VDL	Codliver oil (type A)	5878701	1
Bombastus	Corn oil, refined	10032015A	1
Caelo	Corn oil, refined	13010710	1
Caelo	Corn oil, refined	15296407	5
Caelo	Corn oil, refined	15050506	1
Caelo	Corn oil, refined	11267907	1
Caelo	Corn oil, refined	16260309	1
Caelo	Corn oil, refined	17300102	1
Caelo	Corn oil, refined	13010707	2
Caelo	Corn oil, refined	17055008	1
Caelo	Corn oil, refined	18244602	1
Resana	Corn oil, refined	1208-3678	1
Resana	Corn oil, refined	1308-4063	1
17215601	Decyl oleate	17215601	1
Caelo	Decyl oleate	15248408	1
Caelo	Decyl oleate	14005002	1
Caelo	Decyl oleate	15082206	3
Caelo	Decyl oleate	15191501	1
Caelo	Decyl oleate	15082205	1
Caelo	Decyl oleate	15393704	2
Caelo	Decyl oleate	16223409	1
Caelo	Decyl oleate	17215601	10
Caelo	Decyl oleate	18079402	1
Caelo	Decyl oleate	18214604	2
Caelo	Decyl oleate	18282502	1
Caelo	Decyl oleate	18282506	1
Caelo	Decyl oleate	13291606	2
Caelo	Decyl oleate	18069402	13
Caelo	Decyl oleate	16107101	14
Caelo	Decyl oleate	161071	1
Caelo	Decyl oleate	15047702	2
Caelo	Decyl oleate	18069407	6
Caelo	Decyl oleate	15248405	7
Caelo	Decyl oleate	16224302	4
Caelo	Decyl oleate	16224309	4
Caelo	Decyl oleate	15191502	5
Caelo	Decyl oleate	18069404	2
Euro OTC	Decyl oleate	16107101	1
L12	Decyl oleate	18069402	1
Nachtestung	Decyl oleate	288/18	1
Raben-Apotheke Mildenau	Decyl oleate	14814-B03-292195	1
Sanacorp	Decyl oleate	15082206	1
AHD	Evening primrose oil, refined	18216201	2

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	1703020-01	8
allcura	Evening primrose oil, refined	L2641	1
Allcura	Evening primrose oil, refined	1364	1
Allcura	Evening primrose oil, refined	L-387	1
Allianz	Evening primrose oil, refined	18009109	1
Allianz	Evening primrose oil, refined	18009106	1
Allianz Healthcare 01.0...	Evening primrose oil, refined	AP562-124N	2
Alte Apotheke	Evening primrose oil, refined	15417808	1
Andor	Evening primrose oil, refined	AP869-100N	1
Andor	Evening primrose oil, refined	AP920-114N	1
Anzag	Evening primrose oil, refined	130401812	1
Anzag	Evening primrose oil, refined	13121818	1
Anzag	Evening primrose oil, refined	16281309	1
Anzag	Evening primrose oil, refined	17255801	1
Anzag	Evening primrose oil, refined	AP141023N	1
Anzag 30.01.13 ek:16,40EUR	Evening primrose oil, refined	1205023-02	1
Anzag ek:13.04EUR 08.08.12	Evening primrose oil, refined	1205023-01	2
Anzag/Henry Lamotte	Evening primrose oil, refined	145675	1
apo ident	Evening primrose oil, refined	1608008-01	3
apomix 004	Evening primrose oil, refined	1605027-01	1
Audor Pharma	Evening primrose oil, refined	AP140319N5300	1
Audor Pharma	Evening primrose oil, refined	AP140319N5383	1
Audor Pharma	Evening primrose oil, refined	AP141023N5499	1
Audor Pharma	Evening primrose oil, refined	AP191-088/1N	1
Audor Pharma	Evening primrose oil, refined	AP869-100N	1
Audor Pharma	Evening primrose oil, refined	AP869-100/1N	1
Audor Pharma	Evening primrose oil, refined	869-100N	1
Audor Pharma	Evening primrose oil, refined	AP920-114N	7
Audor Pharma	Evening primrose oil, refined	AP920-114/1N	1
Audor Pharma	Evening primrose oil, refined	AP094-115N	1
Audor Pharma	Evening primrose oil, refined	AP273-116N	5
Audor Pharma	Evening primrose oil, refined	AP294-118N	10
Audor Pharma	Evening primrose oil, refined	AP396-120N	5
Audor Pharma	Evening primrose oil, refined	AP-788-128N	1
Audor Pharma	Evening primrose oil, refined	392-133N	2
Audor Pharma	Evening primrose oil, refined	AP140319	2
Audor Pharma	Evening primrose oil, refined	AP140319N	4
Audor Pharma	Evening primrose oil, refined	AP141023	1
Audor Pharma	Evening primrose oil, refined	AP141023N5584	1
Audor Pharma	Evening primrose oil, refined	AP144330N5736	1
Audor Pharma	Evening primrose oil, refined	AP144330N5770	1
Audor Pharma	Evening primrose oil, refined	AP141023N	6
Audor Pharma	Evening primrose oil, refined	AP147307N	3
Audor Pharma	Evening primrose oil, refined	AP366-108N	3
Audor Pharma	Evening primrose oil, refined	AP140319N5341	1
Audor Pharma	Evening primrose oil, refined	AP676-078N	1
Audor Pharma	Evening primrose oil, refined	AP392-133N	7
Audor Pharma	Evening primrose oil, refined	AP144174N	8
Audor Pharma	Evening primrose oil, refined	AP562-124	1
Audor Pharma	Evening primrose oil, refined	AP788-128N	10
Audor Pharma	Evening primrose oil, refined	AP562-124N	8
Audor Pharma	Evening primrose oil, refined	AP869-100N	1
Audor Pharma	Evening primrose oil, refined	AP144330N	6
Audor Pharma	Evening primrose oil, refined	141023N	1
Audor Pharma	Evening primrose oil, refined	AP191-088N	2
Audor Pharma	Evening primrose oil, refined	AP273116N	1
Bergland	Evening primrose oil, refined	K6013776	1
Bergland/Anzag	Evening primrose oil, refined	H500690	1
Bergland/Phönix	Evening primrose oil, refined	H302605	1
Bergland/Phönix	Evening primrose oil, refined	K501908	1

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Supplier	Substance	Batch	Spectra
Bombastus	Evening primrose oil, refined	15171110	1
Bombastus	Evening primrose oil, refined	1703020-01	1
Bombastus	Evening primrose oil, refined	1000003443	3
Bombastus	Evening primrose oil, refined	15171108	1
Bombastus	Evening primrose oil, refined	13121806	1
Bombastus	Evening primrose oil, refined	12325114	1
Bombastus	Evening primrose oil, refined	133339	1
Cae	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	13121818	3
Caelo	Evening primrose oil, refined	14256810	1
Caelo	Evening primrose oil, refined	150081403	1
Caelo	Evening primrose oil, refined	150303101	1
Caelo	Evening primrose oil, refined	18216203	7
Caelo	Evening primrose oil, refined	11019201	1
Caelo	Evening primrose oil, refined	12032906	2
Caelo	Evening primrose oil, refined	12032913	2
Caelo	Evening primrose oil, refined	12112901	1
Caelo	Evening primrose oil, refined	12112905	3
Caelo	Evening primrose oil, refined	120543078-13	1
Caelo	Evening primrose oil, refined	12112911	4
Caelo	Evening primrose oil, refined	3112M-03075	1
Caelo	Evening primrose oil, refined	12112908	5
Caelo	Evening primrose oil, refined	12112912	1
Caelo	Evening primrose oil, refined	12112906	1
Caelo	Evening primrose oil, refined	20140612-18	1
Caelo	Evening primrose oil, refined	12112915	2
Caelo	Evening primrose oil, refined	12325110	1
Caelo	Evening primrose oil, refined	12112910	1
Caelo	Evening primrose oil, refined	12325115	3
Caelo	Evening primrose oil, refined	4061305	1
Caelo	Evening primrose oil, refined	12325116	4
Caelo	Evening primrose oil, refined	13121807	6
Caelo	Evening primrose oil, refined	13121814	7
Caelo	Evening primrose oil, refined	13121812	7
Caelo	Evening primrose oil, refined	2011409	1
Caelo	Evening primrose oil, refined	1312812	1
Caelo	Evening primrose oil, refined	1312816	1
Caelo	Evening primrose oil, refined	160213003	1
Caelo	Evening primrose oil, refined	14002503	4
Caelo	Evening primrose oil, refined	14002502	2
Caelo	Evening primrose oil, refined	AP094-115N	1
Caelo	Evening primrose oil, refined	14010908	17
Caelo	Evening primrose oil, refined	1210012-02	1
Caelo	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	14010912	2
Caelo	Evening primrose oil, refined	14010917	1
Caelo	Evening primrose oil, refined	14010920	1
Caelo	Evening primrose oil, refined	10101404	1
Caelo	Evening primrose oil, refined	14258608	11
Caelo	Evening primrose oil, refined	15121405	1
Caelo	Evening primrose oil, refined	5011508	1
Caelo	Evening primrose oil, refined	7011502	1
Caelo	Evening primrose oil, refined	14258616	15
Caelo	Evening primrose oil, refined	15081404	11
Caelo	Evening primrose oil, refined	1414201710	1
Caelo	Evening primrose oil, refined	30031501	1
Caelo	Evening primrose oil, refined	1428616	1
Caelo	Evening primrose oil, refined	15081402	3
Caelo	Evening primrose oil, refined	15081405	18
Caelo	Evening primrose oil, refined	15081407	12

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	5061505	1
Caelo	Evening primrose oil, refined	15171101	5
Caelo	Evening primrose oil, refined	15171102	20
Caelo	Evening primrose oil, refined	15171103	7
Caelo	Evening primrose oil, refined	1509005-01	3
Caelo	Evening primrose oil, refined	1517113	1
Caelo	Evening primrose oil, refined	15141102	1
Caelo	Evening primrose oil, refined	15171109	12
Caelo	Evening primrose oil, refined	1503031-01	1
Caelo	Evening primrose oil, refined	15171110	33
Caelo	Evening primrose oil, refined	12031604	1
Caelo	Evening primrose oil, refined	15171106	1
Caelo	Evening primrose oil, refined	1512000501	1
Caelo	Evening primrose oil, refined	1512005-01	1
Caelo	Evening primrose oil, refined	458528	1
Caelo	Evening primrose oil, refined	15417807	3
Caelo	Evening primrose oil, refined	1512005-02	2
Caelo	Evening primrose oil, refined	15417806	16
Caelo	Evening primrose oil, refined	15417805	28
Caelo	Evening primrose oil, refined	1603048-01	3
Caelo	Evening primrose oil, refined	15417809	8
Caelo	Evening primrose oil, refined	16281301	17
Caelo	Evening primrose oil, refined	16245602	1
Caelo	Evening primrose oil, refined	16281303	5
Caelo	Evening primrose oil, refined	14031701	1
Caelo	Evening primrose oil, refined	16281307	10
Caelo	Evening primrose oil, refined	21041716	1
Caelo	Evening primrose oil, refined	162891302	1
Caelo	Evening primrose oil, refined	24061711	1
Caelo	Evening primrose oil, refined	16281311	1
Caelo	Evening primrose oil, refined	16281209	1
Caelo	Evening primrose oil, refined	7170717	1
Caelo	Evening primrose oil, refined	16281314	9
Caelo	Evening primrose oil, refined	16281313	14
Caelo	Evening primrose oil, refined	16281315	6
Caelo	Evening primrose oil, refined	10281314	1
Caelo	Evening primrose oil, refined	1628315	1
Caelo	Evening primrose oil, refined	16281318	8
Caelo	Evening primrose oil, refined	16281319	4
Caelo	Evening primrose oil, refined	1281315	1
Caelo	Evening primrose oil, refined	6121707	1
Caelo	Evening primrose oil, refined	1704018-01	3
Caelo	Evening primrose oil, refined	17255803	15
Caelo	Evening primrose oil, refined	1710011-01	2
Caelo	Evening primrose oil, refined	1628109	1
Caelo	Evening primrose oil, refined	7255801	1
Caelo	Evening primrose oil, refined	18009103	7
Caelo	Evening primrose oil, refined	18009101	29
Caelo	Evening primrose oil, refined	17255804	2
Caelo	Evening primrose oil, refined	18009104	1
Caelo	Evening primrose oil, refined	18009107	2
Caelo	Evening primrose oil, refined	18009106	14
Caelo	Evening primrose oil, refined	3051806	1
Caelo	Evening primrose oil, refined	18001901	1
Caelo	Evening primrose oil, refined	23051821	1
Caelo	Evening primrose oil, refined	18009109	20
Caelo	Evening primrose oil, refined	169071803	1
Caelo	Evening primrose oil, refined	18009117	1
Caelo	Evening primrose oil, refined	180091701	1
Caelo	Evening primrose oil, refined	18009115	7

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	182162003	1
Caelo	Evening primrose oil, refined	18216202	14
Caelo	Evening primrose oil, refined	18216204	1
Caelo	Evening primrose oil, refined	1821602	2
Caelo	Evening primrose oil, refined	18216208	7
Caelo	Evening primrose oil, refined	18216211	4
Caelo	Evening primrose oil, refined	1901046-01	1
Caelo	Evening primrose oil, refined	18216218	1
Caelo	Evening primrose oil, refined	19175401	5
Caelo	Evening primrose oil, refined	19164401	3
Caelo	Evening primrose oil, refined	12325114	4
Caelo	Evening primrose oil, refined	1803006-02	1
Caelo	Evening primrose oil, refined	18216206	17
Caelo	Evening primrose oil, refined	160502701	1
Caelo	Evening primrose oil, refined	122966	3
Caelo	Evening primrose oil, refined	145691	14
Caelo	Evening primrose oil, refined	13121804	1
Caelo	Evening primrose oil, refined	14010901	1
Caelo	Evening primrose oil, refined	14258606	12
Caelo	Evening primrose oil, refined	14258611	3
Caelo	Evening primrose oil, refined	14010914	2
Caelo	Evening primrose oil, refined	18009102	20
Caelo	Evening primrose oil, refined	18216212	1
Caelo	Evening primrose oil, refined	18009110	17
Caelo	Evening primrose oil, refined	17255802	30
Caelo	Evening primrose oil, refined	1235106	1
Caelo	Evening primrose oil, refined	1407002-01	2
Caelo	Evening primrose oil, refined	12325111	10
Caelo	Evening primrose oil, refined	15081403	5
Caelo	Evening primrose oil, refined	15417808	18
Caelo	Evening primrose oil, refined	18009116	6
Caelo	Evening primrose oil, refined	154178806	1
Caelo	Evening primrose oil, refined	1821206	1
Caelo	Evening primrose oil, refined	19164407	1
Caelo	Evening primrose oil, refined	1608008-01	1
Caelo	Evening primrose oil, refined	16281306	12
Caelo	Evening primrose oil, refined	14010913	10
Caelo	Evening primrose oil, refined	18009111	1
Caelo	Evening primrose oil, refined	1407002-02	1
Caelo	Evening primrose oil, refined	14258604	4
Caelo	Evening primrose oil, refined	14258612	3
Caelo	Evening primrose oil, refined	18009105	8
Caelo	Evening primrose oil, refined	14258601	11
Caelo	Evening primrose oil, refined	14010907	1
Caelo	Evening primrose oil, refined	1232516	1
Caelo	Evening primrose oil, refined	1401908	1
Caelo	Evening primrose oil, refined	16281305	7
Caelo	Evening primrose oil, refined	120502302	1
Caelo	Evening primrose oil, refined	12325105	7
Caelo	Evening primrose oil, refined	13121808	15
Caelo	Evening primrose oil, refined	14258617	12
Caelo	Evening primrose oil, refined	16281302	16
Caelo	Evening primrose oil, refined	16281309	40
Caelo	Evening primrose oil, refined	18009114	7
Caelo	Evening primrose oil, refined	1800915	1
Caelo	Evening primrose oil, refined	18216207	4
Caelo	Evening primrose oil, refined	180300602	1
Caelo	Evening primrose oil, refined	15171104	16
Caelo	Evening primrose oil, refined	1704018_01	1
Caelo	Evening primrose oil, refined	1605027-01	2

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	18216217	4
Caelo	Evening primrose oil, refined	12325109	6
Caelo	Evening primrose oil, refined	13121806	2
Caelo	Evening primrose oil, refined	12032908	1
Caelo	Evening primrose oil, refined	15081401	4
Caelo	Evening primrose oil, refined	15171108	1
Caelo	Evening primrose oil, refined	15171111	16
Caelo	Evening primrose oil, refined	1601059-01	1
Caelo	Evening primrose oil, refined	3878-124466	1
Caelo	Evening primrose oil, refined	1000003443	1
Caelo	Evening primrose oil, refined	16281310	7
Caelo	Evening primrose oil, refined	1710011-02	6
Caelo	Evening primrose oil, refined	1803006-01	1
Caelo	Evening primrose oil, refined	18216201	10
Caelo	Evening primrose oil, refined	18216219	2
Caelo	Evening primrose oil, refined	12032912	2
Caelo	Evening primrose oil, refined	12112902	2
Caelo	Evening primrose oil, refined	12112914	2
Caelo	Evening primrose oil, refined	14010905	1
Caelo	Evening primrose oil, refined	14010903	2
Caelo	Evening primrose oil, refined	14258615	2
Caelo	Evening primrose oil, refined	15171105	11
Caelo	Evening primrose oil, refined	150601-01	1
Caelo	Evening primrose oil, refined	1506001-01	1
Caelo	Evening primrose oil, refined	15417801	49
Caelo	Evening primrose oil, refined	17255801	27
Caelo	Evening primrose oil, refined	19164402	3
Caelo	Evening primrose oil, refined	12325113	7
Caelo	Evening primrose oil, refined	1235101	1
Caelo	Evening primrose oil, refined	12355115	1
Caelo	Evening primrose oil, refined	13121813	4
Caelo	Evening primrose oil, refined	1547801	1
Caelo	Evening primrose oil, refined	1628308	1
Caelo	Evening primrose oil, refined	16261313	1
Caelo	Evening primrose oil, refined	16281317	3
Caelo	Evening primrose oil, refined	17322105	1
Caelo	Evening primrose oil, refined	18216214	3
Caelo	Evening primrose oil, refined	1235113	1
Caelo	Evening primrose oil, refined	14010904	7
Caelo	Evening primrose oil, refined	14010910	10
Caelo	Evening primrose oil, refined	14010918	5
Caelo	Evening primrose oil, refined	14258603	11
Caelo	Evening primrose oil, refined	14258607	5
Caelo	Evening primrose oil, refined	1541801	1
Caelo	Evening primrose oil, refined	1755601	1
Caeol/Phönix	Evening primrose oil, refined	13121814	1
Caesar & Loretz	Evening primrose oil, refined	13121809	1
Caesar & Loretz GmbH	Evening primrose oil, refined	12325107	1
Caesar & Loretz GmbH	Evening primrose oil, refined	13121812	1
Caesar & Loretz GmbH	Evening primrose oil, refined	14010910	1
Caesar & Loretz GmbH	Evening primrose oil, refined	14258611	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15171104	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15171109	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15417801	1
Caesar & Loretz GmbH	Evening primrose oil, refined	18216202	3
Caesar & Loretz GmbH	Evening primrose oil, refined	18009109	1
Caesar & Loretz GmbH	Evening primrose oil, refined	18216208	1
Caesar & Loretz GmbH	Evening primrose oil, refined	18216207	1
Caesar & Loretz GmbH	Evening primrose oil, refined	18216214	2
Caesar & Loretz GmbH	Evening primrose oil, refined	18216217	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Evening primrose oil, refined	18216219	1
Caesar & Loretz GmbH	Evening primrose oil, refined	19164402	1
Caesar & Loretz GmbH / ...	Evening primrose oil, refined	1803006-02	1
Caesar & Loretz GmbH 40...	Evening primrose oil, refined	11150007	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12032913	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12112911	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325106	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325113	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325101	1
Caesar & Loretz GmbH/Ph...	Evening primrose oil, refined	18216211	1
Caesar & Loretz/Noweda	Evening primrose oil, refined	1512005-01	1
caesar&loretz	Evening primrose oil, refined	15171110	1
Caesar&Loretz GmbH/ Gehe	Evening primrose oil, refined	16281306	1
calo	Evening primrose oil, refined	18009107	1
Cealo / Noweda	Evening primrose oil, refined	13121814	1
celo/phönix	Evening primrose oil, refined	13121814	1
Delta	Evening primrose oil, refined	1704018-01	1
dr.r.hahn	Evening primrose oil, refined	1509005-01	1
eur	Evening primrose oil, refined	1710011-02	2
Eurho	Evening primrose oil, refined	1710011-01	2
EuRho	Evening primrose oil, refined	1210012-02	5
EuRho	Evening primrose oil, refined	1506001-01	1
EuRho	Evening primrose oil, refined	1509005-01	2
EuRho	Evening primrose oil, refined	1803006-02	1
EuRho/ Phönix	Evening primrose oil, refined	1901046-01	3
EuRho/Phönix	Evening primrose oil, refined	1704018-01	1
Euro OTC	Evening primrose oil, refined	1512005-01	24
Euro OTC	Evening primrose oil, refined	180300602	1
Euro OTC	Evening primrose oil, refined	1401033-02	16
Euro OTC	Evening primrose oil, refined	12112906	1
Euro OTC	Evening primrose oil, refined	13040-18-01	1
Euro OTC	Evening primrose oil, refined	1304018-02	13
Euro OTC	Evening primrose oil, refined	1407002-01	14
Euro OTC	Evening primrose oil, refined	140700201	2
Euro OTC	Evening primrose oil, refined	140133-01	1
Euro OTC	Evening primrose oil, refined	150303101	1
Euro OTC	Evening primrose oil, refined	1506001-01	22
Euro OTC	Evening primrose oil, refined	1603048-01	27
Euro OTC	Evening primrose oil, refined	1605027-01	21
Euro OTC	Evening primrose oil, refined	15417808	1
Euro OTC	Evening primrose oil, refined	16281318	1
Euro OTC	Evening primrose oil, refined	AP141023N	1
Euro OTC	Evening primrose oil, refined	1710011-02	36
Euro OTC	Evening primrose oil, refined	171001102	5
Euro OTC	Evening primrose oil, refined	1803006-01	21
Euro OTC	Evening primrose oil, refined	1710011_01	1
Euro OTC	Evening primrose oil, refined	1901046-01	12
Euro OTC	Evening primrose oil, refined	150900501	1
Euro OTC	Evening primrose oil, refined	ep745611-1	1
Euro OTC	Evening primrose oil, refined	190104601	1
Euro OTC	Evening primrose oil, refined	700077	1
Euro OTC	Evening primrose oil, refined	151200501	1
Euro OTC	Evening primrose oil, refined	1205023-1	1
Euro OTC	Evening primrose oil, refined	151200	1
Euro OTC	Evening primrose oil, refined	133339	1
Euro OTC	Evening primrose oil, refined	160304801	2
Euro OTC	Evening primrose oil, refined	1608008-01	22
Euro OTC	Evening primrose oil, refined	1109004-01	1
Euro OTC	Evening primrose oil, refined	80616-11	1
Euro OTC	Evening primrose oil, refined	1503031-01	18

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Supplier	Substance	Batch	Spectra
Euro OTC	Evening primrose oil, refined	160800801	1
Euro OTC	Evening primrose oil, refined	1704018	2
Euro OTC	Evening primrose oil, refined	1803006	1
Euro OTC	Evening primrose oil, refined	16204	1
Euro OTC	Evening primrose oil, refined	EP-713-711-1	1
Euro OTC	Evening primrose oil, refined	1710011-01	15
Euro OTC	Evening primrose oil, refined	1803006-02	12
Euro OTC	Evening primrose oil, refined	1401033-01	8
Euro OTC	Evening primrose oil, refined	1205023-01	5
Euro OTC	Evening primrose oil, refined	1210012-01	13
Euro OTC	Evening primrose oil, refined	139798	3
Euro OTC	Evening primrose oil, refined	EP713711-1	1
Euro OTC	Evening primrose oil, refined	140103302	1
Euro OTC	Evening primrose oil, refined	1509005-01	21
Euro OTC	Evening primrose oil, refined	171011-01	1
Euro OTC	Evening primrose oil, refined	1304018-01	11
Euro OTC	Evening primrose oil, refined	1703020-01	30
Euro OTC	Evening primrose oil, refined	170011-02	1
Euro OTC	Evening primrose oil, refined	171001101	4
Euro OTC	Evening primrose oil, refined	1210012-02	11
Euro/ Phönix	Evening primrose oil, refined	1304018-02	1
Euro OTC	Evening primrose oil, refined	15171109	1
Euro/Phoenix	Evening primrose oil, refined	1512005-02	2
Euro/Phönix	Evening primrose oil, refined	1304018-01	2
Euro/Sanacorp	Evening primrose oil, refined	1512005-01	1
Euro/Gehe	Evening primrose oil, refined	1603048-01	1
Euro OTC	Evening primrose oil, refined	1205023-02	6
Euro OTC	Evening primrose oil, refined	700775	1
Euro OTC	Evening primrose oil, refined	1704018-01	54
Euro OTC	Evening primrose oil, refined	EP745611-1	3
Euro OTC	Evening primrose oil, refined	140700202	2
Euro OTC	Evening primrose oil, refined	136734	1
Euro OTC	Evening primrose oil, refined	17255801	1
Euro OTC	Evening primrose oil, refined	16281319	1
Euro OTC	Evening primrose oil, refined	170302001	1
Euro OTC	Evening primrose oil, refined	130401801	1
Euro OTC	Evening primrose oil, refined	170401801	3
Euro OTC	Evening primrose oil, refined	1813M-03075	1
Euro OTC	Evening primrose oil, refined	14C07-B01-291800	1
Euro OTC	Evening primrose oil, refined	17110011-01	1
EuroTOC / Noweda	Evening primrose oil, refined	140700202	1
Fagron	Evening primrose oil, refined	13E06-No9	1
Fagron	Evening primrose oil, refined	12e23-N06	1
Fagron	Evening primrose oil, refined	14C07-B01-291800	1
Fagron	Evening primrose oil, refined	14H18-B04-297707	3
Fagron	Evening primrose oil, refined	15C02-B99-305094	1
Fagron	Evening primrose oil, refined	15417803	3
Fagron	Evening primrose oil, refined	145691	1
Fagron	Evening primrose oil, refined	13E06-N09	3
Fagron	Evening primrose oil, refined	1803006-02	1
Fagron	Evening primrose oil, refined	12325101	2
Fagron	Evening primrose oil, refined	1205023-02	1
Fagron	Evening primrose oil, refined	1506001-01	1
Fagron	Evening primrose oil, refined	14C07-801-291800	1
Fargo/Anzag	Evening primrose oil, refined	1704018-01	3
Fargron	Evening primrose oil, refined	13E06-N09	1
Fiebig	Evening primrose oil, refined	16281301	1
Fiebig	Evening primrose oil, refined	17255801	2
Fiebig	Evening primrose oil, refined	18216206	1
Fiebig 12.07.13 EK15,38...	Evening primrose oil, refined	1210012-02	1

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Supplier	Substance	Batch	Spectra
Finteler Apotheke	Evening primrose oil, refined	1703020-01	1
Gatt-Koller	Evening primrose oil, refined	1803525	2
Gehe	Evening primrose oil, refined	12032908	1
Gehe	Evening primrose oil, refined	1109004-02	1
Gehe	Evening primrose oil, refined	12112906	1
Gehe	Evening primrose oil, refined	1205023-02	1
Gehe	Evening primrose oil, refined	12325106	1
Gehe	Evening primrose oil, refined	121112906	1
Gehe	Evening primrose oil, refined	12325110	1
Gehe	Evening primrose oil, refined	12325113	1
Gehe	Evening primrose oil, refined	14010904	1
Gehe	Evening primrose oil, refined	16281306	1
Gehe	Evening primrose oil, refined	16281309	1
Gehe	Evening primrose oil, refined	1704018-01	3
Gehe	Evening primrose oil, refined	EP713711-1	1
Gehe	Evening primrose oil, refined	1710011-01	2
GEHE	Evening primrose oil, refined	1605027-01	1
GEHE	Evening primrose oil, refined	1704018-01	1
GEHE	Evening primrose oil, refined	1710011-01	1
GEHE	Evening primrose oil, refined	18009111	1
GEHE	Evening primrose oil, refined	18216203	1
GEHE	Evening primrose oil, refined	18216215	1
Gehe 5.03.15	Evening primrose oil, refined	1407002-02	1
Caelo	Evening primrose oil, refined	12325106	13
Caelo	Evening primrose oil, refined	12325101	8
Caelo	Evening primrose oil, refined	13121816	14
Caelo	Evening primrose oil, refined	15417802	40
Caelo	Evening primrose oil, refined	15417803	19
Caelo	Evening primrose oil, refined	16281308	23
Caelo	Evening primrose oil, refined	12112903	1
Caelo	Evening primrose oil, refined	1205023-02	2
Gehe28.12..18	Evening primrose oil, refined	18216202	1
Hedinger	Evening primrose oil, refined	14010915	5
henry lamotte	Evening primrose oil, refined	150827	3
Henry Lamotte	Evening primrose oil, refined	123121	1
Henry Lamotte	Evening primrose oil, refined	14258616	1
Henry Lamotte	Evening primrose oil, refined	160502701	1
Henry Lamotte /AHD	Evening primrose oil, refined	1000001044	1
Henry Lamotte /AHD	Evening primrose oil, refined	1000005123	1
Henry Lamotte/AHD	Evening primrose oil, refined	1000005123	1
Henry Lamotte/Anzag	Evening primrose oil, refined	124363	2
Henry Lamotte/Noweda	Evening primrose oil, refined	1000005123	1
Ichthyl Phönix	Evening primrose oil, refined	12112912	1
J.H. Müller	Evening primrose oil, refined	140419	1
J.H.Müller	Evening primrose oil, refined	170832	1
J.H.Müller	Evening primrose oil, refined	171220	1
J.H.Müller	Evening primrose oil, refined	180234	1
J.H.Müller/direkt/17.05. . .	Evening primrose oil, refined	130127	1
Jenne	Evening primrose oil, refined	1210012-02	1
Kehr	Evening primrose oil, refined	16281308	3
Kehr	Evening primrose oil, refined	16281313	1
Kehr	Evening primrose oil, refined	1704018-01	4
Kehr	Evening primrose oil, refined	1710011-01	1
Klenk	Evening primrose oil, refined	12112905	1
Kögl	Evening primrose oil, refined	446412160317	1
Kögl	Evening primrose oil, refined	161805171917	2
Kögl	Evening primrose oil, refined	1700100	1
Kögl	Evening primrose oil, refined	1702248	1
Kögl	Evening primrose oil, refined	1800988	1
Kögl	Evening primrose oil, refined	1802062	1

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Supplier	Substance	Batch	Spectra
L10	Evening primrose oil, refined	1703020-01	1
L12	Evening primrose oil, refined	1704018-01	2
lamotte	Evening primrose oil, refined	145581	3
Lamotte / Gehe	Evening primrose oil, refined	145553	5
Lamotte / Gehe	Evening primrose oil, refined	123121	3
Lamotte / Gehe	Evening primrose oil, refined	145675	4
Lamotte / Gehe	Evening primrose oil, refined	123386	7
Lamotte / Gehe	Evening primrose oil, refined	145802	9
Lamotte / Gehe	Evening primrose oil, refined	124363	4
Lamotte / Gehe	Evening primrose oil, refined	150827	4
Lamotte / Noweda	Evening primrose oil, refined	145581	3
Lamotte//AHD	Evening primrose oil, refined	145581	2
Lamotte/AHD	Evening primrose oil, refined	145581	2
Lamotte/AHD	Evening primrose oil, refined	10000001044	1
Lamotte/AHD	Evening primrose oil, refined	1000002386	1
Lamotte/AHD	Evening primrose oil, refined	1000004385	1
Lamotte/AHD	Evening primrose oil, refined	1000007046	1
Lamotte/Alliance	Evening primrose oil, refined	1000002386	1
Lamotte/Alliance	Evening primrose oil, refined	1000008469	1
Lamotte/Noweda	Evening primrose oil, refined	1000003443	1
Medesign	Evening primrose oil, refined	690548	1
müller	Evening primrose oil, refined	1401332X	1
noveda	Evening primrose oil, refined	12112901	1
Noweda	Evening primrose oil, refined	E1106072	1
Noweda	Evening primrose oil, refined	1205023-01	5
Noweda	Evening primrose oil, refined	13121807	1
Noweda	Evening primrose oil, refined	14010904	1
Noweda	Evening primrose oil, refined	1407002-02	1
Noweda	Evening primrose oil, refined	15171109	2
Noweda	Evening primrose oil, refined	1509005-01	2
Noweda	Evening primrose oil, refined	1608008-01	2
Noweda	Evening primrose oil, refined	16281308	1
Noweda	Evening primrose oil, refined	1710011-01	1
Noweda	Evening primrose oil, refined	1704018	1
Caelo	Evening primrose oil, refined	13121809	11
Caelo	Evening primrose oil, refined	1401904	1
Euro OTC	Evening primrose oil, refined	1512005-02	20
Euro OTC	Evening primrose oil, refined	180300601	3
PG-Naturpharma/Sanacorp	Evening primrose oil, refined	711-098	1
Ph.Eur.8.2	Evening primrose oil, refined	14H18B04297708	1
Phoenix	Evening primrose oil, refined	AP869100N	1
Phoenix	Evening primrose oil, refined	14002503	1
Phoenix	Evening primrose oil, refined	1401033-01	1
Phoenix	Evening primrose oil, refined	14258604	1
Phoenix	Evening primrose oil, refined	1407002-02	1
Phoenix	Evening primrose oil, refined	15417803	1
Phoenix	Evening primrose oil, refined	15417802	1
Phoenix	Evening primrose oil, refined	1703020-01	1
Phoenix 04.12.14	Evening primrose oil, refined	14010905	1
PHOENIX 08.05.2014	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	12325107	8
phönix	Evening primrose oil, refined	1210012-02	1
phönix	Evening primrose oil, refined	14010915	1
phönix	Evening primrose oil, refined	139798	1
Phönix	Evening primrose oil, refined	150827	1
Phönix	Evening primrose oil, refined	1603048-01	1
Phönix	Evening primrose oil, refined	1704018-01	1
Phönix	Evening primrose oil, refined	1803006-01	1
PHÖNIX	Evening primrose oil, refined	18009103	1
Phönix 18.11.2013	Evening primrose oil, refined	13121808	1

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Supplier	Substance	Batch	Spectra
Phönix 27.01.2014	Evening primrose oil, refined	1304018-01	1
Euro OTC	Evening primrose oil, refined	171001-02	1
Caelo	Evening primrose oil, refined	1704018-1	1
Primavera	Evening primrose oil, refined	2611142	1
Primavera 19.10.15	Evening primrose oil, refined	774J232	1
Rondell Apotheke	Evening primrose oil, refined	1506001-01	1
Sanacorp	Evening primrose oil, refined	12325111	1
Sanacorp	Evening primrose oil, refined	12325114	1
Sanacorp	Evening primrose oil, refined	13121809	2
Sanacorp	Evening primrose oil, refined	13121814	1
Sanacorp	Evening primrose oil, refined	15171109	1
Sanacorp	Evening primrose oil, refined	16281313	1
Sanacorp	Evening primrose oil, refined	17255801	1
Sanacorp	Evening primrose oil, refined	18009106	1
Sanacorp	Evening primrose oil, refined	18009109	1
Sanacorp	Evening primrose oil, refined	18009114	1
Sanacorp	Evening primrose oil, refined	18216201	1
Sanacorp	Evening primrose oil, refined	AP144174	1
Caelo	Evening primrose oil, refined	1210012-01	2
Caelo	Evening primrose oil, refined	131211807	1
Euro OTC	Evening primrose oil, refined	17040118-01	1
Caelo	Evening primrose oil, refined	12032901	1
SANMARK LIMITED	Evening primrose oil, refined	1704018-01	1
SANMARK LIMITED	Evening primrose oil, refined	EP713711-1	1
Spinnrad	Evening primrose oil, refined	1116204553	1
Spinnrad GmbH	Evening primrose oil, refined	516204552	1
Spirig /Noweda	Evening primrose oil, refined	1407002-01	1
Stumpf/Henry Lamotte	Evening primrose oil, refined	145691	1
Taoasis	Evening primrose oil, refined	12096-99883	2
Taoasis	Evening primrose oil, refined	3723-107968	1
Taoasis	Evening primrose oil, refined	120161-93968	1
Taoasis	Evening primrose oil, refined	3788-116147	1
Taoasis	Evening primrose oil, refined	3843-121697	2
Taoasis	Evening primrose oil, refined	1707A0307-2507	1
Taoasis	Evening primrose oil, refined	1707A307-2506	1
taoasis/Noweda	Evening primrose oil, refined	37282-115267	1
Taoasis/Phönix	Evening primrose oil, refined	A128740	1
Weltecke	Evening primrose oil, refined	80011012	1
Weltecke GmbH	Evening primrose oil, refined	80011115	1
weltecke/Noweda	Evening primrose oil, refined	80010212	1
Wolf-Apotheke	Evening primrose oil, refined	15417802	2
ACM	Flaxseed oil, native	KNC0446J15	1
AHD	Flaxseed oil, native	17001535	1
AHD	Flaxseed oil, native	18002317	1
Bomb/ Noweda	Flaxseed oil, native	290569	1
Bombastus	Flaxseed oil, native	272528	1
Bombastus	Flaxseed oil, native	271645	2
Bombastus	Flaxseed oil, native	275487	2
Bombastus	Flaxseed oil, native	276106	1
Bombastus	Flaxseed oil, native	276727	2
Bombastus	Flaxseed oil, native	266111	1
Bombastus	Flaxseed oil, native	274875	1
Bombastus	Flaxseed oil, native	282391	1
Bombastus	Flaxseed oil, native	14087903	1
Bombastus	Flaxseed oil, native	297286	2
Bombastus	Flaxseed oil, native	307988	1
Bombastus	Flaxseed oil, native	3079865304	1
Bombastus	Flaxseed oil, native	17002089	3
Bombastus	Flaxseed oil, native	170015335500	1
Bombastus	Flaxseed oil, native	18000694	1

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Supplier	Substance	Batch	Spectra
Bombastus	Flaxseed oil, native	18001721	1
Bombastus	Flaxseed oil, native	180017195740	1
Bombastus	Flaxseed oil, native	293950	1
Bombastus	Flaxseed oil, native	308634	2
Bombastus	Flaxseed oil, native	18003463	1
Bombastus	Flaxseed oil, native	303096	3
Bombastus	Flaxseed oil, native	291126	1
Bombastus	Flaxseed oil, native	17000381	2
Bombastus	Flaxseed oil, native	280711	1
Bombastus	Flaxseed oil, native	291900	1
Bombastus	Flaxseed oil, native	303440	1
Bombastus	Flaxseed oil, native	304454	2
Bombastus	Flaxseed oil, native	306179	3
Bombastus	Flaxseed oil, native	276105	1
Bombastus	Flaxseed oil, native	302269	2
Bombastus	Flaxseed oil, native	288025	1
Bombastus	Flaxseed oil, native	307115	1
Bombastus	Flaxseed oil, native	14087902	1
Bombastus	Flaxseed oil, native	296730	1
Caelo	Flaxseed oil, native	263894	1
Caelo	Flaxseed oil, native	12217504	2
Caelo	Flaxseed oil, native	7111204	1
Caelo	Flaxseed oil, native	23021302	1
Caelo	Flaxseed oil, native	12274205	2
Caelo	Flaxseed oil, native	13178210	1
Caelo	Flaxseed oil, native	13361202	4
Caelo	Flaxseed oil, native	14087908	4
Caelo	Flaxseed oil, native	14087909	1
Caelo	Flaxseed oil, native	9062015A	1
Caelo	Flaxseed oil, native	15175608	5
Caelo	Flaxseed oil, native	15175602	1
Caelo	Flaxseed oil, native	15415904	2
Caelo	Flaxseed oil, native	15415911	1
Caelo	Flaxseed oil, native	16231106	1
Caelo	Flaxseed oil, native	16321102	2
Caelo	Flaxseed oil, native	310225	1
Caelo	Flaxseed oil, native	17236401	4
Caelo	Flaxseed oil, native	17236408	3
Caelo	Flaxseed oil, native	17236404	1
Caelo	Flaxseed oil, native	17314401	3
Caelo	Flaxseed oil, native	18002317	1
Caelo	Flaxseed oil, native	17314405	1
Caelo	Flaxseed oil, native	18120901	4
Caelo	Flaxseed oil, native	17046711	2
Caelo	Flaxseed oil, native	13178203	4
Caelo	Flaxseed oil, native	12217505	2
Caelo	Flaxseed oil, native	14306811	2
Caelo	Flaxseed oil, native	13361203	2
Caelo	Flaxseed oil, native	15175604	1
Caelo	Flaxseed oil, native	299565	1
Caelo	Flaxseed oil, native	16321106	5
Caelo	Flaxseed oil, native	307119	1
Caelo	Flaxseed oil, native	180808181	1
Caelo	Flaxseed oil, native	14306806	2
Caelo	Flaxseed oil, native	15415906	9
Caelo	Flaxseed oil, native	12041701	1
Caelo	Flaxseed oil, native	13178209	3
Caesar & Loretz GmbH Hi...	Flaxseed oil, native	289164	1
Euro OTC	Flaxseed oil, native	13058506	1
Euro OTC	Flaxseed oil, native	124116	1

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Supplier	Substance	Batch	Spectra
Gehe	Flaxseed oil, native	12041701	1
Gehe/Vitalhaus	Flaxseed oil, native	160702	1
H.Lamotte	Flaxseed oil, native	1000009024	1
Henry Lamotte Oils / No...	Flaxseed oil, native	1000000878	1
Henry Lamotte	Flaxseed oil, native	1000003255	1
Henry Lamotte	Flaxseed oil, native	1000003598	1
Henry Lamotte Oels GmbH	Flaxseed oil, native	1000005198	1
Henry Lamotte Oels GmbH	Flaxseed oil, native	1000006422	1
Henry Lamotte Oils GmbH...	Flaxseed oil, native	1000002971	1
Henry Lamotte Oils GMBH...	Flaxseed oil, native	12D05-N02	1
Henry Lamotte Oils/Noweda	Flaxseed oil, native	1000002422	1
Henry Lamotte/Noweda	Flaxseed oil, native	124116	1
Henry Lamotte/Phönix	Flaxseed oil, native	1000009915	1
Henry Lamotte Oils GmbH	Flaxseed oil, native	1000005198	1
Henry/AHD	Flaxseed oil, native	124337	2
Henry/Jenne	Flaxseed oil, native	103277	3
Kruger/Lamotte/30.12.13	Flaxseed oil, native	102503	1
Lamotte	Flaxseed oil, native	124116	2
Lamotte	Flaxseed oil, native	10000047735446	1
Lamotte/Noweda	Flaxseed oil, native	103229	1
Lamotte/Otto	Flaxseed oil, native	5757301	1
Noweda / Henry Lamotte	Flaxseed oil, native	119529	1
Noweda / Henry Lamotte	Flaxseed oil, native	119677	2
Bombastus	Flaxseed oil, native	285121	1
Caelo	Flaxseed oil, native	14306808	1
Caelo	Flaxseed oil, native	15116702	6
Caelo	Flaxseed oil, native	18120904	1
Stumpf/Henry Lamotte	Flaxseed oil, native	124116	1
VDL;2.51EUR;22.06.15	Flaxseed oil, native	15116702	1
Caelo	Grape seed oil, refined	12149204	4
Caelo	Grape seed oil, refined	10222901	1
Caelo	Grape seed oil, refined	12149203	1
Caelo	Grape seed oil, refined	12149205	1
Caelo	Grape seed oil, refined	12149211	1
Caelo	Grape seed oil, refined	13065309	4
Caelo	Grape seed oil, refined	14127906	1
Caelo	Grape seed oil, refined	14214606	2
Caelo	Grape seed oil, refined	15144502	1
Caelo	Grape seed oil, refined	15144505	1
Caelo	Grape seed oil, refined	15294607	2
Caelo	Grape seed oil, refined	16092402	2
Caelo	Grape seed oil, refined	17206507	6
Caelo	Grape seed oil, refined	18224202	3
Caelo	Grape seed oil, refined	12149210	1
Caelo	Grape seed oil, refined	17206501	1
Caelo	Grape seed oil, refined	16092410	2
Caelo	Grape seed oil, refined	16339705	2
Caelo	Grape seed oil, refined	14127902	4
Caelo	Grape seed oil, refined	16092409	3
Caelo	Grape seed oil, refined	16339703	3
Caelo	Grape seed oil, refined	16339706	4
Caelo	Grape seed oil, refined	12149212	2
Caelo	Grape seed oil, refined	18065207	4
Caelo	Grape seed oil, refined	15144509	2
Caelo	Grape seed oil, refined	18224210	3
Caelo	Grape seed oil, refined	13174601	2
Caesar & Lorenz	Grape seed oil, refined	13065310	1
Caesar & Loretz GmbH	Grape seed oil, refined	17206502	1
Caesar & Loretz GmbH	Grape seed oil, refined	18224202	1
Cealo	Grape seed oil, refined	15144505	1

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Supplier	Substance	Batch	Spectra
Fagron	Grape seed oil, refined	16092401	1
Gehe	Grape seed oil, refined	12149204	1
GEHE	Grape seed oil, refined	18065201	1
Holdermann	Grape seed oil, refined	12149212	1
L12	Grape seed oil, refined	18065207	1
Noweda	Grape seed oil, refined	13065309	1
Tilray	Grape seed oil, refined	N0000004667	1
Tilray	Grape seed oil, refined	N0000004666	1
Tilray/ Alliance Health...	Grape seed oil, refined	N0000004669	2
AHD	Jojoba oil, native	16070606	1
Anzag	Jojoba oil, native	5172601	1
Anzag/	Jojoba oil, native	5115601	1
Azett GmbH/AHD	Jojoba oil, native	190217	1
BioPräp/Phoenix 08.03.2...	Jojoba oil, native	1711193	1
Bombastus	Jojoba oil, native	267834	1
Bombastus	Jojoba oil, native	297760	2
Bombastus	Jojoba oil, native	301651	1
Bombastus	Jojoba oil, native	309480	1
Bombastus	Jojoba oil, native	276323	1
Bombastus	Jojoba oil, native	294112	3
Bombastus	Jojoba oil, native	16070610	1
Caelo	Jojoba oil, native	13287701	2
Caelo	Jojoba oil, native	12114702	1
Caelo	Jojoba oil, native	11358103	1
Caelo	Jojoba oil, native	12217009	3
Caelo	Jojoba oil, native	12217003	1
Caelo	Jojoba oil, native	12217008	2
Caelo	Jojoba oil, native	19061307	1
Caelo	Jojoba oil, native	3071301	1
Caelo	Jojoba oil, native	13011204	4
Caelo	Jojoba oil, native	10071307	1
Caelo	Jojoba oil, native	25101303	1
Caelo	Jojoba oil, native	13129005	2
Caelo	Jojoba oil, native	17121302	1
Caelo	Jojoba oil, native	15011412	1
Caelo	Jojoba oil, native	21041504	1
Caelo	Jojoba oil, native	14284207	6
Caelo	Jojoba oil, native	15409903	8
Caelo	Jojoba oil, native	16070601	2
Caelo	Jojoba oil, native	16070606	13
Caelo	Jojoba oil, native	16070609	4
Caelo	Jojoba oil, native	14121702	1
Caelo	Jojoba oil, native	17073309	5
Caelo	Jojoba oil, native	17073310	2
Caelo	Jojoba oil, native	23051804	1
Caelo	Jojoba oil, native	18097109	1
Caelo	Jojoba oil, native	18057103	1
Caelo	Jojoba oil, native	6101802	1
Caelo	Jojoba oil, native	28111810	1
Caelo	Jojoba oil, native	18057107	5
Caelo	Jojoba oil, native	11078605	2
Caelo	Jojoba oil, native	14284204	7
Caelo	Jojoba oil, native	16070608	6
Caelo	Jojoba oil, native	14284202	4
Caelo	Jojoba oil, native	13011202	5
Caelo	Jojoba oil, native	15116904	2
Caelo	Jojoba oil, native	13129004	5
Caelo	Jojoba oil, native	18244707	2
Caelo	Jojoba oil, native	11358102	1
Caelo	Jojoba oil, native	2613M-01986	1

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Supplier	Substance	Batch	Spectra
Caelo	Jojoba oil, native	2614A-01986	1
Caelo	Jojoba oil, native	15409904	3
Caelo	Jojoba oil, native	15409902	9
Caelo	Jojoba oil, native	15116903	8
Caelo	Jojoba oil, native	13129001	3
Caelo	Jojoba oil, native	12217010	4
Caelo	Jojoba oil, native	13011203	2
Caelo	Jojoba oil, native	11078606	1
Caelo	Jojoba oil, native	17073305	6
Caelo	Jojoba oil, native	12114703	1
Caelo	Jojoba oil, native	16070610	8
Caelo	Jojoba oil, native	17073308	1
Caelo	Jojoba oil, native	18057102	6
Caelo	Jojoba oil, native	12114708	1
Caelo	Jojoba oil, native	12114701	1
Caelo	Jojoba oil, native	14052201	5
Caelo	Jojoba oil, native	14052206	1
Caelo	Jojoba oil, native	16070607	2
Caelo	Jojoba oil, native	14284203	2
Caelo	Jojoba oil, native	18057105	10
Caelo	Jojoba oil, native	14284208	5
Caelo	Jojoba oil, native	18057108	1
Caeöo	Jojoba oil, native	13287702	1
Caesar & Loretz GmbH	Jojoba oil, native	18057107	1
Cealo	Jojoba oil, native	16070609	1
DAC 2006	Jojoba oil, native	11358102	1
Euro OTC	Jojoba oil, native	1609003-01	1
Euro OTC	Jojoba oil, native	8001330001	2
Fagron	Jojoba oil, native	5194301	1
Fagron	Jojoba oil, native	14284202	1
Fiebig	Jojoba oil, native	15116904	2
Fiebig	Jojoba oil, native	16070609	3
Fiebig	Jojoba oil, native	17073309	2
Fiebig	Jojoba oil, native	18057107	3
Gatt-Koller	Jojoba oil, native	1801970	4
Gehe	Jojoba oil, native	16070602	1
Bombastus	Jojoba oil, native	306279	1
Gehe Laborchemie Apolda...	Jojoba oil, native	13011202	1
H.Lamotte/Anzag 16.10.17	Jojoba oil, native	8002391001	8
H.Lamotte/Anzag 18.11.16	Jojoba oil, native	8000469001	3
H.Lamotte/anzag 30.12.16	Jojoba oil, native	5913600001	2
Hedinger	Jojoba oil, native	15409903	1
Henry Lamotte	Jojoba oil, native	5194301	1
Henry Lamotte	Jojoba oil, native	5429201	3
Henry Lamotte	Jojoba oil, native	5732801	1
Henry Lamotte	Jojoba oil, native	5404201	1
Henry Lamotte	Jojoba oil, native	5913600001	3
Henry Lamotte / AHD	Jojoba oil, native	5756401	1
Henry Lamotte GmbH	Jojoba oil, native	8000469001	3
Henry Lamotte GmbH/ San...	Jojoba oil, native	80002391001	1
henry lamotte oils	Jojoba oil, native	5055401	1
Henry Lamotte Oils	Jojoba oil, native	8003732001	1
Henry Lamotte Oils GmbH	Jojoba oil, native	5732801	1
Henry Lamotte Oils GmbH	Jojoba oil, native	5913600001	1
Henry Lamotte/ Gehe	Jojoba oil, native	5913600001	1
Henry Lamotte/Alliance ...	Jojoba oil, native	5756401	1
henry lamotte/Sanacorp	Jojoba oil, native	5756401	7
HenryLamotte	Jojoba oil, native	5172601	9
HenryLamotte	Jojoba oil, native	4957101	1
HenryLamotte	Jojoba oil, native	5194301	1

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Supplier	Substance	Batch	Spectra
JENNE	Jojoba oil, native	17073309	1
Kehr	Jojoba oil, native	8000469001	1
Kögl	Jojoba oil, native	432212165116	1
Kögl	Jojoba oil, native	432212160117	2
Kögl	Jojoba oil, native	25302170717	1
Kögl	Jojoba oil, native	25302171717	3
Kögl	Jojoba oil, native	1700876	7
Kögl	Jojoba oil, native	1802131	1
L12	Jojoba oil, native	18057105	1
La Cura Wilco	Jojoba oil, native	2481	1
Lamotte	Jojoba oil, native	5172601	1
Lamotte	Jojoba oil, native	5732801	1
Lamotte	Jojoba oil, native	5756401	2
Lamotte Sanacorp	Jojoba oil, native	5913600001	1
Lamotte Sanacorp	Jojoba oil, native	8000469001	6
Lamotte/Fiebig	Jojoba oil, native	8002391001	1
Lamotte/Gehe	Jojoba oil, native	5172601	1
Lamotte/Gehe	Jojoba oil, native	5732801	1
Lamotte/Sanacorp	Jojoba oil, native	5194301	1
Lamotte/Sanacorp	Jojoba oil, native	5429201	1
Primavera	Jojoba oil, native	19307131	1
Primavera	Jojoba oil, native	17009133	1
Primavera	Jojoba oil, native	241H23	1
Primavera	Jojoba oil, native	63J24	1
Primavera	Jojoba oil, native	361L25	1
Primavera	Jojoba oil, native	59E26	1
Primavera Wareneingang...	Jojoba oil, native	747A23	1
Sanacorp	Jojoba oil, native	16070609	1
Sanacorp	Jojoba oil, native	80002391001	2
Sanacorp	Jojoba oil, native	8003732001	1
Sanacorp	Jojoba oil, native	18057107	1
Caelo	Jojoba oil, native	13129006	5
Spinnrad	Jojoba oil, native	315601031	1
Spinnrad	Jojoba oil, native	416601031	1
Spinrad	Jojoba oil, native	617601032	1
Bombastus	Jojoba oil, native	281299	1
Taoasis	Jojoba oil, native	4674401-67053	1
Taoasis	Jojoba oil, native	5225101-108329	1
Taoasis	Jojoba oil, native	5336301-109515	1
Taoasis	Jojoba oil, native	5406801-111216	1
Taoasis	Jojoba oil, native	5336301-111368	1
Taoasis	Jojoba oil, native	5406801-111877	1
Taoasis	Jojoba oil, native	5445301-112580	2
Taoasis	Jojoba oil, native	2A5890402-121152	2
Taoasis	Jojoba oil, native	133535-123190	2
Taoasis	Jojoba oil, native	133535-123399	1
Taoasis	Jojoba oil, native	137640-123934	1
Taoasis	Jojoba oil, native	151214-125861	4
Taoasis	Jojoba oil, native	151214-127674	1
Taoasis	Jojoba oil, native	140545-127891	1
Taoasis	Jojoba oil, native	141161-217A	1
Taoasis	Jojoba oil, native	141161-347	1
Taoasis	Jojoba oil, native	141161-1819	2
Taoasis	Jojoba oil, native	143650-1819	1
Taoasis	Jojoba oil, native	143650-3436	1
Taoasis	Jojoba oil, native	3403UY	1
Taoasis	Jojoba oil, native	143650-3342	2
Taoasis	Jojoba oil, native	148266-6547	1
Taoasis GmbH	Jojoba oil, native	5445301-112580	1
Taoasis/Anzag	Jojoba oil, native	5815901-118834	3

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Supplier	Substance	Batch	Spectra
Taoasis/Anzag	Jjoba oil, native	5864501-119639	1
Taoasis/Anzag	Jjoba oil, native	2a5890402	1
Taoasis/Anzag	Jjoba oil, native	133535-123190	1
Taoasis/Anzag	Jjoba oil, native	2a5890402-121152	1
Caelo	Jjoba oil, native	13129008	1
Weltecke /Noweda	Jjoba oil, native	89010416	1
wilco	Jjoba oil, native	2480	1
Caelo	Laurel oil	14176301	1
Caelo	Laurel oil	14176303	1
Caelo	Laurel oil	18028203	1
Caelo	Laurel oil	16355702	1
Caelo	Laurel oil	19091902	1
Caelo	Laurel oil	16355701	2
Caesar & Loretz/Noweda	Laurel oil	15216401	1
Gehe	Laurel oil	14196705	1
Gehe	Laurel oil	15097501	1
L12	Laurel oil	16275702	1
AHD	Oleyl oleate (stabilised)	14129003	1
Caelo	Oleyl oleate (stabilised)	17013008	10
Cae	Oleyl oleate (stabilised)	15321701	1
Caelo	Oleyl oleate (stabilised)	26071210	1
Caelo	Oleyl oleate (stabilised)	11292610	1
Caelo	Oleyl oleate (stabilised)	12067705	1
Caelo	Oleyl oleate (stabilised)	12067701	1
Caelo	Oleyl oleate (stabilised)	12220204	1
Caelo	Oleyl oleate (stabilised)	12220201	1
Caelo	Oleyl oleate (stabilised)	12220210	1
Caelo	Oleyl oleate (stabilised)	122220210	1
Caelo	Oleyl oleate (stabilised)	13096401	1
Caelo	Oleyl oleate (stabilised)	21061302	1
Caelo	Oleyl oleate (stabilised)	13167109	4
Caelo	Oleyl oleate (stabilised)	13144401	1
Caelo	Oleyl oleate (stabilised)	13291607	1
Caelo	Oleyl oleate (stabilised)	14129007	10
Caelo	Oleyl oleate (stabilised)	25062015A	1
Caelo	Oleyl oleate (stabilised)	15321706	8
Caelo	Oleyl oleate (stabilised)	153217	1
Caelo	Oleyl oleate (stabilised)	15321702	2
Caelo	Oleyl oleate (stabilised)	23021714	1
Caelo	Oleyl oleate (stabilised)	16104904	2
Caelo	Oleyl oleate (stabilised)	16104907	8
Caelo	Oleyl oleate (stabilised)	4170717	1
Caelo	Oleyl oleate (stabilised)	28111710	1
Caelo	Oleyl oleate (stabilised)	17013009	2
Caelo	Oleyl oleate (stabilised)	17358101	3
Caelo	Oleyl oleate (stabilised)	5121808	1
Caelo	Oleyl oleate (stabilised)	18272003	1
Caelo	Oleyl oleate (stabilised)	18272005	3
Caelo	Oleyl oleate (stabilised)	17121500/17013008	1
Caelo	Oleyl oleate (stabilised)	13096801	1
Caelo	Oleyl oleate (stabilised)	15410204	9
Caelo	Oleyl oleate (stabilised)	18272002	6
Caelo	Oleyl oleate (stabilised)	18272007	1
Caelo	Oleyl oleate (stabilised)	17013014	7
Caelo	Oleyl oleate (stabilised)	15322703	2
Caelo	Oleyl oleate (stabilised)	13167107	1
Caelo	Oleyl oleate (stabilised)	14129007(2mal)	1
Caelo	Oleyl oleate (stabilised)	15321701	13
Caelo	Oleyl oleate (stabilised)	14254603	8
Caelo	Oleyl oleate (stabilised)	17358109	12

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Supplier	Substance	Batch	Spectra
Caelo	Oleyl oleate (stabilised)	17051700/15410207	1
Caelo	Oleyl oleate (stabilised)	1614907	1
Caelo	Oleyl oleate (stabilised)	170105181	1
Caelo	Oleyl oleate (stabilised)	17358103	6
Caelo	Oleyl oleate (stabilised)	1703014	1
Caelo	Oleyl oleate (stabilised)	17358104	3
Caelo	Oleyl oleate (stabilised)	13291602	1
Caelo	Oleyl oleate (stabilised)	18272011	1
Caesar & Loretz GmbH	Oleyl oleate (stabilised)	18272002	1
Caesar&Loretz GmbH	Oleyl oleate (stabilised)	15410204	1
Caesar&Loretz/Noweda	Oleyl oleate (stabilised)	15321702	1
Fagron	Oleyl oleate (stabilised)	11108-N03	1
Fagron	Oleyl oleate (stabilised)	7858448	1
Fagron	Oleyl oleate (stabilised)	14B14-B03-29295	1
Fagron	Oleyl oleate (stabilised)	14B14-B03-29219	1
Fagron	Oleyl oleate (stabilised)	15410204	1
Fagron	Oleyl oleate (stabilised)	11I08-N03	1
Gehe	Oleyl oleate (stabilised)	12220207	1
Hubertus Apotheke	Oleyl oleate (stabilised)	15410207	1
L12	Oleyl oleate (stabilised)	17358103	1
Caelo	Oleyl oleate (stabilised)	15410207	9
Noweda	Oleyl oleate (stabilised)	12067704	3
Noweda	Oleyl oleate (stabilised)	15321706	1
Noweda	Oleyl oleate (stabilised)	17013008	1
Phoenix	Oleyl oleate (stabilised)	14129007	1
Phoenix	Oleyl oleate (stabilised)	17013014	1
Phonix	Oleyl oleate (stabilised)	17358103	1
Phönix	Oleyl oleate (stabilised)	14005001	1
Caelo	Oleyl oleate (stabilised)	13291605	1
Sanacorp	Oleyl oleate (stabilised)	12067705	1
Sanacorp	Oleyl oleate (stabilised)	12220208	1
Sanacorp	Oleyl oleate (stabilised)	13096402	1
Sanacorp	Oleyl oleate (stabilised)	13378403	2
Caelo	Oleyl oleate (stabilised)	12067704	4
SysKem Chemie	Oleyl oleate (stabilised)	8002060413	1
SysKem Chemie	Oleyl oleate (stabilised)	35885	1
VDL	Oleyl oleate (stabilised)	12220205	2
290924	Olive oil, native	290924	2
ACM	Olive oil, native	KNC2225J14	1
AHD, 03.08.2011	Olive oil, native	5372701	1
AHL	Olive oil, native	8003420001	1
Caelo	Olive oil, native	8002366001	1
Allianc. Health. /bo	Olive oil, native	302523	1
Alliance	Olive oil, native	277050	1
Alliance Healthcare	Olive oil, native	12274108	1
Alliance Healthcare	Olive oil, native	13224703	1
Allianz	Olive oil, native	17361108	1
Allianz Healthcare	Olive oil, native	16327402	1
anzag	Olive oil, native	15216308	1
Anzag	Olive oil, native	12077701	1
Anzag	Olive oil, native	12274104	1
Anzag	Olive oil, native	297565	1
Anzag	Olive oil, native	15399706	1
Anzag	Olive oil, native	16327403	1
Anzag	Olive oil, native	17121604	1
Anzag	Olive oil, native	18002118	1
Anzag 31.10.12 ek: 2,78EUR	Olive oil, native	12077701	1
Anzag/Lamotte	Olive oil, native	5623601	1
Apomix	Olive oil, native	17236508	1
Beiersdorf AG/Geilenkir...	Olive oil, native	291374	1

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Supplier	Substance	Batch	Spectra
Bionorica ethics/Allian...	Olive oil, native	18005453	1
Bomastus/Phönix	Olive oil, native	302523	1
Bomastus-Werke AG	Olive oil, native	308230	1
Bomastus	Olive oil, native	273659	3
Bomastus	Olive oil, native	274236	7
Bomastus	Olive oil, native	oo270970	1
Bomastus	Olive oil, native	276542	2
Bomastus	Olive oil, native	277050	9
Bomastus	Olive oil, native	277049	1
Bomastus	Olive oil, native	12274106	1
Bomastus	Olive oil, native	279609	7
Bomastus	Olive oil, native	284144	7
Bomastus	Olive oil, native	4328413	1
Bomastus	Olive oil, native	14118604	1
Bomastus	Olive oil, native	6861571	2
Bomastus	Olive oil, native	292369	21
Bomastus	Olive oil, native	294034	17
Bomastus	Olive oil, native	294035	2
Bomastus	Olive oil, native	296259	3
Bomastus	Olive oil, native	298007	6
Bomastus	Olive oil, native	298008	7
Bomastus	Olive oil, native	110816-1	1
Bomastus	Olive oil, native	16212801	1
Bomastus	Olive oil, native	305003	23
Bomastus	Olive oil, native	305002	9
Bomastus	Olive oil, native	304112	1
Bomastus	Olive oil, native	308229	8
Bomastus	Olive oil, native	111405	1
Bomastus	Olive oil, native	30820	1
Bomastus	Olive oil, native	17001926	26
Bomastus	Olive oil, native	18000212	2
Bomastus	Olive oil, native	18005453	21
Bomastus	Olive oil, native	19000226	2
Bomastus	Olive oil, native	304113	9
Bomastus	Olive oil, native	187(18005452)	1
Bomastus	Olive oil, native	190000227	1
Bomastus	Olive oil, native	19002973	2
Bomastus	Olive oil, native	18005452	8
Bomastus	Olive oil, native	273871	5
Bomastus	Olive oil, native	291374	8
Bomastus	Olive oil, native	287259Noweda	1
Bomastus	Olive oil, native	270971	2
Bomastus	Olive oil, native	272270	2
Bomastus	Olive oil, native	283762	3
Bomastus	Olive oil, native	286533	8
Bomastus	Olive oil, native	289094	5
Bomastus	Olive oil, native	290403	10
Bomastus	Olive oil, native	288752	6
Bomastus	Olive oil, native	297565	4
Bomastus	Olive oil, native	60081503	4
Bomastus	Olive oil, native	267376	2
Bomastus	Olive oil, native	278583	9
Bomastus	Olive oil, native	19002974	5
Bomastus	Olive oil, native	279608	5
Bomastus	Olive oil, native	17121604	1
Bomastus	Olive oil, native	310868	30
Bomastus	Olive oil, native	297227	5
Bomastus	Olive oil, native	281209	4
Bomastus	Olive oil, native	282963	9
Bomastus	Olive oil, native	18003205	31

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Supplier	Substance	Batch	Spectra
Bombastus	Olive oil, native	28963	1
Bombastus	Olive oil, native	289095	5
Bombastus	Olive oil, native	295282	4
Bombastus	Olive oil, native	185(308229)	1
Bombastus	Olive oil, native	17001888	6
Bombastus	Olive oil, native	4812A-02000	1
Bombastus	Olive oil, native	287259	7
Bombastus	Olive oil, native	297564	4
Bombastus	Olive oil, native	300220	15
Bombastus	Olive oil, native	307103	11
Bombastus	Olive oil, native	290924	15
Bombastus	Olive oil, native	285942	10
Bombastus	Olive oil, native	275757	2
Bombastus	Olive oil, native	4613M-02000	1
Bombastus	Olive oil, native	296260	16
Bombastus	Olive oil, native	18002119	26
Bombastus	Olive oil, native	15399702	1
Bombastus	Olive oil, native	308230-20171106Ma7	1
Bombastus	Olive oil, native	308230-20170704Ma13	1
Bombastus	Olive oil, native	186(17001888)	1
Bombastus	Olive oil, native	266513	1
Bombastus	Olive oil, native	310866	4
Bombastus	Olive oil, native	18003204	10
Bombastus	Olive oil, native	265359	1
Bombastus	Olive oil, native	300219	5
Bombastus	Olive oil, native	302522	4
Bombastus	Olive oil, native	281898	5
Bombastus	Olive oil, native	305001	81
Bombastus	Olive oil, native	302521	1
Bombastus	Olive oil, native	306948	23
Bombastus	Olive oil, native	8004251002	1
Bombastus	Olive oil, native	295283	21
Bombastus	Olive oil, native	18002118	3
Bombastus	Olive oil, native	3011000	2
Bombastus	Olive oil, native	8022014A	1
Bombastus	Olive oil, native	308230	59
Bombastus	Olive oil, native	268118	1
Bombastus	Olive oil, native	269674	1
Bombastus	Olive oil, native	270970	4
Bombastus	Olive oil, native	284143	2
Bombastus	Olive oil, native	301100	21
Bombastus	Olive oil, native	302523	15
Bombastus	Olive oil, native	19000227	8
Bombastus	Olive oil, native	14306904	1
Bombastus	Olive oil, native	285160	1
Bombastus	Olive oil, native	301099	9
Bombstus/Phönix	Olive oil, native	18002119	1
Brücken-Apotheke	Olive oil, native	288752	2
Cae	Olive oil, native	12141309	1
Caelo	Olive oil, native	20061207	1
Caelo	Olive oil, native	288752	2
Caelo	Olive oil, native	8003420001	1
Caelo	Olive oil, native	15311408	6
Caelo	Olive oil, native	11063906	1
Caelo	Olive oil, native	11227011	1
Caelo	Olive oil, native	11063901	1
Caelo	Olive oil, native	11376905	3
Caelo	Olive oil, native	406212000	1
Caelo	Olive oil, native	7071206	1
Caelo	Olive oil, native	1207771	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	13081204	1
Caelo	Olive oil, native	31081206	1
Caelo	Olive oil, native	1509212000	1
Caelo	Olive oil, native	12077702	2
Caelo	Olive oil, native	120777027-13	1
Caelo	Olive oil, native	6111208	1
Caelo	Olive oil, native	10111201	1
Caelo	Olive oil, native	3212I-02000	1
Caelo	Olive oil, native	12141309	5
Caelo	Olive oil, native	12141305	3
Caelo	Olive oil, native	28121202	1
Caelo	Olive oil, native	12141310	1
Caelo	Olive oil, native	20270912-4	1
Caelo	Olive oil, native	11227001	1
Caelo	Olive oil, native	24011303	1
Caelo	Olive oil, native	12274106	11
Caelo	Olive oil, native	12041801	10
Caelo	Olive oil, native	713I-02000	1
Caelo	Olive oil, native	1031302	1
Caelo	Olive oil, native	5272401	4
Caelo	Olive oil, native	503312000	1
Caelo	Olive oil, native	4041303	1
Caelo	Olive oil, native	29041301	1
Caelo	Olive oil, native	2113Q02000	1
Caelo	Olive oil, native	13010911	18
Caelo	Olive oil, native	3071302	1
Caelo	Olive oil, native	30071305	1
Caelo	Olive oil, native	13147004	18
Caelo	Olive oil, native	4101312	1
Caelo	Olive oil, native	14111306	1
Caelo	Olive oil, native	16121306	1
Caelo	Olive oil, native	13350101	4
Caelo	Olive oil, native	16011404	1
Caelo	Olive oil, native	13306103	26
Caelo	Olive oil, native	24011408	1
Caelo	Olive oil, native	13021410	1
Caelo	Olive oil, native	25021404	1
Caelo	Olive oil, native	17041404	1
Caelo	Olive oil, native	13051402	1
Caelo	Olive oil, native	17051403	1
Caelo	Olive oil, native	28051405	1
Caelo	Olive oil, native	14070802	1
Caelo	Olive oil, native	14118603	21
Caelo	Olive oil, native	26071403	1
Caelo	Olive oil, native	1081402	1
Caelo	Olive oil, native	14182302	17
Caelo	Olive oil, native	26091403	1
Caelo	Olive oil, native	141182303	1
Caelo	Olive oil, native	8121404	1
Caelo	Olive oil, native	23121413	1
Caelo	Olive oil, native	5011503	1
Caelo	Olive oil, native	14118606	2
Caelo	Olive oil, native	2021501	1
Caelo	Olive oil, native	2021502	1
Caelo	Olive oil, native	5734701	1
Caelo	Olive oil, native	7031501	1
Caelo	Olive oil, native	18031506	1
Caelo	Olive oil, native	24031502	1
Caelo	Olive oil, native	14306913	2
Caelo	Olive oil, native	18041502	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	7051507	1
Caelo	Olive oil, native	290403	2
Caelo	Olive oil, native	2061503	1
Caelo	Olive oil, native	20061502	1
Caelo	Olive oil, native	1406914	1
Caelo	Olive oil, native	14306914	1
Caelo	Olive oil, native	14071504	1
Caelo	Olive oil, native	15112703	3
Caelo	Olive oil, native	24081507	1
Caelo	Olive oil, native	294034	1
Caelo	Olive oil, native	15216309	9
Caelo	Olive oil, native	295283	2
Caelo	Olive oil, native	15311403	21
Caelo	Olive oil, native	90417099	1
Caelo	Olive oil, native	297564	1
Caelo	Olive oil, native	12388	1
Caelo	Olive oil, native	301100	1
Caelo	Olive oil, native	16035311	11
Caelo	Olive oil, native	16144605	4
Caelo	Olive oil, native	16212806	28
Caelo	Olive oil, native	1621806	2
Caelo	Olive oil, native	16278806	1
Caelo	Olive oil, native	16212805	1
Caelo	Olive oil, native	17020700/16212806	1
Caelo	Olive oil, native	25021708	1
Caelo	Olive oil, native	17038703	9
Caelo	Olive oil, native	9031707	1
Caelo	Olive oil, native	11031706	1
Caelo	Olive oil, native	16327406	10
Caelo	Olive oil, native	8041709	1
Caelo	Olive oil, native	20041701	1
Caelo	Olive oil, native	21041714	1
Caelo	Olive oil, native	8061712	1
Caelo	Olive oil, native	27061703	1
Caelo	Olive oil, native	3071714	1
Caelo	Olive oil, native	17121603	4
Caelo	Olive oil, native	14071704	1
Caelo	Olive oil, native	17121604	6
Caelo	Olive oil, native	8002656001	1
Caelo	Olive oil, native	12081701	1
Caelo	Olive oil, native	8002868001	1
Caelo	Olive oil, native	26081709	1
Caelo	Olive oil, native	7091703	1
Caelo	Olive oil, native	308229	1
Caelo	Olive oil, native	6101706	1
Caelo	Olive oil, native	17121608	9
Caelo	Olive oil, native	14101709	1
Caelo	Olive oil, native	23101704	1
Caelo	Olive oil, native	17121607	4
Caelo	Olive oil, native	28111704	1
Caelo	Olive oil, native	17236502	4
Caelo	Olive oil, native	17236501	21
Caelo	Olive oil, native	310866	3
Caelo	Olive oil, native	11121701	1
Caelo	Olive oil, native	17236506	2
Caelo	Olive oil, native	172236501	1
Caelo	Olive oil, native	17236505	29
Caelo	Olive oil, native	310868	2
Caelo	Olive oil, native	12021822	1
Caelo	Olive oil, native	17001926	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	23041802	1
Caelo	Olive oil, native	3051807	1
Caelo	Olive oil, native	19051806leber	1
Caelo	Olive oil, native	9061810	1
Caelo	Olive oil, native	1802011-01	1
Caelo	Olive oil, native	17361106	21
Caelo	Olive oil, native	16081803	1
Caelo	Olive oil, native	210818B	1
Caelo	Olive oil, native	17361108	3
Caelo	Olive oil, native	18121101	25
Caelo	Olive oil, native	12091803	1
Caelo	Olive oil, native	18003205	3
Caelo	Olive oil, native	29091802	1
Caelo	Olive oil, native	20101801	1
Caelo	Olive oil, native	18208101	29
Caelo	Olive oil, native	18208102	6
Caelo	Olive oil, native	15121802	1
Caelo	Olive oil, native	18208106	12
Caelo	Olive oil, native	18208107	3
Caelo	Olive oil, native	18208110	5
Caelo	Olive oil, native	18311901	7
Caelo	Olive oil, native	18311906	2
Caelo	Olive oil, native	11376906	3
Caelo	Olive oil, native	11227002	2
Caelo	Olive oil, native	12141306	12
Caelo	Olive oil, native	16K24-B01_329002	1
Caelo	Olive oil, native	16035308	6
Caelo	Olive oil, native	123773	1
Caelo	Olive oil, native	5464901	2
Caelo	Olive oil, native	17121606	19
Caelo	Olive oil, native	13224703	17
Caelo	Olive oil, native	14182305	2
Caelo	Olive oil, native	15112707	4
Caelo	Olive oil, native	15399704	22
Caelo	Olive oil, native	300117/A	1
Caelo	Olive oil, native	17121900/17121610	1
Caelo	Olive oil, native	8004194001	1
Caelo	Olive oil, native	18311902	2
Caelo	Olive oil, native	17038702	38
Caelo	Olive oil, native	18311910	5
Caelo	Olive oil, native	19076109	2
Caelo	Olive oil, native	14306905	14
Caelo	Olive oil, native	15216305	1
Caelo	Olive oil, native	13224704	15
Caelo	Olive oil, native	14306915	7
Caelo	Olive oil, native	15399703	21
Caelo	Olive oil, native	16035309	5
Caelo	Olive oil, native	16212803	4
Caelo	Olive oil, native	265359	1
Caelo	Olive oil, native	306949	1
Caelo	Olive oil, native	17001888	1
Caelo	Olive oil, native	13350102	15
Caelo	Olive oil, native	5891202	1
Caelo	Olive oil, native	15216307	12
Caelo	Olive oil, native	8001560001	1
Caelo	Olive oil, native	306950	3
Caelo	Olive oil, native	p070106118	1
Caelo	Olive oil, native	19311901	1
Caelo	Olive oil, native	15399702	18
Caelo	Olive oil, native	13224701	6

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	14024408	15
Caelo	Olive oil, native	14182304	3
Caelo	Olive oil, native	16035310	18
Caelo	Olive oil, native	17361104	17
Caelo	Olive oil, native	8004067001	1
Caelo	Olive oil, native	1612803	1
Caelo	Olive oil, native	13010904	22
Caelo	Olive oil, native	1214306	1
Caelo	Olive oil, native	290924	1
Caelo	Olive oil, native	307103	1
Caelo	Olive oil, native	172365025615	1
Caelo	Olive oil, native	15112705	7
Caelo	Olive oil, native	2915A-02000	1
Caelo	Olive oil, native	15399706	1
Caelo	Olive oil, native	3916I-02000	1
Caelo	Olive oil, native	13224702	4
Caelo	Olive oil, native	5623601	1
Caelo	Olive oil, native	3313I-02000	1
Caelo	Olive oil, native	114Q-02000	1
Caelo	Olive oil, native	13350105	3
Caelo	Olive oil, native	14306902	1
Caelo	Olive oil, native	15363302	1
Caelo	Olive oil, native	297565	1
Caelo	Olive oil, native	1100616	1
Caelo	Olive oil, native	16327402	38
Caelo	Olive oil, native	17361101	34
Caelo	Olive oil, native	130109062x	1
Caelo	Olive oil, native	14024407	11
Caelo	Olive oil, native	13350104	7
Caelo	Olive oil, native	800067001	1
Caelo	Olive oil, native	279609	1
Caelo	Olive oil, native	15311404	12
Caelo	Olive oil, native	1324704	1
Caelo	Olive oil, native	292369	2
Caelo	Olive oil, native	15216310	4
Caelo	Olive oil, native	295282	3
Caelo	Olive oil, native	298008	2
Caelo	Olive oil, native	305003	2
Caelo	Olive oil, native	17121602	21
Caelo	Olive oil, native	60081503	2
Caelo	Olive oil, native	18912182	1
Fagron	Olive oil, native	18003205	1
Caelo	Olive oil, native	12274104	7
Caelo	Olive oil, native	13350103	13
Caelo	Olive oil, native	14306916	9
Caelo	Olive oil, native	300220	1
Caelo	Olive oil, native	18005453	2
Caelo	Olive oil, native	1521309	1
Caelo	Olive oil, native	16212802	4
Caelo	Olive oil, native	8001854001	1
Caelo	Olive oil, native	16327403	9
Caelo	Olive oil, native	17121610	11
Caelo	Olive oil, native	17236508	4
Caelo	Olive oil, native	1812101	1
Caelo	Olive oil, native	3418a-02000	1
Caelo	Olive oil, native	1828110	1
Caelo	Olive oil, native	19076110	1
Caelo	Olive oil, native	14024406	5
Caelo	Olive oil, native	15216308	13
Caelo	Olive oil, native	6/AKD15	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	308230	8
Caelo	Olive oil, native	18208111	1
Caelo	Olive oil, native	171216	1
Caelo	Olive oil, native	14182303	19
Caelo	Olive oil, native	12077701	11
Caelo	Olive oil, native	160353010	1
Caerol / Gehe	Olive oil, native	15311401	1
Caerolo/Krieger	Olive oil, native	17121606	1
Caerolo/Phönix	Olive oil, native	15311401	2
Caerolo/Phönix	Olive oil, native	15311402	1
Caesar & Loretz GmbH	Olive oil, native	13350101	1
Caesar & Loretz GmbH	Olive oil, native	14306904	1
Caesar & Loretz GmbH Hi...	Olive oil, native	13350102	1
Caesar & Loretz GmbH Hi...	Olive oil, native	14182302	1
Caesar & Loretz GmbH Hi...	Olive oil, native	15216309	1
Caesar & Loretz GmbH Hi...	Olive oil, native	15311404	1
Caesar & Loretz GmbH Hi...	Olive oil, native	16212801	1
Caesar & Loretz GmbH Hi...	Olive oil, native	16212806	1
Caesar & Loretz GmbH, 4...	Olive oil, native	12141306	1
Caesar & Loretz GmbH, 20...	Olive oil, native	17121602	1
Caesar & Loretz GmbH/Mi...	Olive oil, native	19076104	1
Caesar 6 Loretz GmbH	Olive oil, native	16327402	1
Caesar&Lorenz/Phoenix	Olive oil, native	17121604	4
Caesar&Loretz	Olive oil, native	17038702	2
Caesar&Loretz GmbH, AHC...	Olive oil, native	17038702	1
Caesar&lorenz,Phoenix,1...	Olive oil, native	15399703	1
Caesar&LoretzGmbH,07,03...	Olive oil, native	16327402	1
Calo	Olive oil, native	18311906	1
Cealo/Gehe	Olive oil, native	12077701	1
Cealo/Gehe	Olive oil, native	17361106	1
celo/Jenne	Olive oil, native	13010904	1
Delta	Olive oil, native	17236505	1
E PLUS	Olive oil, native	17038702	1
Ebert & Jacobi 02.08...	Olive oil, native	15399704	1
Eimermacher	Olive oil, native	8002868001	1
EuRho	Olive oil, native	13010911	1
EuRho	Olive oil, native	1501023-01	1
EuRho	Olive oil, native	1503047-01	1
Euro OTC	Olive oil, native	1212022-01	2
Euro OTC	Olive oil, native	1406009-01	1
Euro OTC	Olive oil, native	308228	11
Euro OTC	Olive oil, native	1802011-01	70
Euro OTC	Olive oil, native	1805023-01	45
Euro OTC	Olive oil, native	1808026-01	151
Euro OTC	Olive oil, native	17236501	1
Euro OTC	Olive oil, native	19000226	1
Euro OTC	Olive oil, native	1503047-02	1
Euro OTC	Olive oil, native	1602022-01	1
Euro OTC	Olive oil, native	1602022-02	1
Euro OTC	Olive oil, native	1608006-02	88
Euro OTC	Olive oil, native	1807019-01	1
Euro OTC	Olive oil, native	1809017-01	1
Euro OTC	Olive oil, native	14182303	1
Euro OTC	Olive oil, native	17391101	1
Euro OTC	Olive oil, native	18002119	1
euro-oct	Olive oil, native	1503047-02	1
Euro OTC	Olive oil, native	16327406	3
Euro OTC	Olive oil, native	19000227	1
Fagron	Olive oil, native	12A18-N08	2
Fagron	Olive oil, native	12I07-N07	2

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Supplier	Substance	Batch	Spectra
Fagron	Olive oil, native	12107-N07	1
Fagron	Olive oil, native	13010904	1
Fagron	Olive oil, native	13C08-N06	5
Fagron	Olive oil, native	13c08-N06	1
Fagron	Olive oil, native	13J25-B04-289441	2
Fagron	Olive oil, native	14G08-B02-300074	3
Fagron	Olive oil, native	15A27-B03	1
Fagron	Olive oil, native	15216309	1
Fagron	Olive oil, native	329002	1
Fagron	Olive oil, native	284144	2
Fagron	Olive oil, native	130190	2
Fagron	Olive oil, native	13G18-B08-286424	3
Fagron	Olive oil, native	129189	1
Fagron	Olive oil, native	13J25-B04	1
Fagron	Olive oil, native	16K24-B01-329002	2
Fagron	Olive oil, native	14B12-B06	1
Fagron	Olive oil, native	133026	2
Fagron	Olive oil, native	15A27-B03-304709	5
Fagron	Olive oil, native	139812	1
Fagron	Olive oil, native	13G18-B08	1
Fagron	Olive oil, native	15216308	1
Fagron	Olive oil, native	16K24-01-329002	1
Fargon	Olive oil, native	17236501	1
Fiebig	Olive oil, native	12077702	1
Fiebig	Olive oil, native	8001431001	1
Fiebig	Olive oil, native	8001948002	1
Fiebig	Olive oil, native	8002656001	1
Fiebig	Olive oil, native	17236501	1
Fiebig	Olive oil, native	8003420001	1
Fiebig	Olive oil, native	8004251002	2
Frago/Gehe	Olive oil, native	16K24-B01-329002	2
Frago/Noweda	Olive oil, native	16K24-B01	1
Gatt-Koller	Olive oil, native	1900963	1
Gehe	Olive oil, native	11C16-N08	1
Gehe	Olive oil, native	267376	1
Gehe	Olive oil, native	5107101	1
Gehe	Olive oil, native	269674	2
Gehe	Olive oil, native	265359	1
Gehe	Olive oil, native	12I07-N07	1
Gehe	Olive oil, native	277050	2
Gehe	Olive oil, native	13010911	1
Gehe	Olive oil, native	279609	1
Gehe	Olive oil, native	278583	1
Gehe	Olive oil, native	281209	2
Gehe	Olive oil, native	5470202	1
Gehe	Olive oil, native	282963	2
Gehe	Olive oil, native	284144	1
Gehe	Olive oil, native	288752	1
Gehe	Olive oil, native	289094	1
Gehe	Olive oil, native	298007	1
Gehe	Olive oil, native	305003	1
Gehe	Olive oil, native	305002	1
Gehe	Olive oil, native	16212801	1
Gehe	Olive oil, native	8002366001	1
GEHE	Olive oil, native	305002	1
GEHE	Olive oil, native	308229	1
GEHE	Olive oil, native	17361101	1
GEHE	Olive oil, native	18002118	1
Gehe - Lamotte	Olive oil, native	5271504	1
Gehe - Lamotte	Olive oil, native	5470202	1

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Supplier	Substance	Batch	Spectra
Gehe - Lamotte	Olive oil, native	5623601	1
Gehe - Lamotte	Olive oil, native	5671601	2
Caelo	Olive oil, native	171211610	1
Bombastus	Olive oil, native	306950	18
Caelo	Olive oil, native	800236001	1
Gehe/henry	Olive oil, native	8001431001	1
Gehe-Henry	Olive oil, native	8002026001	1
Gehe-Henry	Olive oil, native	8002366001	1
H. Lamotte/Noweda	Olive oil, native	5671901	1
H.Lamotte/Noweda	Olive oil, native	5232201	1
H.Lamotte/Noweda	Olive oil, native	5470202	1
hen	Olive oil, native	8001648001	1
Henry L/Spangro	Olive oil, native	8003420001	1
Henry Lamotte	Olive oil, native	5107101	1
Henry Lamotte	Olive oil, native	5232201	1
Henry Lamotte	Olive oil, native	5272401	3
Henry Lamotte	Olive oil, native	5271504	1
Henry Lamotte	Olive oil, native	5671601	1
Henry Lamotte	Olive oil, native	5671901	3
Henry Lamotte	Olive oil, native	5813601	2
Henry Lamotte	Olive oil, native	5734701	1
Henry Lamotte	Olive oil, native	8000652001	1
Henry Lamotte	Olive oil, native	5921100001	1
Henry Lamotte	Olive oil, native	8000821001	1
Henry Lamotte	Olive oil, native	5891202	1
Henry Lamotte	Olive oil, native	8001648001	1
Henry Lamotte	Olive oil, native	8001560001	2
Henry Lamotte	Olive oil, native	16327402	1
Henry Lamotte	Olive oil, native	8002656001	1
Henry Lamotte	Olive oil, native	8003801001	1
Henry Lamotte	Olive oil, native	8003580002	1
Henry Lamotte	Olive oil, native	8004067001	3
Henry Lamotte	Olive oil, native	8004499001	1
Henry Lamotte	Olive oil, native	1000010861	1
Henry Lamotte / Gehe	Olive oil, native	8004067001	1
Henry Lamotte / Noweda	Olive oil, native	123773	1
Henry Lamotte / Noweda	Olive oil, native	8004194001	1
Henry Lamotte / Phoenix	Olive oil, native	1000010861	1
Henry Lamotte / Phönix	Olive oil, native	8004827001	1
Henry Lamotte Oils	Olive oil, native	5903400003	2
Henry Lamotte Oils	Olive oil, native	8000821001	1
Henry Lamotte Oils	Olive oil, native	8001648001	1
Henry Lamotte Oils	Olive oil, native	8022366001	1
Henry Lamotte Oils	Olive oil, native	8003420001	1
henry lamotte oils gmbh	Olive oil, native	5464901	1
Henry Lamotte Oils Gmbh	Olive oil, native	8001560001	1
Henry Lamotte Oils GmbH	Olive oil, native	5372701	1
Henry Lamotte Oils GmbH	Olive oil, native	124392	1
Henry Lamotte Oils GmbH	Olive oil, native	5671901	2
Henry Lamotte Oils GmbH	Olive oil, native	5921100001	1
Henry Lamotte Oils GmbH	Olive oil, native	5813601	1
Henry Lamotte Oils GmbH	Olive oil, native	8000652001	1
Henry Lamotte Oils GmbH	Olive oil, native	5921100001	1
Henry Lamotte Oils GmbH	Olive oil, native	8001560001	1
Henry Lamotte Oils GmbH	Olive oil, native	8002026001	1
Henry Lamotte Oils GmbH	Olive oil, native	8003420001	1
Henry Lamotte Oils GmbH	Olive oil, native	8003801001	1
Henry Lamotte Oils GmbH	Olive oil, native	8004067001	2
Henry Lamotte Oils GmbH	Olive oil, native	8004499001	1
Henry Lamotte Oils GmbH...	Olive oil, native	8001854001	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH...	Olive oil, native	8004067001	1
Henry Lamotte Oils GmbH...	Olive oil, native	8004499001	1
Henry Lamotte Oils GmbH...	Olive oil, native	124392	1
Henry Lamotte Oils GmbH...	Olive oil, native	8003801001	1
Henry Lamotte Oils GmbH...	Olive oil, native	8004827001	1
Henry Lamotte Oils GmbH...	Olive oil, native	8002868001	1
Henry Lamotte Oils GmbH...	Olive oil, native	8003580002	1
Henry Lamotte Oils GmbH...	Olive oil, native	8004067001	1
Henry Lamotte Oils GmbH...	Olive oil, native	5470202	1
Henry Lamotte Oils GmbH...	Olive oil, native	5734701	1
Henry Lamotte, Noweda	Olive oil, native	5372701	1
Henry Lamotte/ Alliance	Olive oil, native	8001854001	1
Henry Lamotte/ Alliance...	Olive oil, native	8002868001	1
Henry Lamotte/ Nowed	Olive oil, native	1000004908	1
Henry Lamotte/ Noweda	Olive oil, native	124392	1
Henry Lamotte/ Noweda	Olive oil, native	1000004908	1
Henry Lamotte/AHC	Olive oil, native	800156001	1
Henry Lamotte/AHC	Olive oil, native	8002366001	1
Henry Lamotte/AHD	Olive oil, native	8000821001	1
Henry Lamotte/Anzag	Olive oil, native	5272401	1
Henry Lamotte/Anzag	Olive oil, native	123773	1
Henry Lamotte/Anzag	Olive oil, native	590340003	1
Henry Lamotte/Anzag	Olive oil, native	8001648001	1
Henry Lamotte/Gehe	Olive oil, native	5903400003	1
Henry Lamotte/Kehr	Olive oil, native	8000652001	1
Henry lamotte/N/PZN:004...	Olive oil, native	5372701	1
Henry Lamotte/Noweda	Olive oil, native	8000821001	1
Henry Lamotte/Noweda	Olive oil, native	8001854001	2
Henry Lamotte/Noweda	Olive oil, native	8002366001	1
Henry Lamotte/Noweda	Olive oil, native	8002827001	1
Henry Lamotte/Noweda	Olive oil, native	8002656001	1
Henry Lamotte/Noweda	Olive oil, native	8003580002	1
Henry Lamotte/Phoenix	Olive oil, native	8001431001	1
Henry Lamotte/Phoenix	Olive oil, native	8001948002	1
Henry Lamotte/Phönix	Olive oil, native	8001648001	1
Henry Lamotte/Phönix	Olive oil, native	8001948002	1
Henry Lamotte/Phönix	Olive oil, native	8003420001	2
Henry Lamotte/Phönix	Olive oil, native	1000004908	1
Henry Lamotte/Phönix	Olive oil, native	8004499001	1
Henry Lamotte/Sanacorp	Olive oil, native	8000652001	1
Henry Lamotte/Sanacorp	Olive oil, native	8003801001	1
Henry, Noweda	Olive oil, native	5232201	1
Henry/Gehe	Olive oil, native	8001854001	1
Henry/Phönix	Olive oil, native	8004067001	1
HenryLamotte	Olive oil, native	5232201	2
HenryLamotte/AHD	Olive oil, native	8002821001	1
HenryLamotte/AHD	Olive oil, native	8003801001	1
HenryLamotte/AHD	Olive oil, native	8004499001	1
HenryLamotte/AHD	Olive oil, native	1000010861	1
HenryLamotte/Alliance H...	Olive oil, native	800358002	1
HenryLamotte/Noweda	Olive oil, native	1000004908	3
HenryLamotte/Noweda	Olive oil, native	8002827001	1
HenryLamotte/Noweda	Olive oil, native	8004067001	1
HenryLamotte/Noweda	Olive oil, native	8004499001	2
HenryLamotte/Phoenix	Olive oil, native	5272401	4
HenryLamotte/Phönix	Olive oil, native	8002827001	1
HenryLamotte/Phönix	Olive oil, native	8004499001	1
HL/N/25.02.13 PZN:3649899	Olive oil, native	5283901	1
Ichthyol/Phönix	Olive oil, native	274236	1
J.H. Müller	Olive oil, native	140115	1

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Supplier	Substance	Batch	Spectra
Jenne	Olive oil, native	18208106	1
JENNE	Olive oil, native	17361108	1
Kehr	Olive oil, native	308229	1
Kögl	Olive oil, native	300609164116	1
Kögl	Olive oil, native	300609163816	1
Kögl	Olive oil, native	44102170917	2
Kögl	Olive oil, native	44102171417	1
Kögl	Olive oil, native	20172174	2
Kögl	Olive oil, native	1700561	1
Kögl	Olive oil, native	1702444	2
Kögl	Olive oil, native	1803441	1
Krieger	Olive oil, native	17361101	1
L12	Olive oil, native	1637402	1
L12	Olive oil, native	16327402	1
Lamotte	Olive oil, native	5232201	3
Lamotte	Olive oil, native	5272401	4
Lamotte	Olive oil, native	123773	2
Lamotte	Olive oil, native	5372701	1
Lamotte	Olive oil, native	5464901	2
Lamotte	Olive oil, native	5470202	3
Lamotte	Olive oil, native	5903400003	1
Lamotte	Olive oil, native	8000821001	1
Lamotte	Olive oil, native	8004194001	2
Lamotte	Olive oil, native	800449901	1
Lamotte	Olive oil, native	1000010861	1
Lamotte / AHC	Olive oil, native	1000010808	1
Lamotte / Gehe	Olive oil, native	5127501	1
Lamotte / Gehe	Olive oil, native	5283901	2
Lamotte / Gehe	Olive oil, native	5372701	2
Lamotte / Gehe	Olive oil, native	L901	1
Lamotte / Gehe	Olive oil, native	5470202	1
Lamotte / Gehe	Olive oil, native	5734701	1
Lamotte / Gehe	Olive oil, native	8003420001	1
Lamotte / Gehe	Olive oil, native	8004251002	2
Lamotte / Noweda	Olive oil, native	124392	1
Lamotte / Phönix	Olive oil, native	8001431001	1
Lamotte / Sanacorp	Olive oil, native	5283901	1
Lamotte Gmbh	Olive oil, native	8001948002	1
Lamotte Phönix	Olive oil, native	5272401	2
Lamotte Phönix	Olive oil, native	5271504	1
Lamotte/ Anzag	Olive oil, native	5271504	1
Lamotte/ Anzag	Olive oil, native	5470202	2
Lamotte/ Gehe	Olive oil, native	1000011651	1
Lamotte/Alliance	Olive oil, native	5623601	1
Lamotte/Alliance	Olive oil, native	5891202	1
Lamotte/Alliance	Olive oil, native	8003420001	1
Lamotte/Alliance	Olive oil, native	8004827001	1
Lamotte/Alliance	Olive oil, native	8004499001	1
Lamotte/Anzag	Olive oil, native	5671901	1
Lamotte/Anzag	Olive oil, native	5734701	1
Lamotte/Anzag	Olive oil, native	5813601	1
Caelo	Olive oil, native	5470202	1
Lamotte/Ebert	Olive oil, native	8003420001	1
Lamotte/Ebert	Olive oil, native	8003580002	1
lamotte/Gehe	Olive oil, native	5271504	1
Lamotte/GH/11.09.13	Olive oil, native	5271504	1
Lamotte/Kehr	Olive oil, native	8000821001	1
Lamotte/Kehr	Olive oil, native	8003580002	1
lamotte/noweda	Olive oil, native	8001854001	1
lamotte/noweda	Olive oil, native	8002827001	1

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Supplier	Substance	Batch	Spectra
lamotte/noweda	Olive oil, native	1000004908	1
Lamotte/Noweda	Olive oil, native	5464901	1
Lamotte/Noweda	Olive oil, native	8002656001	1
Lamotte/Noweda	Olive oil, native	8003580002	1
Lamotte/Noweda	Olive oil, native	8003801001	1
LAMOTTE/NOWEDA	Olive oil, native	5470202	1
Lamotte/Phoenix	Olive oil, native	8002868001	1
Lamotte/Phoenix	Olive oil, native	8003580002	1
Lamotte/Phoenix	Olive oil, native	8004251002	1
Lamotte/Sanacorp	Olive oil, native	5271504	2
Lamotte/Sanacorp	Olive oil, native	5470202	1
Lamotte/Sanacorp	Olive oil, native	5671901	1
Lamotte/Sanacorp	Olive oil, native	8000652001	1
Lamotte/Spangro	Olive oil, native	5671901	1
Lamotte/Spangro	Olive oil, native	5891202	1
Lamotte/Spangro	Olive oil, native	8000652001	1
Lamotte/Spangro	Olive oil, native	5903400003	1
Lamotte/Spangro	Olive oil, native	8001648001	1
Lamotte/Spangro	Olive oil, native	8002366001	2
Lamotte/Spangro	Olive oil, native	8004194001	1
Lamotte/Spangro	Olive oil, native	8004251002	1
Lamotte/V.d.L.	Olive oil, native	5464901	1
Midas	Olive oil, native	17121602	1
Midas	Olive oil, native	17236501	1
Midas	Olive oil, native	17361106	1
Midas	Olive oil, native	17361107	1
Midas	Olive oil, native	18121101	1
Midas	Olive oil, native	18208101	1
Noweda	Olive oil, native	267376	1
Noweda	Olive oil, native	268118	1
Noweda	Olive oil, native	12077702	2
Noweda	Olive oil, native	272270	2
Noweda	Olive oil, native	12141309	1
Noweda	Olive oil, native	277050	2
Noweda	Olive oil, native	13350102	1
Noweda	Olive oil, native	284143	1
Noweda	Olive oil, native	5813601	1
Noweda	Olive oil, native	295282	1
Noweda	Olive oil, native	15399702	1
Caelo	Olive oil, native	13010906	6
Caelo	Olive oil, native	13147001	9
Caelo	Olive oil, native	14118604	13
Noweda 21.02.2015	Olive oil, native	14182302	1
Bombastus	Olive oil, native	285642	1
Caelo	Olive oil, native	15112704	3
Caelo	Olive oil, native	15311401	4
Caelo	Olive oil, native	15311402	8
Noweda/Lamotte	Olive oil, native	5813601	1
Noweda-Henry	Olive oil, native	5891202	1
Caelo	Olive oil, native	14306904	7
Pharmachem/AHD	Olive oil, native	13324703	1
Phoenix	Olive oil, native	5470202	1
Phoenix	Olive oil, native	13350103	1
Phoenix	Olive oil, native	1406009-01	1
Phoenix	Olive oil, native	14118603	1
Phoenix	Olive oil, native	16035310	1
Phoenix	Olive oil, native	16035311	1
Phoenix	Olive oil, native	17121606	1
Phoenix	Olive oil, native	18208101	1
Phoenix	Olive oil, native	19076105	1

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Supplier	Substance	Batch	Spectra
PHOENIX 03.03.2014	Olive oil, native	1305014-01	1
Caelo	Olive oil, native	5271504	2
Caelo	Olive oil, native	CE834/ES	1
Phonix	Olive oil, native	17361107	1
phönix	Olive oil, native	13010904	1
Phönix	Olive oil, native	12274106	1
Phönix	Olive oil, native	20032	1
Phönix	Olive oil, native	14118606	1
Phönix	Olive oil, native	15216308	1
Phönix	Olive oil, native	15399702	1
Phönix	Olive oil, native	16327402	1
Phönix	Olive oil, native	16327406	1
Phönix	Olive oil, native	17038702	1
Phönix	Olive oil, native	17121610	1
Phönix	Olive oil, native	17001926	1
Phönix	Olive oil, native	18003205	1
Phönix	Olive oil, native	18208101	1
PHÖNIX	Olive oil, native	16327402	1
PHÖNIX	Olive oil, native	17236501	1
PHÖNIX	Olive oil, native	17361106	1
PHÖNIX	Olive oil, native	18208101	2
Caelo	Olive oil, native	17361107	5
Phönix 09.11.12	Olive oil, native	272270	1
Phönix Gotha	Olive oil, native	277049	1
Phönix Gotha	Olive oil, native	15216308	1
Phönix, 07.11.2011	Olive oil, native	278583	1
Caelo	Olive oil, native	46646018208101	1
Bombastus	Olive oil, native	303449	2
Caelo	Olive oil, native	16212801	14
Phönix/Lamotte	Olive oil, native	5272401	1
Raben-Apotheke Mildenau	Olive oil, native	5623601	1
Raben-Apotheke Mildenau	Olive oil, native	5891202	3
S.Binder	Olive oil, native	284144	1
sanacorp	Olive oil, native	13147004	1
sanacorp	Olive oil, native	14306904	1
sanacorp	Olive oil, native	15112706	1
Sanacorp	Olive oil, native	273659	1
Sanacorp	Olive oil, native	12141306	2
Sanacorp	Olive oil, native	12274108	1
Sanacorp	Olive oil, native	277050	1
Sanacorp	Olive oil, native	13C08-N06	1
Sanacorp	Olive oil, native	279609	1
Sanacorp	Olive oil, native	14306903	1
Sanacorp	Olive oil, native	1/AKD4	2
Sanacorp	Olive oil, native	5/AKD13	1
Sanacorp	Olive oil, native	308229	1
Sanacorp	Olive oil, native	17236501	1
Sanacorp	Olive oil, native	18002119	1
Sanacorp	Olive oil, native	18005453	1
Caelo	Olive oil, native	15112706	16
Caelo	Olive oil, native	18002119	3
Sanacorp 18.03.14 EK 10...	Olive oil, native	13G18-B08-286423	1
Sanacorp 21.01.15 EK 10...	Olive oil, native	14G08-B02-300073	1
Caelo	Olive oil, native	14306903	4
Caelo	Olive oil, native	12274108	1
Caelo	Olive oil, native	1301094	1
VDL Nachliefer; 10.7.15...	Olive oil, native	291374	2
Wolf Handelsgesellschaft	Olive oil, native	128972ES	1
Wolfvital	Olive oil, native	W48B041	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Omega-3-fish oil	1603021-01	1
Euro OTC	Omega-3-fish oil	1311028-01	1
Henry Lamotte	Omega-3-fish oil	1000002451	1
Henry Lamotte Oils	Omega-3-fish oil	123305	1
Henry Lamotte Oils/Sana...	Omega-3-fish oil	123780	1
Lamotte/Sanacorp	Omega-3-fish oil	123883	1
Lamotte/Sanacorp	Omega-3-fish oil	124247	3
AHD	Peanut oil, refined	14246901	1
AHD	Peanut oil, refined	17169001	2
AHD, 06.05.2013	Peanut oil, refined	12323204	1
Alliance Healthcare	Peanut oil, refined	13129203	1
Anzag	Peanut oil, refined	12c30n02	1
Anzag	Peanut oil, refined	12H31N05	1
Anzag	Peanut oil, refined	12323204	1
Anzag	Peanut oil, refined	13358804	1
Anzag	Peanut oil, refined	15015103	1
Anzag 07.12.12	Peanut oil, refined	12203803	1
Anzag 16.01.13 ek.5.13	Peanut oil, refined	5204402	2
Bombastus	Peanut oil, refined	8273799	1
Fagron	Peanut oil, refined	12C30-N02	1
Caelo	Peanut oil, refined	12203806	3
Fagron	Peanut oil, refined	14033601	1
Aponorm/Wepa	Peanut oil, refined	17169018	1
Bombastus	Peanut oil, refined	18004538	1
Bombastus	Peanut oil, refined	267966	4
Bombastus	Peanut oil, refined	276103	2
Bombastus	Peanut oil, refined	263129	1
Bombastus	Peanut oil, refined	286393	5
Bombastus	Peanut oil, refined	283866	1
Bombastus	Peanut oil, refined	288510	2
Bombastus	Peanut oil, refined	291671	4
Bombastus	Peanut oil, refined	295272	10
Bombastus	Peanut oil, refined	299136	7
Bombastus	Peanut oil, refined	302017	4
Bombastus	Peanut oil, refined	303460	5
Bombastus	Peanut oil, refined	16071104	1
Bombastus	Peanut oil, refined	305319	2
Bombastus	Peanut oil, refined	310008	2
Bombastus	Peanut oil, refined	18005645	3
Bombastus	Peanut oil, refined	29527	1
Bombastus	Peanut oil, refined	271512	3
Bombastus	Peanut oil, refined	297242	2
Bombastus	Peanut oil, refined	284286	5
Bombastus	Peanut oil, refined	80370408	2
Bombastus	Peanut oil, refined	307541	3
Bombastus	Peanut oil, refined	310007	3
Bombastus	Peanut oil, refined	18002249	2
Bombastus	Peanut oil, refined	17169010	1
Bombastus	Peanut oil, refined	18014402	1
Bombastus	Peanut oil, refined	18014405	1
Bombastus	Peanut oil, refined	17001078	1
Bombastus	Peanut oil, refined	30100	1
Bombastus	Peanut oil, refined	264328	1
Caelo	Peanut oil, refined	16071104	14
Caelo	Peanut oil, refined	11313905	4
Caelo	Peanut oil, refined	11100201	2
Caelo	Peanut oil, refined	11254503	1
Caelo	Peanut oil, refined	11163201	1
Caelo	Peanut oil, refined	6061202	1
Caelo	Peanut oil, refined	26061203	1

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Supplier	Substance	Batch	Spectra
Caelo	Peanut oil, refined	1207211954	1
Caelo	Peanut oil, refined	12101503	8
Caelo	Peanut oil, refined	24081208	1
Caelo	Peanut oil, refined	12101502	3
Caelo	Peanut oil, refined	9101201	1
Caelo	Peanut oil, refined	3112M-01954	1
Caelo	Peanut oil, refined	12203803	15
Caelo	Peanut oil, refined	10208605	1
Caelo	Peanut oil, refined	1211503	1
Caelo	Peanut oil, refined	12274302	21
Caelo	Peanut oil, refined	21121205	1
Caelo	Peanut oil, refined	12041092	1
Caelo	Peanut oil, refined	7031307	1
Caelo	Peanut oil, refined	28031304	1
Caelo	Peanut oil, refined	3061303	1
Caelo	Peanut oil, refined	8061303	1
Caelo	Peanut oil, refined	12323205	3
Caelo	Peanut oil, refined	9091303	1
Caelo	Peanut oil, refined	30101312	1
Caelo	Peanut oil, refined	5314601	1
Caelo	Peanut oil, refined	16011403	1
Caelo	Peanut oil, refined	13358804	21
Caelo	Peanut oil, refined	28021406	1
Caelo	Peanut oil, refined	14033601	17
Caelo	Peanut oil, refined	1358804	1
Caelo	Peanut oil, refined	13051403	1
Caelo	Peanut oil, refined	23051406	1
Caelo	Peanut oil, refined	5592601	3
Caelo	Peanut oil, refined	25091405	1
Caelo	Peanut oil, refined	14246901	14
Caelo	Peanut oil, refined	14115403	5
Caelo	Peanut oil, refined	14111401	1
Caelo	Peanut oil, refined	30121415	1
Caelo	Peanut oil, refined	14246902	5
Caelo	Peanut oil, refined	20021502	1
Caelo	Peanut oil, refined	14355903	6
Caelo	Peanut oil, refined	14355905	13
Caelo	Peanut oil, refined	15015104	13
Caelo	Peanut oil, refined	15208506	18
Caelo	Peanut oil, refined	15208501	3
Caelo	Peanut oil, refined	15012016	1
Caelo	Peanut oil, refined	15331503	13
Caelo	Peanut oil, refined	15331506	1
Caelo	Peanut oil, refined	16071101	19
Caelo	Peanut oil, refined	16071105	19
Caelo	Peanut oil, refined	8000666005	1
Caelo	Peanut oil, refined	16071106	2
Caelo	Peanut oil, refined	16071103	19
Caelo	Peanut oil, refined	16259502	1
Caelo	Peanut oil, refined	160711	1
Caelo	Peanut oil, refined	301000	1
Caelo	Peanut oil, refined	1624502	1
Caelo	Peanut oil, refined	170420802	1
Caelo	Peanut oil, refined	19081707	1
Caelo	Peanut oil, refined	17169001	27
Caelo	Peanut oil, refined	171690015409	1
Caelo	Peanut oil, refined	305319	2
Caelo	Peanut oil, refined	17328601	44
Caelo	Peanut oil, refined	1769018	1
Caelo	Peanut oil, refined	18014402	32

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Supplier	Substance	Batch	Spectra
Caelo	Peanut oil, refined	16071804	1
Caelo	Peanut oil, refined	18014405	13
Caelo	Peanut oil, refined	22091807	1
Caelo	Peanut oil, refined	18014	1
Caelo	Peanut oil, refined	18208207	6
Caelo	Peanut oil, refined	18296001	19
Caelo	Peanut oil, refined	18926002	1
Caelo	Peanut oil, refined	12041902	10
Caelo	Peanut oil, refined	1416A-01954	1
Caelo	Peanut oil, refined	160711104	1
Caelo	Peanut oil, refined	17169018	20
Caelo	Peanut oil, refined	3614M-01954	1
Caelo	Peanut oil, refined	1232304	1
Caelo	Peanut oil, refined	5204402	1
Caelo	Peanut oil, refined	13306102	8
Caelo	Peanut oil, refined	1224302	1
Caelo	Peanut oil, refined	18296002	12
Caelo	Peanut oil, refined	103(18296001)	1
Caelo	Peanut oil, refined	15015103	14
Caelo	Peanut oil, refined	18296007	3
Caelo	Peanut oil, refined	13358801	10
Caelo	Peanut oil, refined	171699010	1
Caelo	Peanut oil, refined	12274305	3
Caelo	Peanut oil, refined	15273403	14
Caelo	Peanut oil, refined	13129203	34
Caelo	Peanut oil, refined	1531502	1
Caelo	Peanut oil, refined	302017	2
Caelo	Peanut oil, refined	12080802	4
Caelo	Peanut oil, refined	13129202	1
Caelo	Peanut oil, refined	14115405	14
Caelo	Peanut oil, refined	13J25-B06-291838	1
Caelo	Peanut oil, refined	14246903	18
Caelo	Peanut oil, refined	15208505	13
Caelo	Peanut oil, refined	17042802	32
Caelo	Peanut oil, refined	19059205	1
Caelo	Peanut oil, refined	107063	1
Caelo	Peanut oil, refined	102(17169001)	1
Caelo	Peanut oil, refined	13306101	2
Caelo	Peanut oil, refined	15273402	15
Caelo	Peanut oil, refined	15331502	27
Caelo	Peanut oil, refined	15331501	16
Caelo	Peanut oil, refined	16071102	25
Caelo	Peanut oil, refined	12274032	1
Caelo	Peanut oil, refined	3813E1954	1
Caelo	Peanut oil, refined	13358803	14
Caelo	Peanut oil, refined	18296009	3
Caelo	Peanut oil, refined	173286015616	1
Caelo	Peanut oil, refined	14115406	13
Caelo	Peanut oil, refined	13173003	1
Caelo	Peanut oil, refined	15015106	4
Caelo	Peanut oil, refined	17169010	31
Caelo	Peanut oil, refined	17169020	1
Caelo	Peanut oil, refined	18208202	31
Caelo	Peanut oil, refined	16348001	40
Caelo	Peanut oil, refined	1013A-01954	2
Caelo	Peanut oil, refined	1671101	1
Caesar & Loretz	Peanut oil, refined	16071103	1
Caesar & Loretz	Peanut oil, refined	17169001	2
Caesar & Loretz GmbH	Peanut oil, refined	13358803	1
Caesar & Loretz GmbH	Peanut oil, refined	14115404	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Peanut oil, refined	15208506	1
Caesar & Loretz GmbH	Peanut oil, refined	16249502	1
Caesar & Loretz GmbH	Peanut oil, refined	18296002	1
Caesar & Loretz GmbH	Peanut oil, refined	18296001	1
Caesar & Loretz GmbH	Peanut oil, refined	18208204	1
Caesar & Loretz GmbH	Peanut oil, refined	18296009	1
Caesar & Loretz GmbH Hi...	Peanut oil, refined	14115404	1
Caesar & Loretz GmbH Hi...	Peanut oil, refined	15331502	1
Caesar & Loretz/ Caesar...	Peanut oil, refined	17328601	1
Caesar & Loretz/AHC	Peanut oil, refined	16071104	1
Caesar & Loretz/Noweda	Peanut oil, refined	15273402	1
Caesar & Loretz/Noweda	Peanut oil, refined	16249502	1
caesar & loretz GmbH, Phö...	Peanut oil, refined	16071101	1
Caesar&Loretz GmbH	Peanut oil, refined	18296001	1
Caesar&Loretz GmbH, PHön...	Peanut oil, refined	16348001	1
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	12323204	1
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	13306106	1
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	14355905	1
Caesar&lorenz,Phoenix	Peanut oil, refined	14033601	1
Caesar&lorenz,Phoenix	Peanut oil, refined	14246903	1
caesar&lorenz,phönix	Peanut oil, refined	1508506	1
Caesar/Lorenz	Peanut oil, refined	12274302	1
Caleo	Peanut oil, refined	14/10-B07	1
Cealo/AHD	Peanut oil, refined	16071101	1
Cealo/Noweda	Peanut oil, refined	17169010	1
Cealo/Phoenix	Peanut oil, refined	14115405	1
Ebert KKH 20.09.16	Peanut oil, refined	8001417003	2
EuRho	Peanut oil, refined	1204018-01	1
Euro OTC	Peanut oil, refined	17169018	1
Euro OTC	Peanut oil, refined	1301015	1
Euro OTC	Peanut oil, refined	17328601	1
Euro OTC	Peanut oil, refined	5592601	1
Fagron	Peanut oil, refined	16A27-B04-322519	2
Fagron	Peanut oil, refined	5012A-01954	1
Fagron	Peanut oil, refined	12J23-N01	2
Fagron	Peanut oil, refined	12c30-n02	1
Fagron	Peanut oil, refined	12A05-N05	1
Fagron	Peanut oil, refined	5314601	1
Fagron	Peanut oil, refined	12J23-N01	1
Fagron	Peanut oil, refined	13g30-n05	1
Fagron	Peanut oil, refined	14D11-B05-294677	4
Fagron	Peanut oil, refined	13J25B06291837	1
Fagron	Peanut oil, refined	13j25b06291837	1
Fagron	Peanut oil, refined	P101P102P103	1
Fagron	Peanut oil, refined	14246901	1
Fagron	Peanut oil, refined	14D11-B05-294672	2
Fagron	Peanut oil, refined	14355904	2
Fagron	Peanut oil, refined	130723	1
Fagron	Peanut oil, refined	15B11B02304989	2
Fagron	Peanut oil, refined	15E07-B04	1
Fagron	Peanut oil, refined	14/10-B07-300426	1
Fagron	Peanut oil, refined	15E07-B04-308779	2
Fagron	Peanut oil, refined	16A27B04322519	1
Fagron	Peanut oil, refined	17169018	1
Fagron	Peanut oil, refined	17K16-B07-344245	2
Fagron	Peanut oil, refined	18D13-B01-352516	1
Fagron	Peanut oil, refined	18G28B01354810	1
Fagron	Peanut oil, refined	18G28-B01-354810	1
Fagron	Peanut oil, refined	13G30-N05	7
Fagron	Peanut oil, refined	13G30-N05	1

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Supplier	Substance	Batch	Spectra
Fagron	Peanut oil, refined	12H31-N05	4
Fagron	Peanut oil, refined	17A10-B01-332760	2
Fagron	Peanut oil, refined	17K16-B07-347994	1
Fagron	Peanut oil, refined	16071105	2
Fagron	Peanut oil, refined	15331506	1
Fagron	Peanut oil, refined	19E17-B01-362264	1
Fagron	Peanut oil, refined	13J25-B06-291838	4
Fagron	Peanut oil, refined	131943	2
Fagron	Peanut oil, refined	18208202	1
Fagron	Peanut oil, refined	14I-10B07-300438	1
Fagron	Peanut oil, refined	14I10-B07-300438	2
Fagron	Peanut oil, refined	1410-B07-300438	1
Fagron	Peanut oil, refined	133498	1
Fiebig	Peanut oil, refined	18208202	1
Fiebig 02.10.12 ek: 5,13EUR	Peanut oil, refined	5231601	1
Fischar	Peanut oil, refined	5904100001	2
Gatt-Koller	Peanut oil, refined	1900111	1
gehe	Peanut oil, refined	310007	1
Gehe	Peanut oil, refined	12041902	1
Gehe	Peanut oil, refined	13306103	1
Gehe	Peanut oil, refined	13306106	1
Gehe	Peanut oil, refined	16249502	1
GEHE	Peanut oil, refined	17042802	2
gehe/ cealo	Peanut oil, refined	15015104	1
Caelo	Peanut oil, refined	16071103/1160117	1
Fagron	Peanut oil, refined	17042802	1
H.Lamotte/Noweda	Peanut oil, refined	5231601	1
H.Lamotte/Noweda	Peanut oil, refined	1034	1
H.Lamotte/Noweda	Peanut oil, refined	5473601	1
H.Lamotte/Noweda	Peanut oil, refined	5699601	1
H.Lamotte/Noweda	Peanut oil, refined	5904100001	1
Henry Lamotte Oils GmbH	Peanut oil, refined	1000010888	1
Hedinger	Peanut oil, refined	14355903	1
Henry Lamotte	Peanut oil, refined	520442	1
Henry Lamotte	Peanut oil, refined	611Erdnuss	1
Henry Lamotte	Peanut oil, refined	5204402	1
Henry Lamotte	Peanut oil, refined	5699601	2
Henry Lamotte	Peanut oil, refined	5473601	1
Henry Lamotte	Peanut oil, refined	5592601	1
Henry Lamotte	Peanut oil, refined	5697901	2
Henry Lamotte	Peanut oil, refined	5904100001	2
Henry Lamotte	Peanut oil, refined	8000666005	3
henry lamotte / Gehe	Peanut oil, refined	1000010888	1
Henry Lamotte GmbH/Hold...	Peanut oil, refined	5231601	1
Henry Lamotte oils GmbH	Peanut oil, refined	5204402	2
Henry Lamotte Oils GmbH	Peanut oil, refined	16071105	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5473601	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5699601	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5697901	4
Henry Lamotte Oils GmbH	Peanut oil, refined	5904100091	1
Henry Lamotte Oils GmbH	Peanut oil, refined	8000666005	3
Henry Lamotte Oils GmbH	Peanut oil, refined	8001417003	3
Henry Lamotte Oils GmbH	Peanut oil, refined	8001959001	1
Henry Lamotte oils GmbH...	Peanut oil, refined	5699601	2
Henry Lamotte Oils GmbH...	Peanut oil, refined	5473601	2
Henry Lamotte/Jenne	Peanut oil, refined	5204402	1
Henry Lamotte/Phönix	Peanut oil, refined	8001959001	1
Henry Lamotte/Phönix	Peanut oil, refined	17169001	1
HenryLamotte/Phoenix	Peanut oil, refined	5231601	1
Jenne	Peanut oil, refined	16071104	1

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Supplier	Substance	Batch	Spectra
Kastner	Peanut oil, refined	5592601	2
Kögl	Peanut oil, refined	425612165116	3
Kögl	Peanut oil, refined	393021711179	1
Kögl	Peanut oil, refined	39302171717	1
Kögl	Peanut oil, refined	216906172917	1
Kögl	Peanut oil, refined	1701232	1
Kögl	Peanut oil, refined	1800078	1
Kögl	Peanut oil, refined	1801368	1
Kögl	Peanut oil, refined	1801916	2
L12	Peanut oil, refined	18208202	2
L12	Peanut oil, refined	18208207	2
Lamotte	Peanut oil, refined	5204402	2
Lamotte	Peanut oil, refined	5473601	3
Lamotte	Peanut oil, refined	5592601	1
Lamotte	Peanut oil, refined	5699501	1
Lamotte	Peanut oil, refined	5699601	3
Lamotte	Peanut oil, refined	5697901	2
Lamotte	Peanut oil, refined	1000010888	1
Lamotte / Gehe	Peanut oil, refined	5404101	1
lamotte/Gehe	Peanut oil, refined	5592601	3
Lamotte/GEHE	Peanut oil, refined	5204402	1
lamotte/Jenne	Peanut oil, refined	5404101	1
Lamotte/Phoenix	Peanut oil, refined	5592601	1
Lamotte/Phoenix	Peanut oil, refined	5699601	2
Lamotte/Phoenix	Peanut oil, refined	5904100001	1
lamotte/Phönix	Peanut oil, refined	5697901	1
Lamotte/Phönix	Peanut oil, refined	16071102	1
Lamotte/Phönix	Peanut oil, refined	8003146001	1
Midas	Peanut oil, refined	16348001	2
Midas	Peanut oil, refined	17169001	1
Midas	Peanut oil, refined	17169010	1
Caelo	Peanut oil, refined	16249502	50
Nachprüfung	Peanut oil, refined	1426903	1
Nachprüfung	Peanut oil, refined	123456	1
Noweda	Peanut oil, refined	11B16-N02	2
Noweda	Peanut oil, refined	5103001	1
Noweda	Peanut oil, refined	123508	1
Noweda	Peanut oil, refined	12C30-N02	1
Noweda	Peanut oil, refined	12274302	1
Noweda	Peanut oil, refined	11313905	1
Noweda	Peanut oil, refined	13358804	1
Noweda	Peanut oil, refined	1410B07300438	1
Noweda	Peanut oil, refined	16071104	1
Phoenix	Peanut oil, refined	13306106	1
Phoenix	Peanut oil, refined	13358803	1
Phoenix	Peanut oil, refined	14115405	1
Phoenix	Peanut oil, refined	14355905	1
Phoenix	Peanut oil, refined	16348001	1
Phoenix	Peanut oil, refined	17328601	1
Phoenix	Peanut oil, refined	18296002	1
Phönix	Peanut oil, refined	5204402	1
Phönix	Peanut oil, refined	12274302	2
Phönix	Peanut oil, refined	5404101	1
Phönix	Peanut oil, refined	5473601	1
Phönix	Peanut oil, refined	13358801	1
Phönix	Peanut oil, refined	18208202	1
Phönix Gotha	Peanut oil, refined	13306103	1
Phönix Gotha	Peanut oil, refined	13129202	1
Phönix Gotha	Peanut oil, refined	15273403	1
Caelo	Peanut oil, refined	12323204	15

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Supplier	Substance	Batch	Spectra
Purren Apotheke	Peanut oil, refined	11313905	1
Resana GmbH / GEHE	Peanut oil, refined	1805-5943	1
Sanacorp	Peanut oil, refined	12274302	2
Sanacorp	Peanut oil, refined	13129203	1
Sanacorp	Peanut oil, refined	14355904	1
Sanacorp	Peanut oil, refined	16348001	1
Sanacorp	Peanut oil, refined	17042802	2
Sanacorp	Peanut oil, refined	17169018	1
Caelo	Peanut oil, refined	466158	1
Caelo	Peanut oil, refined	14355904	14
Bombastus	Peanut oil, refined	266753	1
Caelo	Peanut oil, refined	11313906	2
Sanacorp;13.05.15; 2,94EUR	Peanut oil, refined	14355905	1
Caelo	Rapeseed oil, refined	15214407	1
Caelo	Rapeseed oil, refined	12054406	2
Caelo	Rapeseed oil, refined	16185004	3
Caelo	Rapeseed oil, refined	18047201	1
Caelo	Rapeseed oil, refined	15296106	3
Caelo	Rapeseed oil, refined	15214403	1
Caelo	Rapeseed oil, refined	17213901	3
Caelo	Rapeseed oil, refined	18047204	1
Bombastus	Safflower oil, refined type I	309851	1
Bombastus	Safflower oil, refined type I	19000029	1
Caelo	Safflower oil, refined type I	305902	1
Caelo	Safflower oil, refined type I	299143	1
Caelo	Safflower oil, refined type I	16184901	1
AHD	Sesame oil, refined	1000007221	1
Bremer Schlüssel/Phönix	Sesame oil, refined	1000007221	1
Caelo	Sesame oil, refined	15374001	12
Caelo	Sesame oil, refined	10241803	1
Caelo	Sesame oil, refined	12054501	1
Caelo	Sesame oil, refined	30051201	1
Caelo	Sesame oil, refined	5319201	2
Caelo	Sesame oil, refined	21051305	1
Caelo	Sesame oil, refined	25051305	1
Caelo	Sesame oil, refined	13011105	11
Caelo	Sesame oil, refined	13011107	7
Caelo	Sesame oil, refined	13011105	1
Caelo	Sesame oil, refined	14101302	1
Caelo	Sesame oil, refined	13011109	1
Caelo	Sesame oil, refined	130111107	1
Caelo	Sesame oil, refined	17011405	1
Caelo	Sesame oil, refined	13172906	5
Caelo	Sesame oil, refined	14170004	8
Caelo	Sesame oil, refined	10011503	1
Caelo	Sesame oil, refined	14170001	1
Caelo	Sesame oil, refined	14170005	3
Caelo	Sesame oil, refined	14351804	6
Caelo	Sesame oil, refined	11081513	1
Caelo	Sesame oil, refined	1615E-02016	1
Caelo	Sesame oil, refined	15239405	5
Caelo	Sesame oil, refined	15374006	5
Caelo	Sesame oil, refined	28041709	1
Caelo	Sesame oil, refined	16312505	8
Caelo	Sesame oil, refined	6071715	1
Caelo	Sesame oil, refined	16312507	3
Caelo	Sesame oil, refined	17177701	1
Caelo	Sesame oil, refined	8002939002	1
Caelo	Sesame oil, refined	17332102	1
Caelo	Sesame oil, refined	1717770	1

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Supplier	Substance	Batch	Spectra
Caelo	Sesame oil, refined	7071804	1
Caelo	Sesame oil, refined	17177703	16
Caelo	Sesame oil, refined	15422706	5
Caelo	Sesame oil, refined	17332103	7
Caelo	Sesame oil, refined	13011104	4
Caelo	Sesame oil, refined	18331301	1
Caelo	Sesame oil, refined	13172908	2
Caelo	Sesame oil, refined	16312501	4
Caelo	Sesame oil, refined	1000005858	1
Caelo	Sesame oil, refined	123826	1
Caelo	Sesame oil, refined	15422707	2
Caelo	Sesame oil, refined	17332106	7
Caesar und Loretz GmbH	Sesame oil, refined	16312505	1
Euro OTC	Sesame oil, refined	15374001	1
Euro OTC	Sesame oil, refined	13011107	1
Euro OTC	Sesame oil, refined	124494	1
Fagron	Sesame oil, refined	16312505	2
Fagron	Sesame oil, refined	124494	2
Fiebig	Sesame oil, refined	1000003864	1
Fiebig	Sesame oil, refined	17332103	1
Fiebig/Lamotte	Sesame oil, refined	7316137	1
Fiebig/Medesign	Sesame oil, refined	689299	1
Gatt-Koller	Sesame oil, refined	1803403	2
Gehe	Sesame oil, refined	122972	1
Gehe / 23.01.13 Henry L...	Sesame oil, refined	122972	1
H.Lamotte/Ebert	Sesame oil, refined	1000005858	1
Hedinger/Noweda	Sesame oil, refined	1000005858	1
Henr	Sesame oil, refined	123826	1
Henry Lamotte	Sesame oil, refined	5319201	1
Henry Lamotte	Sesame oil, refined	123826	1
Henry Lamotte	Sesame oil, refined	5514801	1
Henry Lamotte	Sesame oil, refined	124494	1
Henry Lamotte	Sesame oil, refined	5744101	1
Henry Lamotte	Sesame oil, refined	5872901	1
Henry Lamotte	Sesame oil, refined	8001557002	3
Henry Lamotte	Sesame oil, refined	8000531001	1
Henry Lamotte	Sesame oil, refined	1000002705	2
Henry Lamotte	Sesame oil, refined	2705	1
Henry Lamotte / Noweda	Sesame oil, refined	5639301	1
Henry Lamotte Oils	Sesame oil, refined	122972	1
Henry Lamotte Oils	Sesame oil, refined	5319201	2
Henry Lamotte Oils	Sesame oil, refined	123488	2
Henry Lamotte Oils	Sesame oil, refined	5514801	2
Henry Lamotte Oils	Sesame oil, refined	1000009220	2
Henry Lamotte Oils GmbH	Sesame oil, refined	122972	1
Henry Lamotte Oils GmbH	Sesame oil, refined	123488	1
Henry Lamotte Oils GmbH	Sesame oil, refined	1000002705	1
Henry Lamotte Oils GmbH	Sesame oil, refined	1000003864	1
Henry Lamotte Oils GmbH...	Sesame oil, refined	1000002705	1
Henry Lamotte Oils/Ebert	Sesame oil, refined	1000007221	1
Henry Lamotte/ 26.06.13...	Sesame oil, refined	123488	1
Henry Lamotte/ Noweda	Sesame oil, refined	1000002705	1
Henry Lamotte/ Noweda	Sesame oil, refined	1000005858	1
Henry Lamotte/ NOweda	Sesame oil, refined	5872901	1
Henry Lamotte/Kehr	Sesame oil, refined	8001557002	1
Henry Lamotte/Sanacorp	Sesame oil, refined	123826	1
Henry Lamotte/Sanacorp	Sesame oil, refined	8000531001	1
Henry Lomoote/Noweda	Sesame oil, refined	1000002705	1
HenryLamotte/Phoenix	Sesame oil, refined	5135601	1
Jenne	Sesame oil, refined	17177703	1

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Supplier	Substance	Batch	Spectra
Kögl	Sesame oil, refined	303709163816	1
Kögl	Sesame oil, refined	1700881	2
Kögl	Sesame oil, refined	1702060	1
L10	Sesame oil, refined	1000007221	1
L12	Sesame oil, refined	1000002705	2
L12	Sesame oil, refined	8002939002	2
L12	Sesame oil, refined	10000007221	1
L12	Sesame oil, refined	1000009220	4
L12/Henry Lamotte	Sesame oil, refined	8001557002	2
L12/Henry Lamotte	Sesame oil, refined	1000005858	3
Lamotte	Sesame oil, refined	4711A-02016	1
Lamotte	Sesame oil, refined	123826	3
Lamotte	Sesame oil, refined	123488	2
Lamotte	Sesame oil, refined	5514801	3
Lamotte	Sesame oil, refined	124494	1
Lamotte	Sesame oil, refined	5744101	1
Lamotte	Sesame oil, refined	582001	1
Lamotte	Sesame oil, refined	5872001	1
Lamotte	Sesame oil, refined	5872901	1
Lamotte	Sesame oil, refined	8000531001	3
Lamotte	Sesame oil, refined	8001557002	4
Lamotte	Sesame oil, refined	1000002705	1
Lamotte über Noweda	Sesame oil, refined	1000002705	1
Lamotte über Phoenix	Sesame oil, refined	5639301	2
Lamotte über Phoenix	Sesame oil, refined	5821001	1
Lamotte über Phoenix	Sesame oil, refined	5872001	1
Lamotte über Phoenix	Sesame oil, refined	5872901	2
Lamotte über Phoenix	Sesame oil, refined	8000682001	2
Lamotte/ Noweda	Sesame oil, refined	123488	1
lamotte/ Phoenix	Sesame oil, refined	5744101	1
Lamotte/Krieger	Sesame oil, refined	5319201	1
Lamotte/noweda	Sesame oil, refined	170713a	1
Lamotte/Phönix	Sesame oil, refined	58772901	1
Lamotte/Phönix	Sesame oil, refined	84280	1
Lamotte/Phönix	Sesame oil, refined	8002939002	2
Lamotte/Sanacorp	Sesame oil, refined	5872001	1
Lamotte/Sanacorp	Sesame oil, refined	5744101	1
Medesign/ Fiebig	Sesame oil, refined	689298	1
Midas/Henry Lamotte	Sesame oil, refined	1000003864	2
Noweda/Henry Lamotte Oils	Sesame oil, refined	5872901	1
Phoenix	Sesame oil, refined	14170004	1
Phoenix/Lamotte	Sesame oil, refined	5634501	1
Phönix 12.12.12	Sesame oil, refined	12054508	1
Sanacorp	Sesame oil, refined	1000002705	1
Caelo	Sesame oil, refined	11224108	2
Abis Pharma/Sanacorp	Shea butter, refined	10-500P/0714	1
Bahnhofapotheke Kempten...	Shea butter, refined	G16FGFI	1
Caelo	Shea butter, refined	11346509	1
Caelo	Shea butter, refined	12242404	1
Caelo	Shea butter, refined	13143807	1
Caelo	Shea butter, refined	13143814	2
Caelo	Shea butter, refined	13143813	2
Caelo	Shea butter, refined	14033312	2
Caelo	Shea butter, refined	17031501	1
Caelo	Shea butter, refined	14033314	1
Caelo	Shea butter, refined	15303002	4
Caelo	Shea butter, refined	15303005	2
Caelo	Shea butter, refined	16017208	1
Caelo	Shea butter, refined	17085806	7
Caelo	Shea butter, refined	17085803	3

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Supplier	Substance	Batch	Spectra
Caelo	Shea butter, refined	17085809	2
Caelo	Shea butter, refined	17287506	2
Caelo	Shea butter, refined	17085815	1
Caelo	Shea butter, refined	18222304	3
Caelo	Shea butter, refined	18222305	1
Caelo	Shea butter, refined	17149601	3
Caelo	Shea butter, refined	12242416	2
Caelo	Shea butter, refined	15303009	2
Caelo	Shea butter, refined	16017203	3
Caelo	Shea butter, refined	16017214	2
Caelo	Shea butter, refined	11346514	1
Caelo	Shea butter, refined	12242406	1
Caelo	Shea butter, refined	18236004	2
Caelo	Shea butter, refined	12242412	1
Caelo	Shea butter, refined	10133305	2
Caelo	Shea butter, refined	17085804	2
Caelo	Shea butter, refined	14033306	1
Caelo	Shea butter, refined	14261108	4
Caelo	Shea butter, refined	13143810	1
Caelo	Shea butter, refined	17085813	1
Caelo	Shea butter, refined	17287510	3
Caelo	Shea butter, refined	12242410	1
Caelo	Shea butter, refined	1224210	1
Caelo	Shea butter, refined	14261110	1
Caelo	Shea butter, refined	15303007	1
Caelo	Shea butter, refined	14033303	1
Caelo	Shea butter, refined	14033310	1
Caelo	Shea butter, refined	14261109	1
Caelo	Shea butter, refined	14261113	1
Caelo	Shea butter, refined	15303003	2
Caelo	Shea butter, refined	16017205	3
Caelo	Shea butter, refined	17085817	1
Caelo	Shea butter, refined	17085812	2
Caelo	Shea butter, refined	17287505	2
Caelo	Shea butter, refined	15144901	2
Caelo	Shea butter, refined	16017204	2
Caesar & Loretz GmbH	Shea butter, refined	18236002	1
Caesar & Loretz GmbH	Shea butter, refined	18222305	1
Caesar/Noweda	Shea butter, refined	13143813	2
Canea/Phönix	Shea butter, refined	SB1351M13	1
Cealo	Shea butter, refined	19205802	2
DAC 2006	Shea butter, refined	11346509	1
ecocert/sanacorp	Shea butter, refined	20-0418C	1
Euro OTC	Shea butter, refined	1802A0688	1
Fagron	Shea butter, refined	121273	2
Fagron	Shea butter, refined	12G12-N14	1
Fagron	Shea butter, refined	12g12-n14	1
Fagron	Shea butter, refined	13C04-N01	5
Farfalla Essen/ Bahnhof...	Shea butter, refined	FA0130140	1
Franz Thome	Shea butter, refined	400-15	1
Gehe	Shea butter, refined	11079802	1
Gehe	Shea butter, refined	11346509	1
GEHE	Shea butter, refined	18222305	1
JENNE	Shea butter, refined	17287510	1
Caelo	Shea butter, refined	14033304	2
Fagron	Shea butter, refined	11J07-N08	1
Sanacop WE:18.11.17 100...	Shea butter, refined	17085809	1
sanacorp	Shea butter, refined	14033310	1
sanacorp WE:28.12.17 E...	Shea butter, refined	17085815	1
Sanacorp/ Abis Pharma	Shea butter, refined	keine	2

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Supplier	Substance	Batch	Spectra
Sheabutter Import Franz...	Shea butter, refined	14314-18515	1
Sheabutter Import Franz...	Shea butter, refined	14-3-0001	1
Sheabutter-Import Franz...	Shea butter, refined	1205355	2
Sheabutter-Import Franz...	Shea butter, refined	413-0001	1
Spinnrad	Shea butter, refined	217300181	1
Spinnrad/Phönix	Shea butter, refined	416300182	1
Caelo	Shea butter, refined	15144902	1
Caelo	Shea butter, refined	14033313	1
Caelo	Shea butter, refined	14261102	1
Caelo	Shea butter, refined	14261111	1
Caelo	Shea butter, refined	15144907	1
Wolfvital	Shea butter, refined	W68B058	1
Caelo	Soy lecithin, liquid	1604034-01	1
Caelo	Soy lecithin, liquid	1803030-01	1
Caesar & Loretz GmbH	Soy lecithin, liquid	1803030-01	1
Euro OTC	Soy lecithin, liquid	160403401	1
Euro OTC	Soy lecithin, liquid	20061209	1
Euro OTC	Soy lecithin, liquid	1204028-01	1
Euro OTC	Soy lecithin, liquid	1503038-02	1
Euro OTC	Soy lecithin, liquid	614E3336	1
Euro OTC	Soy lecithin, liquid	180303001	1
EUro/AHD	Soy lecithin, liquid	1305019-01	1
Euro OTC	Soy lecithin, liquid	1703001-01	8
Euro OTC	Soy lecithin, liquid	1503038	1
Euro OTC	Soy lecithin, liquid	1604034-01	10
Fagron	Soy lecithin, liquid	1604034-01	1
Gehe	Soy lecithin, liquid	21022111/2	1
Gehe	Soy lecithin, liquid	1803030-1	1
Gehe - Lamotte	Soy lecithin, liquid	1305019-01	1
Euro OTC	Soy lecithin, liquid	1404022V-02	2
Euro OTC	Soy lecithin, liquid	14404022-01	1
Caelo	Soy oil, refined	15239310	3
Caelo	Soy oil, refined	16081309	2
Caelo	Soy oil, refined	16347104	2
Caelo	Soy oil, refined	17300001	3
Caelo	Soy oil, refined	14194107	1
ALH	Sunflower oil, refined	15163805	1
Bombastus	Sunflower oil, refined	271457	1
Bombastus	Sunflower oil, refined	285243	1
Bombastus	Sunflower oil, refined	281796	2
Bombastus	Sunflower oil, refined	285712	2
Bombastus	Sunflower oil, refined	291278	1
Bombastus	Sunflower oil, refined	292956	1
Bombastus	Sunflower oil, refined	295818	2
Bombastus	Sunflower oil, refined	298487	1
Bombastus	Sunflower oil, refined	299712	1
Bombastus	Sunflower oil, refined	275830	1
Bombastus	Sunflower oil, refined	18005423	1
Bombastus	Sunflower oil, refined	274107	1
Caelo	Sunflower oil, refined	11000605	2
Caelo	Sunflower oil, refined	16275801	1
Caelo	Sunflower oil, refined	16275804	2
Caelo	Sunflower oil, refined	17242104	1
Caelo	Sunflower oil, refined	18027004	1
Caelo	Sunflower oil, refined	17073005	1
Caelo	Sunflower oil, refined	12009804	3
Caelo	Sunflower oil, refined	18027005	1
Caelo	Sunflower oil, refined	14147101	3
Caelo	Sunflower oil, refined	15422801	1
Caelo	Sunflower oil, refined	17242101	3

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Supplier	Substance	Batch	Spectra
Caelo	Sunflower oil, refined	14306701	1
Caelo	Sunflower oil, refined	13225102	2
Gehe	Sunflower oil, refined	11126606	1
Henry Lamotte	Sunflower oil, refined	5738004	1
Henry Lamotte	Sunflower oil, refined	8001230001	1
Henry Lamotte/Sanacorp	Sunflower oil, refined	5738004	1
J.H. Müller	Sunflower oil, refined	140229	1
Jenne	Sunflower oil, refined	17242101	1
Jenne	Sunflower oil, refined	18027005	1
Lamotte/L3	Sunflower oil, refined	5422401	1
Noweda / Henry Lamotte	Sunflower oil, refined	5422401	1
Schubert / Phoenix	Sunflower oil, refined	1423F0-2027	2
Wolf Handelsgesellschaft	Sunflower oil, refined	1692305SK	1
Wolf Handelsgesellschaft	Sunflower oil, refined	1822313	1
Caelo	Walnut oil, refined	11167103	1
Caelo	Walnut oil, refined	24101309	1
Caelo	Walnut oil, refined	4051702	1
Caelo	Walnut oil, refined	12214904	1
Caelo	Walnut oil, refined	12214902	1
Caelo	Walnut oil, refined	13338302	1
Hepart AG	Walnut oil, refined	12214904	1
Caelo	Walnut oil, refined	10328802	1
Voegele	Walnut oil, refined	2013113013	2
Vögele	Walnut oil, refined	2017113718	1
Bombastus	Wheatgerm oil, refined	283449	1
Bombastus	Wheatgerm oil, refined	301382	1
Bombastus	Wheatgerm oil, refined	301383	1
Bombastus	Wheatgerm oil, refined	307210	1
Bombastus	Wheatgerm oil, refined	309093	1
Bombastus	Wheatgerm oil, refined	18000536	3
Bombastus	Wheatgerm oil, refined	311302	2
Bombastus	Wheatgerm oil, refined	1800243	1
Bombastus	Wheatgerm oil, refined	305122	2
Bombastus	Wheatgerm oil, refined	286986	1
Bombastus	Wheatgerm oil, refined	295374	1
Bombastus	Wheatgerm oil, refined	307209	1
Bombastus	Wheatgerm oil, refined	18002442	1
Bombastus	Wheatgerm oil, refined	289212	1
Bombastus	Wheatgerm oil, refined	1800524	1
Caelo	Wheatgerm oil, refined	13261605	1
Caelo	Wheatgerm oil, refined	11227305	2
Caelo	Wheatgerm oil, refined	12220304	2
Caelo	Wheatgerm oil, refined	12220307	1
Caelo	Wheatgerm oil, refined	W-240513-2	1
Caelo	Wheatgerm oil, refined	13261601	4
Caelo	Wheatgerm oil, refined	5011502	1
Caelo	Wheatgerm oil, refined	14272514	3
Caelo	Wheatgerm oil, refined	14356001	5
Caelo	Wheatgerm oil, refined	14356006	4
Caelo	Wheatgerm oil, refined	292513	1
Caelo	Wheatgerm oil, refined	15111602	3
Caelo	Wheatgerm oil, refined	15405201	1
Caelo	Wheatgerm oil, refined	16137401	1
Caelo	Wheatgerm oil, refined	16321301	11
Caelo	Wheatgerm oil, refined	17216701	5
Caelo	Wheatgerm oil, refined	6121709	1
Caelo	Wheatgerm oil, refined	14121701	1
Caelo	Wheatgerm oil, refined	17290302	1
Caelo	Wheatgerm oil, refined	18009501	5
Caelo	Wheatgerm oil, refined	2011904	1

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Supplier	Substance	Batch	Spectra
Caelo	Wheatgerm oil, refined	18009509	1
Caelo	Wheatgerm oil, refined	14366001	1
Caelo	Wheatgerm oil, refined	12220305	1
Caelo	Wheatgerm oil, refined	14024502	1
Caelo	Wheatgerm oil, refined	13011501	5
Caelo	Wheatgerm oil, refined	18009506	1
Caelo	Wheatgerm oil, refined	14272511	2
Caelo	Wheatgerm oil, refined	15111603	4
Caelo	Wheatgerm oil, refined	13011503	2
Caelo	Wheatgerm oil, refined	18241002	1
Caelo	Wheatgerm oil, refined	15374101	5
Caelo	Wheatgerm oil, refined	16137404	6
Caelo	Wheatgerm oil, refined	17216702	1
Caelo	Wheatgerm oil, refined	12220306	2
Caelo	Wheatgerm oil, refined	14272513	2
Caelo	Wheatgerm oil, refined	15406201	1
Caelo	Wheatgerm oil, refined	13011507	3
Caelo	Wheatgerm oil, refined	13011505	6
Caelo	Wheatgerm oil, refined	13261603	7
Caelo	Wheatgerm oil, refined	15111605	2
Caelo	Wheatgerm oil, refined	15406205	2
Caelo	Wheatgerm oil, refined	15374104	2
Caelo	Wheatgerm oil, refined	17290301	7
Caelo	Wheatgerm oil, refined	18241012	1
Caelo	Wheatgerm oil, refined	17216705	6
Caelo	Wheatgerm oil, refined	18009505	7
Caelo	Wheatgerm oil, refined	14024501	6
Caelo	Wheatgerm oil, refined	1427251	1
Caelo	Wheatgerm oil, refined	14356003	2
Caelo	Wheatgerm oil, refined	15406206	1
Caelo	Wheatgerm oil, refined	16137405	3
Caelo	Wheatgerm oil, refined	18241006	2
Caelo	Wheatgerm oil, refined	213E-02784	1
Caelo	Wheatgerm oil, refined	18009510	1
Caeöo	Wheatgerm oil, refined	13261601	1
Caesar & Loretz GmbH	Wheatgerm oil, refined	18241002	2
Caesar & Loretz GmbH	Wheatgerm oil, refined	18241006	2
Caesar & Loretz GmbH	Wheatgerm oil, refined	18241012	1
Caesar & Loretz GmbH	Wheatgerm oil, refined	19143201	1
Dr. August Wolff/Phönix	Wheatgerm oil, refined	16137403	1
Euro OTC	Wheatgerm oil, refined	1305015-01	1
Fagron	Wheatgerm oil, refined	13D22-N13	1
GEHE	Wheatgerm oil, refined	18000524	1
GEHE	Wheatgerm oil, refined	18241002	1
Ichthyl Phönix	Wheatgerm oil, refined	12220302	1
Caelo	Wheatgerm oil, refined	13011502	1
Caelo	Wheatgerm oil, refined	6137403	1
Caelo	Wheatgerm oil, refined	18241008	1
Noweda	Wheatgerm oil, refined	14356003	1
Phoenix	Wheatgerm oil, refined	15374101	1
Phoenix	Wheatgerm oil, refined	16137403	1
Phoenix	Wheatgerm oil, refined	16321301	1
phönix	Wheatgerm oil, refined	16321301	1
Phönix	Wheatgerm oil, refined	17216701	1
PHÖNIX	Wheatgerm oil, refined	17216705	1
Primavera	Wheatgerm oil, refined	3606132	1
Primavera	Wheatgerm oil, refined	1048L25	1
Sanacorp	Wheatgerm oil, refined	1/AKD2	1
VDL;	Wheatgerm oil, refined	13261603	1
VDL;11.3.16;3,45EUR	Wheatgerm oil, refined	15374101	2

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Supplier	Substance	Batch	Spectra
VDL;3,44EUR;22.05.15	Wheatgerm oil, refined	14356001	1
Caelo	Almond oil, refined	13350007	4
Caelo	Almond oil, refined	14042704	3
Caelo	Almond oil, refined		17
Gehe/Lamotte	Almond oil, refined		1
Kögl	Almond oil, refined		1
phönix	Almond oil, refined		3
xxx	Almond oil, refined		1
Caelo	Apricot kernel oil, refined	13357604	1
Caelo	Avocado oil, refined	13361406	9
Caelo	Avocado oil, refined	14363703	10
Taoasis	Avocado oil, refined		1
Caelo	Borage oil, refined, stabili...	13170606	15
Caelo	Borage oil, refined, stabili...	16266007	16
Caelo	Borage oil, refined, stabili...	14161904	4
	Borage oil, refined, stabili...	123387	1
	Borage oil, refined, stabili...	13170606	1
Caelo	Codliver oil (type A)	12062501	9
Caelo	Codliver oil (type A)	13396403	2
Henry Lamotte Oils GmBh	Codliver oil (type A)		1
Phönix/Lamotte	Codliver oil (type A)		1
Caelo	Corn oil, refined	12141511	1
Caelo	Decyl oleate	14005001	4
Caelo	Decyl oleate	13378403	3
Euro OTC	Decyl oleate	1309018-01	1
allcura/Noweda	Evening primrose oil, refined		1
	Evening primrose oil, refined	1503031-01	1
	Evening primrose oil, refined	150303101	1
Caelo	Evening primrose oil, refined	14258610	20
Caelo	Evening primrose oil, refined	12325103	4
Caelo	Evening primrose oil, refined	14010915	11
Euro OTC	Evening primrose oil, refined	1407002-02	21
Euro OTC	Evening primrose oil, refined	1506001	1
Euro OTC	Evening primrose oil, refined		1
Bombastus	Flaxseed oil, native	281489	2
Bombastus	Flaxseed oil, native	19001510	1
Caelo	Flaxseed oil, native	14087903	1
s.Prüfprotokoll	Flaxseed oil, native		1
Caelo	Grape seed oil, refined	13065302	7
Caelo	Grape seed oil, refined	16092401	1
Caelo	Jojoba oil, native	16070602	11
Gatt-Koller	Jojoba oil, native		1
Caelo	Oleyl oleate (stabilised)	12220205	4
Caelo	Oleyl oleate (stabilised)	12220207	3
Apotheke am Landrain	Olive oil, native		1
Bombastus	Olive oil, native	306949	9
Bombastus	Olive oil, native	19001848	8
Caelo	Olive oil, native	14024409	8
Caelo	Olive oil, native	163274	3
Fagron	Olive oil, native		1
Gehe	Olive oil, native		1
noweda	Olive oil, native		1
Sanacorp	Olive oil, native		1
Caelo	Peanut oil, refined	13306106	15
Caelo	Peanut oil, refined	14115404	10
Caelo	Rapeseed oil, refined	13011008	1
Caelo	Sesame oil, refined	12054508	3
Caelo	Sesame oil, refined	13397402	3
Caelo	Shea butter, refined	15303004	1
Caelo	Shea butter, refined	15144903	1

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Supplier	Substance	Batch	Spectra
Caelo	Shea butter, refined	14261107	2
Euro OTC	Soy lecithin, liquid	1305019-01	1
Euro OTC	Soy lecithin, liquid	1404022-01	2
Caelo	Walnut oil, refined	13202401	3
Caelo	Wheatgerm oil, refined	13261604	3
Caelo	Wheatgerm oil, refined	13011508	2
Caelo	Wheatgerm oil, refined	16137403	3

- 125 210 spectra from 703 *Apo-Ident* customers from a total of 32 518 batches from a further 315 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Triglycerides* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Triglycerides* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	5320	0	51 039
Type B	0	3075	0	65 856
Type C	0	13 065	78	124 936

The substance/substance group *Triglycerides* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.8872 %)
Type B	100.0000 % (> 99.9652 %)	100.0000 % (> 99.8049 %)
Type C	100.0000 % (> 99.6503 %)	99.4065 % (> 99.3837 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Triglycerides* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Sorbitan trioleate	26.86	—
Softisan [®] 649	27.45	—
Permethrin 25% solution	27.46	—
Softisan [®] 378	27.81	—
Paraffin, yellow	33.62	—
Wool alcohol ointment DAB	33.86	—
Metronidazole 25% in white petrolatum	34.00	—
Castor oil	34.63	—
Wool fat	34.64	—
Paraffin, white	35.49	—
Hydrophilic ointment DAB	37.91	—
Pasta Cordes [®]	38.60	—
Emulsifying hydrophobic base gel DAC	39.13	—
Paraffin, light liquid	39.79	—
Isopropyl palmitate	41.07	—
Triglycerides, medium-chain	42.47	—
Squalane	43.05	—
Paraffin, liquid	44.92	—
Triglycerol diisostearate	48.67	—
Unguentum Cordes [®]	49.07	—
Hydrophobic base gel DAC	50.34	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Triglycerides* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31584	31382	1.27	42.31
31210	31210	0.00	57.42
33070	33070	0.00	39.84
31491	31491	0.00	53.77
32730	31210	2.16	57.16
34602	34602	0.00	55.21
30754	31496	7.09	32.63
30863	31496	8.94	32.52
31496	31496	0.00	32.52
31246	31246	0.00	30.93
31346	31801	1.51	30.84
32680	32680	0.00	31.50
33059	33059	0.00	32.88
33085	33085	0.00	32.06
33255	31122	2.67	34.14
31217	31217	0.00	52.96
30878	31361	5.19	73.82
31374	31274	2.18	51.53
31361	31361	0.00	69.24

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32745	31217	3.20	51.84
31677	31361	6.44	72.08
33472	31016	2.66	56.10
31825	31361	5.21	68.24
34701	31609	3.49	49.63
31161	31161	0.00	61.60
31384	31161	3.07	62.42
33510	30981	4.53	65.36
30855	31708	2.40	72.50
34643	34643	0.00	60.85
31460	31460	0.00	69.42
31356	32195	1.29	31.91
34721	34721	0.00	58.14
31572	31572	0.00	68.30
31585	31801	3.86	33.79
30647	31350	1.75	44.66
31589	31460	2.95	68.92
32186	32186	0.00	30.43
31215	31215	0.00	45.70
31708	31708	0.00	68.91
32195	32195	0.00	30.65
31376	34716	2.34	43.14
31775	31775	0.00	70.83
32990	33085	1.48	32.54
32991	32457	3.31	32.63
33063	33063	0.00	33.73
34521	31801	4.00	33.00
31322	31322	0.00	43.80
31482	31322	1.68	43.22
31519	31322	3.34	42.86
33254	34300	5.06	42.48
33876	34300	3.65	41.75
34300	34300	0.00	44.06
34691	31322	2.53	43.30
31378	31491	4.17	54.88
31834	34643	2.89	57.44
32729	31161	3.86	56.34
30873	31350	4.70	44.77
33309	33309	0.00	59.26
31350	31350	0.00	43.27
34716	34716	0.00	40.18
31016	31016	0.00	55.05
31274	31274	0.00	51.75
31344	31274	2.43	52.12
34437	34437	0.00	51.82
30981	30981	0.00	67.08
31121	31121	0.00	61.49
31362	32334	3.53	62.66
32746	31161	3.78	59.41
32334	32334	0.00	62.46
34713	34713	0.00	57.31

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31172	31172	0.00	79.92
31326	33064	5.00	84.78
33064	33064	0.00	78.57
33880	31172	1.60	80.82
34522	33064	5.10	86.33
31513	31513	0.00	28.04
31582	31513	6.43	31.42
31826	31513	5.78	30.59
32300	31513	9.37	30.80
32301	31513	4.26	27.81
31332	31332	0.00	48.21
31609	31609	0.00	49.78
33917	33917	0.00	48.07
34663	34663	0.00	41.24
34718	34718	0.00	41.28
30840	33060	4.41	30.22
31375	31375	0.00	26.86
32683	32683	0.00	27.13
32931	34666	3.43	28.54
33060	33060	0.00	29.72
31250	31250	0.00	27.84
34666	34666	0.00	29.36
31337	31770	1.61	35.31
31122	31122	0.00	35.29
31770	31770	0.00	35.05
31833	31833	0.00	32.11
32188	32188	0.00	34.11
31336	31336	0.00	32.59
34441	34441	0.00	44.86
31662	31801	1.98	32.85
31034	31523	1.18	30.74
34711	34711	0.00	41.79
31801	31801	0.00	31.25
31523	31523	0.00	27.48
32457	32457	0.00	31.25
34753	34753	0.00	29.00
33067	33067	0.00	34.21
30679	31729	2.70	90.43
31178	31729	5.04	89.64
31540	31729	2.76	90.94
31729	31729	0.00	89.55
31792	31729	0.80	89.68
31875	31729	7.63	88.15
31216	31216	0.00	67.57
31380	31216	2.38	67.17
33916	33916	0.00	68.36
31382	31382	0.00	41.24

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all

substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Triglycerides, medium-chain**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31483-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Triglycerides, medium-chain; Oleum neutrale

Special notes

When selecting the *Triglycerides, medium-chain* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Triglycerides, medium-chain	7	15	514

Second-stage model

For differentiation of the substance/substance group *Triglycerides, medium-chain* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Triglycerides, medium-chain*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Triglycerides, m...	13392404	31483	60	AR-14-FG-012976-01
Caelo	Triglycerides, m...	13348507	31484	60	20131028
Euro OTC	Triglycerides, m...	1402019-01	31485	60	20140317
Euro OTC	Triglycerides, m...	1509022	31771	60	20151007*
Euro OTC	Triglycerides, m...	1511011	31804	60	20151125*
Euro OTC	Triglycerides, m...	1601050	31955	60	20160218*
Fagron	Triglycerides, m...	18G13-B01-363706	34674	40	20180824

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 400 spectra of 7 reference samples from the substance/substance group *Triglycerides, medium-chain*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 7 different batches.
- 55 959 spectra from a total of 1109 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 600 spectra of 15 reference samples from the substance/substance group *Triglycerides, medium-chain*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 15 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Triglycerides, medium-chain	161243	32204	40
Caelo	Triglycerides, medium-chain	162385	32697	40
Caelo	Triglycerides, medium-chain	170160	33077	40
Caelo	Triglycerides, medium-chain	170784	33312	40
Caelo	Triglycerides, medium-chain	172177	33672	40
Caelo	Triglycerides, medium-chain	191294	34607	40
Caelo	Triglycerides, medium-chain	191993	34608	40
Caelo	Triglycerides, medium-chain	191951	34609	40
Caelo	Triglycerides, medium-chain	192781	34715	40
Euro OTC	Triglycerides, medium-chain	1603041	32278	40
Euro OTC	Triglycerides, medium-chain	1606035	32464	40
Euro OTC	Triglycerides, medium-chain	1701023	32983	40
Euro OTC	Triglycerides, medium-chain	1709014	33845	40
Euro OTC	Triglycerides, medium-chain	1801034	33997	40
Euro OTC	Triglycerides, medium-chain	1812014	34429	40

- 68 874 spectra from a total of 1487 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 2747 spectra from 553 *Apo-Ident* customers from 522 batches from the substance/substance group *Triglycerides, medium-chain*.
- Among them are spectra of independent samples from 509 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
/Sanacorp 02.05.2016	Triglycerides, medium-chain	15272004	1
00000000	Triglycerides, medium-chain	103899	1
ACM	Triglycerides, medium-chain	KNC0254J15	5
AHD	Triglycerides, medium-chain	17361002	3
AHD 23.12.2014	Triglycerides, medium-chain	14219003	1
Fagron	Triglycerides, medium-chain	14D08-N01	1
Alliance Healthcare	Triglycerides, medium-chain	1302004-02	1
Alliance Healthcare	Triglycerides, medium-chain	1606035-01	1
Caelo	Triglycerides, medium-chain	1060001	1
Alliance/Bionorica	Triglycerides, medium-chain	107080	1
Alliance/Fargon	Triglycerides, medium-chain	15H03-B03-525331	1
Allianz	Triglycerides, medium-chain	120015	1
Anzag	Triglycerides, medium-chain	12078604	2
Anzag	Triglycerides, medium-chain	12256505	1
Anzag	Triglycerides, medium-chain	16124304	1
Anzag	Triglycerides, medium-chain	98569	2
Anzag 11.10.12	Triglycerides, medium-chain	11301109	1
Anzag/Ethics	Triglycerides, medium-chain	109952	1

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Supplier	Substance	Batch	Spectra
Anzag/Henry Lamotte	Triglycerides, medium-chain	1504029-02	1
Euro OTC	Triglycerides, medium-chain	1210002-01	5
apo-ident/ Phönix	Triglycerides, medium-chain	1601050-01	1
Apo-Ident/Noweda	Triglycerides, medium-chain	1606035-02	1
Apomix	Triglycerides, medium-chain	116587	1
Binorica ethics/Phönix	Triglycerides, medium-chain	125596	1
Binorica ethics/Phönix	Triglycerides, medium-chain	125597	1
bio	Triglycerides, medium-chain	105038	1
Bionirca ethics / Allia...	Triglycerides, medium-chain	109951	1
bionorica	Triglycerides, medium-chain	93574	1
bionorica	Triglycerides, medium-chain	107077	1
Bionorica	Triglycerides, medium-chain	58448	11
Bionorica	Triglycerides, medium-chain	69719	2
Bionorica	Triglycerides, medium-chain	79406	1
Bionorica	Triglycerides, medium-chain	87112	2
Bionorica	Triglycerides, medium-chain	87113	1
Bionorica	Triglycerides, medium-chain	91719	2
Bionorica	Triglycerides, medium-chain	150930	1
Bionorica	Triglycerides, medium-chain	95080	1
Bionorica	Triglycerides, medium-chain	107078	1
Bionorica	Triglycerides, medium-chain	107080	2
Bionorica	Triglycerides, medium-chain	4817A-03960	1
Bionorica	Triglycerides, medium-chain	105038	3
Bionorica	Triglycerides, medium-chain	116693	2
Bionorica	Triglycerides, medium-chain	116645	2
Bionorica	Triglycerides, medium-chain	116688	1
Bionorica	Triglycerides, medium-chain	180325	1
Bionorica	Triglycerides, medium-chain	123998	6
Bionorica	Triglycerides, medium-chain	125596	1
Bionorica	Triglycerides, medium-chain	123997	1
Bionorica	Triglycerides, medium-chain	127733	1
Bionorica	Triglycerides, medium-chain	127732	1
Bionorica	Triglycerides, medium-chain	127731	1
Bionorica	Triglycerides, medium-chain	128839	1
Bionorica	Triglycerides, medium-chain	128842	1
Bionorica	Triglycerides, medium-chain	129876	2
Bionorica	Triglycerides, medium-chain	129879	1
Bionorica / Alliance	Triglycerides, medium-chain	103902	1
Bionorica / Alliance He...	Triglycerides, medium-chain	120017	1
Bionorica / Alliance He...	Triglycerides, medium-chain	123997	1
Bionorica / Alliance He...	Triglycerides, medium-chain	116637	1
Bionorica / E	Triglycerides, medium-chain	123999(Miglyol	1
Bionorica / E	Triglycerides, medium-chain	123999	2
bionorica / Phoenix / 0...	Triglycerides, medium-chain	94874	1
Bionorica / Phoenix 03...	Triglycerides, medium-chain	116643	1
bionorica / Phoenix Lei...	Triglycerides, medium-chain	95087	1
Bionorica /G	Triglycerides, medium-chain	129878	1
Bionorica /Gehe 11.02.19	Triglycerides, medium-chain	125596	1
Bionorica /Phönix	Triglycerides, medium-chain	116692	1
Bionorica /Phönix	Triglycerides, medium-chain	116640	2
Bionorica /Phönix	Triglycerides, medium-chain	120015	2
Bionorica Dronabinol-Set	Triglycerides, medium-chain	107078	1
bionorica ethics	Triglycerides, medium-chain	116689	1
bionorica ethics	Triglycerides, medium-chain	128843	1
Bionorica ethics	Triglycerides, medium-chain	91713	2
Bionorica ethics	Triglycerides, medium-chain	94875	1
Bionorica ethics	Triglycerides, medium-chain	105039	1
Bionorica ethics	Triglycerides, medium-chain	107080	2
Bionorica ethics	Triglycerides, medium-chain	107079	2
Bionorica ethics	Triglycerides, medium-chain	103898	2

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Supplier	Substance	Batch	Spectra
Bionorica ethics	Triglycerides, medium-chain	107081	1
Bionorica ethics	Triglycerides, medium-chain	109951	4
Bionorica ethics	Triglycerides, medium-chain	109948	2
Bionorica ethics	Triglycerides, medium-chain	116688	1
Bionorica ethics	Triglycerides, medium-chain	116645	2
Bionorica ethics	Triglycerides, medium-chain	116687	1
Bionorica ethics	Triglycerides, medium-chain	170517	1
Bionorica ethics	Triglycerides, medium-chain	116643	2
Bionorica ethics	Triglycerides, medium-chain	120016	2
Bionorica ethics	Triglycerides, medium-chain	105038	1
Bionorica ethics	Triglycerides, medium-chain	123998	4
Bionorica ethics	Triglycerides, medium-chain	123999	4
Bionorica ethics	Triglycerides, medium-chain	123997	1
Bionorica ethics	Triglycerides, medium-chain	125597	2
Bionorica ethics	Triglycerides, medium-chain	116638	1
Bionorica ethics	Triglycerides, medium-chain	127732	1
Bionorica ethics	Triglycerides, medium-chain	128840	5
Bionorica ethics	Triglycerides, medium-chain	125596	1
Bionorica ethics	Triglycerides, medium-chain	128842	1
Bionorica ethics	Triglycerides, medium-chain	127731	1
Bionorica ethics	Triglycerides, medium-chain	129877	4
Bionorica ethics	Triglycerides, medium-chain	116639	1
Bionorica Ethics	Triglycerides, medium-chain	62424	3
Bionorica Ethics	Triglycerides, medium-chain	75316	1
Bionorica Ethics	Triglycerides, medium-chain	95112	1
Bionorica Ethics	Triglycerides, medium-chain	94879	1
Bionorica Ethics	Triglycerides, medium-chain	94875	1
Bionorica Ethics	Triglycerides, medium-chain	95079	1
Bionorica Ethics	Triglycerides, medium-chain	98570	2
Bionorica Ethics	Triglycerides, medium-chain	103899	1
Bionorica Ethics	Triglycerides, medium-chain	105039	1
Bionorica Ethics	Triglycerides, medium-chain	107077	1
Bionorica Ethics	Triglycerides, medium-chain	107079	1
Bionorica Ethics	Triglycerides, medium-chain	105038	1
Bionorica Ethics	Triglycerides, medium-chain	107080	2
Bionorica Ethics	Triglycerides, medium-chain	109953	1
Bionorica Ethics	Triglycerides, medium-chain	109951	2
Bionorica Ethics	Triglycerides, medium-chain	16689	1
Bionorica Ethics	Triglycerides, medium-chain	109709	1
Bionorica Ethics	Triglycerides, medium-chain	109949	1
Bionorica Ethics	Triglycerides, medium-chain	109950	1
Bionorica Ethics	Triglycerides, medium-chain	105040	1
Bionorica Ethics	Triglycerides, medium-chain	109959	1
Bionorica Ethics	Triglycerides, medium-chain	116688	3
Bionorica Ethics	Triglycerides, medium-chain	116646	2
Bionorica Ethics	Triglycerides, medium-chain	116639	1
Bionorica Ethics	Triglycerides, medium-chain	116640	1
Bionorica Ethics	Triglycerides, medium-chain	120015	1
Bionorica Ethics	Triglycerides, medium-chain	123015	1
Bionorica Ethics	Triglycerides, medium-chain	120017	1
Bionorica Ethics	Triglycerides, medium-chain	105044	1
Bionorica Ethics	Triglycerides, medium-chain	125596	3
Bionorica ethics / Alli...	Triglycerides, medium-chain	109951	1
Bionorica ethics / Alli...	Triglycerides, medium-chain	127732	1
Bionorica ethics / Alli...	Triglycerides, medium-chain	127731	2
Bionorica ethics GmbH	Triglycerides, medium-chain	128839	1
Bionorica ethics GmbH	Triglycerides, medium-chain	250696	1
Bionorica ethics GmbH/B...	Triglycerides, medium-chain	129877	1
Bionorica ethics/AHD	Triglycerides, medium-chain	3(0000109950)	1
Bionorica ethics/AHD	Triglycerides, medium-chain	4(0000116692)	1

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Supplier	Substance	Batch	Spectra
Bionorica ethics/AHD	Triglycerides, medium-chain	5(171102)	1
Bionorica ethics/AHD	Triglycerides, medium-chain	7(0000116643)	1
Bionorica ethics/AHD	Triglycerides, medium-chain	6(0000116646)	1
Bionorica ethics/Allian...	Triglycerides, medium-chain	116646	1
Bionorica ethics/Allian...	Triglycerides, medium-chain	125596	3
Bionorica ethics/Kehr	Triglycerides, medium-chain	95082	1
Bionorica ethics/Noweda	Triglycerides, medium-chain	105039	2
Bionorica ethics/Noweda	Triglycerides, medium-chain	107077	2
Bionorica Ethics/Noweda	Triglycerides, medium-chain	85113	3
Bionorica Ethics/Noweda	Triglycerides, medium-chain	95112	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	109950	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	170517	2
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116646	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116642	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116639	2
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116641	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	109949	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123014	2
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123997	3
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123999	2
Bionorica ethics/Phönix...	Triglycerides, medium-chain	129877	4
Bionorica ethics/Sanaco...	Triglycerides, medium-chain	150930	1
Bionorica ethics/Sanaco...	Triglycerides, medium-chain	97884	1
Bionorica ethics/Sanaco...	Triglycerides, medium-chain	93569	1
Bionorica etics	Triglycerides, medium-chain	116643	1
Bionorica etics	Triglycerides, medium-chain	120017	1
Bionorica SE	Triglycerides, medium-chain	107080	2
Bionorica SE	Triglycerides, medium-chain	116689	1
Bionorica SE	Triglycerides, medium-chain	127732	1
Bionorica SE/Phönix	Triglycerides, medium-chain	116643	1
Bionorica/ Alliance	Triglycerides, medium-chain	116639	1
Bionorica/ Alliance	Triglycerides, medium-chain	116641	1
Bionorica/ Alliance	Triglycerides, medium-chain	125596	1
Bionorica/ Anzag	Triglycerides, medium-chain	8(0000126132)	1
Bionorica/ Anzag	Triglycerides, medium-chain	9(0000123015)	1
Bionorica/ Anzag	Triglycerides, medium-chain	10(0000123999)	1
Bionorica/ Anzag	Triglycerides, medium-chain	12(0000251649)	1
Bionorica/ Anzag	Triglycerides, medium-chain	13(0000125596)	1
Bionorica/ Anzag	Triglycerides, medium-chain	14(0000125596)	1
Bionorica/ Anzag	Triglycerides, medium-chain	15(0000127732)	1
Bionorica/ Anzag	Triglycerides, medium-chain	16(0000127732)	1
Bionorica/ Anzag	Triglycerides, medium-chain	17(0000127731)	1
Bionorica/ Anzag	Triglycerides, medium-chain	18(0000128842)	1
Bionorica/ Anzag	Triglycerides, medium-chain	19(0000128841)	1
Bionorica/ Anzag	Triglycerides, medium-chain	20(0000128843)	1
Bionorica/ Gehe	Triglycerides, medium-chain	120016	1
Bionorica/ Gehe	Triglycerides, medium-chain	123997	3
Bionorica/ Gehe	Triglycerides, medium-chain	127732	1
Bionorica/ Gehe	Triglycerides, medium-chain	127731	1
Bionorica/ Gehe	Triglycerides, medium-chain	128841	2
Bionorica/ Gehe	Triglycerides, medium-chain	128843	1
Bionorica/ Gehe	Triglycerides, medium-chain	129876	1
Bionorica/ Noweda	Triglycerides, medium-chain	109950	1
Bionorica/ Noweda	Triglycerides, medium-chain	120017	1
bionorica/ Phoenix Leip...	Triglycerides, medium-chain	103900	1
bionorica/ Phoenix Leip...	Triglycerides, medium-chain	98569	1
Bionorica/ Sanacorp	Triglycerides, medium-chain	107077	1
Bionorica/ Sanacorp	Triglycerides, medium-chain	171102	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	105038	2
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109951	1

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Supplier	Substance	Batch	Spectra
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109952	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109950	2
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109949	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116689	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116687	2
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116642	2
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116639	2
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116640	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116638	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116643	3
Bionorica/Anzag	Triglycerides, medium-chain	98569	1
Bionorica/Anzag	Triglycerides, medium-chain	10538	1
Bionorica/Fiebig	Triglycerides, medium-chain	116687	1
Bionorica/Gehe	Triglycerides, medium-chain	105039	1
Bionorica/Gehe	Triglycerides, medium-chain	116638	1
BIONORICA/GEHE	Triglycerides, medium-chain	109950	1
BIONORICA/GEHE	Triglycerides, medium-chain	120017	1
BIONORICA/GEHE	Triglycerides, medium-chain	127732	2
BIONORICA/GEHE	Triglycerides, medium-chain	129876	1
BIONORICA/GEHE 26.06.18	Triglycerides, medium-chain	116687	1
BIONORICA/GEHE 15.03.19	Triglycerides, medium-chain	125597	1
Bionorica/Kehr	Triglycerides, medium-chain	151130	1
Bionorica/Kehr	Triglycerides, medium-chain	109951	1
Bionorica/Kehr	Triglycerides, medium-chain	116686	1
Bionorica/Krieger	Triglycerides, medium-chain	98569	1
Bionorica/Noweda	Triglycerides, medium-chain	93566	1
Bionorica/Noweda	Triglycerides, medium-chain	98573	1
Bionorica/Noweda	Triglycerides, medium-chain	103899	2
Bionorica/Noweda	Triglycerides, medium-chain	103900	1
Bionorica/Noweda	Triglycerides, medium-chain	103902	1
Bionorica/Noweda	Triglycerides, medium-chain	107079	1
Bionorica/Noweda	Triglycerides, medium-chain	107080	1
Bionorica/Noweda	Triglycerides, medium-chain	105038	1
BIONORICA/Noweda	Triglycerides, medium-chain	128842	1
Bionorica/phoenix	Triglycerides, medium-chain	1318A-03960	1
Bionorica/Phoenix	Triglycerides, medium-chain	171102	1
Bionorica/Phoenix	Triglycerides, medium-chain	116642	1
Bionorica/Phoenix	Triglycerides, medium-chain	123999	1
Bionorica/Phoenix	Triglycerides, medium-chain	127732	1
Bionorica/Phoenix	Triglycerides, medium-chain	129876	1
bionorica/Phoenix/29.12...	Triglycerides, medium-chain	95080	1
Bionorica/Phönix	Triglycerides, medium-chain	105038	1
Bionorica/Phönix	Triglycerides, medium-chain	109953	2
Bionorica/Phönix	Triglycerides, medium-chain	116587	1
Bionorica/Phönix	Triglycerides, medium-chain	116642	1
Bionorica/Phönix	Triglycerides, medium-chain	120015	1
Bionorica/Phönix	Triglycerides, medium-chain	127733	2
Bionorica/Phönix	Triglycerides, medium-chain	257537	1
Bionorica/Phönix	Triglycerides, medium-chain	123998	1
Bionorica/Phönix	Triglycerides, medium-chain	129877	1
Bionorica/Phönix IE1125...	Triglycerides, medium-chain	128843	5
Bionorica/Sanacorp	Triglycerides, medium-chain	123997	1
Bionorica/Sanacorp	Triglycerides, medium-chain	123999	1
Bionorica/Sanacorp	Triglycerides, medium-chain	125596	1
Bionorica/Sanacorp WE:	Triglycerides, medium-chain	85532	1
BionoricaEthics	Triglycerides, medium-chain	116643	2
Bionoricaethics (Dronab...	Triglycerides, medium-chain	128843(0137640)	1
Bionoricaethics / K	Triglycerides, medium-chain	120017(Miglyol	1
Bionoricaethics / K	Triglycerides, medium-chain	120017	1
Bionoricaethics/ E (Dro...	Triglycerides, medium-chain	170517	1

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Supplier	Substance	Batch	Spectra
BionoricaEthics/ Phönix	Triglycerides, medium-chain	128840	1
BionoricaEthics/Noweda	Triglycerides, medium-chain	105038	1
BionoricaEthics/Noweda	Triglycerides, medium-chain	105041	1
bionoricaEthiks/Phoenix	Triglycerides, medium-chain	116687	1
BionoricPhoenix	Triglycerides, medium-chain	958448	1
Bombastus	Triglycerides, medium-chain	17361001	1
Bombastus	Triglycerides, medium-chain	17236202	2
Bombastus	Triglycerides, medium-chain	58/18	1
Bombastus	Triglycerides, medium-chain	116587	1
Bombastus	Triglycerides, medium-chain	15139608	1
Bombastus	Triglycerides, medium-chain	1603041-02	1
Bombastus	Triglycerides, medium-chain	1801034-01	1
Caelo	Triglycerides, medium-chain	13348503	8
Caelo	Triglycerides, medium-chain	13348506	5
Caelo	Triglycerides, medium-chain	11D29-N01	1
Caelo	Triglycerides, medium-chain	11301109	1
Caelo	Triglycerides, medium-chain	4110i-01998	1
Caelo	Triglycerides, medium-chain	11154601	1
Caelo	Triglycerides, medium-chain	12078605	2
Caelo	Triglycerides, medium-chain	20270312-3	1
Caelo	Triglycerides, medium-chain	8011301	1
Caelo	Triglycerides, medium-chain	12256505	22
Caelo	Triglycerides, medium-chain	1210002-01	1
Caelo	Triglycerides, medium-chain	1226505	1
Caelo	Triglycerides, medium-chain	18031307	1
Caelo	Triglycerides, medium-chain	12253802	4
Caelo	Triglycerides, medium-chain	1803111	2
Caelo	Triglycerides, medium-chain	1256504	1
Caelo	Triglycerides, medium-chain	12356908	21
Caelo	Triglycerides, medium-chain	2113Q01998	1
Caelo	Triglycerides, medium-chain	31051303	1
Caelo	Triglycerides, medium-chain	10194002	1
Caelo	Triglycerides, medium-chain	13095304	12
Caelo	Triglycerides, medium-chain	1115805	1
Caelo	Triglycerides, medium-chain	50775165	1
Caelo	Triglycerides, medium-chain	13098601	16
Caelo	Triglycerides, medium-chain	23082013B	1
Caelo	Triglycerides, medium-chain	2101305	1
Caelo	Triglycerides, medium-chain	12101303	1
Caelo	Triglycerides, medium-chain	13098605	5
Caelo	Triglycerides, medium-chain	101001	1
Caelo	Triglycerides, medium-chain	18111309	1
Caelo	Triglycerides, medium-chain	13210301	1
Caelo	Triglycerides, medium-chain	13348501	5
Caelo	Triglycerides, medium-chain	13177111	1
Caelo	Triglycerides, medium-chain	14098306	3
Caelo	Triglycerides, medium-chain	14098305	1
Caelo	Triglycerides, medium-chain	14330503	1
Caelo	Triglycerides, medium-chain	15239802	1
Caelo	Triglycerides, medium-chain	15012016	1
Caelo	Triglycerides, medium-chain	60492256	1
Caelo	Triglycerides, medium-chain	15374201	1
Caelo	Triglycerides, medium-chain	11207501	1
Caelo	Triglycerides, medium-chain	10356205	1
Caelo	Triglycerides, medium-chain	6061201	1
Caelo	Triglycerides, medium-chain	13081205	1
Caelo	Triglycerides, medium-chain	11207502	2
Caelo	Triglycerides, medium-chain	27101202	1
Caelo	Triglycerides, medium-chain	14101704	1
Caelo	Triglycerides, medium-chain	11031502	1

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	6051503	1
Caelo	Triglycerides, medium-chain	15080603	1
Caelo	Triglycerides, medium-chain	13159607	1
Caelo	Triglycerides, medium-chain	15272005	31
Caelo	Triglycerides, medium-chain	12079604	1
Caelo	Triglycerides, medium-chain	15270004	1
Caelo	Triglycerides, medium-chain	1572003	1
Caelo	Triglycerides, medium-chain	1527003	1
Caelo	Triglycerides, medium-chain	15379608	21
Caelo	Triglycerides, medium-chain	15379611	11
Caelo	Triglycerides, medium-chain	1572005	1
Caelo	Triglycerides, medium-chain	152722007	1
Caelo	Triglycerides, medium-chain	15272007	11
Caelo	Triglycerides, medium-chain	1537908	1
Caelo	Triglycerides, medium-chain	15379610	16
Caelo	Triglycerides, medium-chain	16124304	12
Caelo	Triglycerides, medium-chain	15379612	14
Caelo	Triglycerides, medium-chain	16124308	22
Caelo	Triglycerides, medium-chain	15379602/170314M	1
Caelo	Triglycerides, medium-chain	20165321	1
Caelo	Triglycerides, medium-chain	1001008-01	1
Caelo	Triglycerides, medium-chain	11051706	1
Caelo	Triglycerides, medium-chain	17016002	25
Caelo	Triglycerides, medium-chain	17016001	39
Caelo	Triglycerides, medium-chain	16124310	1
Caelo	Triglycerides, medium-chain	27071702	1
Caelo	Triglycerides, medium-chain	13124310	1
Caelo	Triglycerides, medium-chain	1606035-03	1
Caelo	Triglycerides, medium-chain	16H18-B01	1
Caelo	Triglycerides, medium-chain	17016008	16
Caelo	Triglycerides, medium-chain	17076008	1
Caelo	Triglycerides, medium-chain	17194901	2
Caelo	Triglycerides, medium-chain	18121703	1
Caelo	Triglycerides, medium-chain	1504029-01	1
Caelo	Triglycerides, medium-chain	17326202	1
Caelo	Triglycerides, medium-chain	1706007	1
Caelo	Triglycerides, medium-chain	17361001	58
Caelo	Triglycerides, medium-chain	17F16-B02-341874	1
Caelo	Triglycerides, medium-chain	116692	1
Caelo	Triglycerides, medium-chain	23041803	1
Caelo	Triglycerides, medium-chain	18118804	1
Caelo	Triglycerides, medium-chain	116646	1
Caelo	Triglycerides, medium-chain	21071804	1
Caelo	Triglycerides, medium-chain	18118801	42
Caelo	Triglycerides, medium-chain	116643	1
Caelo	Triglycerides, medium-chain	116640	1
Caelo	Triglycerides, medium-chain	18118802	8
Caelo	Triglycerides, medium-chain	17361003	1
Caelo	Triglycerides, medium-chain	18118808	12
Caelo	Triglycerides, medium-chain	28111806	1
Caelo	Triglycerides, medium-chain	1821953	1
Caelo	Triglycerides, medium-chain	18008807	1
Caelo	Triglycerides, medium-chain	17322107	1
Caelo	Triglycerides, medium-chain	18239004	9
Caelo	Triglycerides, medium-chain	1812014-01	3
Caelo	Triglycerides, medium-chain	18239003	16
Caelo	Triglycerides, medium-chain	127732	1
Caelo	Triglycerides, medium-chain	19055101	1
Caelo	Triglycerides, medium-chain	1612307	1
Caelo	Triglycerides, medium-chain	19060001	3

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	150402902	1
Caelo	Triglycerides, medium-chain	161243047	1
Caelo	Triglycerides, medium-chain	170420MT/16124308	1
Caelo	Triglycerides, medium-chain	1411009-02	1
Caelo	Triglycerides, medium-chain	17F16-B02	2
Caelo	Triglycerides, medium-chain	3413I-01998	1
Caelo	Triglycerides, medium-chain	14219009	9
Caelo	Triglycerides, medium-chain	15272004	40
Caelo	Triglycerides, medium-chain	1603041-02	3
Caelo	Triglycerides, medium-chain	1606035-02	1
Caelo	Triglycerides, medium-chain	123999	3
Caelo	Triglycerides, medium-chain	1504029-02	1
Caelo	Triglycerides, medium-chain	12356903	9
Caelo	Triglycerides, medium-chain	12356901	7
Caelo	Triglycerides, medium-chain	14219003	11
Caelo	Triglycerides, medium-chain	12078604	15
Caelo	Triglycerides, medium-chain	116641	1
Caelo	Triglycerides, medium-chain	15H03-B03-312351	1
Caelo	Triglycerides, medium-chain	146(18238902)	1
Caelo	Triglycerides, medium-chain	11(0000125596)	1
Caelo	Triglycerides, medium-chain	17194902	8
Caelo	Triglycerides, medium-chain	14219007	10
Caelo	Triglycerides, medium-chain	15272003	28
Caelo	Triglycerides, medium-chain	171123M/17016009	1
Caelo	Triglycerides, medium-chain	15272006	16
Caelo	Triglycerides, medium-chain	15H03-B03(BTM-Set)	1
Caelo	Triglycerides, medium-chain	3113506	1
Caelo	Triglycerides, medium-chain	4817A-01998	1
Caelo	Triglycerides, medium-chain	17361002	19
Caelo	Triglycerides, medium-chain	1302004-01	1
Caelo	Triglycerides, medium-chain	16124307	66
Caelo	Triglycerides, medium-chain	17236203	17
Caelo	Triglycerides, medium-chain	1115811	1
Caelo	Triglycerides, medium-chain	13177102	21
Caelo	Triglycerides, medium-chain	11154602	2
Caelo	Triglycerides, medium-chain	15139607	20
Caelo	Triglycerides, medium-chain	105041	1
Caelo	Triglycerides, medium-chain	1256505	1
Caelo	Triglycerides, medium-chain	15139604	15
Caelo	Triglycerides, medium-chain	95084	4
Caelo	Triglycerides, medium-chain	16288504	1
Caelo	Triglycerides, medium-chain	17016007	53
Caelo	Triglycerides, medium-chain	1805020-01	1
Caelo	Triglycerides, medium-chain	614M1998	1
Caelo	Triglycerides, medium-chain	19060004	1
Caelo	Triglycerides, medium-chain	1572006	1
Caelo	Triglycerides, medium-chain	15242006	1
Caelo	Triglycerides, medium-chain	15376911	5
Caelo	Triglycerides, medium-chain	15H03-B03-328583	1
Caelo	Triglycerides, medium-chain	16124306/170518M	1
Caelo	Triglycerides, medium-chain	150518	1
Caelo	Triglycerides, medium-chain	16238501	1
Caelo	Triglycerides, medium-chain	180109M/17236204	1
Caelo	Triglycerides, medium-chain	180206M/17236204	1
Caelo	Triglycerides, medium-chain	109948	3
Caelo	Triglycerides, medium-chain	116691	2
Caelo	Triglycerides, medium-chain	71142383	1
Caelo	Triglycerides, medium-chain	1818801	1
Caelo	Triglycerides, medium-chain	181188802	1
Caelo	Triglycerides, medium-chain	18238901	33

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	123998	3
Caelo	Triglycerides, medium-chain	18238902	14
Caelo	Triglycerides, medium-chain	15379609	16
Caelo	Triglycerides, medium-chain	11207503	1
Caelo	Triglycerides, medium-chain	12356909	4
Caelo	Triglycerides, medium-chain	12356904	1
Caelo	Triglycerides, medium-chain	14380802	12
Caelo	Triglycerides, medium-chain	15139605	15
Caelo	Triglycerides, medium-chain	16124309	1
Caelo	Triglycerides, medium-chain	183238901	1
Caelo	Triglycerides, medium-chain	12256504	6
Caelo	Triglycerides, medium-chain	1225604	1
Caelo	Triglycerides, medium-chain	13177101	9
Caelo	Triglycerides, medium-chain	13348502	7
Caelo	Triglycerides, medium-chain	14380804	24
Caelo	Triglycerides, medium-chain	1539605	1
Caelo	Triglycerides, medium-chain	1601050-01	2
Caelo	Triglycerides, medium-chain	15272008	2
Caelo	Triglycerides, medium-chain	1537961	1
Caelo	Triglycerides, medium-chain	15H-B03-525331	1
Caelo	Triglycerides, medium-chain	15H-B03-525120	1
Caelo	Triglycerides, medium-chain	10124307	1
Caelo	Triglycerides, medium-chain	16238508	1
Caelo	Triglycerides, medium-chain	17236202	41
Caelo	Triglycerides, medium-chain	1906002	1
Caelo	Triglycerides, medium-chain	2014030260	1
Caelo	Triglycerides, medium-chain	13095306	3
Caelo	Triglycerides, medium-chain	59/AKD7	1
Caelo	Triglycerides, medium-chain	1606035-01	1
Caelo	Triglycerides, medium-chain	116689	1
Caelo	Triglycerides, medium-chain	18118807	37
Caelo	Triglycerides, medium-chain	1801034-02	2
Caelo	Triglycerides, medium-chain	613A-01998	1
Caeolo/Noweda	Triglycerides, medium-chain	15379608	1
Caesar	Triglycerides, medium-chain	17016007	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	12078603	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	13098601	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	116642	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	18238901	4
Caesar & Loretz GmbH	Triglycerides, medium-chain	18239003	2
Caesar & Loretz GmbH / ...	Triglycerides, medium-chain	18238902	1
Caesar & Loretz GmbH Hi...	Triglycerides, medium-chain	15379610	1
Caesar & Loretz GmbH, P...	Triglycerides, medium-chain	17016001	1
Caesar & Loretz GmbH/ M...	Triglycerides, medium-chain	19060001	1
Caesar & Loretz GmbH/K	Triglycerides, medium-chain	125596	1
Caesar Loretz	Triglycerides, medium-chain	19055101	1
Caesar und Loretz GmbH	Triglycerides, medium-chain	17016007	1
Caesar&Lorenz	Triglycerides, medium-chain	17016001	1
Caesar&lorenz,Phoenix	Triglycerides, medium-chain	13177102	1
Caesar&lorenz,Phoenix	Triglycerides, medium-chain	14219003	1
Caesar/Alliance	Triglycerides, medium-chain	14219007	1
Caesar/Noweda	Triglycerides, medium-chain	11301104	1
Caesar/Noweda	Triglycerides, medium-chain	13177109	1
Caolo- Phönix	Triglycerides, medium-chain	14098306	1
Caolo/NOWEDA	Triglycerides, medium-chain	18118802	1
Cealo	Triglycerides, medium-chain	16124307	1
celo/phönix	Triglycerides, medium-chain	13095306	1
Cremer Oleo GmbH & Co K...	Triglycerides, medium-chain	15H03-B03-525120	1
Defektur	Triglycerides, medium-chain	1710910-b	1
Delta	Triglycerides, medium-chain	17361001	1

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Supplier	Substance	Batch	Spectra
Dr. Wolff/Gehe	Triglycerides, medium-chain	1801034-02	1
Ebert	Triglycerides, medium-chain	13098601	1
Ebert 12.10.16	Triglycerides, medium-chain	15379611	1
eigene Herstellung	Triglycerides, medium-chain	1712907-a	1
Eurho	Triglycerides, medium-chain	1205015-01	1
EuRho	Triglycerides, medium-chain	1111037-01	1
EuRho	Triglycerides, medium-chain	4121201	1
EuRho	Triglycerides, medium-chain	1406016-01	1
EuRho	Triglycerides, medium-chain	1801034-02	1
Eurho/Phoenix	Triglycerides, medium-chain	13095303	2
EuRho/Phönix	Triglycerides, medium-chain	13020004-02	1
EuRho/Phönix	Triglycerides, medium-chain	1411009-02	1
Euro OTC	Triglycerides, medium-chain	160304102	1
Euro OTC	Triglycerides, medium-chain	150902201	1
Euro OTC	Triglycerides, medium-chain	1105005-01	2
Euro OTC	Triglycerides, medium-chain	1007009-01	1
Euro OTC	Triglycerides, medium-chain	1411009-02	6
Euro OTC	Triglycerides, medium-chain	1504029-02	11
Euro OTC	Triglycerides, medium-chain	1509022-01	4
Euro OTC	Triglycerides, medium-chain	160105001	2
Euro OTC	Triglycerides, medium-chain	15379612	1
Euro OTC	Triglycerides, medium-chain	1600105001	1
Euro OTC	Triglycerides, medium-chain	17016002	1
Euro OTC	Triglycerides, medium-chain	1701023-01	8
Euro OTC	Triglycerides, medium-chain	1805020-01	13
Euro OTC	Triglycerides, medium-chain	71161892	1
Euro OTC	Triglycerides, medium-chain	18118801	1
Euro OTC	Triglycerides, medium-chain	1902005-01	3
Euro OTC	Triglycerides, medium-chain	1601050-01	38
Euro OTC	Triglycerides, medium-chain	1504029-01	8
Euro OTC	Triglycerides, medium-chain	130200401	1
Euro OTC	Triglycerides, medium-chain	61140578	1
Euro OTC	Triglycerides, medium-chain	1205015-01	3
Euro OTC	Triglycerides, medium-chain	1111037-01	1
Euro OTC	Triglycerides, medium-chain	1302004-02	8
Euro OTC	Triglycerides, medium-chain	1411009-01	8
Euro OTC	Triglycerides, medium-chain	41141312	1
Euro OTC	Triglycerides, medium-chain	160105	1
Euro OTC	Triglycerides, medium-chain	GT-8009020616	1
Euro OTC	Triglycerides, medium-chain	160603502	1
Euro OTC	Triglycerides, medium-chain	1801034-01	27
Euro OTC	Triglycerides, medium-chain	1801034-02	12
Euro OTC	Triglycerides, medium-chain	1606035-01	29
Euro OTC	Triglycerides, medium-chain	1606035-02	17
Euro OTC	Triglycerides, medium-chain	1902005-02	2
Euro OTC	Triglycerides, medium-chain	1411009-002	1
Euro OTC	Triglycerides, medium-chain	1511011-01	11
Euro OTC	Triglycerides, medium-chain	1309025-01	2
Euro OTC	Triglycerides, medium-chain	151101101	1
Euro OTC	Triglycerides, medium-chain	1302004-01	12
Euro OTC	Triglycerides, medium-chain	71143373	2
Euro OTC	Triglycerides, medium-chain	1603041-01	6
Euro OTC	Triglycerides, medium-chain	58448	2
Euro OTC	Triglycerides, medium-chain	67940	2
Euro OTC	Triglycerides, medium-chain	1406016-01	5
Euro OTC	Triglycerides, medium-chain	2614A-01998	1
Euro OTC	Triglycerides, medium-chain	1603041-02	25
Euro OTC	Triglycerides, medium-chain	160427	1
Euro OTC	Triglycerides, medium-chain	1812014-01	12
Euro OTC	Triglycerides, medium-chain	15379610	1

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Supplier	Substance	Batch	Spectra
Euro/ Phönix	Triglycerides, medium-chain	1117Q-01998	1
Euro OTC	Triglycerides, medium-chain	700282	2
Euro OTC	Triglycerides, medium-chain	1709014-01	19
Euro OTC	Triglycerides, medium-chain	71161992	6
Euro OTC	Triglycerides, medium-chain	1606035-03	8
Euro OTC	Triglycerides, medium-chain	1709014-02	9
Euro OTC	Triglycerides, medium-chain	170901401	1
Euro OTC	Triglycerides, medium-chain	1509022-01G	1
Euro OTC	Triglycerides, medium-chain	127733	3
Euro OTC	Triglycerides, medium-chain	1709014-01-20180404M	1
Fagron	Triglycerides, medium-chain	14G25-B03	3
Fagron	Triglycerides, medium-chain	170517	3
Fagron	Triglycerides, medium-chain	10K09-0031	1
Fagron	Triglycerides, medium-chain	12C27-N02	1
Fagron	Triglycerides, medium-chain	12I04-N07	8
Fagron	Triglycerides, medium-chain	12K07-N22	5
Fagron	Triglycerides, medium-chain	13E24-N04	13
Fagron	Triglycerides, medium-chain	12I04-N07	1
Fagron	Triglycerides, medium-chain	13H02-N03	1
Fagron	Triglycerides, medium-chain	13H02N03	1
Fagron	Triglycerides, medium-chain	14G25B03	1
Fagron	Triglycerides, medium-chain	14D11-N01	1
Fagron	Triglycerides, medium-chain	14G25-B03-305014	1
Fagron	Triglycerides, medium-chain	12/04-N07	1
Fagron	Triglycerides, medium-chain	140514	1
Fagron	Triglycerides, medium-chain	15D24-B03-525046	2
Fagron	Triglycerides, medium-chain	15D24B03525046	1
Fagron	Triglycerides, medium-chain	15H03-B03	4
Fagron	Triglycerides, medium-chain	15H03-B03-312924	5
Fagron	Triglycerides, medium-chain	15D24-B03-307759	2
Fagron	Triglycerides, medium-chain	150518	4
Fagron	Triglycerides, medium-chain	15H03-B03-525189	2
Fagron	Triglycerides, medium-chain	15H03-B03-318529	7
Fagron	Triglycerides, medium-chain	15H03-B03-325574	2
Fagron	Triglycerides, medium-chain	15403-B03-318529	1
Fagron	Triglycerides, medium-chain	15H03-Bo3-318529	1
Fagron	Triglycerides, medium-chain	15H03-Bo3-311235	1
Fagron	Triglycerides, medium-chain	16H18-B01-525420	5
Fagron	Triglycerides, medium-chain	15H03-B03-328583	3
Fagron	Triglycerides, medium-chain	16H18-B01	4
Fagron	Triglycerides, medium-chain	15H03-B03-318530	1
Fagron	Triglycerides, medium-chain	15H03B03312315	1
Fagron	Triglycerides, medium-chain	16H18-B01-525506	9
Fagron	Triglycerides, medium-chain	27101710	1
Fagron	Triglycerides, medium-chain	1606035-01	1
Fagron	Triglycerides, medium-chain	17F16-B02-525622	11
Fagron	Triglycerides, medium-chain	17F16-B02-525621	2
Fagron	Triglycerides, medium-chain	17F16-802	2
Fagron	Triglycerides, medium-chain	17F16-B02-341874	3
Fagron	Triglycerides, medium-chain	109948	1
Fagron	Triglycerides, medium-chain	18A19-B04	9
Fagron	Triglycerides, medium-chain	1801034-01	1
Fagron	Triglycerides, medium-chain	18A19B04525725	1
Fagron	Triglycerides, medium-chain	18A19-B04-525726	6
Fagron	Triglycerides, medium-chain	18a19-bo4-350476	1
Fagron	Triglycerides, medium-chain	17F16B02-341874	1
Fagron	Triglycerides, medium-chain	18A19-B04-525821	4
Fagron	Triglycerides, medium-chain	525837	1
Fagron	Triglycerides, medium-chain	18G13-B01-525837	2
Fagron	Triglycerides, medium-chain	18G13-B01-352212	1

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Supplier	Substance	Batch	Spectra
Fagron	Triglycerides, medium-chain	18G13-B01	3
Fagron	Triglycerides, medium-chain	18G13-B01-525912	1
Fagron	Triglycerides, medium-chain	18G13-B01-525948	2
Fagron	Triglycerides, medium-chain	18G13-B01-353926	1
Fagron	Triglycerides, medium-chain	IoIO1eoGmbH160427	1
Fagron	Triglycerides, medium-chain	18G13B01357639	1
Fagron	Triglycerides, medium-chain	18A19/B04/348506	1
Fagron	Triglycerides, medium-chain	12A20-N16	1
Fagron	Triglycerides, medium-chain	18A19-B04-350476	1
Fagron	Triglycerides, medium-chain	18G13-B01-355309	4
Fagron	Triglycerides, medium-chain	14G25-B03-296937	6
Fagron	Triglycerides, medium-chain	15H03-B03-525271	4
Fagron	Triglycerides, medium-chain	15H03-B03_318529	1
Fagron	Triglycerides, medium-chain	16124308	1
Fagron	Triglycerides, medium-chain	11L19-N20	1
Fagron	Triglycerides, medium-chain	14K28-N01	2
Fagron	Triglycerides, medium-chain	19I30-F03-365619	1
Fagron	Triglycerides, medium-chain	181201401	1
Fagron	Triglycerides, medium-chain	17F16-B02-525657	3
Fagron	Triglycerides, medium-chain	171209	1
Fagron	Triglycerides, medium-chain	17F16-B02	4
Fagron	Triglycerides, medium-chain	18G13-B01-525781	1
Fagron	Triglycerides, medium-chain	16H18-B01-331028	6
Fagron	Triglycerides, medium-chain	16h18-b01-331028	1
Fagron	Triglycerides, medium-chain	110321	1
Fagron	Triglycerides, medium-chain	13j25-b11	1
Fagron	Triglycerides, medium-chain	1210002-01	3
Fagron	Triglycerides, medium-chain	15H03-B03-322735	4
Fagron	Triglycerides, medium-chain	11G28-N07	1
Fagron	Triglycerides, medium-chain	14G25-B03-302294	12
Fagron	Triglycerides, medium-chain	15H03-B03-312351	9
Fagron	Triglycerides, medium-chain	160427	2
Fagron	Triglycerides, medium-chain	116638	1
Fagron	Triglycerides, medium-chain	105040	1
Fagron	Triglycerides, medium-chain	120604	2
Fagron	Triglycerides, medium-chain	130502	1
Fagron	Triglycerides, medium-chain	13J21-N06	1
Fagron	Triglycerides, medium-chain	15H03-B03322735	1
Fagron	Triglycerides, medium-chain	161123	4
Fagron	Triglycerides, medium-chain	18G13-B01-353059	2
Fagron	Triglycerides, medium-chain	15H03-B03-525225	2
Fagron	Triglycerides, medium-chain	15H03-B03-525331	3
Fagron	Triglycerides, medium-chain	15H03-B03-525383	1
Fagron	Triglycerides, medium-chain	16H18-B01-525477	2
Fagron	Triglycerides, medium-chain	18A19-B04-345025	3
Fagron	Triglycerides, medium-chain	18A19-B04-525713	1
Fagron	Triglycerides, medium-chain	18A19B04350476	1
Fagron	Triglycerides, medium-chain	18G13-B01-525871	1
Fagron	Triglycerides, medium-chain	17F16-B02-340113	3
Fagron	Triglycerides, medium-chain	18118801	1
Fagron	Triglycerides, medium-chain	18239003	1
Fagron	Triglycerides, medium-chain	16H18-B01-525531	2
Fagron	Triglycerides, medium-chain	18A19-B04-525705	3
Fagron	Triglycerides, medium-chain	15H03-B03-525120	8
Fargon	Triglycerides, medium-chain	150518	1
Fargon/Phönix	Triglycerides, medium-chain	150518	1
Fargon/Sanacorp	Triglycerides, medium-chain	11L19-N20	1
Fiebig	Triglycerides, medium-chain	11207502	1
Fiebig	Triglycerides, medium-chain	16124308	3
Fiebig	Triglycerides, medium-chain	17016002	1

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Supplier	Substance	Batch	Spectra
Fiebig	Triglycerides, medium-chain	16124310	1
Fiebig	Triglycerides, medium-chain	17016007	1
Fiebig	Triglycerides, medium-chain	17016008	1
Fiebig	Triglycerides, medium-chain	17236203	4
Fiebig	Triglycerides, medium-chain	17361001	1
Fiebig	Triglycerides, medium-chain	18118808	1
Fiebig	Triglycerides, medium-chain	18238902	4
Fiebig	Triglycerides, medium-chain	18239004	1
Fiebig/ THC Pharma	Triglycerides, medium-chain	105043	1
Gatt-Koller	Triglycerides, medium-chain	1802502	2
Gatt-Koller	Triglycerides, medium-chain	1803423	1
Gehe	Triglycerides, medium-chain	12078603	1
Gehe	Triglycerides, medium-chain	12356908	1
Gehe	Triglycerides, medium-chain	1302004-01	1
Gehe	Triglycerides, medium-chain	13177102	3
Gehe	Triglycerides, medium-chain	1309025-01	1
Gehe	Triglycerides, medium-chain	14D23-B02-293330	1
Gehe	Triglycerides, medium-chain	1504029-01	1
Gehe	Triglycerides, medium-chain	1601050-0	1
Gehe	Triglycerides, medium-chain	1601050-01	1
Gehe	Triglycerides, medium-chain	1603041-02	1
Gehe	Triglycerides, medium-chain	1539608	1
Gehe	Triglycerides, medium-chain	15379612	1
Gehe	Triglycerides, medium-chain	16124307	2
Gehe	Triglycerides, medium-chain	15272004	1
Gehe	Triglycerides, medium-chain	17016001	3
Gehe	Triglycerides, medium-chain	16124310	1
Gehe	Triglycerides, medium-chain	160427	1
Gehe	Triglycerides, medium-chain	16H18-B01-525477	1
Gehe	Triglycerides, medium-chain	117111	1
Gehe	Triglycerides, medium-chain	117113	1
Gehe	Triglycerides, medium-chain	1709014-01	1
Gehe	Triglycerides, medium-chain	109951	1
Gehe	Triglycerides, medium-chain	109949	1
Gehe	Triglycerides, medium-chain	1805020-01	1
GEHE	Triglycerides, medium-chain	1603041-01	1
GEHE	Triglycerides, medium-chain	95080	1
GEHE	Triglycerides, medium-chain	1603041-02	1
GEHE	Triglycerides, medium-chain	98569	1
GEHE	Triglycerides, medium-chain	17016001	1
GEHE	Triglycerides, medium-chain	1606035-03	1
GEHE	Triglycerides, medium-chain	105039	1
GEHE	Triglycerides, medium-chain	107078	1
GEHE	Triglycerides, medium-chain	107077	2
GEHE	Triglycerides, medium-chain	71161992	1
GEHE	Triglycerides, medium-chain	1801034-01	2
GEHE	Triglycerides, medium-chain	116687	1
GEHE	Triglycerides, medium-chain	109949	1
GEHE	Triglycerides, medium-chain	1805020-01	1
GEHE	Triglycerides, medium-chain	1812014-01	2
GEHE	Triglycerides, medium-chain	1902005-001	1
Gehe 07.12.18	Triglycerides, medium-chain	123015	1
Gehe/Bionorica	Triglycerides, medium-chain	116641	1
Caelo	Triglycerides, medium-chain	14380803	9
Gehe/EuRo	Triglycerides, medium-chain	1603041-02	2
Euro OTC	Triglycerides, medium-chain	16030410	1
Fagron	Triglycerides, medium-chain	18A19-B04-525725	6
gehe-06.11.18	Triglycerides, medium-chain	12016	1
Gehe-Eurho 10.09.18	Triglycerides, medium-chain	71143373	1
Euro OTC	Triglycerides, medium-chain	150402901	1

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Supplier	Substance	Batch	Spectra
Hansen & Rosenthal/Noweda	Triglycerides, medium-chain	1509022-01	1
Hansen&Rosenthal/Phönix	Triglycerides, medium-chain	1406016-01	1
HCT Pharma	Triglycerides, medium-chain	2012100833	1
Hedinger	Triglycerides, medium-chain	1606035-02	2
Henry Lamotte	Triglycerides, medium-chain	1302004-01	1
Henry Lamotte GmbH/ San...	Triglycerides, medium-chain	16124307	1
Henry Lamotte Oils GmbH...	Triglycerides, medium-chain	15379602	1
hochhaus-Apotheke	Triglycerides, medium-chain	1606035-01	1
Hubertus Apotheke	Triglycerides, medium-chain	15379610	1
Ichthyol/Phönix	Triglycerides, medium-chain	1603041-02	2
Jenne	Triglycerides, medium-chain	107081	1
Jenne	Triglycerides, medium-chain	116646	1
Kehr	Triglycerides, medium-chain	98570	1
Kehr	Triglycerides, medium-chain	109949	1
Kehr	Triglycerides, medium-chain	109953	1
Kehr	Triglycerides, medium-chain	116586	1
Kehr	Triglycerides, medium-chain	11664	1
Kehr	Triglycerides, medium-chain	1801034-01	1
Kehr	Triglycerides, medium-chain	116639	1
Caelo	Triglycerides, medium-chain	19060002	3
Kehr/THC Pharma	Triglycerides, medium-chain	105041	1
Kehr/THC Pharma	Triglycerides, medium-chain	105040	2
Kehr/THC Pharma	Triglycerides, medium-chain	116690	1
Kehr/THC Pharma	Triglycerides, medium-chain	116691	1
Kehr/THC Pharma	Triglycerides, medium-chain	116644	2
Kehr/THC Pharma	Triglycerides, medium-chain	VT231118-1	1
Kögl	Triglycerides, medium-chain	188006163816	1
Kögl	Triglycerides, medium-chain	391711160417	1
Kögl	Triglycerides, medium-chain	19102171217	1
Kögl	Triglycerides, medium-chain	19102170817	1
Kögl	Triglycerides, medium-chain	1700780	4
Krieger	Triglycerides, medium-chain	17361002	1
Fagron	Triglycerides, medium-chain	17236203	1
L12	Triglycerides, medium-chain	18G13-B01-352212	2
L30	Triglycerides, medium-chain	15H03-b03-318530	1
L31	Triglycerides, medium-chain	18A19-B04-345026	1
Miglyol	Triglycerides, medium-chain	15139605	1
nachtragen	Triglycerides, medium-chain	127733	2
nachtragen	Triglycerides, medium-chain	125596	2
Noweda	Triglycerides, medium-chain	12256505	1
Noweda	Triglycerides, medium-chain	11301109	2
Noweda	Triglycerides, medium-chain	101001	1
Noweda	Triglycerides, medium-chain	11207501	1
Noweda	Triglycerides, medium-chain	15139608	1
Noweda	Triglycerides, medium-chain	14219007	1
Noweda	Triglycerides, medium-chain	17016001	1
Noweda	Triglycerides, medium-chain	17236202	1
Caelo	Triglycerides, medium-chain	10356208	1
Noweda /THC Pharma	Triglycerides, medium-chain	109709	1
Noweda/Bionorica	Triglycerides, medium-chain	103901	1
Noweda/Bionorica	Triglycerides, medium-chain	123013	1
Caelo	Triglycerides, medium-chain	15139608	27
Noweda/THC Pharma	Triglycerides, medium-chain	105044	1
Noweda/THC Pharma	Triglycerides, medium-chain	109948	1
Euro OTC	Triglycerides, medium-chain	141100901	1
Euro OTC	Triglycerides, medium-chain	141100902	1
Phagron GmbH / Anzag	Triglycerides, medium-chain	12K07-N22	1
Pharimex	Triglycerides, medium-chain	75316	2
Pharmachem	Triglycerides, medium-chain	1606035-02	2
Pharmachem	Triglycerides, medium-chain	109952	2

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Supplier	Substance	Batch	Spectra
Pharmachem GmbH	Triglycerides, medium-chain	105041	1
Pharmachem/Phoenix	Triglycerides, medium-chain	18118801	3
Phoenix	Triglycerides, medium-chain	13098601	1
Phoenix	Triglycerides, medium-chain	15139605	1
Phoenix	Triglycerides, medium-chain	15H03-B03-525271	1
Phoenix	Triglycerides, medium-chain	17016007	1
Phoenix Leipzig 05.09.2...	Triglycerides, medium-chain	105039	1
phönix	Triglycerides, medium-chain	1606035	1
Phönix	Triglycerides, medium-chain	1210002-01	2
Phönix	Triglycerides, medium-chain	11320508	1
Phönix	Triglycerides, medium-chain	12356901	1
Phönix	Triglycerides, medium-chain	1300204-01	1
Phönix	Triglycerides, medium-chain	13177102	1
Phönix	Triglycerides, medium-chain	1801034-02	1
Phönix	Triglycerides, medium-chain	18238901	1
Phönix	Triglycerides, medium-chain	129876	5
Phönix 29.10.12	Triglycerides, medium-chain	12078604	1
Phönix Gotha	Triglycerides, medium-chain	1205015-01	2
Phönix Gotha	Triglycerides, medium-chain	1210002-01	2
Phönix Gotha	Triglycerides, medium-chain	1302004-01	3
Phönix Gotha	Triglycerides, medium-chain	1302004-02	1
Phönix Gotha	Triglycerides, medium-chain	1411009-01	2
Phönix Gotha	Triglycerides, medium-chain	1411009-02	1
Phönix Gotha	Triglycerides, medium-chain	1504029-01	2
Euro OTC	Triglycerides, medium-chain	180103401	1
Phönix/Bionorica	Triglycerides, medium-chain	105042	1
Phönix/Bionorica	Triglycerides, medium-chain	109950	3
Phönix/Bionorica	Triglycerides, medium-chain	109949	2
Phönix/Bionorica	Triglycerides, medium-chain	116646	1
Caelo	Triglycerides, medium-chain	16H18-B01-525506	1
Caelo	Triglycerides, medium-chain	1225605	1
Euro OTC	Triglycerides, medium-chain	18118807	2
Sanacorp	Triglycerides, medium-chain	12078604	1
Sanacorp	Triglycerides, medium-chain	12356903	1
Sanacorp	Triglycerides, medium-chain	12356908	1
Sanacorp	Triglycerides, medium-chain	13177102	1
Sanacorp	Triglycerides, medium-chain	130502	1
Sanacorp	Triglycerides, medium-chain	13348502	2
Sanacorp	Triglycerides, medium-chain	56/AKD3	1
Sanacorp	Triglycerides, medium-chain	14219003	3
Sanacorp	Triglycerides, medium-chain	58/AKD4	1
Sanacorp	Triglycerides, medium-chain	15139608	1
Sanacorp	Triglycerides, medium-chain	93574	1
Sanacorp	Triglycerides, medium-chain	6/AKD12	1
Sanacorp	Triglycerides, medium-chain	15379608	1
Sanacorp	Triglycerides, medium-chain	17016007	2
Sanacorp	Triglycerides, medium-chain	17361001	4
Sanacorp	Triglycerides, medium-chain	17361002	2
Sanacorp	Triglycerides, medium-chain	18118801	3
Sanacorp	Triglycerides, medium-chain	18118807	1
Sanacorp	Triglycerides, medium-chain	18238902	3
Caelo	Triglycerides, medium-chain	116688	2
Sanacorp /Bionorica	Triglycerides, medium-chain	116640	2
Sanacorp WE:27.09.17 ...	Triglycerides, medium-chain	107077	1
Sanacorp/Bionorica	Triglycerides, medium-chain	109952	2
Sanacorp/Bionorica	Triglycerides, medium-chain	128841	2
Sanacorp/Bionorica Ethics	Triglycerides, medium-chain	83204	1
Bombastus	Triglycerides, medium-chain	123997	1
Caelo	Triglycerides, medium-chain	12078603	12
Caelo	Triglycerides, medium-chain	AKD5	1

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	11301106	12
Euro OTC	Triglycerides, medium-chain	116688	1
THc	Triglycerides, medium-chain	109948	2
THC	Triglycerides, medium-chain	95083	1
THC	Triglycerides, medium-chain	105041	2
THC	Triglycerides, medium-chain	105043	3
THC	Triglycerides, medium-chain	180522PMT0000105043	1
THC Pharm	Triglycerides, medium-chain	93571	1
THC Pharm	Triglycerides, medium-chain	93573	2
THC Pharm	Triglycerides, medium-chain	116691	1
THC PHARM	Triglycerides, medium-chain	116644	1
THC Pharm / Phönix	Triglycerides, medium-chain	95083	1
THC Pharm GmbH	Triglycerides, medium-chain	105043	1
THC Pharm GmbH	Triglycerides, medium-chain	105041	1
THC Pharm GmbH	Triglycerides, medium-chain	105040	1
THC Pharm GmbH	Triglycerides, medium-chain	116690	2
THC Pharm/Sanacorp	Triglycerides, medium-chain	91714	1
THC Pharma	Triglycerides, medium-chain	2012050379	1
THC Pharma	Triglycerides, medium-chain	93573	1
THC Pharma	Triglycerides, medium-chain	98572	2
THC Pharma	Triglycerides, medium-chain	105040	1
THC Pharma	Triglycerides, medium-chain	105042	1
THC Pharma	Triglycerides, medium-chain	105043	8
THC Pharma	Triglycerides, medium-chain	105044	1
THC Pharma	Triglycerides, medium-chain	109948	1
THC Pharma	Triglycerides, medium-chain	161123	1
THC Pharma	Triglycerides, medium-chain	116690	5
THC Pharma	Triglycerides, medium-chain	116637	1
THC Pharma	Triglycerides, medium-chain	123998	4
THC Pharma	Triglycerides, medium-chain	127733	3
THC Pharma / Alliance H. . .	Triglycerides, medium-chain	93566	1
THC Pharma / Alliance H. . .	Triglycerides, medium-chain	109953	1
THC Pharma / Phönix	Triglycerides, medium-chain	109948	1
THC Pharma / Phönix	Triglycerides, medium-chain	116690	4
THC Pharma CPM/Phönix	Triglycerides, medium-chain	105043	4
THC Pharma/ Alliance He. . .	Triglycerides, medium-chain	116690	1
THC Pharma/ gehe	Triglycerides, medium-chain	116690	1
THC Pharma/ Phönix	Triglycerides, medium-chain	105041	3
THC Pharma/Gehe	Triglycerides, medium-chain	105041	1
THC Pharma/Gehe	Triglycerides, medium-chain	11669105/20	1
THC Pharma/Noweda	Triglycerides, medium-chain	2014030260	1
THC Pharma/Noweda	Triglycerides, medium-chain	2015070139	1
THC Pharma/Noweda	Triglycerides, medium-chain	93573	1
THC Pharma/Phoenix	Triglycerides, medium-chain	VT200418	1
THC Pharma/Phoenix	Triglycerides, medium-chain	VT280918-1	1
THC Pharma/Phönix	Triglycerides, medium-chain	85533	1
THC Pharma/Phönix	Triglycerides, medium-chain	90059	2
THC Pharma/Phönix	Triglycerides, medium-chain	93571	1
THC Rezeptur-Set	Triglycerides, medium-chain	95084	2
THC/ KEHR	Triglycerides, medium-chain	116637	1
THC/AEP	Triglycerides, medium-chain	116644	1
THC/AEP	Triglycerides, medium-chain	125595	1
THC/AEP	Triglycerides, medium-chain	12595	1
THC/Gehe	Triglycerides, medium-chain	98572	1
THC/Gehe	Triglycerides, medium-chain	105042	13
THC/Gehe	Triglycerides, medium-chain	105043	10
THC/Gehe	Triglycerides, medium-chain	105041	2
THC/Gehe	Triglycerides, medium-chain	VT281117-2	1
THC/Gehe	Triglycerides, medium-chain	VT131217-1	1
THC/Gehe	Triglycerides, medium-chain	105044	1

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Supplier	Substance	Batch	Spectra
THC/Gehe	Triglycerides, medium-chain	109948	2
THC/Gehe	Triglycerides, medium-chain	116690	1
THC/Noweda	Triglycerides, medium-chain	105040	8
THC/Noweda	Triglycerides, medium-chain	116691	2
THC/Phoenix	Triglycerides, medium-chain	123998	1
THC/phönix	Triglycerides, medium-chain	116644	3
THC/Phönix	Triglycerides, medium-chain	2014030260	2
THC/Phönix	Triglycerides, medium-chain	116690	1
THC/Phönix	Triglycerides, medium-chain	116644	1
THC/Sana	Triglycerides, medium-chain	2015070139	2
THC_PHARMA/Noweda	Triglycerides, medium-chain	116637	1
THC-Pharm GmbH	Triglycerides, medium-chain	105042	1
THC-Pharm GmbH	Triglycerides, medium-chain	105043	2
THCPharm/Noweda	Triglycerides, medium-chain	250696	3
WE:05.04.2016 Sanacorp	Triglycerides, medium-chain	15272006	1
	Triglycerides, medium-chain	13E24-N04	3
	Triglycerides, medium-chain	1406016-01	1
Caelo	Triglycerides, medium-chain	13392404	2
Caelo	Triglycerides, medium-chain		4
Euro OTC	Triglycerides, medium-chain	1402019-01	2
Fagron	Triglycerides, medium-chain		2
Sanacorp	Triglycerides, medium-chain		1
THC Pharm	Triglycerides, medium-chain		1
THC Pharma/Phönix	Triglycerides, medium-chain		1

- 135 606 spectra from 703 *Apo-Ident* customers from a total of 34 780 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Triglycerides, medium-chain* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Triglycerides, medium-chain* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	400	0	55 959
Type B	0	600	0	68 874
Type C	0	2734	13	135 606

The substance/substance group *Triglycerides, medium-chain* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.0000 %)
Type C	100.0000 % (> 99.6452 %)	99.5268 % (> 99.4175 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Triglycerides, medium-chain* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Squalane	15.62	—
2-ethylhexyl laurate	30.03	—
Wool fat	30.14	—
Laurel oil	30.72	—
Soy lecithin, liquid	32.39	—
Pasta Cordes®	34.25	—
Wheatgerm oil, refined	34.64	—
Shea butter, refined	35.28	—
Sunflower oil, refined	38.04	—
Grape seed oil, refined	39.22	—
Apricot kernel oil, refined	39.91	—
Guaiazulene 25%, water-soluble	40.23	—
Isopropyl myristate	40.94	—
Metronidazole 25% in white petrolatum	43.27	—
Soy oil, refined	43.40	—
Camphor ointment	46.63	—
Sesame oil, refined	47.04	—
Olive oil, native	47.37	—
Sorbitan trioleate	48.34	—
Avocado oil, refined	48.79	—
Borage oil, refined, stabilised	49.78	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Triglycerides, medium-chain* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31483	31483	0.00	20.61
31484	31804	1.99	17.43
31485	31804	2.09	17.19
31771	31771	0.00	19.23

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31804	31804	0.00	16.71
31955	31955	0.00	17.95
34674	31804	2.03	15.62

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Triglycerol diisostearate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30756-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Triglycerol diisostearate; Triglyceroli diisostearas

Special notes

When selecting the *Triglycerol diisostearate* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Triglycerol diisostearate	3	2	41

Second-stage model

For differentiation of the substance/substance group *Triglycerol diisostearate* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Triglycerol diisostearate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Triglycerol diis...	12018503	30756	40	20120201
Caelo	Triglycerol diis...	13081002	31219	40	1403749
Caelo	Triglycerol diis...	14118801	31338	40	20140425

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 spectra of 3 reference samples from the substance/substance group *Triglycerol diisostearate*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 3 different batches.
- 56 239 spectra from a total of 1113 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Triglycerol diisostearate*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Triglycerol diisostearate	163311	33094	40
Caelo	Triglycerol diisostearate	180592	34073	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 266 spectra from 133 *Apo-Ident* customers from 44 batches from the substance/substance group *Triglycerol diisostearate*.
- Among them are spectra of independent samples from 41 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Alliance Healthcare	Triglycerol diisostearate	18059207	1
Audor Pharma	Triglycerol diisostearate	14118801	1
Bombastus	Triglycerol diisostearate	15283405	1
Bombastus	Triglycerol diisostearate	18059201	1
Caelo	Triglycerol diisostearate	14380504	7
Caelo	Triglycerol diisostearate	11074801	1
Caelo	Triglycerol diisostearate	11162902	1
Caelo	Triglycerol diisostearate	12018501	2
Caelo	Triglycerol diisostearate	12133303	5
Caelo	Triglycerol diisostearate	12359401	3
Caelo	Triglycerol diisostearate	12359405	7
Caelo	Triglycerol diisostearate	9082013A	1
Caelo	Triglycerol diisostearate	13236704	8
Caelo	Triglycerol diisostearate	13399003	6
Caelo	Triglycerol diisostearate	14193003	4
Caelo	Triglycerol diisostearate	15283403	1
Caelo	Triglycerol diisostearate	15283402	8
Caelo	Triglycerol diisostearate	15283406	2
Caelo	Triglycerol diisostearate	16179202	1
Caelo	Triglycerol diisostearate	152835405	1
Caelo	Triglycerol diisostearate	16179205	3
Caelo	Triglycerol diisostearate	16331101	27
Caelo	Triglycerol diisostearate	27101713	1
Caelo	Triglycerol diisostearate	18059207	11
Caelo	Triglycerol diisostearate	18059202	1
Caelo	Triglycerol diisostearate	18183802	11
Caelo	Triglycerol diisostearate	19138901	3
Caelo	Triglycerol diisostearate	2(18059201)	1
Caelo	Triglycerol diisostearate	15137505	13
Caelo	Triglycerol diisostearate	18059201	25
Caelo	Triglycerol diisostearate	15283405	3
Caelo	Triglycerol diisostearate	16331107	2
Caelo	Triglycerol diisostearate	1883802	1
Caelo	Triglycerol diisostearate	14193008	6
Caelo	Triglycerol diisostearate	15283401	1
Caelo	Triglycerol diisostearate	163311001	1
Caelo	Triglycerol diisostearate	16331102	1
Caelo	Triglycerol diisostearate	16179207	1
Caelo	Triglycerol diisostearate	14054802	2
Caelo	Triglycerol diisostearate	14118804	2
Caelo	Triglycerol diisostearate	15283404	10

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerol diisostearate	16062502	22
Caelo	Triglycerol diisostearate	16331103	8
Caelo	Triglycerol diisostearate	151375	1
Caesar & Loretz	Triglycerol diisostearate	16331101	1
Caesar & Loretz GmbH	Triglycerol diisostearate	14054802	4
Caesar & Loretz GmbH	Triglycerol diisostearate	18183802	2
Caesar & Loretz GmbH	Triglycerol diisostearate	18183806	2
Caesar & Loretz GmbH/ P...	Triglycerol diisostearate	19138901	1
Caesar&Loretz GmbH	Triglycerol diisostearate	16331101	1
Caesar/Noweda	Triglycerol diisostearate	15283404	1
Fagron	Triglycerol diisostearate	14193003	1
Gehe	Triglycerol diisostearate	12359401	1
Gehe	Triglycerol diisostearate	14118801	2
Gehe	Triglycerol diisostearate	16062502	1
Gehe	Triglycerol diisostearate	16331101	1
GEHE	Triglycerol diisostearate	18059201	1
Noweda	Triglycerol diisostearate	14380504	1
Noweda	Triglycerol diisostearate	14193008	1
Phoenix	Triglycerol diisostearate	14054802	1
Phoenix	Triglycerol diisostearate	15283405	1
Phonix	Triglycerol diisostearate	18059201	1
Phönix	Triglycerol diisostearate	16331103	1
Phönix	Triglycerol diisostearate	18059201	3
PHÖNIX	Triglycerol diisostearate	16331103	1
Sanacorp	Triglycerol diisostearate	15137505	1
Caelo	Triglycerol diisostearate	12018503	3
Caelo	Triglycerol diisostearate	13081002	4
Caelo	Triglycerol diisostearate	14118801	10

- 138 087 spectra from 703 *Apo-Ident* customers from a total of 35 252 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Triglycerol diisostearate* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Triglycerol diisostearate* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	120	0	56 239
Type B	0	80	0	69 394
Type C	0	264	2	138 087

The substance/substance group *Triglycerol diisostearate* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9783 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	99.2481 % (> 98.1203 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Triglycerol diisostearate* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Sorbitan- and glycerol monooleate	22.93	—
Softisan [®] 649	33.56	—
Castor oil	39.49	—
Polyol fatty acid ester	41.65	—
Hydrophilic ointment DAB	41.82	—
Macrogol 8 stearate type I	43.13	—
Macrogolglycerol ricinoleate	44.80	—
Macrogol 4 lauryl ether	45.57	—
Pasta Cordes [®]	51.36	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Triglycerol diisostearate* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30756	31219	5.85	31.50
31219	31219	0.00	35.74
31338	31219	6.64	37.82

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Verbena oil, nature-identical**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30666-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Verbena oil, nature-identical; Oleum verbenae

Special notes

When selecting the *Verbena oil, nature-identical* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Verbena oil, nature-identical	5	2	1

Second-stage model

For differentiation of the substance/substance group *Verbena oil, nature-identical* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Verbena oil, nature-identical*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Verbena oil, nat...	10368808	30666	40	20101229
Caelo	Verbena oil, nat...	13141710	31194	40	1412074
Caelo	Verbena oil, nat...	14026003	31399	40	20140128
Caelo	Verbena oil, nat...	15229809	32071	60	20150714
Caelo	Verbena oil, nat...	192731	34720	40	20191004*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 220 spectra of 5 reference samples from the substance/substance group *Verbena oil, nature-identical*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 5 different batches.
- 56 139 spectra from a total of 1111 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Verbena oil, nature-identical*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Verbena oil, nature-identical	16290903	33604	40
Caelo	Verbena oil, nature-identical	172589	33906	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1 spectra from 1 *Apo-Ident* customers from 1 batches from the substance/substance group *Verbena oil, nature-identical*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Verbena oil, nature-identical	13141704	1

- 138 352 spectra from 703 *Apo-Ident* customers from a total of 35 294 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Verbena oil, nature-identical* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Verbena oil, nature-identical* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	220	0	56 139
Type B	0	80	0	69 394
Type C	0	1	0	138 352

The substance/substance group *Verbena oil, nature-identical* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.2727 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6542 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Verbena oil, nature-identical* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Acorus oil	29.97	—
Geranium oil, genuine	36.59	—
Myrtle oil	45.66	—
Cedar wood oil	46.89	—
Matricaria oil, rich in (-)-alpha-bisa...	48.01	—
Dwarf pine oil	54.43	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Verbena oil, nature-identical* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30666	31194	2.38	50.05
31194	31194	0.00	53.24
31399	31194	3.40	51.81
32071	31194	4.73	50.41
34720	34720	0.00	52.67

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Viscous base solution (NRF p. 20)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30659-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Viscous base solution (NRF p. 20)

Special notes

When selecting the *Viscous base solution (NRF p. 20)* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Viscous base solution (NRF p. 20)	10	44	407

Second-stage model

For differentiation of the substance/substance group *Viscous base solution (NRF p. 20)* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Viscous base solution (NRF p. 20)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Viscous base sol...	12127301	30659	40	1403145
Caelo	Viscous base sol...	14020401	31354	60	20140124
Caelo	Viscous base sol...	14109401	31658	60	AR-15-FG-007904-01
Caelo	Viscous base sol...	15265401	31790	60	20150825
Caelo	Viscous base sol...	153888	31882	60	20151124*
Caelo	Viscous base sol...	153888	31883	60	20151124*
Caelo	Viscous base sol...	153888	31884	60	20151124*
Caelo	Viscous base sol...	153889	31885	60	20151124*
Caelo	Viscous base sol...	153889	31886	60	20151124*
Caelo	Viscous base sol...	154121	31887	60	20151130*
Caelo	Viscous base sol...	154121	31888	60	20151130*
Caelo	Viscous base sol...	153890	31889	60	20151124*
Caelo	Viscous base sol...	153890	31890	60	20151124*
Caelo	Viscous base sol...	153894	31893	60	20151130*
Caelo	Viscous base sol...	153894	31894	60	20151130*
Caelo	Viscous base sol...	153895	31895	60	20151130*
Caelo	Viscous base sol...	153895	31896	60	20151130*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1000 spectra of 17 reference samples from the substance/substance group *Viscous base solution (NRF p. 20)*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 10 different batches.
- 55359 spectra from a total of 1106 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1960 spectra of 46 reference samples from the substance/substance group *Viscous base solution (NRF p. 20)*.
- Among them are spectra of independent samples from 44 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Viscous base solution (NRF p...	153892	31891	60
Caelo	Viscous base solution (NRF p...	153893	31892	60
Caelo	Viscous base solution (NRF p...	153896	31897	60
Caelo	Viscous base solution (NRF p...	153897	31899	60
Caelo	Viscous base solution (NRF p...	161076	32287	40
Caelo	Viscous base solution (NRF p...	161089	32288	40
Caelo	Viscous base solution (NRF p...	161090	32289	40
Caelo	Viscous base solution (NRF p...	162172	32356	40
Caelo	Viscous base solution (NRF p...	162173	32357	40
Caelo	Viscous base solution (NRF p...	162174	32358	40
Caelo	Viscous base solution (NRF p...	162175	32359	40
Caelo	Viscous base solution (NRF p...	162176	32360	40
Caelo	Viscous base solution (NRF p...	162297	32554	40
Caelo	Viscous base solution (NRF p...	162298	32555	40
Caelo	Viscous base solution (NRF p...	162299	32556	40
Caelo	Viscous base solution (NRF p...	162300	32557	40
Caelo	Viscous base solution (NRF p...	162301	32558	40
Caelo	Viscous base solution (NRF p...	162650	32559	40
Caelo	Viscous base solution (NRF p...	162651	32572	40
Caelo	Viscous base solution (NRF p...	162652	32573	40
Caelo	Viscous base solution (NRF p...	162653	32574	40
Caelo	Viscous base solution (NRF p...	162655	32575	40
Caelo	Viscous base solution (NRF p...	163153	32897	40
Caelo	Viscous base solution (NRF p...	163152	32898	40
Caelo	Viscous base solution (NRF p...	170176	33146	40
Caelo	Viscous base solution (NRF p...	170177	33147	40
Caelo	Viscous base solution (NRF p...	170178	33148	40
Caelo	Viscous base solution (NRF p...	170179	33149	40
Caelo	Viscous base solution (NRF p...	170180	33150	40
Caelo	Viscous base solution (NRF p...	170239	33151	40
Caelo	Viscous base solution (NRF p...	170240	33152	40
Caelo	Viscous base solution (NRF p...	172319	33730	40
Caelo	Viscous base solution (NRF p...	171940	33731	40
Caelo	Viscous base solution (NRF p...	171941	33732	40
Caelo	Viscous base solution (NRF p...	171942	33733	40
Caelo	Viscous base solution (NRF p...	171943	33734	40
Caelo	Viscous base solution (NRF p...	171944	33735	40
Caelo	Viscous base solution (NRF p...	172892	33972	40
Caelo	Viscous base solution (NRF p...	172895	33973	40
Caelo	Viscous base solution (NRF p...	180306	34131	40
Caelo	Viscous base solution (NRF p...	181240	34132	40
Caelo	Viscous base solution (NRF p...	181242	34249	40
Caelo	Viscous base solution (NRF p...	181244	34250	40
Caelo	Viscous base solution (NRF p...	182684	34311	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Viscous base solution (NRF p...	153896	31898	60
Caelo	Viscous base solution (NRF p...	153897	31900	60

- 67 514 spectra from a total of 1458 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1094 spectra from 107 *Apo-Ident* customers from 412 batches from the substance/substance group *Viscous base solution (NRF p. 20)*.
- Among them are spectra of independent samples from 407 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	16217602	10
Caelo	Viscous base solution (NRF p...	16217301	8
Caelo	Viscous base solution (NRF p...	17138801	3
Aliance am 08.04.2014	Viscous base solution (NRF p...	1306F002	1
Alliance Health 21.02.2...	Viscous base solution (NRF p...	13229502	2
Alliance Health.18.09.2...	Viscous base solution (NRF p...	14109901	1
Anzag	Viscous base solution (NRF p...	13158201	2
Anzag	Viscous base solution (NRF p...	17098401	2
Caelo	Viscous base solution (NRF p...	3x14058901	1
Apomix / 11	Viscous base solution (NRF p...	12309201	1
Apomix / 11	Viscous base solution (NRF p...	13229501	1
Apomix/Phönix	Viscous base solution (NRF p...	16217601	1
Bahnhof Apotheke	Viscous base solution (NRF p...	160818001	1
Bahnhof Apotheke	Viscous base solution (NRF p...	160818002	1
Bahnhof-Apotheke	Viscous base solution (NRF p...	160823001	1
Bahnhof-Apotheke	Viscous base solution (NRF p...	160825001	1
Bahnhof-Apotheke	Viscous base solution (NRF p...	160825002	1
Bombastus	Viscous base solution (NRF p...	15265501	1
Caelo	Viscous base solution (NRF p...	16108001	3
Caelo	Viscous base solution (NRF p...	15031804	1
Caelo	Viscous base solution (NRF p...	11140501	1
Caelo	Viscous base solution (NRF p...	12093901	1
Caelo	Viscous base solution (NRF p...	12093701	1
Caelo	Viscous base solution (NRF p...	12093801	1
Caelo	Viscous base solution (NRF p...	12231101	5
Caelo	Viscous base solution (NRF p...	12231002	1
Caelo	Viscous base solution (NRF p...	12094101	2
Caelo	Viscous base solution (NRF p...	12231201	1
Caelo	Viscous base solution (NRF p...	12127501	1
Caelo	Viscous base solution (NRF p...	1224991	1
Caelo	Viscous base solution (NRF p...	12249901	3
Caelo	Viscous base solution (NRF p...	12249801	1
Caelo	Viscous base solution (NRF p...	11176401	1
Caelo	Viscous base solution (NRF p...	20250113-1	1
Caelo	Viscous base solution (NRF p...	12309101	11
Caelo	Viscous base solution (NRF p...	12309202	3

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	13006401	6
Caelo	Viscous base solution (NRF p...	13006501	1
Caelo	Viscous base solution (NRF p...	13150802	2
Caelo	Viscous base solution (NRF p...	13071302	1
Caelo	Viscous base solution (NRF p...	13096001	2
Caelo	Viscous base solution (NRF p...	13220101	1
Caelo	Viscous base solution (NRF p...	13246501	6
Caelo	Viscous base solution (NRF p...	13246101	1
Caelo	Viscous base solution (NRF p...	14020402	5
Caelo	Viscous base solution (NRF p...	14059001	2
Caelo	Viscous base solution (NRF p...	14059101	5
Caelo	Viscous base solution (NRF p...	14109402	3
Caelo	Viscous base solution (NRF p...	14110001	2
Caelo	Viscous base solution (NRF p...	14188001	5
Caelo	Viscous base solution (NRF p...	14187801	12
Caelo	Viscous base solution (NRF p...	14266101	1
Caelo	Viscous base solution (NRF p...	14187601	5
Caelo	Viscous base solution (NRF p...	15093801	2
Caelo	Viscous base solution (NRF p...	15093602	4
Caelo	Viscous base solution (NRF p...	16107901	1
Caelo	Viscous base solution (NRF p...	6101705	1
Caelo	Viscous base solution (NRF p...	14266601	2
Caelo	Viscous base solution (NRF p...	14354304	3
Caelo	Viscous base solution (NRF p...	14109701	1
Caelo	Viscous base solution (NRF p...	14368401	5
Caelo	Viscous base solution (NRF p...	14368601	8
Caelo	Viscous base solution (NRF p...	5051502	1
Caelo	Viscous base solution (NRF p...	15093401	4
Caelo	Viscous base solution (NRF p...	1071501	1
Caelo	Viscous base solution (NRF p...	18071502	1
Caelo	Viscous base solution (NRF p...	15180101	4
Caelo	Viscous base solution (NRF p...	20081501	1
Caelo	Viscous base solution (NRF p...	15264801	7
Caelo	Viscous base solution (NRF p...	15264901	1
Caelo	Viscous base solution (NRF p...	15196601	1
Caelo	Viscous base solution (NRF p...	15265101	2
Caelo	Viscous base solution (NRF p...	152364901	1
Caelo	Viscous base solution (NRF p...	15265801	3
Caelo	Viscous base solution (NRF p...	15412101	2
Caelo	Viscous base solution (NRF p...	15265901	6
Caelo	Viscous base solution (NRF p...	16108901	10
Caelo	Viscous base solution (NRF p...	16108201	2
Caelo	Viscous base solution (NRF p...	16159401	1
Caelo	Viscous base solution (NRF p...	16217201	1
Caelo	Viscous base solution (NRF p...	16229901	12
Caelo	Viscous base solution (NRF p...	16265201	2
Caelo	Viscous base solution (NRF p...	11031709	1
Caelo	Viscous base solution (NRF p...	17017801	6
Caelo	Viscous base solution (NRF p...	17041703	1
Caelo	Viscous base solution (NRF p...	19041709	1
Caelo	Viscous base solution (NRF p...	17017901	4
Caelo	Viscous base solution (NRF p...	16265301	2
Caelo	Viscous base solution (NRF p...	17098102	5
Caelo	Viscous base solution (NRF p...	17097801	3
Caelo	Viscous base solution (NRF p...	17098401	2
Caelo	Viscous base solution (NRF p...	17098501	1
Caelo	Viscous base solution (NRF p...	17098101	6
Caelo	Viscous base solution (NRF p...	16265501	1
Caelo	Viscous base solution (NRF p...	17138701	4
Caelo	Viscous base solution (NRF p...	21081704	1

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	16091702	1
Caelo	Viscous base solution (NRF p...	17138601	2
Caelo	Viscous base solution (NRF p...	17194101	3
Caelo	Viscous base solution (NRF p...	4111704	1
Caelo	Viscous base solution (NRF p...	17138401	4
Caelo	Viscous base solution (NRF p...	17194401	4
Caelo	Viscous base solution (NRF p...	27121703	1
Caelo	Viscous base solution (NRF p...	17231601	11
Caelo	Viscous base solution (NRF p...	13011807	1
Caelo	Viscous base solution (NRF p...	17232101	10
Caelo	Viscous base solution (NRF p...	17231401	3
Caelo	Viscous base solution (NRF p...	25041801	1
Caelo	Viscous base solution (NRF p...	17231701	4
Caelo	Viscous base solution (NRF p...	26051801	1
Caelo	Viscous base solution (NRF p...	23061811	1
Caelo	Viscous base solution (NRF p...	18031101	3
Caelo	Viscous base solution (NRF p...	16081804	1
Caelo	Viscous base solution (NRF p...	18031301	5
Caelo	Viscous base solution (NRF p...	18124402	1
Caelo	Viscous base solution (NRF p...	8091809	1
Caelo	Viscous base solution (NRF p...	18124301	8
Caelo	Viscous base solution (NRF p...	20101802	1
Caelo	Viscous base solution (NRF p...	18031501	2
Caelo	Viscous base solution (NRF p...	7111803	1
Caelo	Viscous base solution (NRF p...	22121809	1
Caelo	Viscous base solution (NRF p...	18206101	2
Caelo	Viscous base solution (NRF p...	18206201	4
Caelo	Viscous base solution (NRF p...	18206701	1
Caelo	Viscous base solution (NRF p...	19011901	1
Caelo	Viscous base solution (NRF p...	18124401	1
Caelo	Viscous base solution (NRF p...	18267901	1
Caelo	Viscous base solution (NRF p...	18321002	12
Caelo	Viscous base solution (NRF p...	18206602	2
Caelo	Viscous base solution (NRF p...	19041901	1
Caelo	Viscous base solution (NRF p...	19258501	1
Caelo	Viscous base solution (NRF p...	13158001	9
Caelo	Viscous base solution (NRF p...	15093601	4
Caelo	Viscous base solution (NRF p...	15265501	7
Caelo	Viscous base solution (NRF p...	15265601	2
Caelo	Viscous base solution (NRF p...	14187901	3
Caelo	Viscous base solution (NRF p...	16230001	4
Caelo	Viscous base solution (NRF p...	17289501	1
Caelo	Viscous base solution (NRF p...	16108301	3
Caelo	Viscous base solution (NRF p...	15265301	9
Caelo	Viscous base solution (NRF p...	18206901	1
Caelo	Viscous base solution (NRF p...	13150801	3
Caelo	Viscous base solution (NRF p...	7(18124501)	1
Caelo	Viscous base solution (NRF p...	8(18268601)	1
Caelo	Viscous base solution (NRF p...	19041201	4
Caelo	Viscous base solution (NRF p...	14368801	1
Caelo	Viscous base solution (NRF p...	17231501	11
Caelo	Viscous base solution (NRF p...	13006001	3
Caelo	Viscous base solution (NRF p...	14354401	5
Caelo	Viscous base solution (NRF p...	15389501	2
Caelo	Viscous base solution (NRF p...	16217601	5
Caelo	Viscous base solution (NRF p...	17138501	1
Caelo	Viscous base solution (NRF p...	12127601	2
Caelo	Viscous base solution (NRF p...	13229201	2
Caelo	Viscous base solution (NRF p...	17193501	3
Caelo	Viscous base solution (NRF p...	1723001	1

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	17232001	3
Caelo	Viscous base solution (NRF p...	18030602	9
Caelo	Viscous base solution (NRF p...	18321001	2
Caelo	Viscous base solution (NRF p...	13006201	3
Caelo	Viscous base solution (NRF p...	13246701	4
Caelo	Viscous base solution (NRF p...	14187701	1
Caelo	Viscous base solution (NRF p...	15196701	2
Caelo	Viscous base solution (NRF p...	16108101	1
Caelo	Viscous base solution (NRF p...	16108601	4
Caelo	Viscous base solution (NRF p...	12019001	1
Caelo	Viscous base solution (NRF p...	1418730	2
Caelo	Viscous base solution (NRF p...	16315201	5
Caelo	Viscous base solution (NRF p...	16159101	1
Caelo	Viscous base solution (NRF p...	6(17193501)	1
Caelo	Viscous base solution (NRF p...	15265701	10
Caelo	Viscous base solution (NRF p...	18207001	4
Caelo	Viscous base solution (NRF p...	13158002	2
Caelo	Viscous base solution (NRF p...	14058901	3
Caelo	Viscous base solution (NRF p...	14109501	5
Caelo	Viscous base solution (NRF p...	15265402	2
Caelo	Viscous base solution (NRF p...	16229801	1
Caelo	Viscous base solution (NRF p...	17023901	18
Caelo	Viscous base solution (NRF p...	17193901	2
Caelo	Viscous base solution (NRF p...	18030601	7
Caelo	Viscous base solution (NRF p...	17231901	7
Caelo	Viscous base solution (NRF p...	1789201	1
Caelo	Viscous base solution (NRF p...	17289401	1
Caelo	Viscous base solution (NRF p...	18031401	2
Caelo	Viscous base solution (NRF p...	18124403	6
Caelo	Viscous base solution (NRF p...	18206102	1
Caelo	Viscous base solution (NRF p...	19041501	1
Caelo	Viscous base solution (NRF p...	17290101	2
Caelo	Viscous base solution (NRF p...	17018001	2
Caelo	Viscous base solution (NRF p...	5(17138401)	1
Caelo	Viscous base solution (NRF p...	9(19041301)	1
Caelo	Viscous base solution (NRF p...	16265001	9
Caelo	Viscous base solution (NRF p...	17289301	2
Caelo	Viscous base solution (NRF p...	17289201	7
Caelo	Viscous base solution (NRF p...	13151101	5
Caelo	Viscous base solution (NRF p...	13158201	2
Caelo	Viscous base solution (NRF p...	13229101	1
Caelo	Viscous base solution (NRF p...	15093501	2
Caelo	Viscous base solution (NRF p...	15389401	3
Caelo	Viscous base solution (NRF p...	16108701	1
Caelo	Viscous base solution (NRF p...	16230101	1
Caelo	Viscous base solution (NRF p...	16315202	1
Caelo	Viscous base solution (NRF p...	17097901	1
Caelo	Viscous base solution (NRF p...	17193502	2
Caelo	Viscous base solution (NRF p...	17194301	1
Caelo	Viscous base solution (NRF p...	177232001	1
Caelo	Viscous base solution (NRF p...	17194201	2
Caelo	Viscous base solution (NRF p...	17232010	1
Caelo	Viscous base solution (NRF p...	17194501	1
Caelo	Viscous base solution (NRF p...	18124501	7
Fagron	Viscous base solution (NRF p...	1820601	1
Caelo	Viscous base solution (NRF p...	13151201	4
Caelo	Viscous base solution (NRF p...	13096101	6
Caelo	Viscous base solution (NRF p...	12309201	6
Caelo	Viscous base solution (NRF p...	13228901	8
Caelo	Viscous base solution (NRF p...	13229501	4

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	13229502	3
Caelo	Viscous base solution (NRF p...	14109901	11
Caelo	Viscous base solution (NRF p...	14059301	1
Caelo	Viscous base solution (NRF p...	14354501	1
Caelo	Viscous base solution (NRF p...	15093301	10
Caelo	Viscous base solution (NRF p...	15141901	2
Caelo	Viscous base solution (NRF p...	15141601	2
Caelo	Viscous base solution (NRF p...	17024001	2
Caelo	Viscous base solution (NRF p...	18268601	12
Caelo	Viscous base solution (NRF p...	19041203	1
Caelo	Viscous base solution (NRF p...	13246901	1
Caelo	Viscous base solution (NRF p...	14000901	1
Caelo	Viscous base solution (NRF p...	14187501	1
Caelo	Viscous base solution (NRF p...	15093701	3
Caelo	Viscous base solution (NRF p...	15142001	1
Caelo	Viscous base solution (NRF p...	16108501	3
Caelo	Viscous base solution (NRF p...	16108401	3
Caelo	Viscous base solution (NRF p...	16107601	5
Caelo	Viscous base solution (NRF p...	16315301	6
Caelo	Viscous base solution (NRF p...	17231301	1
Caelo	Viscous base solution (NRF p...	18124202	1
Caelo	Viscous base solution (NRF p...	1814403	1
Caelo	Viscous base solution (NRF p...	18206801	2
Caelo	Viscous base solution (NRF p...	19041301	6
Caelo	Viscous base solution (NRF p...	18268602	1
Caelo	Viscous base solution (NRF p...	14368701	3
Caelo	Viscous base solution (NRF p...	15105701	4
Caelo	Viscous base solution (NRF p...	13158101	2
Caelo	Viscous base solution (NRF p...	13229001	4
Caelo	Viscous base solution (NRF p...	14000801	7
Caelo	Viscous base solution (NRF p...	14020502	5
Caelo	Viscous base solution (NRF p...	15265201	4
Caelo	Viscous base solution (NRF p...	15265001	1
Caelo	Viscous base solution (NRF p...	15389701	7
Caelo	Viscous base solution (NRF p...	16265101	4
Caelo	Viscous base solution (NRF p...	17017701	5
Caelo	Viscous base solution (NRF p...	17231201	10
Caelo	Viscous base solution (NRF p...	18031201	4
Caelo	Viscous base solution (NRF p...	3013A-03142	1
Caeolo/Gehe	Viscous base solution (NRF p...	17194101	1
Caesar & Loretz GmbH	Viscous base solution (NRF p...	13158201	1
Caesar & Loretz GmbH	Viscous base solution (NRF p...	18268001	4
Caesar & Loretz GmbH / ...	Viscous base solution (NRF p...	18321301	2
Caesar & Loretz GmbH/Sana	Viscous base solution (NRF p...	18321501	2
Caesar & Loretz GmbH/Sa...	Viscous base solution (NRF p...	18268201	3
Caesar und Loretz	Viscous base solution (NRF p...	14109401	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	15265701	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16108901	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16107601	3
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16217301	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16229701	1
Cealo	Viscous base solution (NRF p...	17098302	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160630007	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160630008	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160718007	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160719002	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160805001	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160805002	1
Euro OTC	Viscous base solution (NRF p...	17232001	1
Euro OTC	Viscous base solution (NRF p...	17231801	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Viscous base solution (NRF p...	15141601	1
Fagron	Viscous base solution (NRF p...	31101205	1
Fagron	Viscous base solution (NRF p...	1206F003	3
Fagron	Viscous base solution (NRF p...	1203C004	2
Fagron	Viscous base solution (NRF p...	1111F003	1
Fagron	Viscous base solution (NRF p...	1301F003	3
Fagron	Viscous base solution (NRF p...	22041304	1
Fagron	Viscous base solution (NRF p...	1301F002	1
Fagron	Viscous base solution (NRF p...	1111F001	1
Fagron	Viscous base solution (NRF p...	1214509	1
Fagron	Viscous base solution (NRF p...	1302F002	1
Fagron	Viscous base solution (NRF p...	1301F001	1
Fagron	Viscous base solution (NRF p...	13J22-T05-007729	2
Fagron	Viscous base solution (NRF p...	13J22-T05-007720	1
Fagron	Viscous base solution (NRF p...	28111402	1
Fagron	Viscous base solution (NRF p...	10031502	1
Fagron	Viscous base solution (NRF p...	14K24-T03-031283	2
Fagron	Viscous base solution (NRF p...	1705701	2
Fagron	Viscous base solution (NRF p...	1813227	1
Fagron	Viscous base solution (NRF p...	1310F006	1
Fagron	Viscous base solution (NRF p...	1509255	2
Fagron	Viscous base solution (NRF p...	1604682	4
Fagron	Viscous base solution (NRF p...	1705702	2
Fagron	Viscous base solution (NRF p...	1802062	1
Fagron	Viscous base solution (NRF p...	14059001	2
Fishar	Viscous base solution (NRF p...	15265401	1
gehe	Viscous base solution (NRF p...	17097801	1
gehe	Viscous base solution (NRF p...	17194101	1
gehe	Viscous base solution (NRF p...	17194401	2
Gehe	Viscous base solution (NRF p...	12019201	1
Gehe 19.12.14	Viscous base solution (NRF p...	14187601	1
GEHE am 27.05.2014	Viscous base solution (NRF p...	14020502	1
Caelo	Viscous base solution (NRF p...	17231510	1
Caelo	Viscous base solution (NRF p...	17193801	1
Gutenberg-Apotheke	Viscous base solution (NRF p...	14020502	1
Gutenberg-Apotheke	Viscous base solution (NRF p...	14059101	2
Herstellung	Viscous base solution (NRF p...	20040113-1	1
Herstellung	Viscous base solution (NRF p...	20090113-1	2
Herstellung	Viscous base solution (NRF p...	20040113-2	1
Herstellung	Viscous base solution (NRF p...	20010213-1	1
Herstellung	Viscous base solution (NRF p...	20080213-1	1
Herstellung	Viscous base solution (NRF p...	20150213-1	1
Herstellung	Viscous base solution (NRF p...	20220213-1	1
Herstellung	Viscous base solution (NRF p...	20220213-2	1
Herstellung	Viscous base solution (NRF p...	20080313-1	1
Herstellung	Viscous base solution (NRF p...	2150313-1	1
Herstellung	Viscous base solution (NRF p...	20130313-1	1
Herstellung	Viscous base solution (NRF p...	20210313-1	1
Herstellung	Viscous base solution (NRF p...	20260313-1	1
Herstellung	Viscous base solution (NRF p...	20260313-2	1
Herstellung	Viscous base solution (NRF p...	20210313-2	1
Herstellung	Viscous base solution (NRF p...	20190413-1	1
Herstellung	Viscous base solution (NRF p...	20190413-2	1
Herstellung	Viscous base solution (NRF p...	20030513-1	1
Herstellung	Viscous base solution (NRF p...	20100513-1	1
Herstellung	Viscous base solution (NRF p...	20160513-2	1
Herstellung	Viscous base solution (NRF p...	20220513-2	1
Herstellung	Viscous base solution (NRF p...	20280513-1	1
Herstellung	Viscous base solution (NRF p...	20050613-1	1
Herstellung	Viscous base solution (NRF p...	20100613-1	1

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Supplier	Substance	Batch	Spectra
Herstellung	Viscous base solution (NRF p...	20140613-1	1
Herstellung	Viscous base solution (NRF p...	20130613-1	1
Herstellung	Viscous base solution (NRF p...	20280613-1	1
Herstellung	Viscous base solution (NRF p...	20280613-2	1
Herstellung	Viscous base solution (NRF p...	20050713-2	1
Herstellung	Viscous base solution (NRF p...	20050713-1	1
Herstellung	Viscous base solution (NRF p...	20120713-1	1
Herstellung	Viscous base solution (NRF p...	20260713-2	1
Herstellung	Viscous base solution (NRF p...	20260713-1	1
Herstellung	Viscous base solution (NRF p...	20300713-2	1
Herstellung	Viscous base solution (NRF p...	20150813-4	1
Herstellung	Viscous base solution (NRF p...	20150813-3	1
Herstellung	Viscous base solution (NRF p...	20060913-1	1
Herstellung	Viscous base solution (NRF p...	20060913-2	1
Herstellung	Viscous base solution (NRF p...	2030913-1	1
Herstellung	Viscous base solution (NRF p...	20200913-1	1
Herstellung	Viscous base solution (NRF p...	20270913-2	1
Herstellung	Viscous base solution (NRF p...	20041013-1	1
Herstellung	Viscous base solution (NRF p...	131018001	1
Herstellung	Viscous base solution (NRF p...	131018004	1
Herstellung	Viscous base solution (NRF p...	131025001	1
Herstellung	Viscous base solution (NRF p...	131030004	1
Herstellung	Viscous base solution (NRF p...	131030005	1
Herstellung	Viscous base solution (NRF p...	131115001	1
Herstellung	Viscous base solution (NRF p...	131126002	1
Herstellung	Viscous base solution (NRF p...	131203012	1
Herstellung	Viscous base solution (NRF p...	131206001	1
Herstellung	Viscous base solution (NRF p...	131211001	1
Herstellung	Viscous base solution (NRF p...	131211002	1
Herstellung	Viscous base solution (NRF p...	131220001	1
Herstellung	Viscous base solution (NRF p...	131218006	1
Herstellung	Viscous base solution (NRF p...	140108003	1
Herstellung	Viscous base solution (NRF p...	140108002	1
Herstellung	Viscous base solution (NRF p...	140117001	1
Herstellung	Viscous base solution (NRF p...	240114	1
Jenne	Viscous base solution (NRF p...	16108901	1
Klosterring	Viscous base solution (NRF p...	17098102	1
Klosterring	Viscous base solution (NRF p...	17138401	2
Klosterring	Viscous base solution (NRF p...	19098302	1
Klosterring	Viscous base solution (NRF p...	19223101	6
Nachprüfung	Viscous base solution (NRF p...	13158001	1
Noweda	Viscous base solution (NRF p...	11176201	1
Noweda	Viscous base solution (NRF p...	12019401	1
Noweda	Viscous base solution (NRF p...	12093601	2
Noweda	Viscous base solution (NRF p...	17098101	3
Caelo	Viscous base solution (NRF p...	14187301	8
Caelo	Viscous base solution (NRF p...	17098302	1
Phoenix	Viscous base solution (NRF p...	18030601	2
Phoenix 08.07.2014	Viscous base solution (NRF p...	14110001	1
Caelo	Viscous base solution (NRF p...	13246401	5
Caelo	Viscous base solution (NRF p...	12019002	2
Caelo	Viscous base solution (NRF p...	14020601	3
Caelo	Viscous base solution (NRF p...	14187201	9
PHÖNIX	Viscous base solution (NRF p...	17232001	2
Caelo	Viscous base solution (NRF p...	17194001	3
Caelo	Viscous base solution (NRF p...	16109001	1
Post Aptotheke	Viscous base solution (NRF p...	1306F002	2
Sanacorp	Viscous base solution (NRF p...	12127401	2
Sanacorp	Viscous base solution (NRF p...	12231301	4
Sanacorp	Viscous base solution (NRF p...	14109402	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Viscous base solution (NRF p...	15265201	1
Sanacorp	Viscous base solution (NRF p...	15265601	1
Sanacorp, 22.02.17, 32,...	Viscous base solution (NRF p...	16265101	1
sanacorp, 32,14EUR, 15.09...	Viscous base solution (NRF p...	16108601	1
Caelo	Viscous base solution (NRF p...	14266501	7
Fagron	Viscous base solution (NRF p...	17098302	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	270515	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	300615	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	90915	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	71015	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	30216	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	150616	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	220616	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	91213	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	60114	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100214	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100314	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	90414	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	70514	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110614	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	90714	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	10814	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100914	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	131014	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	111114	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	11214	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	2012015	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	260115	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	250215	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	230315	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	160415	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100715	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	111115	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	161215	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110116	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	220216	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	160316	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	130416	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	20516	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110516	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	250716	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	290716	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	290716-2	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	70916	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	280916	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	121016	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	261016	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	91116	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	231116	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	71216	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	211216	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	40117	1
Caelo	Viscous base solution (NRF p...	14020301	5
VDL 17.10.14	Viscous base solution (NRF p...	14109401	1
VDL 24.05.14	Viscous base solution (NRF p...	14020401	2
Caelo	Viscous base solution (NRF p...	12127301	1
Caelo	Viscous base solution (NRF p...	14109401	7
Caelo	Viscous base solution (NRF p...	15265401	10
Caelo	Viscous base solution (NRF p...	14020401	10
Caelo	Viscous base solution (NRF p...		1

- 137 259 spectra from 703 *Apo-Ident* customers from a total of 34 891 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Viscous base solution (NRF p. 20)* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Viscous base solution (NRF p. 20)* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1000	0	55 359
Type B	0	1960	0	67 514
Type C	0	1088	6	137 259

The substance/substance group *Viscous base solution (NRF p. 20)* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.4000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.6939 %)
Type C	100.0000 % (> 99.6452 %)	99.4516 % (> 99.1773 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Viscous base solution (NRF p. 20)* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Lotio Cordes [®]	16.54	—
Raspberry syrup (conserved)	18.11	—
Liquorice juice purified, diluted	18.13	—
Condurango wine	23.61	—
Chest elixir	23.92	—
Ribwort plantain syrup (conserved)	24.93	—
Marshmallow syrup (conserved)	25.60	—
Fortified wine	28.32	—
Gel basis Audor [®]	29.52	—

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Substanz	Distance in main model	Distance in second-stage model
Sugar syrup DAB	32.91	—
Cherry syrup (conserved)	37.33	—
Hydrophilic base emulsion (NRF p.25)	39.37	—
Ipecacuanha syrup (NRF 19.1)	42.38	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Viscous base solution (NRF p. 20)* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30659	30659	0.00	19.91
31354	31888	2.04	16.54
31658	31658	0.00	18.63
31790	31888	3.06	20.64
31882	31882	0.00	19.15
31883	31883	0.00	20.31
31884	31884	0.00	18.90
31885	31885	0.00	19.23
31886	31886	0.00	18.69
31887	31887	0.00	20.28
31888	31888	0.00	20.32
31889	31889	0.00	19.02
31890	31890	0.00	21.46
31893	31893	0.00	20.97
31894	31894	0.00	19.01
31895	31895	0.00	20.65
31896	31896	0.00	19.74

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group	Water and aqueous solutions
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	12/03/2020
Report number	30869-2020-03-12
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Water and aqueous solutions; Aluminium acetotartrate solution; Aqua; Chlorhexidine digluconate solution 20%; Liquor aluminii acetico-tartarici; Solutio chlorhexidini gluconici 20%; Water

Special notes

When selecting the *Water and aqueous solutions* substance/substance group, the following information is displayed to the user:

- Advice for the identification of water: Preserved, purified and distilled water can not be conclusively distinguished by spectral analysis. An additional analysis of identity may be required.

Applicable documents

978-3-7692-6679-5	<i>European Pharmacopoeia 9th Edition, Basic Version 2017</i> [3]
Komm2.2.40	<i>Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident</i> [4]
AA004	<i>Erstellung und Validierung eines IdentModul-Updates</i>

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Aluminium acetotartrate solution	5	1	136
Chlorhexidine digluconate solution 20%	10	10	378
Water	6	24	589

Second-stage model

For differentiation of the substance/substance group *Water and aqueous solutions* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Water and aqueous solutions*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Aluminium acetot...	12233502	30869	40	20120810
Caelo	Aluminium acetot...	13378704	31342	40	AR-14-FG-012698-01
Caelo	Aluminium acetot...	15299901	31959	60	20151001
Hedinger	Aluminium acetot...	020160B	32921	40	20150818
Hedinger	Aluminium acetot...	020165B	34690	40	20180903
Caelo	Chlorhexidine di...	14011009	31463	60	AR-15-FG-010164-03
Caelo	Chlorhexidine di...	15131504	31705	60	20150424
Caelo	Chlorhexidine di...	15292508	32308	40	20151109
Euro OTC	Chlorhexidine di...	1508022	31735	60	20150916*
Euro OTC	Chlorhexidine di...	1511039	31846	60	20160114*
Euro OTC	Chlorhexidine di...	1511033-01	32732	40	20160114
Euro OTC	Chlorhexidine di...	1610021	32831	40	20161121*
Euro OTC	Chlorhexidine di...	1610022	32832	40	20161121*
Fagron	Chlorhexidine di...	13H19-B01	31240	30	20130906
Fagron	Chlorhexidine di...	15I03-B02-315213	31829	45	20151027
Caelo	Water	13176101	31057	40	20130627
Caelo	Water	14253301	31624	60	20140923
Caelo	Water	15142501	31718	60	1510212
Caelo	Water	161975	32354	30	20160725*
Fagron	Water	14K05-T02-016775	31676	60	20150225
Fagron	Water	15D01-C20-16500	31809	60	20151105

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1005 spectra of 21 reference samples from the substance/substance group *Water and aqueous solutions*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 21 different batches.
- 55 354 spectra from a total of 1095 batches from further 216 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 1400 spectra of 35 reference samples from the substance/substance group *Water and aqueous solutions*.
- Among them are spectra of independent samples from 35 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Aluminium acetotartrate solu...	16004505	33490	40
Caelo	Chlorhexidine digluconate so...	163088	33089	40
Caelo	Chlorhexidine digluconate so...	172101	33693	40
Caelo	Chlorhexidine digluconate so...	190808	34470	40
Euro OTC	Chlorhexidine digluconate so...	1701037	33230	40
Euro OTC	Chlorhexidine digluconate so...	1708006	33843	40
Euro OTC	Chlorhexidine digluconate so...	1712002	33927	40
Euro OTC	Chlorhexidine digluconate so...	1807014	34191	40
Euro OTC	Chlorhexidine digluconate so...	1811026	34351	40
Euro OTC	Chlorhexidine digluconate so...	1902010	34425	40
Euro OTC	Chlorhexidine digluconate so...	1908014	34695	40
Caelo	Water	153714	32080	40
Caelo	Water	153945	32082	40
Caelo	Water	162119	32353	40
Caelo	Water	162230	32355	40
Caelo	Water	163133	32893	40
Caelo	Water	162554	32894	40
Caelo	Water	170020	33178	40
Caelo	Water	170324	33179	40
Caelo	Water	171731	33575	40
Caelo	Water	171451	33576	40
Caelo	Water	171773	33577	40
Caelo	Water	172534	33738	40
Caelo	Water	172535	33739	40
Caelo	Water	172532	33740	40
Caelo	Water	170988	33976	40
Caelo	Water	172958	33979	40
Caelo	Water	180004	34135	40
Caelo	Water	181355	34138	40
Caelo	Water	181951	34240	40
Caelo	Water	181352	34241	40
Caelo	Water	182287	34242	40
Caelo	Water	182399	34245	40
Caelo	Water	182288	34315	40
Fagron	Water	16K25-C20-17409	32963	40

- 68 074 spectra from a total of 1467 batches from further 358 substances. These spectra were

recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 4564 spectra from 580 *Apo-Ident* customers from 1147 batches from the substance/substance group *Water and aqueous solutions*.
- Among them are spectra of independent samples from 1099 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
A. Hedinger/Noweda	Aluminium acetotartrate solu...	201628	1
AHD	Aluminium acetotartrate solu...	20162B	1
AHD	Aluminium acetotartrate solu...	201628	1
AHD/Hedinger	Aluminium acetotartrate solu...	20159B	1
Alliance Healthcare	Aluminium acetotartrate solu...	12318705	2
Anzag	Aluminium acetotartrate solu...	20152B	2
Anzag 17.04.13 ek: 5,43EUR	Aluminium acetotartrate solu...	20152B	1
Anzag/	Aluminium acetotartrate solu...	20151B	1
Anzag/ Hedinger	Aluminium acetotartrate solu...	20153B	1
Caelo	Aluminium acetotartrate solu...	160030	1
athenstaedt	Aluminium acetotartrate solu...	110024	1
athenstaedt	Aluminium acetotartrate solu...	160036	1
athenstaedt	Aluminium acetotartrate solu...	160030	1
Athenstaedt	Aluminium acetotartrate solu...	900108	3
Athenstaedt	Aluminium acetotartrate solu...	160036	2
Athenstaedt	Aluminium acetotartrate solu...	160029	1
Athenstaedt	Aluminium acetotartrate solu...	180044	1
Athenstaedt	Aluminium acetotartrate solu...	180041	1
athenstaedt / Gehe	Aluminium acetotartrate solu...	160036	1
athenstaedt GmbH	Aluminium acetotartrate solu...	900107	2
athenstaedt GmbH	Aluminium acetotartrate solu...	160030	1
athenstaedt GmbH / Noweda	Aluminium acetotartrate solu...	110024	1
athenstaedt GmbH/Phönix	Aluminium acetotartrate solu...	160030	1
athenstaedt/AllianceHC	Aluminium acetotartrate solu...	160029	1
athenstaedt/GEHE	Aluminium acetotartrate solu...	160030	1
Athenstaedt/P	Aluminium acetotartrate solu...	180041	1
athenstaedt/Phönix	Aluminium acetotartrate solu...	180041	1
athenstaedtFiebig	Aluminium acetotartrate solu...	180044	1
athenstedt	Aluminium acetotartrate solu...	110029	1
Aug. Hedinger GmbH & Co...	Aluminium acetotartrate solu...	20161B	1
Bombastus	Aluminium acetotartrate solu...	160029	1
Bombastus	Aluminium acetotartrate solu...	18078602	1
Caelo	Aluminium acetotartrate solu...	13101105	1
Caelo	Aluminium acetotartrate solu...	10114803	1
Caelo	Aluminium acetotartrate solu...	4071201	1
Caelo	Aluminium acetotartrate solu...	12116803	3
Caelo	Aluminium acetotartrate solu...	12116804	4
Caelo	Aluminium acetotartrate solu...	17081201	1
Caelo	Aluminium acetotartrate solu...	12318702	1
Caelo	Aluminium acetotartrate solu...	2713M-01793	1
Caelo	Aluminium acetotartrate solu...	12318704	3
Caelo	Aluminium acetotartrate solu...	13101102	5
Caelo	Aluminium acetotartrate solu...	13101104	5
Caelo	Aluminium acetotartrate solu...	13261304	3

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Supplier	Substance	Batch	Spectra
Caelo	Aluminium acetotartrate solu. ...	13261302	2
Caelo	Aluminium acetotartrate solu. ...	6031415	1
Caelo	Aluminium acetotartrate solu. ...	20155B	4
Caelo	Aluminium acetotartrate solu. ...	13378701	3
Caelo	Aluminium acetotartrate solu. ...	19052014A	1
Caelo	Aluminium acetotartrate solu. ...	13261306	1
Caelo	Aluminium acetotartrate solu. ...	13378702	1
Caelo	Aluminium acetotartrate solu. ...	13378708	2
Caelo	Aluminium acetotartrate solu. ...	20156B	3
Caelo	Aluminium acetotartrate solu. ...	110024	1
Caelo	Aluminium acetotartrate solu. ...	20158B	1
Caelo	Aluminium acetotartrate solu. ...	20159B	1
Caelo	Aluminium acetotartrate solu. ...	1425006	1
Caelo	Aluminium acetotartrate solu. ...	110029	1
Caelo	Aluminium acetotartrate solu. ...	14252007	1
Caelo	Aluminium acetotartrate solu. ...	14071503	1
Caelo	Aluminium acetotartrate solu. ...	15045404	2
Caelo	Aluminium acetotartrate solu. ...	15045403	4
Caelo	Aluminium acetotartrate solu. ...	15045405	5
Caelo	Aluminium acetotartrate solu. ...	1504506	1
Caelo	Aluminium acetotartrate solu. ...	15054405	1
Caelo	Aluminium acetotartrate solu. ...	1529901	1
Caelo	Aluminium acetotartrate solu. ...	15299902	5
Caelo	Aluminium acetotartrate solu. ...	15299601	1
Caelo	Aluminium acetotartrate solu. ...	16004501	4
Caelo	Aluminium acetotartrate solu. ...	1031706	1
Caelo	Aluminium acetotartrate solu. ...	2016B	1
Caelo	Aluminium acetotartrate solu. ...	16004525	1
Caelo	Aluminium acetotartrate solu. ...	16004504	2
Caelo	Aluminium acetotartrate solu. ...	16004512	9
Caelo	Aluminium acetotartrate solu. ...	2058179	1
Caelo	Aluminium acetotartrate solu. ...	16342001	13
Caelo	Aluminium acetotartrate solu. ...	16091704	1
Caelo	Aluminium acetotartrate solu. ...	(020)020	1
Caelo	Aluminium acetotartrate solu. ...	16342005	6
Caelo	Aluminium acetotartrate solu. ...	17051804	1
Caelo	Aluminium acetotartrate solu. ...	18078602	11
Caelo	Aluminium acetotartrate solu. ...	18078606	8
Caelo	Aluminium acetotartrate solu. ...	18078607	3
Caelo	Aluminium acetotartrate solu. ...	18078608	1
Caelo	Aluminium acetotartrate solu. ...	14252008	2
Caelo	Aluminium acetotartrate solu. ...	15299904	3
Caelo	Aluminium acetotartrate solu. ...	14252009	2
Caelo	Aluminium acetotartrate solu. ...	20154B	4
Caelo	Aluminium acetotartrate solu. ...	20152B	1
Caelo	Aluminium acetotartrate solu. ...	20151B	1
Caelo	Aluminium acetotartrate solu. ...	20152b	1
Caelo	Aluminium acetotartrate solu. ...	117(18078602)	1
Caelo	Aluminium acetotartrate solu. ...	118(18288401)	1
Caelo	Aluminium acetotartrate solu. ...	201538	1
Caelo	Aluminium acetotartrate solu. ...	20161B	11
Caelo	Aluminium acetotartrate solu. ...	163420006	1
Caelo	Aluminium acetotartrate solu. ...	20150B	2
Caelo	Aluminium acetotartrate solu. ...	14252010	7
Caelo	Aluminium acetotartrate solu. ...	1425010	1
Caelo	Aluminium acetotartrate solu. ...	20159b	1
Caelo	Aluminium acetotartrate solu. ...	12318701	5
Caelo	Aluminium acetotartrate solu. ...	11315004	1
Caelo	Aluminium acetotartrate solu. ...	13101101	2
Caelo	Aluminium acetotartrate solu. ...	12318703	1

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Supplier	Substance	Batch	Spectra
Caelo	Aluminium acetotartrate solu...	20162B	2
Caelo	Aluminium acetotartrate solu...	20163B	3
Caelo	Aluminium acetotartrate solu...	20164B	2
Caelo	Aluminium acetotartrate solu...	18078611	2
Caelo	Aluminium acetotartrate solu...	11315007	1
Caelo	Aluminium acetotartrate solu...	12233501	3
Caelo	Aluminium acetotartrate solu...	16004505	13
Caelo	Aluminium acetotartrate solu...	13261301	3
Caelo	Aluminium acetotartrate solu...	14252004	1
Caelo	Aluminium acetotartrate solu...	12318705	2
Caelo	Aluminium acetotartrate solu...	13378709	4
Caelo	Aluminium acetotartrate solu...	13378706	3
Caelo	Aluminium acetotartrate solu...	18288401	2
Caelo	Aluminium acetotartrate solu...	201563	1
Caelo	Aluminium acetotartrate solu...	20160B	3
Caelo	Aluminium acetotartrate solu...	16342007	2
Caelo	Aluminium acetotartrate solu...	16342006	13
Caelo	Aluminium acetotartrate solu...	20153B	3
Caelo	Aluminium acetotartrate solu...	13261303	1
Caelo	Aluminium acetotartrate solu...	13378703	1
Caelo	Aluminium acetotartrate solu...	15045406	11
Caelo	Aluminium acetotartrate solu...	15299909	9
Caesar & Lorenz	Aluminium acetotartrate solu...	12318703	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu...	16004505	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu...	16004504	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu...	16342006	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu...	18078606	2
Caesar & Loretz GmbH/ P...	Aluminium acetotartrate solu...	18288401	1
Caesar & Loretz GmbH/Ph...	Aluminium acetotartrate solu...	18078611	1
Caesar u Loretz	Aluminium acetotartrate solu...	14252005	1
Caesar&Loretz GmbH/Anzag	Aluminium acetotartrate solu...	13101105	1
Caesar&Loretz GmbH/Anzag	Aluminium acetotartrate solu...	14252010	1
Caesar&lorenz,Phoenix	Aluminium acetotartrate solu...	12116804	1
Calo/AHD	Aluminium acetotartrate solu...	13101105	1
Cealo/AHD	Aluminium acetotartrate solu...	15299909	1
Cealo/Anzag	Aluminium acetotartrate solu...	15299901	1
Cealo/Anzag	Aluminium acetotartrate solu...	18078606	1
Cealo/Gehe	Aluminium acetotartrate solu...	1800041	1
Dr. Seeger	Aluminium acetotartrate solu...	20153B	1
Dr. Seeger GmbH/Noweda	Aluminium acetotartrate solu...	20146B	1
Dr.Seeger GmbH	Aluminium acetotartrate solu...	20153B	1
E Plus	Aluminium acetotartrate solu...	16342005	1
E-Plus	Aluminium acetotartrate solu...	18078602	1
Euro OTC	Aluminium acetotartrate solu...	20157B	1
Euro OTC	Aluminium acetotartrate solu...	13378701	1
Euro OTC	Aluminium acetotartrate solu...	16004512	1
FA.Hedinger	Aluminium acetotartrate solu...	20159B	1
Fagron	Aluminium acetotartrate solu...	20163B	1
Fiebig	Aluminium acetotartrate solu...	20163B	1
Fischar/Anzag	Aluminium acetotartrate solu...	20152B	1
Franz / Anzag	Aluminium acetotartrate solu...	(020)020	1
franz gmbh	Aluminium acetotartrate solu...	201538	1
franz GmbH	Aluminium acetotartrate solu...	20155B	1
Franz GmbH	Aluminium acetotartrate solu...	20153B	2
Franz GmbH	Aluminium acetotartrate solu...	20155B	3
Franz GmbH	Aluminium acetotartrate solu...	20152B	2
Franz GmbH	Aluminium acetotartrate solu...	20161B	2
Franz GmbH	Aluminium acetotartrate solu...	2163B	1
Franz GmbH / Phoenix	Aluminium acetotartrate solu...	201538	1
Franz GmbH / Phoenix	Aluminium acetotartrate solu...	20161B	1

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Supplier	Substance	Batch	Spectra
Franz GmbH/Phönix	Aluminium acetotartrate solu. ...	20151B	1
Gehe	Aluminium acetotartrate solu. ...	201528	1
Gehe	Aluminium acetotartrate solu. ...	20153B	1
Gehe	Aluminium acetotartrate solu. ...	20155B	1
Gehe	Aluminium acetotartrate solu. ...	15045406	1
Gehe	Aluminium acetotartrate solu. ...	15045403	1
Gehe	Aluminium acetotartrate solu. ...	20160B	2
Gehe	Aluminium acetotartrate solu. ...	20163B	4
GEHE	Aluminium acetotartrate solu. ...	20161B	1
GEHE	Aluminium acetotartrate solu. ...	20163B	1
GEHE	Aluminium acetotartrate solu. ...	20164B	2
GEHE	Aluminium acetotartrate solu. ...	20165B	3
GEHE 08.05	Aluminium acetotartrate solu. ...	20157B	1
Gehe Kassel	Aluminium acetotartrate solu. ...	201568B	1
Gehe/Athenstaedt GmbH&C...	Aluminium acetotartrate solu. ...	180041	1
Caelo	Aluminium acetotartrate solu. ...	12233503	1
Gehe/Hedinger	Aluminium acetotartrate solu. ...	20153B	1
Gehe/Hedinger	Aluminium acetotartrate solu. ...	20156B	1
geile	Aluminium acetotartrate solu. ...	20154B	1
Haedinger	Aluminium acetotartrate solu. ...	20160B	1
Hediger/Phönix	Aluminium acetotartrate solu. ...	20156B	1
hedinger	Aluminium acetotartrate solu. ...	20151B	1
hedinger	Aluminium acetotartrate solu. ...	201528	1
hedinger	Aluminium acetotartrate solu. ...	20156B	3
hedinger	Aluminium acetotartrate solu. ...	20157B	2
hedinger	Aluminium acetotartrate solu. ...	20158B	3
hedinger	Aluminium acetotartrate solu. ...	201598	1
hedinger	Aluminium acetotartrate solu. ...	20160B	1
hedinger	Aluminium acetotartrate solu. ...	20161B	1
hedinger	Aluminium acetotartrate solu. ...	20163B	1
hedinger	Aluminium acetotartrate solu. ...	20164B	1
hedinger	Aluminium acetotartrate solu. ...	201165B	1
Hedinger	Aluminium acetotartrate solu. ...	402211793	1
Hedinger	Aluminium acetotartrate solu. ...	1002211793	1
Hedinger	Aluminium acetotartrate solu. ...	20149B	1
Hedinger	Aluminium acetotartrate solu. ...	20150B	4
Hedinger	Aluminium acetotartrate solu. ...	2015B	1
Hedinger	Aluminium acetotartrate solu. ...	20151B	8
Hedinger	Aluminium acetotartrate solu. ...	1111	1
Hedinger	Aluminium acetotartrate solu. ...	2021302	1
Hedinger	Aluminium acetotartrate solu. ...	20152B	8
Hedinger	Aluminium acetotartrate solu. ...	26041301	1
Hedinger	Aluminium acetotartrate solu. ...	2153B	1
Hedinger	Aluminium acetotartrate solu. ...	20153B	9
Hedinger	Aluminium acetotartrate solu. ...	201538	2
Hedinger	Aluminium acetotartrate solu. ...	20154B	10
Hedinger	Aluminium acetotartrate solu. ...	20155B	9
Hedinger	Aluminium acetotartrate solu. ...	201548	1
Hedinger	Aluminium acetotartrate solu. ...	20156B	16
Hedinger	Aluminium acetotartrate solu. ...	5081403	1
Hedinger	Aluminium acetotartrate solu. ...	201568	1
Hedinger	Aluminium acetotartrate solu. ...	20157B	9
Hedinger	Aluminium acetotartrate solu. ...	20158B	4
Hedinger	Aluminium acetotartrate solu. ...	20159B	6
Hedinger	Aluminium acetotartrate solu. ...	20161B	18
Hedinger	Aluminium acetotartrate solu. ...	20160B	13
Hedinger	Aluminium acetotartrate solu. ...	201608	1
Hedinger	Aluminium acetotartrate solu. ...	2016B	1
Hedinger	Aluminium acetotartrate solu. ...	2016b	1
Hedinger	Aluminium acetotartrate solu. ...	20162B	5

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Supplier	Substance	Batch	Spectra
Hedinger	Aluminium acetotartrate solu...	20163B	6
Hedinger	Aluminium acetotartrate solu...	20163b	1
Hedinger	Aluminium acetotartrate solu...	201638	2
Hedinger	Aluminium acetotartrate solu...	20164B	3
Hedinger	Aluminium acetotartrate solu...	20165B	2
HEDINGER	Aluminium acetotartrate solu...	20151B	1
Hedinger	Aluminium acetotartrate solu...	20150B	1
Hedinger	Aluminium acetotartrate solu...	20151B	1
Hedinger , Noweda	Aluminium acetotartrate solu...	20153B	1
Hedinger , Stuttgart	Aluminium acetotartrate solu...	20154B	1
Hedinger / Anzag	Aluminium acetotartrate solu...	20160B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20152B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	3958/V09/15	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20154B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20155B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20156B	4
Hedinger / Gehe	Aluminium acetotartrate solu...	20157B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20161B	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20163B	3
Hedinger / Gehe	Aluminium acetotartrate solu...	20165B	1
Hedinger / Noweda	Aluminium acetotartrate solu...	20159B	1
Hedinger / Noweda	Aluminium acetotartrate solu...	20161B	1
Hedinger / Noweda	Aluminium acetotartrate solu...	20160B	1
Hedinger / Phoenix	Aluminium acetotartrate solu...	20163B	2
Hedinger / Sanacorp	Aluminium acetotartrate solu...	20155B	1
Hedinger / Sanacorp	Aluminium acetotartrate solu...	20156B	1
Hedinger GmbH	Aluminium acetotartrate solu...	20160B	1
Hedinger GmbH	Aluminium acetotartrate solu...	20161B	1
Hedinger GmbH & Co.KG	Aluminium acetotartrate solu...	20163B	1
Hedinger GmbH, Phoenix	Aluminium acetotartrate solu...	20162B	2
Hedinger Phönix	Aluminium acetotartrate solu...	20152B	1
Hedinger Phönix	Aluminium acetotartrate solu...	20153B	1
Hedinger Phönix	Aluminium acetotartrate solu...	20162B	1
Hedinger Phönix	Aluminium acetotartrate solu...	20163B	1
Hedinger Phönix	Aluminium acetotartrate solu...	20164B	2
Hedinger über Phoenix	Aluminium acetotartrate solu...	20155B	1
Hedinger über Phoenix	Aluminium acetotartrate solu...	20157B	1
Hedinger, Heiligenwiese...	Aluminium acetotartrate solu...	20150B	1
Hedinger, Noweda	Aluminium acetotartrate solu...	20154B	1
Hedinger/ G	Aluminium acetotartrate solu...	20164B	1
Hedinger/ Gehe	Aluminium acetotartrate solu...	20162B	1
Hedinger/ Gehe	Aluminium acetotartrate solu...	20163B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20149B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20156B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20157B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20159B	1
Hedinger/ Phönix	Aluminium acetotartrate solu...	20159B	1
hedinger/ Sanacorp	Aluminium acetotartrate solu...	20163B5693	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20150B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20154B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20159B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20161B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20163B	2
Hedinger/ Sanacorp WE...	Aluminium acetotartrate solu...	20158B	1
Hedinger/AHD	Aluminium acetotartrate solu...	20152B	2
Hedinger/AHD	Aluminium acetotartrate solu...	201153B	1
Hedinger/AHD	Aluminium acetotartrate solu...	20146B	1
Hedinger/AHD	Aluminium acetotartrate solu...	2164B	1
Hedinger/Alliance Healt...	Aluminium acetotartrate solu...	20159B	1
hedinger/anzag	Aluminium acetotartrate solu...	20152B	1

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Supplier	Substance	Batch	Spectra
hedinger/anzag	Aluminium acetotartrate solu...	20153b	1
Hedinger/Anzag	Aluminium acetotartrate solu...	20157B	1
Hedinger/Anzag	Aluminium acetotartrate solu...	20159B	1
Hedinger/Anzag	Aluminium acetotartrate solu...	20160B	1
Hedinger/Anzag	Aluminium acetotartrate solu...	20161B	2
Hedinger/Ebert	Aluminium acetotartrate solu...	20162B	1
Hedinger/Ebert	Aluminium acetotartrate solu...	20163B	1
Hedinger/Fiebig	Aluminium acetotartrate solu...	20161B	1
Hedinger/Fiebig	Aluminium acetotartrate solu...	20162B	3
Hedinger/G	Aluminium acetotartrate solu...	20162B	1
hedinger/gehe	Aluminium acetotartrate solu...	20154B	1
hedinger/gehe	Aluminium acetotartrate solu...	20162B	1
hedinger/gehe	Aluminium acetotartrate solu...	20163B	1
hedinger/Gehe	Aluminium acetotartrate solu...	20155B	1
hedinger/Gehe	Aluminium acetotartrate solu...	20156B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20152B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20153B	4
Hedinger/Gehe	Aluminium acetotartrate solu...	201548	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20157B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20158B	2
Hedinger/Gehe	Aluminium acetotartrate solu...	20159B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20160B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20161B	3
Hedinger/Gehe	Aluminium acetotartrate solu...	20162B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20163B	4
Hedinger/Gehe	Aluminium acetotartrate solu...	201638	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20164B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20165B	2
Hedinger/GEHE	Aluminium acetotartrate solu...	20155B	1
Hedinger/Holdermann	Aluminium acetotartrate solu...	20150B	1
Hedinger/Jenne 16.08.14	Aluminium acetotartrate solu...	20156B	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20151B	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20156B	3
Hedinger/Noweda	Aluminium acetotartrate solu...	20158B	2
Hedinger/Noweda	Aluminium acetotartrate solu...	20160B	2
Hedinger/Noweda	Aluminium acetotartrate solu...	200161B	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20161B	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20162B	1
HEDINGER/NOWEDA	Aluminium acetotartrate solu...	20159B	1
Hedinger/Otto	Aluminium acetotartrate solu...	201538	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20154B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20159B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	201578	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20158B	2
Hedinger/Phoenix	Aluminium acetotartrate solu...	20160B	3
Hedinger/Phoenix	Aluminium acetotartrate solu...	20020	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20162B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20163B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20164B	1
hedinger/phönix	Aluminium acetotartrate solu...	20155B	1
hedinger/phönix	Aluminium acetotartrate solu...	20157B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20152B	2
Hedinger/Phönix	Aluminium acetotartrate solu...	20153B	2
Hedinger/Phönix	Aluminium acetotartrate solu...	(020)020	1
Hedinger/Phönix	Aluminium acetotartrate solu...	2015B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20155B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20156B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20157B	3
Hedinger/Phönix	Aluminium acetotartrate solu...	20159B	4
Hedinger/Phönix	Aluminium acetotartrate solu...	20160B	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phönix	Aluminium acetotartrate solu...	20163B	3
Hedinger/Phönix	Aluminium acetotartrate solu...	20164B	2
Hedinger/Phönix	Aluminium acetotartrate solu...	20165B	1
Hedinger/Sana	Aluminium acetotartrate solu...	20159B	1
Hedinger/Sana	Aluminium acetotartrate solu...	20164B	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20153B	2
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20154B	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20158B	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20159B	2
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20163B	6
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20164B	2
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20165B	1
Hedinger/V.d.L.	Aluminium acetotartrate solu...	20154B	1
Hedinger/VDL	Aluminium acetotartrate solu...	20161B	1
heidinger/gehe	Aluminium acetotartrate solu...	201618	1
heidinger/noweda	Aluminium acetotartrate solu...	20156B	1
heidinger/phönix	Aluminium acetotartrate solu...	20159B	2
Heidinger/Phönix	Aluminium acetotartrate solu...	20163B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20161B	2
Henry Lamotte GmbH/ San...	Aluminium acetotartrate solu...	16004505	1
HenryLamotte	Aluminium acetotartrate solu...	20163B	2
Jenne	Aluminium acetotartrate solu...	20161B	1
Jenne	Aluminium acetotartrate solu...	20162B	1
Kehr/gepepharm	Aluminium acetotartrate solu...	20160B	1
L 20/Hedinger	Aluminium acetotartrate solu...	201618	1
L10/Apoth.E.Bartel	Aluminium acetotartrate solu...	20161B	1
L12	Aluminium acetotartrate solu...	20163B	2
Leyh Pharma	Aluminium acetotartrate solu...	18078606	1
Noweda	Aluminium acetotartrate solu...	20150B	1
Noweda	Aluminium acetotartrate solu...	13261304	1
Noweda/Hedinger	Aluminium acetotartrate solu...	20153B	1
Noweda/Hedinger	Aluminium acetotartrate solu...	20156B	1
Phoenix WE 11.03.17 EK...	Aluminium acetotartrate solu...	20161B	1
Phoenix/Cealo	Aluminium acetotartrate solu...	20155B	1
Phönix	Aluminium acetotartrate solu...	12116805	1
Phönix	Aluminium acetotartrate solu...	12318705	1
Phönix	Aluminium acetotartrate solu...	12318703	1
Phönix	Aluminium acetotartrate solu...	20153b	1
Phönix	Aluminium acetotartrate solu...	13101101	1
Phönix Gotha	Aluminium acetotartrate solu...	900108	2
Phönix Gotha	Aluminium acetotartrate solu...	13261304	1
Phönix/Hedinger	Aluminium acetotartrate solu...	20155B	3
Raben-Apotheke Mildenau	Aluminium acetotartrate solu...	20156B	2
Sanacorp	Aluminium acetotartrate solu...	20150B	2
Sanacorp	Aluminium acetotartrate solu...	20152B	1
Sanacorp	Aluminium acetotartrate solu...	20155B	1
Caelo	Aluminium acetotartrate solu...	14252011	1
sanacorp/Hedinger	Aluminium acetotartrate solu...	20157B	1
Sanacorp/Hedinger	Aluminium acetotartrate solu...	20157B	1
Spangr/Hedinger	Aluminium acetotartrate solu...	201538	1
Spangro/Hedinger	Aluminium acetotartrate solu...	20158B	1
Spangropharm	Aluminium acetotartrate solu...	20161B	1
Stumpf	Aluminium acetotartrate solu...	20151B	1
WE:21.03.2016 Sanacor...	Aluminium acetotartrate solu...	20160B	1
AHD	Chlorhexidine digluconate so...	12114012	1
AHD	Chlorhexidine digluconate so...	1206023-02	3
AHD	Chlorhexidine digluconate so...	13136115	1
AHD	Chlorhexidine digluconate so...	17210112	1
AHD	Chlorhexidine digluconate so...	18215610	1
Euro OTC	Chlorhexidine digluconate so...	1508022-22	1

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Supplier	Substance	Batch	Spectra
ALH	Chlorhexidine digluconate so...	1610021-01	1
Euro OTC	Chlorhexidine digluconate so...	1508022-02	11
Alliance Healthcare	Chlorhexidine digluconate so...	1206023	1
Fagron	Chlorhexidine digluconate so...	18C05B04346797	1
Allianz Healthcare	Chlorhexidine digluconate so...	1721110	1
anzag	Chlorhexidine digluconate so...	15131504	1
Anzag	Chlorhexidine digluconate so...	1206023-01	2
Anzag	Chlorhexidine digluconate so...	1708006-02	1
Anzag	Chlorhexidine digluconate so...	18215610	1
ANZAG	Chlorhexidine digluconate so...	11353012	1
Caelo	Chlorhexidine digluconate so...	1508022-22	1
Caelo	Chlorhexidine digluconate so...	16002506	8
Fagron	Chlorhexidine digluconate so...	15I03B02317319	2
Anzag; 3.80EUR; 7.10.2015	Chlorhexidine digluconate so...	1412018-02	1
Apo-ident	Chlorhexidine digluconate so...	1508022-01	1
apo-ident.	Chlorhexidine digluconate so...	1511033-01	6
apo-ident.	Chlorhexidine digluconate so...	1610021-01	1
apomix	Chlorhexidine digluconate so...	18215601	1
Apomix / Phönix	Chlorhexidine digluconate so...	17210105	1
Audor Pharma	Chlorhexidine digluconate so...	13K26-B06-289365	2
Berkel AHK	Chlorhexidine digluconate so...	13136115	1
Bombastus	Chlorhexidine digluconate so...	1412018-02	1
Bombastus	Chlorhexidine digluconate so...	1508022-02	1
Cael/Nowda	Chlorhexidine digluconate so...	13136115	1
Cael0/ Fiebig	Chlorhexidine digluconate so...	17210106	1
Caeli/Fiebig	Chlorhexidine digluconate so...	17210112	1
Caelo	Chlorhexidine digluconate so...	15131502	6
Caelo	Chlorhexidine digluconate so...	15f30-b05-309829	1
Caelo	Chlorhexidine digluconate so...	10200303	1
Caelo	Chlorhexidine digluconate so...	11135107	1
Caelo	Chlorhexidine digluconate so...	11353004	2
Caelo	Chlorhexidine digluconate so...	11353001	3
Caelo	Chlorhexidine digluconate so...	12H14-N06	2
Caelo	Chlorhexidine digluconate so...	12114001	4
Caelo	Chlorhexidine digluconate so...	12114008	4
Caelo	Chlorhexidine digluconate so...	20031301	1
Caelo	Chlorhexidine digluconate so...	1206023-01	1
Caelo	Chlorhexidine digluconate so...	12114013	3
Caelo	Chlorhexidine digluconate so...	12H14-N016	1
Caelo	Chlorhexidine digluconate so...	12114014	3
Caelo	Chlorhexidine digluconate so...	10200308	1
Caelo	Chlorhexidine digluconate so...	13136101	4
Caelo	Chlorhexidine digluconate so...	13136112	4
Caelo	Chlorhexidine digluconate so...	13136015	1
Caelo	Chlorhexidine digluconate so...	13136114	6
Caelo	Chlorhexidine digluconate so...	140111009	1
Caelo	Chlorhexidine digluconate so...	14011011	3
Caelo	Chlorhexidine digluconate so...	14011015	5
Caelo	Chlorhexidine digluconate so...	1401105	1
Caelo	Chlorhexidine digluconate so...	140111011	1
Caelo	Chlorhexidine digluconate so...	14011017	4
Caelo	Chlorhexidine digluconate so...	10213441	1
Caelo	Chlorhexidine digluconate so...	14011018	3
Caelo	Chlorhexidine digluconate so...	14331308	2
Caelo	Chlorhexidine digluconate so...	14331306	4
Caelo	Chlorhexidine digluconate so...	14331313	9
Caelo	Chlorhexidine digluconate so...	1412018-01	3
Caelo	Chlorhexidine digluconate so...	15131505	16
Caelo	Chlorhexidine digluconate so...	26A080415	1
Caelo	Chlorhexidine digluconate so...	15131503	13

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	13081502	1
Caelo	Chlorhexidine digluconate so...	141201802	2
Caelo	Chlorhexidine digluconate so...	15131510	13
Caelo	Chlorhexidine digluconate so...	15F30-B05-309829	1
Caelo	Chlorhexidine digluconate so...	15292507	6
Caelo	Chlorhexidine digluconate so...	15292509	6
Caelo	Chlorhexidine digluconate so...	141201801	1
Caelo	Chlorhexidine digluconate so...	15292512	5
Caelo	Chlorhexidine digluconate so...	1529511	1
Caelo	Chlorhexidine digluconate so...	1529504	1
Caelo	Chlorhexidine digluconate so...	1529509	1
Caelo	Chlorhexidine digluconate so...	16002505	20
Caelo	Chlorhexidine digluconate so...	16E09-B03	1
Caelo	Chlorhexidine digluconate so...	1511033-02	2
Caelo	Chlorhexidine digluconate so...	16308812	14
Caelo	Chlorhexidine digluconate so...	16308811	29
Caelo	Chlorhexidine digluconate so...	17210101	2
Caelo	Chlorhexidine digluconate so...	17210105	24
Caelo	Chlorhexidine digluconate so...	17210106	13
Caelo	Chlorhexidine digluconate so...	172010105	1
Caelo	Chlorhexidine digluconate so...	17E09-B01-335140	2
Caelo	Chlorhexidine digluconate so...	BK17-CG-001	1
Caelo	Chlorhexidine digluconate so...	17210112	19
Caelo	Chlorhexidine digluconate so...	18A09-B05-344604	1
Caelo	Chlorhexidine digluconate so...	181102601	1
Caelo	Chlorhexidine digluconate so...	13136105	5
Caelo	Chlorhexidine digluconate so...	17210102	3
Caelo	Chlorhexidine digluconate so...	171002-02	1
Caelo	Chlorhexidine digluconate so...	18215612	1
Caelo	Chlorhexidine digluconate so...	19080812	1
Caelo	Chlorhexidine digluconate so...	18215601	35
Caelo	Chlorhexidine digluconate so...	11353013	2
Caelo	Chlorhexidine digluconate so...	14011013	6
Caelo	Chlorhexidine digluconate so...	14331309	3
Caelo	Chlorhexidine digluconate so...	17210110	14
Caelo	Chlorhexidine digluconate so...	14011004	1
Caelo	Chlorhexidine digluconate so...	16308802	21
Caelo	Chlorhexidine digluconate so...	15292504	19
Caelo	Chlorhexidine digluconate so...	15131565	1
Caelo	Chlorhexidine digluconate so...	151361503	1
Caelo	Chlorhexidine digluconate so...	18107-B04	1
Caelo	Chlorhexidine digluconate so...	11135114	1
Caelo	Chlorhexidine digluconate so...	13136115	2
Caelo	Chlorhexidine digluconate so...	17230801	58
Caelo	Chlorhexidine digluconate so...	1308002-02	7
Caelo	Chlorhexidine digluconate so...	11353009	2
Caelo	Chlorhexidine digluconate so...	11353012	3
Caelo	Chlorhexidine digluconate so...	12114019	3
Caelo	Chlorhexidine digluconate so...	1592509	1
Caelo	Chlorhexidine digluconate so...	13A29-N06	1
Caelo	Chlorhexidine digluconate so...	12114015	2
Caelo	Chlorhexidine digluconate so...	1630881	1
Caelo	Chlorhexidine digluconate so...	18215602	6
Caelo	Chlorhexidine digluconate so...	15/03-B02-315213	1
Caelo	Chlorhexidine digluconate so...	18045911	4
Caelo	Chlorhexidine digluconate so...	16E09-B03-322465	1
Caelo	Chlorhexidine digluconate so...	19080808	12
Caelo	Chlorhexidine digluconate so...	15I03-B02-315213	4
Caelo	Chlorhexidine digluconate so...	15/03-B02-315552	1
Caelo	Chlorhexidine digluconate so...	1308002-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	15103-b02-317319	1
Caelo	Chlorhexidine digluconate so...	171027CDG/17210105	1
Caelo	Chlorhexidine digluconate so...	14331312	8
Caelo	Chlorhexidine digluconate so...	7230801	1
Caelo	Chlorhexidine digluconate so...	19080817	2
Caelo	Chlorhexidine digluconate so...	15F30-B05-311700	1
Caelo	Chlorhexidine digluconate so...	15109201	10
Caelo	Chlorhexidine digluconate so...	13H19-B01-285451	1
Caelo	Chlorhexidine digluconate so...	BK13-CG-011	1
Caelo	Chlorhexidine digluconate so...	18045903	38
Caelo	Chlorhexidine digluconate so...	182156212	1
Caelo	Chlorhexidine digluconate so...	19080807	3
Caelo	Chlorhexidine digluconate so...	12k22-n09	1
Caelo	Chlorhexidine digluconate so...	1308002	1
Caelo	Chlorhexidine digluconate so...	1708006-01	2
Fagron	Chlorhexidine digluconate so...	14D25-B04-299289	1
Caelo	Chlorhexidine digluconate so...	12114007	1
Caelo	Chlorhexidine digluconate so...	14011020	1
Caelo	Chlorhexidine digluconate so...	14331303	2
Caelo	Chlorhexidine digluconate so...	14331310	1
Caelo	Chlorhexidine digluconate so...	1721105	1
Caelo	Chlorhexidine digluconate so...	12114012	9
Caelo	Chlorhexidine digluconate so...	1316103	1
Caelo	Chlorhexidine digluconate so...	1202010-01	1
Caelo	Chlorhexidine digluconate so...	11L05-N080040	1
Caelo	Chlorhexidine digluconate so...	10213458	1
Caelo	Chlorhexidine digluconate so...	16002501	13
Caelo	Chlorhexidine digluconate so...	16002510	5
Caelo	Chlorhexidine digluconate so...	16308801	41
Caelo	Chlorhexidine digluconate so...	17G04-B01-341693	1
Caelo	Chlorhexidine digluconate so...	18A09-B05-344603	1
Caelo	Chlorhexidine digluconate so...	18045909	8
Caelo	Chlorhexidine digluconate so...	18045906	17
Caelo	Chlorhexidine digluconate so...	18215610	17
Fagron	Chlorhexidine digluconate so...	18045907	1
Caelo	Chlorhexidine digluconate so...	14331301	7
Caelo	Chlorhexidine digluconate so...	12122222	1
Caelo	Chlorhexidine digluconate so...	13136103	11
Caelo	Chlorhexidine digluconate so...	1412018-02	2
Caelo	Chlorhexidine digluconate so...	16002502	4
Caelo	Chlorhexidine digluconate so...	1610022-01	1
Caelo	Chlorhexidine digluconate so...	13K26-B06-288849	2
Caelo	Chlorhexidine digluconate so...	15109202	5
Caelo	Chlorhexidine digluconate so...	15131509	23
Caelo	Chlorhexidine digluconate so...	15131512	7
Caelo	Chlorhexidine digluconate so...	1508022-01	3
Caelo	Chlorhexidine digluconate so...	160308811	1
Caelo	Chlorhexidine digluconate so...	1701037-02	7
Caelo	Chlorhexidine digluconate so...	17G04-B01-341691	1
Caelo	Chlorhexidine digluconate so...	170103702	1
Caelo	Chlorhexidine digluconate so...	18C05-B04-349429	1
Caelo	Chlorhexidine digluconate so...	15110033-01	1
Caelo	Chlorhexidine digluconate so...	180459035663	1
Caelo	Chlorhexidine digluconate so...	1206023-02-335731907	1
Caelo	Chlorhexidine digluconate so...	13K26-B06	1
Caelo	Chlorhexidine digluconate so...	815I-01262	1
Caelo	Chlorhexidine digluconate so...	15131508	3
Caelo	Chlorhexidine digluconate so...	1511033-01	3
Caelo	Chlorhexidine digluconate so...	17230811	1
Caelo	Chlorhexidine digluconate so...	18215603	1

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	19080809	1
Caesar & Lorenz GmbH	Chlorhexidine digluconate so...	17230801	2
Caesar & Loretz	Chlorhexidine digluconate so...	16002510	1
Caesar & Loretz GmbH	Chlorhexidine digluconate so...	18045903	1
Caesar & Loretz GmbH	Chlorhexidine digluconate so...	18215610	3
Caesar & Loretz GmbH	Chlorhexidine digluconate so...	18215602	1
Caesar & Loretz GmbH	Chlorhexidine digluconate so...	19080808	1
Caesar & Loretz GmbH/ A...	Chlorhexidine digluconate so...	15292508	1
Caesar & Loretz GmbH/ N...	Chlorhexidine digluconate so...	19080808	1
Caleo/Sanacorp	Chlorhexidine digluconate so...	15292507	1
Cealo	Chlorhexidine digluconate so...	14331307	1
Cealo/Noweda	Chlorhexidine digluconate so...	15292508	2
Celo	Chlorhexidine digluconate so...	110816-7	1
Eu Rho/ Gehe	Chlorhexidine digluconate so...	1412018-02	1
EuRho	Chlorhexidine digluconate so...	1105012-01	1
EuRho	Chlorhexidine digluconate so...	1206023-02	2
EuRho	Chlorhexidine digluconate so...	1308002-02	1
EuRho	Chlorhexidine digluconate so...	141201801	1
EuRho	Chlorhexidine digluconate so...	1412018-02	1
EuRho	Chlorhexidine digluconate so...	1701037	1
EuRho	Chlorhexidine digluconate so...	1712002-01	1
EuRho	Chlorhexidine digluconate so...	1708006-01	1
EuRho/Gehe	Chlorhexidine digluconate so...	1708006-01	1
EuRho/Noweda	Chlorhexidine digluconate so...	17230801	1
EuRho/Phönix	Chlorhexidine digluconate so...	1708006-01	3
Euro	Chlorhexidine digluconate so...	1412018-0	1
Euro OCT	Chlorhexidine digluconate so...	3-8962-3-01-24	1
Euro OTC	Chlorhexidine digluconate so...	130800201	4
Euro OTC	Chlorhexidine digluconate so...	CS-00201018	1
Euro OTC	Chlorhexidine digluconate so...	13KB062888448	1
Euro OTC	Chlorhexidine digluconate so...	161002101	2
Euro OTC	Chlorhexidine digluconate so...	1206023-01	14
Euro OTC	Chlorhexidine digluconate so...	1308002-02	28
Euro OTC	Chlorhexidine digluconate so...	1412018801	1
Euro OTC	Chlorhexidine digluconate so...	1412018-02	29
Euro OTC	Chlorhexidine digluconate so...	15008022-01	1
Euro OTC	Chlorhexidine digluconate so...	1508072-02	1
Euro OTC	Chlorhexidine digluconate so...	1701037-01	9
Euro OTC	Chlorhexidine digluconate so...	1708006-01	23
Euro OTC	Chlorhexidine digluconate so...	3896260321	1
Euro OTC	Chlorhexidine digluconate so...	171200201	1
Euro OTC	Chlorhexidine digluconate so...	1811026-01	13
Euro OTC	Chlorhexidine digluconate so...	1825601	1
Euro OTC	Chlorhexidine digluconate so...	181102601	1
Euro OTC	Chlorhexidine digluconate so...	15131505	1
Euro OTC	Chlorhexidine digluconate so...	150822-02	1
Euro OTC	Chlorhexidine digluconate so...	1712002-01	21
Euro OTC	Chlorhexidine digluconate so...	141218-01	1
Euro OTC	Chlorhexidine digluconate so...	1902010-02	2
Euro OTC	Chlorhexidine digluconate so...	1708006_02	1
Euro OTC	Chlorhexidine digluconate so...	1811026_01	1
Euro OTC	Chlorhexidine digluconate so...	1110012-01	1
Euro OTC	Chlorhexidine digluconate so...	150802202	1
Euro OTC	Chlorhexidine digluconate so...	120602301	3
Euro OTC	Chlorhexidine digluconate so...	282215	1
Euro OTC	Chlorhexidine digluconate so...	141201801	1
Euro OTC	Chlorhexidine digluconate so...	3-8962-6-03-21	2
Euro OTC	Chlorhexidine digluconate so...	1708006	1
Euro OTC	Chlorhexidine digluconate so...	151103	1
Euro OTC	Chlorhexidine digluconate so...	1610022-01	16

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Supplier	Substance	Batch	Spectra
Euro OTC	Chlorhexidine digluconate so...	1902010-01	3
Euro OTC	Chlorhexidine digluconate so...	1701037	3
Euro OTC	Chlorhexidine digluconate so...	1701037-02	33
Euro OTC	Chlorhexidine digluconate so...	13D16-N04	1
Euro OTC	Chlorhexidine digluconate so...	1308002	1
Euro OTC	Chlorhexidine digluconate so...	17080006-02	2
Euro OTC	Chlorhexidine digluconate so...	1308002-01	25
Euro OTC	Chlorhexidine digluconate so...	37(1708006-02)	1
Euro OTC	Chlorhexidine digluconate so...	38(1811026-01)	1
Euro OTC	Chlorhexidine digluconate so...	190210-01	1
Euro OTC	Chlorhexidine digluconate so...	36(1701037-02)	1
Euro OTC	Chlorhexidine digluconate so...	1206023-02	26
Euro OTC	Chlorhexidine digluconate so...	130002-01	1
Euro OTC	Chlorhexidine digluconate so...	1508022-01	25
Euro OTC	Chlorhexidine digluconate so...	171200202	1
Euro OTC	Chlorhexidine digluconate so...	s-8962-6-03-21	1
Euro OTC	Chlorhexidine digluconate so...	12K22-N09	1
Euro OTC	Chlorhexidine digluconate so...	1712002	1
Euro OTC	Chlorhexidine digluconate so...	3896250214	1
Euro OTC	Chlorhexidine digluconate so...	3-8962-7-02-39	2
Euro/ Phönix	Chlorhexidine digluconate so...	1610021-01	1
euro//Noweda	Chlorhexidine digluconate so...	1708006-02	1
Euro/Anzag	Chlorhexidine digluconate so...	1701037-02	1
Euro OTC	Chlorhexidine digluconate so...	1508022_02	1
Euro OTC	Chlorhexidine digluconate so...	1610021_01	1
Euro/Phönix	Chlorhexidine digluconate so...	161002101	2
Euro OTC	Chlorhexidine digluconate so...	1202010-01	8
Euro OTC	Chlorhexidine digluconate so...	120201001	1
Euro OTC	Chlorhexidine digluconate so...	106023-02	1
Euro OTC	Chlorhexidine digluconate so...	1712002-02	12
Euro OTC	Chlorhexidine digluconate so...	17E09-B01-335137	1
Euro OTC	Chlorhexidine digluconate so...	3896270218	3
Euro OTC	Chlorhexidine digluconate so...	1908014-01	1
Euro OTC	Chlorhexidine digluconate so...	130800202	1
Euro OTC	Chlorhexidine digluconate so...	151103-01	1
Euro OTC	Chlorhexidine digluconate so...	150802201	3
Euro OTC	Chlorhexidine digluconate so...	3896220404	1
EuroPTC/Phönix	Chlorhexidine digluconate so...	1412018-01	1
Evonic	Chlorhexidine digluconate so...	1308002-02	2
Evonic	Chlorhexidine digluconate so...	3896220404	1
Evonic Technochem	Chlorhexidine digluconate so...	1412018-01	1
Evonic Technochem. GmbH	Chlorhexidine digluconate so...	1610021-01	1
Euro OTC	Chlorhexidine digluconate so...	1708006-02	21
Fagon	Chlorhexidine digluconate so...	15I03-B02-314177	1
Fagro/ Noweda	Chlorhexidine digluconate so...	13K26-B06-289365	1
Fagro/AHD	Chlorhexidine digluconate so...	1412018-02	1
Fagron	Chlorhexidine digluconate so...	18C05-B04	1
Fagron	Chlorhexidine digluconate so...	11L05-N08	5
Fagron	Chlorhexidine digluconate so...	204211262	1
Fagron	Chlorhexidine digluconate so...	12A02-N11	6
Fagron	Chlorhexidine digluconate so...	11K09-N05	4
Fagron	Chlorhexidine digluconate so...	13081204	1
Fagron	Chlorhexidine digluconate so...	6111210	1
Fagron	Chlorhexidine digluconate so...	12H14-N06	19
Fagron	Chlorhexidine digluconate so...	20200112-1	1
Fagron	Chlorhexidine digluconate so...	12H14-No6	4
Fagron	Chlorhexidine digluconate so...	17011310	1
Fagron	Chlorhexidine digluconate so...	2612M01262	1
Fagron	Chlorhexidine digluconate so...	12F01-N021	1
Fagron	Chlorhexidine digluconate so...	2512M01262	1

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Supplier	Substance	Batch	Spectra
Fagron	Chlorhexidine digluconate so...	103311262	1
Fagron	Chlorhexidine digluconate so...	12H-14-N06	1
Fagron	Chlorhexidine digluconate so...	1213E-01262	1
Fagron	Chlorhexidine digluconate so...	120201001	1
Fagron	Chlorhexidine digluconate so...	12K22-N09	20
Fagron	Chlorhexidine digluconate so...	12H14N06	1
Fagron	Chlorhexidine digluconate so...	25051304	1
Fagron	Chlorhexidine digluconate so...	11L05-N080069/262	1
Fagron	Chlorhexidine digluconate so...	120355-ooo4	1
Fagron	Chlorhexidine digluconate so...	13A29-N060155/228	1
Fagron	Chlorhexidine digluconate so...	9081302	1
Fagron	Chlorhexidine digluconate so...	12f01-N21	1
Fagron	Chlorhexidine digluconate so...	13D16-N04	9
Fagron	Chlorhexidine digluconate so...	1112013D	1
Fagron	Chlorhexidine digluconate so...	13H19-801	1
Fagron	Chlorhexidine digluconate so...	4111303	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285453	9
Fagron	Chlorhexidine digluconate so...	23121307	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285451	6
Fagron	Chlorhexidine digluconate so...	13H19B01	1
Fagron	Chlorhexidine digluconate so...	13H19B01285451	1
Fagron	Chlorhexidine digluconate so...	13h19b01285447	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-CG-011	1
Fagron	Chlorhexidine digluconate so...	13K26-B06	8
Fagron	Chlorhexidine digluconate so...	13K-26-B06-288853	1
Fagron	Chlorhexidine digluconate so...	13k26-b06	1
Fagron	Chlorhexidine digluconate so...	1081403	1
Fagron	Chlorhexidine digluconate so...	26091402	1
Fagron	Chlorhexidine digluconate so...	14D25-B04-294673	4
Fagron	Chlorhexidine digluconate so...	13K26B06289366	1
Fagron	Chlorhexidine digluconate so...	BK14-CG-003	2
Fagron	Chlorhexidine digluconate so...	13K26-B06-289366	1
Fagron	Chlorhexidine digluconate so...	15121406	1
Fagron	Chlorhexidine digluconate so...	10031503	1
Fagron	Chlorhexidine digluconate so...	11081502	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-309829	3
Fagron	Chlorhexidine digluconate so...	15F30-B05-30929	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-311700	5
Fagron	Chlorhexidine digluconate so...	15I03-B02-313663	1
Fagron	Chlorhexidine digluconate so...	15I03-B02-313663	4
Fagron	Chlorhexidine digluconate so...	15I03-B02-315552	6
Fagron	Chlorhexidine digluconate so...	15I03-B02-314177	1
Fagron	Chlorhexidine digluconate so...	15I03-B02	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-315213	2
Fagron	Chlorhexidine digluconate so...	BK15-CG-001	3
Fagron	Chlorhexidine digluconate so...	15J03-B02	1
Fagron	Chlorhexidine digluconate so...	15103B02-315212	1
Fagron	Chlorhexidine digluconate so...	15I03B02	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-315212	1
Fagron	Chlorhexidine digluconate so...	16b25-b98-318800	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-320995	6
Fagron	Chlorhexidine digluconate so...	16E09-B03-320996	3
Fagron	Chlorhexidine digluconate so...	15I03-B02-317320	1
Fagron	Chlorhexidine digluconate so...	15I03-0006	1
Fagron	Chlorhexidine digluconate so...	16B25-B98	1
Fagron	Chlorhexidine digluconate so...	16e09-b03	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-322465	1
Fagron	Chlorhexidine digluconate so...	16002510	2
Fagron	Chlorhexidine digluconate so...	15I03-B02317319	1
Fagron	Chlorhexidine digluconate so...	16H-23-B03-329123	1

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Supplier	Substance	Batch	Spectra
Fagron	Chlorhexidine digluconate so...	16E09-B03-322464	2
Fagron	Chlorhexidine digluconate so...	16H23-B03-329123	1
Fagron	Chlorhexidine digluconate so...	1511033-02	1
Fagron	Chlorhexidine digluconate so...	8041712	1
Fagron	Chlorhexidine digluconate so...	BK16-CG-011	1
Fagron	Chlorhexidine digluconate so...	10071703	1
Fagron	Chlorhexidine digluconate so...	1610022-01	1
Fagron	Chlorhexidine digluconate so...	17E09-B01	3
Fagron	Chlorhexidine digluconate so...	17E09-B01335140	1
Fagron	Chlorhexidine digluconate so...	1701037-01	1
Fagron	Chlorhexidine digluconate so...	13111704	1
Fagron	Chlorhexidine digluconate so...	1708006-01	2
Fagron	Chlorhexidine digluconate so...	12021823	1
Fagron	Chlorhexidine digluconate so...	7051804	1
Fagron	Chlorhexidine digluconate so...	8051814	1
Fagron	Chlorhexidine digluconate so...	18A09B05	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-349429	1
Fagron	Chlorhexidine digluconate so...	6101801	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-351140	5
Fagron	Chlorhexidine digluconate so...	A-180063	1
Fagron	Chlorhexidine digluconate so...	18C05-804	1
Fagron	Chlorhexidine digluconate so...	14332309	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-288848	2
Fagron	Chlorhexidine digluconate so...	16002501	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-352123	1
Fagron	Chlorhexidine digluconate so...	12F01-N21	37
Fagron	Chlorhexidine digluconate so...	15103-B02-315213	1
Fagron	Chlorhexidine digluconate so...	15I31-B02-313663	1
Fagron	Chlorhexidine digluconate so...	15E13-B07-309826	5
Fagron	Chlorhexidine digluconate so...	1511033-01	2
Fagron	Chlorhexidine digluconate so...	BK14-CG-023	1
Fagron	Chlorhexidine digluconate so...	16B25-B98-318800	4
Fagron	Chlorhexidine digluconate so...	16E09-B03-322382	2
Fagron	Chlorhexidine digluconate so...	16E09-B03-323873	1
Fagron	Chlorhexidine digluconate so...	18A09-B05-344605	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-316428	1
Fagron	Chlorhexidine digluconate so...	12H14-No06	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285447	2
Fagron	Chlorhexidine digluconate so...	13K26-B06-289365	6
Fagron	Chlorhexidine digluconate so...	14D25-B04-294674	3
Fagron	Chlorhexidine digluconate so...	BK15CG001	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-324024	2
Fagron	Chlorhexidine digluconate so...	18A09-B05-344604	1
Fagron	Chlorhexidine digluconate so...	12114007	1
Fagron	Chlorhexidine digluconate so...	1503-802	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-315211	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285448	3
Fagron	Chlorhexidine digluconate so...	13H19-B01-285452	4
Fagron	Chlorhexidine digluconate so...	13K26-B06-288853	3
Fagron	Chlorhexidine digluconate so...	14D25-B04-299288	1
Fagron	Chlorhexidine digluconate so...	15C03-B02-306308	2
Fagron	Chlorhexidine digluconate so...	15E13B07309826	1
Fagron	Chlorhexidine digluconate so...	15I03B02314176	1
Fagron	Chlorhexidine digluconate so...	1503-B02-316428	1
Fagron	Chlorhexidine digluconate so...	1503B02316428	1
Fagron	Chlorhexidine digluconate so...	13A29-N06	14
Fagron	Chlorhexidine digluconate so...	13K16B06288853	1
Fagron	Chlorhexidine digluconate so...	2614Q-01262	1
Fagron	Chlorhexidine digluconate so...	1503B02314176	1
Fagron	Chlorhexidine digluconate so...	18A09-B05	1

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Supplier	Substance	Batch	Spectra
Fagron	Chlorhexidine digluconate so...	18107-B04-353643	1
Fagron	Chlorhexidine digluconate so...	A180-630	1
Fagron	Chlorhexidine digluconate so...	12A02-11	1
Fagron	Chlorhexidine digluconate so...	13d16-N04	2
Fagron	Chlorhexidine digluconate so...	14D25-B04	4
Fagron	Chlorhexidine digluconate so...	15I03-B02-0006	1
Fagron	Chlorhexidine digluconate so...	BK13-CG-018	2
Fagron	Chlorhexidine digluconate so...	14D25-B04-294675	1
Fagron	Chlorhexidine digluconate so...	15F30-B05	3
Fagron	Chlorhexidine digluconate so...	4513U1262	1
Fagron	Chlorhexidine digluconate so...	15C03B02	2
Fagron	Chlorhexidine digluconate so...	15F30B05	1
Fagron	Chlorhexidine digluconate so...	15I03-B01-314176	1
Fagron	Chlorhexidine digluconate so...	16E09-B03	5
Fagron	Chlorhexidine digluconate so...	17E09-B01-335140	11
Fagron	Chlorhexidine digluconate so...	17E09-B01-335137	2
Fagron	Chlorhexidine digluconate so...	17G04-B01	2
Fagron	Chlorhexidine digluconate so...	18A09-B05-344415	3
Fagron	Chlorhexidine digluconate so...	15L03-B02-315552	1
Fagron	Chlorhexidine digluconate so...	12K22-0005	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-313663	1
Fagron	Chlorhexidine digluconate so...	17e09-b01-335140	1
Fagron	Chlorhexidine digluconate so...	17G04-B01-341690	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-349430	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-349427	1
Fagron	Chlorhexidine digluconate so...	18I07-B04-356582	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-288849	1
Fagron	Chlorhexidine digluconate so...	BK13-CG-011	3
Fagron	Chlorhexidine digluconate so...	13K26-B06_289365	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285449	1
Fagron	Chlorhexidine digluconate so...	BK13-CG-285447	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-309827	1
Fagron	Chlorhexidine digluconate so...	16B25-B98-318799	1
Fagron	Chlorhexidine digluconate so...	18A09-B05-344604	7
Fagron	Chlorhexidine digluconate so...	18I07-B04-353643	2
Fagron	Chlorhexidine digluconate so...	BK16-CG-005	1
Fagron	Chlorhexidine digluconate so...	17E09-B01-335136	2
Fargon	Chlorhexidine digluconate so...	12F01-N21	1
Fargon/ Noweda	Chlorhexidine digluconate so...	12f01n21	1
Fiebig	Chlorhexidine digluconate so...	1110012-01	1
Fiebig	Chlorhexidine digluconate so...	1511033-02	1
Fiebig	Chlorhexidine digluconate so...	1610022-01	2
Fiebig	Chlorhexidine digluconate so...	1811026-01	3
Finteler Apotheke	Chlorhexidine digluconate so...	1701037-01	1
Fragon/ Phönix	Chlorhexidine digluconate so...	15C03-B02-306308	1
Fragon/Phoenix	Chlorhexidine digluconate so...	18C05-B04-349428	1
Frau Brinn-Holtz	Chlorhexidine digluconate so...	15292507	1
Galderma	Chlorhexidine digluconate so...	1511033-02	1
Gehe	Chlorhexidine digluconate so...	12h14-n06	1
Gehe	Chlorhexidine digluconate so...	1206023-02	2
Gehe	Chlorhexidine digluconate so...	13136105	1
Gehe	Chlorhexidine digluconate so...	13136109	1
Gehe	Chlorhexidine digluconate so...	13136114	4
Gehe	Chlorhexidine digluconate so...	14331309	1
Gehe	Chlorhexidine digluconate so...	151103301	1
Gehe	Chlorhexidine digluconate so...	16308801	2
GEHE	Chlorhexidine digluconate so...	1610022-01	1
GEHE	Chlorhexidine digluconate so...	17210110	1
GEHE	Chlorhexidine digluconate so...	1811026-01	1
GEHE	Chlorhexidine digluconate so...	CS-00201018	1

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Supplier	Substance	Batch	Spectra
GEHE	Chlorhexidine digluconate so...	1902010-02	1
GEHE 08.12.2014	Chlorhexidine digluconate so...	BK14-CG-003	1
GEHE 20.05.2014	Chlorhexidine digluconate so...	13136114	1
Caelo	Chlorhexidine digluconate so...	151103301	1
Caelo	Chlorhexidine digluconate so...	15292511	2
Gehe/EuRo	Chlorhexidine digluconate so...	1712002-01	1
Euro OTC	Chlorhexidine digluconate so...	1412018-01	23
Geilenkirchen	Chlorhexidine digluconate so...	15131503	1
Hedinger/Sanacorp6.5.2014	Chlorhexidine digluconate so...	1234	1
hochhaus-Apotheke	Chlorhexidine digluconate so...	16002510	1
Ichthyol/Phönix	Chlorhexidine digluconate so...	16002506	2
Industries AG / Phoenix	Chlorhexidine digluconate so...	1308002-02	1
JENNE	Chlorhexidine digluconate so...	1712002-01	1
Kehr	Chlorhexidine digluconate so...	1610022-01	1
Klenk	Chlorhexidine digluconate so...	13D16-N04	1
Klenk	Chlorhexidine digluconate so...	1511033-01	1
Klosterring	Chlorhexidine digluconate so...	17210110	1
Klosterring	Chlorhexidine digluconate so...	18215601	1
Kögl	Chlorhexidine digluconate so...	1802507	1
Krieger	Chlorhexidine digluconate so...	17210105	1
Krieger	Chlorhexidine digluconate so...	18045903	1
L10	Chlorhexidine digluconate so...	1511033-02	1
L10	Chlorhexidine digluconate so...	1708006-01	2
Euro OTC	Chlorhexidine digluconate so...	151103301	2
L12	Chlorhexidine digluconate so...	1712002-02	1
L12	Chlorhexidine digluconate so...	1811026-01	2
Caelo	Chlorhexidine digluconate so...	1511033/02	1
L30	Chlorhexidine digluconate so...	1511033-01	1
Laborchemie Apolda	Chlorhexidine digluconate so...	1511033-01	2
Lamotte / Gehe	Chlorhexidine digluconate so...	14011017	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-346797	2
Noweda	Chlorhexidine digluconate so...	11353004	1
Noweda	Chlorhexidine digluconate so...	1202010-01	3
Noweda	Chlorhexidine digluconate so...	12114012	1
Noweda	Chlorhexidine digluconate so...	1308002-01	2
Noweda	Chlorhexidine digluconate so...	1508022-01	1
Noweda	Chlorhexidine digluconate so...	15131510	1
Noweda	Chlorhexidine digluconate so...	15292508	1
Noweda	Chlorhexidine digluconate so...	16308811	1
Noweda	Chlorhexidine digluconate so...	17210105	1
Noweda	Chlorhexidine digluconate so...	17210112	2
Caelo	Chlorhexidine digluconate so...	16309902	1
Caelo	Chlorhexidine digluconate so...	1206023-02	3
Euro OTC	Chlorhexidine digluconate so...	1511033-02	12
Noweda18.12.2014	Chlorhexidine digluconate so...	14331303	1
Euro OTC	Chlorhexidine digluconate so...	1105012-01	1
P.W. Beyvers / Noweda	Chlorhexidine digluconate so...	17210106	1
Phoenix	Chlorhexidine digluconate so...	13H19-B01-285452	1
Phoenix	Chlorhexidine digluconate so...	14331307	1
Phoenix	Chlorhexidine digluconate so...	1511033-01	1
PHOENIX 25.07.2014	Chlorhexidine digluconate so...	13k26-b06-288849	1
Phoenix WE: 01.09.17 E...	Chlorhexidine digluconate so...	1701037-02	3
phönix	Chlorhexidine digluconate so...	1511033-01	2
Phönix	Chlorhexidine digluconate so...	11353004	1
Phönix	Chlorhexidine digluconate so...	1206023-01	1
Phönix	Chlorhexidine digluconate so...	12H14-N06	1
Phönix	Chlorhexidine digluconate so...	1206023-02	2
Phönix	Chlorhexidine digluconate so...	13K26-B06-28965	1
Phönix	Chlorhexidine digluconate so...	1610021-01	1
Phönix	Chlorhexidine digluconate so...	1610022-01	2

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Supplier	Substance	Batch	Spectra
Phönix	Chlorhexidine digluconate so...	16308812	1
Phönix	Chlorhexidine digluconate so...	17001037-02	1
Phönix	Chlorhexidine digluconate so...	1712002-01	2
PHÖNIX	Chlorhexidine digluconate so...	1708006-01	1
Phönix 28.01.2014	Chlorhexidine digluconate so...	1206023-02	1
Phönix Gotha	Chlorhexidine digluconate so...	12A02-N11	1
Phönix Gotha	Chlorhexidine digluconate so...	12H14-N06	1
Phönix Gotha	Chlorhexidine digluconate so...	13A29-N06	1
Phönix Gotha	Chlorhexidine digluconate so...	13K26-B06-288853	1
Phönix Gotha	Chlorhexidine digluconate so...	14120189-01	1
Phönix Gotha	Chlorhexidine digluconate so...	1412018-01	1
Caelo	Chlorhexidine digluconate so...	16E09-B03-324024	1
Phönix/EuRho	Chlorhexidine digluconate so...	1206023-01	2
Euro OTC	Chlorhexidine digluconate so...	1610021-01	22
Fagron	Chlorhexidine digluconate so...	5x15I03-B02-3152120	1
sanacorp	Chlorhexidine digluconate so...	14011015	1
sanacorp	Chlorhexidine digluconate so...	14331312	1
Sanacorp	Chlorhexidine digluconate so...	1206023-01	4
Sanacorp	Chlorhexidine digluconate so...	12K22-N09	1
Sanacorp	Chlorhexidine digluconate so...	12114001	1
Sanacorp	Chlorhexidine digluconate so...	13136103	1
Sanacorp	Chlorhexidine digluconate so...	13136115	2
Sanacorp	Chlorhexidine digluconate so...	14011004	1
Sanacorp	Chlorhexidine digluconate so...	14331312	1
Sanacorp	Chlorhexidine digluconate so...	15131509	1
Sanacorp	Chlorhexidine digluconate so...	15292508	2
Sanacorp	Chlorhexidine digluconate so...	16002501	2
Sanacorp	Chlorhexidine digluconate so...	1701037-02	2
Sanacorp	Chlorhexidine digluconate so...	17230801	2
Sanacorp EK:5,70 EUR...	Chlorhexidine digluconate so...	1701037	1
Caelo	Chlorhexidine digluconate so...	172101110	1
Sanacorp 17.07.2015	Chlorhexidine digluconate so...	15131504	1
Euro OTC	Chlorhexidine digluconate so...	811026-01	1
Caelo	Chlorhexidine digluconate so...	32/AD1	1
Caelo	Chlorhexidine digluconate so...	14331307	8
Fagron	Chlorhexidine digluconate so...	15131505	2
Fagron	Chlorhexidine digluconate so...	16H23-B03	1
Schütz Dishman Biotech ...	Chlorhexidine digluconate so...	15E13-B07	1
Schütz Dishman Biotech ...	Chlorhexidine digluconate so...	15I03-B02	1
Sonnen-Apotheke Wefensl...	Chlorhexidine digluconate so...	16002501	1
Symbiotica	Chlorhexidine digluconate so...	1412018-02	1
VDL	Chlorhexidine digluconate so...	130800201	1
VDL; 13.7.15; 3,83EUR	Chlorhexidine digluconate so...	1412018-01	1
Caelo	Water	17B13-T02-041604	1
Fagron	Water	18C19T29054007	1
AHL	Water	17291301	2
Alte Apotheke	Water	16022202	1
Alte Apotheke	Water	16223601	1
Caelo	Water	16L12T25039642	1
Caelo	Water	17E05T11044076	1
Fagron	Water	17K27-T10-050547	6
Anzag/Anzag 31.08.18	Water	LOTAP0083	1
Caelo	Water	16F14-T07-034326	1
apomix/ Fiebig	Water	17E05-T03-044051	1
apomix/Noweda	Water	17114501	1
Beiersdorf/Gehe	Water	17K27-T15-050585	1
Bionorica ethics	Water	18G16-T03-058126	1
Bombastus	Water	AP0093	1
Bombastus	Water	18178302	1
Caelo	Water	16065101	2

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Supplier	Substance	Batch	Spectra
Caelo	Water	19005501	3
Caelo	Water	15068702	4
Caelo	Water	15220602	7
Caelo	Water	14321201	1
Caelo	Water	15253901	5
Caelo	Water	15235201	1
Caelo	Water	1524101	1
Caelo	Water	15336501	5
Caelo	Water	15287302	3
Caelo	Water	15355201	1
Caelo	Water	17011603	1
Caelo	Water	15317401	1
Caelo	Water	15355301	2
Caelo	Water	15G09-T04-024368	2
Caelo	Water	16002901	1
Caelo	Water	15H25T18025678	1
Caelo	Water	15371202	4
Caelo	Water	16065001	1
Caelo	Water	16093301	3
Caelo	Water	15D13-T09-021469	1
Caelo	Water	16041701	1
Caelo	Water	1615201	1
Caelo	Water	16127901	4
Caelo	Water	16065201	2
Caelo	Water	23081606	1
Caelo	Water	16151201	2
Caelo	Water	16127902	4
Caelo	Water	16223501	1
Caelo	Water	16171301	1
Caelo	Water	16340201	2
Caelo	Water	16F14-T05-034321	2
Caelo	Water	16291601	1
Caelo	Water	16218601	1
Caelo	Water	16353303	7
Caelo	Water	17002001	6
Caelo	Water	17035101	3
Caelo	Water	LOTAP0044	2
Caelo	Water	17034801	1
Caelo	Water	17114501	5
Caelo	Water	14170717	1
Caelo	Water	17114701	11
Caelo	Water	16L12-T31-039661	1
Caelo	Water	17034901	1
Caelo	Water	17089301	1
Caelo	Water	17114801	5
Caelo	Water	39628	1
Caelo	Water	17211401	1
Caelo	Water	17173101	3
Caelo	Water	17177301	16
Caelo	Water	17277102	5
Caelo	Water	17291301	2
Caelo	Water	17295701	22
Caelo	Water	17320001	8
Caelo	Water	17E05-T13-044080	1
Caelo	Water	18061901	10
Caelo	Water	18019501	3
Caelo	Water	18000401	3
Caelo	Water	18030402	9
Caelo	Water	18065601	5
Caelo	Water	LOTAP0083	2

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Supplier	Substance	Batch	Spectra
Caelo	Water	18210601	5
Caelo	Water	18156401	5
Caelo	Water	18178302	11
Caelo	Water	18110401	4
Caelo	Water	LOTAP-SP0001	1
Caelo	Water	18195201	3
Caelo	Water	18228701	5
Caelo	Water	18238601	3
Caelo	Water	18C19-T28-054003	1
Caelo	Water	18263401	1
Caelo	Water	18240101	2
Caelo	Water	18228801	1
Caelo	Water	18305401	1
Caelo	Water	15235301	2
Caelo	Water	15394501	2
Caelo	Water	16223601	3
Caelo	Water	17032401	3
Caelo	Water	15H25-T21-025683	2
Caelo	Water	17B10-T18-041564	3
Caelo	Water	219167	1
Caelo	Water	17K01-T01-048440	1
Caelo	Water	18J10-T01-060845	1
Caelo	Water	19077801	7
Caelo	Water	19077601	2
Caelo	Water	17098701	5
Caelo	Water	16065601	1
Caelo	Water	15287401	2
Caelo	Water	15355401	1
Caelo	Water	17K27-T09-050544	5
Caelo	Water	16223801	15
Caelo	Water	18093501	7
Caelo	Water	15H25-T18-025678	1
Caelo	Water	18093601	7
Caelo	Water	15336502	1
Caelo	Water	16C23-T16-031436	3
Caelo	Water	16223901	1
Caelo	Water	17K27T14050581	1
Caelo	Water	18C19-T25-053991	1
Caelo	Water	15394202	12
Caelo	Water	17317301	2
Caelo	Water	18156301	1
Caelo	Water	4(18265001)	1
Caelo	Water	19005602	1
Caelo	Water	16F13-T11-034264	1
Caelo	Water	19005601	10
Caelo	Water	19065102	5
Caelo	Water	1810401	1
Caelo	Water	190775501	1
Caelo	Water	19152701	1
Caelo	Water	16F14-T03-034317	1
Caelo	Water	18305101	2
Caelo	Water	18E09-T01-055708	1
Caelo	Water	18109201	2
Caelo	Water	15254101	3
Caelo	Water	15394201	2
Caelo	Water	16C23-/08_031427	1
Caelo	Water	17282701	9
Caelo	Water	17089101	2
Caelo	Water	16F143-T09-034330	1
Caelo	Water	17E05-T11-044076	3

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Supplier	Substance	Batch	Spectra
Caelo	Water	17179001	4
Caelo	Water	17233001	4
Caelo	Water	1723311	1
Caelo	Water	15025501	1
Caelo	Water	14364201	1
Caelo	Water	15427201	5
Caelo	Water	16211901	3
Caelo	Water	16255201	4
Caelo	Water	16L12-T11-039624	1
Caelo	Water	17B10-T27-041575	1
Caelo	Water	17319901	3
Caelo	Water	180619012x	1
Caelo	Water	18146801	2
Caelo	Water	18156201	8
Caelo	Water	1814801	1
Caelo	Water	LOTAP0089	1
Caelo	Water	LotAP0083	1
Caelo	Water	18226701	1
Caelo	Water	19077501	1
Caelo	Water	17173001	3
Caelo	Water	16313201	4
Caelo	Water	180620012x	1
Caelo	Water	5(18265001)	1
Caelo	Water	15287501	2
Caelo	Water	16006001	3
Caelo	Water	16178101	1
Caelo	Water	15K10-T06-027620	1
Caelo	Water	16286801	4
Caelo	Water	16313202	1
Caelo	Water	17098901	7
Caelo	Water	17219101	6
Caelo	Water	18I24-T15-060243	1
Caelo	Water	15220601	3
Caelo	Water	1542701	1
Caelo	Water	15L15-T05-028681	1
Caelo	Water	15F04-T05-023263	1
Caelo	Water	16F13-T11-34264	1
Caelo	Water	16K25-C20-17409	1
Caelo	Water	17211301	4
Caelo	Water	17H24-T13-047717	1
Caelo	Water	17313801	1
Caelo	Water	18E28-T02-056491	1
Caelo	Water	AP0099	1
Caelo	Water	19012801	3
Caelo	Water	17149601	3
Caelo	Water	17H24-T11-047713	2
Caelo	Water	17249101	4
Caelo	Water	18062001	1
Caelo	Water	14LL26	3
Caelo	Water	18109301	4
Caelo	Water	18C19T053999	1
Caelo	Water	18226601	2
Caelo	Water	18035301	1
Caelo	Water	18G16-T04-058129	1
Caelo	Water	19077701	1
Caelo	Water	17339701	1
Caelo	Water	19162701	2
Caelo	Water	16065701	1
Caelo	Water	16255101	2
Caelo	Water	16334301	1

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Supplier	Substance	Batch	Spectra
Caelo	Water	16215202	1
Caelo	Water	17012002	1
Caelo	Water	17035001	1
Caelo	Water	17179101	7
Caelo	Water	17H24-T15-047721	3
Caelo	Water	17339801	3
Caelo	Water	18109501	2
Caelo	Water	18E07-T08-055699	3
Caelo	Water	18C-T15-053741	1
Caelo	Water	18254801	2
Caelo	Water	18305501	2
Caelo	Water	18228901	1
Caelo	Water	19019801	1
Caelo	Water	18332901	1
Caelo	Water	19111701	2
Caelo	Water	19199101	3
Caelo	Water	AP-SP0002	1
Caelo	Water	15I10-T08-025964	1
Caelo	Water	17E05-T03-044051	3
Caelo	Water	17233101	5
Caelo	Water	17H24-T09-047709	2
Caelo	Water	17304001	1
Caelo	Water	17304101	2
Caelo	Water	18062101	7
Caelo	Water	18042901	14
Caelo	Water	18138601	4
Caelo	Water	18109101	2
Caelo	Water	LOTAP	1
Caelo	Water	17F23-T06-045760	1
Caelo	Water	LOTAP0088	1
Caelo	Water	18156501	4
Caelo	Water	181468801	1
Caelo	Water	18239901	1
Caelo	Water	18227001	5
Caelo	Water	18265001	16
Caelo	Water	18325001	1
Caelo	Water	18305301	2
Caelo	Water	19037701	1
Caelo	Water	19097901	2
Caelo	Water	19149201	1
Caelo	Water	19111601	1
Caelo	Water	19133401	1
Caelo	Water	18305201	3
Caesar & Loretz	Water	17145001	3
Caesar & Loretz	Water	17173001	1
Caesar & Loretz GmbH	Water	LOTAP-SP0002	2
Caesar & Loretz GmbH	Water	18240101	1
Caesar & Loretz GmbH	Water	18299501	1
Caesar & Loretz GmbH	Water	18305501	1
Caesar & Loretz GmbH	Water	19199101	1
Caesar & Loretz GmbH Hi...	Water	15394202	1
Caesar & Loretz GmbH Hi...	Water	16127902	1
Caesar & Loretz GmbH/ M...	Water	19207401	2
Caesar & Loretz GmbH/Mi...	Water	18325001	3
Caesar & Loretz GmbH/Mi...	Water	19037701	2
Caesar & Loretz GmbH/Mi...	Water	19097801	1
Caesar & Loretz GmbH/Mi...	Water	19149201	6
Cealo/Gehe	Water	LOTAP0086	1
Delta	Water	18C19-T25-053991	1
E Plus	Water	18109101	6

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Supplier	Substance	Batch	Spectra
E Plus	Water	18156301	2
Ebert 04.04.2014	Water	15K10-T04-027614	1
Euro OTC	Water	16F13-T18-034301	1
Euro OTC	Water	18E09-T01-055708	1
Euro OTC	Water	17E05-T13-044080	2
Euro OTC	Water	17295701	1
Euro OTC	Water	16307601	1
Euro OTC	Water	18C19T29054007	1
Euro OTC	Water	15L15-T07-028685	1
Fagron	Water	15L14T14028664	2
Fagron	Water	16F14-T07-034326	14
Fagron	Water	16L15-T07-028685	1
Fagron	Water	17E05T05044063	1
Fagron	Water	18C19-T25-053991	3
Fagron	Water	18042901	2
Fagron	Water	14L03-T03-017773	1
Fagron	Water	14L03T13017804	1
Fagron	Water	17804	1
Fagron	Water	14K05-T03-016779	1
Fagron	Water	14L03-T07-017788	3
Fagron	Water	14L03-T11-017800	2
Fagron	Water	15D14-T09-021490	4
Fagron	Water	13K13-T08-008092	1
Fagron	Water	14L03-T13-017804	1
Fagron	Water	14K06-C20-16125	2
Fagron	Water	15D14-T06-021484	3
Fagron	Water	15D13-T07-021465	2
Fagron	Water	15F04-T05-023263	2
Fagron	Water	15I10-T08-025964	2
Fagron	Water	15H25-T14-025670	9
Fagron	Water	15D14-To5-021481	1
Fagron	Water	15G09-T02-024364	4
Fagron	Water	15F24-T03-023883	3
Fagron	Water	15E18-C20-16520	3
Fagron	Water	15H25-T18-025678	4
Fagron	Water	15G09-T04-024368	5
Fagron	Water	15L15-T03-028676	4
Fagron	Water	15L15-T03-0286761042	1
Fagron	Water	15L15-T05-028681	4
Fagron	Water	15h0-T09-025968	1
Fagron	Water	16C22-T09-031414	6
Fagron	Water	16C23-T08-031427	3
Fagron	Water	15K10-T06-027620	3
Fagron	Water	16F13-T14-034274	5
Fagron	Water	15K10-T05-027617	1
Fagron	Water	16C23-C20-17151	3
Fagron	Water	16F13-T16-034297	4
Fagron	Water	16286801	2
Fagron	Water	16f14-t07-034326	2
Fagron	Water	15L15T07-028685	1
Fagron	Water	16C23-C20	1
Fagron	Water	16F14T05-034321	1
Fagron	Water	16K25-C20	1
Fagron	Water	16C23-T14-031432	3
Fagron	Water	16L12-T11-039624	7
Fagron	Water	16K25-C20-17409	2
Fagron	Water	16L12-T31-039661	5
Fagron	Water	LOTAP0048	1
Fagron	Water	16B10-T02-030206	2
Fagron	Water	Ap0048	1

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Supplier	Substance	Batch	Spectra
Fagron	Water	16B10-T04-030213	1
Fagron	Water	17B10-T27-041575	2
Fagron	Water	15K10-T08-027626	1
Fagron	Water	17C06-T09-042290	1
Fagron	Water	15K10-T07-027623	1
Fagron	Water	16H02-T01	1
Fagron	Water	17E05-T03-044051	6
Fagron	Water	16B10-T05-030216	2
Fagron	Water	17c31-t05	1
Fagron	Water	16B10-T03-030210	1
Fagron	Water	17H24-T09-047709	3
Fagron	Water	17C31-T05	1
Fagron	Water	B17C31-T05-043064	1
Fagron	Water	17H24-T11-047713	8
Fagron	Water	17B10-T18	1
Fagron	Water	16B10T02030207	1
Fagron	Water	17F23-T06045760	1
Fagron	Water	17L20-T02-051255	5
Fagron	Water	17K27-T09	1
Fagron	Water	17K27-T14-050581	7
Fagron	Water	17F23_T06_045760	1
Fagron	Water	17L20-T02-051254	2
Fagron	Water	18C13-T14-053737	6
Fagron	Water	17L20-T03-051259	2
Fagron	Water	18C19-T25-05399	3
Fagron	Water	17K27-T16-050588	3
Fagron	Water	17K27-T15-050585	3
Fagron	Water	LOTAP0083	2
Fagron	Water	17K27-T16_050588	1
Fagron	Water	18C19-T27-053999	2
Fagron	Water	18C19-T29	1
Fagron	Water	18C19-T29-054007	8
Fagron	Water	54007	1
Fagron	Water	181019-T31-054017	1
Fagron	Water	18J10-T01-060845	4
Fagron	Water	18G16-T04-058129	3
Fagron	Water	54012	1
Fagron	Water	19A18-T02-063515	3
Fagron	Water	16C23-T16-031436	2
Fagron	Water	17j20-T03-051260	1
Fagron	Water	15L15-T01-028672	6
Fagron	Water	19A18-T06-063528	2
Fagron	Water	18E25-T01-056423	6
Fagron	Water	16F14-T03-034317	5
Fagron	Water	17810-T18-041564	2
Fagron	Water	16810-T02-030206	1
Fagron	Water	17L20-T02-51254	1
Fagron	Water	16F14-T05-034321	6
Fagron	Water	16H02-T01-035743	7
Fagron	Water	16F13T18034301	2
Fagron	Water	16L12-T16-039628	5
Fagron	Water	18E07-T08-055699	9
Fagron	Water	16L12-T25-039642	7
Fagron	Water	18G16-T05-058132	4
Fagron	Water	19A18-T11-063541	1
Fagron	Water	14L03T09017794	1
Fagron	Water	17E05-T01-044045	8
Fagron	Water	18c19-T29-054007	1
Fagron	Water	18L19-T06-062853	3
Fagron	Water	18124-T14-060238	2

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Supplier	Substance	Batch	Spectra
Fagron	Water	15h25-t21-025683	1
Fagron	Water	16F13-T18-034301	12
Fagron	Water	16L12-T27-039646	6
Fagron	Water	16L12T29039657	2
Fagron	Water	15L15-T01-0208672	1
Fagron	Water	16L12-t29-039657	1
Fagron	Water	17H24-Tn-047713	1
Fagron	Water	17F23-T06-045760	3
Fagron	Water	18G16-T01-058118	8
Fagron	Water	17B13-T02-04604	1
Fagron	Water	18C19T31054017	1
Fagron	Water	16C23-T08-31427	1
Fagron	Water	16F13-T16-034279	1
Fagron	Water	16F14-T09-034330	5
Fagron	Water	16L-T11-039624	1
Fagron	Water	17H24-T09-04773	1
Fagron	Water	17H24-T13-047717	7
Fagron	Water	2918E-03019	1
Fagron	Water	18C19-T31-054017	7
Fagron	Water	18E09-T02-055711	5
Fagron	Water	18G16-T03-058126	2
Fagron	Water	19A18-T01-063489	5
Fagron	Water	16F14T05034321	1
Fagron	Water	17K27-T13-050577	1
Fagron	Water	17E05-T07-044067	4
Fagron	Water	15F24T03-023883	1
Fagron	Water	15L14-T14-028664	7
Fagron	Water	15L15-T07-028685	6
Fagron	Water	18C19-T30-054012	11
Fagron	Water	18G16-T03-0588126	1
Fagron	Water	17K27T15050585	2
Fagron	Water	16L12-T29-039657	3
Fagron	Water	17B13-T02-041604	9
Fagron	Water	19C29-T05-065509	2
Fagron	Water	219167	1
Fagron	Water	18G16T04058129	1
Fagron	Water	14L03-T09-017794	2
Fagron	Water	15D14-T10-021493	4
Fagron	Water	15D14-T13-021499	2
Fagron	Water	15F24-T01-023879	9
Fagron	Water	1509-T02-024364	1
Fagron	Water	15H25-T16-025674	4
Fagron	Water	16C23-T06-31423	1
Fagron	Water	16L1-T27-039646	1
Fagron	Water	15D14-T05	2
Fagron	Water	18C19-T6-053995	1
Fagron	Water	12243501	1
Fagron	Water	15F-24-023883	1
Fagron	Water	15D14-T05-021481	3
Fagron	Water	16C23-T-16-031436	1
Fagron	Water	16f14-t09-034330	1
Fagron	Water	17B10-T20-041571	1
Fagron	Water	17H24-T15-047721	5
Fagron	Water	16F23-T06-045760	1
Fagron	Water	15D13-T09-021469	6
Fagron	Water	15D14-T14-021502	6
Fagron	Water	15H25-T21-025683	5
Fagron	Water	16C23-T06-031423	5
Fagron	Water	17E05-T11-044076	4
Fagron	Water	17K01-T01-048440	5

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Supplier	Substance	Batch	Spectra
Fagron	Water	19C29-T02_065500	1
Fagron	Water	14J16-T24-016261	1
Fagron	Water	15F04-T03-023259	2
Fagron	Water	15F04-T03-023529	1
Fagron	Water	15k10-t04-027614	1
Fagron	Water	16F13-T11-034264	10
Fagron	Water	16F13-TN-034264	1
Fagron	Water	16L12T16039628	1
Fagron	Water	16B10-T05-03026	1
Fagron	Water	16L12/T16/039628	1
Fagron	Water	17114801	1
Fagron	Water	16K25C20-17409	1
Fagron	Water	17E05-T05-044063	6
Fagron	Water	17K27-T09-050544	8
Fagron	Water	17K27-T11-050552	3
Fagron	Water	18C19-T26-053995	9
Fagron	Water	18E28-T01-056486	2
Fagron	Water	19E20-T09-067576	1
Fagron	Water	15L-15T07028685	1
Fagron	Water	T14-031432	1
Fagron	Water	41608	1
Fagron	Water	44080	1
Fagron	Water	17H24T13047717	1
Fagron	Water	18G16-T02-058123	2
Fagron	Water	16F14-t03-034317	1
Fagron	Water	14F02-T03-012891	1
Fagron	Water	17E05-T13-044080	8
Fagron	Water	18C13T15-053741	1
Fagron	Water	18C13-T14-053736	2
Fagron	Water	18E28-T02-056491	1
Fagron	Water	18E28-T-02-056491	1
Fagron	Water	19A18-T08-063538	1
Fagron	Water	19D01-T10-065562	1
Fagron	Water	15L14-T12-028660	3
Fagron	Water	15K10-T04-027614	7
Fagron	Water	17h24-709-047709	1
Fagron	Water	17K27-T09-o5o44	1
Fagron	Water	18C19-T28-054003	4
Fagron	Water	19C29-T02-065500	2
Fagron	Water	19A18-T07-063531	3
Fargon	Water	303429	1
Fargon	Water	16L12T11039624	1
Fargon	Water	16L12-t31-039661	1
Fargon	Water	17e05-t07-044067	1
Fargon	Water	17K27-T13-050577	1
Fargon / Gehe	Water	15D14-T13-021499	1
Fargon / Gehe	Water	17B10-T27-041575	1
Fargon GmbH & Co.KG	Water	16F13-T16-034297	1
Fargon GmbH & Co.KG	Water	15K10-To4-027614	1
Fargon GmbH & Co.KG	Water	15K10-T07-027623	2
Fargon GmbH & Co.KG	Water	16F14-T07-034326	1
Fargon GmbH & Co.KG	Water	17B10-T20-041571	1
Fargon GmbH & Co.KG	Water	16B10-T04-030213	3
Fargon GmbH & Co.KG	Water	17E05-T03-044051	1
Fargon/Kehr	Water	15F04-T05-023263	1
Fargon/Kehr	Water	17B10-T20-041571	1
Fargon/Kehr	Water	17H24-T09-047709	1
Fargon/Kehr	Water	17L20-T02-051255	4
Fargon/Noweda	Water	15L15-T028676	1
Fargon/Sanacorp	Water	18G16-T03-058126	2

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Supplier	Substance	Batch	Spectra
Fiebig	Water	16C22-T09-031414	1
Fiebig	Water	17e05_t01_044045	1
Caelo	Water	16F14-T05o34321	1
Caelo	Water	16L12-T27-039646	2
Fiebig/Fagromn	Water	17H24-T09-047709	2
Fagron	Water	17e05_t05_044063	1
Fragon/Phoenix	Water	15L14-T12-028660	1
Fragon/Phoenix	Water	15L4-T14-028664	1
Fragon/Phoenix	Water	17K27-T16-050588	1
Fragron	Water	15L15-T01-028672	1
Fresenius	Water	14KB1003	1
Fresenius Kabi/Phoenix	Water	145I21	1
Fresenius Kabi/Phoenix	Water	14LE20	3
Fresenius Kabi/Phönix	Water	14IL38	2
Fresenius Kabi/Phönix	Water	14KI21	4
Gehe	Water	17319901	2
Gehe	Water	17H24-T15-047721	1
Gehe	Water	17H24-T11-047713	1
Gehe	Water	17H24-T13-047717	1
GEHE	Water	17B10-T27-041575	2
GEHE	Water	17H24-T13-047717	1
GEHE	Water	17H27-T10-050547	1
GEHE	Water	17K27-T15	1
GEHE	Water	18E08-T01	1
GEHE	Water	18E09-T02-055711	1
GEHE	Water	18G16-T02	2
GEHE	Water	19A18-T07	1
GEHE	Water	19A18-T06	1
GEHE	Water	19D01-T12-065568	1
GEHE	Water	19C29-T02-065500	2
GEHE	Water	19C29-T08-065529	2
Caelo	Water	15406801	2
Caelo	Water	16L12T16039628	1
Caelo	Water	2x17114701	1
Caelo	Water	LOTAP0075	1
Fagron	Water	17C31-T05-043064	4
Fagron	Water	17K27-T09-050544/107	1
hedinger	Water	219135	1
Hedinger	Water	219116	1
Hedinger	Water	219133	1
Hedinger	Water	219132	1
Hedinger	Water	219143	2
Hedinger	Water	219140	1
Hedinger	Water	219147	1
Hedinger	Water	219147 (2x)	1
Hedinger	Water	219164	1
Hedinger	Water	219167	2
Hedinger	Water	219173	1
Hedinger	Water	219184	1
Hedinger/ Sanacorp	Water	AP0022	1
Hedinger/Gehe	Water	219181	1
Hedinger/Noweda	Water	219177	1
Hedinger/Phönix	Water	219124	1
Klenk	Water	17F23-T06-045760	2
Henry Lamotte	Water	15L14-T12-028660	1
Henry Lamotte Oils GmbH...	Water	17K27-T09-050544	1
Jenne	Water	17E05-T11-044076	1
Jenne	Water	17H24-T09-047709	2
JENNE	Water	17K27-T15-050585	1
Kehr	Water	17114501	1

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Supplier	Substance	Batch	Spectra
Kehr	Water	17114801	1
Caelo	Water	17002101	5
Caelo	Water	17145002	1
Fagron	Water	18E07T08055699	1
Fagron	Water	18G16-To1-058118	1
Kerndl	Water	8412	1
Kerndl	Water	32517	1
Klenk	Water	15D14-T-021499	1
Klenk	Water	17173001	2
Caelo	Water	16F14-T09-034330	1
Caelo	Water	17810-T27-041575	1
L12	Water	16L12-T16-039628	1
L12	Water	17E05-T11-044076	1
L12	Water	17K27-T13-050577	1
L12	Water	18C13-T14-053737	1
Fagron	Water	16F13T11034264	2
Fagron	Water	16F13-T11-0342564	1
Lamotte/Alliance	Water	17211201	1
Midas	Water	16C22_T07-031410	1
Midas	Water	17E05-T07-044067	1
Midas	Water	17K27-T11-050552	2
Midas	Water	18062101	2
Midas	Water	17L20-T02-051255	1
Midas	Water	17K01-T01-048440	1
Midas	Water	18C19-T31-054017	2
Midas	Water	18226801	1
Midas	Water	18E28-T01-056487	1
Midas	Water	18265001	2
Midas	Water	18263401	2
Midas	Water	18E09-T01-055708	1
Midas	Water	18G16-T04-058129	1
Fagron	Water	16C22-T07-031410	1
Fagron	Water	15L15-T07-028685	1
Fagron	Water	16C23-T4-031432	1
Fagron	Water	16C23_t14-031432	1
Noweda	Water	15F04-T03-023259	1
Noweda	Water	15K10-T05-027617	1
Caelo	Water	15068701	1
Caelo	Water	16307501	3
Fagron	Water	17E05-To1-o44o45	1
Caelo	Water	16B10T04030213	1
Fagron	Water	18c13T15053743	1
Caelo	Water	16002601	1
Caelo	Water	17035201	1
Caelo	Water	16B10-T05-030216	2
Fagron	Water	18C13-T14-053757	1
Fagron	Water	18C13-T16-053745	1
Noweda/Wepa	Water	L0TAP0053	1
Phoenix	Water	15L14-T14	1
Phoenix	Water	15L15-T07	1
Phoenix	Water	L0TAP0095	1
Phoenix WE28.04.17 -7,9...	Water	16H02-T01-035743	1
Phönix	Water	16127901	1
Phönix	Water	17233001	2
Phönix	Water	18019501	4
Phönix	Water	18109501	1
Phönix	Water	18E09-T01-055708	1
PHÖNIX	Water	17E05-T07-044067	2
PHÖNIX	Water	17E05-T07	2

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Supplier	Substance	Batch	Spectra
PHÖNIX	Water	17H24-T13	1
Phönix WE:08.12.17 E...	Water	17C31-T05-043064	2
Caelo	Water	17145001	11
Caelo	Water	15F24-T03-023883	2
Caelo	Water	17H24T11047713	1
Phönix Gotha	Water	15019101	3
Phönix Gotha	Water	15142501	1
Phönix Gotha	Water	14K05-T02-016775	2
Phönix Gotha	Water	15253901	1
Phönix Gotha	Water	15235201	2
Fagron	Water	15/10-T08-025964	1
Caelo	Water	18C13-T15-053741	2
Euro OTC	Water	16L12-T16-39628	1
Fagron	Water	2050917/17B10-T18-04	1
Fagron	Water	17B10-T18-041564	1
Fagron	Water	17k27-T09-050544	1
Phönix/Wepa	Water	LOTAP0073	1
Rabenapotheke	Water	14L03-T11-017800	1
Rondell Apotheke	Water	LOTAP0016	1
Sanacorp	Water	17K27-T15-050585	1
Sanacorp	Water	17339801	1
Sanacorp	Water	17K27-T14-050581	1
Sanacorp	Water	18138601	1
Sanacorp	Water	18210601	1
Sanacorp	Water	LOTAP0090	1
Sanacorp	Water	18C19-T30-054012	1
Caelo	Water	LOTAP0029	1
Caelo	Water	LOTAP0039	1
Caelo	Water	LOTAP0042	1
Caelo	Water	LOTAP0050	1
Fagron	Water	17H14-T09-047709	1
Sanacorp /Wepa	Water	LOTAP0042	1
Caelo	Water	17B10-T20-041571	1
Fagron	Water	17B13-T04-041608	9
Sanacorp/Wepa	Water	LOTAP0083	1
Sophien AM/Wepa	Water	LOTAP0077	1
Test	Water	Test	1
Wasser, gereinigt	Water	15D14T09021490	1
Fagron	Water	16H02T01035743	1
WE:Sanacorp 12.09.2016 ...	Water	16C23-T08-031427	1
wepa	Water	LOTAP0024	1
wepa	Water	LOTAP0031	1
wepa	Water	LOTAP0033	3
wepa	Water	LOTAP0038	1
wepa	Water	LOTAP0040	1
wepa	Water	LOTAP0045	1
wepa	Water	LOTAP0048	1
wepa	Water	LOTAP0081	1
wepa	Water	LOT0094AP	1
wepa	Water	LOTAP0095	1
wepa	Water	LOTAP0101	1
Wepa	Water	LOTAP0013	1
Wepa	Water	LOTAP0017	1
Wepa	Water	LOTAP0020	1
Wepa	Water	LOTAP0015	1
Wepa	Water	AP0024	1
Wepa	Water	LOTAP0025	1
Wepa	Water	LOTAP0021	1
Wepa	Water	LOTAP0030	1
Wepa	Water	LOTAP0040	2

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Supplier	Substance	Batch	Spectra
Wepa	Water	LOTAP0035	1
Wepa	Water	LOTAP0046	2
Wepa	Water	LOTAP0048	1
Wepa	Water	LOTAP0054	2
Wepa	Water	AP0054	1
Wepa	Water	LOTAP0060	1
Wepa	Water	LOTAP0059	1
Wepa	Water	LOTAP0053	1
Wepa	Water	LOTAP0065	1
Wepa	Water	LOTAP0061	1
Wepa	Water	LOTAP0064	1
Wepa	Water	LOTAP0067	2
Wepa	Water	LOTAP0072	4
Wepa	Water	LOTAP0073	1
Wepa	Water	AP0074	1
Wepa	Water	LOTAP0076	1
Wepa	Water	ap0069	1
Wepa	Water	LOTAP0078	3
Wepa	Water	LOTAP0079	2
Wepa	Water	AP0080	1
Wepa	Water	LOTAP0074	2
Wepa	Water	LOTAP-SP0001	5
Wepa	Water	LOTAP0080	2
Wepa	Water	LOTAPSP0001	1
Wepa	Water	LOTAP0084	1
Wepa	Water	LOTAP0082	1
Wepa	Water	LOTAP0085	1
Wepa	Water	LOTAP0087	1
Wepa	Water	LOTAP0088	1
Wepa	Water	LOTAP0083	1
Wepa	Water	LOTAP0091	1
Wepa	Water	LOTAP-SP0002	1
Wepa	Water	AP-SP0002	1
Wepa	Water	LOTAP0093	1
Wepa	Water	AP-SP0003	1
Wepa	Water	LOTAP0097	1
Wepa	Water	LOTAP-SP-0003	1
Wepa	Water	LOTAP0101	1
Wepa	Water	LOTAP0095	2
Wepa	Water	LOT-AP-SP0003	1
Wepa	Water	LOTAPSP0003	1
Wepa	Water	LOTAP0106	2
Wepa	Water	LOTAP-SP0004	1
Wepa	Water	AP-SP0005	1
Wepa	Water	LOTAP0103	1
Wepa	Water	apsp0006	1
Wepa	Water	LOTAP-SP0005	1
Wepa	Water	LOTAP0111	1
WEPA	Water	LOTAP0012	2
WEPA	Water	LOTAP0025	2
WEPA	Water	LOTAP0036	1
WEPA	Water	LOTAP0038	2
WEPA	Water	LOTAP0039	1
WEPA	Water	LOTAP00500	1
WEPA	Water	LOTAP0051	1
WEPA	Water	LOTAP0047	1
WEPA	Water	LOTAP0054	1
WEPA	Water	LOTAP0062	1
WEPA	Water	LOTAP0069	1
WEPA	Water	LOTAP0071	1

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Supplier	Substance	Batch	Spectra
WEPA	Water	LOTAP0075	2
WEPA	Water	LOTAP00812ma151	1
WEPA	Water	AP0076	1
WEPA	Water	LOTAP0078	1
WEPA	Water	LOTAP0081	1
WEPA	Water	LOTAP0089	1
WEPA	Water	LOTAP0095	1
WEPA	Water	LOTAP0112	1
Wepa / Wepa	Water	LOTAP0045	1
Wepa / Wepa	Water	LOTAP0048	2
Wepa Apothekenbedarf	Water	LOTAP0037	3
Wepa Apothekenbedarf	Water	LOTAP0042	2
Wepa Apothekenbedarf	Water	AP0064	1
Wepa Apothekenbedarf	Water	LOTAP0078	1
Wepa Apothekenbedarf	Water	LOTAP0092	1
Wepa Apothekenbedarf	Water	LOTAP0103	1
WEPA Apothekenbedarf	Water	LOTAP0042	1
WEPA Apothekenbedarf Gm...	Water	LOTAP0061	2
WEPA Apothekenbedarf Gm...	Water	LOTAP0074	1
WEPA Apothekenbedarf Gm...	Water	LOTAP0082	1
WEPA Apothekenbedarf Gm...	Water	LOTAP0089	1
WEPA Apothekenbedarf Gm...	Water	LOTAP0095	1
WEPA Apothekenbedarf Gm...	Water	LOTAP0100	1
Wepa,	Water	LOTAP0089	1
Wepa/ Anzag	Water	15 (AP0081)	1
Wepa/ Anzag	Water	16 (LOTAP0092)	1
Wepa/ Anzag	Water	17 (LOTAP0095)	1
Wepa/ Anzag	Water	18 (LOTAP0097)	1
Wepa/ Anzag	Water	19 (LOTAP0102)	1
Wepa/ Anzag	Water	20 (LOTAP0104)	1
Wepa/ Phoenix	Water	LOTAP0059	2
Wepa/ Phönix	Water	LOTAT0086	1
Wepa/ wepa	Water	LOTAP0048	1
Wepa/ Wepa	Water	LOTAP0051	1
Wepa/AHD	Water	10 (LOTAP0062)	1
Wepa/AHD	Water	11 (LOTAP0062)	1
Wepa/AHD	Water	13 (LOTAP0078)	1
Wepa/AHD	Water	14 (AP0076)	1
Wepa/Anzag 11.07.2017	Water	LOTAP0055	3
wepa/Sanaco	Water	LOTAP0028	1
wepa/Sanacorp	Water	AP0027	1
Wepa/Sanacorp	Water	LOTAP0047	1
Wepa/Sanacorp	Water	LOTAP0076	1
Wepa/Sanacorp	Water	LOTAP0081	2
Wepa/Sanacorp	Water	LOTAP0084	1
Wepa/Sanacorp	Water	LOTAP0089	1
Wepa/Sanacorp	Water	LOTAP0091	1
Wepa/Sanacorp	Water	LOTAT0092	1
Wepa/Wepa	Water	9 (LOTAP0061)	1
Wepa/Wepa	Water	LOTAP0068	1
Wepa/Wepa	Water	12 (AP0074)	1
Wepa/Wepa	Water	LOTAP0083	1
Wepa/Wepa	Water	LOTAP0078	1
Wepa/Wepa	Water	LOTAP0086	2
Wepa/Wepa	Water	LOTAP0091	1
Wepa/Wepa	Water	lotap0095	1
Wepa/Wepa	Water	LOTAP0099	1
Wepa/Wepa	Water	LOTAP0108	1
WEPA/WEPA	Water	LOTAP0056	1
WEPA/WEPA	Water	LOTAP0096	1

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Supplier	Substance	Batch	Spectra
Wepa-Apothekenbedarf	Water	LOTAP0069	1
WEPA-WEPA	Water	LOTAP0028	1
Caelo	Aluminium acetotartrate solu...	12233502	4
Caelo	Aluminium acetotartrate solu...	15299901	19
Caelo	Aluminium acetotartrate solu...	13378704	1
Dr.Seeger GmbH	Aluminium acetotartrate solu...		1
Hedinger	Aluminium acetotartrate solu...		1
Hedinger/Phönix	Aluminium acetotartrate solu...		1
	Chlorhexidine digluconate so...	13K26B06289365	1
Euro OTC	Chlorhexidine digluconate so...	1511033-01	63
Caelo	Chlorhexidine digluconate so...	15131504	13
Caelo	Chlorhexidine digluconate so...	15292508	17
Caelo	Chlorhexidine digluconate so...	14011009	1
Caelo	Chlorhexidine digluconate so...		5
	Chlorhexidine digluconate so...	1308002-02	1
Fagron	Chlorhexidine digluconate so...	13H19-B01	5
Fagron	Chlorhexidine digluconate so...	15I03-B02-315213	1
Fagron	Water		3
Fagron	Water	14K05-T02-016775	2
Serumwerk Bernburg AG	Water		2
Wepa /AllianceH.	Water		1
Wepa Apothekenbedarf	Water		1
Wepa/ wepa	Water		6
Wepa/Wepa	Water		1

- 133 789 spectra from 703 *Apo-Ident* customers from a total of 34 163 batches from a further 337 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Water and aqueous solutions* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Water and aqueous solutions* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1005	0	55 354
Type B	0	1399	1	67 546
Type C	0	4467	97	133 439

The substance/substance group *Water and aqueous solutions* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.4030 %)
Type B	100.0000 % (> 99.9658 %)	99.9286 % (> 99.7143 %)
Type C	100.0000 % (> 99.6517 %)	97.8747 % (> 97.8089 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several

new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Water and aqueous solutions* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Dextrorotary lactic acid 20%	17.42	—
Chest elixir	28.88	—
Hydrophilic base emulsion (NRF p.25)	29.56	—
Liquorice juice purified, diluted	32.06	—
Fortified wine	35.79	—
Condurango wine	43.08	—
Non-ionic hydrous liniment SR/DAC (NRF...	43.94	—
Hydrophilic cream, non-ionic SR (NRF p...	44.80	—
Polyhexanide solution 20%	45.72	—
Lotio Cordes®	46.14	—
Gel basis Audor®	46.90	—
Hydrated liniment SR/DAC (NRF p.40)	47.93	—
Hydrophilic cream, non-ionic without p...	50.55	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Water and aqueous solutions* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31342	31342	0.00	16.57
32921	31342	9.27	18.71
31959	31342	4.84	16.82
31240	31735	2.45	24.90
31463	31463	0.00	26.60
31705	31718	9.44	24.42
31735	31735	0.00	24.89
31829	31463	3.78	24.71
31846	31846	0.00	25.60
32308	31846	9.08	23.94
32732	31846	2.15	24.25

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
32831	32831	0.00	32.10
32832	32832	0.00	31.74
30869	31342	5.59	18.77
31057	31718	2.65	32.12
34690	31342	5.08	18.76
31624	31718	1.83	30.76
31676	32354	4.53	33.41
31718	31718	0.00	31.47
31809	31718	4.02	28.85
32354	32354	0.00	31.29

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Wines**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30641-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Wines; Chest elixir; Condurango wine; Fortified wine; Gel basis Audor®; Liquiritiae succi elixir; Liquorice juice purified, diluted; Lotio Cordes®; Succus liquiritiae depur. solut.; Vinum condurangum

Special notes

When selecting the *Wines* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Chest elixir	4	2	6
Condurango wine	2	3	1
Fortified wine	3	2	8
Gel basis Audor®	4	2	14
Liquorice juice purified, diluted	3	3	30
Lotio Cordes®	3	2	19

Second-stage model

For differentiation of the substance/substance group *Wines* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Wines*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Chest elixir	13003109	31213	40	1405332
Caelo	Chest elixir	14182707	31615	60	20140709
Caelo	Chest elixir	17013603	33619	40	20170125
Caelo	Chest elixir	191235	34642	40	20190506*
Caelo	Condurango wine	11239009	30901	60	20110909
Caelo	Condurango wine	14345603	31581	60	1505325
Caelo	Fortified wine	13208302	31127	40	1403400
Caelo	Fortified wine	13208306	31222	70	20130822
Caelo	Fortified wine	13397204	31466	60	20131216
Audor Pharma	Gel basis Audor®	AP111500	30641	40	20101104
Audor Pharma	Gel basis Audor®	AP103113G	31108	40	1404231
Audor Pharma	Gel basis Audor®	AP63101G	32751	40	20160906
Audor Pharma	Gel basis Audor®	AP63101G	32752	40	20160906
Audor Pharma	Gel basis Audor®	AP84001G	34599	40	20181019
Caelo	Liquorice juice ...	14203111	31652	60	20140711
Caelo	Liquorice juice ...	171695	33330	40	20170621*
Caelo	Liquorice juice ...	192332	34710	40	20191016*
Ichthyol	Lotio Cordes®	12D014	31075	40	1403759
Ichthyol	Lotio Cordes®	14D010	31595	60	20140826
Ichthyol	Lotio Cordes®	15D002	32487	40	20150318

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 950 spectra of 20 reference samples from the substance/substance group *Wines*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 19 different batches.
- 55 409 spectra from a total of 1097 batches from further 213 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 560 spectra of 14 reference samples from the substance/substance group *Wines*.
- Among them are spectra of independent samples from 14 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Chest elixir	15379113	32956	40
Caelo	Chest elixir	181495	34228	40
Caelo	Condurango wine	15341903	32957	40
Caelo	Condurango wine	15341901	33836	40
Caelo	Condurango wine	180781	34074	40
Caelo	Fortified wine	161795	32336	40
Caelo	Fortified wine	171984	33712	40
Audor Pharma	Gel basis Audor [®]	AP53801G	32724	40
Audor Pharma	Gel basis Audor [®]	AP72301G	33626	40
Caelo	Liquorice juice purified, di...	161241	32200	40
Caelo	Liquorice juice purified, di...	16316201	33463	40
Caelo	Liquorice juice purified, di...	182598	34336	40
Ichthyol	Lotio Cordes [®]	15D021	32965	40
Ichthyol	Lotio Cordes [®]	16D011	33839	40

- 68 914 spectra from a total of 1488 batches from further 355 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 315 spectra from 84 *Apo-Ident* customers from 88 batches from the substance/substance group *Wines*.
- Among them are spectra of independent samples from 77 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Chest elixir	18101306	1
Caelo	Chest elixir	19071402	1
Caelo	Chest elixir	12091406	1
Caelo	Chest elixir	13121719	1
Caelo	Chest elixir	3031506	1
Fiebig	Chest elixir	11019106	1
Caelo	Condurango wine	14345604	1

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Supplier	Substance	Batch	Spectra
Breko	Fortified wine	201701v13	1
Breko	Fortified wine	201701v12	1
Caelo	Fortified wine	16179505	1
Caelo	Fortified wine	12059809	2
Caelo	Fortified wine	15175501	2
Caelo	Fortified wine	15175508	1
Noweda	Fortified wine	16179509	1
phönix	Fortified wine	16179508	1
Anzag	Gel basis Audor [®]	103081G	1
Audor Pharma	Gel basis Audor [®]	AP100852G	2
Audor Pharma	Gel basis Audor [®]	AP102464G	4
Audor Pharma	Gel basis Audor [®]	102464	3
Audor Pharma	Gel basis Audor [®]	AP102464	1
Audor Pharma	Gel basis Audor [®]	AP80601G	23
Audor Pharma	Gel basis Audor [®]	AP103993G	3
Audor Pharma	Gel basis Audor [®]	AP53801G	10
Audor Pharma	Gel basis Audor [®]	AP72301G	30
Audor Pharma	Gel basis Audor [®]	ap84001g	5
Audor Pharma	Gel basis Audor [®]	AP90601	3
Audor Pharma	Gel basis Audor [®]	AP103081G	2
Audor Pharma	Gel basis Audor [®]	Ap103081G	1
Audor Pharma	Gel basis Audor [®]	AP100852	1
Audor Pharma	Gel basis Audor [®]	ap103113g	1
Caelo	Gel basis Audor [®]	18041301	1
Fagron	Gel basis Audor [®]	AP103993G	1
Caelo	Liquorice juice purified, di...	12061203	1
Caelo	Liquorice juice purified, di...	12116703	2
Caelo	Liquorice juice purified, di...	12116709	1
Caelo	Liquorice juice purified, di...	13067606	3
Caelo	Liquorice juice purified, di...	16316202	1
Caelo	Liquorice juice purified, di...	17169508	3
Caelo	Liquorice juice purified, di...	16124103	6
Caelo	Liquorice juice purified, di...	11293208	1
Caelo	Liquorice juice purified, di...	15144207	2
Caelo	Liquorice juice purified, di...	12116704	3
Caelo	Liquorice juice purified, di...	17169504	1
Caelo	Liquorice juice purified, di...	117169505	1
Caelo	Liquorice juice purified, di...	13067602	2
Caelo	Liquorice juice purified, di...	16124108	4
Caelo	Liquorice juice purified, di...	16316201	4
Caelo	Liquorice juice purified, di...	17169505	2
Caelo	Liquorice juice purified, di...	18034101	1
Caelo	Liquorice juice purified, di...	16124109	1
Caelo	Liquorice juice purified, di...	13067604	1
Caelo	Liquorice juice purified, di...	13133801	5
Caelo	Liquorice juice purified, di...	14002602	4
Caelo	Liquorice juice purified, di...	14203104	2
Caelo	Liquorice juice purified, di...	14203105	3
Caelo	Liquorice juice purified, di...	14203107	1
Caelo	Liquorice juice purified, di...	15155302	1
Caelo	Liquorice juice purified, di...	16316208	4
Caelo	Liquorice juice purified, di...	18155006	2
Fagron	Liquorice juice purified, di...	15155302	2
Caelo	Liquorice juice purified, di...	15144203	1
Jenne	Liquorice juice purified, di...	16124103	1
Phönix	Liquorice juice purified, di...	18155009	1
VDL	Liquorice juice purified, di...	12116703	2
VDL	Liquorice juice purified, di...	11293210	1
Alliance Health 05.06.2...	Lotio Cordes [®]	11D029	1
Anzag/Ichtyol-Gesellsch...	Lotio Cordes [®]	13D009	1

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Supplier	Substance	Batch	Spectra
Caelo	Lotio Cordes [®]	12081403	1
Caelo	Lotio Cordes [®]	10D011	20
Caelo	Lotio Cordes [®]	14D010	1
Caelo	Lotio Cordes [®]	15D002	1
Caelo	Lotio Cordes [®]	14D011	3
Euro OTC	Lotio Cordes [®]	15D022	2
Ichthiol/Sanacorp	Lotio Cordes [®]	18D002	1
Ichthol/ gehe 06.11.17	Lotio Cordes [®]	16d010	1
Ichthyol	Lotio Cordes [®]	11D030	1
Ichthyol	Lotio Cordes [®]	14041402	1
Ichthyol	Lotio Cordes [®]	13D009	1
Ichthyol	Lotio Cordes [®]	13D010	1
Ichthyol	Lotio Cordes [®]	16021509	1
Ichthyol	Lotio Cordes [®]	27041508	1
Ichthyol	Lotio Cordes [®]	14D011	1
Ichthyol	Lotio Cordes [®]	27041507	1
Ichthyol	Lotio Cordes [®]	15D001	2
Ichthyol	Lotio Cordes [®]	16D010	2
Ichthyol	Lotio Cordes [®]	18D001	1
ICHTHYOL	Lotio Cordes [®]	15D002	1
Ichthyol / Gehe	Lotio Cordes [®]	15D022	1
Ichthyol / Gehe	Lotio Cordes [®]	16D011	1
Ichthyol / Noweda	Lotio Cordes [®]	14D010	2
Ichthyol /Noweda	Lotio Cordes [®]	15D001	1
Ichthyol Gesellschaft- ...	Lotio Cordes [®]	13D010	1
Ichthyol Gesellschaft/N...	Lotio Cordes [®]	15d001	1
Ichthyol/Anzag	Lotio Cordes [®]	15D002	1
Ichthyol/Ebert	Lotio Cordes [®]	15D022	1
Ichthyol/gehe	Lotio Cordes [®]	13D010	1
Ichthyol/gehe	Lotio Cordes [®]	14D010	2
Ichthyol/Gehe	Lotio Cordes [®]	18D001	1
Ichthyol/Gehe	Lotio Cordes [®]	18D002	1
Ichthyol/GEHE	Lotio Cordes [®]	14D011	1
Ichthyol/Phoenix	Lotio Cordes [®]	15D001	1
Ichthyol/Phoenix	Lotio Cordes [®]	15D002	1
Ichthyol/Phönix	Lotio Cordes [®]	13D009	1
Ichthyol/Phönix	Lotio Cordes [®]	14D010	2
Ichthyol/Phönix	Lotio Cordes [®]	15D001	2
Ichthyol/Phönix	Lotio Cordes [®]	15D002	4
Ichthyol/Phönix	Lotio Cordes [®]	18D001	1
Ichthyol/Sanacorp	Lotio Cordes [®]	14D010	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	15D001	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	15D022	2
Ichthyol-Gesellschaft	Lotio Cordes [®]	4111709	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	30041806	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	18D001	1
Ichthyol-Gesellschaft, ...	Lotio Cordes [®]	13D010	1
ichtyol	Lotio Cordes [®]	12D014	1
Ichtyol	Lotio Cordes [®]	16D010	20
Ichtyol/Phoenix	Lotio Cordes [®]	18D002	1
Ichtyol-Gesellschaft	Lotio Cordes [®]	15D002	1
Kehr	Lotio Cordes [®]	16D011	1
Phoenix/Stiefel	Lotio Cordes [®]	12D014	1
Audor Pharma	Gel basis Audor [®]		12
Audor Pharma	Gel basis Audor [®]	AP103113G	1
Audor Pharma	Gel basis Audor [®]	AP84001G	13
Ichthyol	Lotio Cordes [®]	14D010	2
Ichthyol	Lotio Cordes [®]	15D002	2

- 138 038 spectra from 703 *Apo-Ident* customers from a total of 35 207 batches from a further 334 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Wines* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Wines* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	950	0	55 409
Type B	0	560	0	68 709
Type C	0	310	5	137 993

The substance/substance group *Wines* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.3684 %)
Type B	100.0000 % (> 99.9652 %)	100.0000 % (> 98.9286 %)
Type C	100.0000 % (> 99.6426 %)	98.4127 % (> 97.4603 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra ([Rule of Three](#) [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Wines* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Hydrophilic base emulsion (NRF p.25)	14.87	—
Viscous base solution (NRF p. 20)	21.10	—
Dextrorotary lactic acid 20%	27.89	—
Hydrated liniment SR/DAC (NRF p.40)	32.94	—
Raspberry syrup (conserved)	33.81	—
Sodium lactate solution 50%	34.03	—
Aluminium acetotartrate solution	34.34	—
Chlorhexidine digluconate solution 20%	35.46	—
Water	36.49	—
Polyhexanide solution 20%	39.66	—
Non-ionic hydrous liniment SR/DAC (NRF...	39.87	—

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Substanz	Distance in main model	Distance in second-stage model
Marshmallow syrup (conserved)	41.26	—
Base cream, diluted	43.50	—
Sugar syrup DAB	48.25	—
Ribwort plantain syrup (conserved)	48.52	—
Ipecacuanha syrup (NRF 19.1)	51.39	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Wines* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31213	31213	0.00	33.54
31615	34642	4.81	26.96
33619	31213	6.15	28.87
31075	31075	0.00	29.30
31652	34710	6.46	33.60
33330	33330	0.00	36.43
34710	34710	0.00	31.08
34642	34642	0.00	27.19
30641	31108	6.61	22.17
32751	31127	7.97	21.18
32752	31127	7.40	21.17
31127	31127	0.00	20.20
31108	31108	0.00	20.09
31222	31127	2.12	20.18
34599	31108	8.89	21.19
31466	31127	3.06	20.10
31595	31075	5.15	21.36
30901	31581	8.97	34.79
31581	31581	0.00	30.19
32487	31075	7.04	39.25

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Wood oils**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30710-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Wood oils; Cypress oil; Juniper wood oil; Oleum cupressi; Oleum Juniperi e Ligno pro uso externo; Terebinthinae aetheroleum; Turpentine oil

Special notes

When selecting the *Wood oils* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Cypress oil	2	2	2
Juniper wood oil	4	2	9
Turpentine oil	6	2	37

Second-stage model

For differentiation of the substance/substance group *Wood oils* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Wood oils*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cypress oil	13349109	31837	60	1606484
Caelo	Cypress oil	16130501	32183	40	9464
Caelo	Juniper wood oil	11363504	30710	40	20111221
Caelo	Juniper wood oil	11363507	30860	40	20111221
Caelo	Juniper wood oil	13196208	31201	40	1405102
Caelo	Juniper wood oil	190399	34644	40	20190312*
Caelo	Turpentine oil	12383210	31214	40	1407275
Caelo	Turpentine oil	161997	32317	40	20160707*
Caelo	Turpentine oil	171509	33310	40	20170518*
Euro OTC	Turpentine oil	1312026-01	31531	60	20140113
Euro OTC	Turpentine oil	1511012	31815	60	20151214*
Euro OTC	Turpentine oil	1703005	33232	40	20170327*

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 540 spectra of 12 reference samples from the substance/substance group *Wood oils*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 12 different batches.
- 55 819 spectra from a total of 1104 batches from further 216 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples:

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 280 spectra of 7 reference samples from the substance/substance group *Wood oils*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cypress oil	17017101	33602	40
Caelo	Cypress oil	173150	33905	40
Caelo	Juniper wood oil	16055410	33506	40
Caelo	Juniper wood oil	171964	33914	40
Caelo	Turpentine oil	181108	34060	40
Euro OTC	Turpentine oil	1806017	34188	40
Caelo	Cypress oil	17017101	33603	40

- 69 194 spectra from a total of 1496 batches from further 358 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 120 spectra from 73 *Apo-Ident* customers from 51 batches from the substance/substance group *Wood oils*.
- Among them are spectra of independent samples from 47 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Cypress oil	16130505	12
Caelo	Cypress oil	17017101	1
JENNE	Cypress oil	17017101	1
Caelo	Juniper wood oil	14008307	3
Caelo	Juniper wood oil	14008306	1
Caelo	Juniper wood oil	15149502	1
Caelo	Juniper wood oil	14008301	1
Caelo	Juniper wood oil	14008303	2
Caelo	Juniper wood oil	15149511	1
Caelo	Juniper wood oil	12342604	1
Taoasis GmbH	Juniper wood oil	736525-110967	1
Taoasis GmbH	Juniper wood oil	604898-109389	1
AHC 20.07 13 250ml	Turpentine oil	13106701	1
AHD	Turpentine oil	16199705	1
Caelo	Turpentine oil	14242701	1
Caelo	Turpentine oil	11127905	1
Caelo	Turpentine oil	412M-02022	1
Caelo	Turpentine oil	14071201	1
Caelo	Turpentine oil	10296303	1
Caelo	Turpentine oil	19061310	1
Caelo	Turpentine oil	1424703	1
Caelo	Turpentine oil	14242703	1

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Supplier	Substance	Batch	Spectra
Caelo	Turpentine oil	24544454	1
Caelo	Turpentine oil	15185106	4
Caelo	Turpentine oil	15185110	1
Caelo	Turpentine oil	16199705	4
Caelo	Turpentine oil	16199709	1
Caelo	Turpentine oil	15185101	5
Caelo	Turpentine oil	16199701	4
Caelo	Turpentine oil	13378804	2
Caelo	Turpentine oil	13106701	8
Caelo	Turpentine oil	24(18110801)	1
Caelo	Turpentine oil	12383201	1
Caelo	Turpentine oil	11358910	7
Caelo	Turpentine oil	11358903	5
Caelo	Turpentine oil	14012601	2
Caelo	Turpentine oil	15084003	2
Caelo	Turpentine oil	23(16199709)	1
Caelo	Turpentine oil	11127908	2
Caelo	Turpentine oil	16199172	1
Caelo	Turpentine oil	16199712	3
Caelo	Turpentine oil	161990709	1
Euro OTC	Turpentine oil	981772	2
Euro OTC	Turpentine oil	1511012-01	1
Euro OTC	Turpentine oil	711Q-03557	2
Euro OTC	Turpentine oil	1503007-01	2
Euro OTC	Turpentine oil	1210016-01	4
Fiebig	Turpentine oil	15185101	1
Gehe	Turpentine oil	16199705	1
Kögl	Turpentine oil	1700151	1
Euro OTC	Turpentine oil	1407037-01	1
Phönix	Turpentine oil	13378804	1
Sanacorp	Turpentine oil	13106701	1
Sanacorp	Turpentine oil	12383210	1
Sanacorp	Turpentine oil	16199712	2
Sanacorp WE:12.01.2017 ...	Turpentine oil	16199701	1
Schiele	Turpentine oil	55379	1
Caelo	Cypress oil	16130501	1
Caelo	Cypress oil		1
Caelo	Turpentine oil	12383210	3
Schiele/Phönix	Turpentine oil		1

- 138 233 spectra from 703 *Apo-Ident* customers from a total of 35 246 batches from a further 337 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Wood oils* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Wood oils* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	540	0	55 819
Type B	0	280	0	69 194
Type C	0	116	4	138 233

The substance/substance group *Wood oils* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 98.8889 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 97.8571 %)
Type C	100.0000 % (> 99.6452 %)	96.6667 % (> 94.1667 %)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Wood oils* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Myrtle oil	19.26	—
Eucalyptus oil	20.77	—
Pine silvestris oil	21.03	—
Cajeput (essentiel oil)	22.98	—
Rosemary oil	23.77	—
Dwarf pine oil	34.66	—
Caraway oil	41.46	—
Spruce needle oil	43.44	—
Verbena oil, nature-identical	44.54	—
Sage oil	45.53	—
Juniper oil	46.16	—
Citric oil	46.89	—
Peppermint oil	48.66	—
Spearmint oil	50.41	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Wood oils* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31815	31815	0.00	25.58
32317	32317	0.00	27.43
33232	33232	0.00	28.88
30710	31201	3.41	32.98
30860	31201	5.03	32.75
31201	31201	0.00	33.57
31214	31214	0.00	30.50
31531	31214	2.72	31.85
33310	33310	0.00	29.22
32183	32183	0.00	26.19
34644	34644	0.00	32.42
31837	31837	0.00	23.31

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Wool alcohols creams**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 34567-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Wool alcohols creams; Eucerin® cum Aqua; Lanae alcoholum unguentum aquosum DAB; Unguentum Alcoholum Lanae aquosum SR; Wool alcohol cream DAB; Wool alcohol cream SR

Special notes

When selecting the *Wool alcohols creams* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Eucerin® cum Aqua	19	50	6
Wool alcohol cream DAB	4	10	0
Wool alcohol cream SR	8	5	0

Second-stage model

For differentiation of the substance/substance group *Wool alcohols creams* the following second-stage model is used:

- [Submodel fl](#)

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Wool alcohols creams*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Eucerin [®] cum Aqua	13369401	34877	40	20131111
Caelo	Eucerin [®] cum Aqua	13369401	34878	40	1406055
Caelo	Eucerin [®] cum Aqua	14126801	34879	40	20140415
Caelo	Eucerin [®] cum Aqua	153608	34880	60	20151029*
Caelo	Eucerin [®] cum Aqua	153608	34881	60	20151029*
Caelo	Eucerin [®] cum Aqua	153608	34882	60	20151029*
Caelo	Eucerin [®] cum Aqua	153609	34883	60	20151103*
Caelo	Eucerin [®] cum Aqua	153611	34885	60	20151106*
Caelo	Eucerin [®] cum Aqua	153613	34887	60	20151106*
Caelo	Eucerin [®] cum Aqua	153615	34889	60	20151029*
Caelo	Eucerin [®] cum Aqua	153615	34890	60	20151029*
Caelo	Eucerin [®] cum Aqua	153616	34891	60	20151029*
Caelo	Eucerin [®] cum Aqua	153616	34892	60	20151029*
Caelo	Eucerin [®] cum Aqua	153617	34893	60	20151103*
Caelo	Eucerin [®] cum Aqua	153617	34894	60	20151103*
Caelo	Eucerin [®] cum Aqua	160901	34898	40	20160414*
Caelo	Eucerin [®] cum Aqua	161994	34922	40	20160928*
Caelo	Eucerin [®] cum Aqua	161994	34923	40	20160928*
Caelo	Eucerin [®] cum Aqua	161994	34924	40	20160928*
Caelo	Eucerin [®] cum Aqua	163129	34926	40	20161111*
Caelo	Eucerin [®] cum Aqua	170394	34935	40	20170214*
Caelo	Eucerin [®] cum Aqua	170395	34936	40	20170209*
Caelo	Eucerin [®] cum Aqua	170398	34937	40	20170221*
Caelo	Eucerin [®] cum Aqua	170396	34940	40	20170214*
Caelo	Eucerin [®] cum Aqua	170401	34947	40	20170217*
Caelo	Eucerin [®] cum Aqua	170397	34948	40	20170214*
Caelo	Eucerin [®] cum Aqua	172848	34961	40	20171023*
Bombastus	Wool alcohol cre. ...	284945	34567	40	1406054
Bombastus	Wool alcohol cre. ...	18006845	34578	40	130371
Caelo	Wool alcohol cre. ...	13394101	34568	30	1509376
Caelo	Wool alcohol cre. ...	161776	34569	40	20160615*
apomix	Wool alcohol cre. ...	07A210519	34593	40	20190521
apomix	Wool alcohol cre. ...	06A210519	34594	40	20190521
Bombastus	Wool alcohol cre. ...	19000025	34591	40	130668
Bombastus	Wool alcohol cre. ...	18004726	34592	40	127526
Caelo	Wool alcohol cre. ...	13272603	34585	70	20130829
Caelo	Wool alcohol cre. ...	14031601	34586	40	1512182
Caelo	Wool alcohol cre. ...	160143	34587	40	20160121*
Caelo	Wool alcohol cre. ...	161208	34588	40	20160503*

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Validation samples

A total of 264 186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1820 spectra of 39 reference samples from the substance/substance group *Wool alcohols creams*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 31 different batches.
- 54 539 spectra from a total of 1085 batches from further 216 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 3020 spectra of 74 reference samples from the substance/substance group *Wool alcohols creams*.
- Among them are spectra of independent samples from 65 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Eucerin [®] cum Aqua	12205402	34876	40
Caelo	Eucerin [®] cum Aqua	153610	34884	60
Caelo	Eucerin [®] cum Aqua	153612	34886	60
Caelo	Eucerin [®] cum Aqua	153614	34888	60
Caelo	Eucerin [®] cum Aqua	160078	34895	40
Caelo	Eucerin [®] cum Aqua	160899	34896	40
Caelo	Eucerin [®] cum Aqua	160900	34897	40
Caelo	Eucerin [®] cum Aqua	160902	34899	40
Caelo	Eucerin [®] cum Aqua	160903	34900	40
Caelo	Eucerin [®] cum Aqua	160904	34901	40
Caelo	Eucerin [®] cum Aqua	160905	34902	40
Caelo	Eucerin [®] cum Aqua	160906	34903	40
Caelo	Eucerin [®] cum Aqua	160907	34904	40
Caelo	Eucerin [®] cum Aqua	161122	34905	40
Caelo	Eucerin [®] cum Aqua	161578	34906	40
Caelo	Eucerin [®] cum Aqua	161577	34908	40
Caelo	Eucerin [®] cum Aqua	161579	34909	40
Caelo	Eucerin [®] cum Aqua	161580	34910	40
Caelo	Eucerin [®] cum Aqua	161581	34912	40
Caelo	Eucerin [®] cum Aqua	161992	34916	40
Caelo	Eucerin [®] cum Aqua	161993	34919	40
Caelo	Eucerin [®] cum Aqua	161989	34925	40
Caelo	Eucerin [®] cum Aqua	163131	34927	40
Caelo	Eucerin [®] cum Aqua	162779	34928	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Eucerin [®] cum Aqua	162782	34929	40
Caelo	Eucerin [®] cum Aqua	162783	34930	40
Caelo	Eucerin [®] cum Aqua	162781	34931	40
Caelo	Eucerin [®] cum Aqua	162823	34932	40
Caelo	Eucerin [®] cum Aqua	163130	34933	40
Caelo	Eucerin [®] cum Aqua	170392	34934	40
Caelo	Eucerin [®] cum Aqua	170399	34938	40
Caelo	Eucerin [®] cum Aqua	170400	34939	40
Caelo	Eucerin [®] cum Aqua	163407	34941	40
Caelo	Eucerin [®] cum Aqua	163409	34942	40
Caelo	Eucerin [®] cum Aqua	163410	34943	40
Caelo	Eucerin [®] cum Aqua	171028	34944	40
Caelo	Eucerin [®] cum Aqua	171027	34945	40
Caelo	Eucerin [®] cum Aqua	171026	34946	40
Caelo	Eucerin [®] cum Aqua	171487	34949	40
Caelo	Eucerin [®] cum Aqua	171490	34950	40
Caelo	Eucerin [®] cum Aqua	171492	34951	40
Caelo	Eucerin [®] cum Aqua	171876	34952	40
Caelo	Eucerin [®] cum Aqua	171877	34953	40
Caelo	Eucerin [®] cum Aqua	171878	34954	40
Caelo	Eucerin [®] cum Aqua	171879	34955	40
Caelo	Eucerin [®] cum Aqua	171880	34956	40
Caelo	Eucerin [®] cum Aqua	172844	34957	40
Caelo	Eucerin [®] cum Aqua	172845	34958	40
Caelo	Eucerin [®] cum Aqua	172846	34959	40
Caelo	Eucerin [®] cum Aqua	172847	34960	40
Caelo	Wool alcohol cream DAB	12036401	34566	40
Caelo	Wool alcohol cream DAB	161774	34570	40
Caelo	Wool alcohol cream DAB	161778	34571	40
Caelo	Wool alcohol cream DAB	163441	34572	40
Caelo	Wool alcohol cream DAB	170941	34573	40
Caelo	Wool alcohol cream DAB	171783	34574	40
Caelo	Wool alcohol cream DAB	171782	34575	40
Caelo	Wool alcohol cream DAB	180234	34576	40
Caelo	Wool alcohol cream DAB	180863	34577	40
Caelo	Wool alcohol cream DAB	190110	34579	40
Bombastus	Wool alcohol cream SR	00270036	34582	40
Bombastus	Wool alcohol cream SR	00265302	34583	40
Caelo	Wool alcohol cream SR	12066202	34581	40
Caelo	Wool alcohol cream SR	162490	34589	40
Caelo	Wool alcohol cream SR	172287	34590	40
Caelo	Eucerin [®] cum Aqua	161578	34907	40
Caelo	Eucerin [®] cum Aqua	161580	34911	40
Caelo	Eucerin [®] cum Aqua	161577	34913	40
Caelo	Eucerin [®] cum Aqua	161578	34914	40
Caelo	Eucerin [®] cum Aqua	161579	34915	40
Caelo	Eucerin [®] cum Aqua	161992	34917	40
Caelo	Eucerin [®] cum Aqua	161992	34918	40
Caelo	Eucerin [®] cum Aqua	161993	34920	40
Caelo	Eucerin [®] cum Aqua	161993	34921	40

- 66 454 spectra from a total of 1437 batches from further 358 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 9 spectra from 8 *Apo-Ident* customers from 6 batches from the substance/substance group *Wool alcohols creams*.
- Among them are spectra of independent samples from 6 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Eucerin [®] cum Aqua	19115401	2
Caelo	Eucerin [®] cum Aqua	19115701	1
Caelo	Eucerin [®] cum Aqua	19040602	1
Caelo	Eucerin [®] cum Aqua	19000401	1
Caelo	Eucerin [®] cum Aqua	19115501	1
Caelo	Eucerin [®] cum Aqua	19177601	2
Caelo	Eucerin [®] cum Aqua	19115501	1

- 138 344 spectra from 703 *Apo-Ident* customers from a total of 35 292 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Wool alcohols creams* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Wool alcohols creams* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	1820	0	54 539
Type B	0	3020	0	66 454
Type C	0	9	0	133 244

The substance/substance group *Wool alcohols creams* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate* (*specificity*) and the weighted *true positive rate* (*recognition rate*) are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9780 %)	100.0000 % (> 99.6703 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 99.8013 %)
Type C	100.0000 % (> 99.6448 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Wool alcohols creams* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Base cream DAC	18.36	23.35
Lanette [®] ointment (conserved)	21.13	11.10
Non-ionic hydrophil ointment	37.60	13.53
Psorisol base cream Audor [®]	40.71	—
⋮	⋮	⋮
Squalane	>50	165.01
2-ethylhexyl laurate	>50	182.81

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Wool alcohols creams* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34568	34568	0.00	26.69
34880	34880	0.00	23.97
34594	34586	11.01	21.13
34585	34890	5.92	20.53
34890	34890	0.00	21.96
34948	34948	0.00	24.72
34926	34926	0.00	20.10
34922	34922	0.00	22.29
34878	34878	0.00	22.11
34935	34935	0.00	24.11
34881	34881	0.00	24.16
34936	34936	0.00	24.11
34588	34588	0.00	19.47
34885	34885	0.00	24.37
34940	34940	0.00	24.41
34569	34569	0.00	24.44
34887	34887	0.00	18.37
34586	34586	0.00	22.85
34892	34892	0.00	20.19
34593	34586	8.35	20.84
34889	34889	0.00	20.57
34883	34883	0.00	25.44
34947	34947	0.00	27.47
34923	34923	0.00	22.97

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
34587	34587	0.00	24.51
34894	34894	0.00	18.36
34591	34883	5.84	19.36
34937	34937	0.00	24.50
34567	34567	0.00	19.33
34898	34898	0.00	26.67
34578	34961	3.73	24.43
34879	34883	2.08	27.80
34924	34924	0.00	21.70
34882	34882	0.00	25.12
34592	34883	4.98	22.38
34891	34891	0.00	21.57
34877	34878	1.69	23.17
34893	34893	0.00	20.61
34961	34961	0.00	24.90

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Wormwood oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 30846-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Wormwood oil; Oleum absinthii

Special notes

When selecting the *Wormwood oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]

Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]

AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Wormwood oil	4	2	4

Second-stage model

For differentiation of the substance/substance group *Wormwood oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Wormwood oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Wormwood oil	11346603	30846	40	20111208
Caelo	Wormwood oil	13347703	31198	40	1403146
Caelo	Wormwood oil	13347704	31423	60	20131028
Caelo	Wormwood oil	13347704	31424	60	20131028
Caelo	Wormwood oil	182940	34451	40	20181108*

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 240 spectra of 5 reference samples from the substance/substance group *Wormwood oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 4 different batches.
- 56119 spectra from a total of 1112 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 80 spectra of 2 reference samples from the substance/substance group *Wormwood oil*.
- Among them are spectra of independent samples from 2 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wormwood oil	15316909	33508	40
Caelo	Wormwood oil	170389	33904	40

- 69 394 spectra from a total of 1500 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 7 spectra from 4 *Apo-Ident* customers from 4 batches from the substance/substance group *Wormwood oil*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Wormwood oil	2017115182	2
Caelo	Wormwood oil	12197809	1
Caelo	Wormwood oil	17038903	1
Voegelé	Wormwood oil	2013109402	3

- 138 346 spectra from 703 *Apo-Ident* customers from a total of 35 291 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Wormwood oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Wormwood oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	240	0	56 119
Type B	0	80	0	69 394
Type C	0	7	0	138 346

The substance/substance group *Wormwood oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9781 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9653 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6464 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Wormwood oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Bergamot oil	65.82	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Wormwood oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
30846	31198	4.98	70.21
31198	31198	0.00	69.65
31423	31198	2.16	68.84
31424	31198	1.77	69.19
34451	34451	0.00	65.75

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

VALIDATION REPORT

IdentModule 2.1-2020-01

Validated substance/substance group **Ylang-ylang oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 12/03/2020
Report number 31300-2020-03-12
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ylang-ylang oil; Oleum cananga odorata

Special notes

When selecting the *Ylang-ylang oil* substance/substance group, the following information is displayed to the user:

no information

Applicable documents

978-3-7692-6679-5 *European Pharmacopoeia 9th Edition, Basic Version 2017* [3]
Komm2.2.40 *Erfüllung von Ph. Eur. 2.2.40 durch Apo-Ident* [4]
AA004 *Erstellung und Validierung eines IdentModul-Updates*

Validation method

Validation is performed after every change to the chemometric model (also “database”) in three steps:

1. The chemometric model is calculated from the calibration spectra using a *PCA algorithm*. The calibration spectra originate from the calibration samples of all substances in this class.
2. In the *chemometric model* generated, the distances between all separable substances are checked for compliance with the specified safety distances.
3. All spectra are presented to the generated chemometric model for evaluation. In three runs, the reference spectra (*Type A*), spectra from independent samples (*Type B*), and spectra from the field (*Type C*) are presented successively. Here, no single *false positive* result is permitted.

Finally, a report is generated from the validation run results and is archived together with the parameters of the model generation in audit-compliant manner.

Number of independent samples (batches) in calibration and validation

A sample is considered independent if no sample from the same batch has been included in the calibration of the chemometric model.

Substance	Type A	Type B	Type C
Ylang-ylang oil	2	4	1

Second-stage model

For differentiation of the substance/substance group *Ylang-ylang oil* the following second-stage model is used:

no second-stage model

Calibration samples

Only spectra which have been recorded by *HiperScan GmbH* from traceable samples are used for the generation of the [chemometric models](#). The following samples have been obtained from the substance/substance group *Ylang-ylang oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Ylang-ylang oil	15101104	31791	60	9203
Caelo	Ylang-ylang oil	15101104	31860	60	20150330
Caelo	Ylang-ylang oil	15101109	32175	40	20150330
Caelo	Ylang-ylang oil	15101109	32350	40	20150330

Validation samples

A total of 264186 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 200 spectra of 4 reference samples from the substance/substance group *Ylang-ylang oil*. These samples are listed above in the [calibration samples](#) section. The reference samples come from 2 different batches.
- 56159 spectra from a total of 1114 batches from further 218 substances. These spectra were recorded by *HiperScan GmbH*. *Type A* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type A* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix A](#). The samples in [Appendix A](#) were added for model generation not with the intention to have the model identify these substances, but with the intention to make the model reject them despite their similarity to substances identifiable.

Type B Spectra from independent samples not included in the database structure. Measurement is carried out by *HiperScan GmbH*.

Samples from batches of which no spectra have been included in the database structure are considered as independent samples. The number of batches from which independent samples supplied *Type B* spectra for validation is shown below, representing the number of independent *Type B* samples. Samples, of which some of the spectra have been included in the database structure and other spectra in the validation, are marked with a [†]. The following applies to the remaining unmarked samples: In the same batch, there was at least one additional sample (other sales container, other sample ID) from which reference spectra (*Type A*) were included in the database structure.

- 180 spectra of 4 reference samples from the substance/substance group *Ylang-ylang oil*.
- Among them are spectra of independent samples from 4 batches from which no spectra have been included in the database structure. They are sorted upwards in the following table and separated from the additional samples by a line.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ylang-ylang oil	12040606	31300	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ylang-ylang oil	14192905	31733	60
Caelo	Ylang-ylang oil	163148	33079	40
Caelo	Ylang-ylang oil	16314804	33606	40

- 69 294 spectra from a total of 1498 batches from further 360 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type B* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix B](#).

Type C Spectra of independent samples not included in the database structure. *Apo-Ident* customers carry out the measurements. *HiperScan GmbH* generally does not verify the information provided by the customer regarding manufacturer and batch number.

- 1 spectra from 1 *Apo-Ident* customers from 1 batches from the substance/substance group *Ylang-ylang oil*.
- Among them are spectra of independent samples from 1 batches from which no spectra have been included in the database structure. These are sorted upwards in the following table.

Supplier	Substance	Batch	Spectra
Caelo	Ylang-ylang oil	23011502	1

- 138 352 spectra from 703 *Apo-Ident* customers from a total of 35 294 batches from a further 339 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are documented within this entire report. If the substance can be identified with this [chemometric model](#), the samples are listed in the *Type C* section of each substance page. If the substance cannot be identified by this model, the samples are listed in [Appendix C](#).

Validation results

The validation runs checked whether the substance/substance group *Ylang-ylang oil* can clearly be distinguished from all other substances using NIR spectroscopy with *Apo-Ident*. For this purpose, all relevant spectra of the various substances were compared with *Ylang-ylang oil* and it was evaluated how many matches (positive) and rejections (negative) were correct or incorrect. The following table breaks down the numbers of correct and incorrect results according to the expected result (*positive/negative*) and the validation spectrum type (*A/B/C*).

	False positive	True positive	False negative	True negative
Type A	0	200	0	56 159
Type B	0	0	180	69 294
Type C	0	0	1	138 352

The substance/substance group *Ylang-ylang oil* can be clearly distinguished from all other substances. In order to make these figures comparable, the weighted *true negative rate (specificity)* and the weighted *true positive rate (recognition rate)* are determined:

	Specificity	Recognition rate
Type A	100.0000 % (> 99.9782 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9653 %)	0.0000 % (≥ 0.0000 %)
Type C	100.0000 % (> 99.6542 %)	n/a (n/a)

In order to ensure that each substance is entered with the same weight irrespective of the number of spectra available, each spectrum is weighted with the reciprocal value of its number. (If several new spectra of a substance with a very distinctive spectrum are added, the values for *specificity* and *recognition rate* are safer, but are by no means idealised.)

In order to illustrate the impact of the number of spectra, a comparison is made in parentheses as to how the *specificity* or *recognition rate* would worsen if three additional incorrect results were to exist amongst the spectra (*Rule of Three* [10, 11]). The larger the number of spectra, the lower the deterioration if the three hypothetical *incorrect results* were added.

Where the number of spectra does not exceed 20, no *recognition rate* is provided.

Nearest chemometric neighbours

The following table lists the closest chemometric neighbours of the substance/substance group *Ylang-ylang oil* in the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*. Furthermore, their *Mahalanobis distance* is specified within the main model and, where appropriate, within the second-stage model.

Substance	Distance in main model	Distance in second-stage model
Lavender oil	29.66	—
Bergamot oil	31.35	—
Clary sage oil	46.79	—
Acorus oil	82.88	—

The list stops after the first substance with a *Mahalanobis distance* greater than 50. If the substance/substance group *Ylang-ylang oil* is separated from critical neighbours in a second-stage model, all the remaining substances in the second-stage model follow.

Identity according to identity test using NIR spectroscopy

For each substance, a certificate of the correct identity is obtained from an independent GMP-certified test laboratory. If the identity of the sample can be provided using NIR on an independently tested reference sample, in the following table the *Mahalanobis distance* to the reference sample is specified as well as the *Mahalanobis distance* to the next non-identical substance:

Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31791	31791	0.00	49.11
31860	31791	2.53	50.20
32175	31791	4.67	51.41
32350	31791	4.02	49.87

The identity of a sample will be confirmed by NIR if the distance to the next foreign sample is at least 50 % greater than the distance to a reference sample whose identity has been established by laboratory testing. This criterion is always considered in the chemometric model, which contains all substances of the substance class, even if a second-stage dissolves a subgroup of similar substances, thereby increasing the distances between them. The samples confirmed by NIR support the statistical variance of the original reference substance, but cannot add new aspects or forms of the substance.

Appendix A: Additional calibration samples (Type A)

Substance spectra also enter the generation of the [chemometric model](#) which cannot be identified with this model. This serves the purpose that substances which the model is not supposed to recognise are safely rejected. The spectra of these samples are entered into the validation as *Type A*. They were recorded by *HiperScan GmbH*.

The samples originate from 2 batches. From these, 80 spectra were recorded. The calibration spectra of substances which can be identified with the model are listed respectively in the section *calibration samples* for the individual substances and do not appear again elsewhere in this list.

Supplier	Substance	Batch	Spectra	Certificate
Caelo	Coal tar solution	182919	40	20190226*
Hänseler AG	Cooling cream Ph.Helv.	2019.02.0611	40	20190320

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Appendix B: Additional validation samples (*Type B*)

It is necessary that spectra also enter the validation which cannot be identified with this model. In this manner, it is verified that the model also rejects unknown substances. The spectra for these samples were recorded by *HiperScan GmbH*. They are allocated to the *Type B*. They also include the calibration spectra for other models.

The samples originate from 200 batches. From these 8635 spectra were recorded. The spectra recorded on independent samples of substances which can be identified with the model are listed respectively in the section *Type B* for the individual substances and do not appear again elsewhere in this list.

Supplier	Substance	Batch	Spectra	Certificate
Maros	Abrotani mother tincture	RU2276	40	20121121
Caelo	Abwaschbare Salbengrundlage (NRF S.31)	180622	40	20180215*
Caelo	Abwaschbare Salbengrundlage (NRF S.31)	182529	40	20180926*
Caelo	Acorus tincture (70%) 1:5	11355109	40	20111212
Caelo	Alcoholic liniment	13351909	40	20131028
Caelo	Aloe vera oil	190953	40	20190412*
Hedinger	Ammonia solution 10% DAB	027138	40	20130423
Hänseler AG	Anionic hydrophilic cream Ph.Helv.	2018.09.0249	40	20181012
Fagron	Apricot aroma	13D08-N08	30	1407103
Maros	Arnica root mother tincture D1	U3606	40	20120817
Caelo	Aromatic tincture (70%) 1:5	11355009	40	20111212
Maros	Ash bark mother tincture	U3264	40	20111110
Caelo	Basil oil	11035902	40	20110208
Caelo	Basil oil	11346902	40	20111208
Caelo	Basil oil	13153601	40	1404505
Caelo	Basil oil	13395803	40	20131211
Caelo	Belladonna tincture, standardised (70%) 1:10	190191	40	20190205*
Caelo	Benzalkonium chloride	12033409	40	20120307
apomix	Benzalkonium chloride solution 0.1% with sodium edetate 1% ASR	05B150612	40	20120619
apomix	Betamethasone valerate 1%	01B200912	40	20120925
Maros	Bilberry leaf mother tincture	U3749	40	20130228
Caelo	Bitter tincture (70%) 1:5	11380108	60	20120105
Maros	Bittersweet stalks mother tincture	U3320	40	20120229
Maros	Black cohosh mother tincture	U3668	40	20121220
Maros	Boldo leaf mother tincture	U3502	30	20120402
Maros	Bryony root mother tincture	U3269	40	20111207
Maros	Burnet root mother tincture	U3600	30	20120821
Caelo	Calendula oil, fat	13287203	40	1403102
Caelo	Calendula oil, fat	14063403	40	20140307
Caelo	Camphor oil 10%	13317402	40	1509155
Caelo	Camphor oil 10%	13317402	60	20131022
Gatt-Koller	Camphor spirit (ÖAB)	18.00514	40	1809577
Euro OTC	Capsaicin liquid extract 3%	1205038-02	40	1406349
Euro OTC	Capsaicin liquid extract 3%	1205038-01	40	20120601
Fagron	Carbomer gel 1%	1205D002	40	from supplier
Caelo	Carmelite water	14001202	40	20140109
Caelo	Carotene (ca. 4m IU)	12139305	40	1402564

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Supplier	Substance	Batch	Spectra	Certificate
Caelo	Cayenne pepper tincture, standardised (85%) 1:10	11102412	40	20110407
Hänseler AG	Cetylic ointment Ph.Helv.	2018.09.0016	40	20180924
Caelo	Chinchona bark tincture, standardised (70%)	11275507	40	20110929
Caelo	Cineole	173099	40	20171205*
Caelo	Cineole	191846	40	20190722*
apomix	Clobatesol propionate 0,5%	01B200912	40	20120924
Ichthyol	Clobetasol 0.5% Cordes [®] RK	11D034	40	20111205
Caelo	Coal tar solution	90392199	40	F 2009 000 986
Maros	Common broom mother tincture	R4688	40	20100806
Maros	Common wormwood mother tincture	U2448	40	20110329
Maros	Coneflower herb, purple mother tincture	U3041	40	20111005
Ratiopharm	Corticoid-ratiopharm 0.1% cream	L30263	40	from supplier
apomix	Dexamethasone 1% (non-ionic, hydrophilic cream SR)	04A270513	40	20130527
Caelo	Dimethyl isosorbide	15230402	60	1603485
Caelo	Dimethyl isosorbide	15427602	60	20160210
Caelo	Dimethyl isosorbide	16170904	40	20160714
Caelo	Dimethyl isosorbide	17169803	40	20170620
apomix	Epinephrine solution 0,1% SR	04A160712	40	20120727
Maros	Fennel fruit tincture 1:5	6996	40	20120614
Maros	Figwort mother tincture	U3623	40	20120917
Caelo	Food colorant yellow (E102; E124)	12022212	40	20120127
Caelo	Formic acid 85%	13373301	60	20131118
Caelo	Ginger oil	163186	40	20161213*
Caelo	Ginger oil	15042113	40	20150217
Maros	Ginkgo leaf mother tincture	U2834	40	20100806
Maros	Golden rod herb tincture 1:5	6737	30	20120227
Caelo	Hawthorn tincture of leaf and flower (70%) 1:5	11311816	40	20111103
Maros	Horehound herb mother tincture	U2929	40	20091215
Caelo	Horse chestnut seed tincture	10346909	40	20101216
Maros	Horse chestnut seed tincture	U2882	40	20100610
Caelo	Hyoscyamus oil	162692	40	20160930*
Ichthyol	Ichthyol [®] raw material	11A075	20	20110124
Fagron	Iron (III) subsulfate solution	17J23-B12-342837	40	20171221
Maros	Juniper tincture 1:5	1239	40	20130328
Caelo	Larch terpine	161264	60	20160428*
Caelo	Lavender spirit	13300803	50	1403101
Caelo	Lavender spirit	13300803	60	20130917
Caelo	Lime water	12055002	40	20120301
Maros	Lovage root mother tincture	U3389	40	20120417
Caelo	Macadamia oil, refined	13012102	40	1407349
Caelo	Macadamia oil, refined	14179304	60	20140611
Caelo	Macadamia oil, refined	170556	40	20170302*
Hänseler AG	Macrogol ointment Ph.Helv.	2018.11.0534	40	20181129
Hänseler AG	Macrogol ointment Ph.Helv.	2018.01.0313	40	20180116
Maros	Matricaria flower mother tincture	U3347	40	20121121
Caelo	Matricaria flower tincture (70%) 1:5	11269917	40	20110928

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Supplier	Substance	Batch	Spectra	Certificate
Caelo	Matricaria liquid extract	12360306	40	20121206
Caelo	Matricaria liquid extract	12360310	40	20121206
Caelo	Matricaria oil, fat	12189803	40	20120713
Caelo	Matricaria oil, fat	14001103	40	20120713
Caelo	Melissa leaf tincture (70%) 1:5	11102807	40	20110412
apomix	Methylosanilinium chloride solution 0.5% SR	03C200712	80	20120723
apomix	Methylosanilinium chloride solution 0.5% SR	01A260413	40	20130429
Leyh Pharma	Methylosanilinium chloride solution 0.5% SR	131711	40	20130422
apomix	Methylosanilinium chloride solution 1% SR	05A200712	40	20120723
apomix	Metronidazole 10% (non-ionic, hydrophilic cream SR)	07B110913	40	1403475
Maros	Mistletoe mother tincture	U2932	40	20100225
Maros	Monk's pepper fruit mother tincture D1	U3476	40	20120524
Maros	Motherwort herb mother tincture	U2785	40	20120125
Maros	Motherwort herb tincture 1:5	6997	40	20120905
Caelo	Nettle herb liquid extract	14176902	40	1501199
Maros	Nettle mother tincture	U3633	40	20121219
Caelo	Nettle root tincture (70%) 1:5	11187409	40	20110705
Caelo	Nettle tincture (70%) 1:5	11108801	40	20110412
Hänseler AG	Nonionic hydrophilic ointment Ph.Helv.	2018.05.0237	40	20180615
Caelo	Opium tincture, standardised	13394905	40	0914I-02461
Caelo	Orange flower oil, artificial	13067705	40	20130304
Caelo	Orange flower oil, artificial	13067707	40	1404598
Caelo	Orange flower water	12238104	40	20120816
Staufen-Pharm	Oxalic acid D30 vial	09.05.12	80	from supplier
Caelo	Peanut oil, hydrated	13339803	40	20131105
Maros	Pelargonium root mother tincture	01028113	40	20121030
Caelo	Pepsin wine	12277403	60	20120921
Caelo	Pepsin wine	14339802	45	1503624
Caelo	Pepsin wine	15449301	60	20160118
Caelo	Pepsin wine	15449303	40	20160118
Caelo	Peru balsam, original	12302401	40	20121017
Caelo	Peru balsam, original	14223909	60	1703349
Fagron	Peru balsam, original	13F13-N04	40	1502255
Audor	Phenoxyethanol	APDEG4324219P	60	AR-16-FG-003720-01
Audor	Phenoxyethanol	APDEG4324219P	60	20150219
Audor	Phenoxyethanol	APDEG4324219XP	40	20170406
Caelo	Plantain herb liquid extract (35%) 1:1	11332613	40	20111129
Caelo	Polyacrylic acid gel pH 6,5 (NRF p. 43)	173012	40	20171027*
apomix	Prednisolone 1% (non-ionic - hydrophilic cream SR)	07A031212	40	20121207
apomix	Prednisolone 1% (non-ionic - hydrophilic cream SR)	01A100113	40	20130110
Caelo	Prednisolone acetate concentrate 10% basis white paraffin	13077701	100	20130313

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Supplier	Substance	Batch	Spectra	Certificate
Caelo	Primrose root liquid extract 1:1	12175307	100	1404596
Caelo	Primrose root liquid extract 1:1	13330110	60	20130930
Caelo	Propolis liquid extract 10% (in propylene glycol)	11220411	40	from supplier
Caelo	Propolis liquid extract 10% (in propylene glycol)	11220406	40	20110829
Caelo	Propolis liquid extract 10% (in propylene glycol)	13347602	40	1404589
Caelo	Propolis liquid extract 10% (in propylene glycol)	13347606	60	20131030
Caelo	Propolis tincture (96%)	11269521	40	20110930
Bombastus	Propolis tincture 20%	273005	40	20120712
Bombastus	Propolis tincture 20%	273005	40	20120712
Caelo	Pyroligneous acid, purified	12023203	40	20120130
Maros	Ribwort plantain tincture 1:5	6736	40	20120227
Maros	Robert herb mother tincture	U3720	40	20111127
Maros	Rosemary leaf mother tincture D1	U3238	40	20110531
Caelo	Sage leaf liquid extract (55%) 1:1	10305313	40	20101118
Caelo	Sage leaf liquid extract (55%) 1:1	11372203	40	20120102
Caelo	Salicylic acid concentrate 10%, white paraffin basis	153947	40	20151130*
Caelo	Salicylic acid concentrate 5%, white paraffin basis	153946	40	20151130*
apomix	Searing paste SR	04B130418	40	20180416
Caelo	Siam benzoin tincture (90%) 1:5	11239201	60	20110927
Caelo	Siam benzoin tincture (90%) 1:5	13169905	50	1405623
Hedinger	Sodium hypochlorite solution 1%	045226	40	20170110
Euro OTC	Sodium lactate solution 60%	1201037-01	60	20120224
Euro OTC	Sodium lactate solution 60%	1310007-01	60	20140217
Euro OTC	Sodium lactate solution 60%	1310007-01	40	AR-17-FG-012458-01
Euro OTC	Sodium lactate solution 60%	1310007-01	40	20140217
Caelo	Spearmint water	11210003	40	20110823
Caelo	St. John's wort oil	12076913	40	20120323
Caelo	St. John's wort oil	13389218	40	20131210
Maros	St. John's wort oil	9712	40	20121102
Caelo	Standardised cayenne pepper extract (80%) 4-7:1	13259103	20	20130926
Maros	Strophanthus seed mother tincture D1	01028513	40	20121210
Maros	Sundew herb mother tincture	U3354	40	20120917
Bene	Tacholiniquin® 1% solution	350K121	40	from supplier
Maros	Teasel root mother tincture	U3685	40	20121114
Maros	Tetterwort mother tincture	U3063	40	20110905
Caelo	Texapon® CS paste	12292001	40	20121010
Caelo	Texapon® CS paste	12292006	40	20121010
Caelo	Texapon® CS paste	14087206	60	1501415
Caelo	Texapon® CS paste	16268901	40	20160915
Caelo	Texapon® CS paste	16268901	40	20160915
Caelo	Thyme liquid extract	13273613	60	20130819

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Supplier	Substance	Batch	Spectra	Certificate
Fagron	Tretinoin solution 3.33mg/ml	11K09-N03	40	20111122
apomix	Triamcinolone acetonide 1% (non-ionic, hydrophile cream SR)	01A210513	40	20130521
apomix	Triamcinolone acetonide 1% (non-ionic, hydrophile cream SR)	09C111212	40	20121212
Caelo	Triamcinolone acetonide concentrate 2% base white paraffin	12250701	70	20120830
Caelo	Valerian root liquid extract	13343703	60	20131017
Caelo	Valerian tincture (70%) 1:5	12113006	40	20120420
Caelo	Valerian tincture (70%) 1:5	12196203	40	20120718
Caelo	Valerian tincture (70%) 1:5	12113006	40	20120420
Caelo	Vitamin A-palmitate (ca. 1 m I.U./g)	12132910	60	20120516
Audor	Vitamin F liposomes	AP307176FL	40	20130821
Maros	Walnut bark tincture 1:5	1240	40	20130403
Maros	Waterhorehound herb mother tincture	U3388	40	20120203
Maros	Willow bark tincture 1:5	6865	40	20120604
Caelo	Witch hazel bark liquid ex- tract (45%) 1:1	13357902	40	1407627
Caelo	Witch hazel bark liquid ex- tract (45%) 1:1	13357902	40	20131107
Caelo	Witch hazel leaf liquid ex- tract (45%) 1:1	12165010	40	20120628
Maros	Wood violet mother tincture	U2222	40	20120511
Hänseler AG	Wool wax Ph.Helv.	2017.10.0158	40	20171114
Caelo	Wormwood tincture (70%) 1:5	12237901	40	20120829
Maros	Yam mother tincture	32210	40	20111020
apomix	Zinc oxide cream 25% SR (NRF 11.109)	02B220119	40	20190123
Bombastus	Zinc oxide cream 25% SR (NRF 11.109)	00269409	40	20120228
Henry Lamotte	Zinc oxide lotion, aqueous DAC	5375600	40	20121026
Bombastus	Zinc oxide oil DAC	00269769	40	from supplier
Caelo	Zinc oxide oil DAC	12160002	40	20120614
Caelo	Zinc oxide oil DAC	12289802	40	20121107
apomix	Zinc oxide oil SR 90	10B090712	40	from supplier
Bombastus	Zinc oxide oil SR 90	00269651	40	20120320
apomix	Zinc oxide paste SR90	01A190218	40	20180220
apomix	Zinc oxide paste, soft SR90	31B141117	40	20171114
Bombastus	Zinc oxide paste, soft SR90	00267515	20	from supplier
Caelo	Zinc paste DAB	12147801	40	20120601
Fagron	Zinc paste DAB	12E22-T09	40	from supplier
Henry Lamotte	Zinc paste, soft DAB	5374900	40	20120918
Caelo	Zinc paste, soft DRF (sta- bilised)	12378402	80	20121220

*The spectra were taken from a part of the same sample which the supplier used for its analysis (identity, purity, content). In this case the manufacturer certificates proof the identity and quality of the sample from those the spectra descend.

Appendix C: Additional validation samples (*Type C*)

Spectra for substances from the field which cannot be identified with this model also enter the validation. In this manner, it is verified that the model also rejects unknown substances. The spectra for these samples were recorded by *Apo-Ident* customers. They belong to *Type C*. The information provided by the customer regarding the manufacturer and batch number is taken over by *HiperScan GmbH* to a large extent unchecked.

The samples originate from 3951 batches. From these, 12 138 spectra were recorded. The spectra recorded on independent samples of substances from the field which can be identified with the model are listed respectively in the section *Type C* for the individual substances and do not appear again elsewhere in this list.

Supplier	Substance	Batch	Spectra
Caelo	Acorus tincture (70%)...	11355115	1
Caelo	Acorus tincture (70%)...	19121322	1
Anzag ek:10.21EUR 27.08...	Alcoholic liniment	12103301	1
Caelo	Alcoholic liniment	2507212316	1
Caelo	Alcoholic liniment	204312316	1
Caelo	Alcoholic liniment	34365645645	1
Caelo	Alcoholic liniment	445255	1
Caelo	Alcoholic liniment	2612M-02925	1
Caelo	Alcoholic liniment	12103312	1
Caelo	Alcoholic liniment	12103319	1
Caelo	Alcoholic liniment	5213E2316	1
Caelo	Aloe vera oil	11014807	2
Caelo	Aloe vera oil	12033104	1
Caelo	Aloe vera oil	11014806	1
Caelo	Aloe vera oil	12033106	1
Caelo	Aloe vera oil	12033108	1
Caelo	Aloe vera oil	12033111	1
Caelo	Aloe vera oil	123033108	1
Caelo	Aloe vera oil	12033114	2
Caelo	Aloe vera oil	12383702	3
Caelo	Aloe vera oil	12383703	3
Caelo	Aloe vera oil	12383706	5
Caelo	Aloe vera oil	12033107	1
Caelo	Aloe vera oil	12033113	4
Caelo	Aloe vera oil	12033101	1
Caelo	Aloe vera oil	11014804	1
Caesar § Lorenz GmbH	Aloe vera oil	12383707	1
Primavera	Aloe vera oil	8601131	1
Taoasis	Aloe vera oil	110137-96542	1
Taoasis	Aloe vera oil	120247-107323	1
Taoasis	Aloe vera oil	111208-105327	1
Taoasis	Aloe vera oil	120247-106498	1
Taoasis	Aloe vera oil	130237-111659	1
Taoasis	Aloe vera oil	130501-112371	1
Taoasis	Aloe vera oil	130237-112020BAG94	1
Taoasis GmbH	Aloe vera oil	130237	1
Maros	Angelica root tinctur...	1028713	2
Maros	Angelica root tinctur...	8030113	1
Caelo	Apricot aroma	14C19-B30-292291	1
Caelo	Arnica oil, fat	11096702	1
Caelo	Arnica oil, fat	12088504	3
Caelo	Arnica oil, fat	Sanacorb	1
Caelo	Arnica oil, fat	12359703	1
Caelo	Arnica oil, fat	13186604	1
Caelo	Arnica oil, fat	13186601	2
Caelo	Arnica oil, fat	13042503	3
Caelo	Arnica oil, fat	13186602	1

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Supplier	Substance	Batch	Spectra
Taoasis	Arnica oil, fat	7360-111366	1
Taoasis	Arnica oil, fat	7360-112511	1
Taoasis	Arnica oil, fat	7525-113064	1
Taoasis	Arnica oil, fat	7360-111459	1
Caelo	Arnica tincture (70%)...	10341801	1
Caelo	Arnica tincture (70%)...	10362814	3
Caelo	Arnica tincture (70%)...	10362820	1
Caelo	Arnica tincture (70%)...	12031001	1
Caelo	Arnica tincture (70%)...	12031004	2
Caelo	Arnica tincture (70%)...	12031008	1
Caelo	Arnica tincture (70%)...	12301009	1
Caelo	Arnica tincture (70%)...	20090312-4	1
Caelo	Arnica tincture (70%)...	10362809	1
Caelo	Arnica tincture (70%)...	12031015	7
Caelo	Arnica tincture (70%)...	26031301	1
Caelo	Arnica tincture (70%)...	10362805	1
Caelo	Arnica tincture (70%)...	13094609	5
Caelo	Arnica tincture (70%)...	8111301	1
Caelo	Arnica tincture (70%)...	13094607	3
Caelo	Arnica tincture (70%)...	13094610	2
Caelo	Arnica tincture (70%)...	10362815	2
Caelo	Arnica tincture (70%)...	12031017	7
Caelo	Arnica tincture (70%)...	13094613	1
Caelo	Arnica tincture (70%)...	12031009	4
Caelo	Arnica tincture (70%)...	13094612	2
Caelo	Arnica tincture (70%)...	1213A-02398	1
Euro OTC	Arnica tincture (70%)...	1211003-01	2
Euro OTC	Arnica tincture (70%)...	1204046-01	3
Euro OTC	Arnica tincture (70%)...	1306038-01	1
Euro OTC	Arnica tincture (70%)...	1112029-01	1
Lamotte	Arnica tincture (70%)...	5139400	1
Teofarma	Arnica tincture (70%)...	144301	1
Caelo	Basil oil	13153601	1
Caelo	Belladonna tincture, ...	11322611	2
Caelo	Belladonna tincture, ...	12315101	1
Caelo	Belladonna tincture, ...	12315104	2
Caelo	Belladonna tincture, ...	12315111	2
Caelo	Belladonna tincture, ...	13273004	1
Caelo	Belladonna tincture, ...	11322615	1
Caelo	Benzalkonium chloride	12033403	2
Caelo	Benzalkonium chloride	12033411	1
Caelo	Benzalkonium chloride	13307902	1
Caelo	Benzalkonium chloride	13070201	1
Caelo	Benzalkonium chloride	13070206	6
Caesar & Loretz GmbH,...	Benzalkonium chloride	12033407	2
Sanacorp	Benzalkonium chloride	10190002	1
apomix	Benzalkonium chloride...	4a210515	1
Apomix	Benzalkonium chloride...	6B060912	1
Apomix	Benzalkonium chloride...	3A170413	2
Apomix direkt	Benzalkonium chloride...	2B070313	1
Apomix direkt	Benzalkonium chloride...	4A110713	2
Caelo	Benzoic lard (stabili...	12063902	1
Anzag/04.04.2013	Betamethasone valerat...	3B280213	1
apomix/phoenix	Betamethasone valerat...	13C031213	1
Ichthyol	Betamethason-V 1.22% ...	11D001	56
Ichthyol	Betamethason-V 1.22% ...	11D01	1
Ichthyol	Betamethason-V 1.22% ...	11D035	99
Ichthyol	Betamethason-V 1.22% ...	11/2015	1
Ichthyol/Jenne	Betamethason-V 1.22% ...	12D015	24
Ichthyol/Jenne	Betamethason-V 1.22% ...	12D015	2

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Supplier	Substance	Batch	Spectra
Maros	Bitter candytuft fres...	5408	1
Maros	Bitter candytuft fres...	5433	1
Caelo	Bitter orange tinctur...	27072013	1
Caelo	Bitter orange tinctur...	13003302	1
Caelo	Bitter orange tinctur...	12231906	2
Caelo	Bitter orange tinctur...	13003301	1
Caelo	Bitter orange tinctur...	13003309	1
Gehe	Bitter orange tinctur...	11187211	1
Gehrlicher/Gehrlicher	Burnet root mother ti...	U3600	1
Caelo	Calendula mother tinc...	12117313	1
Caelo	Calendula oil, fat	12189901	1
Caelo	Calendula oil, fat	11274801	2
Caelo	Calendula oil, fat	11183102	1
Caelo	Calendula oil, fat	12216901	2
Caelo	Calendula oil, fat	13185402	4
Caelo	Calendula oil, fat	14001004	2
Caelo	Calendula oil, fat	13251002	3
Caelo	Calendula oil, fat	12373103	1
Caelo	Calendula oil, fat	13069603	1
Caelo	Calendula oil, fat	12373101	2
Caelo	Calendula oil, fat	12006802	3
Caelo	Calendula oil, fat	122116904	1
Caelo	Calendula oil, fat	13251002/1	1
Caelo	Calendula oil, fat	13355701	1
Caelo	Calendula oil, fat	13185401	2
Caelo	Calendula oil, fat	12373102	3
Caelo	Calendula oil, fat	13355702	2
Caesar u Loretz	Calendula oil, fat	13251004	1
Caelo	Calendula oil, fat	13251003	4
Klenk	Calendula oil, fat	12308503	1
Caelo	Calendula oil, fat	12189903	2
Caelo	Calendula oil, fat	12216904	1
Caelo	Calendula oil, fat	12308502	2
Caelo	Calendula oil, fat	13069601	1
Taoasis	Calendula oil, fat	119426-108734	1
Taoasis	Calendula oil, fat	119943-110316	1
Caelo	Calendula tincture (7...	10260111	1
Caelo	Calendula tincture (7...	11143803	1
Caelo	Calendula tincture (7...	11332710	1
Caelo	Calendula tincture (7...	12117305	1
Caelo	Calendula tincture (7...	12117308	1
Caelo	Calendula tincture (7...	11332702	1
Caelo	Calendula tincture (7...	19061311	1
Caelo	Calendula tincture (7...	13142803	1
Caelo	Calendula tincture (7...	12117320	1
Caelo	Calendula tincture (7...	13142802	2
Caelo	Calendula tincture (7...	12117311	1
Caelo	Calendula tincture (7...	12117301	3
Caelo	Calendula tincture (7...	12117310	2
Caelo	Calendula tincture (7...	12117312	3
Caelo	Calendula tincture (7...	12117313	1
Caelo	Calendula tincture (7...	12117317	5
Caelo	Calendula tincture (7...	13142804	7
Anzag 27.12.12 ek:5,19	Camphor oil 10%	12269502	10
Berkel AHK	Camphor oil 10%	15028001	3
Caelo	Camphor oil 10%	14139202	2
Caelo	Camphor oil 10%	15028003	1
Caelo	Camphor oil 10%	14139201	1
Caelo	Camphor oil 10%	18082015A	1
Caelo	Camphor oil 10%	15028002	1

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Supplier	Substance	Batch	Spectra
Caelo	Camphor oil 10%	15028003	1
Caelo	Camphor oil 10%	15338202	2
Caelo	Camphor oil 10%	15338202	1
Caelo	Camphor oil 10%	12269501	1
Caelo	Camphor oil 10%	13317401	4
Caelo	Camphor oil 10%	13043901	2
Caelo	Camphor oil 10%	15208001	1
Caelo	Camphor oil 10%	13317402	10
Caelo	Camphor oil 10%	15338201	1
Caelo	Camphor oil 10%	16085201	2
L12	Camphor oil 10%	16085202	2
Midas	Camphor oil 10%	17003105	3
Euro OTC	Camphor oil 10%	15338204	2
phönix	Camphor oil 10%	7/AKD57	1
Caelo	Camphor oil 10%	14139202	4
Caelo	Camphor oil 10%	15028004	2
Caelo	Camphor oil 10%	15338205	1
Sanacorp	Camphor oil 10%	7/AKD4	1
Caelo	Carbomer gel 1%	1102D002	1
Fagron	Carbomer gel 1%	1211D010	2
Fagron	Carbomer gel 1%	1309D002	1
Fagron	Carbomer gel 1%	1302D002	7
Fagron	Carbomer gel 1%	1309D001	1
Caelo	Carotene (ca. 4m IU)	13008404	1
Resena/Anzag	Carotene (ca. 4m IU)	1204-3534	1
AHD	Castor oil, hydrated	278661	1
Anzag 19.12.2012	Castor oil, hydrated	273882	3
Anzag 29.04.13 ek: 3,...	Castor oil, hydrated	13096304	1
Bombastus	Castor oil, hydrated	266593	1
Bombastus	Castor oil, hydrated	269565	3
Bombastus	Castor oil, hydrated	270580	5
Bombastus	Castor oil, hydrated	264468	1
Bombastus	Castor oil, hydrated	26956512-13	1
Bombastus	Castor oil, hydrated	275938	1
Bombastus	Castor oil, hydrated	271754	2
Bombastus	Castor oil, hydrated	266591	1
Bombastus	Castor oil, hydrated	272591	1
Bombastus	Castor oil, hydrated	255179	1
Caelo	Castor oil, hydrated	8061201	1
Caelo	Castor oil, hydrated	16071201	1
Caelo	Castor oil, hydrated	11260604	1
Caelo	Castor oil, hydrated	4101201	1
Caelo	Castor oil, hydrated	12114603	3
Caelo	Castor oil, hydrated	25011301	1
Caelo	Castor oil, hydrated	14199604	1
Caelo	Castor oil, hydrated	14101703	1
Caelo	Castor oil, hydrated	11359502	2
Caelo	Castor oil, hydrated	12114606	1
Caelo	Castor oil, hydrated	11359508	5
Caelo	Castor oil, hydrated	12071101	1
Caelo	Castor oil, hydrated	11359507	1
Caelo	Castor oil, hydrated	12114605	2
Caelo	Castor oil, hydrated	11260603	2
Caelo	Castor oil, hydrated	11260609	1
EuRho	Castor oil, hydrated	1212008-01	1
Euro OTC	Castor oil, hydrated	1112002-02	1
Euro OTC	Castor oil, hydrated	1109001-01	1
Euro OTC	Castor oil, hydrated	1910212009	1
Euro OTC	Castor oil, hydrated	1202041-02	1
Euro OTC	Castor oil, hydrated	1512212009	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Castor oil, hydrated	1206039-01	2
Euro OTC	Castor oil, hydrated	120204-01	1
Euro OTC	Castor oil, hydrated	1206039-02	2
Fagron	Castor oil, hydrated	10L02-N03	1
Gehe	Castor oil, hydrated	1311012	1
Bombastus	Castor oil, hydrated	273390	13
H.Lamotte/Noweda	Castor oil, hydrated	5280301	2
H.Lamotte/Noweda	Castor oil, hydrated	123384	1
Caelo	Castor oil, hydrated	11359501	2
Caelo	Castor oil, hydrated	12114602	3
lamotte	Castor oil, hydrated	5188401	2
Lamotte / Gehe	Castor oil, hydrated	5138701	2
Noweda	Castor oil, hydrated	268877	1
Euro OTC	Castor oil, hydrated	2507213553	1
Phoenix	Castor oil, hydrated	11325205	2
Phoenix	Castor oil, hydrated	12071107	1
Phönix Gotha	Castor oil, hydrated	12H29-N04	2
Phönix Gotha	Castor oil, hydrated	12H29-N04	1
Caelo	Castor oil, hydrated	12042103	2
Caelo	Cayenne pepper tinctu...	13072013	1
Caelo	Cayenne pepper tinctu...	11102425	1
Caelo	Cayenne pepper tinctu...	11102419	1
Caelo	Cayenne pepper tinctu...	12207111	2
Phönix	Cayenne pepper tinctu...		1
Bombastus	Chinese cinnamon oil	263892	1
Bombastus	Chinese cinnamon oil	262660	1
Bombastus	Chinese cinnamon oil	269558	1
Nachprüfung	Chinese cinnamon oil		1
Caelo	Cinchona bark tinctur...	13069808	1
Maros/Maros	Cistus tincture 1:5	11027812	1
apomix	Clobatesol propionate...	1A20213	1
Noweda/apomix	Clobatesol propionate...	13A131113	1
Phoenix/Apomix	Clobatesol propionate...	6A070513	1
ichthyol	Clobetasol 0.5% Corde...	5112M-03390	1
ichthyol	Clobetasol 0.5% Corde...	1713M-03390	1
Ichthyol	Clobetasol 0.5% Corde...	11D003	12
Ichthyol	Clobetasol 0.5% Corde...	9D035	1
Ichthyol	Clobetasol 0.5% Corde...	11D034	24
Ichthyol	Clobetasol 0.5% Corde...	10D024	1
Ichthyol	Clobetasol 0.5% Corde...	12d012	1
Ichtyol	Clobetasol 0.5% Corde...	12D012	13
Caelo	Coal tar solution	11319204	5
Caelo	Coal tar solution	9345509	2
Caelo	Coal tar solution	9345510	1
Caelo	Coal tar solution	9345406	1
Caelo	Coal tar solution	27071207	1
Caelo	Coal tar solution	113192017	1
Caelo	Coal tar solution	13193703	4
Caelo	Coal tar solution	13193713	2
Caelo	Coal tar solution	14331403	1
Caelo	Coal tar solution	14331401	1
Caelo	Coal tar solution	14331402	1
Caelo	Coal tar solution	14331509	1
Caelo	Coal tar solution	14331506	1
Caelo	Coal tar solution	15203703	1
Caelo	Coal tar solution	12286103	21
Caelo	Coal tar solution	11319207	10
Caelo	Coal tar solution	90391069	2
Caelo	Coal tar solution	15203704	1
Caelo	Coal tar solution	11319209	1

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Supplier	Substance	Batch	Spectra
Caelo	Coal tar solution	9039201	1
Caelo	Coal tar solution	11319203	1
Caelo	Coal tar solution	24131-01799	1
Caesar & Loretz GmbH	Coal tar solution	72816068	1
Euro OTC	Coal tar solution	1110031-01	6
Euro OTC	Coal tar solution	1110031	2
Euro OTC	Coal tar solution	1307027-01	2
Fagron	Coal tar solution	11F21-N01	3
Fagron	Coal tar solution	20230712-6	1
Fagron	Coal tar solution	12L05-N02	3
Fagron	Coal tar solution	13H06-N02	9
Fagron	Coal tar solution	16102013B	1
Fagron	Coal tar solution	13H06N02	1
Fagron	Coal tar solution	18061301	1
Fagron	Coal tar solution	13I26-N02	1
Fagron	Coal tar solution	2011.07.0288	2
Fagron	Coal tar solution	12E08-N01	3
Fagron	Coal tar solution	4513E1799	1
Fagron	Coal tar solution	11/05-N12	1
Fagron	Coal tar solution	12E08-N08	1
Fagron	Coal tar solution	12H28-N05	1
Fiebig	Coal tar solution	9345501	3
Gehe	Coal tar solution	701972-0001	1
Gehe	Coal tar solution	12A20-N04	1
Krieger	Coal tar solution	11319212	3
Euro OTC	Coal tar solution	1110031-02	6
Phönix	Coal tar solution	12105-n02	1
Phönix	Coal tar solution	12F19-N08	3
Phönix	Coal tar solution	11B14-N04	1
Retest	Coal tar solution	11D01-N04	1
Caelo	Coconut oil, hardened	613E-07004	1
Caelo	Coconut oil, hardened	11379511	1
Caelo	Coconut oil, hardened	11379510	2
Caelo	Coconut oil, hardened	11379517	1
Cealo / Noweda	Coconut oil, hardened	13010808	1
Caelo	Comfrey root tincture...	11121314	2
Caelo	Comfrey root tincture...	12054008	1
Caelo	Comfrey root tincture...	12054012	2
Caelo	Comfrey root tincture...	12054016	1
Caelo	Comfrey tincture, cle...	11121406	1
Caelo	Comfrey tincture, cle...	14298513	1
Caelo	Comfrey tincture, cle...	12177001	3
Caelo	Comfrey tincture, cle...	12177005	1
Caelo	Comfrey tincture, cle...	4512E-02482	1
Apomix / 11	Dexamethasone 1% (non...	4A270513	1
apomix/ Phoenix	Dexamethasone 1% (non...	2A220313	1
Caelo	Dimethyl isosorbide	16170901	1
Caelo	Dimethyl isosorbide	16170902	12
Caelo	Food colorant blue (...)	12322306	1
Caelo	Food colorant blue (...)	12038601	1
Caelo	Food colorant blue (...)	13212405	1
Caelo	Food colorant green ...	13020105	1
Caelo	Food colorant red (E...	13020001	1
Caelo	Food colorant red (E...	13020002	1
Caelo	Food colorant red (E...	13020005	1
Caelo	Food colorant yellow...	12022212	1
Caelo	Food colorant yellow...	13075706	1
Anzag/ Fischar	Formic acid 85%		1
Caelo	Formic acid 85%	10343801	1
Caelo	Formic acid 85%	13373301	1

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Supplier	Substance	Batch	Spectra
Hedinger	Formic acid 85%	383338	1
Hedinger	Formic acid 85%	170912	1
Ichthyol	Gentamicin 1% Cordes®...	10D026	33
Ichthyol	Gentamicin 1% Cordes®...	12D010	28
Ichthyol-Gesellschaft...	Gentamicin 1% Cordes®...	9D002	1
Caelo	Gentian tincture (70%...	11220506	1
Caelo	Gentian tincture (70%...	11220504	1
Caelo	Gentian tincture (70%...	4109M-02442	1
Caelo	Gentian tincture (70%...	12035507	5
Caelo	Gentian tincture (70%...	13036405	1
Caelo	Gentian tincture (70%...	300711	1
Caesar&loretz,Phoenix	Gentian tincture (70%...	13036409	2
Caesar/Noweda	Gentian tincture (70%...	13036408	1
Nachprüfung	Gentian tincture (70%...	411E02442	1
Phönix Gotha	Gentian tincture (70%...	10334601	1
Caelo	Ginger tincture (70%)...	11053812	1
Caelo	Ginger tincture (70%)...	11323810	1
Caelo	Hawthorn tincture of ...	12211008	1
Caelo	Horse chestnut seed l...	12293604	1
Caelo	Horse chestnut seed l...	11194611	2
Caelo	Horse chestnut seed t...	12295308	1
apomix	Hydrogen peroxide sol...	231A160513	1
apomix	Hydrogen peroxide sol...	6A070114	1
apomix	Hydrogen peroxide sol...	6A080116	1
Apomix	Hydrogen peroxide sol...	227A160513	1
apomix PKH	Hydrogen peroxide sol...	472A160913	1
Apomix/Anzag	Hydrogen peroxide sol...	67A300113	1
Fagron	Hydrogen peroxide sol...	13K07-M04	1
Fagron	Hydrogen peroxide sol...	12I06-M05	1
Fagron	Hydrogen peroxide sol...	13A02-M10	1
Fagron	Hydrogen peroxide sol...	13D05-M04	1
Fagron	Hydrogen peroxide sol...	13G09-M07	1
Fagron	Hydrogen peroxide sol...	13G09-M03	1
Fagron	Hydrogen peroxide sol...	13G12-M06	1
Fagron	Hydrogen peroxide sol...	13G12-M09	1
Fagron	Hydrogen peroxide sol...	13A02-M13	1
Fischar	Hydrogen peroxide sol...	6303042A	1
GEHE	Hydrogen peroxide sol...		10
GEHE	Hydrogen peroxide sol...	H216091/1	1
Hedinger	Hydrogen peroxide sol...	301205	1
Hedinger	Hydrogen peroxide sol...	301208	1
Hedinger	Hydrogen peroxide sol...	301210	2
Hedinger	Hydrogen peroxide sol...	301207	1
Hedinger	Hydrogen peroxide sol...	301212	1
Hedinger	Hydrogen peroxide sol...	301211	1
Hedinger/AHD	Hydrogen peroxide sol...	61010B	1
Herbeta Arzneimittel	Hydrogen peroxide sol...	15061202	1
Hubertus Apo	Hydrogen peroxide sol...	240513	1
Hubertus Apo	Hydrogen peroxide sol...	100913	1
Hubertus Apotheke	Hydrogen peroxide sol...	130114	1
Hubertus Apotheke	Hydrogen peroxide sol...	5082014	1
PKH / Gehe	Hydrogen peroxide sol...	12D27-M09	1
PKH / Gehe	Hydrogen peroxide sol...	12D26-M05	1
PKH / Gehe	Hydrogen peroxide sol...	12I06-M07	2
PKH / Gehe	Hydrogen peroxide sol...	12I04-M09	1
PKH / Gehe	Hydrogen peroxide sol...	13A02-M09	3
PKH GmbH	Hydrogen peroxide sol...	487A161012	1
PKH GmbH/Anzag	Hydrogen peroxide sol...	485A121012	1
stumpf	Hydrogen peroxide sol...	280A060712	1
Anzag	Hydrogen peroxide sol...	61007B	7

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Supplier	Substance	Batch	Spectra
Anzag/Fischar	Hydrogen peroxide sol...	6313035	2
Caelo	Hydrogen peroxide sol...	610093	1
Caelo	Hydrogen peroxide sol...	12091302	1
Caelo	Hydrogen peroxide sol...	61010b	1
Fischar	Hydrogen peroxide sol...	6311092	2
Fischar	Hydrogen peroxide sol...	6312061	1
Fischar	Hydrogen peroxide sol...	6312073	2
Fischar	Hydrogen peroxide sol...	6312081	2
Fischar	Hydrogen peroxide sol...	6312077	1
Fischar	Hydrogen peroxide sol...	6312082	1
Fischar	Hydrogen peroxide sol...	631109	1
Fischar	Hydrogen peroxide sol...	6313025	2
Fischar	Hydrogen peroxide sol...	6313061	5
Fischar	Hydrogen peroxide sol...	6314018	1
Fischar	Hydrogen peroxide sol...	6314021	2
Fischar	Hydrogen peroxide sol...	6315084	1
Fischar/AHD	Hydrogen peroxide sol...	6313062	1
Fischar/Anzag	Hydrogen peroxide sol...	6313064	2
Fischar/G	Hydrogen peroxide sol...	6312072	1
Fischar/G	Hydrogen peroxide sol...	6313033	1
Fischar/G	Hydrogen peroxide sol...	6313093	2
Fischar/Gehe	Hydrogen peroxide sol...	6313102	1
Fischar/GEHE/16.04.2013	Hydrogen peroxide sol...	6312114	3
Fischar/GUMO /02.08.2...	Hydrogen peroxide sol...	6313027	6
Fischar/Sanacorp	Hydrogen peroxide sol...	6312111	1
Fischbar	Hydrogen peroxide sol...	4101202	1
Gehe	Hydrogen peroxide sol...	6312074	3
Gehe/Fischar/11.12.2012	Hydrogen peroxide sol...	6312105	6
GEHE/Fischar/12.06.2012	Hydrogen peroxide sol...	6312012	3
Gehe/Fischar11.07.2012	Hydrogen peroxide sol...	6312051	6
Hedinger	Hydrogen peroxide sol...	61006B	1
Hedinger	Hydrogen peroxide sol...	61005B	2
Hedinger	Hydrogen peroxide sol...	61010B	21
Hedinger	Hydrogen peroxide sol...	61011B	24
Hedinger	Hydrogen peroxide sol...	16092013A	1
Hedinger	Hydrogen peroxide sol...	210913H202	1
Hedinger	Hydrogen peroxide sol...	8111302	1
Hedinger	Hydrogen peroxide sol...	61003B	2
Hedinger	Hydrogen peroxide sol...	610128	1
HEDINGER	Hydrogen peroxide sol...	601008B	1
Hedinger / Gehe	Hydrogen peroxide sol...	(061b)061b	2
Hedinger / Gehe	Hydrogen peroxide sol...	64044B	1
Hedinger Jenne	Hydrogen peroxide sol...	61009B	21
Hedinger/Anzag	Hydrogen peroxide sol...	4413A-01720	1
Hedinger/Anzag 21.07....	Hydrogen peroxide sol...	61008B	19
Herstellung	Hydrogen peroxide sol...	6313072	1
Noweda/Hedinger	Hydrogen peroxide sol...	61012B	8
Otto Fischar	Hydrogen peroxide sol...	6313101	1
Otto Fischar / Noweda	Hydrogen peroxide sol...	6314011	1
Otto Fischar gmbh	Hydrogen peroxide sol...	6314113	1
Otto Fischar gmbh	Hydrogen peroxide sol...	6315031	1
Otto Fischar GmbH	Hydrogen peroxide sol...	6312021	2
Otto Fischar GmbH & Co...	Hydrogen peroxide sol...	6313055	5
Phönix	Hydrogen peroxide sol...	6313073	2
Caelo	Hydrogen peroxide sol...		1
All..Healthc./Apomix	Hydrophilic metronida...	7B180713	5
Alliance Healthcare/A...	Hydrophilic metronida...	6B120613	5
Alliance Healthcare/A...	Hydrophilic metronida...	11201113	1
AMH Niemann GmbH & Co...	Hydrophilic metronida...	4190413	1
AMH Niemann GmbH+Co Kg	Hydrophilic metronida...	5B170414	1

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Supplier	Substance	Batch	Spectra
amv niemann gmbh&co kg	Hydrophilic metronida...	4B060515	1
Anzag	Hydrophilic metronida...	11B201113	2
apomix	Hydrophilic metronida...	11B221112	2
apomix	Hydrophilic metronida...	5B020513	6
apomix	Hydrophilic metronida...	9B091013	2
apomix	Hydrophilic metronida...	10C141013	1
Apomix	Hydrophilic metronida...	1B190112	1
Apomix	Hydrophilic metronida...	2B220212	2
Apomix	Hydrophilic metronida...	4B270412	1
Apomix	Hydrophilic metronida...	9B041012	2
Apomix	Hydrophilic metronida...	8418213	2
Apomix	Hydrophilic metronida...	8B110912	4
Apomix	Hydrophilic metronida...	10B251012	3
Apomix	Hydrophilic metronida...	1B030113	4
Apomix	Hydrophilic metronida...	3B140313	4
Apomix	Hydrophilic metronida...	2B220213	5
ApoMix	Hydrophilic metronida...	6B310512	3
Apomix Anzag	Hydrophilic metronida...	7B200712	5
Apomix/Noweda	Hydrophilic metronida...	8B290813	3
apomix/Phönix	Hydrophilic metronida...	11B20113	1
Apomix/Phönix	Hydrophilic metronida...	12B111213	1
Brückenapotheke	Hydrophilic metronida...	3113Q-07001	1
Brückenapotheke	Hydrophilic metronida...	3313M-07001	1
Brückenapotheke	Hydrophilic metronida...	3913E-07001	1
Brückenapotheke	Hydrophilic metronida...	5013A-07001	1
Brückenapotheke	Hydrophilic metronida...	414M-07001	1
Brücken-Apotheke	Hydrophilic metronida...	4613M-07001	1
Defektur	Hydrophilic metronida...	3212M-03387	1
Defektur	Hydrophilic metronida...	3412M-07001	1
Defektur	Hydrophilic metronida...	3512L-07001	1
Defektur	Hydrophilic metronida...	3712Q-07001	1
Defektur	Hydrophilic metronida...	4012A-07001	1
Defektur	Hydrophilic metronida...	4112E-07001	1
Defektur	Hydrophilic metronida...	4612E-03387	1
Defektur	Hydrophilic metronida...	4812E-07001	1
Defektur	Hydrophilic metronida...	4912Q-07001	1
Defektur	Hydrophilic metronida...	813A-07001	1
Defektur	Hydrophilic metronida...	1613a-07001	1
Defektur	Hydrophilic metronida...	1813E-07001	1
Defektur	Hydrophilic metronida...	1813Q-07001	1
Defektur	Hydrophilic metronida...	1913A-07001	1
Defektur	Hydrophilic metronida...	2513q-07001	1
Defektur	Hydrophilic metronida...	2713E-07001	1
Eigenherstellung	Hydrophilic metronida...	912Q-07001	1
Gehe	Hydrophilic metronida...	2512Q-07001	2
Gehe	Hydrophilic metronida...	5112Q-07001	1
Gehe	Hydrophilic metronida...	1013Q-07001	1
Gehe	Hydrophilic metronida...	1213E-07001	2
Gehe	Hydrophilic metronida...	2813M-07001	1
Gehe	Hydrophilic metronida...	3613E-07001	1
Gehe	Hydrophilic metronida...	4813E-07001	1
Gehe	Hydrophilic metronida...	5513E-03387	1
Gehe	Hydrophilic metronida...	114M-07001	1
Phönix Gotha	Hydrophilic metronida...	4B190413	6
Caelo	Hydrophobic triclosan...	S0211201.1	1
Caelo	Hydrophobic triclosan...	S011503.1	1
Infectopham/Gehe	Hydrophobic triclosan...	S021201.	1
Infectopharm	Hydrophobic triclosan...	S031101.1	1
Infectopharm	Hydrophobic triclosan...	20160712-1	1
Infectopharm	Hydrophobic triclosan...	S091202.1	7

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Supplier	Substance	Batch	Spectra
Infectopharm	Hydrophobic triclosan...	S091203.1	8
InfectoPharm	Hydrophobic triclosan...	S091103.1	3
InfectoPharm / 04.09...	Hydrophobic triclosan...	S091104.1	1
Infectopharm,AHC	Hydrophobic triclosan...	S101304.1	1
InfectoPharm/GEHE	Hydrophobic triclosan...	S.091203.1	1
InfectoPharm/Phoenix	Hydrophobic triclosan...	S021201.1	4
Phönix Gotha	Hydrophobic triclosan...	S091201.1	1
Sanacorp, 1303.12 EK:...	Hydrophobic triclosan...	S091102.1	1
Spangro/Infectopharm	Hydrophobic triclosan...	S041301.1	4
Anzag	Hydrophobic triclosan...	S021202.1	5
Anzag/Infectopharm	Hydrophobic triclosan...	S091206.1	10
Caelo	Hydrophobic triclosan...	2111310005	1
Caelo	Hydrophobic triclosan...	3131-07001	1
Caesar & Loretz GmbH	Hydrophobic triclosan...	S041303.1	3
Hedinger / Stumpf	Hydrophobic triclosan...	S101209.1	13
infectopharm	Hydrophobic triclosan...	S041302.1	3
Infectopharm	Hydrophobic triclosan...	S021201.1	2
Infectopharm	Hydrophobic triclosan...	S091109.1	2
Infectopharm	Hydrophobic triclosan...	S0212041	1
Infectopharm	Hydrophobic triclosan...	S101207.1	8
Infectopharm	Hydrophobic triclosan...	S101208.1	12
Infectopharm	Hydrophobic triclosan...	5101209.1	1
Infectopharm	Hydrophobic triclosan...	s1012091	1
Infectopharm	Hydrophobic triclosan...	S041301.1	7
Infectopharm	Hydrophobic triclosan...	S04131011	1
Infectopharm	Hydrophobic triclosan...	S031502.1	1
InfectoPharm / Gehe	Hydrophobic triclosan...	S0413041	1
Infectopharm, Noweda	Hydrophobic triclosan...	S021203.1	4
Infectopharm, Noweda	Hydrophobic triclosan...	S0231204.1	1
Infectopharm/AHD	Hydrophobic triclosan...	S1012209.1	1
InfectoPharm/Phönix	Hydrophobic triclosan...	1101410005	1
Phönix Gotha	Hydrophobic triclosan...	561069	1
Phönix/InfectoPharm	Hydrophobic triclosan...	S021204.1	7
Phönix/InfectoPharm	Hydrophobic triclosan...	S021205.1	5
Sanacorp	Hydrophobic triclosan...	S031105.1	1
Alliance	Hydroxyethylcellulose...	13190401	10
Caelo	Hydroxyethylcellulose...	11341701	1
apomix	Hydroxyethylcellulose...	20B230712	1
Apomix	Hydroxyethylcellulose...	6B090312	1
Apomix	Hydroxyethylcellulose...	24B070912	2
Apomix	Hydroxyethylcellulose...	5B150213	3
Apomix	Hydroxyethylcellulose...	9B120413	1
Apomix	Hydroxyethylcellulose...	12B260413	1
Apomix	Hydroxyethylcellulose...	13B260413	4
Apomix	Hydroxyethylcellulose...	11B260413	1
Apomix	Hydroxyethylcellulose...	16B310513	3
Apomix	Hydroxyethylcellulose...	27B081113	1
Apomix	Hydroxyethylcellulose...	6D230514	1
Apomix / Phönix	Hydroxyethylcellulose...	21C090813	1
apomix PKH	Hydroxyethylcellulose...	2B270112	1
apomix PKH	Hydroxyethylcellulose...	9C200412	1
apomix PKH	Hydroxyethylcellulose...	14B080612	1
apomix PKH	Hydroxyethylcellulose...	17B060712	1
Apomix/ Noweda	Hydroxyethylcellulose...	5B090312	1
Apomix/ Sanacorp	Hydroxyethylcellulose...	19B080713	1
Apomix/ Anzag	Hydroxyethylcellulose...	10C120413	1
Apomix/Noweda	Hydroxyethylcellulose...	18B080713	2
Caelo	Hydroxyethylcellulose...	16061204	1
Caelo	Hydroxyethylcellulose...	15067801	1
Caelo	Hydroxyethylcellulose...	11341501	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydroxyethylcellulose...	22061204	1
Caelo	Hydroxyethylcellulose...	12071701	2
Caelo	Hydroxyethylcellulose...	20071204	1
Caelo	Hydroxyethylcellulose...	11363401	1
Caelo	Hydroxyethylcellulose...	14081202	1
Caelo	Hydroxyethylcellulose...	14081203	1
Caelo	Hydroxyethylcellulose...	12128201	2
Caelo	Hydroxyethylcellulose...	11341801	1
Caelo	Hydroxyethylcellulose...	12128001	4
Caelo	Hydroxyethylcellulose...	12128202	2
Caelo	Hydroxyethylcellulose...	25091209	1
Caelo	Hydroxyethylcellulose...	2101201	1
Caelo	Hydroxyethylcellulose...	2101203	1
Caelo	Hydroxyethylcellulose...	17101201	1
Caelo	Hydroxyethylcellulose...	17101206	1
Caelo	Hydroxyethylcellulose...	17101207	1
Caelo	Hydroxyethylcellulose...	26101205	1
Caelo	Hydroxyethylcellulose...	12244002	4
Caelo	Hydroxyethylcellulose...	10111202	1
Caelo	Hydroxyethylcellulose...	5121205	1
Caelo	Hydroxyethylcellulose...	21121201	1
Caelo	Hydroxyethylcellulose...	12320601	3
Caelo	Hydroxyethylcellulose...	29011301	1
Caelo	Hydroxyethylcellulose...	13021302	1
Caelo	Hydroxyethylcellulose...	13009501	10
Caelo	Hydroxyethylcellulose...	1219401	1
Caelo	Hydroxyethylcellulose...	13009301	4
Caelo	Hydroxyethylcellulose...	26031306	1
Caelo	Hydroxyethylcellulose...	23041305	1
Caelo	Hydroxyethylcellulose...	11264501	1
Caelo	Hydroxyethylcellulose...	6051303	1
Caelo	Hydroxyethylcellulose...	13084404	13
Caelo	Hydroxyethylcellulose...	6061307	1
Caelo	Hydroxyethylcellulose...	6061308	1
Caelo	Hydroxyethylcellulose...	29061301	1
Caelo	Hydroxyethylcellulose...	30071301	1
Caelo	Hydroxyethylcellulose...	13190901	3
Caelo	Hydroxyethylcellulose...	1319401	1
Caelo	Hydroxyethylcellulose...	4091303	1
Caelo	Hydroxyethylcellulose...	8101303	1
Caelo	Hydroxyethylcellulose...	15101311	1
Caelo	Hydroxyethylcellulose...	13190701	4
Caelo	Hydroxyethylcellulose...	14111307	1
Caelo	Hydroxyethylcellulose...	14111308	1
Caelo	Hydroxyethylcellulose...	21111304	1
Caelo	Hydroxyethylcellulose...	3786917	1
Caelo	Hydroxyethylcellulose...	6121301	1
Caelo	Hydroxyethylcellulose...	13286401	1
Caelo	Hydroxyethylcellulose...	11011402	1
Caelo	Hydroxyethylcellulose...	24011402	1
Caelo	Hydroxyethylcellulose...	13286801	2
Caelo	Hydroxyethylcellulose...	13393301	1
Caelo	Hydroxyethylcellulose...	14066401	2
Caelo	Hydroxyethylcellulose...	14066301	3
Caelo	Hydroxyethylcellulose...	14200101	2
Caelo	Hydroxyethylcellulose...	15067901	1
Caelo	Hydroxyethylcellulose...	16127002	1
Caelo	Hydroxyethylcellulose...	12219201	4
Caelo	Hydroxyethylcellulose...	12209201	1
Caelo	Hydroxyethylcellulose...	13084402	12

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Supplier	Substance	Batch	Spectra
Caelo	Hydroxyethylcellulose...	13393201	1
Caelo	Hydroxyethylcellulose...	13009303	3
Caelo	Hydroxyethylcellulose...	13286101	7
Caelo	Hydroxyethylcellulose...	13286201	5
Caelo	Hydroxyethylcellulose...	13084403	10
Caelo	Hydroxyethylcellulose...	12071401	1
Caelo	Hydroxyethylcellulose...	13190801	5
Caelo	Hydroxyethylcellulose...	12351501	2
Caelo	Hydroxyethylcellulose...	13286301	3
Caelo	Hydroxyethylcellulose...	3286101	1
Fagron	Hydroxyethylcellulose...	13009401	3
Fagron	Hydroxyethylcellulose...	12351401	1
Gehe	Hydroxyethylcellulose...	22b070912	1
Caelo	Hydroxyethylcellulose...	12351502	3
Caelo	Hydroxyethylcellulose...	12320602	1
Caelo	Hydroxyethylcellulose...	13286601	5
Caelo	Hydroxyethylcellulose...	12071501	2
Phönix	Hydroxyethylcellulose...	13286702	1
Phönix Gotha	Hydroxyethylcellulose...	12244003	4
Phönix Gotha	Hydroxyethylcellulose...	12320501	8
PKH Halle	Hydroxyethylcellulose...	3B240113	1
Sanacorp	Hydroxyethylcellulose...	12127901	2
Sanacorp	Hydroxyethylcellulose...	12219401	6
Sanacorp	Hydroxyethylcellulose...	12309303	9
Sanacorp	Hydroxyethylcellulose...	13190501	8
Caelo	Hydroxyethylcellulose...	12219501	5
Sanacorp/ PKH Halle	Hydroxyethylcellulose...	8B050412	1
Sanacorp/ PKH Halle	Hydroxyethylcellulose...	10B200412	1
Caelo	Hydroxyethylcellulose...	12219302	4
AMH Niemann GmbH & Co...	Hydroxyethylcellulose...	7B040313	1
AMH Niemann GmbH & Co...	Hydroxyethylcellulose...	13B310513	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	2C270112	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	1B270112	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	6C090312	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	10B200412	1
apomix	Hydroxyethylcellulose...	17B080713	2
apomix	Hydroxyethylcellulose...	14B310513	1
apomix	Hydroxyethylcellulose...	5B060717	1
Apomix	Hydroxyethylcellulose...	19B141011	1
Apomix	Hydroxyethylcellulose...	22B281011	1
Apomix	Hydroxyethylcellulose...	5B090312	3
Apomix	Hydroxyethylcellulose...	15B060712	1
Apomix	Hydroxyethylcellulose...	14B080612	1
Apomix	Hydroxyethylcellulose...	26B301112	1
Apomix	Hydroxyethylcellulose...	6B040313	2
Apomix	Hydroxyethylcellulose...	16B080713	1
Apomix	Hydroxyethylcellulose...	21C060913	2
Apomix / Phönix	Hydroxyethylcellulose...	11B120413	1
Apomix/ Phönix	Hydroxyethylcellulose...	19B090813	1
Caesar & Loretz/ Noweda	Hydroxyethylcellulose...	5B150213	1
PKH Halle/ Alliance H.	Hydroxyethylcellulose...	18B090813	4
Caelo	Iodine tincture	9356601	1
Caelo	Iodine tincture	5021308	1
Caelo	Iodine tincture	12285902	1
Caelo	Iodine tincture	12285901	1
Caelo	Iodine tincture	12285903	1
Caelo	Iodine tincture	11303104	1
Caelo	Iodine tincture	28061302	1
Caelo	Iodine tincture	1071303	1
Caelo	Iodine tincture	2101302	1

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Supplier	Substance	Batch	Spectra
Caelo	Iodine tincture	13193501	1
Caelo	Iodine tincture	14111309	1
Caelo	Iodine tincture	13193502	1
Caelo	Iodine tincture	24011405	1
Caelo	Iodine tincture	5021402	1
Caelo	Iodine tincture	12285906	3
Fagron	Iodine tincture	11309402	1
Caelo	Iodine tincture	13193503	1
Otto Fischer GmbH & C...	Lactic acid 80% L(+)	20020271	1
Phönix Gotha	Lactic acid 80% L(+)	2002071	2
Caelo	Lard	11263707	1
Caelo	Lard	11263714	1
Caelo	Lard	11379606	1
Caelo	Lard	11263706	1
Caelo	Lard	11263715	1
Caelo	Lard	11379605	2
Caesar&loretz,Phoenix	Lard	11095310	1
Caelo	Lavender spirit	13166502	1
Caelo	Lavender spirit	13300803	2
dhu	Lavender spirit	1041012	4
Caelo	Lime water	13028602	1
Caelo	Macadamia oil, refined	13012104	1
Caelo	Macadamia oil, refined	13012106	1
Caelo	Macadamia oil, refined	14179304	2
Caelo	Macadamia oil, refined	16074404	1
Primavera	Macadamia oil, refined	58C24	1
Spinnrad	Macadamia oil, refined	117301241	1
Taoasis	Macadamia oil, refined	128991	1
Taoasis	Macadamia oil, refined	4976601-92844	1
Maros	Marian thistle fruit ...	U3762	2
Caelo	Marian thistle seed t...	11061110	1
Caelo	Marian thistle seed t...	12043822	1
Caelo	Marian thistle seed t...	13044304	1
Caelo	Matricaria flower tin...	13044206	1
Caelo	Matricaria flower tin...	9061201	1
Caelo	Matricaria flower tin...	3081201	1
Caelo	Matricaria flower tin...	24091208	1
Caelo	Matricaria flower tin...	11011303	1
Caelo	Matricaria flower tin...	11011307	1
Caelo	Matricaria flower tin...	11269917	2
Caelo	Matricaria flower tin...	11269920	4
Caelo	Matricaria flower tin...	3051310	1
Caelo	Matricaria flower tin...	11269911	1
Caelo	Matricaria flower tin...	13142803	1
Caelo	Matricaria flower tin...	13044202	1
Caelo	Matricaria flower tin...	12111305	1
Caelo	Matricaria flower tin...	14078402	1
Caelo	Matricaria flower tin...	11269924	1
Caelo	Matricaria flower tin...	11269905	1
Caelo	Matricaria liquid ext...	11303606	2
Caelo	Matricaria liquid ext...	12254801	2
Caelo	Matricaria liquid ext...	12360303	2
Caelo	Matricaria liquid ext...	12360310	3
Caelo	Matricaria liquid ext...	10382713	1
Caelo	Matricaria liquid ext...	12360306	1
Maros	Matricaria liquid ext...	6990	3
aliance healthcare	Matricaria oil, fat	13204306	2
Caelo	Matricaria oil, fat	11261506	1
Caelo	Matricaria oil, fat	12189803	2
Caelo	Matricaria oil, fat	12372903	5

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Supplier	Substance	Batch	Spectra
Caelo	Matricaria oil, fat	1218903	1
Caesar & Lorenz	Matricaria oil, fat	13204304	2
Maros	Melissa leaf liquid e. ...	6399	3
Caelo	Melissa leaf tincture. ...	10105412	1
Caelo	Melissa leaf tincture. ...	12206201	3
Caelo	Melissa leaf tincture. ...	11102812	1
Caelo	Melissa leaf tincture. ...	12206205	4
Caelo	Melissa leaf tincture. ...	11011305	1
Caelo	Melissa leaf tincture. ...	3051308	1
Caelo	Melissa leaf tincture. ...	12206214	6
Caelo	Melissa leaf tincture. ...	1206214	1
Caelo	Melissa leaf tincture. ...	27111307	1
Caelo	Melissa leaf tincture. ...	5121303	1
Caelo	Melissa leaf tincture. ...	12233609	2
Caelo	Melissa leaf tincture. ...	1233609	1
Caelo	Melissa leaf tincture. ...	1223612	1
Caelo	Melissa leaf tincture. ...	12233612	1
Caelo	Melissa leaf tincture. ...	12206218	5
Gehe	Methoxsalen 0.006% Co. ...	13D004A	1
Gehe	Methoxsalen 0.006% Co. ...	13D004B	1
Ichthyol	Methoxsalen 0.006% Co. ...	130004	2
Ichthyol	Methoxsalen 0.006% Co. ...	14D001	1
Ichthyol Gesellschaft	Methoxsalen 0.006% Co. ...	12D011	5
Ichthyol- Gesellschaft	Methoxsalen 0.006% Co. ...	13D013	7
ICHTHYOL/ahp	Methoxsalen 0.006% Co. ...	13d004	1
Ichthyol/Gehe	Methoxsalen 0.006% Co. ...	13D004	29
Sanacorp/Ichthyol	Methoxsalen 0.006% Co. ...	13D013	1
AMH Niemann	Methylrosanilinium ch. ...	3A060612	1
AMH Niemann GmbH & Co. ...	Methylrosanilinium ch. ...	1b140213	1
Anzag	Methylrosanilinium ch. ...	5A200712	1
Anzag	Methylrosanilinium ch. ...	1A140213	2
apomix, PKH GmbH	Methylrosanilinium ch. ...	2B260413	1
apomix/ Gehe	Methylrosanilinium ch. ...	2B290312	1
Apomix/Anzag	Methylrosanilinium ch. ...	1B260413	1
Apomix/Gehe	Methylrosanilinium ch. ...	4B200712	1
Leyhs/Noweda	Methylrosanilinium ch. ...	124141	1
Phoenix (PKH Halle)	Methylrosanilinium ch. ...	4A200712	1
apomix	Metronidazole 10% (no. ...	48170413	1
apomix	Metronidazole 10% (no. ...	38110313	1
apomix	Metronidazole 10% (no. ...	5B150513	1
apomix	Metronidazole 10% (no. ...	3B070417	1
Phoenix (PKH Halle)	Metronidazole 10% (no. ...	11B251012	1
Phoenix (PKH Halle)	Metronidazole 10% (no. ...	1B020113	1
PKH Halle / Phoenix	Metronidazole 10% (no. ...	8B211013	1
Caelo	Myrrh tincture (90%) ...	11019810	1
Caelo	Myrrh tincture (90%) ...	3101212460	1
Caelo	Myrrh tincture (90%) ...	2704212460	1
Caelo	Myrrh tincture (90%) ...	11260916	1
Caelo	Myrrh tincture (90%) ...	24081209	1
Caelo	Myrrh tincture (90%) ...	11019809	1
Caelo	Myrrh tincture (90%) ...	11260918	1
Caelo	Myrrh tincture (90%) ...	1910211095	1
Caelo	Myrrh tincture (90%) ...	12197103	2
Caelo	Myrrh tincture (90%) ...	20111214	1
Caelo	Myrrh tincture (90%) ...	12197104	2
Caelo	Myrrh tincture (90%) ...	20101012-1	1
Caelo	Myrrh tincture (90%) ...	12197105	10
Caelo	Myrrh tincture (90%) ...	12197106	1
Caelo	Myrrh tincture (90%) ...	2002312460	1
Caelo	Myrrh tincture (90%) ...	12197205	4

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Supplier	Substance	Batch	Spectra
Caelo	Myrrh tincture (90%) ...	2913M2460	1
Caelo	Myrrh tincture (90%) ...	12197303	15
Caelo	Myrrh tincture (90%) ...	12197305	7
Caelo	Myrrh tincture (90%) ...	13273303	4
Caelo	Myrrh tincture (90%) ...	13273404	1
Caelo	Myrrh tincture (90%) ...	13273308	4
Caelo	Myrrh tincture (90%) ...	14244206	1
Caelo	Myrrh tincture (90%) ...	15110504	1
Caelo	Myrrh tincture (90%) ...	11260909	3
Caelo	Myrrh tincture (90%) ...	12197107	2
Caelo	Myrrh tincture (90%) ...	12197112	2
Caelo	Myrrh tincture (90%) ...	13273301	5
Caelo	Myrrh tincture (90%) ...	13273302	8
Caelo	Myrrh tincture (90%) ...	11260914	3
Caelo	Myrrh tincture (90%) ...	230312	1
Caelo	Myrrh tincture (90%) ...	45132U2460	1
Caelo	Myrrh tincture (90%) ...	614M2460	1
Caelo	Myrrh tincture (90%) ...	11260908	1
Caesar/Noweda	Myrrh tincture (90%) ...	12197204	2
Hetterich/Teofarma	Myrrh tincture (90%) ...	139101	1
Noweda	Myrrh tincture (90%) ...	1219104	1
Caelo	Myrrh tincture (90%) ...	133273301	1
Caelo	Nettle root tincture ...	11187409	1
Caelo	Nettle root tincture ...	12341302	1
Caelo	Nettle tincture (70%)...	1108810	1
Caelo	Nettle tincture (70%)...	11108810	1
Anzag	Opium tincture, stand...	12006212	17
Caelo	Opium tincture, stand...	12162608	1
Caelo	Opium tincture, stand...	12380302	1
Caelo	Opium tincture, stand...	13144005	2
Caelo	Opium tincture, stand...	13144004	1
Caelo	Opium tincture, stand...	13394902	1
Caelo	Opium tincture, stand...	5005712	6
Caelo	Opium tincture, stand...	22031302	1
Caelo	Opium tincture, stand...	30031301	1
Caelo	Opium tincture, stand...	8061301	1
Caelo	Opium tincture, stand...	3071303	1
Caelo	Opium tincture, stand...	25071302	1
Caelo	Opium tincture, stand...	12121305	1
Caelo	Opium tincture, stand...	16121304	1
Caelo	Opium tincture, stand...	10011404	1
Caelo	Opium tincture, stand...	24011406	1
Caelo	Opium tincture, stand...	13260602	1
Caelo	Opium tincture, stand...	14108504	1
Caelo	Opium tincture, stand...	14108510	1
Caelo	Opium tincture, stand...	6009916	1
Caelo	Opium tincture, stand...	16330406	1
Caelo	Opium tincture, stand...	17227201	1
Caelo	Opium tincture, stand...	12380307	1
Caelo	Opium tincture, stand...	13144011	1
Caelo	Opium tincture, stand...	12162602	1
Eigenherstellung	Opium tincture, stand...	70613PML01	2
Fagron	Opium tincture, stand...	9006012/Maros	1
Gehe	Opium tincture, stand...	6006713	28
Gehe	Opium tincture, stand...	5007714	1
Gehe	Opium tincture, stand...	6007814	2
Gehe	Opium tincture, stand...	7007914	1
Gehe/Maros	Opium tincture, stand...	11006112	16
Maros	Opium tincture, stand...	4005612	3
Maros	Opium tincture, stand...	8005812	7

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Supplier	Substance	Batch	Spectra
Maros	Opium tincture, stand...	9006012	15
Maros	Opium tincture, stand...	15031302	1
Maros	Opium tincture, stand...	1006313	14
Maros	Opium tincture, stand...	13071303	1
Maros	Opium tincture, stand...	2004511	1
Maros	Opium tincture, stand...	11007213	8
Maros	Opium tincture, stand...	4007614	3
Maros	Opium tincture, stand...	3007514	2
Maros	Opium tincture, stand...	5008715	2
Maros	Opium tincture, stand...	11008214	1
Maros	Opium tincture, stand...	7008915	1
Maros	Opium tincture, stand...	8009015	2
Maros	Opium tincture, stand...	10009115	2
Maros	Opium tincture, stand...	2009416	2
Maros	Opium tincture, stand...	3009616	1
Maros	Opium tincture, stand...	4009716	1
MAROS	Opium tincture, stand...	3005512	1
MAROS	Opium tincture, stand...	4010817	1
Maros Arznei GmbH	Opium tincture, stand...	8006913	25
Maros Arznei GmbH	Opium tincture, stand...	11007113	8
MAROS Arznei GmbH	Opium tincture, stand...	7006813	16
Maros Arznei GmbH/Anzag	Opium tincture, stand...	2005412	1
Maros/Gehe	Opium tincture, stand...	5006613	27
Maros/Gehe	Opium tincture, stand...	10007013	11
Maros/N/010.06.13/PZN...	Opium tincture, stand...	4006513	32
Maros/Phoenix	Opium tincture, stand...	60066713	1
Noweda	Opium tincture, stand...	1106112	2
Caelo	Opium tincture, stand...	13144010	1
Phönix	Opium tincture, stand...	2006413	23
sanacorp	Opium tincture, stand...	9005912	3
Sanacorp	Opium tincture, stand...	60006713	1
Caelo	Orange flower oil, ar...	11232005	3
Caelo	Orange flower oil, ar...	13154801	1
Caelo	Orange flower oil, ar...	13121302	1
Caelo	Orange flower oil, ar...	13154804	1
Noweda	Orange flower oil, ar...	10267805	1
Caelo	Orange flower oil, ar...		1
Anzag 26.11.12 ek:3,35	Orange flower water	12171703	1
Caelo	Orange flower water	1235606	1
Caelo	Orange flower water	11327301	2
Caelo	Orange flower water	12119103	1
Caelo	Orange flower water	12359606	3
Caelo	Orange flower water	12359605	1
Caelo	Orange flower water	1339301	1
Caelo	Orange flower water	13339301	1
Caelo	Orange flower water	14156804	1
Caelo	Orange flower water	12328604	2
Caelo	Orange flower water	12328602	1
Caelo	Orange flower water	13339302	2
Caelo	Orange flower water	13057302	2
Caelo	Orange flower water	13096605	3
Sanacorp	Orange flower water	AKD34	1
AMH Niemann/G	Oxytetracycline ointm...	2C160212	1
AMH Niemann/G	Oxytetracycline ointm...	4C300712	1
AMH Niemann/G	Oxytetracycline ointm...	1B200313	1
Apomix	Oxytetracycline ointm...	1A160212	1
Defektur	Oxytetracycline ointm...	49/12	1
Defektur	Oxytetracycline ointm...	55/12	1
Defektur	Oxytetracycline ointm...	8/13	1
Defektur	Oxytetracycline ointm...	12/13	1

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Supplier	Substance	Batch	Spectra
Defektur	Oxytetracycline ointm. ...	25/13	1
Defektur	Oxytetracycline ointm. ...	41/13	1
Defektur	Oxytetracycline ointm. ...	43/13	1
Defektur	Oxytetracycline ointm. ...	50/13	1
Pharmachem	Oxytetracycline ointm. ...	230113	1
Pharmachem	Oxytetracycline ointm. ...	140212	2
Gehrlicher	Pansy mother tincture	RU1775	1
ACM	Paraffin, liquid	KNC2106J14	1
ACM	Paraffin, liquid	KNC2160J14	1
AHD	Paraffin, liquid	16171010	1
AHD	Paraffin, liquid	171707002/01	1
AHD	Paraffin, liquid	1506005-02	4
AHD	Paraffin, liquid	1710025-01	13
AHD	Paraffin, liquid	1000002996	2
AHD	Paraffin, liquid	100002996	1
AHD	Paraffin, liquid	17321510	6
AHD	Paraffin, liquid	181770005	1
Caelo	Paraffin, liquid	15234502	12
Euro OTC	Paraffin, liquid	160703-01	1
Caelo	Paraffin, liquid	15293204	12
Caelo	Paraffin, liquid	17062001	34
Allergika Pharma GmbH	Paraffin, liquid	12/10	1
Allergika Pharma GmbH	Paraffin, liquid	8/06	1
Allergika Pharma GmbH	Paraffin, liquid	18/112023	1
Caelo	Paraffin, liquid	16082904	20
anzag	Paraffin, liquid	1509011-01	7
Bombastus	Paraffin, liquid	308476	4
Caelo	Paraffin, liquid	14059708	5
Caelo	Paraffin, liquid	14202507	9
Beiersdorf	Paraffin, liquid	30841410	1
Bombastus	Paraffin, liquid	298396	2
Bombastus	Paraffin, liquid	300061	2
Bombastus	Paraffin, liquid	266032	1
Bombastus	Paraffin, liquid	260652	1
Bombastus	Paraffin, liquid	263350	1
Bombastus	Paraffin, liquid	272590	2
Bombastus	Paraffin, liquid	281540	2
Bombastus	Paraffin, liquid	14187601	1
Bombastus	Paraffin, liquid	288827	2
Bombastus	Paraffin, liquid	290824	2
Bombastus	Paraffin, liquid	292137	1
Bombastus	Paraffin, liquid	294568	1
Bombastus	Paraffin, liquid	295576	1
Bombastus	Paraffin, liquid	295576	2
Bombastus	Paraffin, liquid	18005175	3
Bombastus	Paraffin, liquid	19001235	1
Bombastus	Paraffin, liquid	146(18000358)	1
Bombastus	Paraffin, liquid	147(18002494)	1
Bombastus	Paraffin, liquid	148(18002494)	1
Bombastus	Paraffin, liquid	149(18005175)	1
Bombastus	Paraffin, liquid	150(18005175)	1
Bombastus	Paraffin, liquid	151(19001235)	1
Bombastus	Paraffin, liquid	281540	1
Bombastus	Paraffin, liquid	274958	7
Bombastus	Paraffin, liquid	284273	1
Bombastus	Paraffin, liquid	284273	2
Bombastus	Paraffin, liquid	293385	2
Bombastus	Paraffin, liquid	142(308476)	1
Bombastus	Paraffin, liquid	144(18000358)	1
Bombastus	Paraffin, liquid	306312	2

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, liquid	143(310779)	1
Bombastus	Paraffin, liquid	17360403	7
Bombastus	Paraffin, liquid	301968	2
Bombastus	Paraffin, liquid	301958	1
Bombastus	Paraffin, liquid	6861849	1
Bombastus	Paraffin, liquid	310779	4
Caelo	Paraffin, liquid	11354102	9
Caelo	Paraffin, liquid	1817702	1
Caelo	Paraffin, liquid	10162009	1
Caelo	Paraffin, liquid	11207702	2
Caelo	Paraffin, liquid	9320905	1
Caelo	Paraffin, liquid	11263606	3
Caelo	Paraffin, liquid	10071202	1
Caelo	Paraffin, liquid	2111202	1
Caelo	Paraffin, liquid	221108111F30-NO	1
Caelo	Paraffin, liquid	12042205	6
Caelo	Paraffin, liquid	20210312-4	1
Caelo	Paraffin, liquid	14011303	1
Caelo	Paraffin, liquid	1601312050	1
Caelo	Paraffin, liquid	12227701	8
Caelo	Paraffin, liquid	11092703	1
Caelo	Paraffin, liquid	715I-02050	1
Caelo	Paraffin, liquid	19021302	1
Caelo	Paraffin, liquid	12324304	2
Caelo	Paraffin, liquid	10162002	1
Caelo	Paraffin, liquid	10364703	1
Caelo	Paraffin, liquid	2103312050	1
Caelo	Paraffin, liquid	12227610	1
Caelo	Paraffin, liquid	1913Q-02050	1
Caelo	Paraffin, liquid	13005805	15
Caelo	Paraffin, liquid	1234307	1
Caelo	Paraffin, liquid	0000000	1
Caelo	Paraffin, liquid	11071302	1
Caelo	Paraffin, liquid	3213Q2050	1
Caelo	Paraffin, liquid	12227602	1
Caelo	Paraffin, liquid	13005205	1
Caelo	Paraffin, liquid	13005806	1
Caelo	Paraffin, liquid	13232903	8
Caelo	Paraffin, liquid	13232901	13
Caelo	Paraffin, liquid	83054508	1
Caelo	Paraffin, liquid	13232902	14
Caelo	Paraffin, liquid	27011405	1
Caelo	Paraffin, liquid	16061203	1
Caelo	Paraffin, liquid	10062014A	1
Caelo	Paraffin, liquid	10071403	1
Caelo	Paraffin, liquid	14059701	8
Caelo	Paraffin, liquid	14059708	4
Caelo	Paraffin, liquid	14044504	2
Caelo	Paraffin, liquid	14059703	2
Caelo	Paraffin, liquid	14059703	4
Caelo	Paraffin, liquid	14044507	3
Caelo	Paraffin, liquid	13248006	2
Caelo	Paraffin, liquid	14059701	1
Caelo	Paraffin, liquid	14141408	1
Caelo	Paraffin, liquid	14011514	1
Caelo	Paraffin, liquid	1420509	1
Caelo	Paraffin, liquid	14357203	9
Caelo	Paraffin, liquid	14305904	1
Caelo	Paraffin, liquid	15106101	5
Caelo	Paraffin, liquid	14163807	3

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, liquid	4091515	1
Caelo	Paraffin, liquid	151060104	1
Caelo	Paraffin, liquid	25092015	1
Caelo	Paraffin, liquid	15106109	2
Caelo	Paraffin, liquid	15293203	15
Caelo	Paraffin, liquid	15106107	13
Caelo	Paraffin, liquid	15293205	26
Caelo	Paraffin, liquid	15106107	1
Caelo	Paraffin, liquid	15293201	10
Caelo	Paraffin, liquid	15293202	12
Caelo	Paraffin, liquid	13103309	3
Caelo	Paraffin, liquid	15923205	1
Caelo	Paraffin, liquid	15293202	1
Caelo	Paraffin, liquid	1593205	1
Caelo	Paraffin, liquid	15336704	14
Caelo	Paraffin, liquid	15336702	1
Caelo	Paraffin, liquid	15234506	4
Caelo	Paraffin, liquid	15230601	1
Caelo	Paraffin, liquid	1235465	1
Caelo	Paraffin, liquid	160829	1
Caelo	Paraffin, liquid	16149802	22
Caelo	Paraffin, liquid	1604009-01	13
Caelo	Paraffin, liquid	16149801	24
Caelo	Paraffin, liquid	1608294	1
Caelo	Paraffin, liquid	16171002	4
Caelo	Paraffin, liquid	16171001	16
Caelo	Paraffin, liquid	16238804	2
Caelo	Paraffin, liquid	160822907	1
Caelo	Paraffin, liquid	161710	1
Caelo	Paraffin, liquid	9041705	1
Caelo	Paraffin, liquid	16171009	2
Caelo	Paraffin, liquid	16238807	5
Caelo	Paraffin, liquid	16238808	18
Caelo	Paraffin, liquid	1126261	1
Caelo	Paraffin, liquid	16E30-B05-325889	3
Caelo	Paraffin, liquid	17062001	4
Caelo	Paraffin, liquid	17047604	2
Caelo	Paraffin, liquid	15111739	1
Caelo	Paraffin, liquid	17062007	26
Caelo	Paraffin, liquid	17321501	31
Caelo	Paraffin, liquid	17196001	11
Caelo	Paraffin, liquid	170620055518	1
Caelo	Paraffin, liquid	30041805	1
Caelo	Paraffin, liquid	18048103	2
Caelo	Paraffin, liquid	1000007838	5
Caelo	Paraffin, liquid	15121804	1
Caelo	Paraffin, liquid	17360404	1
Caelo	Paraffin, liquid	18177007	9
Caelo	Paraffin, liquid	1817705	1
Caelo	Paraffin, liquid	19010302	13
Caelo	Paraffin, liquid	13390606	1
Caelo	Paraffin, liquid	14163804	5
Caelo	Paraffin, liquid	12109603	2
Caelo	Paraffin, liquid	13390604	1
Caelo	Paraffin, liquid	14059705	1
Caelo	Paraffin, liquid	17047610	1
Caelo	Paraffin, liquid	17321401-20180206Ma7	1
Caelo	Paraffin, liquid	12227609	3
Caelo	Paraffin, liquid	14163807	18
Caelo	Paraffin, liquid	17321509	17

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, liquid	1608204	1
Caelo	Paraffin, liquid	B18177008	1
Caelo	Paraffin, liquid	11H04-N02	1
Caelo	Paraffin, liquid	15106102	2
Caelo	Paraffin, liquid	18177001	24
Caelo	Paraffin, liquid	1205033-01	1
Caelo	Paraffin, liquid	16238808(1)	1
Caelo	Paraffin, liquid	16238808(2)	1
Caelo	Paraffin, liquid	16238808(3)	1
Caelo	Paraffin, liquid	16238808(4)	1
Caelo	Paraffin, liquid	13050102	20
Caelo	Paraffin, liquid	16149801,20161112Ma7	1
Caelo	Paraffin, liquid	18177004	18
Caelo	Paraffin, liquid	1811Q-02050	1
Caelo	Paraffin, liquid	15106104	10
Caelo	Paraffin, liquid	15299201	1
Caelo	Paraffin, liquid	14202509	5
Caelo	Paraffin, liquid	13390602	1
Caelo	Paraffin, liquid	12102101	9
Caelo	Paraffin, liquid	13131704	1
Caelo	Paraffin, liquid	14202509	6
Caelo	Paraffin, liquid	14357203	1
Caelo	Paraffin, liquid	1960017	1
Caelo	Paraffin, liquid	113544102	1
Caelo	Paraffin, liquid	1437205	1
Caelo	Paraffin, liquid	17062002	6
Caelo	Paraffin, liquid	1135412	1
Caelo	Paraffin, liquid	17321401	18
Caelo	Paraffin, liquid	17321503	23
Caelo	Paraffin, liquid	14141406	1
Caelo	Paraffin, liquid	14305904	5
Caelo	Paraffin, liquid	3613A-02050	1
Caelo	Paraffin, liquid	15429603	13
Caelo	Paraffin, liquid	1721503	1
Caelo	Paraffin, liquid	145(18000358)	1
Caelo	Paraffin, liquid	12H27-N01	10
Caelo	Paraffin, liquid	1304010-01	4
Caelo	Paraffin, liquid	214U-02050	1
Caelo	Paraffin, liquid	13248007	8
Caelo	Paraffin, liquid	13390601	7
Caelo	Paraffin, liquid	1309022-02	2
Caelo	Paraffin, liquid	14134601	1
Caelo	Paraffin, liquid	14357204	4
Caelo	Paraffin, liquid	16/080/P	1
Caelo	Paraffin, liquid	15234505	1
Caelo	Paraffin, liquid	1607039-01	1
Caelo	Paraffin, liquid	13321401	1
Caelo	Paraffin, liquid	17321506	32
Caelo	Paraffin, liquid	17321505	16
Caelo	Paraffin, liquid	1817004	1
Caelo	Paraffin, liquid	19010304	4
Caelo	Paraffin, liquid	1114U02050	1
Caelo	Paraffin, liquid	14357204	11
Caelo	Paraffin, liquid	150600501	3
Caelo	Paraffin, liquid	1322902	1
Caelo	Paraffin, liquid	1307007-01	1
Caelo	Paraffin, liquid	14357201	1
Caelo	Paraffin, liquid	15293209	1
Caelo	Paraffin, liquid	12324307	1
Caelo	Paraffin, liquid	16082908	10

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, liquid	16082905	16
Caelo	Paraffin, liquid	16149806	2
Caelo	Paraffin, liquid	16238803	15
Caelo	Paraffin, liquid	161001701	1
Caelo	Paraffin, liquid	16238809	1
Caelo	Paraffin, liquid	16171008	4
Caelo	Paraffin, liquid	16238812	1
Caelo	Paraffin, liquid	170105185	1
Caelo	Paraffin, liquid	18177005	25
Caelo	Paraffin, liquid	14202507	1
Caelo	Paraffin, liquid	16238806	43
Caelo	Paraffin, liquid	16238813	12
Caelo	Paraffin, liquid	17321507	1
Caelo	Paraffin, liquid	1435905	2
Caelo	Paraffin, liquid	14D24-B05-295022	6
Caelo	Paraffin, liquid	14357205	3
Caelo	Paraffin, liquid	14D24B05-295022	1
Caelo	Paraffin, liquid	16082907	16
Caelo	Paraffin, liquid	160820907	1
Caelo	Paraffin, liquid	CH: 201LEK: 5, 31	1
Caelo	Paraffin, liquid	16238815	5
Caelo	Paraffin, liquid	16238860	1
Caelo	Paraffin, liquid	18177002	8
Caelo	Paraffin, liquid	17360409	7
Caelo	Paraffin, liquid	15336703	11
Caelo	Paraffin, liquid	13131705	17
Caelo	Paraffin, liquid	12295601	1
Caelo	Paraffin, liquid	12324306	1
Caelo	Paraffin, liquid	13390602	18
Caelo	Paraffin, liquid	14044507	4
Caelo	Paraffin, liquid	13390604	1
Caelo	Paraffin, liquid	14141408	2
Caelo	Paraffin, liquid	180104101	1
Caelo	Paraffin, liquid	170476	1
Caelo	Paraffin, liquid	4112M-02048	1
Caelo	Paraffin, liquid	2213A-02050	1
Caesar & Loretz / All...	Paraffin, liquid	18048102	10
Caesar & Loretz GmbH	Paraffin, liquid	17360414	2
Calo	Paraffin, liquid	15429603	1
Cealo	Paraffin, liquid	1300805	1
Devesa/ Phönix	Paraffin, liquid	14D24-B05-295022	1
Eigenherstellung	Paraffin, liquid	130712HML01	1
Eigenherstellung	Paraffin, liquid	291012HJK01	1
Eigenherstellung	Paraffin, liquid	150413HML01	1
Eigenherstellung	Paraffin, liquid	Hergest.am13.05.13	1
Eigenherstellung	Paraffin, liquid	261113HML01	1
Eigenherstellung	Paraffin, liquid	150114HML01	1
Eigenherstellung	Paraffin, liquid	60614HJK01	1
Eigenherstellung	Paraffin, liquid	210714H01	1
Eigenherstellung	Paraffin, liquid	11214HAS01	1
Eigenherstellung	Paraffin, liquid	260115ML01	1
Eigenherstellung	Paraffin, liquid	100615HJK01	1
Eigenherstellung	Paraffin, liquid	240715HML01	1
EuRho	Paraffin, liquid	1207022-01	3
EuRho / Noweda	Paraffin, liquid	131102401	4
Euro OTC	Paraffin, liquid	1108033-01	1
Euro OTC	Paraffin, liquid	1412010-01	4
Euro OTC	Paraffin, liquid	1509011-01	1
Euro OTC	Paraffin, liquid	1404010-01	3
Euro OTC	Paraffin, liquid	1311024/01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Paraffin, liquid	1102009-01	1
Euro OTC	Paraffin, liquid	1203042-01	3
Euro OTC	Paraffin, liquid	1211026-01	7
Euro OTC	Paraffin, liquid	1211027-01	12
Euro OTC	Paraffin, liquid	1303031-01	11
Euro OTC	Paraffin, liquid	120802101	1
Euro OTC	Paraffin, liquid	130303101	1
Euro OTC	Paraffin, liquid	2911028-01	1
Euro OTC	Paraffin, liquid	22101402	1
Euro OTC	Paraffin, liquid	1404009-01	5
Euro OTC	Paraffin, liquid	140900701	1
Euro OTC	Paraffin, liquid	1412010-01	8
Euro OTC	Paraffin, liquid	1602026-01	19
Euro OTC	Paraffin, liquid	1511300-01	1
Euro OTC	Paraffin, liquid	1607039-01	11
Euro OTC	Paraffin, liquid	1704023-01	3
Euro OTC	Paraffin, liquid	1704023-0108598729	1
Euro OTC	Paraffin, liquid	1704023	1
Euro OTC	Paraffin, liquid	1802016-01	10
Euro OTC	Paraffin, liquid	142430	1
Euro OTC	Paraffin, liquid	143577	1
Euro OTC	Paraffin, liquid	18100201	1
Euro OTC	Paraffin, liquid	144484	1
Euro OTC	Paraffin, liquid	1311024-01	13
Euro OTC	Paraffin, liquid	170608P/1610017-01	1
Euro OTC	Paraffin, liquid	1810002_01	1
Euro OTC	Paraffin, liquid	144404	1
Euro OTC	Paraffin, liquid	1506021-01	1
Euro OTC	Paraffin, liquid	17133-01	1
Euro OTC	Paraffin, liquid	1707002-01	10
Euro OTC	Paraffin, liquid	139845	1
Euro OTC	Paraffin, liquid	1110014-01	4
Euro OTC	Paraffin, liquid	121102701	1
Euro OTC	Paraffin, liquid	1404009-01	10
Euro OTC	Paraffin, liquid	1501016-01	5
Euro OTC	Paraffin, liquid	1604009-01	1
Euro OTC	Paraffin, liquid	160703901	1
Euro OTC	Paraffin, liquid	1701052-01	6
Euro OTC	Paraffin, liquid	1801041-01	7
Euro OTC	Paraffin, liquid	1255801	1
Euro OTC	Paraffin, liquid	1511030-01	17
Euro OTC	Paraffin, liquid	130902201	1
Euro OTC	Paraffin, liquid	1608007-01	5
Euro OTC	Paraffin, liquid	1503046-01	10
Euro OTC	Paraffin, liquid	171002501	1
Euro OTC	Paraffin, liquid	140400901	1
Euro OTC	Paraffin, liquid	1511029-01	7
Euro OTC	Paraffin, liquid	1304010-01	3
Euro OTC	Paraffin, liquid	170900201	1
Euro OTC	Paraffin, liquid	1309022-01	2
Euro OTC	Paraffin, liquid	133888	1
Euro OTC	Paraffin, liquid	18110002-01	1
Euro OTC	Paraffin, liquid	1311024-01	1
Euro OTC	Paraffin, liquid	1706017-01	2
Euro OTC	Paraffin, liquid	1901011-01	4
Euro OTC	Paraffin, liquid	1307007-01	13
Euro Pharma	Paraffin, liquid	150101601	2
Euro/ Sanacorp	Paraffin, liquid	1409007-01	1
Euro/Gehe	Paraffin, liquid	1604045-01	7
Euro OTC	Paraffin, liquid	1407042-01	9

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Supplier	Substance	Batch	Spectra
Euro OTC	Paraffin, liquid	1106009-01	1
Euro OTC	Paraffin, liquid	16238802	23
Euro OTC	Paraffin, liquid	1606032-01	13
Euro OTC	Paraffin, liquid	1709002-01	4
Euro OTC	Paraffin, liquid	1701033-01	20
Euro OTC	Paraffin, liquid	1610017-01	14
Euro OTC	Paraffin, liquid	16020026-01	1
Euro OTC	Paraffin, liquid	17044023-01	1
Euro OTC	Paraffin, liquid	1810002-01	7
Euro OTC	Paraffin, liquid	1264597	1
Euro OTC	Paraffin, liquid	140401001	2
Fagron	Paraffin, liquid	14D24-B05	3
Fagron	Paraffin, liquid	1004C014	1
Fagron	Paraffin, liquid	11L19-N01	1
Fagron	Paraffin, liquid	12H27-N01	1
Fagron	Paraffin, liquid	13A30-N11	19
Fagron	Paraffin, liquid	11co8-no7	1
Fagron	Paraffin, liquid	13A3010	2
Fagron	Paraffin, liquid	959561	5
Fagron	Paraffin, liquid	13E28-N02	14
Fagron	Paraffin, liquid	13E28-N02	1
Fagron	Paraffin, liquid	13G24N12	1
Fagron	Paraffin, liquid	13H02-B02	1
Fagron	Paraffin, liquid	13L17-B01-289491	5
Fagron	Paraffin, liquid	13L17-B01-289493	2
Fagron	Paraffin, liquid	13L17-B01-289492	2
Fagron	Paraffin, liquid	11L19-N01	1
Fagron	Paraffin, liquid	14D24-B05-295014	3
Fagron	Paraffin, liquid	12-23-n03	1
Fagron	Paraffin, liquid	1005070	1
Fagron	Paraffin, liquid	13117-b01-289492	1
Fagron	Paraffin, liquid	13a30-n11	1
Fagron	Paraffin, liquid	110816-2	1
Fagron	Paraffin, liquid	16A27B01323777	1
Fagron	Paraffin, liquid	17J02-B01-345372	3
Fagron	Paraffin, liquid	18B19-B06	1
Fagron	Paraffin, liquid	18B19-B09	1
Fagron	Paraffin, liquid	18B19B09351592	1
Fagron	Paraffin, liquid	17D28-B01-353241	2
Fagron	Paraffin, liquid	29137	1
Fagron	Paraffin, liquid	13L17-B01-289491	2
Fagron	Paraffin, liquid	13L17-B01	3
Fagron	Paraffin, liquid	16E30-B05-327577	5
Fagron	Paraffin, liquid	1198738	1
Fagron	Paraffin, liquid	B05-295022	1
Fagron	Paraffin, liquid	13G24-N12	8
Fagron	Paraffin, liquid	16E30-B05-324041	2
Fagron	Paraffin, liquid	13C19-N09	3
Fagron	Paraffin, liquid	123586	4
Fagron	Paraffin, liquid	14d24-b05-295023	2
Fagron	Paraffin, liquid	14D24-B05	4
Fagron	Paraffin, liquid	941435	1
Fagron	Paraffin, liquid	1153092	1
Fagron	Paraffin, liquid	4413M2050	1
Fagron	Paraffin, liquid	13L-B01-289491	1
Fagron	Paraffin, liquid	15B16-B03-304611	7
Fagron	Paraffin, liquid	1806004-01	8
Fagron	Paraffin, liquid	14D24-B05-295023	1
Fagron	Paraffin, liquid	16E30B05327577	2
Fagron	Paraffin, liquid	18B19-B06-347311	1

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Supplier	Substance	Batch	Spectra
Fagron	Paraffin, liquid	18B19-B09-347311	1
Fagron	Paraffin, liquid	13117-B01-289492	1
Fagron	Paraffin, liquid	14357205	1
Fagron	Paraffin, liquid	1179735	1
Fagron	Paraffin, liquid	16K09-B06-332237	4
Fagron	Paraffin, liquid	13L17-B01-289493	2
fargon	Paraffin, liquid	196310	1
Fiebig	Paraffin, liquid	17010331	1
Fiebig	Paraffin, liquid	18177008	10
Fagron	Paraffin, liquid	196310-0004	1
fragon	Paraffin, liquid		2
Gatt-Koller	Paraffin, liquid	1802936	1
Gatt-Koller	Paraffin, liquid	1802836	1
Gatt-Koller	Paraffin, liquid	1900504	1
Gatt-Koller	Paraffin, liquid	1900893	1
Gehe	Paraffin, liquid	12227601	1
Gehe	Paraffin, liquid	13103309	16
Gehe	Paraffin, liquid	14305905	8
GEHE	Paraffin, liquid	1810001-01	2
Caelo	Paraffin, liquid	1313705	2
Gehe-Henry	Paraffin, liquid	1000002995	10
Hansen & Rosenthal KG...	Paraffin, liquid	14D24-B05-295023	7
Hansen & Rosenthal/No...	Paraffin, liquid	16A27-B01	2
Henry Lamotte	Paraffin, liquid	123393	3
Henry Lamotte	Paraffin, liquid	5863401	7
Henry Lamotte	Paraffin, liquid	8003083001	5
Henry Lamotte Gmbh, M...	Paraffin, liquid	79460	1
Henry Lamotte Oels GmbH	Paraffin, liquid	123393	4
Henry Lamotte oils GmbH	Paraffin, liquid	123743	28
Henry Lamotte Oils GmbH	Paraffin, liquid	5098101	1
Henry Lamotte Oils GmbH	Paraffin, liquid	5593601	17
Henry Lamotte Oils Gm...	Paraffin, liquid	13148606	1
Henry Lamotte Olis	Paraffin, liquid	2x5367601	1
Henry Lamotte Olis Gm...	Paraffin, liquid	5593601	20
Henry Lamotte/Sanacorp	Paraffin, liquid	1313703	1
Kehr	Paraffin, liquid	17062005	12
Euro OTC	Paraffin, liquid	261113PML01	1
Kögl	Paraffin, liquid	3862511164716	1
Kögl	Paraffin, liquid	26702170717	1
Kögl	Paraffin, liquid	88903171317	1
Kögl	Paraffin, liquid	175705172217	1
Kögl	Paraffin, liquid	1700810	1
Kögl	Paraffin, liquid	11701629	1
Kögl	Paraffin, liquid	1702112	2
Kögl	Paraffin, liquid	1800712	1
Kögl	Paraffin, liquid	1801030	1
Kögl	Paraffin, liquid	1801918	1
Kögl	Paraffin, liquid	1802726	2
Caelo	Paraffin, liquid	16282801	1
Caelo	Paraffin, liquid	1702007	1
Laborchemie Apolda/Je...	Paraffin, liquid	12345	1
Lamotte	Paraffin, liquid	123075	7
Merck	Paraffin, liquid	K15810032	1
Noweda	Paraffin, liquid	122875	5
Noweda	Paraffin, liquid	1208021-01	5
Noweda	Paraffin, liquid	1404009-09	1
Noweda/Bomnastus	Paraffin, liquid	303806	7
Caelo	Paraffin, liquid	17047603	8
Euro OTC	Paraffin, liquid	1407042-01	5
Euro OTC	Paraffin, liquid	1506005-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Paraffin, liquid	1404010-01	2
Euro OTC	Paraffin, liquid	1511030-01	1
Euro OTC	Paraffin, liquid	130401001	1
Ph.Eur.	Paraffin, liquid	6861849	2
Phoenix	Paraffin, liquid	12042202	17
Phoenix	Paraffin, liquid	16082906	14
Phoenix	Paraffin, liquid	17j02-B01-343565	1
Phoenix	Paraffin, liquid	18002494	3
Phoenix	Paraffin, liquid	16K09-B06-331721	2
Fagron	Paraffin, liquid	12J23-N03	4
Caelo	Paraffin, liquid	15106109	8
Phonix	Paraffin, liquid	18B19-B19-347311	1
PHÖNIX	Paraffin, liquid	17062008	14
Fagron	Paraffin, liquid	959561	1
Caelo	Paraffin, liquid	17062001/2051017	1
Fagron	Paraffin, liquid	13L17-B01-289492	3
Phönix/Henry	Paraffin, liquid	5367601	34
Sanacorp	Paraffin, liquid	12324307	22
Sanacorp	Paraffin, liquid	59/AKD4	1
Sanacorp	Paraffin, liquid	18000358	1
Caelo	Paraffin, liquid	13232901ok	1
Caelo	Paraffin, liquid	14305905	2
Caelo	Paraffin, liquid	15293201	1
Caelo	Paraffin, liquid	19010303	2
Caelo	Paraffin, liquid	57/AD1	1
Caelo	Paraffin, liquid	58/AKD55	1
Caelo	Paraffin, liquid	59/AKD2	1
Fagron	Paraffin, liquid	16A27-B01-323777	11
Spinnrad	Paraffin, liquid	13103308	1
Euro OTC	Paraffin, liquid	1506005-01	10
Euro OTC	Paraffin, liquid	125071	1
Caelo	Peanut oil, hydrated	10206801	2
Caelo	Peanut oil, hydrated	11266904	1
Caelo	Peanut oil, hydrated	11300302	1
Caelo	Peanut oil, hydrated	12298203	1
Caelo	Peanut oil, hydrated	12298204	2
Caelo	Peanut oil, hydrated	13172801	2
Caelo	Peanut oil, hydrated	12298206	4
Caelo	Peanut oil, hydrated	12298205	2
Caelo	Peanut oil, hydrated	13172803	4
Phönix Gotha	Peanut oil, hydrated	12230701	2
Maros	Peppermint leaf mothe...	RU2432	2
Caelo	Peppermint spirit 80.2%	11185901	1
Caelo	Peppermint spirit 80.2%	11339501	1
Caelo	Peppermint spirit 80.2%	11185902	1
Caelo	Peppermint spirit 80.2%	12327202	2
Caesar&Loretz GmbH/An...	Peppermint spirit 80.2%	13252802	1
Caelo	Peppermint tincture (...)	9089503	1
Caelo	Peppermint tincture (...)	10106507	1
Caelo	Peppermint tincture (...)	9089504	1
Caelo	Peppermint tincture (...)	24091206	1
Caelo	Peppermint tincture (...)	11207414	3
Caelo	Peppermint tincture (...)	12293409	1
Maros	Peppermint tincture (...)	RU2432	1
Caelo	Peru balsam, original	131966609	1
Caelo	Peru balsam, original	11150808	2
Caelo	Peru balsam, original	13196609	1
Caelo	Peru balsam, original	11025902	1
Caelo	Peru balsam, original	12020602	2
Caelo	Peru balsam, original	12302411	5

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Supplier	Substance	Batch	Spectra
Caelo	Peru balsam, original	12302413	1
Caelo	Peru balsam, original	13196606	1
Caelo	Peru balsam, original	13196606	1
Caelo	Peru balsam, original	Retest	1
Caelo	Peru balsam, original	13196609	1
Fagron	Peru balsam, original	9G03-N09	1
Fagron	Peru balsam, original	12K30-N02	2
Fagron	Peru balsam, original	12H29-N010432/549	1
Fagron	Peru balsam, original	12A20-N13	2
Fagron	Peru balsam, original	11G22-N06	2
Fagron	Peru balsam, original	3913E-01162	1
Fagron	Peru balsam, original	2215I-01162	1
Nachprüfung	Peru balsam, original	12020602	1
Phönix Gotha	Peru balsam, original	10C30-N07	1
s.Prüfprotokoll	Peru balsam, original	s.Prüfprotokoll	1
Caelo	Peru balsam, original	12020611	4
Audor Pharma	Phenoxyethanol	APDEG4324219P	12
Audor Pharma	Phenoxyethanol	APDEG4324219XP	1
Audor Pharma	Phenoxyethanol	APDEG432419P	1
Caelo	Plantain herb liquid ...	11332621	1
Caelo	Plantain herb liquid ...	13008706	1
Caelo	Plantain herb liquid ...	13008703	2
Caesar & Loretz	Plantain herb liquid ...	13008704	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332620	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332613	2
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332616	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332611	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	13008708	2
APOMIX / 11	Prednisolone 1% (non-...	3A160813	1
Caelo	Propolis liquid extra...	14377411	1
Caelo	Propolis liquid extra...	12086102	1
Caelo	Propolis liquid extra...	12086105	1
Caelo	Propolis liquid extra...	13347601	1
Caelo	Propolis liquid extra...	13347613	1
Caelo	Propolis liquid extra...	12086101	1
Caelo	Propolis liquid extra...	12086115	1
Caelo	Propolis liquid extra...	12086113	1
Caelo	Propolis liquid extra...	14377408	1
Caelo	Propolis tincture (96%)	11269516	1
Caelo	Propolis tincture (96%)	11269511	1
Caelo	Propolis tincture (96%)	12206322	1
Caelo	Propolis tincture (96%)	11269521	1
Caelo	Propolis tincture (96%)	10305414	1
Caesar/Lorenz	Propolis tincture (96%)	12206319	1
müller	Propolis tincture (96%)	131206	1
Bomba/AHD	Propolis tincture 20%	280337	2
Caelo	Ratanhia tincture (70...	11292802	4
Caelo	Ratanhia tincture (70...	12255401	5
Caelo	Ratanhia tincture (70...	12255403	2
Caelo	Ratanhia tincture (70...	14101305	1
Caelo	Ratanhia tincture (70...	13051205	1
Caelo	Ratanhia tincture (70...	13051206	3
Caelo	Ratanhia tincture (70...	CH: 008/0913	1
Caelo	Ratanhia tincture (70...	11204310	1
Caesar/Noweda	Ratanhia tincture (70...	13051210	1
Noweda	Ratanhia tincture (70...	12255406	1
Caelo	Rose water	12342405	1
Caelo	Rose water	12185405	3
Caelo	Rose water	12288903	7
Caelo	Rose water	12299801	2

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Supplier	Substance	Batch	Spectra
Caelo	Rose water	1021301	1
Caelo	Rose water	12288902	2
Caelo	Rose water	12342407	2
Caelo	Rose water	13137302	2
Caelo	Rose water	12299803	1
Caelo	Rose water	12342406	2
Caelo	Rose water	13137303	1
Caelo	Rose water	31101305	1
Caelo	Rose water	13306603	5
Caelo	Rose water	13306604	8
Caelo	Rose water	13137307	1
Caelo	Rose water	15253701	1
Caelo	Rose water	13137305	6
Caelo	Rose water	1234201	1
Caelo	Rose water	1317302	1
Caelo	Rose water	12342404	1
Caelo	Rose water	12342402	1
Caelo	Rose water	13343604	2
Caelo	Rose water	11355401	1
Caelo	Rose water	12123203	1
Caelo	Rose water	12299802	6
Caelo	Rose water	13255902	4
Fagron	Rose water	12H20-N09	3
Fagron	Rose water	13B01-N01	3
Fagron	Rose water	12H-20-N09	1
Fagron	Rose water	737724	1
Caelo	Rose water	12342401	2
Otto Fischar GmbH	Rose water	5354081	1
Caelo	Rose water	11286005	1
Caelo	Rosemary leaf tinctur...	9135008	1
Caelo	Rosemary leaf tinctur...	140613	1
Caelo	Rosemary leaf tinctur...	9135005	1
Caelo	Sage leaf liquid extr...	11372206	1
Caelo	Sage leaf liquid extr...	11372217	1
Caelo	Sage tincture (70%) 1...	9345011	1
Caelo	Sage tincture (70%) 1...	12196602	6
Caelo	Sage tincture (70%) 1...	4111M-02476	1
Caelo	Sage tincture (70%) 1...	1120910	1
Caelo	Sage tincture (70%) 1...	11220910	1
Caelo	Sage tincture (70%) 1...	11220909	1
Caelo	Sage tincture (70%) 1...	11220911	1
Caelo	Sage tincture (70%) 1...	12196607	2
Caelo	Sage tincture (70%) 1...	12196611	7
Caelo	Sage tincture (70%) 1...	1219661	1
Caelo	Sage tincture (70%) 1...	12196609	3
Caelo	Sage tincture (70%) 1...	13125503	3
Caelo	Sage tincture (70%) 1...	27111308	1
Caelo	Sage tincture (70%) 1...	13125504	1
Caelo	Sage tincture (70%) 1...	13125513	3
Caelo	Sage tincture (70%) 1...	13125509	1
Caelo	Sage tincture (70%) 1...	14078111	1
Caelo	Sage tincture (70%) 1...	15081804	1
Caelo	Sage tincture (70%) 1...	1120912	1
Caelo	Sage tincture (70%) 1...	13125505	1
Caelo	Sage tincture (70%) 1...	12196612	3
apomix	Searing paste SR	9B280613	2
Apomix	Searing paste SR	3B180213	1
Apomix	Searing paste SR	14B240913	3
Apomix	Searing paste SR	15B211013	1
Apomix / 20	Searing paste SR	12B150813	2

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Supplier	Substance	Batch	Spectra
Apomix/Noweda	Searing paste SR	11B010813	1
Apomix/Phönix	Searing paste SR	5B110413	1
Taoasis	Siam benzoin	541389-111081	1
Caelo	Siam benzoin tincture...	1228119	1
Phönix	Siam benzoin tincture...	12228107	1
Hedinger / Sanacorp	Sodium hypochlorite s...	46386	1
Hedinger/ Gehe	Sodium hypochlorite s...	46375	1
Hedinger/ Phönix	Sodium hypochlorite s...	46392	1
Caelo	Sodium lactate soluti...	131000701	1
Euro OTC	Sodium lactate soluti...	1310007-01	27
Euro OTC	Sodium lactate soluti...	1212004-01	2
Caelo	Spearmint water	13184503	1
Bombastus	St. John's wort oil	272178	1
Bombastus	St. John's wort oil	275674	1
Bombastus	St. John's wort oil	279926	1
Bombastus	St. John's wort oil	282275	1
Bombastus	St. John's wort oil	283368	1
Bombastus	St. John's wort oil	293138	1
Caelo	St. John's wort oil	2061205	1
Caelo	St. John's wort oil	10380614	1
Caelo	St. John's wort oil	11205309	5
Caelo	St. John's wort oil	2071201	1
Caelo	St. John's wort oil	11372104	4
Caelo	St. John's wort oil	28091204	1
Caelo	St. John's wort oil	1501302	1
Caelo	St. John's wort oil	12293911	8
Caelo	St. John's wort oil	12293902	1
Caelo	St. John's wort oil	12293903	1
Caelo	St. John's wort oil	13155804	8
Caelo	St. John's wort oil	13155802	3
Caelo	St. John's wort oil	12292904	1
Caelo	St. John's wort oil	5346791	1
Caelo	St. John's wort oil	13252506	1
Caelo	St. John's wort oil	14130405	1
Caelo	St. John's wort oil	13389218	1
Caelo	St. John's wort oil	15358606	1
Caelo	St. John's wort oil	15358605	1
Caelo	St. John's wort oil	16037003	1
Caelo	St. John's wort oil	12076913	7
Caelo	St. John's wort oil	12193404	1
Caelo	St. John's wort oil	11372102	2
Caelo	St. John's wort oil	13065106	3
Caelo	St. John's wort oil	12076912	2
Caelo	St. John's wort oil	12076904	1
Caelo	St. John's wort oil	13155803	1
Caelo	St. John's wort oil	12293919	2
Caelo	St. John's wort oil	12293918	4
Fagron	St. John's wort oil	12L17-N15	1
Fagron	St. John's wort oil	5346701	4
Fagron	St. John's wort oil	12A30-N09	1
Fagron	St. John's wort oil	13A30-N09	1
henry	St. John's wort oil	5803902	1
Henry Lamotte	St. John's wort oil	5442802	1
HenryLamotte/Sanacorp	St. John's wort oil	5308402-3457312120	1
Lamotte	St. John's wort oil	5171601	6
Lamotte	St. John's wort oil	5346702	11
Lamotte / Sanacorp	St. John's wort oil	517601	1
Lamotte Sanacorp	St. John's wort oil	5308402	5
Lamotte/Noweda	St. John's wort oil	4959702	5
Maros	St. John's wort oil	9758	1

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Supplier	Substance	Batch	Spectra
Maros	St. John's wort oil	97583x	1
Caelo	St. John's wort oil	13065104	5
Phönix	St. John's wort oil	12293904	4
Caelo	St. John's wort oil	12076905	2
primavera	St. John's wort oil	12106131	1
Primavera	St. John's wort oil	25508131	1
Purren Apotheke	St. John's wort oil	11205311	1
Sanacorp	St. John's wort oil	13252505	3
Caelo	St. John's wort oil	12293917	4
Caelo	St. John's wort oil	13065105	9
Taoasis	St. John's wort oil	145646-103095	1
Taoasis	St. John's wort oil	12312-109683	1
Taoasis	St. John's wort oil	123212-110835	1
Taoasis	St. John's wort oil	123212-111876	1
Taoasis GmbH	St. John's wort oil	150822-107470	1
Caelo	St. John's wort tinct...	11195213	1
Caelo	St. John's wort tinct...	11195217	1
Caelo	St. John's wort tinct...	122377006	1
Caelo	St. John's wort tinct...	11091303	1
Caelo	St. John's wort tinct...	12237708	1
Caelo	St. John's wort tinct...	12237706	1
Caelo	St. John's wort tinct...	11195216	2
Caelo	St. John's wort tinct...	12237709	1
Caelo	Standardised cayenne ...	12053902	2
Nachprüfung	Standardised cayenne ...	2413M-03232	1
Maros/direkt/07.05.13	Strophanthus seed mot...	4029013	1
Maros/direkt/15.01.14	Strophanthus seed mot...	1031014	3
Maros/direkt/21.10.13	Strophanthus seed mot...	10030413	2
Maros/direkt/28.02.14	Strophanthus seed mot...	2031214	4
Maros/Maros	Strophanthus seed mot...	6029813	2
Caelo	Texapon® CS paste	12292006	1
Caelo	Texapon® CS paste	12292007	1
Caelo	Texapon® CS paste	1577804	1
Caelo	Texapon® CS paste	15177804	2
Caelo	Texapon® CS paste	16268904	1
Caelo	Texapon® CS paste	16268903	1
Caelo	Texapon® CS paste	16268907	2
Caelo	Texapon® CS paste	16268909	2
Caelo	Theriac	1121206	1
Caelo	Theriac	11121203	1
Caelo	Theriac	12067207	2
Caelo	Theriac	13187201	3
Caelo	Theriac	12067201	2
Caelo	Theriac	12067214	1
Caelo	Theriac	12067205	1
Fiebig 23.10.12 ek:6,...	Theriac	12067202	1
Phönix	Theriac	12067210	1
Caelo	Thyme liquid extract	11090508	1
Caelo	Thyme liquid extract	13036502	2
Caelo	Thyme liquid extract	100312	1
Caelo	Thyme liquid extract	12072102	2
Caelo	Thyme liquid extract	13036516	1
Caelo	Thyme liquid extract	1313M-01420	1
Caesar & Loretz	Thyme liquid extract	12197005	2
Maros	Thyme liquid extract	1156	1
Noweda	Thyme liquid extract	10198605	1
Caelo	Thyme tincture (70%) ...	10043113	1
Caelo	Thyme tincture (70%) ...	21031311	1
Caelo	Thyme tincture (70%) ...	18101304	1
Caelo	Tormentil tincture (7...	13263004	1

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Supplier	Substance	Batch	Spectra
Caelo	Tormentil tincture (7...	13263007	1
Caelo	Tormentil tincture (7...	11061207	1
Caelo	Tormentil tincture (7...	3101212484	1
Caelo	Tormentil tincture (7...	1910212484	1
Caelo	Tormentil tincture (7...	4212E-02484	1
Caelo	Tormentil tincture (7...	12255204	1
Caelo	Tormentil tincture (7...	11278309	2
Caelo	Tormentil tincture (7...	2103312484	1
Caelo	Tormentil tincture (7...	13003018	3
Caelo	Tormentil tincture (7...	13263003	1
Caelo	Tormentil tincture (7...	13003003	1
Caelo	Tormentil tincture (7...	11278310	1
Caelo	Tormentil tincture (7...	13003010	2
Caelo	Tormentil tincture (7...	13003012	5
Caelo	Tormentil tincture (7...	13003009	3
Caelo	Tormentil tincture (7...	3713Q2484	1
Caelo	Tormentil tincture (7...	614M2484	1
Caelo	Tormentil tincture (7...	13003002	2
Caelo	Tormentil tincture (7...	13003008	1
Caelo	Tretinoin solution 3...	11K09-N-03	1
Fagron	Tretinoin solution 3...	12C08-N14	4
Fagron	Tretinoin solution 3...	19061306	1
Fagron	Tretinoin solution 3...	13C28-N01	10
Fagron	Tretinoin solution 3...	1308D002	1
Fagron	Tretinoin solution 3...	1501D004	1
Fagron	Tretinoin solution 3...	1108D001	1
Fagron	Tretinoin solution 3...	13C25-N01	1
Fagron	Tretinoin solution 3...	1204D004	1
Fagron	Tretinoin solution 3...	1308D00213/11-N04	1
Fagron	Tretinoin solution 3...	12G05-N15	6
Fagron	Tretinoin solution 3...	13/11-N04	2
Fagron	Tretinoin solution 3...	13I11-N04	6
Apomix / 11	Triamcinolone acetoni...	9C111212	1
Apomix / 11	Triamcinolone acetoni...	6A260813	2
Apomix / 11	Triamcinolone acetoni...	5A290713	2
Apomix / 11	Triamcinolone acetoni...	10A051213	1
Apomix / 20	Triamcinolone acetoni...	8A190913	1
Apomix / 30	Triamcinolone acetoni...	7A170913	2
APOMIX / 30	Triamcinolone acetoni...	3A110613	1
Apomix/ 11	Triamcinolone acetoni...	4A040713	1
Caelo	Triamcinolone acetoni...	12301201	2
Caelo	Triamcinolone acetoni...	1332501	1
Caelo	Triamcinolone acetoni...	13184701	6
Caelo	Triamcinolone acetoni...	13275801	4
Defektur	Triamcinolone acetoni...	3813Q	1
Defektur	Triamcinolone acetoni...	4213E	1
Defektur	Triamcinolone acetoni...	4713A	1
Defektur	Triamcinolone acetoni...	4913Q	1
Fagron	Triamcinolone acetoni...	214Q	1
Phönix	Triamcinolone acetoni...	13029801	2
Caelo	Valerian tincture (70...	16030101	1
Caelo	Valerian tincture (70...	11254309	1
Caelo	Valerian tincture (70...	11379201	3
Caelo	Valerian tincture (70...	12113002	1
Caelo	Valerian tincture (70...	12030902	2
Caelo	Valerian tincture (70...	6099.99.99	1
Caelo	Valerian tincture (70...	12113004	3
Caelo	Valerian tincture (70...	12196203	1
Caelo	Valerian tincture (70...	11011308	1
Caelo	Valerian tincture (70...	11379204	1

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Supplier	Substance	Batch	Spectra
Caelo	Valerian tincture (70...	12030904	1
Caelo	Valerian tincture (70...	12294002	3
Caelo	Valerian tincture (70...	12294008	2
Caelo	Valerian tincture (70...	13003206	6
Caelo	Valerian tincture (70...	13003205	1
Caelo	Valerian tincture (70...	13094503	2
Caelo	Valerian tincture (70...	13094506	2
Caelo	Valerian tincture (70...	13052601	1
Caelo	Valerian tincture (70...	18101302	1
Caelo	Valerian tincture (70...	8011423	1
Caelo	Valerian tincture (70...	14353011	1
Caelo	Valerian tincture (70...	13184905	4
Caelo	Valerian tincture (70...	11187103	1
Caelo	Valerian tincture (70...	12196204	4
Caelo	Valerian tincture (70...	12294007	4
Caelo	Valerian tincture (70...	1309505	1
Caelo	Valerian tincture (70...	12030908	1
Caelo	Valerian tincture (70...	12113005	1
Caelo	Valerian tincture (70...	13094507	5
Caelo	Valerian tincture (70...	13094505	7
Caelo	Valerian tincture (70...	13094505-3380319003	1
Caelo	Valerian tincture (70...	13349203	1
Cheplapharm Arzneimit...	Valerian tincture (70...	70713	1
EuRho	Valerian tincture (70...	1301003-01	1
Euro OTC	Valerian tincture (70...	1304041-01	1
Noweda	Valerian tincture (70...	F1300052	1
Noweda	Valerian tincture (70...	F1300146	1
Caelo	Valerian tincture (70...	11379203	1
Phönix Gotha	Valerian tincture (70...	11254302	1
Caelo	Valerian tincture (70...	12196210	2
Caelo	Vitamin A-palmitate (...)	10316605	1
Caelo	Vitamin A-palmitate (...)	1117801	1
Caelo	Vitamin A-palmitate (...)	12132902	2
Caelo	Vitamin A-palmitate (...)	11178109	1
Caelo	Vitamin A-palmitate (...)	12132904	2
Caelo	Vitamin A-palmitate (...)	12132906	1
Caelo	Vitamin A-palmitate (...)	1013Q-02565	1
Caelo	Vitamin A-palmitate (...)	12132910	2
Caelo	Vitamin A-palmitate (...)	13057002	4
Caelo	Vitamin A-palmitate (...)	3815926	1
Caelo	Vitamin A-palmitate (...)	130577002	1
Caelo	Vitamin A-palmitate (...)	13296208	1
Caelo	Vitamin A-palmitate (...)	11178101	1
Caelo	Vitamin A-palmitate (...)	12132906	1
Caelo	Vitamin A-palmitate (...)	12132910	4
Caelo	Vitamin A-palmitate (...)	120404301	1
Caelo	Vitamin A-palmitate (...)	13057003	1
Caelo	Vitamin A-palmitate (...)	13296206	1
Caesar & Loretz GmbH	Vitamin A-palmitate (...)	10316605	1
Euro OTC	Vitamin A-palmitate (...)	1204043-01	4
Euro OTC	Vitamin A-palmitate (...)	1310030-01	1
EUro/AHD	Vitamin A-palmitate (...)	1211032-01	3
Euro OTC	Vitamin A-palmitate (...)	1305003-01	3
Fagron	Vitamin A-palmitate (...)	UT12110078	1
Fagron	Vitamin A-palmitate (...)	12J16-N03	1
Fagron	Vitamin A-palmitate (...)	13F26-N08	5
Fagron	Vitamin A-palmitate (...)	13C19-N12	5
Gehe	Vitamin A-palmitate (...)	11178101	3
Gehe	Vitamin A-palmitate (...)	1110018-01	1
Gehe	Vitamin A-palmitate (...)	11178103	2

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Supplier	Substance	Batch	Spectra
GEHE	Vitamin A-palmitate (...)	12132902	4
gehe 28.11.2013	Vitamin A-palmitate (...)	13057007	2
Caelo	Vitamin A-palmitate (...)	13057002	1
Euro OTC	Vitamin A-palmitate (...)	1305003-01-342631115	1
Phönix	Vitamin A-palmitate (...)	12132904	3
Euro OTC	Vitamin A-palmitate (...)	1211032-01	3
Audor Pharma	Vitamin F liposomes	AP207152FL	1
Audor Pharma	Vitamin F liposomes	AP302038FL	1
Eigenherstellung	Vitamin F liposomes	AP307176FL	1
Caelo	Witch hazel bark liqu...	13044104	1
Caelo	Witch hazel bark liqu...	11165602	1
Caelo	Witch hazel bark liqu...	13044102	3
Caelo	Witch hazel bark liqu...	11165605	1
Caelo	Witch hazel bark liqu...	13044106	1
Caelo	Witch hazel bark water	12376901	3
Caelo	Witch hazel bark water	13324411	1
Caelo	Witch hazel bark water	11238904	1
Caelo	Witch hazel bark water	11238906	3
Caelo	Witch hazel bark water	12196906	4
Caelo	Witch hazel bark water	12196905	3
Caelo	Witch hazel bark water	11238910	1
Caelo	Witch hazel bark water	1219608	1
Caelo	Witch hazel bark water	12196908	3
Caelo	Witch hazel bark water	12376907	9
Caelo	Witch hazel bark water	12376906	2
Caelo	Witch hazel bark water	12376905	2
Caelo	Witch hazel bark water	12376912	2
Caelo	Witch hazel bark water	12376918	3
Caelo	Witch hazel bark water	13324403	7
Caelo	Witch hazel bark water	12376912Caelo	1
Caelo	Witch hazel bark water	14093305	2
Caelo	Witch hazel bark water	14093309	2
Caelo	Witch hazel bark water	15430206	1
Caelo	Witch hazel bark water	13324401	1
Caelo	Witch hazel bark water	12376909	3
Caelo	Witch hazel bark water	12359605	1
Fiebig ek:5.69EUR 10.08...	Witch hazel bark water	11238911	2
Hedinger	Witch hazel bark water	20153B	2
Spinnrad/Phoenix	Witch hazel bark water	413310062	1
Caelo	Witch hazel leaf liqu...	27081302	1
Caelo	Witch hazel leaf liqu...	11060505	1
Caelo	Witch hazel leaf liqu...	12165010	1
Caelo	Witch hazel leaf liqu...	31031404	1
Caelo	Witch hazel leaf liqu...	16071401	1
Caelo	Witch hazel leaf liqu...	14112302	1
Caelo	Witch hazel leaf liqu...	15397406	1
Noweda	Witch hazel leaf liqu...	12095405	1
Sanacorp	Witch hazel leaf liqu...	13112003	1
12370401	Wool alcohol cream DA...	12370401	11
18023501	Wool alcohol cream DA...	18023501	16
A.H. 25.06.13 ek: 9,75EUR	Wool alcohol cream DA...	13145501	6
Aallianc. Healthc. / ...	Wool alcohol cream DA...	35A260516	1
Caelo	Wool alcohol cream DA...	18005985	1
AHD	Wool alcohol cream DA...	14356301	1
AHD	Wool alcohol cream DA...	18262301	12
AHD / Leyh	Wool alcohol cream DA...	153711	1
Bombastus	Wool alcohol cream DA...	3020333	1
Caelo	Wool alcohol cream DA...	16344202	3
Bombastus	Wool alcohol cream DA...	288355	2
All. Healthc. /Apomix	Wool alcohol cream DA...	33A150415	1

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Supplier	Substance	Batch	Spectra
All..Healthc./Apomix	Wool alcohol cream DA...	41A020513	2
Euro OTC	Wool alcohol cream DA...	39A150514	4
Allianc. Health. / Ap...	Wool alcohol cream DA...	46A011116	3
Allianc. Health. / Ap...	Wool alcohol cream DA...	5A220217	3
Allianc. Health. / Apo...	Wool alcohol cream DA...	49A031116	3
Alliance Health 06.03...	Wool alcohol cream DA...	14362102	5
Alliance Health 07.01...	Wool alcohol cream DA...	13369701	5
Alliance Healthcare	Wool alcohol cream DA...	275909	1
Alliance Healthcare/A...	Wool alcohol cream DA...	69A080814	1
Caelo	Wool alcohol cream DA...	13172103	11
Anzag	Wool alcohol cream DA...	11226402	1
Anzag	Wool alcohol cream DA...	12122201	1
Anzag	Wool alcohol cream DA...	13145801	11
Anzag	Wool alcohol cream DA...	282749	2
Caelo	Wool alcohol cream DA...	12308001	7
apomix	Wool alcohol cream DA...	22A200213	1
apomix	Wool alcohol cream DA...	27A180315	1
apomix	Wool alcohol cream DA...	58A100615	1
apomix	Wool alcohol cream DA...	96A111115	3
apomix	Wool alcohol cream DA...	20A010316	2
apomix	Wool alcohol cream DA...	3A270116	1
apomix	Wool alcohol cream DA...	40A080816	5
apomix	Wool alcohol cream DA...	14A280617	1
apomix	Wool alcohol cream DA...	14A130618	3
apomix	Wool alcohol cream DA...	27A211118	2
apomix	Wool alcohol cream DA...	2A120219	3
Apomix	Wool alcohol cream DA...	20A070212	1
Apomix	Wool alcohol cream DA...	21A070212	1
Apomix	Wool alcohol cream DA...	32A070312	1
Apomix	Wool alcohol cream DA...	33A070312	1
Apomix	Wool alcohol cream DA...	51A070512	1
Apomix	Wool alcohol cream DA...	69A100712	1
Apomix	Wool alcohol cream DA...	62A200612	1
Apomix	Wool alcohol cream DA...	96A161012	1
Apomix	Wool alcohol cream DA...	104A291012	1
Apomix	Wool alcohol cream DA...	103A291012	4
Apomix	Wool alcohol cream DA...	101A291012	1
Apomix	Wool alcohol cream DA...	3A160113	2
Apomix	Wool alcohol cream DA...	90A021012	1
Apomix	Wool alcohol cream DA...	98A241012	1
Apomix	Wool alcohol cream DA...	20A120213	1
Apomix	Wool alcohol cream DA...	109A191112	1
Apomix	Wool alcohol cream DA...	39A180413	3
Apomix	Wool alcohol cream DA...	56A300713	1
Apomix	Wool alcohol cream DA...	19A120213	1
Apomix	Wool alcohol cream DA...	33A080413	1
Apomix	Wool alcohol cream DA...	72A270913	1
Apomix	Wool alcohol cream DA...	56A270613	1
Apomix	Wool alcohol cream DA...	101A191213	2
Apomix	Wool alcohol cream DA...	1A020114	1
Apomix	Wool alcohol cream DA...	41A150514	1
Apomix	Wool alcohol cream DA...	41A150515	1
Apomix	Wool alcohol cream DA...	61A080714	2
Apomix	Wool alcohol cream DA...	83A290914	2
Apomix	Wool alcohol cream DA...	96A181114	4
Apomix	Wool alcohol cream DA...	92A281014	1
Apomix	Wool alcohol cream DA...	100A021214	1
Apomix	Wool alcohol cream DA...	108A301214	1
Apomix	Wool alcohol cream DA...	13A050215	1
Apomix	Wool alcohol cream DA...	64A250715	1

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Supplier	Substance	Batch	Spectra
Apomix	Wool alcohol cream DA...	74A130815	2
Apomix	Wool alcohol cream DA...	92A111115	1
Apomix	Wool alcohol cream DA...	32A120416	3
Apomix	Wool alcohol cream DA...	5A280116	1
Apomix	Wool alcohol cream DA...	37A040716	1
Apomix	Wool alcohol cream DA...	19A010316	1
Apomix	Wool alcohol cream DA...	50A011216	4
Apomix	Wool alcohol cream DA...	6A230217	1
Apomix	Wool alcohol cream DA...	15A280617	4
Apomix	Wool alcohol cream DA...	18A070817	7
Apomix	Wool alcohol cream DA...	25A231117	3
Apomix	Wool alcohol cream DA...	3A110118	2
Apomix	Wool alcohol cream DA...	11A050418	6
Apomix	Wool alcohol cream DA...	12A070518	5
Apomix	Wool alcohol cream DA...	20A240718	5
Apomix	Wool alcohol cream DA...	22A200818	2
Apomix	Wool alcohol cream DA...	24A091018	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	88A231013	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	57A300614	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	6A220115	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	72-A190814	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	41A230415	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	46A27515	1
apomix PKH GmbH Halle	Wool alcohol cream DA...	69A120815	1
apomix / Alliance	Wool alcohol cream DA...	100A191213	1
Apomix / Alliance Hea...	Wool alcohol cream DA...	22A300817	2
apomix / Anzag	Wool alcohol cream DA...	64A300714	1
apomix / Anzag	Wool alcohol cream DA...	4A220115	1
apomix / Anzag	Wool alcohol cream DA...	42A290816	1
Apomix / Anzag	Wool alcohol cream DA...	81A100915	1
Apomix / Phönix	Wool alcohol cream DA...	21A280214	2
Apomix / Phönix	Wool alcohol cream DA...	33A010414	1
Apomix / Phönix	Wool alcohol cream DA...	48A110614	2
Apomix / Phönix	Wool alcohol cream DA...	85A300914	2
Apomix /Alliance	Wool alcohol cream DA...	13A180214	1
Apomix /Noweda	Wool alcohol cream DA...	25a170316	1
Apomix /Noweda	Wool alcohol cream DA...	6a230217	1
apomix 004	Wool alcohol cream DA...	65A060715	1
apomix AHD	Wool alcohol cream DA...	15A160216	3
apomix AMH Niemann Gm...	Wool alcohol cream DA...	36A250516	2
apomix AMH Niemann Gm...	Wool alcohol cream DA...	39A050716	4
apomix AMH Niemann Gm...	Wool alcohol cream DA...	48A021116	3
apomix AMH Niemann Gm...	Wool alcohol cream DA...	45A041016	2
apomix AMH Niemann Gm...	Wool alcohol cream DA...	4A020217	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	8A060317	2
apomix AMH Niemann Gm...	Wool alcohol cream DA...	9A260417	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	24A221117	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	4A110118	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	7A130218	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	10A040418	7
apomix AMH Niemann Gm...	Wool alcohol cream DA...	15A130618	4
apomix AMH Niemann Gm...	Wool alcohol cream DA...	13A070518	4
apomix AMH Niemann Gm...	Wool alcohol cream DA...	18A230718	3
apomix AMH Niemann Gm...	Wool alcohol cream DA...	23A200818	1
apomix AMH Niemann Gm...	Wool alcohol cream DA...	28A191218	2
apomix AMH Niemann Gm...	Wool alcohol cream DA...	3A130219	4
apomix AMH Niemann Gm...	Wool alcohol cream DA...	6A210519	4
Apomix Anzag	Wool alcohol cream DA...	69A080814	1
Apomix Anzag	Wool alcohol cream DA...	9A050215	1
Apomix Anzag	Wool alcohol cream DA...	41A150514	1

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Supplier	Substance	Batch	Spectra
Apomix Anzag	Wool alcohol cream DA...	13A010617	5
Apomix/ Gehe	Wool alcohol cream DA...	13A150216	2
Apomix/ Phönix 26.02.19	Wool alcohol cream DA...	1A160119	3
apomix/AHD	Wool alcohol cream DA...	102A091215	1
Apomix/AHD	Wool alcohol cream DA...	16A130618	2
Apomix/Alliance Healt...	Wool alcohol cream DA...	66A060715	1
apomix/Anzag	Wool alcohol cream DA...	89A041113	1
apomix/ANZAG/04.07.2013	Wool alcohol cream DA...	4546233	1
apomix/Gehe	Wool alcohol cream DA...	104A111214	1
Apomix/Gehe	Wool alcohol cream DA...	50A110614	1
Apomix/Gehe	Wool alcohol cream DA...	15A230215	1
Apomix/Gehe	Wool alcohol cream DA...	37A220415	2
Apomix/Gehe	Wool alcohol cream DA...	87A061015	1
Apomix/Gehe	Wool alcohol cream DA...	104A091215	1
Apomix/Gehe	Wool alcohol cream DA...	10A270417	1
Apomix/Gehe	Wool alcohol cream DA...	16A290617	1
Apomix/Gehe	Wool alcohol cream DA...	16A070817	2
Apomix/GEHE	Wool alcohol cream DA...	6A120218	2
apomix/GEHE/04.04.2013	Wool alcohol cream DA...	108A191112	1
apomix/GEHE23.04.14	Wool alcohol cream DA...	5A200114	1
apomix/Holdermann	Wool alcohol cream DA...	78A160913	1
apomix/Holdermann	Wool alcohol cream DA...	93A111115	1
apomix/Holdermann	Wool alcohol cream DA...	34A250516	4
apomix/Holdermann	Wool alcohol cream DA...	11A270417	1
apomix/Noweda	Wool alcohol cream DA...	90A221014	1
apomix/Noweda	Wool alcohol cream DA...	75A130815	1
apomix/Noweda	Wool alcohol cream DA...	31A110416	1
apomix/Noweda	Wool alcohol cream DA...	42a290816	1
Apomix/Noweda	Wool alcohol cream DA...	81A260913	1
Apomix/Noweda	Wool alcohol cream DA...	20A270214	1
Apomix/Noweda	Wool alcohol cream DA...	12A040214	1
Apomix/Noweda	Wool alcohol cream DA...	81A290914	1
Apomix/Noweda	Wool alcohol cream DA...	105A301214	1
Apomix/Noweda	Wool alcohol cream DA...	17A230215	1
Apomix/Noweda	Wool alcohol cream DA...	62A250615	1
Apomix/Noweda	Wool alcohol cream DA...	77A260815	1
Apomix/Noweda	Wool alcohol cream DA...	301311	2
Apomix/Noweda	Wool alcohol cream DA...	38A050716	1
Apomix/Noweda	Wool alcohol cream DA...	44A041016	1
Apomix/Noweda	Wool alcohol cream DA...	2A120117	5
Apomix/Noweda	Wool alcohol cream DA...	3A1101118	1
apomix/Phönix	Wool alcohol cream DA...	43A200515	1
Apomix/Phönix	Wool alcohol cream DA...	47A040613	3
Apomix/Phönix	Wool alcohol cream DA...	5A220115	1
Apomix/Sana	Wool alcohol cream DA...	14A180215	4
Apomix/Sana	Wool alcohol cream DA...	89A291015	3
Apomix/Sana	Wool alcohol cream DA...	90A291015	1
Apotheke zum Zirkel	Wool alcohol cream DA...	519E-01371	3
Beiersdorf/Alliance	Wool alcohol cream DA...	51630108WA	1
Spangropharm	Wool alcohol cream DA...	83730208WA	1
bomastus-Werke AG	Wool alcohol cream DA...	18006642	3
Bombastus	Wool alcohol cream DA...	291432	1
Bombastus	Wool alcohol cream DA...	288354	2
Bombastus	Wool alcohol cream DA...	291479	1
Bombastus	Wool alcohol cream DA...	291477	1
Bombastus	Wool alcohol cream DA...	291478	1
Bombastus	Wool alcohol cream DA...	296133	3
Bombastus	Wool alcohol cream DA...	311459	3
Bombastus	Wool alcohol cream DA...	267043	1
Bombastus	Wool alcohol cream DA...	267046	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	269832	1
Bombastus	Wool alcohol cream DA...	270038	1
Bombastus	Wool alcohol cream DA...	270033	1
Bombastus	Wool alcohol cream DA...	270033	1
Bombastus	Wool alcohol cream DA...	273631	2
Bombastus	Wool alcohol cream DA...	271811	1
Bombastus	Wool alcohol cream DA...	270721	1
Bombastus	Wool alcohol cream DA...	272263	1
Bombastus	Wool alcohol cream DA...	275987	1
Bombastus	Wool alcohol cream DA...	274628	1
Bombastus	Wool alcohol cream DA...	274348	1
Bombastus	Wool alcohol cream DA...	274630	1
Bombastus	Wool alcohol cream DA...	274349	1
Bombastus	Wool alcohol cream DA...	274347	1
Bombastus	Wool alcohol cream DA...	276219	2
Bombastus	Wool alcohol cream DA...	275917	2
Bombastus	Wool alcohol cream DA...	275911	1
Bombastus	Wool alcohol cream DA...	274634	1
Bombastus	Wool alcohol cream DA...	275990	1
Bombastus	Wool alcohol cream DA...	276214	1
Bombastus	Wool alcohol cream DA...	275918	1
Bombastus	Wool alcohol cream DA...	277096	1
Bombastus	Wool alcohol cream DA...	278742	1
Bombastus	Wool alcohol cream DA...	277206	1
Bombastus	Wool alcohol cream DA...	278745	2
Bombastus	Wool alcohol cream DA...	277855	2
Bombastus	Wool alcohol cream DA...	277771	1
Bombastus	Wool alcohol cream DA...	276212	1
Bombastus	Wool alcohol cream DA...	277097	1
Bombastus	Wool alcohol cream DA...	27771	1
Bombastus	Wool alcohol cream DA...	277204	1
Bombastus	Wool alcohol cream DA...	278827	1
Bombastus	Wool alcohol cream DA...	278831	2
Bombastus	Wool alcohol cream DA...	277208	1
Bombastus	Wool alcohol cream DA...	278744	2
Bombastus	Wool alcohol cream DA...	279875	2
Bombastus	Wool alcohol cream DA...	280390	2
Bombastus	Wool alcohol cream DA...	282239	2
Bombastus	Wool alcohol cream DA...	280386	1
Bombastus	Wool alcohol cream DA...	282685	1
Bombastus	Wool alcohol cream DA...	282684	1
Bombastus	Wool alcohol cream DA...	282750	1
Bombastus	Wool alcohol cream DA...	282246	1
Bombastus	Wool alcohol cream DA...	284447	1
Bombastus	Wool alcohol cream DA...	283575	2
Bombastus	Wool alcohol cream DA...	282748	2
Bombastus	Wool alcohol cream DA...	284577	1
Bombastus	Wool alcohol cream DA...	284951	4
Bombastus	Wool alcohol cream DA...	284582	1
Bombastus	Wool alcohol cream DA...	285872	1
Bombastus	Wool alcohol cream DA...	285874	2
Bombastus	Wool alcohol cream DA...	287093	4
Bombastus	Wool alcohol cream DA...	285875	1
Bombastus	Wool alcohol cream DA...	286235	1
Bombastus	Wool alcohol cream DA...	287087	2
Bombastus	Wool alcohol cream DA...	2846336	1
Bombastus	Wool alcohol cream DA...	288446	5
Bombastus	Wool alcohol cream DA...	287176	1
Bombastus	Wool alcohol cream DA...	289384	1
Bombastus	Wool alcohol cream DA...	288443	2

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	289623	3
Bombastus	Wool alcohol cream DA...	289622	1
Bombastus	Wool alcohol cream DA...	289622	1
Bombastus	Wool alcohol cream DA...	291272	1
Bombastus	Wool alcohol cream DA...	291265	1
Bombastus	Wool alcohol cream DA...	291479	1
Bombastus	Wool alcohol cream DA...	291350	1
Bombastus	Wool alcohol cream DA...	291476	4
Bombastus	Wool alcohol cream DA...	291352	2
Bombastus	Wool alcohol cream DA...	291264	1
Bombastus	Wool alcohol cream DA...	291349	1
Bombastus	Wool alcohol cream DA...	285872	1
Bombastus	Wool alcohol cream DA...	289391	1
Bombastus	Wool alcohol cream DA...	293067	1
Bombastus	Wool alcohol cream DA...	294270	4
Bombastus	Wool alcohol cream DA...	293064	1
Bombastus	Wool alcohol cream DA...	293066	1
Bombastus	Wool alcohol cream DA...	289491	1
Bombastus	Wool alcohol cream DA...	294333	2
Bombastus	Wool alcohol cream DA...	296127	2
Bombastus	Wool alcohol cream DA...	296134	2
Bombastus	Wool alcohol cream DA...	296131	3
Bombastus	Wool alcohol cream DA...	296130	1
Bombastus	Wool alcohol cream DA...	296132	2
Bombastus	Wool alcohol cream DA...	297413	4
Bombastus	Wool alcohol cream DA...	297527	3
Bombastus	Wool alcohol cream DA...	288260	1
Bombastus	Wool alcohol cream DA...	297412	1
Bombastus	Wool alcohol cream DA...	295464	1
Bombastus	Wool alcohol cream DA...	298813	1
Bombastus	Wool alcohol cream DA...	295465	1
Bombastus	Wool alcohol cream DA...	297411	1
Bombastus	Wool alcohol cream DA...	299784	4
Bombastus	Wool alcohol cream DA...	298812	2
Bombastus	Wool alcohol cream DA...	299783	2
Bombastus	Wool alcohol cream DA...	299226	2
Bombastus	Wool alcohol cream DA...	299786	2
Bombastus	Wool alcohol cream DA...	297523	1
Bombastus	Wool alcohol cream DA...	300835	2
Bombastus	Wool alcohol cream DA...	301312	4
Bombastus	Wool alcohol cream DA...	298672	1
Bombastus	Wool alcohol cream DA...	299229	1
Bombastus	Wool alcohol cream DA...	300836	1
Bombastus	Wool alcohol cream DA...	302030	4
Bombastus	Wool alcohol cream DA...	299785	2
Bombastus	Wool alcohol cream DA...	301309	4
Bombastus	Wool alcohol cream DA...	300576	1
Bombastus	Wool alcohol cream DA...	300834	1
Bombastus	Wool alcohol cream DA...	301883	4
Bombastus	Wool alcohol cream DA...	303010	1
Bombastus	Wool alcohol cream DA...	299235	1
Bombastus	Wool alcohol cream DA...	301890	3
Bombastus	Wool alcohol cream DA...	295532	1
Bombastus	Wool alcohol cream DA...	302029	5
Bombastus	Wool alcohol cream DA...	301880	1
Bombastus	Wool alcohol cream DA...	303528	3
Bombastus	Wool alcohol cream DA...	301887	5
Bombastus	Wool alcohol cream DA...	301888	1
Bombastus	Wool alcohol cream DA...	3029972	1
Bombastus	Wool alcohol cream DA...	30297	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	301306	1
Bombastus	Wool alcohol cream DA...	303525	2
Bombastus	Wool alcohol cream DA...	6862317	1
Bombastus	Wool alcohol cream DA...	302967	2
Bombastus	Wool alcohol cream DA...	304432	5
Bombastus	Wool alcohol cream DA...	303526	1
Bombastus	Wool alcohol cream DA...	303527	1
Bombastus	Wool alcohol cream DA...	306211	5
Bombastus	Wool alcohol cream DA...	304433	2
Bombastus	Wool alcohol cream DA...	306082	2
Bombastus	Wool alcohol cream DA...	304431	5
Bombastus	Wool alcohol cream DA...	60089704	1
Bombastus	Wool alcohol cream DA...	306090	8
Bombastus	Wool alcohol cream DA...	306214	3
Bombastus	Wool alcohol cream DA...	306088	3
Bombastus	Wool alcohol cream DA...	306213	1
Bombastus	Wool alcohol cream DA...	306087	1
Bombastus	Wool alcohol cream DA...	307613	3
Bombastus	Wool alcohol cream DA...	3068180	2
Bombastus	Wool alcohol cream DA...	307282	3
Bombastus	Wool alcohol cream DA...	306816	5
Bombastus	Wool alcohol cream DA...	307286	2
Bombastus	Wool alcohol cream DA...	307621	5
Bombastus	Wool alcohol cream DA...	308303	4
Bombastus	Wool alcohol cream DA...	307623	4
Bombastus	Wool alcohol cream DA...	307622	4
Bombastus	Wool alcohol cream DA...	307284	6
Bombastus	Wool alcohol cream DA...	308304	1
Bombastus	Wool alcohol cream DA...	308306	7
Bombastus	Wool alcohol cream DA...	60080303	1
Bombastus	Wool alcohol cream DA...	308316	3
Bombastus	Wool alcohol cream DA...	310579	1
Bombastus	Wool alcohol cream DA...	308313	3
Bombastus	Wool alcohol cream DA...	308683	3
Bombastus	Wool alcohol cream DA...	310582	5
Bombastus	Wool alcohol cream DA...	308685	2
Bombastus	Wool alcohol cream DA...	308309	3
Bombastus	Wool alcohol cream DA...	310583	1
Bombastus	Wool alcohol cream DA...	310585	1
Bombastus	Wool alcohol cream DA...	308315	2
Bombastus	Wool alcohol cream DA...	308312	5
Bombastus	Wool alcohol cream DA...	311449	3
Bombastus	Wool alcohol cream DA...	308311	2
Bombastus	Wool alcohol cream DA...	307281	2
Bombastus	Wool alcohol cream DA...	309640	4
Bombastus	Wool alcohol cream DA...	310584	4
Bombastus	Wool alcohol cream DA...	311529	7
Bombastus	Wool alcohol cream DA...	311456	1
Bombastus	Wool alcohol cream DA...	311451	4
Bombastus	Wool alcohol cream DA...	309641	1
Bombastus	Wool alcohol cream DA...	311523	3
Bombastus	Wool alcohol cream DA...	17002210	10
Bombastus	Wool alcohol cream DA...	311527	2
Bombastus	Wool alcohol cream DA...	311457	2
Bombastus	Wool alcohol cream DA...	17002209	1
Bombastus	Wool alcohol cream DA...	18000764	4
Bombastus	Wool alcohol cream DA...	17002205	1
Bombastus	Wool alcohol cream DA...	18001373	2
Bombastus	Wool alcohol cream DA...	18002542	4
Bombastus	Wool alcohol cream DA...	17002204	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	18001378	3
Bombastus	Wool alcohol cream DA...	230718A	1
Bombastus	Wool alcohol cream DA...	250718A	1
Bombastus	Wool alcohol cream DA...	18002412	1
Bombastus	Wool alcohol cream DA...	18004058	5
Bombastus	Wool alcohol cream DA...	18002408	2
Bombastus	Wool alcohol cream DA...	18004015	2
Bombastus	Wool alcohol cream DA...	18004062	3
Bombastus	Wool alcohol cream DA...	18003999	1
Bombastus	Wool alcohol cream DA...	18002551	2
Bombastus	Wool alcohol cream DA...	18001376	1
Bombastus	Wool alcohol cream DA...	18006845	2
Bombastus	Wool alcohol cream DA...	19000026	3
Bombastus	Wool alcohol cream DA...	19000022	2
Bombastus	Wool alcohol cream DA...	19000021	1
Bombastus	Wool alcohol cream DA...	289390	1
Bombastus	Wool alcohol cream DA...	270723	1
Bombastus	Wool alcohol cream DA...	272127	2
Bombastus	Wool alcohol cream DA...	267154	2
Bombastus	Wool alcohol cream DA...	292695	2
Bombastus	Wool alcohol cream DA...	299227	1
Bombastus	Wool alcohol cream DA...	278828	2
Bombastus	Wool alcohol cream DA...	282242	3
Bombastus	Wool alcohol cream DA...	284580	1
Bombastus	Wool alcohol cream DA...	287179	2
Bombastus	Wool alcohol cream DA...	288442	3
Bombastus	Wool alcohol cream DA...	291348	2
Bombastus	Wool alcohol cream DA...	295460	2
Bombastus	Wool alcohol cream DA...	297528	3
Bombastus	Wool alcohol cream DA...	285867	1
Bombastus	Wool alcohol cream DA...	284450	1
Bombastus	Wool alcohol cream DA...	295462	3
Bombastus	Wool alcohol cream DA...	304429	3
Bombastus	Wool alcohol cream DA...	308302	3
Bombastus	Wool alcohol cream DA...	307285	1
Bombastus	Wool alcohol cream DA...	18001377	4
Bombastus	Wool alcohol cream DA...	294273	1
Bombastus	Wool alcohol cream DA...	299780	1
Bombastus	Wool alcohol cream DA...	18004719	3
Bombastus	Wool alcohol cream DA...	19001832	3
Bombastus	Wool alcohol cream DA...	311452	4
Bombastus	Wool alcohol cream DA...	311453	1
Bombastus	Wool alcohol cream DA...	18002546	3
Bombastus	Wool alcohol cream DA...	18002545	3
Bombastus	Wool alcohol cream DA...	311524	6
Bombastus	Wool alcohol cream DA...	308310	7
Bombastus	Wool alcohol cream DA...	18004002	5
Bombastus	Wool alcohol cream DA...	289393	1
Bombastus	Wool alcohol cream DA...	310578	3
Bombastus	Wool alcohol cream DA...	18001379	1
Bombastus	Wool alcohol cream DA...	18004055	3
Bombastus	Wool alcohol cream DA...	289395	1
Bombastus	Wool alcohol cream DA...	305256	1
Bombastus	Wool alcohol cream DA...	306212	2
Bombastus	Wool alcohol cream DA...	295528	1
Bombastus	Wool alcohol cream DA...	295534	1
Bombastus	Wool alcohol cream DA...	298815	2
Bombastus	Wool alcohol cream DA...	300833	3
Bombastus	Wool alcohol cream DA...	18000762	2
Bombastus	Wool alcohol cream DA...	279020	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	281506	1
Bombastus	Wool alcohol cream DA...	288261	1
Bombastus	Wool alcohol cream DA...	294527	2
Bombastus	Wool alcohol cream DA...	298679	5
Bombastus	Wool alcohol cream DA...	299234	8
Bombastus	Wool alcohol cream DA...	304435	11
Bombastus	Wool alcohol cream DA...	305255	4
Bombastus	Wool alcohol cream DA...	294272	3
Bombastus	Wool alcohol cream DA...	18000768	2
Bombastus	Wool alcohol cream DA...	294330	2
Bombastus	Wool alcohol cream DA...	18002543	4
Bombastus	Wool alcohol cream DA...	310573	1
Bombastus	Wool alcohol cream DA...	18002540	1
Bombastus	Wool alcohol cream DA...	18006641	1
Bombastus	Wool alcohol cream DA...	301889	2
Bombastus	Wool alcohol cream DA...	270730	1
Bombastus	Wool alcohol cream DA...	18004001	3
Bombastus	Wool alcohol cream DA...	274849	1
Bombastus	Wool alcohol cream DA...	284947	3
Bombastus	Wool alcohol cream DA...	284948	2
Bombastus	Wool alcohol cream DA...	289632	1
Bombastus	Wool alcohol cream DA...	273634	2
Bombastus	Wool alcohol cream DA...	279877	2
Bombastus	Wool alcohol cream DA...	302964	1
Bombastus	Wool alcohol cream DA...	304421	1
Bombastus	Wool alcohol cream DA...	300831	1
Bombastus	Wool alcohol cream DA...	284451	3
Bombastus	Wool alcohol cream DA...	285868	2
Bombastus	Wool alcohol cream DA...	289394	1
Bombastus	Wool alcohol cream DA...	289395	1
Bombastus	Wool alcohol cream DA...	289088	1
Bombastus	Wool alcohol cream DA...	289489	2
Bombastus	Wool alcohol cream DA...	295529	6
Bombastus	Wool alcohol cream DA...	18002550	3
Bombastus	Wool alcohol cream DA...	18004722	2
Bombastus	Wool alcohol cream DA...	18006646	2
Bombastus	Wool alcohol cream DA...	286237	2
Bombastus	Wool alcohol cream DA...	40/14	1
Bombastus	Wool alcohol cream DA...	18002552	4
Bombastus	Wool alcohol cream DA...	284445	1
Bombastus	Wool alcohol cream DA...	287085	1
Bombastus	Wool alcohol cream DA...	292769	1
Bombastus	Wool alcohol cream DA...	298678	2
Bombastus	Wool alcohol cream DA...	60080302	3
Bombastus	Wool alcohol cream DA...	294529	1
Bombastus	Wool alcohol cream DA...	300581	4
Bombastus	Wool alcohol cream DA...	293069	4
Bombastus	Wool alcohol cream DA...	291352	1
Bombastus	Wool alcohol cream DA...	289487	2
Bombastus	Wool alcohol cream DA...	294271	2
Bombastus	Wool alcohol cream DA...	302970	5
Bombastus	Wool alcohol cream DA...	18002549	1
Bombastus	Wool alcohol cream DA...	19002149	1
Bombastus	Wool alcohol cream DA...	19002152	1
Bombastus	Wool alcohol cream DA...	302969	3
Bombastus	Wool alcohol cream DA...	269924	1
Bombastus	Wool alcohol cream DA...	272259	2
Bombastus	Wool alcohol cream DA...	274629	1
Bombastus	Wool alcohol cream DA...	278749	1
Bombastus	Wool alcohol cream DA...	284446	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	285817	1
Bombastus	Wool alcohol cream DA...	288441	1
Bombastus	Wool alcohol cream DA...	17002202	1
Bombastus	Wool alcohol cream DA...	18000758	1
Bombastus	Wool alcohol cream DA...	18000760	1
Bombastus	Wool alcohol cream DA...	18002538	1
Bombastus	Wool alcohol cream DA...	19000015	1
Bombastus	Wool alcohol cream DA...	19001826	1
Bombastus	Wool alcohol cream DA...	18004060	1
Bombastus	Wool alcohol cream DA...	18004061	1
Bombastus	Wool alcohol cream DA...	18002547	1
Bombastus	Wool alcohol cream DA...	18004057	4
Bombastus	Wool alcohol cream DA...	306219	3
Bombastus	Wool alcohol cream DA...	306822	6
Bombastus	Wool alcohol cream DA...	17002147	5
Bombastus	Wool alcohol cream DA...	279019	2
Bombastus	Wool alcohol cream DA...	288259	2
Bombastus	Wool alcohol cream DA...	288260	1
Bombastus	Wool alcohol cream DA...	289088	1
Bombastus	Wool alcohol cream DA...	280988	1
Bombastus	Wool alcohol cream DA...	289620	1
Bombastus	Wool alcohol cream DA...	306089	2
Bombastus	Wool alcohol cream DA...	18002553	3
Bombastus	Wool alcohol cream DA...	18004720	5
Bombastus	Wool alcohol cream DA...	298817	3
Bombastus	Wool alcohol cream DA...	298677	3
Bombastus	Wool alcohol cream DA...	305261	1
Bombastus	Wool alcohol cream DA...	311455	4
Bombastus	Wool alcohol cream DA...	17002207	3
Bombastus	Wool alcohol cream DA...	18000770	5
Bombastus	Wool alcohol cream DA...	283574	1
Bombastus	Wool alcohol cream DA...	277097	1
Bombastus	Wool alcohol cream DA...	282754	6
Bombastus	Wool alcohol cream DA...	278832	1
Bombastus	Wool alcohol cream DA...	284579	4
Bombastus	Wool alcohol cream DA...	293063	1
Bombastus	Wool alcohol cream DA...	300583	6
Bombastus	Wool alcohol cream DA...	301891	5
Bombastus	Wool alcohol cream DA...	276216	1
Bombastus	Wool alcohol cream DA...	277769	3
Bombastus	Wool alcohol cream DA...	306818	2
Bombastus	Wool alcohol cream DA...	302031	8
Bombastus	Wool alcohol cream DA...	302966	7
Bombastus	Wool alcohol cream DA...	278824	2
Bombastus	Wool alcohol cream DA...	281504	2
Bombastus	Wool alcohol cream DA...	279870	2
Bombastus	Wool alcohol cream DA...	47/14	1
Bombastus	Wool alcohol cream DA...	298674	2
Bombastus	Wool alcohol cream DA...	295537	1
Bombastus	Wool alcohol cream DA...	306820	2
Bombastus	Wool alcohol cream DA...	307626	2
Bombastus	Wool alcohol cream DA...	309636	1
Bombastus	Wool alcohol cream DA...	307616	1
Bombastus	Wool alcohol cream DA...	311454	3
Bombastus	Wool alcohol cream DA...	311447	1
Bombastus	Wool alcohol cream DA...	18000757	2
Bombastus	Wool alcohol cream DA...	18002416	4
Bombastus	Wool alcohol cream DA...	18004000	1
Bombastus	Wool alcohol cream DA...	17002203	1
Bombastus	Wool alcohol cream DA...	19001836	2

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	18001375	2
Bombastus	Wool alcohol cream DA...	18002544	2
Bombastus	Wool alcohol cream DA...	310580	4
Bombastus	Wool alcohol cream DA...	18000769	2
Bombastus	Wool alcohol cream DA...	295536	10
Bombastus	Wool alcohol cream DA...	305257	6
Bombastus	Wool alcohol cream DA...	18004013	6
Bombastus	Wool alcohol cream DA...	297530	2
Bombastus	Wool alcohol cream DA...	306083	2
Bombastus	Wool alcohol cream DA...	3083301	1
Bombastus	Wool alcohol cream DA...	310581	2
Bombastus	Wool alcohol cream DA...	17002208	5
Bombastus	Wool alcohol cream DA...	307624	5
Bombastus	Wool alcohol cream DA...	306215	7
Bombastus	Wool alcohol cream DA...	308684	4
Bombastus	Wool alcohol cream DA...	18004059	1
Bombastus	Wool alcohol cream DA...	18006644	2
Bombastus	Wool alcohol cream DA...	18006842	4
Bombastus	Wool alcohol cream DA...	269927	1
Bombastus	Wool alcohol cream DA...	272257	2
Bombastus	Wool alcohol cream DA...	273633	1
Bombastus	Wool alcohol cream DA...	274631	1
Bombastus	Wool alcohol cream DA...	275913	1
Bombastus	Wool alcohol cream DA...	277770	2
Bombastus	Wool alcohol cream DA...	285869	1
Bombastus	Wool alcohol cream DA...	28/7175	1
Bombastus	Wool alcohol cream DA...	300577	7
Bombastus	Wool alcohol cream DA...	298814	1
Bombastus	Wool alcohol cream DA...	301885	3
Bombastus	Wool alcohol cream DA...	301305	1
Bombastus	Wool alcohol cream DA...	306080	1
Bombastus	Wool alcohol cream DA...	18000765	4
Bombastus	Wool alcohol cream DA...	18001374	2
Bombastus	Wool alcohol cream DA...	18002536	1
Bombastus	Wool alcohol cream DA...	18004716	1
Bombastus	Wool alcohol cream DA...	18006648	4
Bombastus	Wool alcohol cream DA...	19000160	1
Bombastus	Wool alcohol cream DA...	19000163	1
Bombastus	Wool alcohol cream DA...	311528	2
Bombastus	Wool alcohol cream DA...	19000168	2
Bombastus	Wool alcohol cream DA...	284636	3
Bombastus	Wool alcohol cream DA...	19000165	1
Bombastus	Wool alcohol cream DA...	299231	4
Bombastus	Wool alcohol cream DA...	299230	6
Bombastus	Wool alcohol cream DA...	298668	1
Bombastus	Wool alcohol cream DA...	279021	1
Bombastus	Wool alcohol cream DA...	286234	2
Bombastus	Wool alcohol cream DA...	288350	1
Bombastus	Wool alcohol cream DA...	289091	2
Bombastus	Wool alcohol cream DA...	291347	1
Bombastus	Wool alcohol cream DA...	292693	2
Bombastus	Wool alcohol cream DA...	294532	2
Bombastus	Wool alcohol cream DA...	294332	1
Bombastus	Wool alcohol cream DA...	300578	4
Bombastus	Wool alcohol cream DA...	306085	1
Bombastus	Wool alcohol cream DA...	305254	1
Bombastus	Wool alcohol cream DA...	307617	5
Bombastus	Wool alcohol cream DA...	307618	4
Bombastus	Wool alcohol cream DA...	308686	5
Bombastus	Wool alcohol cream DA...	311448	5

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	311526	1
Bombastus	Wool alcohol cream DA...	18002411	1
Bombastus	Wool alcohol cream DA...	298816	4
Bombastus	Wool alcohol cream DA...	300837	2
Bombastus	Wool alcohol cream DA...	305260	5
Bombastus	Wool alcohol cream DA...	306084	3
Bombastus	Wool alcohol cream DA...	306817	1
Bombastus	Wool alcohol cream DA...	274683	2
Bombastus	Wool alcohol cream DA...	278829	2
Bombastus	Wool alcohol cream DA...	281503	2
Bombastus	Wool alcohol cream DA...	286238	1
Bombastus	Wool alcohol cream DA...	280391	1
Bombastus	Wool alcohol cream DA...	289087	1
Bombastus	Wool alcohol cream DA...	288259	2
Bombastus	Wool alcohol cream DA...	289396	1
Bombastus	Wool alcohol cream DA...	291433	1
Bombastus	Wool alcohol cream DA...	291479	1
Bombastus	Wool alcohol cream DA...	292694	1
Bombastus	Wool alcohol cream DA...	295463	3
Bombastus	Wool alcohol cream DA...	295218	1
Bombastus	Wool alcohol cream DA...	297526	2
Bombastus	Wool alcohol cream DA...	299787	1
Bombastus	Wool alcohol cream DA...	303529	1
Bombastus	Wool alcohol cream DA...	311450	1
Bombastus	Wool alcohol cream DA...	18000767	2
Bombastus	Wool alcohol cream DA...	108002412	1
Bombastus	Wool alcohol cream DA...	1800762	1
Bombastus	Wool alcohol cream DA...	19000169	3
Bombastus	Wool alcohol cream DA...	19000167	1
Bombastus	Wool alcohol cream DA...	19000024	1
Bombastus	Wool alcohol cream DA...	19001840	1
Bombastus	Wool alcohol cream DA...	289091	2
Bombastus	Wool alcohol cream DA...	308689	2
Bombastus	Wool alcohol cream DA...	18002413	5
Bombastus	Wool alcohol cream DA...	19000170	1
Bombastus	Wool alcohol cream DA...	17002145	2
Bombastus	Wool alcohol cream DA...	18001380	4
Bombastus	Wool alcohol cream DA...	18006843	3
Bombastus	Wool alcohol cream DA...	277854	1
Bombastus	Wool alcohol cream DA...	292697	1
Bombastus	Wool alcohol cream DA...	301892	1
Bombastus	Wool alcohol cream DA...	17197320	1
Bombastus	Wool alcohol cream DA...	19001835	1
Bombastus	Wool alcohol cream DA...	19001834	1
Bombastus	Wool alcohol cream DA...	17002150	5
Bombastus	Wool alcohol cream DA...	265303	2
Bombastus	Wool alcohol cream DA...	267799	1
Bombastus	Wool alcohol cream DA...	270035	2
Bombastus	Wool alcohol cream DA...	270037	2
Bombastus	Wool alcohol cream DA...	273637	1
Bombastus	Wool alcohol cream DA...	273636	1
Bombastus	Wool alcohol cream DA...	277093	1
Bombastus	Wool alcohol cream DA...	278833	1
Bombastus	Wool alcohol cream DA...	297531	6
Bombastus	Wool alcohol cream DA...	297529	4
Bombastus	Wool alcohol cream DA...	297533	1
Bombastus	Wool alcohol cream DA...	299233	3
Bombastus	Wool alcohol cream DA...	299232	2
Bombastus	Wool alcohol cream DA...	300579	2
Bombastus	Wool alcohol cream DA...	302033	6

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DA...	304437	3
Bombastus	Wool alcohol cream DA...	304436	12
Bombastus	Wool alcohol cream DA...	306217	5
Bombastus	Wool alcohol cream DA...	305259	3
Bombastus	Wool alcohol cream DA...	308301	8
Bombastus	Wool alcohol cream DA...	308688	8
Bombastus	Wool alcohol cream DA...	308687	6
Bombastus	Wool alcohol cream DA...	308314	5
Bombastus	Wool alcohol cream DA...	310585	3
Bombastus	Wool alcohol cream DA...	311458	6
Bombastus	Wool alcohol cream DA...	17002211	4
Bombastus	Wool alcohol cream DA...	18002548	3
Bombastus	Wool alcohol cream DA...	18004014	3
Bombastus	Wool alcohol cream DA...	18004724	5
Bombastus	Wool alcohol cream DA...	18003998	1
Bombastus	Wool alcohol cream DA...	18006840	2
Bombastus	Wool alcohol cream DA...	18006838	1
Bombastus	Wool alcohol cream DA...	18006839	2
Bombastus	Wool alcohol cream DA...	19000025	3
Bombastus	Wool alcohol cream DA...	19001841	2
Bombastus	Wool alcohol cream DA...	19002148	2
Bombastus	Wool alcohol cream DA...	291267	1
Bombastus	Wool alcohol cream DA...	277856	3
Bombastus	Wool alcohol cream DA...	308307	6
Bombastus	Wool alcohol cream DA...	311525	4
Bombastus	Wool alcohol cream DA...	18004718	3
Bombastus	Wool alcohol cream DA...	18004725	3
Bombastus	Wool alcohol cream DA...	17002148	1
Bombastus	Wool alcohol cream DA...	18000763	2
Bombastus	Wool alcohol cream DA...	18004063	1
Bombastus	Wool alcohol cream DA...	298676	1
Bombastus	Wool alcohol cream DA...	299228	2
Bombastus	Wool alcohol cream DA...	307619	1
Bombastus	Wool alcohol cream DA...	18000766	2
Bombastus	Wool alcohol cream DA...	284943	1
Bombastus	Wool alcohol cream DA...	301308	2
Bombastus	Wool alcohol cream DA...	18002415	2
Bombstus	Wool alcohol cream DA...	302032	4
Bumbastus	Wool alcohol cream DA...	302972	7
Caelo	Wool alcohol cream DA...	12240502	1
Caelo	Wool alcohol cream DA...	13061501	14
Caelo	Wool alcohol cream DA...	1306804	1
Caelo	Wool alcohol cream DA...	13279502	4
Caelo	Wool alcohol cream DA...	14046501	4
Caelo	Wool alcohol cream DA...	14170801	1
Caelo	Wool alcohol cream DA...	14246201	1
Caelo	Wool alcohol cream DA...	20161102-2	1
Caelo	Wool alcohol cream DA...	15361601	1
Caelo	Wool alcohol cream DA...	17102603	6
Caelo	Wool alcohol cream DA...	11228001	2
Caelo	Wool alcohol cream DA...	11356201	1
Caelo	Wool alcohol cream DA...	11356501	1
Caelo	Wool alcohol cream DA...	12001301	1
Caelo	Wool alcohol cream DA...	12106001	1
Caelo	Wool alcohol cream DA...	12030601	2
Caelo	Wool alcohol cream DA...	1117601	1
Caelo	Wool alcohol cream DA...	12056401	2
Caelo	Wool alcohol cream DA...	11226401	1
Caelo	Wool alcohol cream DA...	12106401	3
Caelo	Wool alcohol cream DA...	11226301	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	12036501	7
Caelo	Wool alcohol cream DA...	12122002	3
Caelo	Wool alcohol cream DA...	12122101	4
Caelo	Wool alcohol cream DA...	12106701	2
Caelo	Wool alcohol cream DA...	12000301	1
Caelo	Wool alcohol cream DA...	11356001	1
Caelo	Wool alcohol cream DA...	25091204	1
Caelo	Wool alcohol cream DA...	1212202	1
Caelo	Wool alcohol cream DA...	12205701	4
Caelo	Wool alcohol cream DA...	12269201	5
Caelo	Wool alcohol cream DA...	1226901	1
Caelo	Wool alcohol cream DA...	12205801	3
Caelo	Wool alcohol cream DA...	12036402	2
Caelo	Wool alcohol cream DA...	11171501	1
Caelo	Wool alcohol cream DA...	12036601	6
Caelo	Wool alcohol cream DA...	12101602	1
Caelo	Wool alcohol cream DA...	12205402	4
Caelo	Wool alcohol cream DA...	12205501	1
Caelo	Wool alcohol cream DA...	12123501	7
Caelo	Wool alcohol cream DA...	12307401	6
Caelo	Wool alcohol cream DA...	2112217035	1
Caelo	Wool alcohol cream DA...	20101112-1	1
Caelo	Wool alcohol cream DA...	12259701	3
Caelo	Wool alcohol cream DA...	12307103	4
Caelo	Wool alcohol cream DA...	12307601	6
Caelo	Wool alcohol cream DA...	12122001	4
Caelo	Wool alcohol cream DA...	23021303	1
Caelo	Wool alcohol cream DA...	12351901	5
Caelo	Wool alcohol cream DA...	13029503	7
Caelo	Wool alcohol cream DA...	12036301	2
Caelo	Wool alcohol cream DA...	12307102	1
Caelo	Wool alcohol cream DA...	13068503	3
Caelo	Wool alcohol cream DA...	13068601	8
Caelo	Wool alcohol cream DA...	12259802	2
Caelo	Wool alcohol cream DA...	115A171212	1
Caelo	Wool alcohol cream DA...	13061601	3
Caelo	Wool alcohol cream DA...	1913Q-01371	1
Caelo	Wool alcohol cream DA...	13062201	4
Caelo	Wool alcohol cream DA...	E-090413-3	1
Caelo	Wool alcohol cream DA...	13145202	7
Caelo	Wool alcohol cream DA...	13068701	9
Caelo	Wool alcohol cream DA...	13145701	3
Caelo	Wool alcohol cream DA...	12370401	1
Caelo	Wool alcohol cream DA...	9071301	1
Caelo	Wool alcohol cream DA...	13172001	8
Caelo	Wool alcohol cream DA...	13029502	1
Caelo	Wool alcohol cream DA...	13061401	2
Caelo	Wool alcohol cream DA...	13081303	1
Caelo	Wool alcohol cream DA...	13261801	12
Caelo	Wool alcohol cream DA...	12101304	1
Caelo	Wool alcohol cream DA...	269213261801	1
Caelo	Wool alcohol cream DA...	1327901	1
Caelo	Wool alcohol cream DA...	13279101	4
Caelo	Wool alcohol cream DA...	13172105	2
Caelo	Wool alcohol cream DA...	13369601	12
Caelo	Wool alcohol cream DA...	13289403	8
Caelo	Wool alcohol cream DA...	13369401	5
Caelo	Wool alcohol cream DA...	13280801	2
Caelo	Wool alcohol cream DA...	1118962	1
Caelo	Wool alcohol cream DA...	9011407	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	13394103	1
Caelo	Wool alcohol cream DA...	13369601	1
Caelo	Wool alcohol cream DA...	14362201	6
Caelo	Wool alcohol cream DA...	13394102	21
Caelo	Wool alcohol cream DA...	14033202	7
Caelo	Wool alcohol cream DA...	13394201	8
Caelo	Wool alcohol cream DA...	13172102	1
Caelo	Wool alcohol cream DA...	9041402	1
Caelo	Wool alcohol cream DA...	14092601	6
Caelo	Wool alcohol cream DA...	14092502	8
Caelo	Wool alcohol cream DA...	14045801	13
Caelo	Wool alcohol cream DA...	284638	1
Caelo	Wool alcohol cream DA...	1373801	1
Caelo	Wool alcohol cream DA...	14092501	7
Caelo	Wool alcohol cream DA...	14166901	3
Caelo	Wool alcohol cream DA...	14164201	14
Caelo	Wool alcohol cream DA...	14046381	1
Caelo	Wool alcohol cream DA...	14162503	4
Caelo	Wool alcohol cream DA...	14162502	6
Caelo	Wool alcohol cream DA...	14164201	5
Caelo	Wool alcohol cream DA...	14246501	2
Caelo	Wool alcohol cream DA...	14169101	4
Caelo	Wool alcohol cream DA...	14126801	3
Caelo	Wool alcohol cream DA...	14170801	2
Caelo	Wool alcohol cream DA...	14216601	4
Caelo	Wool alcohol cream DA...	14092501	9
Caelo	Wool alcohol cream DA...	14246401	6
Caelo	Wool alcohol cream DA...	14169101	8
Caelo	Wool alcohol cream DA...	13369401	1
Caelo	Wool alcohol cream DA...	289089	1
Caelo	Wool alcohol cream DA...	23101405	1
Caelo	Wool alcohol cream DA...	14246101	3
Caelo	Wool alcohol cream DA...	14246301	5
Caelo	Wool alcohol cream DA...	14259402	1
Caelo	Wool alcohol cream DA...	14259601	1
Caelo	Wool alcohol cream DA...	14246201	2
Caelo	Wool alcohol cream DA...	14259401	3
Caelo	Wool alcohol cream DA...	14164201	1
Caelo	Wool alcohol cream DA...	14246501	5
Caelo	Wool alcohol cream DA...	14246101	2
Caelo	Wool alcohol cream DA...	14259801	2
Caelo	Wool alcohol cream DA...	14092601	1
Caelo	Wool alcohol cream DA...	14216902	13
Caelo	Wool alcohol cream DA...	1426401	1
Caelo	Wool alcohol cream DA...	15011504	1
Caelo	Wool alcohol cream DA...	14295402	1
Caelo	Wool alcohol cream DA...	21105102	1
Caelo	Wool alcohol cream DA...	14259801	4
Caelo	Wool alcohol cream DA...	1424501	1
Caelo	Wool alcohol cream DA...	14362301	4
Caelo	Wool alcohol cream DA...	14295401	1
Caelo	Wool alcohol cream DA...	14295401	4
Caelo	Wool alcohol cream DA...	14295601	3
Caelo	Wool alcohol cream DA...	14356303	1
Caelo	Wool alcohol cream DA...	14295601	1
Caelo	Wool alcohol cream DA...	15017501	1
Caelo	Wool alcohol cream DA...	14246301	2
Caelo	Wool alcohol cream DA...	13394101	1
Caelo	Wool alcohol cream DA...	14356501	2
Caelo	Wool alcohol cream DA...	14356301	3

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	15017601	20
Caelo	Wool alcohol cream DA...	14295601	2
Caelo	Wool alcohol cream DA...	1429501	1
Caelo	Wool alcohol cream DA...	15017601	2
Caelo	Wool alcohol cream DA...	14296001	2
Caelo	Wool alcohol cream DA...	15017502	6
Caelo	Wool alcohol cream DA...	1456302	1
Caelo	Wool alcohol cream DA...	14295801	2
Caelo	Wool alcohol cream DA...	15132101	9
Caelo	Wool alcohol cream DA...	15073601	17
Caelo	Wool alcohol cream DA...	15017601	1
Caelo	Wool alcohol cream DA...	15149801	13
Caelo	Wool alcohol cream DA...	1071503	1
Caelo	Wool alcohol cream DA...	15150001	6
Caelo	Wool alcohol cream DA...	14259701	1
Caelo	Wool alcohol cream DA...	15017901	1
Caelo	Wool alcohol cream DA...	15174201	8
Caelo	Wool alcohol cream DA...	1515101	1
Caelo	Wool alcohol cream DA...	15073701	4
Caelo	Wool alcohol cream DA...	15073801	2
Caelo	Wool alcohol cream DA...	15149802	1
Caelo	Wool alcohol cream DA...	15149802	1
Caelo	Wool alcohol cream DA...	15226301	1
Caelo	Wool alcohol cream DA...	15150101	5
Caelo	Wool alcohol cream DA...	15266001	6
Caelo	Wool alcohol cream DA...	15174302	6
Caelo	Wool alcohol cream DA...	15266201	10
Caelo	Wool alcohol cream DA...	15259701	2
Caelo	Wool alcohol cream DA...	15150101	2
Caelo	Wool alcohol cream DA...	15260102	1
Caelo	Wool alcohol cream DA...	alt:0415I-01371	1
Caelo	Wool alcohol cream DA...	15259901	2
Caelo	Wool alcohol cream DA...	15266101	1
Caelo	Wool alcohol cream DA...	15268402	4
Caelo	Wool alcohol cream DA...	15259801	5
Caelo	Wool alcohol cream DA...	15259801	1
Caelo	Wool alcohol cream DA...	15360901	15
Caelo	Wool alcohol cream DA...	15268501	9
Caelo	Wool alcohol cream DA...	15360901	1
Caelo	Wool alcohol cream DA...	15361101	4
Caelo	Wool alcohol cream DA...	15268302	32
Caelo	Wool alcohol cream DA...	15268601	15
Caelo	Wool alcohol cream DA...	16008103	1
Caelo	Wool alcohol cream DA...	15361501	12
Caelo	Wool alcohol cream DA...	16024501	7
Caelo	Wool alcohol cream DA...	16008103	2
Caelo	Wool alcohol cream DA...	16008103	19
Caelo	Wool alcohol cream DA...	15361301	1
Caelo	Wool alcohol cream DA...	16007802	3
Caelo	Wool alcohol cream DA...	299782	6
Caelo	Wool alcohol cream DA...	160245	1
Caelo	Wool alcohol cream DA...	16024601	9
Caelo	Wool alcohol cream DA...	16007702	3
Caelo	Wool alcohol cream DA...	15361201	1
Caelo	Wool alcohol cream DA...	16008201	1
Caelo	Wool alcohol cream DA...	16090501	27
Caelo	Wool alcohol cream DA...	16024403	11
Caelo	Wool alcohol cream DA...	16024502	1
Caelo	Wool alcohol cream DA...	152683021	1
Caelo	Wool alcohol cream DA...	16090501	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	80616-10	1
Caelo	Wool alcohol cream DA...	16089902	8
Caelo	Wool alcohol cream DA...	16090301	8
Caelo	Wool alcohol cream DA...	16090401	12
Caelo	Wool alcohol cream DA...	16157901	21
Caelo	Wool alcohol cream DA...	16008401	4
Caelo	Wool alcohol cream DA...	16090601	1
Caelo	Wool alcohol cream DA...	16008001	2
Caelo	Wool alcohol cream DA...	16024401	7
Caelo	Wool alcohol cream DA...	16177701	10
Caelo	Wool alcohol cream DA...	201310	1
Caelo	Wool alcohol cream DA...	16157901	1
Caelo	Wool alcohol cream DA...	1608992	1
Caelo	Wool alcohol cream DA...	16158102	3
Caelo	Wool alcohol cream DA...	16340902	4
Caelo	Wool alcohol cream DA...	1609041	1
Caelo	Wool alcohol cream DA...	161177701	1
Caelo	Wool alcohol cream DA...	1600841	1
Caelo	Wool alcohol cream DA...	16090201	2
Caelo	Wool alcohol cream DA...	16157802	6
Caelo	Wool alcohol cream DA...	303530	2
Caelo	Wool alcohol cream DA...	16177401	14
Caelo	Wool alcohol cream DA...	16157801	12
Caelo	Wool alcohol cream DA...	16158101	14
Caelo	Wool alcohol cream DA...	16112201	11
Caelo	Wool alcohol cream DA...	160912ECA	1
Caelo	Wool alcohol cream DA...	16177602	18
Caelo	Wool alcohol cream DA...	16158001	1
Caelo	Wool alcohol cream DA...	16157501	1
Caelo	Wool alcohol cream DA...	16007701	1
Caelo	Wool alcohol cream DA...	16199101	11
Caelo	Wool alcohol cream DA...	16120802	1
Caelo	Wool alcohol cream DA...	16282301	26
Caelo	Wool alcohol cream DA...	16199301	6
Caelo	Wool alcohol cream DA...	116282301	1
Caelo	Wool alcohol cream DA...	16090601	1
Caelo	Wool alcohol cream DA...	161776	1
Caelo	Wool alcohol cream DA...	16278201	4
Caelo	Wool alcohol cream DA...	16198401	1
Caelo	Wool alcohol cream DA...	16312901	1
Caelo	Wool alcohol cream DA...	16249003	2
Caelo	Wool alcohol cream DA...	16340701	7
Caelo	Wool alcohol cream DA...	16312902	11
Caelo	Wool alcohol cream DA...	16198901	3
Caelo	Wool alcohol cream DA...	16344301	20
Caelo	Wool alcohol cream DA...	16344201	24
Caelo	Wool alcohol cream DA...	16340703	3
Caelo	Wool alcohol cream DA...	16282301	1
Caelo	Wool alcohol cream DA...	1634080101098277	1
Caelo	Wool alcohol cream DA...	1709202	1
Caelo	Wool alcohol cream DA...	306819	2
Caelo	Wool alcohol cream DA...	17039201	11
Caelo	Wool alcohol cream DA...	16344101	15
Caelo	Wool alcohol cream DA...	170390301	1
Caelo	Wool alcohol cream DA...	16345802	2
Caelo	Wool alcohol cream DA...	17039202	4
Caelo	Wool alcohol cream DA...	16177801	1
Caelo	Wool alcohol cream DA...	17040001	10
Caelo	Wool alcohol cream DA...	170394015292	1
Caelo	Wool alcohol cream DA...	17104702	4

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	17102602	3
Caelo	Wool alcohol cream DA...	17039501	1
Caelo	Wool alcohol cream DA...	5081702	1
Caelo	Wool alcohol cream DA...	163441	1
Caelo	Wool alcohol cream DA...	171202701	1
Caelo	Wool alcohol cream DA...	17104703	3
Caelo	Wool alcohol cream DA...	17148701	11
Caelo	Wool alcohol cream DA...	Chargeergänzen!!	1
Caelo	Wool alcohol cream DA...	17155901	23
Caelo	Wool alcohol cream DA...	17128502	6
Caelo	Wool alcohol cream DA...	17102801	4
Caelo	Wool alcohol cream DA...	171559015364	1
Caelo	Wool alcohol cream DA...	17104701	1
Caelo	Wool alcohol cream DA...	17197303	4
Caelo	Wool alcohol cream DA...	17228702	4
Caelo	Wool alcohol cream DA...	17156102	2
Caelo	Wool alcohol cream DA...	17187601	9
Caelo	Wool alcohol cream DA...	171973202	1
Caelo	Wool alcohol cream DA...	308305	1
Caelo	Wool alcohol cream DA...	17187902	5
Caelo	Wool alcohol cream DA...	17179301	1
Caelo	Wool alcohol cream DA...	17284301	30
Caelo	Wool alcohol cream DA...	17187901	1
Caelo	Wool alcohol cream DA...	17016001	1
Caelo	Wool alcohol cream DA...	17284701	4
Caelo	Wool alcohol cream DA...	17284802	3
Caelo	Wool alcohol cream DA...	171877015454	1
Caelo	Wool alcohol cream DA...	18012201	31
Caelo	Wool alcohol cream DA...	17228703	2
Caelo	Wool alcohol cream DA...	18012401	6
Caelo	Wool alcohol cream DA...	17284401	2
Caelo	Wool alcohol cream DA...	18012303	7
Caelo	Wool alcohol cream DA...	17352401	2
Caelo	Wool alcohol cream DA...	1728402	1
Caelo	Wool alcohol cream DA...	17264301	1
Caelo	Wool alcohol cream DA...	18069601	16
Caelo	Wool alcohol cream DA...	3051810	1
Caelo	Wool alcohol cream DA...	18069602	5
Caelo	Wool alcohol cream DA...	181541	5
Caelo	Wool alcohol cream DA...	18012701	9
Caelo	Wool alcohol cream DA...	17198302	1
Caelo	Wool alcohol cream DA...	18086301	3
Caelo	Wool alcohol cream DA...	17352402	2
Caelo	Wool alcohol cream DA...	17352403	2
Caelo	Wool alcohol cream DA...	18098201	7
Caelo	Wool alcohol cream DA...	18104101	10
Caelo	Wool alcohol cream DA...	18104201	6
Caelo	Wool alcohol cream DA...	18003997	2
Caelo	Wool alcohol cream DA...	18189602	3
Caelo	Wool alcohol cream DA...	18104001	1
Caelo	Wool alcohol cream DA...	18189603	1
Caelo	Wool alcohol cream DA...	18144101	6
Caelo	Wool alcohol cream DA...	18192303	6
Caelo	Wool alcohol cream DA...	18258203	2
Caelo	Wool alcohol cream DA...	18241401	17
Caelo	Wool alcohol cream DA...	18262404	2
Caelo	Wool alcohol cream DA...	18241201	1
Caelo	Wool alcohol cream DA...	18262601	1
Caelo	Wool alcohol cream DA...	18262501	5
Caelo	Wool alcohol cream DA...	18241301	4

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	18262701	3
Caelo	Wool alcohol cream DA...	19011001	2
Caelo	Wool alcohol cream DA...	18331901	3
Caelo	Wool alcohol cream DA...	19058004	4
Caelo	Wool alcohol cream DA...	19040801	2
Caelo	Wool alcohol cream DA...	12001201	1
Caelo	Wool alcohol cream DA...	19115301	3
Caelo	Wool alcohol cream DA...	19177801	1
Caelo	Wool alcohol cream DA...	303524	1
Caelo	Wool alcohol cream DA...	11356301	1
Caelo	Wool alcohol cream DA...	120307010	1
Caelo	Wool alcohol cream DA...	13369801	5
Caelo	Wool alcohol cream DA...	15260001	15
Caelo	Wool alcohol cream DA...	298675	2
Caelo	Wool alcohol cream DA...	15361301	5
Caelo	Wool alcohol cream DA...	15150002	2
Caelo	Wool alcohol cream DA...	13145601	15
Caelo	Wool alcohol cream DA...	17149101	6
Caelo	Wool alcohol cream DA...	18006647	2
Caelo	Wool alcohol cream DA...	13289301	12
Caelo	Wool alcohol cream DA...	14216701	3
Caelo	Wool alcohol cream DA...	14113201	1
Caelo	Wool alcohol cream DA...	14046002	1
Caelo	Wool alcohol cream DA...	14295901	2
Caelo	Wool alcohol cream DA...	17284501	1
Caelo	Wool alcohol cream DA...	12307901	3
Caelo	Wool alcohol cream DA...	14126801	14
Caelo	Wool alcohol cream DA...	14167101	2
Caelo	Wool alcohol cream DA...	14259701	1
Caelo	Wool alcohol cream DA...	1416903	1
Caelo	Wool alcohol cream DA...	14362401	5
Caelo	Wool alcohol cream DA...	16340801	37
Caelo	Wool alcohol cream DA...	163123101	1
Caelo	Wool alcohol cream DA...	20170419ECA/16312902	1
Caelo	Wool alcohol cream DA...	17039701	7
Caelo	Wool alcohol cream DA...	18241501	3
Caelo	Wool alcohol cream DA...	14045901	4
Caelo	Wool alcohol cream DA...	14259501	1
Caelo	Wool alcohol cream DA...	15174103	10
Caelo	Wool alcohol cream DA...	16014302	6
Caelo	Wool alcohol cream DA...	18170303	10
Caelo	Wool alcohol cream DA...	275988	1
Caelo	Wool alcohol cream DA...	296128	2
Caelo	Wool alcohol cream DA...	12056402	1
Caelo	Wool alcohol cream DA...	13280601	1
Caelo	Wool alcohol cream DA...	14295701	4
Caelo	Wool alcohol cream DA...	29/AKD12	1
Caelo	Wool alcohol cream DA...	16278301	5
Caelo	Wool alcohol cream DA...	17149201	10
Caelo	Wool alcohol cream DA...	17197302	37
Caelo	Wool alcohol cream DA...	18069603	1
Caelo	Wool alcohol cream DA...	18295602	1
Caelo	Wool alcohol cream DA...	15174105	2
Caelo	Wool alcohol cream DA...	14164001	2
Caelo	Wool alcohol cream DA...	273635	1
Caelo	Wool alcohol cream DA...	274635	1
Caelo	Wool alcohol cream DA...	14216601	2
Caelo	Wool alcohol cream DA...	12106102	2
Caelo	Wool alcohol cream DA...	12351801	1
Caelo	Wool alcohol cream DA...	17094102	6

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	13068601	1
Caelo	Wool alcohol cream DA...	1118956	1
Caelo	Wool alcohol cream DA...	12259702	3
Caelo	Wool alcohol cream DA...	12307301	1
Caelo	Wool alcohol cream DA...	13061701	3
Caelo	Wool alcohol cream DA...	13062301	5
Caelo	Wool alcohol cream DA...	13145301	7
Caelo	Wool alcohol cream DA...	1526601	1
Caelo	Wool alcohol cream DA...	15266501	8
Caelo	Wool alcohol cream DA...	12307701	6
Caelo	Wool alcohol cream DA...	14167101	2
Caelo	Wool alcohol cream DA...	14295502	7
Caelo	Wool alcohol cream DA...	18012301	7
Caelo	Wool alcohol cream DA...	12260101	4
Caelo	Wool alcohol cream DA...	12307501	3
Caelo	Wool alcohol cream DA...	15132101	1
Caelo	Wool alcohol cream DA...	15132301	1
Caelo	Wool alcohol cream DA...	15149902	1
Caelo	Wool alcohol cream DA...	18023403	7
Caelo	Wool alcohol cream DA...	13061901	7
Caelo	Wool alcohol cream DA...	14295801	3
Caelo	Wool alcohol cream DA...	14046401	5
Caelo	Wool alcohol cream DA...	21(19115401)	1
Caelo	Wool alcohol cream DA...	13279201	3
Caelo	Wool alcohol cream DA...	16313101	28
Caelo	Wool alcohol cream DA...	14092401	2
Caelo	Wool alcohol cream DA...	15268303	2
Caelo	Wool alcohol cream DA...	15268401	3
Caelo	Wool alcohol cream DA...	14046101	1
Caelo	Wool alcohol cream DA...	12260401	1
Caelo	Wool alcohol cream DA...	13373701	9
Caelo	Wool alcohol cream DA...	14295502	1
Caelo	Wool alcohol cream DA...	13066501	1
Caelo	Wool alcohol cream DA...	13068501	1
Caelo	Wool alcohol cream DA...	14216901	1
Caelo	Wool alcohol cream DA...	13394103	1
Caelo	Wool alcohol cream DA...	16177601	6
Caelo	Wool alcohol cream DA...	13373601	6
Caelo	Wool alcohol cream DA...	14167001	4
Caelo	Wool alcohol cream DA...	14259601	4
Caelo	Wool alcohol cream DA...	15260102	19
Caelo	Wool alcohol cream DA...	13145201	2
Caelo	Wool alcohol cream DA...	16120801	2
Caelo	Wool alcohol cream DA...	16345801	5
Caelo	Wool alcohol cream DA...	17149002	7
Caelo	Wool alcohol cream DA...	171128ECA/17149002	1
Caelo	Wool alcohol cream DA...	17284801	7
Caelo	Wool alcohol cream DA...	18258202	1
Caelo	Wool alcohol cream DA...	13172104	1
Caelo	Wool alcohol cream DA...	14356402	5
Caelo	Wool alcohol cream DA...	1211901	1
Caelo	Wool alcohol cream DA...	1703401	1
Caelo	Wool alcohol cream DA...	16353902	2
Caelo	Wool alcohol cream DA...	16344102	8
Caelo	Wool alcohol cream DA...	PE113	1
Caelo	Wool alcohol cream DA...	14107602	1
Caelo	Wool alcohol cream DA...	417A-01371	1
Caelo	Wool alcohol cream DA...	19199004	1
Caelo	Wool alcohol cream DA...	19040701	3
Caelo	Wool alcohol cream DA...	14169101	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	13029504	3
Caelo	Wool alcohol cream DA...	1314570	1
Caelo	Wool alcohol cream DA...	13261701	13
Caelo	Wool alcohol cream DA...	13322801	21
Caelo	Wool alcohol cream DA...	13369402	3
Caelo	Wool alcohol cream DA...	13373903	3
Caelo	Wool alcohol cream DA...	306086	3
Caelo	Wool alcohol cream DA...	1718701	1
Caelo	Wool alcohol cream DA...	17197301/5580	1
Caelo	Wool alcohol cream DA...	18086401	14
Caelo	Wool alcohol cream DA...	14164101	2
Caelo	Wool alcohol cream DA...	1339401	1
Caelo	Wool alcohol cream DA...	14045602	1
Caelo	Wool alcohol cream DA...	13373501	3
Caelo	Wool alcohol cream DA...	14169201	2
Caelo	Wool alcohol cream DA...	14356302	22
Caelo	Wool alcohol cream DA...	14356601	4
Caelo	Wool alcohol cream DA...	15360902	4
Caelo	Wool alcohol cream DA...	2716Q-01371	1
Caelo	Wool alcohol cream DA...	17102901	6
Caelo	Wool alcohol cream DA...	18002414	2
Caelo	Wool alcohol cream DA...	18005983	2
Caelo	Wool alcohol cream DA...	11356601	1
Caelo	Wool alcohol cream DA...	13061402	3
Caelo	Wool alcohol cream DA...	14246201	2
Caelo	Wool alcohol cream DA...	13369501	2
Caelo	Wool alcohol cream DA...	15361201	9
Caelo	Wool alcohol cream DA...	14362201	12
Caelo	Wool alcohol cream DA...	12209001	1
Caelo	Wool alcohol cream DA...	11226201	1
Caelo	Wool alcohol cream DA...	13062101	17
Caelo	Wool alcohol cream DA...	13029502	2
Caelo	Wool alcohol cream DA...	13061801	3
Caelo	Wool alcohol cream DA...	13145201	3
Caelo	Wool alcohol cream DA...	13171901	7
Caelo	Wool alcohol cream DA...	13394101	8
Caelo	Wool alcohol cream DA...	13373801	8
Caelo	Wool alcohol cream DA...	14113201	6
Caelo	Wool alcohol cream DA...	37A090414	1
Caelo	Wool alcohol cream DA...	14246501	4
Caelo	Wool alcohol cream DA...	14163901	1
Caelo	Wool alcohol cream DA...	14295901	1
Caelo	Wool alcohol cream DA...	14362301	2
Caelo	Wool alcohol cream DA...	14216601	1
Caelo	Wool alcohol cream DA...	14356402	2
Caelo	Wool alcohol cream DA...	15022201	5
Caelo	Wool alcohol cream DA...	14356401	2
Caelo	Wool alcohol cream DA...	15132301	1
Caelo	Wool alcohol cream DA...	15259901	4
Caelo	Wool alcohol cream DA...	16312901	6
Caelo	Wool alcohol cream DA...	16313002	10
Caelo	Wool alcohol cream DA...	1640801	1
Caelo	Wool alcohol cream DA...	19A070817	2
Caelo	Wool alcohol cream DA...	17188001	8
Caelo	Wool alcohol cream DA...	1728701	1
Caelo	Wool alcohol cream DA...	18104302	28
Caelo	Wool alcohol cream DA...	18241402	1
Caelo	Wool alcohol cream DA...	18262403	4
Caelo	Wool alcohol cream DA...	19115401	3
Caelo	Wool alcohol cream DA...	12260002	7

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	12307201	8
Caelo	Wool alcohol cream DA...	614E1371	1
Caelo	Wool alcohol cream DA...	14296001	7
Caelo	Wool alcohol cream DA...	13279001	5
Caelo	Wool alcohol cream DA...	12208902	7
Caelo	Wool alcohol cream DA...	14216902	3
Caelo	Wool alcohol cream DA...	20(17156102)	1
Caelo	Wool alcohol cream DA...	14046501	1
Caelo	Wool alcohol cream DA...	16341001	13
Caelo	Wool alcohol cream DA...	16278101	2
Caelo	Wool alcohol cream DA...	1336901	1
Caelo	Wool alcohol cream DA...	13013201	1
Caelo	Wool alcohol cream DA...	288265	1
Caelo	Wool alcohol cream DA...	14216901	1
Caelo	Wool alcohol cream DA...	14092401	1
Caelo	Wool alcohol cream DA...	15073502	3
Caelo	Wool alcohol cream DA...	15226301	8
Caelo	Wool alcohol cream DA...	15259701	20
Caelo	Wool alcohol cream DA...		2
Caelo	Wool alcohol cream DA...	16024301	2
Caelo	Wool alcohol cream DA...	16158001	18
Caelo	Wool alcohol cream DA...	17039601	7
Caelo	Wool alcohol cream DA...	171851	1
Caelo	Wool alcohol cream DA...	17094001	7
Caelo	Wool alcohol cream DA...	17187801	36
Caelo	Wool alcohol cream DA...	17178402	1
Caelo	Wool alcohol cream DA...	18012302	6
Caelo	Wool alcohol cream DA...	18096001	1
Caelo	Wool alcohol cream DA...	18098301	27
Caelo	Wool alcohol cream DA...	18098101	5
Caelo	Wool alcohol cream DA...	18147502	1
Caelo	Wool alcohol cream DA...	19040601	3
Caelo	Wool alcohol cream DA...	15360801	6
Caelo	Wool alcohol cream DA...	12056202	1
Caelo	Wool alcohol cream DA...	13279401	3
Caelo	Wool alcohol cream DA...	14045702	4
Caelo	Wool alcohol cream DA...	14046201	6
Caelo	Wool alcohol cream DA...	14170801	2
Caelo	Wool alcohol cream DA...	14362201	1
Caelo	Wool alcohol cream DA...	15073301	1
Caelo	Wool alcohol cream DA...	18143901	16
Caelo	Wool alcohol cream DA...	18241601	2
Caelo	Wool alcohol cream DA...	16177603	6
Caelo	Wool alcohol cream DA...	15017901	6
Caelo	Wool alcohol cream DA...	1015E-01371	1
Caelo	Wool alcohol cream DA...	12205401	1
Caelo	Wool alcohol cream DA...	12259901	3
Caelo	Wool alcohol cream DA...	13013202	9
Caelo	Wool alcohol cream DA...	13145401	4
Caelo	Wool alcohol cream DA...	13190202	1
Caelo	Wool alcohol cream DA...	13279601	2
Caelo	Wool alcohol cream DA...	2x13279201	1
Caelo	Wool alcohol cream DA...	13169401	1
Caelo	Wool alcohol cream DA...	13280701	4
Caelo	Wool alcohol cream DA...	13279701	2
Caelo	Wool alcohol cream DA...	13190201	1
Caelo	Wool alcohol cream DA...	14046001	1
Caelo	Wool alcohol cream DA...	14169201	2
Caelo	Wool alcohol cream DA...	14164101	1
Caelo	Wool alcohol cream DA...	114163901	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	14246102	1
Caelo	Wool alcohol cream DA...	415A-01371	1
Caelo	Wool alcohol cream DA...	14295301	2
Caelo	Wool alcohol cream DA...	15022201	1
Caelo	Wool alcohol cream DA...	15017701	2
Caelo	Wool alcohol cream DA...	15174301	5
Caelo	Wool alcohol cream DA...	15150001	1
Caelo	Wool alcohol cream DA...	15266101	1
Caelo	Wool alcohol cream DA...	15361402	16
Caelo	Wool alcohol cream DA...	15361601	4
Caelo	Wool alcohol cream DA...	15361701	1
Caelo	Wool alcohol cream DA...	15360901	1
Caelo	Wool alcohol cream DA...	1608001	1
Caelo	Wool alcohol cream DA...	16007801	1
Caelo	Wool alcohol cream DA...	16199004	19
Caelo	Wool alcohol cream DA...	16199201	8
Caelo	Wool alcohol cream DA...	17039301	24
Caelo	Wool alcohol cream DA...	17156101	2
Caelo	Wool alcohol cream DA...	17197301	13
Caelo	Wool alcohol cream DA...	18003802	4
Caelo	Wool alcohol cream DA...	18098001	18
Caelo	Wool alcohol cream DA...	18144001	8
Caelo	Wool alcohol cream DA...	18023401	1
Caelo	Wool alcohol cream DA...	18104002	7
Caelo	Wool alcohol cream DA...	18086902	2
Caelo	Wool alcohol cream DA...	18104401	5
Caelo	Wool alcohol cream DA...	18094402	4
Caelo	Wool alcohol cream DA...	18192401	8
Caelo	Wool alcohol cream DA...	18192302	13
Caelo	Wool alcohol cream DA...	18241302	9
Caelo	Wool alcohol cream DA...	1915301	1
Caelo	Wool alcohol cream DA...	180696015657	2
Caelo	Wool alcohol cream DA...	180983015714	1
Caelo	Wool alcohol cream DA...	13279201-3433311180	1
Caelo	Wool alcohol cream DA...	13281003	4
Caelo	Wool alcohol cream DA...	14166901ok	1
Caelo	Wool alcohol cream DA...	14162502	5
Caelo	Wool alcohol cream DA...	14170901	2
Caelo	Wool alcohol cream DA...	14166901	1
Caelo	Wool alcohol cream DA...	1416901	1
Caelo	Wool alcohol cream DA...	14259801	5
Caelo	Wool alcohol cream DA...	14092501	2
Caelo	Wool alcohol cream DA...	14295701	1
Caelo	Wool alcohol cream DA...	15017501	3
Caelo	Wool alcohol cream DA...	15073502	1
Caelo	Wool alcohol cream DA...	15174104	19
Caelo	Wool alcohol cream DA...	1529701	1
Caelo	Wool alcohol cream DA...	15268/601	1
Caelo	Wool alcohol cream DA...	16007701	14
Caelo	Wool alcohol cream DA...	16090702	22
Caelo	Wool alcohol cream DA...	16177502	11
Caelo	Wool alcohol cream DA...	17187701	23
Caelo	Wool alcohol cream DA...	17197903	2
Caelo	Wool alcohol cream DA...	17284402	1
Caelo	Wool alcohol cream DA...	18094301	21
Caelo	Wool alcohol cream DA...	19011005	4
Caelo	Wool alcohol cream DA...	19040602	2
Caelo	Wool alcohol cream DA...	15132301	2
Caelo	Wool alcohol cream DA...	13394101	1
Caelo	Wool alcohol cream DA...	29131-01371	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DA...	1113E-01371	1
Caelo	Wool alcohol cream DA...	15260102	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	12209101	2
Caesar & Loretz GmbH	Wool alcohol cream DA...	14295901	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	15017801	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	15073701	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	15266501	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	17094201	16
Caesar & Loretz GmbH	Wool alcohol cream DA...	18241603	4
Caesar & Loretz GmbH	Wool alcohol cream DA...	18262402	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	182331902	1
Caesar & Loretz GmbH	Wool alcohol cream DA...	19118802	1
Caesar & Loretz GmbH ...	Wool alcohol cream DA...	13373701	1
Caesar & Loretz GmbH ...	Wool alcohol cream DA...	15361001	3
Caesar & Loretz GmbH,...	Wool alcohol cream DA...	11276102	5
Caesar & Loretz GmbH,...	Wool alcohol cream DA...	12000201	2
Caesar & Loretz GmbH/...	Wool alcohol cream DA...	19000401	11
Caesar & Loretz GmbH/...	Wool alcohol cream DA...	18311102	4
Caesar & Loretz GmbH/...	Wool alcohol cream DA...	19000501	3
Caesar & Loretz/Noweda	Wool alcohol cream DA...	16199401	6
Caesar&Loretz	Wool alcohol cream DA...	17040101	2
Caesar&Loretz,Phoenix	Wool alcohol cream DA...	13068504	17
Caesar&Loretz/Caesar&...	Wool alcohol cream DA...	15266301	6
Ceaelo/Gehe	Wool alcohol cream DA...	18262801	4
Cealo	Wool alcohol cream DA...	17039401	23
Cealo	Wool alcohol cream DA...	17148702	3
Celo	Wool alcohol cream DA...	16008301	1
Defektur	Wool alcohol cream DA...	3817I-01371	1
Devesa	Wool alcohol cream DA...	12106601	1
Euro OTC	Wool alcohol cream DA...	221014	1
Euro OTC	Wool alcohol cream DA...	17284502	6
Euro OTC	Wool alcohol cream DA...	18144003	4
Euro OTC	Wool alcohol cream DA...	43A041016	2
Euro OTC	Wool alcohol cream DA...	17156002	6
Euro OTC	Wool alcohol cream DA...	279873	1
Euro OTC	Wool alcohol cream DA...	17284601	11
Fagron	Wool alcohol cream DA...	16199003	2
Fagron	Wool alcohol cream DA...	18012501	18
Fagron	Wool alcohol cream DA...	18012601	13
Fagron	Wool alcohol cream DA...	12370202	3
Fiebig	Wool alcohol cream DA...	16008201	5
Fiebig	Wool alcohol cream DA...	18094502	42
Caelo	Wool alcohol cream DA...	163443/1	1
Gehe	Wool alcohol cream DA...	267155	2
Gehe	Wool alcohol cream DA...	270032	1
Gehe	Wool alcohol cream DA...	270037	1
Gehe	Wool alcohol cream DA...	80A010812	1
Gehe	Wool alcohol cream DA...	269933	2
Gehe	Wool alcohol cream DA...	272254	2
Gehe	Wool alcohol cream DA...	272253	1
Gehe	Wool alcohol cream DA...	95A161012	1
Gehe	Wool alcohol cream DA...	274686	1
Gehe	Wool alcohol cream DA...	277207	1
Gehe	Wool alcohol cream DA...	32A080413	1
Gehe	Wool alcohol cream DA...	274684	1
Gehe	Wool alcohol cream DA...	279876	2
Gehe	Wool alcohol cream DA...	13279002	3
Gehe	Wool alcohol cream DA...	72A270813	1
Gehe	Wool alcohol cream DA...	282240	1
Gehe	Wool alcohol cream DA...	282245	1

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Supplier	Substance	Batch	Spectra
Gehe	Wool alcohol cream DA...	280493	1
Gehe	Wool alcohol cream DA...	47a040613	1
GEHE	Wool alcohol cream DA...	305253	6
GEHE	Wool alcohol cream DA...	303523	2
GEHE	Wool alcohol cream DA...	308308	2
GEHE	Wool alcohol cream DA...	18170401	19
GEHE	Wool alcohol cream DA...	18170501	10
Caelo	Wool alcohol cream DA...	14162502	1
Bombastus	Wool alcohol cream DA...	289490	1
Gehe 21.08.14	Wool alcohol cream DA...	287175	1
GEHE 24.02.2014	Wool alcohol cream DA...	13373801	1
Bombastus	Wool alcohol cream DA...	302968	1
Caelo	Wool alcohol cream DA...	14216801	5
Bombastus	Wool alcohol cream DA...	288443	3
Gehe/Apomix	Wool alcohol cream DA...	8A290114	1
Gehe/Apomix	Wool alcohol cream DA...	19A270214	1
Gehe/apomix/17.12.2014	Wool alcohol cream DA...	87A141014	1
Gehe/apomix/23.09.14	Wool alcohol cream DA...	62A090714	2
Gehe/Apomix/25.10.2013	Wool alcohol cream DA...	28A210313	2
GEHE/Apomix/31.01.14	Wool alcohol cream DA...	82A260913	1
GEHE/B0mbastus/04.14	Wool alcohol cream DA...	285870	3
Bombastus	Wool alcohol cream DA...	288351	1
Bombastus	Wool alcohol cream DA...	301310	3
Bombastus	Wool alcohol cream DA...	304428	4
Caelo	Wool alcohol cream DA...	12370601	9
Caelo	Wool alcohol cream DA...	12370203	1
Caelo	Wool alcohol cream DA...	14046101	2
Caelo	Wool alcohol cream DA...	15259802	1
Caelo	Wool alcohol cream DA...	16157801/1041016	1
Caelo	Wool alcohol cream DA...	1230317	1
Caelo	Wool alcohol cream DA...	17039901	3
Caelo	Wool alcohol cream DA...	17178301	20
Caelo	Wool alcohol cream DA...	1241017/17155901	1
GH: ...	Wool alcohol cream DA...		1
ichthyol	Wool alcohol cream DA...	297414	1
Ichthyol Gesellschaft...	Wool alcohol cream DA...	14362501	1
Ichthyol-Gesellschaft	Wool alcohol cream DA...	11288302	1
Kehr	Wool alcohol cream DA...	18000771	1
Caelo	Wool alcohol cream DA...	17094002	12
Caelo	Wool alcohol cream DA...	170400001	1
Leyh /Sanacorp	Wool alcohol cream DA...	154421	1
Leyh /Sanacorp	Wool alcohol cream DA...	162631	3
Leyh /Sanacorp	Wool alcohol cream DA...	170231	1
Leyh Pharma	Wool alcohol cream DA...	173821	2
leyh Pharma	Wool alcohol cream DA...	172411	4
Leyh Pharma	Wool alcohol cream DA...	181741	1
Leyh Pharma / Allianc...	Wool alcohol cream DA...	181011	1
Leyh Pharma / Allianc...	Wool alcohol cream DA...	182851	1
Leyh Pharma / Allianc...	Wool alcohol cream DA...	182241	1
Leyh Pharma / Allianc...	Wool alcohol cream DA...	183641	2
Leyh Pharma / Allianc...	Wool alcohol cream DA...	8004134002	1
Leyh Pharma GmbH	Wool alcohol cream DA...	151831	3
Leyh Pharma GmbH	Wool alcohol cream DA...	163741	1
Leyh Pharma GmbH	Wool alcohol cream DA...	171311	1
Leyh Pharma GmbH, 15...	Wool alcohol cream DA...	162411	2
Leyh Pharma/Noweda	Wool alcohol cream DA...	160551	2
Leyh Pharma/Noweda	Wool alcohol cream DA...	161211	1
Leyh Pharma/Noweda	Wool alcohol cream DA...	161531	1
Leyh Pharma/Noweda	Wool alcohol cream DA...	170651	1
Leyh Pharma/Noweda	Wool alcohol cream DA...	192841	1

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Supplier	Substance	Batch	Spectra
Leyh Pharma/Phoenix	Wool alcohol cream DA...	180231	3
Leyh Pharma/Phoenix	Wool alcohol cream DA...	191931	1
Leyh Pharma/Sanacorp	Wool alcohol cream DA...	142031	1
Leyh Pharma/Sanacorp	Wool alcohol cream DA...	144951	1
Leyh Pharma/Sanacorp	Wool alcohol cream DA...	150411	1
Leyh/Noweda	Wool alcohol cream DA...	152321	2
Leytt Pharma / Allian...	Wool alcohol cream DA...	174511	2
Midas	Wool alcohol cream DA...	16322301	1
Noweda	Wool alcohol cream DA...	282241	1
Noweda	Wool alcohol cream DA...	282244	1
Noweda	Wool alcohol cream DA...	14295402	2
Noweda	Wool alcohol cream DA...	291431	1
Noweda	Wool alcohol cream DA...	291478	1
Noweda	Wool alcohol cream DA...	294529	1
Noweda	Wool alcohol cream DA...	295530	1
Noweda	Wool alcohol cream DA...	294333	1
Noweda	Wool alcohol cream DA...	295530	1
Noweda	Wool alcohol cream DA...	298673	1
Noweda	Wool alcohol cream DA...	17156001	19
Caelo	Wool alcohol cream DA...	13008202	1
Bombastus	Wool alcohol cream DA...	271812	1
Bombastus	Wool alcohol cream DA...	289620	1
Noweda/ Caesar & Lore...	Wool alcohol cream DA...	16007901	19
Noweda/apomix	Wool alcohol cream DA...	5A290113	2
Bombastus	Wool alcohol cream DA...	286236	2
Caelo	Wool alcohol cream DA...	12260402	13
Caelo	Wool alcohol cream DA...	13272601	1
Caelo	Wool alcohol cream DA...	14259401	2
Caelo	Wool alcohol cream DA...	14259601	7
Caelo	Wool alcohol cream DA...	14200702	2
Caelo	Wool alcohol cream DA...	1429501	1
Caelo	Wool alcohol cream DA...	15329403	1
Euro OTC	Wool alcohol cream DA...	2507217035	1
Euro OTC	Wool alcohol cream DA...	17102701	29
Otto Fischar GmbH & C...	Wool alcohol cream DA...	294533	10
P.W.Beyvers GmbH,Phönix	Wool alcohol cream DA...	15A230215	1
Pharmachem	Wool alcohol cream DA...	190816	13
Pharmachem	Wool alcohol cream DA...	190417	6
Pharmachem	Wool alcohol cream DA...	291217	13
Pharmachem / Alliance...	Wool alcohol cream DA...	290818	4
Pharmachem Anzag	Wool alcohol cream DA...	260413	3
Pharmachem GmbH	Wool alcohol cream DA...	110913	2
pharmachem gmbh co kg...	Wool alcohol cream DA...	31215	8
Pharmachem/Phoenix	Wool alcohol cream DA...	184511	2
Pharmachem/Phönix	Wool alcohol cream DA...	110614	1
Phoenix	Wool alcohol cream DA...	14A180214	1
Phoenix	Wool alcohol cream DA...	14362501	10
Phoenix	Wool alcohol cream DA...	17039801	8
Phoenix (Pharmachem P...	Wool alcohol cream DA...	260712	3
Phoenix Goettin	Wool alcohol cream DA...	15017801	3
Caelo	Wool alcohol cream DA...	14216903	2
Caelo	Wool alcohol cream DA...	18012201/2110418	1
Caelo	Wool alcohol cream DA...	13145901	5
Caelo	Wool alcohol cream DA...	19058002	1
Phönix	Wool alcohol cream DA...	13279301	6
Phönix	Wool alcohol cream DA...	14295502	1
Phönix	Wool alcohol cream DA...	1098283	1
Phönix	Wool alcohol cream DA...	17148901	5
Phönix	Wool alcohol cream DA...	18023402	21
Phönix	Wool alcohol cream DA...	18086502	8

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Supplier	Substance	Batch	Spectra
Phönix	Wool alcohol cream DA...	18241602	9
Phönix	Wool alcohol cream DA...	18004726	2
Phönix	Wool alcohol cream DA...	1900168	1
PHÖNIX	Wool alcohol cream DA...	17227401	16
PHÖNIX	Wool alcohol cream DA...	17178201	13
Bombastus	Wool alcohol cream DA...	17002206	5
Caelo	Wool alcohol cream DA...	15360802	5
Bombastus	Wool alcohol cream DA...	18002410	4
Phönix Gotha	Wool alcohol cream DA...	12036403	2
Phönix Gotha	Wool alcohol cream DA...	12352001	4
Caelo	Wool alcohol cream DA...	17148201	1
Caelo	Wool alcohol cream DA...	13272601	3
Caelo	Wool alcohol cream DA...	153671601	1
Caelo	Wool alcohol cream DA...	16008301	8
Caelo	Wool alcohol cream DA...	16277902	8
Caelo	Wool alcohol cream DA...	2120817/17039401	1
PKH GmbH,Phönix	Wool alcohol cream DA...	57A100615	1
PKH Halle	Wool alcohol cream DA...	19A240718	5
PKH Halle/AHD	Wool alcohol cream DA...	23A181017	2
PKH Halle/Noweda	Wool alcohol cream DA...	21A290817	2
Raben-Apotheke Mildenau	Wool alcohol cream DA...	38A150514	1
Raben-Apotheke Mildenau	Wool alcohol cream DA...	45A260514	3
Sanacorp	Wool alcohol cream DA...	12307801	4
Sanacorp	Wool alcohol cream DA...	14002801	12
Sanacorp	Wool alcohol cream DA...	22/AKD2	1
Sanacorp	Wool alcohol cream DA...	287183	1
Sanacorp	Wool alcohol cream DA...	288264	1
Sanacorp	Wool alcohol cream DA...	25/AKD3	1
Sanacorp	Wool alcohol cream DA...	13172102	1
Sanacorp	Wool alcohol cream DA...	27/AKD4	1
Sanacorp	Wool alcohol cream DA...	ch. -B28/AKD10	1
Sanacorp	Wool alcohol cream DA...	16090703	2
Sanacorp	Wool alcohol cream DA...	18086302	17
Caelo	Wool alcohol cream DA...	13146001	4
Caelo	Wool alcohol cream DA...	14046502	3
Caelo	Wool alcohol cream DA...	14246301	1
Caelo	Wool alcohol cream DA...	15149902	1
Caelo	Wool alcohol cream DA...	15266001	1
Caelo	Wool alcohol cream DA...	15149801	2
Caelo	Wool alcohol cream DA...	15260001	1
Caelo	Wool alcohol cream DA...	16277903	9
Caelo	Wool alcohol cream DA...	18086303	10
Bombastus	Wool alcohol cream DA...	268902	1
Bombastus	Wool alcohol cream DA...	270725	2
Bombastus	Wool alcohol cream DA...	282751	4
Bombastus	Wool alcohol cream DA...	282753	2
Caelo	Wool alcohol cream DA...	12056301	1
Caelo	Wool alcohol cream DA...	22/AKD52	1
Caelo	Wool alcohol cream DA...	15266401	3
Sonnen-Apotheke Wefen...	Wool alcohol cream DA...	16090101	3
Bombastus	Wool alcohol cream DA...	306218	5
Taoasis	Wool alcohol cream DA...	81/12	1
VDL 28.04;Preis:4,34	Wool alcohol cream DA...	14033202;15R05	1
WE:Sanacorp26.09.2016...	Wool alcohol cream DA...	16090002	1
Caelo	Wormwood tincture (70...	92780419	1
Caelo	Wormwood tincture (70...	10260210	2
Caelo	Wormwood tincture (70...	11145005	1
Caelo	Wormwood tincture (70...	12237901	1
Caelo	Wormwood tincture (70...	12237902	1
Caelo	Wormwood tincture (70...	12237907	1

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Supplier	Substance	Batch	Spectra
Caelo	Wormwood tincture (70...	12237905	4
Phönix Gotha	Wormwood tincture (70...	10010909	1
Caelo	Zinc ointment DAB	11271001	1
Bombastus	Zinc ointment DAB	30071602	1
Bombastus	Zinc ointment DAB	275313	4
Bombastus	Zinc ointment DAB	282182	1
Bombastus	Zinc ointment DAB	277335	2
Bombastus	Zinc ointment DAB	274127	1
Caelo	Zinc ointment DAB	16101202	1
Caelo	Zinc ointment DAB	12042503	3
Caelo	Zinc ointment DAB	20270912-5	1
Caelo	Zinc ointment DAB	12343602	9
Caelo	Zinc ointment DAB	7031303	1
Caelo	Zinc ointment DAB	12098402	4
Caelo	Zinc ointment DAB	12101302	1
Caelo	Zinc ointment DAB	13072702	1
Caelo	Zinc ointment DAB	13257003	1
Caelo	Zinc ointment DAB	13393903	1
Caelo	Zinc ointment DAB	13257001	9
Caelo	Zinc ointment DAB	11367501	3
Caelo	Zinc ointment DAB	1234602	1
Caelo	Zinc ointment DAB	12042502	1
Apomix	Zinc oxide cream 25% ...	7B270513	1
Apomix/ Sanacorp	Zinc oxide cream 25% ...	13B230813	1
Apomix/Noweda	Zinc oxide cream 25% ...	4A100413	1
apomix/Phönix	Zinc oxide cream 25% ...	15B230913	1
Bombastus	Zinc oxide cream 25% ...	272491	1
Bombastus	Zinc oxide cream 25% ...	276966	2
Bombastus	Zinc oxide cream 25% ...	281755	2
Bombastus	Zinc oxide cream 25% ...	272490	1
Bombastus	Zinc oxide cream 25% ...	279248	1
Caelo	Zinc oxide cream 25% ...	13A040912	3
Caelo	Zinc oxide cream 25% ...	279250	2
Caelo	Zinc oxide cream 25% ...	2795250	1
Pharmachem	Zinc oxide cream 25% ...	110112	1
PharmaChem	Zinc oxide cream 25% ...	150513	1
Phönix Gotha	Zinc oxide cream 25% ...	276963	1
PKH GmbH	Zinc oxide cream 25% ...	2B080113	1
Anzag	Zinc oxide lotion, aq...	12309601	6
Anzag 08.03.2013	Zinc oxide lotion, aq...	13018401	16
Bombastus	Zinc oxide lotion, aq...	274933	1
Bombastus	Zinc oxide lotion, aq...	281537	1
Bombastus	Zinc oxide lotion, aq...	284632	1
Caelo	Zinc oxide lotion, aq...	10082601	1
Caelo	Zinc oxide lotion, aq...	3101217039	1
Caelo	Zinc oxide lotion, aq...	12065203	1
Caelo	Zinc oxide lotion, aq...	12065401	1
Caelo	Zinc oxide lotion, aq...	12211501	8
Caelo	Zinc oxide lotion, aq...	711217039	1
Caelo	Zinc oxide lotion, aq...	4121204	1
Caelo	Zinc oxide lotion, aq...	12197103	1
Caelo	Zinc oxide lotion, aq...	12211802	4
Caelo	Zinc oxide lotion, aq...	28121204	1
Caelo	Zinc oxide lotion, aq...	20310812-3	1
Caelo	Zinc oxide lotion, aq...	12307902	1
Caelo	Zinc oxide lotion, aq...	12309802	11
Caelo	Zinc oxide lotion, aq...	12309702	5
Caelo	Zinc oxide lotion, aq...	1230951	1
Caelo	Zinc oxide lotion, aq...	1013I-01815	1
Caelo	Zinc oxide lotion, aq...	19041309	1

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Supplier	Substance	Batch	Spectra
Caelo	Zinc oxide lotion, aq. . .	6061301	1
Caelo	Zinc oxide lotion, aq. . .	2713M1815	1
Caelo	Zinc oxide lotion, aq. . .	11281301	1
Caelo	Zinc oxide lotion, aq. . .	11071303	1
Caelo	Zinc oxide lotion, aq. . .	13087701	19
Caelo	Zinc oxide lotion, aq. . .	13139402	12
Caelo	Zinc oxide lotion, aq. . .	24101311	1
Caelo	Zinc oxide lotion, aq. . .	13283101	9
Caelo	Zinc oxide lotion, aq. . .	12111306	1
Caelo	Zinc oxide lotion, aq. . .	13282901	16
Caelo	Zinc oxide lotion, aq. . .	20122013F	1
Caelo	Zinc oxide lotion, aq. . .	24122013A	1
Caelo	Zinc oxide lotion, aq. . .	13283103	1
Caelo	Zinc oxide lotion, aq. . .	15061201	1
Caelo	Zinc oxide lotion, aq. . .	14010502	1
Caelo	Zinc oxide lotion, aq. . .	14116701	1
Caelo	Zinc oxide lotion, aq. . .	14010602	1
Caelo	Zinc oxide lotion, aq. . .	13282701	1
Caelo	Zinc oxide lotion, aq. . .	14275002	1
Caelo	Zinc oxide lotion, aq. . .	15003201	1
Caelo	Zinc oxide lotion, aq. . .	15154301	1
Caelo	Zinc oxide lotion, aq. . .	15273502	2
Caelo	Zinc oxide lotion, aq. . .	16003202	1
Caelo	Zinc oxide lotion, aq. . .	16003302	1
Caelo	Zinc oxide lotion, aq. . .	14010501	3
Caelo	Zinc oxide lotion, aq. . .	12309701	4
Caelo	Zinc oxide lotion, aq. . .	13087501	12
Caelo	Zinc oxide lotion, aq. . .	13139301	16
Caelo	Zinc oxide lotion, aq. . .	13018801	7
Caelo	Zinc oxide lotion, aq. . .	13282801	5
Caelo	Zinc oxide lotion, aq. . .	132801	1
Caelo	Zinc oxide lotion, aq. . .	11329903	2
Caelo	Zinc oxide lotion, aq. . .	12211701	14
Caelo	Zinc oxide lotion, aq. . .	12211401	6
Caelo	Zinc oxide lotion, aq. . .	13018803	5
Caelo	Zinc oxide lotion, aq. . .	12065301	8
Caelo	Zinc oxide lotion, aq. . .	13087601	21
Caelo	Zinc oxide lotion, aq. . .	11184601	1
Caelo	Zinc oxide lotion, aq. . .	11281401	1
Caelo	Zinc oxide lotion, aq. . .	1109779	1
Caelo	Zinc oxide lotion, aq. . .	13283002	6
Caelo	Zinc oxide lotion, aq. . .	1319601	2
Caelo	Zinc oxide lotion, aq. . .	13024401	5
Caelo	Zinc oxide lotion, aq. . .	13139302	5
Caelo	Zinc oxide lotion, aq. . .	112814101	1
Caelo	Zinc oxide lotion, aq. . .	38112A-01815	1
Caesar & Loretz GmbH	Zinc oxide lotion, aq. . .	12309501	29
Caesar & Loretz GmbH	Zinc oxide lotion, aq. . .	13405901	4
Calo	Zinc oxide lotion, aq. . .	14211601	1
Fagron	Zinc oxide lotion, aq. . .	4213Q-01815	1
Fagron	Zinc oxide lotion, aq. . .	13K19-T02-014523	1
Fagron	Zinc oxide lotion, aq. . .	10H19-T01-000747	1
Finze	Zinc oxide lotion, aq. . .	12065501	5
Gehe	Zinc oxide lotion, aq. . .	12211402	8
Caelo	Zinc oxide lotion, aq. . .	13139601	23
Henry Lamotte	Zinc oxide lotion, aq. . .	60480	1
Henry Lamotte GmbH/Ho. . .	Zinc oxide lotion, aq. . .	5289300	3
henry lamotte oils gmbh	Zinc oxide lotion, aq. . .	6000083002	1
henry lamotte oils gmbh	Zinc oxide lotion, aq. . .	90616-1	1
Henry Lamotte Oils GmbH	Zinc oxide lotion, aq. . .	600320602	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils, A...	Zinc oxide lotion, aq...	5375600	12
Henry Lamotte/ 24.04...	Zinc oxide lotion, aq...	1221401	1
Caelo	Zinc oxide lotion, aq...	11329902	1
lamotte	Zinc oxide lotion, aq...	6003206002	2
Lamotte	Zinc oxide lotion, aq...	5163600	2
Lamotte	Zinc oxide lotion, aq...	5099300	1
Lamotte	Zinc oxide lotion, aq...	5216200	1
Lamotte	Zinc oxide lotion, aq...	60460	1
Lamotte	Zinc oxide lotion, aq...	5651500	1
Lamotte	Zinc oxide lotion, aq...	5735500	3
Lamotte / Gehe	Zinc oxide lotion, aq...	5321300	10
Lamotte / Gehe	Zinc oxide lotion, aq...	5517400	12
Lamotte/ Finze	Zinc oxide lotion, aq...	5563300	2
Noweda	Zinc oxide lotion, aq...	1211701	1
Caelo	Zinc oxide lotion, aq...	13283001	3
Noweda/Lamotte	Zinc oxide lotion, aq...	5447800	9
Phoenix	Zinc oxide lotion, aq...	4010501	1
Phönix	Zinc oxide lotion, aq...	11329801	2
Sanacorp	Zinc oxide lotion, aq...	AKD33	1
Apomix	Zinc oxide oil DAC	26C190911	1
Bombastus	Zinc oxide oil DAC	273970	1
Bombastus	Zinc oxide oil DAC	273972	1
Bombastus	Zinc oxide oil DAC	269765	1
Bombastus	Zinc oxide oil DAC	278159	6
Bombastus	Zinc oxide oil DAC	282083	1
Bombastus	Zinc oxide oil DAC	286041	2
Bombastus	Zinc oxide oil DAC	301565	1
Bombastus	Zinc oxide oil DAC	274182	1
Bombastus	Zinc oxide oil DAC	273971	1
Bombastus	Zinc oxide oil DAC	269650	1
Bombastus	Zinc oxide oil DAC	263248	1
Bombastus	Zinc oxide oil DAC	279564	1
Caelo	Zinc oxide oil DAC	2612M-02026	1
Caelo	Zinc oxide oil DAC	12160101	1
Caelo	Zinc oxide oil DAC	12004701	2
Caelo	Zinc oxide oil DAC	12289801	1
Caelo	Zinc oxide oil DAC	13307202	1
Caelo	Zinc oxide oil DAC	14032701	2
Caelo	Zinc oxide oil DAC	15170902	1
Caelo	Zinc oxide oil DAC	15173002	1
Caelo	Zinc oxide oil DAC	16093002	1
Caelo	Zinc oxide oil DAC	12289802	3
Caelo	Zinc oxide oil DAC	12004601	2
Caelo	Zinc oxide oil DAC	12160002	1
Caelo	Zinc oxide oil DAC	13069701	13
Caelo	Zinc oxide oil DAC	13196501	2
Gehe	Zinc oxide oil DAC	275086	2
Gehe	Zinc oxide oil DAC	279563	3
Gehe	Zinc oxide oil DAC	275085	1
Gehe	Zinc oxide oil DAC	282085	1
Gehe	Zinc oxide oil DAC	289826	1
lamotte/Gehe	Zinc oxide oil DAC	13196401	4
pharmachem	Zinc oxide oil DAC	90512	1
Phönix	Zinc oxide oil DAC	1C010212	1
Phönix	Zinc oxide oil DAC	286040	1
Sanacorp/ apomix	Zinc oxide oil DAC	26B190911	1
Caelo	Zinc oxide oil DAC	12128602	2
vdl	Zinc oxide oil DAC	12351702	5
Anzag	Zinc oxide oil SR 90	15B100912	1
Apomix	Zinc oxide oil SR 90	6B150413	1

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Supplier	Substance	Batch	Spectra
Bombastus	Zinc oxide oil SR 90	6858379	1
Bombastus	Zinc oxide oil SR 90	273973	6
Bombastus	Zinc oxide oil SR 90	277647	1
Pharmachem	Zinc oxide oil SR 90	20712	1
Pharmachem	Zinc oxide oil SR 90	260412	1
Pharmachem	Zinc oxide oil SR 90	150413	1
Pharmachem	Zinc oxide oil SR 90	30712	1
Pharmachem	Zinc oxide oil SR 90	160413	1
Pharmachem Anzag	Zinc oxide oil SR 90	140513	1
Pharmachem GmbH	Zinc oxide oil SR 90	61112	1
pharmachen	Zinc oxide oil SR 90	30045100	1
Pharmachern/AHD	Zinc oxide oil SR 90	160122	1
Bombastus	Zinc oxide paste SR90	273833	1
Bombastus	Zinc oxide paste SR90	266450	1
Bombastus	Zinc oxide paste SR90	279384	1
Bombastus	Zinc oxide paste SR90	279387	1
Bombastus	Zinc oxide paste SR90	276198	1
Bombastus	Zinc oxide paste SR90	276200	3
Bombastus	Zinc oxide paste SR90	256014	1
Caelo	Zinc oxide paste SR90	244154	1
Caelo	Zinc oxide paste SR90	Test2	1
Gehe	Zinc oxide paste SR90	264198	1
Gehe	Zinc oxide paste SR90	266451	1
Gehe	Zinc oxide paste SR90	268240	1
Gehe	Zinc oxide paste SR90	270919	1
Gehe	Zinc oxide paste SR90	276199	2
Gehe	Zinc oxide paste SR90	279386	1
Caelo	Zinc oxide paste SR90	271195	1
AMH Niemann GmbH & Co...	Zinc oxide paste, sof...	25A310712	2
AMH Niemann GmbH&Co.KG	Zinc oxide paste, sof...	21B210612	1
AMH/ Sanacorp	Zinc oxide paste, sof...	43B150811	1
Anzag	Zinc oxide paste, sof...	12121501	1
apomix	Zinc oxide paste, sof...	34A231012	1
Apomix	Zinc oxide paste, sof...	3A090113	1
Apomix	Zinc oxide paste, sof...	4A090113	3
Apomix	Zinc oxide paste, sof...	12B140313	1
apomix, Phönix	Zinc oxide paste, sof...	6A110213	2
Bombastus	Zinc oxide paste, sof...	273330	2
Bombastus	Zinc oxide paste, sof...	271192	2
Bombastus	Zinc oxide paste, sof...	273328	3
Bombastus	Zinc oxide paste, sof...	275031	1
Bombastus	Zinc oxide paste, sof...	275030	4
Bombastus	Zinc oxide paste, sof...	273326	1
Bombastus	Zinc oxide paste, sof...	279586	4
Bombastus	Zinc oxide paste, sof...	277663	1
Bombastus	Zinc oxide paste, sof...	281586	1
Bombastus	Zinc oxide paste, sof...	271196	2
Bombastus	Zinc oxide paste, sof...	273329	4
Caelo	Zinc oxide paste, sof...	12366801	1
Gehe	Zinc oxide paste, sof...	260912	1
Pharmachem	Zinc oxide paste, sof...	70512	1
Phoenix (Pharmachem P...	Zinc oxide paste, sof...	191112	1
Bombastus	Zinc oxide paste, sof...	277662	1
Caelo	Zinc oxide shaking mi...	12261701	1
Caelo	Zinc oxide shaking mi...	13080201	3
Caelo	Zinc oxide shaking mi...	13244001	1
Caelo	Zinc oxide shaking mi...	1308021	1
Caelo	Zinc oxide shaking mi...	1324401	1
Bombastus	Zinc paste DAB	278272	3
Bombastus	Zinc paste DAB	27113603-15	1

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Supplier	Substance	Batch	Spectra
Bombastus	Zinc paste DAB	271133	1
Bombastus	Zinc paste DAB	271136	1
Bombastus	Zinc paste DAB	276144	2
Bombastus	Zinc paste DAB	276143	1
Bombastus	Zinc paste DAB	276141	1
Bombastus	Zinc paste DAB	276145	1
Bombastus	Zinc paste DAB	278861	1
Bombastus	Zinc paste DAB	276604	1
Bombastus	Zinc paste DAB	278865	1
Bombastus	Zinc paste DAB	278863	1
Bombastus	Zinc paste DAB	278270	1
Bombastus	Zinc paste DAB	276146	1
Bombastus	Zinc paste DAB	282037	1
Bombastus	Zinc paste DAB	284662	1
Bombastus	Zinc paste DAB	287850	1
Bombastus	Zinc paste DAB	290176	1
Bombastus	Zinc paste DAB	291718	2
Bombastus	Zinc paste DAB	278273	3
Bombastus	Zinc paste DAB	278274	3
Bombastus	Zinc paste DAB	278864	3
Bombastus	Zinc paste DAB	62/13	1
Bombastus	Zinc paste DAB	273894	1
Bombastus	Zinc paste DAB	271138	2
Bombastus	Zinc paste DAB	280733	2
Bombastus	Zinc paste DAB	280732	1
Bombastus	Zinc paste DAB	271134	1
Caelo	Zinc paste DAB	1321903	1
Caelo	Zinc paste DAB	11321701	3
Caelo	Zinc paste DAB	11290901	1
Caelo	Zinc paste DAB	12206501	8
Caelo	Zinc paste DAB	12066102	1
Caelo	Zinc paste DAB	20271012-1	1
Caelo	Zinc paste DAB	10345201	3
Caelo	Zinc paste DAB	20021310	1
Caelo	Zinc paste DAB	903312054	1
Caelo	Zinc paste DAB	12206401	3
Caelo	Zinc paste DAB	12271702	9
Caelo	Zinc paste DAB	13043401	18
Caelo	Zinc paste DAB	31051302	1
Caelo	Zinc paste DAB	10245901	2
Caelo	Zinc paste DAB	13201801	21
Caelo	Zinc paste DAB	11321702	1
Caelo	Zinc paste DAB	14011402	1
Caelo	Zinc paste DAB	14092301	1
Caelo	Zinc paste DAB	13201201	1
Caelo	Zinc paste DAB	14201201	1
Caelo	Zinc paste DAB	14293302	1
Caelo	Zinc paste DAB	16013302	1
Caelo	Zinc paste DAB	16068501	1
Caelo	Zinc paste DAB	12271601	9
Caelo	Zinc paste DAB	13043301	4
Caelo	Zinc paste DAB	13201701	1
Caelo	Zinc paste DAB	11290801	2
Caelo	Zinc paste DAB	12147801	11
Caelo	Zinc paste DAB	11364102	3
Caelo	Zinc paste DAB	12262301	2
Caelo	Zinc paste DAB	13345202	1
Caelo	Zinc paste DAB	15121-02054	1
Caesar & Loretz GmbH	Zinc paste DAB	281972	1
Bombastus	Zinc paste DAB	271135	2

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Supplier	Substance	Batch	Spectra
Fagron	Zinc paste DAB	273893	1
Fagron	Zinc paste DAB	12I06-T01	1
Fiebig	Zinc paste DAB	268489	1
Noweda	Zinc paste DAB	276606	1
phönix	Zinc paste DAB	12147903	1
Sanacorp	Zinc paste DAB	13043502	3
Sanacorp	Zinc paste DAB	13201903	1
Sanacorp	Zinc paste DAB	13345101	7
Wasserfuhr	Zinc paste DAB	12169401	1
Alliance Health	Zinc paste, soft DAB	278229	4
Alliance Healthcare	Zinc paste, soft DAB	281118	1
Anzag	Zinc paste, soft DAB	12121501	1
Anzag	Zinc paste, soft DAB	14023301	4
Anzag 18.10.12	Zinc paste, soft DAB	12121401	3
Apomix	Zinc paste, soft DAB	13A040912	1
Apomix	Zinc paste, soft DAB	41B051212	1
bom	Zinc paste, soft DAB	286902	1
Bombastus	Zinc paste, soft DAB	265457	1
Bombastus	Zinc paste, soft DAB	267515	1
Bombastus	Zinc paste, soft DAB	271195	2
Bombastus	Zinc paste, soft DAB	270465	3
Bombastus	Zinc paste, soft DAB	5216300	4
Bombastus	Zinc paste, soft DAB	271194	1
Bombastus	Zinc paste, soft DAB	271340	3
Bombastus	Zinc paste, soft DAB	274972	2
Bombastus	Zinc paste, soft DAB	273701	1
Bombastus	Zinc paste, soft DAB	274971	1
Bombastus	Zinc paste, soft DAB	271341	2
Bombastus	Zinc paste, soft DAB	276540	3
Bombastus	Zinc paste, soft DAB	276536	1
Bombastus	Zinc paste, soft DAB	274973	1
Bombastus	Zinc paste, soft DAB	275948	1
Bombastus	Zinc paste, soft DAB	280233	1
Bombastus	Zinc paste, soft DAB	276538	2
Bombastus	Zinc paste, soft DAB	280234	1
Bombastus	Zinc paste, soft DAB	278226	1
Bombastus	Zinc paste, soft DAB	280235	1
Bombastus	Zinc paste, soft DAB	281117	1
Bombastus	Zinc paste, soft DAB	282863	1
Bombastus	Zinc paste, soft DAB	270516	2
Bombastus	Zinc paste, soft DAB	278228	2
Bombastus	Zinc paste, soft DAB	281116	2
Bombastus	Zinc paste, soft DAB	282861	1
Bombastus	Zinc paste, soft DAB	267590	1
Bombastus	Zinc paste, soft DAB	282859	1
Bombastus	Zinc paste, soft DAB	293485	1
Bombastus	Zinc paste, soft DAB	281122	4
Bombastus	Zinc paste, soft DAB	267591	1
Bombastus	Zinc paste, soft DAB	278227	1
Bombastus	Zinc paste, soft DAB	278223	1
Bombastus	Zinc paste, soft DAB	276539	3
Bombastus	Zinc paste, soft DAB	281121	2
Bombastus	Zinc paste, soft DAB	262918	1
Bombastus	Zinc paste, soft DAB	266383	1
Bombastus	Zinc paste, soft DAB	271344	2
Bombastus	Zinc paste, soft DAB	274978	3
Bombastus	Zinc paste, soft DAB	276537	1
Caelo	Zinc paste, soft DAB	28031401	1
Caelo	Zinc paste, soft DAB	2101212055	1
Caelo	Zinc paste, soft DAB	11099003	1

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Supplier	Substance	Batch	Spectra
Caelo	Zinc paste, soft DAB	11269701	2
Caelo	Zinc paste, soft DAB	1403212055	1
Caelo	Zinc paste, soft DAB	11202101	1
Caelo	Zinc paste, soft DAB	11338501	2
Caelo	Zinc paste, soft DAB	208212055	1
Caelo	Zinc paste, soft DAB	11338401	1
Caelo	Zinc paste, soft DAB	12068901	2
Caelo	Zinc paste, soft DAB	1212401	1
Caelo	Zinc paste, soft DAB	12121302	2
Caelo	Zinc paste, soft DAB	711212055	1
Caelo	Zinc paste, soft DAB	17111203	1
Caelo	Zinc paste, soft DAB	12207801	1
Caelo	Zinc paste, soft DAB	12207901	7
Caelo	Zinc paste, soft DAB	12208101	6
Caelo	Zinc paste, soft DAB	213E-02055	1
Caelo	Zinc paste, soft DAB	1601312055	1
Caelo	Zinc paste, soft DAB	12271301	4
Caelo	Zinc paste, soft DAB	6021305	1
Caelo	Zinc paste, soft DAB	12271401	10
Caelo	Zinc paste, soft DAB	12366801	12
Caelo	Zinc paste, soft DAB	13026901	20
Caelo	Zinc paste, soft DAB	13026702	4
Caelo	Zinc paste, soft DAB	12366703	1
Caelo	Zinc paste, soft DAB	13027001	8
Caelo	Zinc paste, soft DAB	11061301	1
Caelo	Zinc paste, soft DAB	13088701	22
Caelo	Zinc paste, soft DAB	2713E2055	1
Caelo	Zinc paste, soft DAB	12206201	1
Caelo	Zinc paste, soft DAB	13088901	12
Caelo	Zinc paste, soft DAB	13089001	13
Caelo	Zinc paste, soft DAB	8081301	1
Caelo	Zinc paste, soft DAB	13203501	12
Caelo	Zinc paste, soft DAB	70913WZP	1
Caelo	Zinc paste, soft DAB	13203301	15
Caelo	Zinc paste, soft DAB	13088/01	1
Caelo	Zinc paste, soft DAB	13088602	1
Caelo	Zinc paste, soft DAB	13203401	11
Caelo	Zinc paste, soft DAB	13203701	2
Caelo	Zinc paste, soft DAB	13316301	23
Caelo	Zinc paste, soft DAB	14111313	1
Caelo	Zinc paste, soft DAB	13316601	6
Caelo	Zinc paste, soft DAB	13387801	5
Caelo	Zinc paste, soft DAB	14023601	1
Caelo	Zinc paste, soft DAB	14023801	1
Caelo	Zinc paste, soft DAB	14023701	3
Caelo	Zinc paste, soft DAB	14117801	1
Caelo	Zinc paste, soft DAB	14173201	1
Caelo	Zinc paste, soft DAB	1417601	1
Caelo	Zinc paste, soft DAB	14023401	1
Caelo	Zinc paste, soft DAB	14173001	2
Caelo	Zinc paste, soft DAB	14181702	1
Caelo	Zinc paste, soft DAB	14172901	1
Caelo	Zinc paste, soft DAB	14296301	1
Caelo	Zinc paste, soft DAB	15005202	1
Caelo	Zinc paste, soft DAB	15072701	3
Caelo	Zinc paste, soft DAB	15073001	1
Caelo	Zinc paste, soft DAB	15072901	1
Caelo	Zinc paste, soft DAB	16001201	3
Caelo	Zinc paste, soft DAB	16042101	1
Caelo	Zinc paste, soft DAB	13036901	1

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Supplier	Substance	Batch	Spectra
Caelo	Zinc paste, soft DAB	12308307	1
Caelo	Zinc paste, soft DAB	12208001	7
Caelo	Zinc paste, soft DAB	12366701	10
Caelo	Zinc paste, soft DAB	63075606	1
Caelo	Zinc paste, soft DAB	12069001	4
Caelo	Zinc paste, soft DAB	13026801	7
Caelo	Zinc paste, soft DAB	12271501	10
Caelo	Zinc paste, soft DAB	13316701	1
Caelo	Zinc paste, soft DAB	414U-02055	1
Caelo	Zinc paste, soft DAB	16121901	1
Caelo	Zinc paste, soft DAB	1212601	1
Caelo	Zinc paste, soft DAB	13388001	3
Caelo	Zinc paste, soft DAB	12208201	7
Caelo	Zinc paste, soft DAB		2
Caelo	Zinc paste, soft DAB	13089101	5
Caelo	Zinc paste, soft DAB	13316401	6
Caelo	Zinc paste, soft DAB	3413E-02055	1
Caesar & Loretz GmbH ...	Zinc paste, soft DAB	11269601	2
Defektur	Zinc paste, soft DAB	54/12	1
Defektur	Zinc paste, soft DAB	11/13	1
Defektur	Zinc paste, soft DAB	32/13	1
Defektur	Zinc paste, soft DAB	56/13	1
Euro OTC	Zinc paste, soft DAB	1211014-01	7
Euro OTC	Zinc paste, soft DAB	214I-02055	1
Euro OTC	Zinc paste, soft DAB	13211014-01	1
Euro OTC	Zinc paste, soft DAB	1310019-01	2
Euro OTC	Zinc paste, soft DAB	121014-01	1
Euro OTC	Zinc paste, soft DAB	1009043-01	3
Euro OTC	Zinc paste, soft DAB	1108059-01	4
Fagron	Zinc paste, soft DAB	12/26-T03	1
Fagron	Zinc paste, soft DAB	12J26-T03	6
Fagron	Zinc paste, soft DAB	4113A-02055	1
Fagron	Zinc paste, soft DAB	10D15-T01	1
Fagron	Zinc paste, soft DAB	13H13-T05-006158	1
Gehe	Zinc paste, soft DAB	11338801	4
Gehe	Zinc paste, soft DAB	12068801	6
Gehe	Zinc paste, soft DAB	11338601	2
Gehe	Zinc paste, soft DAB	130112	1
Gehe	Zinc paste, soft DAB	12A250412	1
Bombastus	Zinc paste, soft DAB	271343	2
Bombastus	Zinc paste, soft DAB	270463	2
Henry Lamotte	Zinc paste, soft DAB	5375700	3
Henry Lamotte Oils GmbH	Zinc paste, soft DAB	5374900	5
Caelo	Zinc paste, soft DAB	5316600	4
Lamotte	Zinc paste, soft DAB	5517500	1
lamotte/Noweda	Zinc paste, soft DAB	5447900	4
Pharmachem Anzag	Zinc paste, soft DAB	191112	1
Phoenix	Zinc paste, soft DAB	281120	1
Phönix	Zinc paste, soft DAB	13040201	10
Phönix	Zinc paste, soft DAB	278225	1
Phönix	Zinc paste, soft DAB	13316501	7
Phönix Gotha	Zinc paste, soft DAB	12069101	3
Phönix Gotha	Zinc paste, soft DAB	12271502	4
Phönix Gotha	Zinc paste, soft DAB	13088801	9
Caelo	Zinc paste, soft DAB	12121601	9
Caelo	Zinc paste, soft DAB	1268901	1
Sanacorp	Zinc paste, soft DAB	273704	2
Sanacorp	Zinc paste, soft DAB	274979	1
Caelo	Zinc paste, soft DAB	11338001	1
Caelo	Zinc paste, soft DAB	12068701	4

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Supplier	Substance	Batch	Spectra
Caelo	Zinc paste, soft DAB	13004101	1
Caelo	Zinc paste, soft DRF ...	13094201	2
Caelo	Zinc paste, soft DRF ...	12160302	1
Caelo	Zinc paste, soft DRF ...	12378402	1

Appendix D: Requirements of validation

In order to ensure adherence to the safe scientific status, the individual methods for manufacturing and testing must be validated under certain circumstances (compare § 34 para. 1 no. 3, § 35 para. 1 no. 4 and para. 4 sentence 1 no. 2 b, para. 6 sentence 3 *ApoBetrO* [Pharmacies Rules and Regulations]). The *ApoBetrO* [Pharmacies Rules and Regulations] incorporates a legal definition in § 1 a para. 16 (quotation translated):

“Validation is the provision of documented proof which with a high degree of safety documents that, via a specific process or standard work process, a medicinal product is manufactured and tested, which is in accordance with previously determined quality features.”

Validation documentation can be used to prove that methods or devices which are not described in the Pharmacopoeia within the meaning of § 6 para. 1 sentence 3 *ApBetrO* [Pharmacies Rules and Regulations] achieve the same results as those in the Pharmacopoeia. On the other hand, with the requirements of the demanded validation it must be observed whether the respective testing method is already incorporated in the Pharmacopoeia.

NIR spectroscopy as a general testing method need not be validated in accordance with the express ruling in the *Ph. Eur. Section 1.1* [3], as it is already described in *Section 2.2.40* of the *Ph. Eur.* as an area of application for the identification of raw materials.

However, a special validation requirement exists for the reference database. This requirement is met with the existing document. Further requirements or rules as to how this proof must be furnished do not exist. It is required that the processes guarantee the same results as the methods and devices in the Pharmacopoeia [17].

Carrying out identity tests with *Apo-Ident* is therefore also possible if the NIR spectroscopy process is not required in the Pharmacopoeia monograph of the substance for identity testing. All NIR analyses with *Apo-Ident* prove several, often all molecule groups and are therefore comparable with a series of individual, targeted chemical proofs [4]. Therefore, the identity proof with *Apo-Ident* replaces the monograph test series (with two or more test combinations).

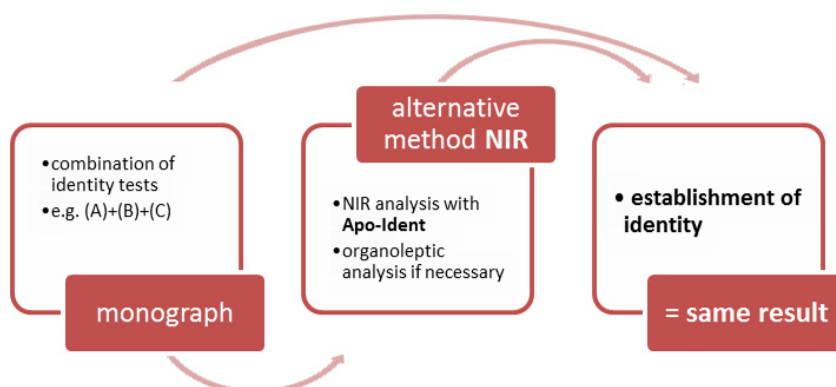


Figure 2: The combination of tests of the monograph is replaced by the alternative method NIR spectroscopy using *Apo-Ident*. This is permissible because both test procedures result in the establishment of the identity of the raw material.

With this validation documentation, proof is furnished that identical results are achieved with *Apo-Ident* and Pharmacopoeia methods, i.e. confirmation of the identity of the raw material [2].

Appendix E: Conformity of Apo-Ident with the European pharmacopeia

According to *Ph. Eur. Section 2.2.40*, NIR spectroscopy is basically suitable for: “Identification of agents, excipients, dosage forms, intermediate manufacturing products, chemical raw materials and packaging materials” ([3], quotation translated).

The fact that *Apo-Ident* meets the further criteria of the European Pharmacopoeia under the headings in *Section 2.2.40*

- Apparatus
- Measurement methods
- Sample preparation and presentation
- Testing the functionality of the instrument
- Identification and characterisation (qualitative analysis)
- Quantitative analysis
- Ongoing model evaluation
- Transfer of databases
- Data storage

can be proven based on the *HiperScan GmbH* documentation of “Meeting 2.2.40 *Ph. Eur.* by *Apo-Ident*” [4].

Appendix F: Addition to the second-stage models

As described in the general part of the *Apo-Ident* validation documentation, in the section [Model creation procedure and validation runs](#), under 2. *Generating the chemometric models (calibration)* in *f*), it is possible to create a further chemometric model for certain substances (second-stage model) and to undertake the assessment in several steps.

Substances in second-stage models

In the substance class *APIs & excipients, liquid/semi-solid (with analysis certificate)*, a distinction is made between the following substances in the listed second-stage models:

Submodell - Submodel fl

2-ethylhexyl laurate
Base cream DAC
Eucerin[®] cum Aqua
Lanette[®] ointment (conserved)
Non-ionic hydrophil ointment
Squalane
Wool alcohol cream DAB
Wool alcohol cream SR

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