

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) Checking the distances between the limits of the separable substances: the distance matrix incorporates the *Mahalanobis distances* from each substance to all the others. If a distance is less than 10, both two substances must be declared as inseparable or *both two* must be removed from the database. (The spectra of removed substances remain as independent *Type B* spectra in the validation.)
- e) Testing the model based on the reference spectra. If *false positive* results arise, you must proceed as in the case of *Mahalanobis distances* which are too small.
- f) If chemometric models are available for all substance classes which meet both criteria (distance matrix and no *false positives*), they are joined together with the evaluation algorithms as an *IdentModule* and encrypted. This unit can no longer be changed. Its overall function is tested by validation.

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 14000 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 $\mathbf{X}$.

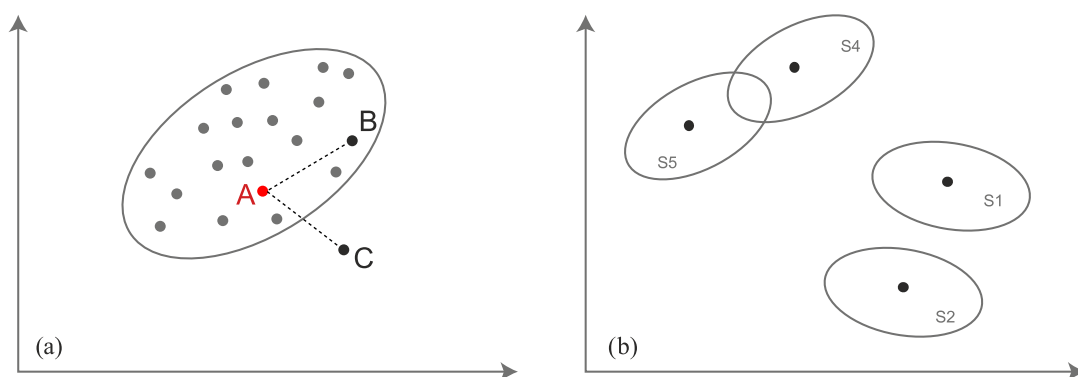


Figure 1: (a) The *Mahalanobis distance* from *A* to *B* is less than from *A* to *C*. However, the *Euclidean distances* are identical. (b) The *Mahalanobis distance* between the two measurement series *S4* and *S5* is smaller than between *S1* and *S2*. However, the *Euclidean distances* are identical.

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 222 872 spectra from 33 177 different batches for a total of 409 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:

Type 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)	214	847	35 835

From category *A* a total of 35 835 spectra from 847 batches for a total of 214 substances were taken into account for validation.

Type 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)	351	1831	79 078

From category *B* a total of 79 078 spectra from 1831 batches for a total of 351 substances were taken into account for validation.

Type 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)	338	31 420	107 959

From category *C* a total of 107 959 spectra from 31 420 batches for a total of 338 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	35 835	0	4 873 560
Type B	0	70 443	400	10 761 029
Type C	0	100 947	2500	14 685 610

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
Type A	100.000 00 % (> 99.999 79 %)	100.000 00 % (> 99.970 63 %)
Type B	100.000 00 % (> 99.999 77 %)	98.993 94 % (> 98.978 21 %)
Type C	100.000 00 % (> 99.997 42 %)	95.542 41 % (> 95.410 39 %)

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

IdentModul 2.0-2019-02

Validated substance/substance group **Acetic acid 30%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30487-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20130107
Caelo	Acetic acid 30%	16079301	33426	40	1801528

Validation samples

A total of 222 872 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 *Acetic acid 30%*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Acetic acid 30%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acetic acid 30%	12376101	31318 [†]	20
Caelo	Acetic acid 30%	172744	33889	40
Caelo	Acetic acid 30%	18123201	34236	40

- 78 978 spectra from a total of 1827 batches from further 350 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 65 *Apo-Ident* customers from 14 batches from the substance/substance group *Acetic acid 30%*.

Supplier	Substance	Batch	Spectra
Caelo	Acetic acid 30%	11271701	3

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
Phoenix	Acetic acid 30%	11271702	1
Caelo	Acetic acid 30%	12376101	14
Phönix	Acetic acid 30%		1
GEHE am 21.05.2014	Acetic acid 30%	12376101	1
Caesar & Loretz GmbH	Acetic acid 30%	14208501	1
Caelo	Acetic acid 30%	12376102	1
Caelo	Acetic acid 30%	14208501	27
Caelo	Acetic acid 30%	1428501	1
Caelo	Acetic acid 30%	14058001	2
Caelo	Acetic acid 30%	16079301	26
Bombastus	Acetic acid 30%	16079301	1
Cealo/Noweda	Acetic acid 30%	16079301	2
Caelo	Acetic acid 30%	16079101	2
Caelo	Acetic acid 30%	16049301	1
Caesar&Loretz	Acetic acid 30%	16079301	1
Caelo	Acetic acid 30%	16076101	1
Caelo	Acetic acid 30%	18123201	1
Caelo	Acetic acid 30%	17274401	2
Caesar & Loretz GmbH	Acetic acid 30%	18123201	1

- 107 869 spectra from 582 *Apo-Ident* customers from a total of 30 667 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	81	9	107 869

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	90.0000 % (> 86.6667 %)

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.

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	33426	13.40	47.32
31318	33426	4.46	46.82
33426	33426	0.00	43.59

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Acetic acid 99%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30486-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20130114
Caelo	Acetic acid 99%	16238401	33423	40	1801527

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 119 spectra of 3 reference samples from the substance/substance group *Acetic acid 99%*. These samples are listed above in the [calibration samples](#) section.
- 35 716 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Acetic acid 99%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acetic acid 99%	11186701	30486	40
Caelo	Acetic acid 99%	13013101	31319 [†]	20
Hedinger	Acetic acid 99%	223083B	33428	40
Hedinger	Acetic acid 99%	223083B	33429	40

- 78 938 spectra from a total of 1827 batches from further 350 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.

- 127 spectra from 97 *Apo-Ident* customers from 34 batches from the substance/substance group *Acetic acid 99%*.

Supplier	Substance	Batch	Spectra
Caelo	Acetic acid 99%	10135706	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
Sanacorp	Acetic acid 99%	11349901	1
Caelo	Acetic acid 99%	11349901	7
Fischar/Gehe	Acetic acid 99%	7002031	1
Anzag	Acetic acid 99%	7002101	1
Caelo	Acetic acid 99%	11186701	1
Fischar / Anzag	Acetic acid 99%	7002031	1
Otto Fischar/ Phoenix	Acetic acid 99%	7002101	1
ph.eur /phönix	Acetic acid 99%	7002101	1
Hedinger/Gehe	Acetic acid 99%	223007B	1
Caelo	Acetic acid 99%	13013101	6
Hedinger/AHD	Acetic acid 99%	2230128	1
Caelo	Acetic acid 99%	7002101	1
Fischar/Phoenix	Acetic acid 99%	7002101	1
Hedinger/NOWEDA	Acetic acid 99%	223012B	1
Caelo	Acetic acid 99%	13218401	1
Fischar/Gehe	Acetic acid 99%	7003053	1
Hedinger	Acetic acid 99%	223018B	1
Otto Fischar GmbH	Acetic acid 99%	7003053	1
Caelo	Acetic acid 99%	13218301	19
Fischar/Noweda	Acetic acid 99%	7004051	2
Phoenix	Acetic acid 99%	7003053	1
Fischar	Acetic acid 99%	7004051	1
Sanacorp	Acetic acid 99%	13218301	1
Fischer/Phönix	Acetic acid 99%	7004111	1
Caelo	Acetic acid 99%	13218501	2
Devisa/Noweda	Acetic acid 99%	13218301	1
ACM	Acetic acid 99%	KNC1163J14	1
Fischar	Acetic acid 99%	7003053	1
Fischar/AHD	Acetic acid 99%	7004111	1
Caelo	Acetic acid 99%	15280701	9
Hedinger/Jenne	Acetic acid 99%	223044B	1
Hedinger	Acetic acid 99%	223052B	1
otto fischar	Acetic acid 99%	7004111	1
Hedinger	Acetic acid 99%	5113M-01010	1
Fischar/Phoenix	Acetic acid 99%	7002101	1
Fischar	Acetic acid 99%	7005091	2
Hedinger	Acetic acid 99%	223055B	1
Hedinger / Kehr	Acetic acid 99%	223079B	1
Fischar Otto / Sanacorp	Acetic acid 99%	7005091	1
Hedinger	Acetic acid 99%	223083B	1
Caelo	Acetic acid 99%	16238401	11
Fischar	Acetic acid 99%	90212/1	1
Fischar/Kehr	Acetic acid 99%	7005091	1
Caelo	Acetic acid 99%	18031701	1
Caelo	Acetic acid 99%	15280702	6
GEHE	Acetic acid 99%	7006091	2
Fischar/Ebert	Acetic acid 99%	7006091	1
Anzag	Acetic acid 99%	223088B	1
Fischer	Acetic acid 99%	7005091	1
Fischar/Noweda	Acetic acid 99%	7006091	1
Fischar	Acetic acid 99%	7006091	2
Caelo	Acetic acid 99%	17200401	7
Fischar/Sanacorp	Acetic acid 99%	7006091	3
Bombastus	Acetic acid 99%	7006091	1
Otto Fischer/Noweda	Acetic acid 99%	70006091	1
fischar	Acetic acid 99%	180406E/7006091	1
Sanacorp	Acetic acid 99%	7006091	1
Fischar/Phönix	Acetic acid 99%	7006091	2
Fischar / Gehe	Acetic acid 99%	7006091	2

- 107 832 spectra from 582 *Apo-Ident* customers from a total of 30 647 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 *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	119	0	35 716
Type B	0	140	0	78 938
Type C	0	127	0	107 832

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 % (> 99.9707 %)	100.0000 % (> 94.9580 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6450 %)	100.0000 % (> 95.2756 %)

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.

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
33423	33423	0.00	87.95
31132	33423	10.86	93.37
31319	33423	6.63	86.42

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Acetone**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30539-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	1505477
Otto Fischar	Acetone	4203051	31580	40	20130513
Hedinger	Acetone	011242B	31793	40	20150703
Otto Fischar	Acetone	4205031	31796	40	20150305

Validation samples

A total of 222 872 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 *Acetone*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 159 spectra of 6 reference samples from the substance/substance group *Acetone*.

Supplier	Substance	Batch	Sample ID	Spectra
Hedinger	Acetone	011215B	31575 [†]	19
Otto Fischar	Acetone	4203051	31580 [†]	20
Hedinger	Acetone	011242B	31793 [†]	20
Otto Fischar	Acetone	4205031	31796 [†]	20
Hedinger	Acetone	011236B	32920	40
Hedinger	Acetone	011297B	33946	40

- 78 919 spectra from a total of 1824 batches from further 350 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.

- 461 spectra from 194 *Apo-Ident* customers from 202 batches from the substance/substance group *Acetone*.

[†]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*.

Supplier	Substance	Batch	Spectra
Hedinger	Acetone	11134B	1
Hedinger	Acetone	2704211002	1
Fischar	Acetone	90110/1	2
Hedinger, Heiligenwiese...	Acetone	11148B	1
Caelo	Acetone	11148B	2
Caelo	Acetone		1
Hedinger	Acetone	11143B	3
Anzag/Dr. Seeger	Acetone	111488	1
Fischbar	Acetone	17091206	1
Fischbar	Acetone	22091201	1
Phönix/Fischer	Acetone	4202052	1
Caelo	Acetone	11152b	1
Hedinger	Acetone	11152B	1
Fischbar	Acetone	2101205	1
Fischar	Acetone	16101206	1
Holdermann	Acetone	11158B	1
GEHE	Acetone	4202052	1
Hedinger, Noweda	Acetone	11163B	1
Hedinger	Acetone	11148B	1
Sanacorp	Acetone	4202062	1
Hedinger Jenne	Acetone	11158B	1
Caelo	Acetone	606001008	1
Hedinger	Acetone	11158B	3
Noweda	Acetone	901101	1
Fischar	Acetone	4202101	1
Hedinger , Noweda	Acetone	11168B	1
Hedinger/ Anzag	Acetone	111588	1
Otto Fischar	Acetone	9011/01	1
Fischar/Gehe	Acetone	4202101	1
Hedinger	Acetone	11168B	1
Fischer/Gehe	Acetone	4201051	1
Hedinger	Acetone	18011306	1
Phönix/Fischar	Acetone	4202062	1
Anzag/ Hedinger	Acetone	11158B	1
Hedinger	Acetone	11163B	1
Fischar	Acetone	6021303	1
Hedinger/Phönix	Acetone	11168B	1
Hedinger	Acetone	111688	1
Hedinger/Noweda	Acetone	111528	1
fischer/Anzag	Acetone	4202061	1
Hedinger	Acetone	11173B	11
Hiperscan	Acetone		1
Hedinger/Phönix	Acetone	11173B	2
Hedinger / Gehe	Acetone	11173B	1
Fischar	Acetone	28031301	1
Fischar	Acetone	4202061	1
Hedinger	Acetone	19041301	1
Phönix	Acetone	4202112	1
Hedinger/Gehe	Acetone	11158B	1
Hedinger/Anzag	Acetone	11173B	1
Caelo	Acetone	111738	1
Fischer	Acetone	A-040613-3	1
Hedinger	Acetone	4061306	1
Hedinger/ Noweda	Acetone	11177B	1
Hedinger	Acetone	11182B	2
Hedinger	Acetone	2713M1002	1
Hedinger	Acetone	11177B	1
Hedinger/Gehe	Acetone	11177B	1
Anzag	Acetone	11173B	1
Hedinger/Sanacorp	Acetone	11185B	2

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Supplier	Substance	Batch	Spectra
Fischar	Acetone	4202121	2
Hedinger	Acetone	111828	1
Fischar	Acetone	9C205/1	1
Hedinger/Noweda	Acetone	11168B	1
Hedinger	Acetone	11185B	2
Caelo	Acetone	59/AKD1	1
Hedinger/Noweda	Acetone	111858	1
Otto Fischar	Acetone	90110/1	1
fischer/Anzag	Acetone	4203032	2
Otto Fischar/Phoenix	Acetone	4202112	1
Caelo	Acetone	11185B	2
Hedinger	Acetone	16081301	1
Hedinger/Otto	Acetone	111738	1
Fischar	Acetone	4008978161101	1
Anzag/Seeger	Acetone	11185B	1
Hedinger , Stuttgart	Acetone	11182B	1
Hedinger	Acetone	11065B	1
Sanacorp	Acetone		2
Hedinger	Acetone	111888	1
Hedinger/Phoenix	Acetone	11185B	1
Fischar	Acetone	30081301	1
Hedinger/AHD	Acetone	110958A2010	1
Hedinger Phönix	Acetone	11173B	1
Fischar/Gehe	Acetone	4203031	3
Hedinger	Acetone	10091304	1
Hedinger	Acetone	11188B	4
Dr.Seeger/Jenne	Acetone	11188B	1
Apoth.E.Bartel / Noweda	Acetone	11173B	1
Fischbar	Acetone	4101302	1
Hedinger, Noweda	Acetone	11188B	1
Hedinger/AHD	Acetone	11158B	1
Hedinger	Acetone	11187B	1
Hedinger / Sanacorp	Acetone	11188B	1
Fischar	Acetone	25101302	1
	Acetone	281013A	1
Fischar	Acetone	4203032	1
Hedinger/ Noweda	Acetone	11187B	1
Fischar	Acetone	22111302	1
Hedinger	Acetone	11195B	2
Hedinger/Phönix	Acetone	11195B	1
Sanacorp/ Fischar	Acetone	4203111	1
Caelo	Acetone	111938	1
Hedinger/Otto	Acetone	11193B	1
Hedinger	Acetone	11193B	1
Hedinger / Phoenix	Acetone	11195B	1
Hedinger Jenne	Acetone	11193B	1
Hedinger	Acetone	111938	1
Fischer/Sanacorp	Acetone	420301	1
Hedinger	Acetone	11199B	4
PHOENIX	Acetone	11195B	2
Hedinger/Sanacorp	Acetone	11187B	2
Otto Fischer/ Gehe	Acetone	4203101	1
Fischar	Acetone	123456	2
Fischar/Noweda	Acetone	4203101	1
Seege/ Jenne	Acetone	11199B	2
Hedinger/ Phoenix	Acetone	1214M1002	1
Fischar/Gehe	Acetone	4203101	1
Fischar	Acetone	5041403	1
Fischar/ Now	Acetone	4203111	1
Otto Fischar	Acetone	90205/1	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Acetone	11193B	1
Hedinger	Acetone	11200B	1
Fischar	Acetone	2051408	1
Hedinger / Sanacorp	Acetone	112038	1
Hedinger/ Jenne	Acetone	11200B	1
Fischar	Acetone	4203091	1
Fischar / Gehe	Acetone		1
Fischar/Phönix	Acetone	4204012	2
Hedinger/Phoenix	Acetone	11187B	1
Barthel	Acetone	11177B	1
Alliance Health 04.06.2...	Acetone	11199B	1
Otto Fischar	Acetone	4203101	1
Hedinger/Sanacorp	Acetone	11200B	1
Hedinger	Acetone	16061404	1
Hedinger/V.d.L.	Acetone	11199B	1
Hed	Acetone	11203B	2
otto fischar/gehe	Acetone	4204032	1
Fischar Anzag	Acetone	90205/2	1
Hedinger/Noweda	Acetone	11210B	1
Hedinger	Acetone	220114	1
Fischar/Gehe	Acetone	4204031	1
hedinger	Acetone	11210B	4
Hedinger / Noweda	Acetone	11203B	1
Fischar	Acetone	4204031	3
Hedinger	Acetone	25071411	1
Hedinger	Acetone	11210B	6
Hedinger / Noweda	Acetone	11210B	2
Hedinger / Noweda	Acetone	11199B	1
Fischar	Acetone	4204051	1
Sanacorp/Phoenix	Acetone	11210B	1
Hedinger/Gehe	Acetone	11210B	1
Stumpf/Hedinger	Acetone	11210B	1
Hedinger / Sanacorp	Acetone	11210B	1
Fischar	Acetone	4204032	1
Hedinger/Gehe	Acetone	311092	1
Hedinger Phönix	Acetone	112008	1
Hedinger	Acetone	112108	1
Hedinger	Acetone	11210B	1
Hedinger / Noweda	Acetone	112158	1
Fischar/Gehe	Acetone	4204071	1
Caelo	Acetone	11210B	1
Caelo	Acetone	11215B	1
Hedinger/Phoenix	Acetone	11215B	1
Euro OTC	Acetone	4204032	1
Hedinger/Sanacorp	Acetone	11210B	1
Dr.Seeger GmbH	Acetone	11199B	1
Hedinger	Acetone	16101402	1
Phönix Gotha	Acetone	4204032	1
Hedinger	Acetone	11215B	3
Caelo	Acetone	11218B	1
Fischar	Acetone	4204052	1
Fischar	Acetone	45204052	1
Otto Fischbar	Acetone	4204052	1
Otto Fischar GmbH&Co.KG...	Acetone	4204032	1
AHD 29.10.14 EK 6,70	Acetone	11210B	1
Hedinger/Sanacorp	Acetone	11215B	1
H.Lamotte/Noweda	Acetone	11210B	2
Noweda	Acetone	11224B	1
Anzag/ Otto Fischar GmbH...	Acetone	4204032	1
Caelo	Acetone	11224B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Acetone	8121401	1
AHD/18.11.14/Hedinger	Acetone	112158	1
Noweda	Acetone	11226B	1
Otto Fischer/ Gehe	Acetone	4204091	1
Hedinger/Noweda	Acetone	11224B	1
Alliance health 12.01.15	Acetone	11218B	1
Hedinger	Acetone	11139B	1
Alliance Healthcare/Hed...	Acetone	11224B	1
otto fischar	Acetone	12011501	1
Hedinger/Noweda	Acetone	11226B	2
hedinger	Acetone	11218B	2
Otto Fischar	Acetone	4204091	1
otto fischar	Acetone	14031502	1
Hedinger/Phoenix	Acetone	11224B	2
Hedinger / Noweda	Acetone	11226B	1
Hedinger/Kehr	Acetone	11227B	1
Hedinger/Gehe	Acetone	11227B	1
Hedinger/AHD	Acetone	11227B	1
Hedinger	Acetone	11226B	1
Infectopharm	Acetone	11227B	1
Caelo	Acetone	11227B	1
fischar	Acetone	4205031	1
Otto Fischar/Phönix	Acetone	4205012	1
Hedinger/Noweda	Acetone	11232B	2
Otto Fischar GmbH & Co...	Acetone	4204051	1
otto fischar	Acetone	23061503	1
Fischar/Phoenix	Acetone	4205031	1
Hedinger	Acetone	11232B	5
Sanacorp / Hedinger WE...	Acetone	11227B	1
ACM	Acetone	KNC0783J13	2
Hedinger/Phoenix	Acetone	11232B	1
Hedinger/Fiebig	Acetone	11241	1
Fischar	Acetone	4091513	1
Fischar	Acetone	4205031	1
Hedinger/Sanacorp	Acetone	11234B	1
Fischar / Gehe	Acetone	1015062	1
Fischar	Acetone	4204072	1
AHD / Hedinger	Acetone	11203B	1
Fischer	Acetone	4205032	1
Hedinger	Acetone	11234B	2
Caelo	Acetone	4205062	2
Caelo	Acetone	11234B	2
Hedinger	Acetone	11241b	1
Fischer/Gehe 3.11.15	Acetone	4205062	1
Phönix	Acetone	11242B	1
Caelo	Acetone	11247B	2
ACM	Acetone	KNC1133J14	1
Hedinger	Acetone	11236B	1
Fischar/Gehe	Acetone	4205071	1
Fischar	Acetone	4205071	1
Fischar	Acetone	4205061	1
Hubertus Apotheke	Acetone	4205062	1
Hedinger	Acetone	11250B	4
Otto Fischar GmbH & Co...	Acetone	4205071	1
Fischar	Acetone	4205011	1
Hedinger über Phoenix	Acetone	11247B	1
Otto Fischar GmbH & Co...	Acetone	1015041	1
Hedinger/Phönix	Acetone	11250B	1
hedinger	Acetone	11252B	2
hedinger	Acetone	11250B	1

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Supplier	Substance	Batch	Spectra
Fischar	Acetone	4206011	2
Otto Fischar GmbH	Acetone	4204032	1
Phönix	Acetone	11250B	1
Noweda/Hedinger	Acetone	11252B	1
Caelo	Acetone	11252B	1
Fischar/Noweda	Acetone	4205062	1
Hedinger/Phönix	Acetone	11232B	1
Hedinger/Phönix	Acetone	11234B	1
Caesar & Loretz GmbH Hi...	Acetone	4205111	1
Caesar & Loretz GmbH Hi...	Acetone	420511	2
Otto Fischar GmbH / Gehe	Acetone	4205092	1
Otto Fischar	Acetone	1016031	1
Fischar/Gehe	Acetone	4205092	1
Hedinger	Acetone	111738	1
Hedinger	Acetone	11256B	2
Fischar / Alliance Heal...	Acetone	4206012	1
Otto Fischer GmbH	Acetone	4205092	1
Otto Fischar GmbH & Co...	Acetone	4206012	1
Hedinger	Acetone	11260B	2
Fischar/Alliance Heathc...	Acetone	4206011	1
Hedinger/Phönix	Acetone	11260B	1
Fischar	Acetone	4206012	2
Caelo	Acetone	11260B	1
Hedinger/Phoenix	Acetone	11260B	1
Fischar	Acetone	4206041	1
Hedinger	Acetone	11261B	1
Fischar	Acetone	1016051	1
Caelo	Acetone	11263B	2
Otto Fischar / Noweda	Acetone	4206012	1
Fischar/Gehe	Acetone	1016051	1
Hedinger/Noweda	Acetone	11263B	1
Hedinger	Acetone	1261B	1
HEDINGER/Phönix	Acetone	11260B	1
Hedinger	Acetone	11272B	2
Euro OTC	Acetone	112618	1
sanacorp, 6,64EUR, 20.04...	Acetone	11256B	1
Ebert KKH 29.09.2016	Acetone	4206042	1
Otto Fischer	Acetone	4206061	1
Fischar/Phönix	Acetone	4206041	1
Fischar	Acetone	1016041	1
Fischar GmbH/Krieger	Acetone	4206071	1
hedinger	Acetone	11271B	1
Fischar/Phönix	Acetone	4205072	1
Hedinger/Noweda	Acetone	11272B	1
Hedinger	Acetone	112618	1
Hedinger/Phoenix	Acetone	11272B	1
fischer	Acetone	4206061	1
Caelo	Acetone	11271B	2
Hedinger	Acetone	112718	1
Fischer/Gehe	Acetone	1015041	1
Hedinger/Phönix	Acetone	11278B	1
Hedinger	Acetone	11278B	4
Otto Fischar GmbH	Acetone	4206091	1
Phoenix	Acetone	11271b	1
Fischbar	Acetone	1016041	1
Hedinger GmbH	Acetone	11271B	1
Fischar / Alliance Heal...	Acetone	4206071	1
Fischer	Acetone	1016101	1
Fischar / Gehe	Acetone	4207013	1
Sanacorp	Acetone	11286B	1

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Supplier	Substance	Batch	Spectra
Otto Fischar/Ebert	Acetone	4205071	1
Phönix	Acetone	1016111	2
Hedinger	Acetone	112788	1
Fischar	Acetone	5051704	1
Hedinger/Noweda	Acetone	112868	1
Hedinger	Acetone	11277B	1
Fischar/Noweda	Acetone	4206092	1
Phoenix/Fischar	Acetone	106091	1
Kehr/A. Hedinger	Acetone	112828	1
Fischar	Acetone	1017032	1
Hedinger	Acetone	11282B	2
Hedinger/Alliance Haelt...	Acetone	11277B	1
Fischar/Noweda	Acetone	4207011	1
Sanacorp	Acetone	11271B	1
Fischar/Phoenix	Acetone	4207013	1
Fischar	Acetone	1017021	1
Noweda	Acetone	4207013	1
Hedinger/Phoenix	Acetone	11283B	1
Sanacorp	Acetone	4206091	1
Noweda/Hedinger	Acetone	11272B	1
Delta	Acetone	4207013	1
Hedinger/AHD	Acetone	11282B	1
Gehe / Fischar	Acetone	1017081	1
Hedinger/Sanacorp	Acetone	112788	1
Caelo	Acetone	11283B	1
Fischar	Acetone	7091706	1
AHD Hedinger	Acetone	11260B	1
Fischar	Acetone	14101702	1
Otto Fischar GmbH	Acetone	4207041	1
Fischar	Acetone	27101711	1
hedinger	Acetone	11283B	1
Sanacorp	Acetone	11288B	1
Phönix / Hedinger	Acetone	11283B	1
Phönix Hedinger	Acetone	11295B	1
Hedinger	Acetone	112898	1
Fischar / Sanacorp	Acetone	4207041	1
fischar / ahd	Acetone	1017092	2
Hedinger/Phönix	Acetone	11289B	2
Hedinger	Acetone	11295B	1
Hedinger/Phoenix	Acetone	112893	1
Hedinger	Acetone	11289B	3
Phoenix/Cealo	Acetone	112898	1
Fischar	Acetone	1017092	1
Euro OTC	Acetone	11297B	1
Hedinger/Alliance	Acetone	112958	1
Phönix W.E:2.03.18 E...	Acetone	11271B	1
Otto Fischar gmbh	Acetone	1017092	1
Hedinger/ Noweda	Acetone	11283B	1
Otto Fischar GmbH	Acetone	4207072	1
Fischar	Acetone	7051801	1
Otto Fischar	Acetone	1018012	1
Fischar/ Noweda	Acetone	1018011	1
Hedinger/Phönix	Acetone	11302B	1
Fischer/Fiebig	Acetone	4207102	1
Fischer/Alliance	Acetone	1018021	1
fishar/Phoenix	Acetone	4208022	2
Fischar	Acetone	29061801	1
Caelo	Acetone	11302B	1
Caelo	Acetone	11297B	1
Otto Fischar GmbH &Co. KG	Acetone	1018051	1

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Supplier	Substance	Batch	Spectra
Hedinger	Acetone	11297B	1
Fischar	Acetone	11195B	1
Fischar	Acetone	4207102	1
Noweda/Hedinger	Acetone	11302B	1
Fischar/Phönix	Acetone	4208021	1
Hedinger	Acetone	11302B	1
fischar/AHD	Acetone	10180315628	1
Fischar	Acetone	20101803	1
Hedinger Phönix	Acetone	11308B	1
Fischar	Acetone	24101803	1
Fischar/ Noweda	Acetone	1018101	1
Otto Fischar	Acetone	4208061	1
Otto fischar	Acetone	22121812	1

- 107 498 spectra from 582 *Apo-Ident* customers from a total of 30 480 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 *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	160	0	35 675
Type B	0	159	0	78 919
Type C	0	448	13	107 498

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 96.2264 %)
Type C	100.0000 % (> 99.6450 %)	97.1800 % (> 96.5293 %)

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.

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	139.84
31580	31575	5.49	136.63
31793	31575	3.29	139.37
31796	31575	6.38	134.29

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Acorus oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31159-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	33835	40	20150320

Validation samples

A total of 222 872 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 *Acorus oil*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Acorus oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Acorus oil	15081902	32347	40
Caelo	Acorus oil	15081901	33251	40

- 78 998 spectra from a total of 1828 batches from further 350 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*.
- 107 959 spectra from 582 *Apo-Ident* customers from a total of 30 680 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 *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	160	0	35 675
Type B	0	80	0	78 998
Type C	0	0	0	107 959

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6449 %)	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.

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	35.33
32180	31159	4.86	32.13
32348	31159	5.32	30.47
33835	31159	5.29	34.67

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	All-rac-alpha-tocopheryl acetate
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31020-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20141216
Euro OTC	All-rac-alpha-to...	1512007	31817	40	20151216*

Validation samples

A total of 222 872 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 *All-rac-alpha-tocopheryl acetate*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

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

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	All-rac-alpha-tocopheryl ace...	1411025-01	31646 [†]	18
Euro OTC	All-rac-alpha-tocopheryl ace...	1512007	31817 [†]	20
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
Caelo	All-rac-alpha-tocopheryl ace...	172397	33688	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1710024	33842	40
Caelo	All-rac-alpha-tocopheryl ace...	172397	33886	40
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012	34096	40
Caelo	All-rac-alpha-tocopheryl ace...	180877	34223	40

- 78 720 spectra from a total of 1821 batches from further 350 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](#).

*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.

[†]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*.

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.

- 445 spectra from 181 *Apo-Ident* customers from 135 batches from the substance/substance group *All-rac-alpha-tocopheryl acetate*.

Supplier	Substance	Batch	Spectra
Caelo	All-rac-alpha-tocopheryl ace...	15239003	9
Caelo	All-rac-alpha-tocopheryl ace...	14076812	10
Caelo	All-rac-alpha-tocopheryl ace...	14076805	6
Caelo	All-rac-alpha-tocopheryl ace...	11043011	1
Euro OTC	All-rac-alpha-tocopheryl ace...	11300002	1
Caelo	All-rac-alpha-tocopheryl ace...	11043007	1
Caelo	All-rac-alpha-tocopheryl ace...	10247405	1
Caelo	All-rac-alpha-tocopheryl ace...	11300001	3
Caelo	All-rac-alpha-tocopheryl ace...	11300005	3
Caelo	All-rac-alpha-tocopheryl ace...	11300002	2
Caelo	All-rac-alpha-tocopheryl ace...	11300003	2
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP11300004T	4
Caelo	All-rac-alpha-tocopheryl ace...	12053802	9
Caelo	All-rac-alpha-tocopheryl ace...	12053803	6
Anzag ek: 7.71	All-rac-alpha-tocopheryl ace...	11300002	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	12053802	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1208020-01	4
ANZAG	All-rac-alpha-tocopheryl ace...	12319401	1
Fagron	All-rac-alpha-tocopheryl ace...	12E16-N06	2
Caelo	All-rac-alpha-tocopheryl ace...	20231012-4	1
Fagron	All-rac-alpha-tocopheryl ace...	12G12-No7	1
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...	12319403	1
DSM Nutritional Prod./ ...	All-rac-alpha-tocopheryl ace...	12E16-N06	1
Fagron	All-rac-alpha-tocopheryl ace...	12L14-N06	4
Euro OTC	All-rac-alpha-tocopheryl ace...	12362307	1
Caelo	All-rac-alpha-tocopheryl ace...	12362307	16
Caelo	All-rac-alpha-tocopheryl ace...	19071302	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP12362305T	4
Caelo	All-rac-alpha-tocopheryl ace...	13075202	2
Euro OTC	All-rac-alpha-tocopheryl ace...	1301010-01	3
EUro/AHD	All-rac-alpha-tocopheryl ace...	1301010-01	1
Caelo	All-rac-alpha-tocopheryl ace...	3312M-02500	1
Caelo	All-rac-alpha-tocopheryl ace...	1813M-02500	1
Caelo	All-rac-alpha-tocopheryl ace...	70913Toc	1
Caelo	All-rac-alpha-tocopheryl ace...	12362404	1
Caelo	All-rac-alpha-tocopheryl ace...	16091301	1
Sanacorp	All-rac-alpha-tocopheryl ace...	1301010-01	1
Sanacorp	All-rac-alpha-tocopheryl ace...	12362307	1
Sanacorp	All-rac-alpha-tocopheryl ace...	AP11300004T	1
Sanacorp	All-rac-alpha-tocopheryl ace...	Ap12362305T	1
Caelo	All-rac-alpha-tocopheryl ace...	611toc	1
Caelo	All-rac-alpha-tocopheryl ace...	13217201	13
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP12362305	1
Fagron	All-rac-alpha-tocopheryl ace...	12362307	1
Caelo	All-rac-alpha-tocopheryl ace...	1321702	1
Fagron	All-rac-alpha-tocopheryl ace...	UT12020065	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	13217202	1
Caelo	All-rac-alpha-tocopheryl ace...	13217202	4

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Supplier	Substance	Batch	Spectra
Euro OTC	All-rac-alpha-tocopheryl ace...	1511I-02500	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP11300004	1
Caelo	All-rac-alpha-tocopheryl ace...	13217205	12
Fagron	All-rac-alpha-tocopheryl ace...	12I28-B40	2
Caelo	All-rac-alpha-tocopheryl ace...	13217207	10
Caesar & Loretz GmbH Hi...	All-rac-alpha-tocopheryl ace...	11300004	1
PHOENIX am 27.03.2014	All-rac-alpha-tocopheryl ace...	1310005-01	1
Caelo	All-rac-alpha-tocopheryl ace...	7123623	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	12362305T	2
Fagron	All-rac-alpha-tocopheryl ace...	12/28-B40-288705	1
Caelo	All-rac-alpha-tocopheryl ace...	13396304	4
Euro OTC	All-rac-alpha-tocopheryl ace...	1310005-01	3
Caelo	All-rac-alpha-tocopheryl ace...	13201102	1
Fagron	All-rac-alpha-tocopheryl ace...	14B03-B06-294690	2
Caelo	All-rac-alpha-tocopheryl ace...	13396305	2
Audor Pharma	All-rac-alpha-tocopheryl ace...	13396303	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP13396303T	5
Caelo	All-rac-alpha-tocopheryl ace...	13396306	4
Euro OTC	All-rac-alpha-tocopheryl ace...	140503201	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1405032-01	3
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP13396303	2
Alliance health 05.01.15	All-rac-alpha-tocopheryl ace...	13396305	1
Caelo	All-rac-alpha-tocopheryl ace...	14011512	1
VDL; 24,15EUR; 26.01.2015	All-rac-alpha-tocopheryl ace...	13217206	1
Caelo	All-rac-alpha-tocopheryl ace...	14076813	3
Caelo	All-rac-alpha-tocopheryl ace...	14076806	6
Euro OTC	All-rac-alpha-tocopheryl ace...	1411025-01	9
Caelo	All-rac-alpha-tocopheryl ace...	14076808	2
Caelo	All-rac-alpha-tocopheryl ace...	14363401	2
Caelo	All-rac-alpha-tocopheryl ace...	15126801	2
Caelo	All-rac-alpha-tocopheryl ace...	1411025	1
Fagron	All-rac-alpha-tocopheryl ace...	UT13110302	1
Stumpf / Hedinger	All-rac-alpha-tocopheryl ace...	15126801	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP14363403T	7
Caelo	All-rac-alpha-tocopheryl ace...	14363406	5
Fagron	All-rac-alpha-tocopheryl ace...	14G02-B05-3043462	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020-01	4
Caelo	All-rac-alpha-tocopheryl ace...	1504020-01	4
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020	1
Caelo	All-rac-alpha-tocopheryl ace...	14363402	2
Caelo	All-rac-alpha-tocopheryl ace...	14363405	4
Euro OTC	All-rac-alpha-tocopheryl ace...	1411025	1
Euro OTC	All-rac-alpha-tocopheryl ace...	303462	1
Caelo	All-rac-alpha-tocopheryl ace...	14363407	5
Caelo	All-rac-alpha-tocopheryl ace...	14363408	4
Euro OTC	All-rac-alpha-tocopheryl ace...	1504020-02	2
Spinnrad	All-rac-alpha-tocopheryl ace...	915303112	1
Caelo	All-rac-alpha-tocopheryl ace...	14363410	5
Caelo	All-rac-alpha-tocopheryl ace...	26011601	1
Noweda	All-rac-alpha-tocopheryl ace...	14363410	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP143634003	1
Fagron	All-rac-alpha-tocopheryl ace...	14602-B05-303462	1
Caelo	All-rac-alpha-tocopheryl ace...	15239001	1
Noweda 06.04.2016	All-rac-alpha-tocopheryl ace...	14363406	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP15239006T	3
Wepa	All-rac-alpha-tocopheryl ace...	AP15239006T	1
Caelo	All-rac-alpha-tocopheryl ace...	1504020-02	1
Caelo	All-rac-alpha-tocopheryl ace...	15239002	1
Fagron	All-rac-alpha-tocopheryl ace...	14G02-B05-303462	2
phönix	All-rac-alpha-tocopheryl ace...	1512007-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	All-rac-alpha-tocopheryl ace...	1512007-01	5
Fagron	All-rac-alpha-tocopheryl ace...	15e18-b07-311818	1
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-311818	2
Caelo	All-rac-alpha-tocopheryl ace...	15239009	5
Caelo	All-rac-alpha-tocopheryl ace...	15239011	5
DSM Nutritional Prod./...	All-rac-alpha-tocopheryl ace...	15E18-B07	1
Caesar & Loretz GmbH	All-rac-alpha-tocopheryl ace...	15239011	1
Gehe	All-rac-alpha-tocopheryl ace...	1512007-01	1
Caelo	All-rac-alpha-tocopheryl ace...	15239010	4
Noweda	All-rac-alpha-tocopheryl ace...	15239011	1
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07	2
Caelo	All-rac-alpha-tocopheryl ace...	15238808	4
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-317323	1
Caelo	All-rac-alpha-tocopheryl ace...	15239012	7
Fagron	All-rac-alpha-tocopheryl ace...	16128604	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP16128607T	2
Caelo	All-rac-alpha-tocopheryl ace...	15238807	7
Caelo	All-rac-alpha-tocopheryl ace...	16128604	3
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011-01	2
Caelo	All-rac-alpha-tocopheryl ace...	15238806	2
Fagron	All-rac-alpha-tocopheryl ace...	15E18-B07-322952	1
Caelo	All-rac-alpha-tocopheryl ace...	16128609	3
Caelo	All-rac-alpha-tocopheryl ace...	16128615	9
Anzag	All-rac-alpha-tocopheryl ace...	AP16128607T	1
Zhejiang, Gehe	All-rac-alpha-tocopheryl ace...		1
Gehe	All-rac-alpha-tocopheryl ace...	16128609	1
Caelo	All-rac-alpha-tocopheryl ace...	16128610	4
Finteler Apotheke	All-rac-alpha-tocopheryl ace...	15E18-B07-326638	1
Caelo	All-rac-alpha-tocopheryl ace...	16128614	5
phönix	All-rac-alpha-tocopheryl ace...	16128615	1
Spinnrad	All-rac-alpha-tocopheryl ace...	1116303113	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1606011-02	2
Anzag	All-rac-alpha-tocopheryl ace...	82943389	1
Caelo	All-rac-alpha-tocopheryl ace...	1606011-02	2
Euro/Fiebig	All-rac-alpha-tocopheryl ace...	1606011-02	1
Caelo	All-rac-alpha-tocopheryl ace...	16128613	2
Caelo	All-rac-alpha-tocopheryl ace...	14101714	1
Caelo	All-rac-alpha-tocopheryl ace...	16128624	4
Caelo	All-rac-alpha-tocopheryl ace...	16128625	6
Sanacorp	All-rac-alpha-tocopheryl ace...	AP161286	1
GEHE	All-rac-alpha-tocopheryl ace...	15E18-B07-311818	2
Noweda	All-rac-alpha-tocopheryl ace...	16128625	1
Caelo	All-rac-alpha-tocopheryl ace...	17239704	6
Euro OTC	All-rac-alpha-tocopheryl ace...	201201707103	2
Caelo	All-rac-alpha-tocopheryl ace...	17239702	2
Caelo	All-rac-alpha-tocopheryl ace...	17359203	3
Caelo	All-rac-alpha-tocopheryl ace...	161286T	1
Euro OTC	All-rac-alpha-tocopheryl ace...	171002401	1
Caelo	All-rac-alpha-tocopheryl ace...	17359201	8
Fagron	All-rac-alpha-tocopheryl ace...	17j02-B07-343845	1
Spinnrad	All-rac-alpha-tocopheryl ace...	217303111	1
Fagron	All-rac-alpha-tocopheryl ace...	17J02-B07-343845	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012-01	1
Audor Pharma	All-rac-alpha-tocopheryl ace...	AP161286T5735	1
Caelo	All-rac-alpha-tocopheryl ace...	12091809	1
Caelo	All-rac-alpha-tocopheryl ace...	18087703	1
Euro OTC	All-rac-alpha-tocopheryl ace...	1803012-01-T20190115	1

- 107 514 spectra from 582 *Apo-Ident* customers from a total of 30 545 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 *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	160	0	35 675
Type B	0	358	0	78 720
Type C	0	440	5	107 514

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.3240 %)
Type C	100.0000 % (> 99.6450 %)	98.8764 % (> 98.2022 %)

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.

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	78.41
31371	31817	2.64	76.45
31646	31020	2.85	77.81
31817	31817	0.00	77.68

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Angelica root oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30939-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	1511618
Caelo	Angelica root oil	163376	33082	40	20161213*
Caelo	Angelica root oil	172038	33909	40	20170728*

Validation samples

A total of 222872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 170 spectra of 4 reference samples from the substance/substance group *Angelica root oil*. These samples are listed above in the [calibration samples](#) section.
- 35665 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Angelica root oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Angelica root oil	13157610	31632 [†]	20
Caelo	Angelica root oil	15337207	32929	40
Caelo	Angelica root oil	15337209	33513	40

- 78978 spectra from a total of 1827 batches from further 350 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*.

*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.

[†]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*.

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

- 107 956 spectra from 582 *Apo-Ident* customers from a total of 30 677 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 *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	170	0	35 665
Type B	0	87	13	78 978
Type C	0	3	0	107 956

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 % (> 99.9706 %)	100.0000 % (> 96.4706 %)
Type B	100.0000 % (> 99.9689 %)	87.0000 % (> 84.0000 %)
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.

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	26.94
31632	31632	0.00	20.28
33082	33082	0.00	26.10
33909	33909	0.00	20.74

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Anise oil / Star aniseed oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31158-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	Star anise oil	13056105	31158	40	1405104
Caelo	Star anise oil	13358202	31404	40	20131105
Euro OTC	Star anise oil	1303017-01	31525	40	20130422
Caelo	Anise oil	14230101	31596	40	AR-15-FG-004287-01
Caelo	Anise oil	15148901	31785	40	20150518
Euro OTC	Star anise oil	511026	31810	40	20151214*
Euro OTC	Star anise oil	1609007	32775	40	20160919*

Validation samples

A total of 222872 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 *Anise oil / Star aniseed oil*. These samples are listed above in the [calibration samples](#) section.
- 35555 spectra from a total of 840 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 310 spectra of 10 reference samples from the substance/substance group *Anise oil / Star aniseed oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Star anise oil	1303017-01	31525 [†]	20
Caelo	Anise oil	14230101	31596 [†]	20
Caelo	Anise oil	15148901	31785 [†]	20
Euro OTC	Star anise oil	511026	31810 [†]	20
Caelo	Anise oil	16306802	32930	40
Caelo	Star anise oil	170162	33061	30
Caelo	Star anise oil	15337007	33468	40
Caelo	Anise oil	16306803	33507	40
Caelo	Anise oil	16306803	33509	40
Caelo	Anise oil	171500	33908	40

- 78768 spectra from a total of 1821 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](#).

*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.

[†]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*.

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.

- 158 spectra from 72 *Apo-Ident* customers from 65 batches from the substance/substance group *Anise oil / Star aniseed oil*.

Supplier	Substance	Batch	Spectra
Caelo	Star anise oil	11352402	4
Phönix	Star anise oil	11352402	1
Caelo	Star anise oil	11352409	8
Caesar/Noweda	Star anise oil	411I-01953	1
Anzag 10.12.12	Star anise oil	1206014-01	1
Caelo	Star anise oil	12322501	2
Caelo	Star anise oil	28051310	1
Taoasis	Star anise oil	106155	1
Caelo	Star anise oil	12322503	3
Caelo	Star anise oil	12322507	5
Caelo	Star anise oil	12322505	1
Caelo	Star anise oil	13056105	7
Caelo	Star anise oil	21111302	1
Caelo	Star anise oil	1232207	1
Caelo	Star anise oil	13056103	1
Caelo	Star anise oil	13358201	1
Caelo	Star anise oil	8012014A	1
Caelo	Star anise oil	5021403	1
Caelo	Star anise oil	13358202	3
Caelo	Star anise oil	31032014C	1
Caelo	Star anise oil	13051404	1
Caelo	Star anise oil	14125501	1
Caelo	Star anise oil	14150301	1
Caelo	Star anise oil	13358208	1
Caelo	Star anise oil	13358209	3
Caelo	Star anise oil	21102014B	1
Caelo	Star anise oil	14195202	6
Caelo	Star anise oil	14150303	1
Caelo	Star anise oil	14230102	1
Caelo	Star anise oil	22122014C	1
Caelo	Star anise oil	22122014D	1
Caelo	Star anise oil	145230101	1
Caelo	Star anise oil	27041501	1
Euro OTC	Star anise oil	1303017-01	1
Caelo	Star anise oil	14195208	2
EuRho/GEHE	Star anise oil	1303017-01	1
Caelo	Star anise oil	14230104	1
Euro OTC	Star anise oil	1502037-01	2
Caelo	Star anise oil	25082015C	1
Caelo	Star anise oil	29081504	1
Caelo	Star anise oil	15085801	1
Caelo	Star anise oil	15085805	11
Caelo	Star anise oil	15085806	2
Phönix	Star anise oil	1502037-01	1
WE:Sanacorp14.06.2014 E...	Star anise oil	13358202	2
Beiersdorf/Noweda	Star anise oil	15337007	2
Caelo	Star anise oil	15337007	2
Caelo	Star anise oil	15337013	5
Caelo	Star anise oil	15337014	1
Caelo	Star anise oil	25021702	1
Caelo	Star anise oil	15337020	7
Caleo/Noweda	Star anise oil	15337020	3

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Supplier	Substance	Batch	Spectra
Caelo	Star anise oil	18111712	1
Caelo	Star anise oil	17016209	1
Caelo	Star anise oil	17016206	3
Caelo	Star anise oil	12011904	1
Caelo	Star anise oil	18066204	1
Caelo	Anise oil	15119401	4
Caelo	Anise oil	14230104	1
Caesar & Loretz	Anise oil	14230104	1
Caelo	Anise oil	15148904	2
Caelo	Anise oil	15148901	1
Caesar & Loretz	Anise oil	15148904	1
Caelo	Anise oil	15085805	1
Caelo	Anise oil	15428903	2
Caelo	Anise oil	15428901	2
Caelo	Anise oil	1612120A/15428901	1
Caelo	Anise oil	16306802	2
Caelo	Anise oil	15428906	4
Apotheke Bauer & Cie. oHG	Anise oil	68952-43-2	1
Caelo	Anise oil	202170A15428901	1
Caesar&Loretz/Noweda	Anise oil	16306802	1
Taoasis	Anise oil	42803-127870	1
Caelo	Anise oil	16306803	3
Caelo	Anise oil	17150001	8
Caesar & Loretz/ Noweda	Anise oil	17150001	1
Taoasis	Anise oil	42803-2851	1

- 107 801 spectra from 582 *Apo-Ident* customers from a total of 30 615 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 *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	280	0	35 555
Type B	0	310	0	78 768
Type C	0	157	1	107 801

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 % (> 99.9705 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.0645 %)
Type C	100.0000 % (> 99.6450 %)	99.3671 % (> 97.4684 %)

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.

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	53.14
31404	31810	2.34	55.64
31525	31810	4.00	54.88
31810	31810	0.00	56.90
32775	32775	0.00	57.31
31596	31596	0.00	62.13
31785	31596	1.40	59.98

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Aqueous salicylic acid 50% (non-ionic, hydrophil...
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30520-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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

Validation samples

A total of 222 872 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 *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*.

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

- 78 998 spectra from a total of 1828 batches from further 350 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.

- 232 spectra from 56 *Apo-Ident* customers from 104 batches from the substance/substance group *Aqueous salicylic acid 50% (non-ionic, hydrophilic cream SR)*.

Supplier	Substance	Batch	Spectra
Gehe	Aqueous salicylic acid 50% (...)	9A020812	1
Apomix	Aqueous salicylic acid 50% (...)	9A020812	1
PhR/Sanacorp	Aqueous salicylic acid 50% (...)	4A05/13	1

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Supplier	Substance	Batch	Spectra
Phoenix (PKH Halle)	Aqueous salicylic acid 50% (...)	3A110213	1
Phoenix/ PKH Halle	Aqueous salicylic acid 50% (...)	5A030413	1
apomix	Aqueous salicylic acid 50% (...)	6A030413	1
Gehe	Aqueous salicylic acid 50% (...)	11A300513	1
Gehe	Aqueous salicylic acid 50% (...)	4A040313	1
PKH GmbH	Aqueous salicylic acid 50% (...)	12A300513	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	12A300513	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	16A250713	1
Apomix	Aqueous salicylic acid 50% (...)	19A160913	1
Apomix	Aqueous salicylic acid 50% (...)	12A300513	1
PKH Halle / Phoenix	Aqueous salicylic acid 50% (...)	21A250913	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	19A160913	1
Gehe	Aqueous salicylic acid 50% (...)	22B161013	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	22C161013	1
Klenk	Aqueous salicylic acid 50% (...)	22B161013	1
Apomix / 11	Aqueous salicylic acid 50% (...)	25B041213	1
Apomix	Aqueous salicylic acid 50% (...)	22C161013	1
PKH Halle/ Phoenix	Aqueous salicylic acid 50% (...)	22C161013	1
PKH Halle/ Phoenix	Aqueous salicylic acid 50% (...)	1C270114	1
PKH GmbH	Aqueous salicylic acid 50% (...)	25C041213	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	3C310314	1
Apomix	Aqueous salicylic acid 50% (...)	2C060314	1
PKH Halle/Sanacorp	Aqueous salicylic acid 50% (...)	1B270114	1
APOMIX / 30	Aqueous salicylic acid 50% (...)	3B310314	1
Apomix	Aqueous salicylic acid 50% (...)	4B200514	1
PKH GmbH	Aqueous salicylic acid 50% (...)	2C060314	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	5B270614	1
Phönix/apomix	Aqueous salicylic acid 50% (...)	4B200514	1
apomix PKH GmbH Halle	Aqueous salicylic acid 50% (...)	6B170714	1
PKH GmbH	Aqueous salicylic acid 50% (...)	6B170714	1
Apomix / GEHE	Aqueous salicylic acid 50% (...)	6B1708714	1
Apomix	Aqueous salicylic acid 50% (...)	6B170714	1
Bombastus	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6C170714	1
Pharmachem/30	Aqueous salicylic acid 50% (...)	38310314	1
Apomix/ Phönix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	6C170714	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	7B180814	1
PKH Halle/ Noweda	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix	Aqueous salicylic acid 50% (...)	8C170914	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix	Aqueous salicylic acid 50% (...)	9B051114	1
Noweda/Apomix	Aqueous salicylic acid 50% (...)	9C051114	1
Apomix / 11	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	1B260115	1
PKH / Noweda	Aqueous salicylic acid 50% (...)	1B260115	2
apomix/Phönix	Aqueous salicylic acid 50% (...)	2B230215	1
Apomix	Aqueous salicylic acid 50% (...)	3B260315	1
apomix/Anzag	Aqueous salicylic acid 50% (...)	10B011214	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	3B260315	1
Apomix	Aqueous salicylic acid 50% (...)	1B260115	1
PKH GmbH	Aqueous salicylic acid 50% (...)	4B280415	1
apomix	Aqueous salicylic acid 50% (...)	3B260315	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	5B040615	2
apomix	Aqueous salicylic acid 50% (...)	5B040615	1
Noweda/PKH GmbH	Aqueous salicylic acid 50% (...)	4C280415	1
Henry Lamotte Oils GmbH	Aqueous salicylic acid 50% (...)	5B040615	1
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	2C230215	1
Noweda/apomix	Aqueous salicylic acid 50% (...)	4B280415	1

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Supplier	Substance	Batch	Spectra
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6B080715	2
apomix/Phoenix	Aqueous salicylic acid 50% (...)	6C080715	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	6B080715	2
apomix	Aqueous salicylic acid 50% (...)	4B280415	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	7C280715	1
apomix	Aqueous salicylic acid 50% (...)	8B250815	2
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	8B250815	1
Apomix/AHD	Aqueous salicylic acid 50% (...)	10B261015	2
Apomix/Alliance Healthc...	Aqueous salicylic acid 50% (...)	9C240915	1
Apomix	Aqueous salicylic acid 50% (...)	9B240915	2
apomix	Aqueous salicylic acid 50% (...)	10B261015	1
apomix	Aqueous salicylic acid 50% (...)	10C2601015	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	12b211215	1
Caelo	Aqueous salicylic acid 50% (...)	11B021215	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	12B211215	1
apomix/Phoenix	Aqueous salicylic acid 50% (...)	12B211215	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	12B211215	1
Apomix/Gehe	Aqueous salicylic acid 50% (...)	12B211215	1
apomix	Aqueous salicylic acid 50% (...)	1B20016	1
Apomix	Aqueous salicylic acid 50% (...)	1C200116	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	11B021215	1
Fagron	Aqueous salicylic acid 50% (...)	1B200116	1
Apomix/ Sanacorp	Aqueous salicylic acid 50% (...)	2B230216	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	3b230316	1
apomix / Alliance Healt...	Aqueous salicylic acid 50% (...)	3B230316	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	12C211215	1
apomix/Phönix	Aqueous salicylic acid 50% (...)	1C200116	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	3C230316	1
Caelo	Aqueous salicylic acid 50% (...)	1B200116	1
apomix	Aqueous salicylic acid 50% (...)	4C030516	1
Apomix	Aqueous salicylic acid 50% (...)	2C230216	1
Apomix	Aqueous salicylic acid 50% (...)	3B230316	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	5b250516	1
Apomix	Aqueous salicylic acid 50% (...)	4B030516	1
apomix	Aqueous salicylic acid 50% (...)	4B030516	1
PKH Halle/Sanacorp	Aqueous salicylic acid 50% (...)	5B250516	2
apomix	Aqueous salicylic acid 50% (...)	6B140616	1
Noweda/PKH GmbH	Aqueous salicylic acid 50% (...)	5B250516	1
Apomix	Aqueous salicylic acid 50% (...)	6B140616	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	6B140616	2
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	4B030516	1
apomix/Phönix	Aqueous salicylic acid 50% (...)	6B140616	1
Beiersdorf/Phönix	Aqueous salicylic acid 50% (...)	7B060716	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	7B060716	1
apomix	Aqueous salicylic acid 50% (...)	8B110816	3
Apomix / Phönix	Aqueous salicylic acid 50% (...)	8B110816	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	9b060916	1
Apomix	Aqueous salicylic acid 50% (...)	9B060916	2
Apomix	Aqueous salicylic acid 50% (...)	10B121016	3
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121016	1
Apomix/Gehe	Aqueous salicylic acid 50% (...)	9B060916	1
Apomix	Aqueous salicylic acid 50% (...)	8B110816	1
PKH Halle/ Phönix	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix / Phönix	Aqueous salicylic acid 50% (...)	10B121016	1
Apomix/ Sanacorp	Aqueous salicylic acid 50% (...)	11B041116	1

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Supplier	Substance	Batch	Spectra
GEHE	Aqueous salicylic acid 50% (...)	10B121016	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	12B251116	1
JENNE	Aqueous salicylic acid 50% (...)	11B041116	1
Apomix	Aqueous salicylic acid 50% (...)	12B251116	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	12B251116	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	1B240117	2
GEHE	Aqueous salicylic acid 50% (...)	11B041116	2
Apomix	Aqueous salicylic acid 50% (...)	13B291216	3
apomix	Aqueous salicylic acid 50% (...)	1B240117	1
Caelo	Aqueous salicylic acid 50% (...)	1B240117	1
PKH Halle	Aqueous salicylic acid 50% (...)	2B270217	3
Apomix	Aqueous salicylic acid 50% (...)	2B270217	3
apomix	Aqueous salicylic acid 50% (...)	2B270217	1
Apomix /Noweda	Aqueous salicylic acid 50% (...)	3b280317	1
GEHE	Aqueous salicylic acid 50% (...)	13B291216	1
Apomix	Aqueous salicylic acid 50% (...)	4B180417	1
apomix/ Phoenix Leipzig...	Aqueous salicylic acid 50% (...)	3b280317	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	3B280317	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	13B291216	1
Apomix	Aqueous salicylic acid 50% (...)	3B280317	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	4B180417	1
Apomix/Phoenix Leipzig ...	Aqueous salicylic acid 50% (...)	5B160517	1
GEHE	Aqueous salicylic acid 50% (...)	6B090617	1
Caelo	Aqueous salicylic acid 50% (...)	3B2803175320	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	5B160517	1
Apomix/Phoenix Leipzig ...	Aqueous salicylic acid 50% (...)	7B300617	1
Apomix	Aqueous salicylic acid 50% (...)	7B300617	1
Apomix / Noweda	Aqueous salicylic acid 50% (...)	7B300617	1
Jenne	Aqueous salicylic acid 50% (...)	6B090617	1
Apomix	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	8B080817	1
Apomix	Aqueous salicylic acid 50% (...)	10B121017	3
Apomix	Aqueous salicylic acid 50% (...)	8B0808175412	1
Apomix	Aqueous salicylic acid 50% (...)	5B1605175356	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121017	1
Frago/Noweda	Aqueous salicylic acid 50% (...)	11B021117	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	8B080817	1
GEHE	Aqueous salicylic acid 50% (...)	7B300617	1
Apomix,Phönix, 16.11.2017	Aqueous salicylic acid 50% (...)	10B121017	1
Apomix	Aqueous salicylic acid 50% (...)	9B070917	1
Apomix/Sanacorp	Aqueous salicylic acid 50% (...)	10B121017	3
aoi-mix	Aqueous salicylic acid 50% (...)	11B021117	1
apomix, Phönix, 09.01.2...	Aqueous salicylic acid 50% (...)	12b211117	2
Apomix / Sanacorp	Aqueous salicylic acid 50% (...)	13B131217	1
GEHE	Aqueous salicylic acid 50% (...)	11B021117	1
Apomix/ Gehe	Aqueous salicylic acid 50% (...)	10B121017	1
Apomix/Phönix	Aqueous salicylic acid 50% (...)	13B131217	1
Gehe	Aqueous salicylic acid 50% (...)	13B131217	1
Sanacorp	Aqueous salicylic acid 50% (...)	12B211117	1
Apomix	Aqueous salicylic acid 50% (...)	1B070218	1
PKH Halle	Aqueous salicylic acid 50% (...)	12B211117	1
Apomix	Aqueous salicylic acid 50% (...)	12B2111175532	1
Caelo	Aqueous salicylic acid 50% (...)	2B050318	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	1B070218	1
Apomix/Phoenix	Aqueous salicylic acid 50% (...)	2B050318	1
GEHE	Aqueous salicylic acid 50% (...)	2B050318	1
PKH Halle/ GEHE	Aqueous salicylic acid 50% (...)	2B050318	1
AHD	Aqueous salicylic acid 50% (...)	2B050318	1
PKH Halle/AHD	Aqueous salicylic acid 50% (...)	2B050318	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Aqueous salicylic acid 50% (...)	3B160418	1
apomix / AHD	Aqueous salicylic acid 50% (...)	2B0503185606	1
Bombastus	Aqueous salicylic acid 50% (...)	2B050318	1
apomix, phoenix 28.05.2...	Aqueous salicylic acid 50% (...)	2b050318	1
Apomix	Aqueous salicylic acid 50% (...)	3B160418	1
Apomix	Aqueous salicylic acid 50% (...)	4B150518	1
apomix / Phoenix Leipzi...	Aqueous salicylic acid 50% (...)	3b160418	1
PKH Halle	Aqueous salicylic acid 50% (...)	4B150518	1
Apomix/ Noweda 12.07.18	Aqueous salicylic acid 50% (...)	4B150518	1
apomix / Phoenix Leipzi...	Aqueous salicylic acid 50% (...)	6B020718	2
Apomix/Noweda	Aqueous salicylic acid 50% (...)	6B020718	1
Apomix/phoenix	Aqueous salicylic acid 50% (...)	6B020718	1
apomix / Phoenix	Aqueous salicylic acid 50% (...)	8B140918	1
apomix/Sanacorp	Aqueous salicylic acid 50% (...)	6B0207185732	1
Apomix	Aqueous salicylic acid 50% (...)	8B140918	1
Apomix/AHD	Aqueous salicylic acid 50% (...)	7B080818	1
Apomix / Phoenix	Aqueous salicylic acid 50% (...)	10B231118	1
Gehe	Aqueous salicylic acid 50% (...)	8B140918	1
apomix / Phoenix	Aqueous salicylic acid 50% (...)	1B030119	1
Apomix/Noweda	Aqueous salicylic acid 50% (...)	1B030119	1
Caelo	Aqueous salicylic acid 50% (...)	9B111018	1

- 107 727 spectra from 582 *Apo-Ident* customers from a total of 30 576 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 *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	120	0	35 715
Type B	0	80	0	78 998
Type C	0	227	5	107 727

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6450 %)	97.8448 % (> 96.5517 %)

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.

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	177.20
32992	31119	10.21	181.52
33493	31119	11.48	181.11

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Base cream DAC
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30211-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Henry Lamotte	Base cream DAC	5215300	30923	70	20120102
Caelo	Base cream DAC	13139901	31043	40	20130513
Euro OTC	Base cream DAC	1304006-01	31252	40	AR-15-FG-014906-01

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Base cream DAC	14052901	31474	30	AR-15-FG-000163-02
Euro OTC	Base cream DAC	1506025	31709	40	20150618*
Euro OTC	Base cream DAC	1506025	31710	40	20150618*
Euro OTC	Base cream DAC	1506026	31711	40	20150618*
Euro OTC	Base cream DAC	1506026	31712	40	20150618*
Euro OTC	Base cream DAC	1506027	31713	40	20150618*
Euro OTC	Base cream DAC	1506027	31714	40	20150618*
Euro OTC	Base cream DAC	1506028	31715	40	20150618*
Euro OTC	Base cream DAC	1506028	31716	40	20150618*
Caelo	Base cream DAC	154204	31964	40	20151218*
Euro OTC	Base cream DAC	39210516	32345	40	20160623
Caelo	Base cream DAC	17028801	34030	40	AR-18-FG-013988-01

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 620 spectra of 15 reference samples from the substance/substance group *Base cream DAC*. These samples are listed above in the [calibration samples](#) section.
- 35 215 spectra from a total of 836 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 5480 spectra of 133 reference samples from the substance/substance group *Base cream DAC*.

Supplier	Substance	Batch	Sample ID	Spectra
Henry Lamotte	Base cream DAC	5215300	30744	40
Caelo	Base cream DAC	11297201	30891	60
Henry Lamotte	Base cream DAC	5215300	30923 [†]	10
Euro OTC	Base cream DAC	1301023-01	31005	40
D'Oroderm	Base cream DAC	1346001	31315	40
Caelo	Base cream DAC	14052901	31474 [†]	10
Euro OTC	Base cream DAC	1506025	31709 [†]	20

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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	Base cream DAC	1506025	31710 [†]	20
Euro OTC	Base cream DAC	1506026	31711 [†]	20
Euro OTC	Base cream DAC	1506026	31712 [†]	20
Euro OTC	Base cream DAC	1506027	31713 [†]	20
Euro OTC	Base cream DAC	1506027	31714 [†]	20
Euro OTC	Base cream DAC	1506028	31715 [†]	20
Euro OTC	Base cream DAC	1506028	31716 [†]	20
Caelo	Base cream DAC	154198	31963	60
Caelo	Base cream DAC	154204	31964 [†]	20
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	161357	32242	40
Caelo	Base cream DAC	161357	32243	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	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	32260	40
Caelo	Base cream DAC	161022	32261	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	161361	32523	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	162407	32536	40
Caelo	Base cream DAC	162407	32537	40
Caelo	Base cream DAC	162407	32538	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	162617	32545	40
Caelo	Base cream DAC	162617	32546	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

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Base cream DAC	171556	33544	40
Caelo	Base cream DAC	171544	33546	40
Caelo	Base cream DAC	172259	33767	40
Bombastus	Base cream DAC	18005744	34318	40
Euro OTC	Base cream DAC	07570418	34319	40
Euro OTC	Base cream DAC	76581018	34320	40
Caelo	Base cream DAC	182723	34352	40

- 73598 spectra from a total of 1715 batches from further 350 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.

- 7751 spectra from 528 *Apo-Ident* customers from 2444 batches from the substance/substance group *Base cream DAC*.

Supplier	Substance	Batch	Spectra
Noweda/Ensbona	Base cream DAC	8821114	5
Ensbona/Anzag	Base cream DAC	50211015	4
Caelo	Base cream DAC	2020216	2
Sana 19.09.14 EK 7,89	Base cream DAC	14227801	1
Caelo	Base cream DAC	11278701	1
Bombastus	Base cream DAC	262001	1
Caelo	Base cream DAC	11279301	3
Lamotte	Base cream DAC	5099700	1
Caelo	Base cream DAC	11296301	1
Lamotte	Base cream DAC	5099800	1
Caelo	Base cream DAC	11295801	2
p.w beyers gmbh,phönix	Base cream DAC		4
Fagron	Base cream DAC	11B11-T05	4
Bombastus	Base cream DAC	266524	1
Caelo	Base cream DAC	11087101	1
Caelo	Base cream DAC	11296601	1
Caelo	Base cream DAC	11279401	1
Caelo	Base cream DAC	11206201	2
Caelo	Base cream DAC	1202001	2
Caelo	Base cream DAC	11297001	1
Bombastus	Base cream DAC	263429	1
Gehe	Base cream DAC	207/2	1
Caelo	Base cream DAC	11330101	2
Anzag	Base cream DAC	207/2	1
Henry Lamotte	Base cream DAC	5163400	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	207/2	1
Caelo	Base cream DAC	11330201	1
Caelo	Base cream DAC	1004211309	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
Gehe	Base cream DAC	207/1	4
EuRho	Base cream DAC	1108002-01	1
Bombastus	Base cream DAC	266749	1
Caelo	Base cream DAC	12000601	1
Caesar & Loretz GmbH, 4...	Base cream DAC	11278901	1
Caelo	Base cream DAC	11330301	1
Caelo	Base cream DAC	12000401	1
Caelo	Base cream DAC	12005401	1
Caelo	Base cream DAC	268820	2
Bombastus	Base cream DAC	269993	1
Caelo	Base cream DAC	11330601	1
Caelo	Base cream DAC	12005101	3
Euro OTC	Base cream DAC	1111041-01	1
Euro OTC	Base cream DAC	1110037-01	2
Euro OTC	Base cream DAC	1107040-01	1
Euro OTC	Base cream DAC	1111009-01	1
Bombastus	Base cream DAC	269996	1
Caelo	Base cream DAC	12000501	3
Fagron	Base cream DAC	11297301	1
Gehe	Base cream DAC	219/1	3
EuRho	Base cream DAC	1111050-01	1
Caelo	Base cream DAC	12061701	1
Caesar & Loretz GmbH, 4...	Base cream DAC	12062601	1
Caelo	Base cream DAC	12005501	4
Henry Lamotte	Base cream DAC	5100000	1
Gehe	Base cream DAC	12005301	1
Lamotte	Base cream DAC	5163400	1
Caelo	Base cream DAC	26061204	1
DAC 2011	Base cream DAC	12061901	1
Caelo	Base cream DAC	12005201	2
Bombastus	Base cream DAC	266799	1
Euro OTC	Base cream DAC	1111028-01	1
Caelo	Base cream DAC	12004901	2
Caelo	Base cream DAC	12071202	1
Gehe	Base cream DAC	219/2	3
Caelo	Base cream DAC	12063001	2
Bombastus	Base cream DAC	270000	2
Henry Lamotte	Base cream DAC	5215400	1
Euro OTC	Base cream DAC	1111051-01	2
Bombastus	Base cream DAC	271999	1
Caelo	Base cream DAC	12062701	2
Caelo	Base cream DAC	12062001	1
Caelo	Base cream DAC	12062801	2
EuRho Anzag ek:33,16 03...	Base cream DAC	1111027-01	1
Noweda	Base cream DAC	5163300	1
Noweda	Base cream DAC	5100000	1
Euro OTC	Base cream DAC	1204025-01	2
Caelo	Base cream DAC	12005701	6
Caelo	Base cream DAC	12159401	2
Bombastus	Base cream DAC	268821	1
Euro OTC	Base cream DAC	1204023-01	1
Henry Lamotte Oils GmbH	Base cream DAC	5215500	1
Caelo	Base cream DAC	12168101	2
Fagron	Base cream DAC	1130-T01	1
Gehe	Base cream DAC	229/2	4
Caelo	Base cream DAC	12174901	1
Caelo	Base cream DAC	11297201	9
Caelo	Base cream DAC	1205007-01	2
Caelo	Base cream DAC	12159301	1
Phoenix	Base cream DAC	272091	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	31081205	1
Bombastus	Base cream DAC	270157	1
Phönix Gotha	Base cream DAC	5215600	2
Bombastus	Base cream DAC	265036	2
Bombastus	Base cream DAC	272093	1
Bombastus	Base cream DAC	272372	1
Caelo	Base cream DAC		13
Caelo	Base cream DAC	12174801	3
Caelo	Base cream DAC	12061601	1
Caelo	Base cream DAC	12168001	1
Caelo	Base cream DAC	1109211309	1
Euro OTC	Base cream DAC	1205018-01	3
Noweda	Base cream DAC	12005601	1
Finze	Base cream DAC	12174901	1
Caelo	Base cream DAC	12175001	5
Bombastus	Base cream DAC	272216	1
Henry Lamotte Oils GmbH	Base cream DAC	5151700	1
Euro OTC	Base cream DAC	1205019-01	1
GEHE	Base cream DAC	12174801	1
P.W.Beyvers	Base cream DAC	229/1	2
Caelo	Base cream DAC	12178301	4
Fagron	Base cream DAC	12C02-T08	5
Bombastus	Base cream DAC	272086	2
Bombastus	Base cream DAC	272215	4
Fagron	Base cream DAC	12C26-T04	1
Caelo	Base cream DAC	12178401	3
Anzag	Base cream DAC	5215600	1
Euro OTC	Base cream DAC	11110023-01	1
Lamotte/Otto	Base cream DAC	5215800	2
Phoenix	Base cream DAC	272219	2
Caelo	Base cream DAC	12175101	1
Caelo	Base cream DAC	12101203	1
Euro OTC	Base cream DAC	1205004-01	1
Caelo	Base cream DAC	12168301	1
Henry Lamotte Oils GmbH	Base cream DAC	5215300	2
Caelo	Base cream DAC	12159201	1
EuRho	Base cream DAC	1111048-01	1
P.W.Beyvers	Base cream DAC	229/1	1
Caelo	Base cream DAC	12168201	1
Caelo	Base cream DAC	12191701	3
Euro OTC	Base cream DAC	1205040-01	1
Caelo	Base cream DAC	12192001	1
Caelo	Base cream DAC	12191801	4
Europarm/Otto	Base cream DAC	1111028-01	2
Henry Lamotte Oils	Base cream DAC	5215600	1
Caelo	Base cream DAC	12192201	2
Caelo	Base cream DAC	12240801	1
Bombastus	Base cream DAC	268925	2
Sanacorp	Base cream DAC	12191801	1
Caelo	Base cream DAC	12062601	1
KEHR / Beyvers GmbH	Base cream DAC	71112PML01	1
Anzag 25.10.12 ek:33,15EUR	Base cream DAC	1205005-01	1
Cealo/Gehe	Base cream DAC	12175101	1
Anzag 09.11.12	Base cream DAC	272216	1
Caelo	Base cream DAC	12111202	1
Caelo	Base cream DAC	12241201	1
Phönix Gotha	Base cream DAC	5215800	1
P.W.Beyvers	Base cream DAC	234/1	1
Fagron	Base cream DAC	12C26-T08	2
Caelo	Base cream DAC	12245101	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	12249401	2
Caelo	Base cream DAC	12262501	5
Anzag	Base cream DAC	1205006-01	1
Caelo	Base cream DAC	12245001	2
Bombastus	Base cream DAC	272375	2
Caelo	Base cream DAC	12159601	5
Caelo	Base cream DAC	12062901	1
Caelo	Base cream DAC	12175201	2
Sanacorp	Base cream DAC	12262801	1
Euro OTC	Base cream DAC	1205041-01	1
Caelo	Base cream DAC	12249501	2
Bombastus	Base cream DAC	272464	2
Caelo	Base cream DAC	12241001	5
Caelo	Base cream DAC	12262402	3
Sanacorp	Base cream DAC	12262402	1
Lamotte/Otto	Base cream DAC	5321000	1
Gehe	Base cream DAC	234/1	1
Caelo	Base cream DAC	30111201	1
Bombastus	Base cream DAC	60090504	2
Caelo	Base cream DAC	12263401	4
Anzag	Base cream DAC	5321000	1
Caelo	Base cream DAC	12262801	6
Fagron	Base cream DAC	12G25-T12	2
Caelo	Base cream DAC	12192101	1
Fagron	Base cream DAC	12G25-T10	1
Sanacorp	Base cream DAC	12263001	1
Bombastus	Base cream DAC	272219	1
Caelo	Base cream DAC	12191902	1
Phönix 22.11.12	Base cream DAC	272218	1
Euro OTC	Base cream DAC	1209037-01	4
Bombastus	Base cream DAC	272084	2
Klenk	Base cream DAC	1205004-01	1
Caelo	Base cream DAC	12262601	3
Bombastus	Base cream DAC	275273	1
Caelo	Base cream DAC	125044-1	1
Caelo	Base cream DAC	1226290	1
Caelo	Base cream DAC	12241101	1
Caelo	Base cream DAC	12249701	1
Caelo	Base cream DAC	12262901	3
Fagron	Base cream DAC	12G25-T03	1
Caelo	Base cream DAC	12263001	1
Bombastus	Base cream DAC	275277	1
Caelo	Base cream DAC	4512Q-01309	1
Sanacorp	Base cream DAC	12262901	1
Caelo	Base cream DAC	12263301	3
Fagron	Base cream DAC	5321100	1
Caelo	Base cream DAC	12167901	12
Caelo	Base cream DAC	8011302	1
Euro OTC	Base cream DAC	1111042-01	1
Caelo	Base cream DAC	12289701	4
Bombastus	Base cream DAC	272373	1
Caelo	Base cream DAC	213M-01309	1
Beyvers	Base cream DAC	234/2	1
Caelo	Base cream DAC	12263101	4
Sanacorp	Base cream DAC	12289701	1
Bombastus	Base cream DAC	275175	1
EuRho	Base cream DAC	1210011-01	2
EuRho	Base cream DAC	1204022-01	1
Henry Lamotte	Base cream DAC	5289000	1
Fagron	Base cream DAC	12C26-T14	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	11033-01	1
Caelo	Base cream DAC	12263201	6
Caelo	Base cream DAC	272084	2
Caelo	Base cream DAC	5321200	2
Euro OTC	Base cream DAC	1205044-01	2
Gehe	Base cream DAC	234/2	4
Caelo	Base cream DAC	5012Q-01309	1
Gehe	Base cream DAC	1230113	1
Caelo	Base cream DAC	12191901	14
Caelo	Base cream DAC	5289100	1
Bombastus	Base cream DAC	275181	2
Bombastus	Base cream DAC	275182	1
Caelo	Base cream DAC	1230901	1
Gehe	Base cream DAC	275277	1
Euro OTC	Base cream DAC	1209038-01	2
Euro OTC	Base cream DAC	1210044-01	4
Anzag/Henry Lamotte	Base cream DAC	5289100	1
Caelo	Base cream DAC	2901311309	1
Caelo	Base cream DAC	12339001	2
Sanacorp	Base cream DAC	12304701	1
Caelo	Base cream DAC	513Q-01309	1
Euro OTC	Base cream DAC	1212025-01	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	234/3	2
Phönix	Base cream DAC	1111029-01	1
Gehe	Base cream DAC	12262901	1
Caelo	Base cream DAC	12343801	5
EuRho	Base cream DAC	1209037-01	1
Euro OTC	Base cream DAC	1212028-01	2
Sanacorp	Base cream DAC	12339001	1
Sanacorp	Base cream DAC	1202001	3
Anzag 14.01.2013	Base cream DAC	1210011-01	1
Caelo	Base cream DAC	12303901	2
Bombastus	Base cream DAC	275447	1
Caelo	Base cream DAC	12304701	9
Fagron	Base cream DAC	13A09T10000232	1
Euro OTC	Base cream DAC	1210011-01	3
Henry Lamotte Oils GmbH	Base cream DAC	5321000	4
Caelo	Base cream DAC	12245201	1
Bombastus	Base cream DAC	1210043-01	1
Euro OTC	Base cream DAC	1212027-01	1
Caelo	Base cream DAC	713I-01309	1
Euro OTC	Base cream DAC	1204004-01	3
Caelo	Base cream DAC	13A09-T10-232	2
Fagron	Base cream DAC	12C02-T09	1
Caelo	Base cream DAC	12347401	5
Caelo	Base cream DAC	12339401	6
Caelo	Base cream DAC	19021304	1
Caesar & Loretz GmbH, 4...	Base cream DAC	12339101	1
Caelo	Base cream DAC	12347301	5
Bombastus	Base cream DAC	275443	1
Henry Lamotte Oils	Base cream DAC	5321200	1
Bombastus	Base cream DAC	1212029-01	3
Euro OTC	Base cream DAC	1209039-01	1
Beyvers	Base cream DAC	234/3	1
Bombastus	Base cream DAC	275184	2
Caelo	Base cream DAC	12347201	1
Noweda	Base cream DAC	12263501	1
Euro OTC	Base cream DAC	129037-01	1
Euro OTC	Base cream DAC	121209-01	1
Caelo	Base cream DAC	12304801	12

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	12339201	9
Henry Lamotte	Base cream DAC	5321000	1
Caelo	Base cream DAC	913I-01309	1
Fagron	Base cream DAC	12G25-T06	2
Caelo	Base cream DAC	12304901	3
Sanacorp	Base cream DAC	12304901	2
Bombastus	Base cream DAC	272221	1
Fagron	Base cream DAC	13A08-T06-000034	1
Bombastus	Base cream DAC	275438	2
Krieger	Base cream DAC	12339301	1
Bombastus	Base cream DAC	275282	1
Bombastus	Base cream DAC	275279	1
Phönix	Base cream DAC	13000601	1
Caelo	Base cream DAC	1013Q-01309	2
Caelo	Base cream DAC	13000701	2
Bombastus	Base cream DAC	276944	2
Bombastus	Base cream DAC	276950	2
Bombastus	Base cream DAC	275172	1
Caelo	Base cream DAC	12305301	4
Caelo	Base cream DAC	12305001	5
anzag 29.01.13 ek: 33,15EUR	Base cream DAC	1212027-01	1
Euro OTC	Base cream DAC	1301040-01	1
Phönix Gotha	Base cream DAC	5321000	1
Anzag 19.02.2013	Base cream DAC	275444	1
Caelo	Base cream DAC	12339301	4
Euro OTC	Base cream DAC	121005401	1
Bombastus	Base cream DAC	275591	1
Caelo	Base cream DAC	13012301	2
Phönix Gotha	Base cream DAC	5322100	1
Caelo	Base cream DAC	13000901	1
P.W.Beyvers	Base cream DAC		1
Gehe	Base cream DAC		8
Euro OTC	Base cream DAC	1204024-01	1
Fagron	Base cream DAC	13A09-T10-000232	3
Phoenix	Base cream DAC	5289100	1
Caelo	Base cream DAC	1213M-01309	1
Euro OTC	Base cream DAC	1210055-01	3
Caelo	Base cream DAC	277111	1
Caelo	Base cream DAC	275591	1
P.W.Beyvers	Base cream DAC	229/2	1
Gehe	Base cream DAC	12347301	1
Caelo	Base cream DAC	22031303	1
Sanacorp	Base cream DAC	12304801	1
Euro OCT	Base cream DAC	1210055-01	1
Gehe	Base cream DAC	111105101	1
Phönix	Base cream DAC	13007101	1
Caelo	Base cream DAC	12344001	1
Euro OTC	Base cream DAC	12339301	1
Caelo	Base cream DAC	13000601	1
Caelo	Base cream DAC	13007101	5
Lamotte/Phoenix	Base cream DAC	5322200	1
Sanacorp	Base cream DAC	13000901	1
Caelo	Base cream DAC	13017001	2
Henry Lamotte/Anzag	Base cream DAC	5289200	1
Caelo	Base cream DAC	13007001	5
AHD, 05.04.2013	Base cream DAC	275439	1
Caelo	Base cream DAC	12305101	1
Caelo	Base cream DAC	13012501	3
Caelo	Base cream DAC	130000601	1
Bombastus	Base cream DAC	276948	1

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Supplier	Substance	Batch	Spectra
Noweda	Base cream DAC	12305001	1
Caelo	Base cream DAC	12240901	3
Caelo	Base cream DAC	13016801	2
Sanacorp	Base cream DAC	13007201	1
Lamotte 001	Base cream DAC	5321000	1
Caelo	Base cream DAC	13007201	3
Alliance Healthcare	Base cream DAC	12305301	1
Caelo	Base cream DAC	12347101	2
Caelo	Base cream DAC	13007301	2
phönix	Base cream DAC	13007101	1
Caelo	Base cream DAC	13017201	4
Bombastus	Base cream DAC	275173	1
Cealo	Base cream DAC	12249401	1
Bombastus	Base cream DAC	278396	2
Gehe	Base cream DAC	275590	1
Caelo	Base cream DAC	13012401	10
Caelo	Base cream DAC	13022401	3
Euro OTC	Base cream DAC	121202801	1
Sanacorp	Base cream DAC	13007301	1
Caelo	Base cream DAC	22041306	1
Caelo	Base cream DAC	13000801	2
Bombastus	Base cream DAC	277248	1
Euro OTC	Base cream DAC	1210053-01	1
Phönix	Base cream DAC	13000701	1
Caelo	Base cream DAC	1713M-01309	1
Bombastus	Base cream DAC	277099	7
Fagron	Base cream DAC	13A09-T19-001952	1
Caelo	Base cream DAC	13000501	1
Fagron	Base cream DAC	13A09-T12-000238	1
Euro OTC	Base cream DAC	1210054-01	1
Euro OTC	Base cream DAC	1301023-01	7
Bombastus	Base cream DAC	275590	2
Phoenix	Base cream DAC	275591	1
Henry Lamotte	Base cream DAC	5322300	3
Hirsch	Base cream DAC	1210054-01	1
Caelo	Base cream DAC	275438	2
Caelo	Base cream DAC	13082101	10
Alliance Healthcare	Base cream DAC	5322400	1
Sanacorp	Base cream DAC	13082101	1
Caelo	Base cream DAC	13012601	2
Fagron	Base cream DAC	13A09-T12-236	1
Euro OTC	Base cream DAC	1304006-01	5
Caelo	Base cream DAC	13016901	3
Doroderm GmbH/ Noweda	Base cream DAC	1202001	4
P.W.Bayvers GmbH	Base cream DAC	234-2	1
Euro OTC	Base cream DAC	120903701	1
EuRho	Base cream DAC	130400501	1
EuRho	Base cream DAC	1302009-01	1
Caelo	Base cream DAC	13082203	7
Bombastus	Base cream DAC	278398	3
Caelo	Base cream DAC	13111201	4
Bombastus	Base cream DAC	278397	1
Lamotte / Anzag	Base cream DAC	5408000	1
calo	Base cream DAC	13012401	1
Caelo	Base cream DAC	13115701	2
Lamotte	Base cream DAC	5322200	1
Euro OTC	Base cream DAC	13201101	1
Caelo	Base cream DAC	13115901	2
Caelo	Base cream DAC	13083101	3
Beyers	Base cream DAC	234/1	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	278470	2
Sanacorp	Base cream DAC	13082203	1
Euro OTC	Base cream DAC	1301042-01	1
Caelo	Base cream DAC	2213V01309	1
Caelo	Base cream DAC	1061303	1
Caelo	Base cream DAC	13115601	8
Eurho/Phoenix	Base cream DAC	13C05-T03-001756	1
Caelo	Base cream DAC	13125101	2
Fagron	Base cream DAC	13C05-T03-00175	1
Fagron	Base cream DAC	13C05-T09-001778	3
Caelo	Base cream DAC	13120001	2
Caelo	Base cream DAC	13119901	1
Caelo	Base cream DAC	132011-01	1
Fagron	Base cream DAC	13C05-T03-001756	7
Bombastus	Base cream DAC	278474	6
Euro OTC	Base cream DAC	1304005-01	2
Caelo	Base cream DAC	13111101	3
Caelo	Base cream DAC	13115801	4
Caelo	Base cream DAC	13111301	5
Caelo	Base cream DAC	13116001	2
Gehe	Base cream DAC	13012501	2
Sanacorp	Base cream DAC	13139801	1
Caelo	Base cream DAC	13139702	10
Beyvers	Base cream DAC		3
Caelo	Base cream DAC	1315601	1
Henry Lamotte/ Noweda	Base cream DAC	532220	1
Beyvers	Base cream DAC	319/1	2
Henry Lamotte	Base cream DAC	5407700	1
Caelo	Base cream DAC	17061305	1
Fagron	Base cream DAC	13C05-T04-001760	1
Fagron	Base cream DAC	12G25-T04	2
Fagron	Base cream DAC	13111101	1
Caelo	Base cream DAC	13111401	2
Noweda	Base cream DAC	12339201	1
Fagron	Base cream DAC	13A09-T19-00194	1
Bombastus	Base cream DAC	278553	1
Caelo	Base cream DAC	13017101	1
Gehe	Base cream DAC	319/1	2
Caelo	Base cream DAC	12116001	1
Euro OTC	Base cream DAC	1304004-01	1
Fagron	Base cream DAC	13E21-T08-003906	11
Caelo	Base cream DAC	13125001	4
Caelo	Base cream DAC	13120201	5
Caelo	Base cream DAC	13139801	5
Noweda	Base cream DAC	131250001	1
Caelo	Base cream DAC	13140001	5
Bombastus	Base cream DAC	278557	2
Caelo	Base cream DAC	12339101	1
Phönix	Base cream DAC	13111401	1
Henry Lamotte	Base cream DAC	5408100	1
Henry Lamotte/Sanacorp	Base cream DAC	13140001	1
Fagron	Base cream DAC	13A09-T14-ooo244	1
Caelo	Base cream DAC	1239201	1
Bombastus	Base cream DAC	278559	1
Bombastus	Base cream DAC	278475	1
Caelo	Base cream DAC	13120101	5
Fagron	Base cream DAC	13A09-T19-001949	1
Caelo	Base cream DAC	1306002-01	1
Lamotte/Anzag	Base cream DAC	5408100	1
Caelo	Base cream DAC	13187901	9

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Supplier	Substance	Batch	Spectra
Alliance Healthcare	Base cream DAC	13139801	1
Henry Lamotte Oils	Base cream DAC	5322400	1
Euro OTC	Base cream DAC	1306002-01	1
Bombastus	Base cream DAC	277110	1
Euro OTC	Base cream DAC	1302037-01	1
Caelo	Base cream DAC	13158601	4
Sanacorp	Base cream DAC	13158401	2
Caelo	Base cream DAC	13158440	1
AHC 27.06.13 EK 32,95	Base cream DAC	1212025-01	1
Euro OTC	Base cream DAC	1302036-01	1
Caelo	Base cream DAC	160704	1
Caelo	Base cream DAC	13187701	2
Caelo	Base cream DAC	13173301	2
Fagron	Base cream DAC	13C05-T10-003297	1
Euro OTC	Base cream DAC	1301044-01	1
Bombastus	Base cream DAC	278560	2
Caelo	Base cream DAC	13173601	14
Caelo	Base cream DAC	18071302	1
Caelo	Base cream DAC	13158801	2
Bombastus	Base cream DAC	278556	6
Euro OTC	Base cream DAC	1306031-01	1
Caelo	Base cream DAC	13173501	4
Lamotte / Anzag	Base cream DAC	5408100	1
Caelo	Base cream DAC	13158501	8
Euro OTC	Base cream DAC	1301022-01	6
Lamotte/ Noweda	Base cream DAC	5407900	1
Bombastus	Base cream DAC	278472	4
Caelo	Base cream DAC	13E21-T08-003906	2
Bombastus	Base cream DAC	279961	1
Sanacorp	Base cream DAC	13173701	1
Lamotte/AHD	Base cream DAC	5407900	1
Caelo	Base cream DAC	13188101	3
Caelo	Base cream DAC	13187801	11
Caelo	Base cream DAC	1387801	1
Caelo	Base cream DAC	1081302	1
Herstellung	Base cream DAC	13173601	1
Euro OTC	Base cream DAC	1306001-01	6
doroderm GmbH	Base cream DAC	1202001	2
Euro OTC	Base cream DAC	1305012-01	1
ensbona	Base cream DAC	74000513	1
Caelo	Base cream DAC	13188401	6
Fagron	Base cream DAC	13C05-T-003297	1
Beyvers	Base cream DAC	319-1	1
Bombastus	Base cream DAC	279964	3
Fagron	Base cream DAC	13A09-T18-000259	2
Caelo	Base cream DAC	5408000	1
Noweda	Base cream DAC	13139901	1
Caelo	Base cream DAC	13173701	4
Caelo	Base cream DAC	1319702	1
Caelo	Base cream DAC	2025-T05	1
Caelo	Base cream DAC	13158401	1
Fagron	Base cream DAC	13E22-T04-003975	1
Sanacorp	Base cream DAC	1317301	1
Caelo	Base cream DAC	13188001	6
Caelo	Base cream DAC	13120301	7
Alliance Healthcare	Base cream DAC	13188101	1
Caelo	Base cream DAC	13198301	4
Euro OTC	Base cream DAC	1301043-01	1
Caelo	Base cream DAC	13139901	14
Fagron	Base cream DAC	13E20-T01-003865	1

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Supplier	Substance	Batch	Spectra
DAC 2011	Base cream DAC	13188401	1
Gehe	Base cream DAC	279961	1
Bombastus	Base cream DAC	278561	1
EuRho	Base cream DAC	1302036-01	1
Fagron	Base cream DAC	13C05-T10-003301	1
Bombastus	Base cream DAC	278558	1
Phönix	Base cream DAC	278475	1
Henry Lamotte	Base cream DAC	5408000	1
Caelo	Base cream DAC	3513I-01309	1
Caelo	Base cream DAC	3013M-01309	1
Caelo	Base cream DAC	3413E-01309	1
Caelo	Base cream DAC	1412I-01309	1
Sanacorp	Base cream DAC	13173601	1
Fagron	Base cream DAC	13E21-T05-003897	6
Euro OTC	Base cream DAC	130102301	1
Fagron	Base cream DAC	3613E-01309	1
Caesar /phönix	Base cream DAC	13139901	2
Sanacorp	Base cream DAC	13187901	1
Caelo	Base cream DAC	5091308	1
Euro OTC	Base cream DAC	130603001	1
Fagron	Base cream DAC	13E21-T04-003893	1
Gehe	Base cream DAC	329/1	3
Bombastus	Base cream DAC	280077	1
Caelo	Base cream DAC	13188601	4
Beyvers	Base cream DAC	329/1	1
Caelo	Base cream DAC	13188501	11
EuRho	Base cream DAC	1301023-01	1
Lamotte / Anzag	Base cream DAC	5408200	1
P.W. Beyvers	Base cream DAC	329/2	4
Gehe	Base cream DAC	13E22T05003978	1
Fagron	Base cream DAC	13E23-T07-004011	3
Caelo	Base cream DAC	13198501	2
Caelo	Base cream DAC	16B290713	1
Caelo	Base cream DAC	1301023-01	1
Sanacorp	Base cream DAC	13188701	1
Henry Lamotte	Base cream DAC	5489800	1
Caelo	Base cream DAC	13198601	8
Bombastus	Base cream DAC	278562	2
Beyvers	Base cream DAC	319/2	1
Fagron	Base cream DAC	13E22-T05-003978	1
Bombastus	Base cream DAC	280080	3
Caesar & Loretz GmbH, 4...	Base cream DAC	13139702	1
Fagron	Base cream DAC	13C05-T03-001755	1
sanacorp	Base cream DAC	548900	1
Fargon	Base cream DAC	13E20-T01-003865	1
Henry Lamotte Oils GmbH	Base cream DAC	5407700	5
Caelo	Base cream DAC	12384002	2
Caelo	Base cream DAC	24091301	1
Caelo	Base cream DAC	13198701	10
Ichtyol	Base cream DAC	5407700	1
Euro OTC	Base cream DAC	1306007-01	1
HENRYLAMOTTE/Gehe	Base cream DAC	5408000	1
Caelo	Base cream DAC	280913B	1
Caelo	Base cream DAC	13198801	19
Bombastus	Base cream DAC	280082	2
Caelo	Base cream DAC	1318701	1
Eimermacher	Base cream DAC	2770713	1
Fagron	Base cream DAC		4
Henry Lamotte/Anzag	Base cream DAC	5408300	2
Fagron	Base cream DAC	13E23-T06-004008	3

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	13249801	6
Caelo	Base cream DAC	13188701	11
Bombastus	Base cream DAC	281240	1
Caelo	Base cream DAC	4113E-01309	1
Gehe	Base cream DAC	329/2	1
Sanacorp	Base cream DAC	13188801	1
Caelo	Base cream DAC	13199001	10
Euro OTC	Base cream DAC	1306044-01	2
Bombastus	Base cream DAC	280079	2
Bombastus	Base cream DAC	6862441	1
Caelo	Base cream DAC	13198901	7
Euro OTC	Base cream DAC	1307035-01	1
Lamotte 001	Base cream DAC	5322400	1
Beyvers GmbH	Base cream DAC	329/2	1
Beyvers GmbH/ Noweda	Base cream DAC	329/1	1
Caelo	Base cream DAC	11101302	1
Noweda	Base cream DAC	13139702	1
Sanacorp	Base cream DAC	13250001	1
Fagron	Base cream DAC	13249901	1
Caelo	Base cream DAC	AKD6	1
Euro OTC	Base cream DAC	1307034-01	2
Gehe	Base cream DAC	1306044-01	1
Caelo	Base cream DAC	19101302	1
Caelo	Base cream DAC	13188801	2
Phönix	Base cream DAC	13E21-T05-003897	1
Caelo	Base cream DAC	13198401	1
phönix	Base cream DAC	5408200	1
Caelo	Base cream DAC	13199101	19
Euro OTC	Base cream DAC	1306042-01	1
Henry Lamotte	Base cream DAC	5321100	1
Fagron	Base cream DAC	13C05-T06-001767	1
Fagron	Base cream DAC	13E23-T08-004015	1
Caelo	Base cream DAC	13249901	2
P.W.Beyvers GmbH,Phönix	Base cream DAC	329/1	1
Sanacorp	Base cream DAC	13199101	3
Caelo	Base cream DAC	5489900	5
Henry Lamotte Oils/ Gehe	Base cream DAC	5321000	2
henry Lamotte / Noweda	Base cream DAC	5408000	1
Caelo	Base cream DAC	13250001	8
Bombastus	Base cream DAC	281329	3
Bombastus	Base cream DAC	281239	1
Euro OTC	Base cream DAC	1306009-01	2
Caelo	Base cream DAC	13E21-T06-003900	1
P. W. Beyvers GmbH	Base cream DAC	329/2	3
Caelo	Base cream DAC	279963	1
Caelo	Base cream DAC	1306031-01	1
Phönix, 28.10.2013	Base cream DAC	279961	1
Bombastus	Base cream DAC	281331	4
Henry Lamotte	Base cream DAC	5489900	2
Caelo	Base cream DAC	8111302	1
Beyvers	Base cream DAC	329/2	2
Bombastus	Base cream DAC	282723	2
Anzag/Lamotte	Base cream DAC	5408300	1
Euro OTC	Base cream DAC	130703601	2
Ferdi	Base cream DAC	21220113	1
Caelo	Base cream DAC	13310901	7
Caelo	Base cream DAC	13249702	3
Caelo	Base cream DAC	13252101	4
P.W. Beyvers	Base cream DAC	329/1	1
Euro OTC	Base cream DAC	1308013-01	4

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Supplier	Substance	Batch	Spectra
Gehe	Base cream DAC	340/1	2
Caelo	Base cream DAC	1319901	2
Fagron	Base cream DAC	13E23-T10-004023	1
Caelo	Base cream DAC	13311301	11
P.W.Weyers GmbH	Base cream DAC	340/1	1
Beyvers/Anzag	Base cream DAC	340/1	1
Sanacorp	Base cream DAC	13310901	1
Bombastus	Base cream DAC	281328	1
Bombastus	Base cream DAC	281243	2
Caelo	Base cream DAC	13311201	10
Caelo	Base cream DAC	13311101	3
Caelo	Base cream DAC	5490000	3
Caelo	Base cream DAC	3121302	1
Ensbona	Base cream DAC	98480713	1
Caelo	Base cream DAC	4913E01309	1
AHD, 02.12.13	Base cream DAC	280079	1
Gehe	Base cream DAC	280082	1
Beyvers	Base cream DAC	340/2	3
Euro OTC	Base cream DAC	1307046-01	1
Euro OTC	Base cream DAC	1307031-01	3
Caelo	Base cream DAC	13312201	4
Bombastus	Base cream DAC	279958	3
Bombastus	Base cream DAC	279960	1
Henry Lamotte Oils GmbH...	Base cream DAC	5489900	1
Sanacorp	Base cream DAC	13312001	1
Sanacorp	Base cream DAC	13311301	2
Bombastus	Base cream DAC	281332	1
gehe 28.11.13	Base cream DAC	340/2	1
Caelo	Base cream DAC	13311401	9
Henry Lamotte	Base cream DAC	5408300	1
Caelo	Base cream DAC	13312101	2
P.W. Beyvers / Anzag	Base cream DAC	340/2	1
Caelo	Base cream DAC	13312001	6
P.W.Beyvers	Base cream DAC	340/2	3
Infecto/Phönix	Base cream DAC	12191901	1
Bombastus	Base cream DAC	278555	3
Fagron	Base cream DAC	13E22T09003991	1
Caelo	Base cream DAC	CH5490000	1
Euro OTC	Base cream DAC	1307044-01	3
Caelo	Base cream DAC	13312301	4
Holdermann	Base cream DAC	280078	1
Eimermacher	Base cream DAC	28310913	2
Caelo	Base cream DAC	13311301-3462312170	1
Bombastus	Base cream DAC	282887	1
Fagron	Base cream DAC	13E23-004023	1
P.W.Beyvers	Base cream DAC	340/1	1
Bombastus	Base cream DAC	279829	1
P. W. Beyvers	Base cream DAC	319/1	1
Lamotte	Base cream DAC	5408000	1
Bombastus	Base cream DAC	281486	1
Euro OTC	Base cream DAC	1309005-01	2
Beyvers/Gumo	Base cream DAC	340/2	1
P.W.Beyvers/Jenne 18.12...	Base cream DAC	340/2	1
Caelo	Base cream DAC	13347101	16
Caelo	Base cream DAC	13311601	4
Fagron	Base cream DAC	13E21-T04-003894	3
Euro OTC	Base cream DAC	130201001	1
Lamotte	Base cream DAC	5489900	1
Fagron	Base cream DAC	13E21-T06-003900	1
P.W.Beyvers GmbH/Anzag	Base cream DAC	340/2	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	1331201	1
Bombastus	Base cream DAC	281242	2
Sanacorp	Base cream DAC	13347201	1
Fagron	Base cream DAC	13E22-T07-003984	1
Fagron	Base cream DAC	13E22-T08-003987	2
Euro OTC	Base cream DAC	13312201	1
Caelo	Base cream DAC	13311801	7
Gehe	Base cream DAC	13310901	1
Gehe	Base cream DAC	282769	1
Caelo	Base cream DAC	13311606	1
Caelo	Base cream DAC	11011405	1
Euro OTC	Base cream DAC	130704701	2
Sanacorp	Base cream DAC	282772	1
Fagron	Base cream DAC	13E23-T12	1
D'ORODERM	Base cream DAC	1346001	1
Caelo	Base cream DAC	13311901	5
Caelo	Base cream DAC	13312401	2
Phönix	Base cream DAC	13311801	1
Fagron	Base cream DAC	13E21-T07-003903	2
Euro OTC	Base cream DAC	1305013-01	1
/ Anzag	Base cream DAC		1
Caelo	Base cream DAC	13347301	7
Gehe	Base cream DAC	13199101	1
Euro OTC	Base cream DAC	1306020-01	6
Fagron	Base cream DAC	13h14t02006207	1
Fagron	Base cream DAC	13311701	1
Caelo	Base cream DAC	13311502	1
Phönix Gotha	Base cream DAC	5489800	1
Sanacorp	Base cream DAC	13312301	1
Caelo	Base cream DAC	13377201	11
Caelo	Base cream DAC	13347201	6
Bombastus	Base cream DAC	282774	1
Apomix / AHD	Base cream DAC	281328006/14	1
Hedinger	Base cream DAC	1309006-01	3
Caelo	Base cream DAC	25011401	1
Caelo	Base cream DAC	13311701	5
Caelo	Base cream DAC	130704501	1
Henry Lamotte	Base cream DAC	5490100	1
Fagron	Base cream DAC	13E23-T16-004035	2
Caelo	Base cream DAC	13378201	7
Noweda	Base cream DAC	13198601	2
Alliance Health 17.01.2...	Base cream DAC	5490100	1
Caelo	Base cream DAC	5537400	1
Bombastus	Base cream DAC	281335	1
Euro OTC	Base cream DAC	130703101	1
Caelo	Base cream DAC	72/AKD1	1
Sanacorp	Base cream DAC	13381101	1
Caelo	Base cream DAC	13378101	6
Fagron	Base cream DAC	13E23-T09	3
Caelo	Base cream DAC	13377901	5
Bombastus	Base cream DAC	282771	1
celo/phönix	Base cream DAC	13377901	3
Caelo	Base cream DAC	5490100	1
Caelo	Base cream DAC	1301681	1
Fagron	Base cream DAC	13H14T02006207	1
P.W.Beyvers GmbH/Phönix	Base cream DAC	340/2	1
Beyvers	Base cream DAC	340/1	1
D'oroderm	Base cream DAC	1346001	4
Henry Lamotte	Base cream DAC	5537100	2
Eimermacher	Base cream DAC	36140913	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	13H14-T10-007314	1
Caelo	Base cream DAC	13381001	15
Caelo	Base cream DAC	13378001	9
Caelo	Base cream DAC	13E23-T10-004023	1
Caelo	Base cream DAC	13H14T05-006551	1
Euro OCT	Base cream DAC	1307047-01	1
Caelo	Base cream DAC	13385101	5
Sanacorp	Base cream DAC	13377201	1
Fagron	Base cream DAC	13A09-T14-000244	1
Caelo	Base cream DAC	13249701	8
Euro OTC	Base cream DAC	1307003-01	2
Caelo	Base cream DAC	13380901	10
Caelo	Base cream DAC	25021402	1
Caelo	Base cream DAC	5537500	2
Bombastus	Base cream DAC	282773	2
Bombastus	Base cream DAC	283972	2
Caelo	Base cream DAC	13H14-T01-006203	2
Sanacorp	Base cream DAC	13381001	1
Fagron	Base cream DAC	13378001	1
Fagron	Base cream DAC	13H14-T02-006207	1
Caelo	Base cream DAC	13381201	7
Euro OTC	Base cream DAC	1307047-01	1
PHOENIX 03.03.2014	Base cream DAC	5537200	2
Euro OTC	Base cream DAC	130704801	1
Euro OTC	Base cream DAC	1307045-01	1
Fagron	Base cream DAC	13H14-T04-006218	3
Fagron	Base cream DAC	13H14-T01-006202	1
Caelo	Base cream DAC	13386201	5
Gehe	Base cream DAC	1302036-01	1
Euro OTC	Base cream DAC	1309006-01	1
Sanacorp	Base cream DAC	283972	2
Caelo	Base cream DAC	13385201	5
Gehe	Base cream DAC	cdbgsdgb	1
Eimermacher	Base cream DAC	97870214	2
Phönix	Base cream DAC	14035801	1
Caelo	Base cream DAC	13384901	10
Bombastus	Base cream DAC	283975	1
Gehe	Base cream DAC	13198501	1
Gehe	Base cream DAC	283974	1
Caelo	Base cream DAC	13812013	1
Caelo	Base cream DAC	14036101	4
Bombastus	Base cream DAC	285228	4
Caelo	Base cream DAC	13386001	7
Caelo	Base cream DAC	1214T01309	1
Sanacorp	Base cream DAC	13380901	1
Eimermacher	Base cream DAC	12170214	2
Fargon/Anzag	Base cream DAC	13H14-T01-006203	1
Fagron	Base cream DAC	13K12-T02-008039	5
Bombastus	Base cream DAC	283974	2
Euro OTC	Base cream DAC	1308023-01	3
Bombastus	Base cream DAC	283917	1
Lamotte/AHD	Base cream DAC	589900	1
D'Oroderm	Base cream DAC	1346001	1
Caelo	Base cream DAC	13386101	2
Gutenberg-Apotheke	Base cream DAC	13378201	1
Caelo	Base cream DAC	1338091	1
Caelo	Base cream DAC	14035901	3
Gehe	Base cream DAC	283975	1
Caelo	Base cream DAC	13381101	2
Caelo	Base cream DAC	28031401	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	28031404	1
Caelo	Base cream DAC	13385301	4
Lamotte/ Noweda	Base cream DAC	5537300	1
Caesar & Loretz GmbH Hi...	Base cream DAC	1308013-01	1
Euro OTC	Base cream DAC	1309008-01	1
Caelo	Base cream DAC	14053002	2
Caelo	Base cream DAC	31031405	1
Euro OTC	Base cream DAC	1311005-01	5
Caelo	Base cream DAC	14053501	1
Bombastus	Base cream DAC	286087	5
Caelo	Base cream DAC	14053601	4
Henry Lamotte oils GmbH	Base cream DAC	5490100	1
Caelo	Base cream DAC	4121	1
Caelo	Base cream DAC	14053701	7
Sanacorp	Base cream DAC	13311801	1
Caelo	Base cream DAC	14036201	11
Caelo	Base cream DAC	13E22-T08-003987	1
noweda	Base cream DAC	13347101	1
Beyvers	Base cream DAC	412/1	2
Henry Lamotte Oils / Gehe	Base cream DAC	5407700	1
Bombastus	Base cream DAC	281334	1
Phönix Gotha	Base cream DAC	5537100	1
Caelo	Base cream DAC	140409	1
Fagron	Base cream DAC	13H14T080	1
Euro OTC	Base cream DAC	1308021-01	3
Euro OTC	Base cream DAC	131007-01	1
Bombastus	Base cream DAC	286160	3
Bombastus	Base cream DAC	283971	1
Fagron	Base cream DAC	13H14-T01-006203	2
P.W.Beyvers	Base cream DAC	412/1	2
Euro OTC	Base cream DAC	1311007-01	3
Phönix	Base cream DAC	14053501	1
Caelo	Base cream DAC	14036001	2
VDL	Base cream DAC	13380901	1
Bombastus	Base cream DAC	285220	1
Gutenberg-Apotheke	Base cream DAC	14035801	1
Lamotte	Base cream DAC	5537000	1
Caelo	Base cream DAC	23041403	1
Sanacorp	Base cream DAC	5537000	2
Fagron	Base cream DAC	13H14T01006203	1
DORODERM GmbH & Co.KG	Base cream DAC	1346001	2
Fagron	Base cream DAC	14A10-T06-009259	5
Euro OTC	Base cream DAC	131100801	1
Gehe am 08.04.2014	Base cream DAC	412/1	2
Phönix	Base cream DAC	6207	1
Lamotte	Base cream DAC	5537300	4
Caelo	Base cream DAC	14091501	9
Bombastus	Base cream DAC	279962	1
Caelo	Base cream DAC	5537000	8
Caelo	Base cream DAC	131100701	1
Bombastus	Base cream DAC	286093	2
Euro OTC	Base cream DAC	1308010-01	1
Sanacorp	Base cream DAC	14091501	2
Caelo	Base cream DAC	14053301	2
Caelo	Base cream DAC	14091401	3
Phoenix	Base cream DAC	14036001	1
Euro OTC	Base cream DAC	1309007-01	8
Bombastus	Base cream DAC	286158	3
Euro OTC	Base cream DAC	1311008-01	2
Caelo	Base cream DAC	14053401	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Anzag	Base cream DAC	5537600	2
Euro OTG	Base cream DAC	1309008-01	2
Bombastus	Base cream DAC	286086	2
P.W.Beyvers GmbH/Anzag	Base cream DAC	412/2	1
GEHE 15.05.2014	Base cream DAC	14053701	1
Bombastus	Base cream DAC	286161	1
Henry Lamotte Oils GmbH	Base cream DAC	5537000	12
Caelo	Base cream DAC	14090601	9
Noweda / Beyvers	Base cream DAC	412/2	1
Bombastus	Base cream DAC	286088	3
Fagron	Base cream DAC	283915	1
Ichthyol / Gehe	Base cream DAC	14A10-T06	1
Caelo	Base cream DAC	14090401	8
Lamotte/ AHDE	Base cream DAC	5407700	1
Euro OTC	Base cream DAC	131100901	1
Bombastus	Base cream DAC	283918	1
Bombastus	Base cream DAC	286162	1
Caelo	Base cream DAC	14053201	1
Caelo	Base cream DAC	14035801	1
Lamotte/Alliance	Base cream DAC	5537600	1
Bombastus	Base cream DAC	286094	3
Bombastus	Base cream DAC	286155	1
Caelo	Base cream DAC	14091701	10
Gehe 28.05.2014	Base cream DAC	14090601	1
Fagron	Base cream DAC	14A13-T02-009280	1
Henry Lamotte oils GmbH	Base cream DAC	5650600	1
Fagron	Base cream DAC	13E23T10004023	1
Euro OTC	Base cream DAC	1311009-01	1
Fagron	Base cream DAC	13H14-T03-006212	1
Caelo	Base cream DAC	14053101	2
Euro OTC	Base cream DAC	1308024-01	7
Caelo	Base cream DAC	14144001	4
Noweda	Base cream DAC	13347201	1
Caelo	Base cream DAC	14091901	6
Fagron	Base cream DAC	286157	1
Caelo	Base cream DAC	14090701	7
Euro OTC	Base cream DAC	1312035-01	6
Phönix Gotha	Base cream DAC	5537300	1
Caelo	Base cream DAC	14A10-T06-009259	1
Caelo	Base cream DAC	14090801	10
Caelo	Base cream DAC	14092001	6
Noweda/Ensbona	Base cream DAC	24180414	4
Caelo	Base cream DAC	16061402	1
Euro OTC	Base cream DAC	1311018-01	1
Euro OTC	Base cream DAC	131101601	1
Bombastus	Base cream DAC	287110	1
Caelo	Base cream DAC	1311009-01	1
Caelo	Base cream DAC	14091801	7
Euro OTC	Base cream DAC	1309013-01	7
Euro OTC	Base cream DAC	1308022-01	6
Euro OTC	Base cream DAC	1309015-01	3
Caelo	Base cream DAC	14052901	16
Caelo	Base cream DAC	2514U1309	1
Fagron	Base cream DAC	13K12-T08-008063	1
Sanacorp	Base cream DAC	72/AKD2	1
Bombastus	Base cream DAC	287251	3
Fagron	Base cream DAC	14D08-T03-011689	7
Fagron	Base cream DAC	14D08-T-03-011689	1
Euro OTC	Base cream DAC	13080224-01	1
Bombastus	Base cream DAC	287193	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	14144101	9
Phoenix	Base cream DAC	5651300	2
Caelo	Base cream DAC	1409101	1
PW Beyves Alliance	Base cream DAC	412/3	1
Bombastus	Base cream DAC	280078	2
GEHE 24.06.2014	Base cream DAC	14091601	1
Phoenix 20.06.2014	Base cream DAC	14090601	1
Beyvers	Base cream DAC	412/3	4
Bombastus	Base cream DAC	285227	1
Caelo	Base cream DAC	13K12-t07-008057	1
Cealo / Noweda	Base cream DAC	14092001	1
AHD	Base cream DAC	5650700	5
Sanacorp	Base cream DAC	14090401	1
Caelo	Base cream DAC	14143901	6
Caelo	Base cream DAC	14143801	7
Fagron	Base cream DAC	13H14-T09	1
Fagron	Base cream DAC	13E22t06003981	1
Caelo	Base cream DAC	14144201	3
Fagron	Base cream DAC	412/2	2
Caelo	Base cream DAC	14091601	7
	Base cream DAC	287114	1
Caelo	Base cream DAC	1334701	1
Lamotte	Base cream DAC	5650700	3
Euro OTC	Base cream DAC	13113101	1
Fagron	Base cream DAC	14A10-T06	1
Euro OTC	Base cream DAC	1312001-01	2
Caelo	Base cream DAC	15071405	1
Euro OTC	Base cream DAC	1312036-01	1
Sanacorp	Base cream DAC	14091701	1
Bombastus	Base cream DAC	287876	1
Euro OTC	Base cream DAC	131103101	1
Henry Lamotte Oils/Sana...	Base cream DAC	5650600	1
Fagron	Base cream DAC	14D-08-T01-011683	1
Raben-Apotheke Mildenau	Base cream DAC	14090601	1
Raben-Apotheke Mildenau	Base cream DAC	14143901	1
Noweda	Base cream DAC	14144101	1
Caelo	Base cream DAC	14151001	7
Euro OTC	Base cream DAC	1306030-01	1
Fagron	Base cream DAC	14B28T04010673	1
Caelo	Base cream DAC	14144202	1
Caelo	Base cream DAC	13K12-T06-008054	2
Caelo	Base cream DAC	14151501	10
Bombastus	Base cream DAC	286159	1
Lamotte/Anzag	Base cream DAC	5651100	1
Fagron	Base cream DAC	14D08-T06-011702	1
Caelo	Base cream DAC	14151101	3
Caelo	Base cream DAC	14151401	7
Sanacorp	Base cream DAC	14144001	1
Hedinger	Base cream DAC	281718	1
Caelo	Base cream DAC	1312001-01	1
Fagron	Base cream DAC	14A13-T04-009286	1
Gehe	Base cream DAC	286088	1
P.W.Beyvers	Base cream DAC	412/3	1
Sanacorp 31.07.2014 EK:...	Base cream DAC	14143901	1
Bombastus	Base cream DAC	287941	1
Bombastus	Base cream DAC	287945	3
Stumpf/Beyvers	Base cream DAC	412/2	1
Bombastus	Base cream DAC	286089	1
Fagron	Base cream DAC	14D08-T02-011686	3
Caelo	Base cream DAC	412/3	1

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Supplier	Substance	Batch	Spectra
EuRho/Phönix	Base cream DAC	1312002-01	1
Euro OTC	Base cream DAC	1311004-01	2
Caelo	Base cream DAC	14151601	7
Fagron	Base cream DAC	13K12-T06-0004	1
Caelo	Base cream DAC	14151901	3
Caelo	Base cream DAC	190814A	1
Stumpf/Beyvers	Base cream DAC	412/3	2
Bombastus	Base cream DAC	287112	1
Caelo	Base cream DAC	14177701	2
Caelo	Base cream DAC	21081407	1
Gehe	Base cream DAC	287941	1
Fagron	Base cream DAC	14d08t02011686	1
Bombastus	Base cream DAC	287117	1
Caelo	Base cream DAC	14090501	1
Caelo	Base cream DAC	14151801	4
Fagron	Base cream DAC	14151501	1
Caelo	Base cream DAC	14178401	5
Euro OTC	Base cream DAC	1312037-01	1
Henry Lamotte/Anzag	Base cream DAC	5651100	1
Euro OTC	Base cream DAC	1308011-01	1
Caelo	Base cream DAC	14178201	14
Caelo	Base cream DAC	14178001	6
Fagron	Base cream DAC	14D08-T03-01168	1
Caelo	Base cream DAC	14151301	2
Bombastus	Base cream DAC	287944	2
Bombastus	Base cream DAC	287115	2
Caelo	Base cream DAC	14177801	2
Fragon	Base cream DAC	13E23-T15-005569	1
Fagron	Base cream DAC	14A13-T04009286	1
Fagron	Base cream DAC	14D08-T01-011683	3
Euro OTC	Base cream DAC	1311031-01	1
Caelo	Base cream DAC	14227801	8
Caelo	Base cream DAC	412/2	1
Bombastus	Base cream DAC	287946	2
Caelo	Base cream DAC	14177901	5
Sanacorp	Base cream DAC	14144101	1
Caelo	Base cream DAC	14232101	5
Euro OTC	Base cream DAC	1312038-01	5
Fagron	Base cream DAC	287197	1
Fagron	Base cream DAC	1408-T08-011710	1
EuRho/Phoenix	Base cream DAC	1311031-01	1
Euro OTC	Base cream DAC	13111004-01	1
Caelo	Base cream DAC	1409041	1
Bombastus	Base cream DAC	287111	1
Caelo	Base cream DAC	14227601	3
Sanacorp	Base cream DAC	287942	1
Caelo	Base cream DAC	14177501	8
Caelo	Base cream DAC	26091405	1
Caelo	Base cream DAC	1415001	1
Caelo	Base cream DAC	287876	1
Phönix	Base cream DAC	14D08-T02-0002	1
Fagron	Base cream DAC	13K12-T07-008057	1
Fagron	Base cream DAC	14D08-T05-011697	4
Bombastus	Base cream DAC	289526	2
Fagron	Base cream DAC	14A13-T06	1
Fagron	Base cream DAC	13K12-T04008048	1
Caelo	Base cream DAC	1417780	1
Fagron	Base cream DAC	13H14-T06-006224	1
Lamotte/Alliance	Base cream DAC	5651300	1
Bombastus	Base cream DAC	286090	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	14D08T04-011692	1
Euro OTC	Base cream DAC	131200101	1
Caelo	Base cream DAC	14178101	4
Bombastus	Base cream DAC	287248	2
Euro/Gehe	Base cream DAC	1312002-01	1
Caelo	Base cream DAC	14263601	3
Fagron	Base cream DAC	14223201	1
Caelo	Base cream DAC	14223201	11
Eur	Base cream DAC	1407022-01	2
Phoenix	Base cream DAC	1306002-01	1
Fagron	Base cream DAC	14D08-T08-011710	4
Caelo	Base cream DAC	14227701	4
Caelo	Base cream DAC	14244501	4
Henry Lamotte oils GmbH	Base cream DAC	5650900	1
Euro OTC	Base cream DAC	1312039-01	6
Phönix Gotha	Base cream DAC	5650600	1
Euro OTC	Base cream DAC	1407020-01	1
Euro OTC	Base cream DAC	1312021-01	1
Caelo	Base cream DAC	14223001	1
Bombastus	Base cream DAC	288057	1
henry lamotte oils gmbh	Base cream DAC	5650900	1
phoenix 01.10.14	Base cream DAC	14178001	1
Bombastus	Base cream DAC	287875	1
Caelo	Base cream DAC	1307003-01	1
Bombastus	Base cream DAC	289660	1
Euro OTC	Base cream DAC	140702201	1
Beyvers	Base cream DAC	440/1	3
Anzag	Base cream DAC	14177801	1
Bombastus	Base cream DAC	288055	4
Euro OTC	Base cream DAC	14223101	1
Fagron	Base cream DAC	3987	2
P.W.Beyvers	Base cream DAC	440/1	1
Caelo	Base cream DAC	14238301	5
Caelo	Base cream DAC	14238501	2
Bayvers	Base cream DAC	440/1	1
Fagron	Base cream DAC	14D08-T04-011692	8
Fagron	Base cream DAC	14D08-T10-011716	2
Eimermacher	Base cream DAC	23090414	1
P.W.Beyvers GmbH,Phönix	Base cream DAC	440/1	2
Noweda 17.10.2014	Base cream DAC	1346001	2
Sanacorp	Base cream DAC	14227901	1
Sanacorp	Base cream DAC	14244501	1
Euro OTC	Base cream DAC	1312003-01	1
Bombastus	Base cream DAC	287116	1
Caelo	Base cream DAC	14227901	4
Fagron	Base cream DAC	13E21-T09-003910	1
Euro OTC	Base cream DAC	1407021-01	1
Bombastus	Base cream DAC	289663	4
Bombastus	Base cream DAC	287197	5
Fagron	Base cream DAC	14d08-t04-011632	1
Fagron	Base cream DAC	1586	1
Caelo	Base cream DAC	14263301	5
Euro OTC	Base cream DAC	1407018-01	7
Fagron	Base cream DAC	14F05-T07	1
Caelo	Base cream DAC	14232301	4
Bombastus	Base cream DAC	283976	1
Noweda/Ensbona	Base cream DAC	56590714	5
Schmittmann GmbH	Base cream DAC	14151901	1
Caelo	Base cream DAC	14238401	2
Sana 17.11.14 EK 7,89	Base cream DAC	14232301	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	1408009-01	1
Sonnenberg-Apotheke	Base cream DAC	289663	1
Fagron	Base cream DAC	14A13-T07-009298	1
Caelo	Base cream DAC	13158701	1
Euro OTC	Base cream DAC	140102001	1
Noweda	Base cream DAC	14F05-T06-012961	2
Bombastus	Base cream DAC	1401020-01	1
Caelo	Base cream DAC	14263201	2
Caelo	Base cream DAC	14289601	5
Caelo	Base cream DAC	1426331	1
Bombastus	Base cream DAC	289530	4
Bombastus	Base cream DAC	288054	1
Bombastus	Base cream DAC	289531	2
Caelo	Base cream DAC	1423101	1
HenryLamotteGmbH/Noweda	Base cream DAC	5650800	1
Henry Lamotte/Anzag	Base cream DAC	5651200	1
Euro OTC	Base cream DAC	5650900	1
	Base cream DAC	289527	1
Euro OTC	Base cream DAC	1401020-01	4
Euro OTC	Base cream DAC	14232001	1
Lamotte/AHD	Base cream DAC	5651300	1
Fagron	Base cream DAC	14F05-T06-012961	5
Caelo	Base cream DAC	131203801	1
Caelo	Base cream DAC	2121403	1
Bombastus	Base cream DAC	288058	1
Caelo	Base cream DAC	14228001	1
Phoenix 13.11.14	Base cream DAC	14143801	1
Caelo	Base cream DAC	1428201	1
Gehe	Base cream DAC	287947	1
Caelo	Base cream DAC	14238101	3
Bombastus	Base cream DAC	289589	1
Lamotte	Base cream DAC	5651000	1
Caelo	Base cream DAC	14290101	2
Caelo	Base cream DAC	14289701	6
Caelo	Base cream DAC	14303301	3
EuRho/Phönix	Base cream DAC	1312037-01	1
Caelo	Base cream DAC	14289801	11
Euro OTC	Base cream DAC	1401024-01	6
Euro OTC	Base cream DAC	1401021-01	1
Fagron	Base cream DAC	14D085T045011692	1
Caelo	Base cream DAC	14289901	8
Bombastus	Base cream DAC	289803	1
Beyvers	Base cream DAC	440/2	2
lamotte/sanacorb	Base cream DAC	5651000	2
Apomix/Jenne	Base cream DAC	4D061014	1
Caelo	Base cream DAC	14222801	2
Caelo	Base cream DAC	74/AKD2	1
Euro OTC	Base cream DAC	140705501	1
Fagron	Base cream DAC	14J07-T14-015986	1
Caelo	Base cream DAC	14263401	2
Anzag 19.12.14 3,82	Base cream DAC	14177501	1
Bombastus	Base cream DAC	289591	1
Sanacorp/ Ferd. Eimerma...	Base cream DAC	8821114	2
Sanacorp	Base cream DAC	14289801	1
Caelo	Base cream DAC	14327101	3
Euro OTC	Base cream DAC	1312004-01	1
Bombastus	Base cream DAC	CHB289803	1
Fagron	Base cream DAC	14F05T08	2
Euro OTC	Base cream DAC	1407022-01	1
Euro OTC	Base cream DAC	1312020-01	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	1407055-01	2
Fagron	Base cream DAC	289803	1
P.W.Beyvers	Base cream DAC	440/2	1
Fagron	Base cream DAC	14F05-T07-012965	4
AHD 11.12.14 EK 8,79	Base cream DAC	289664	1
Caelo	Base cream DAC	14053001	4
Bombastus	Base cream DAC	289804	1
Euro OTC	Base cream DAC	1401025-01	8
Henry Lamotte/Anzag	Base cream DAC	5788600	1
Euro OTC	Base cream DAC	1401023-01	6
Caelo	Base cream DAC	14327001	7
Henry Lamotte oils GmbH	Base cream DAC	5651100	1
Bombastus	Base cream DAC	289665	1
Caelo	Base cream DAC	14011515	1
Beyvers	Base cream DAC	440/3	2
Bombastus	Base cream DAC	289667	1
Caelo	Base cream DAC	14326701	12
Fagron	Base cream DAC	14F05-T24-012983	7
Euro OTC	Base cream DAC	1407054-01	3
Bombastus	Base cream DAC	291030	1
Caelo	Base cream DAC	14303901	13
Caelo	Base cream DAC	14303801	8
Caelo	Base cream DAC	142990001	1
Fagron	Base cream DAC	14F05-T08-012969	1
Gehe	Base cream DAC	291025	1
Fagron	Base cream DAC	14F05-T07-012966	1
Alliance Healthcare	Base cream DAC	14238501	1
Caelo	Base cream DAC	14303101	5
Bombastus	Base cream DAC	291032	2
Euro OTC	Base cream DAC	1401026-01	3
Caelo	Base cream DAC	14232201	10
Henry Lamotte/ Noweda	Base cream DAC	5537300	4
Henry Lamotte Olis GmbH	Base cream DAC	5651100	1
Phönix Gotha	Base cream DAC	5650900	1
Sanacorp 05.01.15 EK 7,89	Base cream DAC	14290001	1
Sanacorp 26.01.15 EK 7,89	Base cream DAC	1403801	1
Caelo	Base cream DAC	14327901	7
Fagron	Base cream DAC	14F06-T05-013014	1
Caelo	Base cream DAC	14326801	5
Henry Lamotte Oils/Phönix	Base cream DAC	5788700	2
Euro OTC	Base cream DAC	140102601	1
Caelo	Base cream DAC	140705401	1
Caelo	Base cream DAC	14238201	1
Bombastus	Base cream DAC	291025	2
Bombastus	Base cream DAC	291028	1
Caelo	Base cream DAC	50205/1Gra	1
Caelo	Base cream DAC	14f05-t07-012965	1
Caelo	Base cream DAC	14290001	6
Caelo	Base cream DAC	14327501	4
Caelo	Base cream DAC	14232001	6
Bombastus	Base cream DAC	291026	2
Caelo	Base cream DAC	14303501	3
Phönix 23.01.15	Base cream DAC	14290001	1
Phönix	Base cream DAC	14303901	1
Sana 11.02.15 EK 8,05	Base cream DAC	14303801	1
Bombastus	Base cream DAC	289802	1
Dr. Wolff	Base cream DAC	14325601	1
Henry Lamotte/Anzag	Base cream DAC	5788700	3
Caelo	Base cream DAC	14327401	3
Caelo	Base cream DAC	14325101	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	14326901	5
lamotte/sanacorb	Base cream DAC	5787800	1
Bombastus	Base cream DAC	292122	2
Bombastus	Base cream DAC	291029	1
Bombastus	Base cream DAC	291069	1
Caelo	Base cream DAC	20021503	1
EuRho/ Ebert	Base cream DAC	1401026-01	1
Caelo	Base cream DAC	14327701	7
Caelo	Base cream DAC	14325801	2
Euro OTC	Base cream DAC	1412002-01	4
Caelo	Base cream DAC	15000801	4
Fagron	Base cream DAC	14J06-T08-015886	9
Euro OTC	Base cream DAC	1401022-01	5
ENSBONA	Base cream DAC	22251214	1
Caelo	Base cream DAC	14368001	8
Fagron	Base cream DAC	14J07-T07	1
Euro OTC	Base cream DAC	1411031-01	1
Eimermacher	Base cream DAC	8811114	1
Phoenix 20.02.15	Base cream DAC	291032	1
EuRho	Base cream DAC	13K29-B32-288245	1
Lamotte	Base cream DAC	5787800	1
Fagron	Base cream DAC	14F05-T24	1
Gehe 25.02.15	Base cream DAC	14325401	1
P.W.Beyvers Gmbh,Phönix	Base cream DAC	440/2	1
Caelo	Base cream DAC	15040801	4
Caelo	Base cream DAC	14328001	3
Caelo	Base cream DAC	14325601	1
Caelo	Base cream DAC	14368201	4
Caelo	Base cream DAC	14327301	2
Caelo	Base cream DAC	15000901	6
Phönix Gotha	Base cream DAC	5787900	1
Henry Lamotte oils GmbH	Base cream DAC	5787800	2
Bombastus	Base cream DAC	290866	1
Fagron	Base cream DAC	14F05T06012961	1
Anzah / Henry lamotte	Base cream DAC	57788600	1
Caelo	Base cream DAC	14374201	3
Bombastus	Base cream DAC	292125	4
Fagron	Base cream DAC	14322301	1
Bombastus	Base cream DAC	292261	1
Caelo	Base cream DAC	14325501	1
Euro OTC	Base cream DAC	1409056-01	1
Fagron	Base cream DAC	14J07-T06-015957	4
Sanacorp	Base cream DAC	14327501	1
Fagron	Base cream DAC	14J23-T04-016463	2
Anzag	Base cream DAC	292258	1
Fagron	Base cream DAC	14J07-T12	1
Bombastus	Base cream DAC	292123	1
Phoenix Goettin	Base cream DAC	14289601	1
Caelo	Base cream DAC	14327801	2
Bombastus	Base cream DAC	291024	1
Caelo	Base cream DAC	15004001	5
Caelo	Base cream DAC	14327601	3
Euro OTC	Base cream DAC	1501007-01	1
Caelo	Base cream DAC	14374301	2
Caelo	Base cream DAC	14368101	4
Gehe	Base cream DAC	15040801	1
Noweda	Base cream DAC	1311004-01	1
Noweda	Base cream DAC	1312037-01	1
Euro OTC	Base cream DAC	1502007-01	3
Caelo	Base cream DAC	15041101	8

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	292267	2
Caelo	Base cream DAC	14325401	1
Fagron	Base cream DAC	6879559	1
Caelo	Base cream DAC	31031506	1
Euro OTC	Base cream DAC	1501050-01	3
Lamotte/Alliance	Base cream DAC	5651200	1
Caelo	Base cream DAC	15040901	4
Caelo	Base cream DAC	1401020-01	1
Bombastus	Base cream DAC	289805	2
Bombastus	Base cream DAC	292258	1
Lamotte	Base cream DAC	5787900	2
Caelo	Base cream DAC	1401025-01	1
Phönix Gotha	Base cream DAC	5788000	1
Caelo	Base cream DAC	14374401	2
Bombastus	Base cream DAC	292263	3
Bombastus	Base cream DAC	289669	1
Euro OTC	Base cream DAC	150150-01	1
Caelo	Base cream DAC	15040701	8
Gehe	Base cream DAC	1502008-01	1
Fagron	Base cream DAC	14J07-T09	1
Caelo	Base cream DAC	14j07T06015957	1
Euro OTC	Base cream DAC	1501008-01	1
Caelo	Base cream DAC	292122	1
Fagron	Base cream DAC	14J07-T07-015961	2
Caelo	Base cream DAC	15064401	7
Caelo	Base cream DAC	5788000	1
Lamotte//AHD	Base cream DAC	5787900	1
Lamotte/Sanacorp	Base cream DAC	5788700	2
Euro OTC	Base cream DAC	1501009-01	1
Caelo	Base cream DAC	15041001	5
Fagron	Base cream DAC	14K05-T08-016808	1
Caelo	Base cream DAC	14303401	1
Bombastus	Base cream DAC	292259	1
Bombastus	Base cream DAC	289590	1
Lamotte	Base cream DAC	5788000	1
Caelo	Base cream DAC	15000701	2
Bombastus	Base cream DAC	291034	2
Euro OTC	Base cream DAC	1502015-01	5
Caelo	Base cream DAC	15/138/B	1
Bombastus	Base cream DAC	293201	2
Euro OTC	Base cream DAC	1502008-01	7
Alliance Healthcare/Hed...	Base cream DAC	1502026-01	2
Caelo	Base cream DAC	15064501	4
Caelo	Base cream DAC	14274601	1
Sanacorp	Base cream DAC	15070101	1
Caelo	Base cream DAC	15064301	7
EuRho	Base cream DAC	1401026-01	2
Gehe,27.0415	Base cream DAC	14F27-T03-013614	1
Bombastus	Base cream DAC	292260	2
Caelo	Base cream DAC	15070101	9
Euro OTC	Base cream DAC	1407019-01	1
Caelo	Base cream DAC	15064601	2
Euro OTC	Base cream DAC	1407023-01	1
Bombastus	Base cream DAC	293200	2
EuroPharm	Base cream DAC	1501008-01	2
Fagron	Base cream DAC	14K05-T07-016800	7
Beyvers	Base cream DAC	515/5	1
Caelo	Base cream DAC	15083001	1
Caelo	Base cream DAC	15070201	9
Anzag	Base cream DAC	293196	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	14325901	1
Caelo	Base cream DAC	15083101	1
Euro OTC	Base cream DAC	1502016-01	4
Bombastus	Base cream DAC	293738	1
Caelo	Base cream DAC	15064701	11
Sanacorp	Base cream DAC	15000701	1
Euro OTC	Base cream DAC	150200801	1
Fagron	Base cream DAC	14J07-T10-015971	2
Gehe/Beyvers	Base cream DAC	440/2	1
Phönix Gotha	Base cream DAC	515/1	1
Caelo	Base cream DAC	15040601	9
Bombastus	Base cream DAC	293196	1
Caelo	Base cream DAC	1501039-1	1
Bombastus	Base cream DAC	292127	2
Bombastus	Base cream DAC	293795	6
Caelo	Base cream DAC	14374501	3
Euro OTC	Base cream DAC	150200701	1
Allianz Healthcare 20.0...	Base cream DAC	14232201	1
Fagron	Base cream DAC	14D08-T05-011698	1
Caelo	Base cream DAC	13051503	1
Fagron	Base cream DAC	14J07-T11-015975	2
Caelo	Base cream DAC	1346001	4
Bombastus	Base cream DAC	293939	4
Caelo	Base cream DAC	5788100	1
Fagron	Base cream DAC	14j07-T07-015961	1
Eimermacher	Base cream DAC	57090315	2
Ensbona	Base cream DAC	57090315	4
Bombastus	Base cream DAC	293199	1
Caelo	Base cream DAC	15164501	4
Euro OTC	Base cream DAC	1502016	1
Fagron	Base cream DAC	14K05T07	1
Beyvers / Phönix	Base cream DAC	515/2	2
Caelo	Base cream DAC	14325701	1
Sanacorp	Base cream DAC	75/AKD4	1
Caelo	Base cream DAC	150671	1
Caelo	Base cream DAC	1502016-01	1
Sanacorp	Base cream DAC	15164601	2
Fagron	Base cream DAC	14K05-T05-016793	2
Euro OTC	Base cream DAC	1502017-01	7
Caelo	Base cream DAC	15164601	7
Bombastus	Base cream DAC		2
Caelo	Base cream DAC	180615010	1
Fagron	Base cream DAC	14J07-T09-015967	3
Caelo	Base cream DAC	15166701	4
Euro OTC	Base cream DAC	1502028	1
Caelo	Base cream DAC	15164401	4
henry lamotte oils gmbh	Base cream DAC	5537000	1
Euro OTC	Base cream DAC	1501040-01	1
Anzag;8.14EUR;17.6.15	Base cream DAC	14232301	2
Caelo	Base cream DAC	23061506	1
Caelo	Base cream DAC	1501019-01	1
Caelo	Base cream DAC	15083201	1
Bmbastus/Noweda	Base cream DAC	292256	1
EuRho/Phönix	Base cream DAC	1502017-01	1
Fagron	Base cream DAC	14k05-t06-016796	1
P. W. Beyvers GmbH	Base cream DAC	515/2	1
Euro OTC	Base cream DAC	1502029-01	2
P&M Cosmetics GmbH & Co...	Base cream DAC	150317	1
Fagron	Base cream DAC	14F06-T04-013010	1
Euro OTC	Base cream DAC	1502028-01	4

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15167001	14
Bombastus	Base cream DAC	293940	1
Eimermacher	Base cream DAC	57080315	1
Ichthyol-Gesellschaft C...	Base cream DAC	15040701	1
Ensbona/Sanacorp	Base cream DAC	22251214	2
Fagron	Base cream DAC	T08-015887	1
Fagron	Base cream DAC	14J07-T08-015964	3
Henry Lamotte/AHD	Base cream DAC	5909700	2
Caelo	Base cream DAC	15164701	10
Caelo	Base cream DAC	15184101	3
Lamotte	Base cream DAC	5788200	2
Bombastus	Base cream DAC	292256	3
Euro	Base cream DAC	1501040-01	2
Caelo	Base cream DAC	151564501	1
Caelo	Base cream DAC	15173201	5
Caelo	Base cream DAC	15166901	3
Fagron	Base cream DAC	14k05t07016800	1
Caelo	Base cream DAC	15173501	7
Caelo	Base cream DAC	15164301	1
Fagron	Base cream DAC	14F06-T04	1
Euro OTC	Base cream DAC	150100801	1
Caelo	Base cream DAC	15166601	4
Fagron	Base cream DAC	14K05-016793	1
Caelo	Base cream DAC	15166801	7
Bombastus	Base cream DAC	293796	1
Caelo	Base cream DAC	15184001	4
Fagron	Base cream DAC	14A10-T05-009253	1
Caelo	Base cream DAC	15190601	2
Euro OTC	Base cream DAC	1520202801	1
Anzag	Base cream DAC	292260	2
Caelo	Base cream DAC	15054501	1
Euro OTC	Base cream DAC	1502026-01	4
Caelo	Base cream DAC	15173601	9
EuRho	Base cream DAC	1502008-01	1
EuRho	Base cream DAC	1502029-01	2
EuRho	Base cream DAC	1501050-01	1
Caelo	Base cream DAC	15184201	1
Europ Ots Pharma	Base cream DAC	1501040-01	1
Caelo	Base cream DAC	14325201	1
Bombastus	Base cream DAC	293941	1
Caelo	Base cream DAC	15173301	1
Caelo	Base cream DAC	5909200	2
Fagron	Base cream DAC	15C11-T07-020396	5
Bombastus	Base cream DAC	294837	1
Fagron	Base cream DAC	15173601	1
Fagron	Base cream DAC	15C11T05020388	1
Fagron	Base cream DAC	15B19-T13-019450	1
Euro OTG/ Euro OTG Pharma	Base cream DAC	1501041-01	1
Noweda	Base cream DAC	1502028-01	2
Henry Lamotte/Anzag	Base cream DAC	5909800	1
Gehe	Base cream DAC	1502026-01	1
Caelo	Base cream DAC	15191001	5
Euro OTC	Base cream DAC	1502025-01	1
Caelo	Base cream DAC	15184301	8
Lamotte	Base cream DAC	5785800	1
Eimermacher Direktbezug	Base cream DAC	57080315	1
Bombastus	Base cream DAC	293800	1
Beyvers	Base cream DAC	515/3	1
Beyvers	Base cream DAC	515/2	1
Fagron	Base cream DAC	15C11T13020416	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	15191202	8
Euro OTC	Base cream DAC	1501020-01	1
Caelo	Base cream DAC	15190701	1
Caelo	Base cream DAC	1513301	1
Henry Lamotte Oils / No...	Base cream DAC	5788200	1
Caelo	Base cream DAC	15190901	3
Ferdinand Eimermacher	Base cream DAC	57090315	3
Gehe	Base cream DAC	294834	1
Caelo	Base cream DAC	14130715	1
Euro OTC	Base cream DAC	1501053-01	2
Fagron	Base cream DAC	15C11-T05-020388	8
Caelo	Base cream DAC	19081503	1
Caelo	Base cream DAC	15184401	14
Phönix Gotha	Base cream DAC	1502025-01	1
Bombastus	Base cream DAC	295899	2
Caelo	Base cream DAC	15250001	4
Bombastus	Base cream DAC	294842	4
Euro OTC	Base cream DAC	1506045-01	9
Caelo	Base cream DAC	15173401	2
Fagron	Base cream DAC	14J07-T10-015972	2
Fagron	Base cream DAC	14F06-T04-013010	1
Euro OTC	Base cream DAC	15502028-01	1
Euro OTC	Base cream DAC	150215-01	1
Euro OTC	Base cream DAC	1506046-01	4
Henry Lamotte/AHD	Base cream DAC	5909900	1
Sanacorp	Base cream DAC	75/AKD6	1
Bombastus	Base cream DAC	293739	2
Fagron	Base cream DAC	15241801	1
Bombastus	Base cream DAC	295897	4
Euro OTC	Base cream DAC	1501019-01	1
Bombastus	Base cream DAC	293942	4
Europharm/Otto	Base cream DAC	1411030-01	1
Sanacorp	Base cream DAC	15250001	1
Fagron	Base cream DAC	15C11-T07	2
P.W. Beyvers GmbH	Base cream DAC	515/3	2
Bombastus	Base cream DAC	296155	5
Caelo	Base cream DAC	15191401	2
Caelo	Base cream DAC	1541901	1
Caelo	Base cream DAC	15250501	14
Euro OTC	Base cream DAC	1501055-01	1
Caelo	Base cream DAC	15250801	7
Caelo	Base cream DAC	15191102	5
Phönix Gotha	Base cream DAC	515/3	1
Henry Lamotte	Base cream DAC	5788200	1
Ensbona/Sanacorp	Base cream DAC	57090315	3
Fagron	Base cream DAC	15C11-T05020388	1
Caelo	Base cream DAC	15241901	3
Caelo	Base cream DAC	15250201	6
Caelo	Base cream DAC	15250101	8
Gehe	Base cream DAC	15173301	1
Bombastus	Base cream DAC	294838	1
Gehe	Base cream DAC	15250501	1
P.W.Beyvers GmbH/ Sanac...	Base cream DAC	515/2	1
AHD/Beyvers	Base cream DAC	515/2	3
Bombastus	Base cream DAC	294829	2
Sanacorp/Henry Lamotte	Base cream DAC	5909300	1
Bombastus	Base cream DAC	295901	1
Fagron	Base cream DAC	15C11-T04-020384	3
Bombastus	Base cream DAC	15C-11T05-020388	1
Bombastus	Base cream DAC	293973	2

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	296224	4
Bombastus	Base cream DAC	293943	2
	Base cream DAC	5909300	2
Bombastus	Base cream DAC	295837	1
Euro OTC	Base cream DAC	1501051-01	4
Lamotte	Base cream DAC	5909300	3
Caelo	Base cream DAC	15272201	15
Caelo	Base cream DAC	1501052-01	1
Fagron	Base cream DAC	15E27-T02-022881	6
Fagron	Base cream DAC	14J07-T13-015981	2
Caelo	Base cream DAC	15250601	2
Caelo	Base cream DAC	15250301	9
Henry Lamotte/ Noweda	Base cream DAC	5537000	2
Caesar&lorenz,Anzag	Base cream DAC	15250101	1
Euro OTC	Base cream DAC	1501052-01	1
Caelo	Base cream DAC	15250701	3
Fagron	Base cream DAC	14K05-t07016800	1
Bombastus	Base cream DAC	294841	2
mephano	Base cream DAC	6500115	3
Euro OTC	Base cream DAC	1508001-01	13
Euro OTC	Base cream DAC	1501054-01	1
Caelo	Base cream DAC	15272301	8
Fagron	Base cream DAC	15011-T04-020384	1
Bombastus	Base cream DAC	294843	4
Bombastus	Base cream DAC	293944	3
Euro OTC	Base cream DAC	1506026-01	1
Caelo	Base cream DAC	15191201	1
Fagron	Base cream DAC	14K05-T05-061793	1
Bombastus	Base cream DAC	296228	1
Bombastus	Base cream DAC	294836	1
Fagron	Base cream DAC	15C11-T09	1
Caelo	Base cream DAC	15306601	3
Bayvers/ AHD	Base cream DAC	515/3	1
Ferd. Eimermacher GmbH ...	Base cream DAC	14120715	4
Ensbona	Base cream DAC	8811114	1
Caelo	Base cream DAC	1520601	1
Caelo	Base cream DAC	15306401	10
Caelo	Base cream DAC	15306701	7
Ensbona/Eimermacher	Base cream DAC	14130715	1
Caelo	Base cream DAC	295898	2
Lamotte	Base cream DAC	590990	1
Bombastus	Base cream DAC	297480	1
Fagron	Base cream DAC	15C11-T06-020392	2
P.W.Beyvers GmbH / Noweda	Base cream DAC	515/3	1
Euro OTC	Base cream DAC	150604601	1
Caelo	Base cream DAC	294834	1
P.W. Beyvers GmbH / Phö...	Base cream DAC	538/1	2
Caesar&Loretz/Caesar&Lo...	Base cream DAC	15272601	1
Fagron	Base cream DAC	15G09-T19-024415	2
Phönix Gotha	Base cream DAC	538/1	1
Fagron	Base cream DAC	15H04-T08-024987	2
P.W. Beyvers/Noweda	Base cream DAC	538/1	2
EuRho	Base cream DAC	1508001-01	1
Caelo	Base cream DAC	15272402	7
Euro OTC	Base cream DAC	1509021-21	1
Caelo	Base cream DAC	15250902	12
Eimermacher/Sanacorp	Base cream DAC	14120715	4
Fagron	Base cream DAC	14K05-T06-016796	3
Fagron	Base cream DAC	15c11t07020396	1
Bombastus	Base cream DAC	296230	3

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	296221	1
Lamotte/AHD	Base cream DAC	5909900	1
Fagron	Base cream DAC	15C11-T11-020411	3
Caelo	Base cream DAC	15190501	1
Caelo	Base cream DAC	15313501	1
Noweda/Ensbona	Base cream DAC	57090315	1
Caelo	Base cream DAC	15306501	6
Caelo	Base cream DAC	15272601	2
Euro OTC	Base cream DAC	1507018-01	2
Bombastus	Base cream DAC	296229	4
Fagron	Base cream DAC	15E27-T02-22881	1
Caelo	Base cream DAC	15191301	2
Eimermacher/Ensbona	Base cream DAC	14130715	1
Caelo	Base cream DAC	5909300	1
AEP	Base cream DAC	296222	1
Henry Lamotte Oils / Ph...	Base cream DAC	5537000	1
Beyvers/AHD	Base cream DAC		1
Bombastus	Base cream DAC	296152	2
Bombastus	Base cream DAC	296156	2
Caelo	Base cream DAC	15318801	8
Euro OTC	Base cream DAC	1502027-01	5
Caelo	Base cream DAC	15242001	12
Bombastus	Base cream DAC	295900	1
Beyvers	Base cream DAC	5153	1
Bombastus	Base cream DAC	298257	2
Caelo	Base cream DAC	15313601	3
Bombastus	Base cream DAC	294832	2
Fagron	Base cream DAC	15H04-T07-024983	2
Caelo	Base cream DAC	15318901	6
Caelo	Base cream DAC	15184301	1
Henry Lamotte/Anzag	Base cream DAC	5909500	1
P.W. Beyvers GmbH	Base cream DAC	538/1	1
Caelo	Base cream DAC	15306101	1
Fagron	Base cream DAC	15H04-T05-024975	14
Caelo	Base cream DAC	15306701	1
Bombastus	Base cream DAC	296226	3
Caelo	Base cream DAC	75/AKD7	1
Enzbona/Eimermacher	Base cream DAC	14120715	2
Euro OTC	Base cream DAC	1506047-01	4
Caelo	Base cream DAC	15357801	6
Fagron	Base cream DAC	15C11-T14-020420	2
Euro OTC	Base cream DAC	1510030-01	15
Bombastus	Base cream DAC	298256	5
Henry Lamotte Oils/ San...	Base cream DAC	5909700	1
Euro OTC	Base cream DAC	1509021-01	15
Euro OTC	Base cream DAC	1506053-01	4
Caelo	Base cream DAC	15357701	11
Fagron	Base cream DAC	15H04-T08	1
Bombastus	Base cream DAC	298173	2
Bombastus	Base cream DAC	294833	2
Caelo	Base cream DAC	15357601	16
Caelo	Base cream DAC	15315401	5
Euro OTC	Base cream DAC	150202601	1
Caelo	Base cream DAC	5909500	1
Caelo	Base cream DAC	1502027-01	1
Gehe	Base cream DAC	15315401	1
Caelo	Base cream DAC	15387201	10
Caelo	Base cream DAC	15387101	7
Bombastus	Base cream DAC	15387001	1
Henry Lamotte	Base cream DAC	5909500	1

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Supplier	Substance	Batch	Spectra
Beyvers	Base cream DAC	538-1	1
Caelo	Base cream DAC	15386801	1
Euro OTC	Base cream DAC	151003001	1
Caelo	Base cream DAC	296229	1
ensbona/Noweda	Base cream DAC	14120715	1
Euro OTC	Base cream DAC	1509025-01	1
Caelo	Base cream DAC	15387001	3
Lamotte	Base cream DAC	60260	1
Caelo	Base cream DAC	15315301	9
Henry Lamotte Oils GmbH	Base cream DAC	5909400	1
Bombastus	Base cream DAC	298264	3
Caelo	Base cream DAC	14222901	1
Fagron	Base cream DAC	15H04-T10-024994	2
Caelo	Base cream DAC	15390501	3
Beyvers	Base cream DAC	538/2	1
Euro OTC	Base cream DAC	1506028-01	3
Gehe	Base cream DAC	1508001-01	1
sanacoro	Base cream DAC	15357601	1
Eimermacher/Eimermacher	Base cream DAC	14130715	5
Euro OTC	Base cream DAC	1509026-01	2
beyvers	Base cream DAC	538/2	2
Caelo	Base cream DAC	15390401	2
Bombastus	Base cream DAC	297482	2
Fagron	Base cream DAC	15H04-T06-024978	9
Caelo	Base cream DAC	1509021-01	1
Bombastus	Base cream DAC	538/2	2
Beyvers/ Phönix	Base cream DAC	538/2	1
Sanacorp	Base cream DAC	15315301	1
Bombastus	Base cream DAC	297494	4
Beyvers GmbH	Base cream DAC	538/2	2
Euro OTC	Base cream DAC	15060-46-01	1
Euro OTC	Base cream DAC	1511001-01	6
Caelo	Base cream DAC	15390301	1
Fagron	Base cream DAC	15h04-t06-024978	2
Bombastus	Base cream DAC	297484	2
Beyvers	Base cream DAC	538/1	2
Beyvers/Noweda	Base cream DAC	538/2	1
Caelo	Base cream DAC	15390601	2
Sanacorp	Base cream DAC	15387101	1
Caelo	Base cream DAC	15391001	4
Gehe	Base cream DAC	15357701	2
Euro OTC	Base cream DAC	15110011-01	1
Bayers	Base cream DAC	538/2	1
Caelo	Base cream DAC	26011602	1
Bombastus	Base cream DAC	298170	1
Caelo	Base cream DAC	15390801	9
Bombastus	Base cream DAC	298172	1
Caelo	Base cream DAC	15420201	9
Bombastus	Base cream DAC	296231	3
Caelo	Base cream DAC	15391101	2
Eimermacher	Base cream DAC	50211015	1
EuRho / Phoenix	Base cream DAC	1506046-01	1
Ensbona/Eimermacher	Base cream DAC	14120715	1
Basiscreme	Base cream DAC	1510027-01	1
Caelo	Base cream DAC	15H04-T08-024987	1
Bombastus	Base cream DAC	297500	2
Henry Lamotte Oils / No...	Base cream DAC	5909500	1
Henry Lamotte Oils GmbH	Base cream DAC	5909600	2
Caelo	Base cream DAC	153868	1
Bombastus	Base cream DAC	296225	6

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Supplier	Substance	Batch	Spectra
Henry Lamotte/ Noweda	Base cream DAC	5909300	1
Caelo	Base cream DAC	5909600	1
Caelo	Base cream DAC	298259	2
Henry Lamotte /AHD	Base cream DAC	5910000	1
Henry Lamotte Oils	Base cream DAC	60260	1
Caelo	Base cream DAC	15391201	4
Caelo	Base cream DAC	1518901	2
Caelo	Base cream DAC	15386901	4
Bombastus	Base cream DAC	298171	1
Sanacorp	Base cream DAC	15390801	2
Caelo	Base cream DAC	170216Vi4	1
Caelo	Base cream DAC	1601023-01	1
Direkt/Phönix	Base cream DAC	50211015	5
Eimermacher	Base cream DAC	50221015	1
WE:16.02.2016	Base cream DAC	15420201	1
Caelo	Base cream DAC	16005101	8
Euro OTC	Base cream DAC	160123-01	1
Henry Lamotte /Noveda	Base cream DAC	5909600	1
Caelo	Base cream DAC	1539101	1
Lamotte/Phönix	Base cream DAC	5909600	1
Caelo	Base cream DAC	15419901	6
Caelo	Base cream DAC	1601027-01	1
Fagron	Base cream DAC	15H04-T07	1
Bombastus	Base cream DAC	298259	3
Caelo	Base cream DAC	16005201	3
Lamotte/Noweda	Base cream DAC	5909600	1
Bombastus	Base cream DAC	296227	1
Bombastus	Base cream DAC	298267	3
Fagron	Base cream DAC	15H04-T12-025000	1
Caelo	Base cream DAC	15420001	12
Bombastus	Base cream DAC	299321	1
Lamotte/ANZAG	Base cream DAC	6002237008	1
Euro OTC	Base cream DAC	15420101	1
Bombastus	Base cream DAC	297498	2
Fagron	Base cream DAC	15G09-T19-024416	2
Fagron	Base cream DAC	15J13-T03-026895	5
Frau Brinn-Holtz	Base cream DAC	16005401	1
AHD/Beyvers	Base cream DAC	538/1	1
Caelo	Base cream DAC	1140116	1
Sanacorp	Base cream DAC		2
Fagron	Base cream DAC	15J15-T01-027034	1
Caelo	Base cream DAC	1587201	1
Caelo	Base cream DAC	15420401	11
Noweda/Ensbona	Base cream DAC	222512	1
Fagron	Base cream DAC	15L17-T04-028778	2
Caelo	Base cream DAC	15420001/20160309/4	1
Lamotte/Noweda	Base cream DAC	6002237001	1
Caelo	Base cream DAC	16005301	7
Fagron	Base cream DAC	15J13-T04-026901	1
Caelo	Base cream DAC	1542041	1
Euro OTC	Base cream DAC	1506053	1
Bombastus	Base cream DAC	297496	1
Euro OTC	Base cream DAC	1511002-01	11
Caelo	Base cream DAC	15390901	1
Fagron	Base cream DAC	15H04T06024978	1
Henry Lamotte	Base cream DAC	5909300	1
Bombastus	Base cream DAC	299320	3
Anzag/Lamotte	Base cream DAC	591000	1
Fagron	Base cream DAC	15C11-T09-020405	1
Caelo	Base cream DAC	15J13-T03-026895	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16005401	4
Fagron	Base cream DAC	15L17-T04	1
Fagron	Base cream DAC	15L17-T01028772	1
Caelo	Base cream DAC	16055701	11
Caelo	Base cream DAC	testmessung	1
Lamotte/AHD	Base cream DAC	5909600	1
Bombastus	Base cream DAC	298261	2
Bombastus	Base cream DAC	298260	1
Caelo	Base cream DAC	16005501	5
Fagron	Base cream DAC	15L17-T06-028791	1
Caelo	Base cream DAC	1605801	1
Caelo	Base cream DAC	16055801	8
Sana 23.03.16 Ek 8,09	Base cream DAC	16055801	1
gehe	Base cream DAC	16005501	1
Bombastus	Base cream DAC	299322	3
Caelo	Base cream DAC	16055901	5
Caelo	Base cream DAC	15420101	2
Bombastus	Base cream DAC	300011	3
Caelo	Base cream DAC	298260	1
Bombastus	Base cream DAC	299323	4
Fagron	Base cream DAC	15C11-To4-020384	1
Euro OTC	Base cream DAC	1601030-01	1
Euro OTC	Base cream DAC	1510027-01	1
Noweda	Base cream DAC	1511001-01	1
Bombastus	Base cream DAC	298262	2
Euro OTC	Base cream DAC	1509028-01	1
Bombastus	Base cream DAC	16005201	1
Noweda	Base cream DAC	16058801	1
Caelo	Base cream DAC	16058801	14
Lamotte / AHD	Base cream DAC	6002237001	1
Henry Lamotte	Base cream DAC	6002237001	2
ENSBONA	Base cream DAC	2020216	1
Bombastus	Base cream DAC	299326	1
Euro OTC	Base cream DAC	1511002-02	2
Caesar&Loretz	Base cream DAC	16005201	1
Caelo	Base cream DAC	16/078/B	1
Cealo	Base cream DAC	16055801	1
Fagron	Base cream DAC	15L17-T01-028772	3
Caelo	Base cream DAC	16041001	4
WE:06.04.2016 Sanacorp	Base cream DAC	16058801	1
Eimermacher/Noweda	Base cream DAC	14120715	2
Bombastus	Base cream DAC	298263	2
Bombastus	Base cream DAC	299325	2
Henry Lamotte	Base cream DAC	6002237002	2
Fagron	Base cream DAC	16B15-T02-030277	10
Gehe	Base cream DAC	15420001	1
Bombastus	Base cream DAC	298265	5
Caelo	Base cream DAC	16059201	4
Caelo	Base cream DAC	16101201	9
Caelo	Base cream DAC	16091901	4
AHD Lamotte GmbH	Base cream DAC	5910000	1
Caelo	Base cream DAC	6002237002	1
Fagron	Base cream DAC	15H04-T14-025007	4
Caelo	Base cream DAC	16055501	3
Caelo	Base cream DAC	16101301	5
Caelo	Base cream DAC	16041301	3
Fagron	Base cream DAC	15L17-T03-028775	8
Euro OTC	Base cream DAC	1603038-01	1
Ensbona	Base cream DAC	2020216	2
Caelo	Base cream DAC	16097601	5

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16101901	7
Fagron	Base cream DAC	15117-T03-028775	4
Caelo	Base cream DAC	16059101	2
Bombastus	Base cream DAC	298266	2
Bombastus	Base cream DAC	260416v3	1
Euro OTC	Base cream DAC	1603016-01	5
Fagron	Base cream DAC	16B15-T01-030274	6
Caelo	Base cream DAC	16102001	1
Lamotte/Sanacorp	Base cream DAC	6002237009	1
Caelo	Base cream DAC	16101401	3
EuRho	Base cream DAC	1511002-01	3
Phoenix	Base cream DAC	16059101	1
Caelo	Base cream DAC	16103901	10
Fagron	Base cream DAC	16b15t02-030277	1
Caelo	Base cream DAC	16103801	12
Lamotte	Base cream DAC	5909600	2
Lamotte	Base cream DAC	59096006002237002	1
Fagron	Base cream DAC	15H04-T13-025003	2
Lamotte/Gehe	Base cream DAC	6002237002	1
Bombastus	Base cream DAC	300012	1
Henry Lamotte	Base cream DAC	5909600	1
Caelo	Base cream DAC	16102101	2
Bombastus	Base cream DAC	299943	1
Euro OTC	Base cream DAC	1603015-01	4
Fagron	Base cream DAC	15L17-T05-028785	2
Bombastus	Base cream DAC	299948	3
Henry Lamotte/Anzag	Base cream DAC	6002237009	2
Euro OTC	Base cream DAC	1604023-01	1
Bombastus	Base cream DAC	16B15-T02-030277	1
Caelo	Base cream DAC	160592	1
Caalo	Base cream DAC	16101901	1
Euro OTC	Base cream DAC	1603028-01	10
Sanacorp	Base cream DAC	78/AKD12	1
Euro OTC	Base cream DAC	1601055-01	2
Ensbona/ Sanacorp	Base cream DAC	1200216	3
phönix	Base cream DAC	15j13-t03-026895	1
Caelo	Base cream DAC	16102201	4
Euro OTC	Base cream DAC	1601028-01	2
Caelo	Base cream DAC	16055601	3
Fagron	Base cream DAC	15H04-T11-024997	2
Euro OTC	Base cream DAC	1603030-01	1
Lamotte/AHD	Base cream DAC	6002237009	1
Caelo	Base cream DAC	1603037-01	1
Euro OTC	Base cream DAC	151100201	1
Bombastus	Base cream DAC	294831	1
Caelo	Base cream DAC	16103701	4
Caelo	Base cream DAC	160976012	1
Caelo	Base cream DAC	299323	1
Caelo	Base cream DAC	16131901	6
Bombastus	Base cream DAC	299950	3
Caelo	Base cream DAC	16128901	3
Caelo	Base cream DAC	16132101	12
EuRho	Base cream DAC	1606028-01	1
Ensbona	Base cream DAC	1200216	3
Caelo	Base cream DAC	16131501	6
Caelo	Base cream DAC	16132001	8
Sana/Henry Lamotte	Base cream DAC	6002237003	1
Euro OTC	Base cream DAC	1603029-01	8
Caelo	Base cream DAC	160102801	1
Lamotte//AHD	Base cream DAC	6002237004	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16134901	4
Fagron	Base cream DAC	16815-T04-030282	1
Fagron	Base cream DAC	16C14-T02-031202	3
Fagron	Base cream DAC	16B15-T04-030281	6
Fagron	Base cream DAC	15G09-19-024414	1
Phoenix	Base cream DAC	16041301	1
Henry Lamotte Oils GmbH	Base cream DAC	6002237002	1
Caelo	Base cream DAC	16132201	2
Ensbona/Eimermacher	Base cream DAC	29230416	1
Fagron	Base cream DAC	1614-T02-031202	1
Bombastus	Base cream DAC	301159	3
Caelo	Base cream DAC	16B15-T02-030277	2
Caelo	Base cream DAC	16B15-T04-030281	4
Henry Lamotte/OG	Base cream DAC	6002237002	1
Caelo	Base cream DAC	15390701	1
Ensbona/ Sanacorp	Base cream DAC	50211015	1
henry lamotte	Base cream DAC	6002237003	1
Caelo	Base cream DAC	16136301	6
Euro OTC	Base cream DAC	1605014-01	1
Bombastus	Base cream DAC	299947	3
Euro OTC	Base cream DAC	1604042-01	2
Eimermacher/Ensbona	Base cream DAC	29230416	2
Euro OTC	Base cream DAC	160302801	1
Euro OTC	Base cream DAC	80616-8	1
Bombastus	Base cream DAC	301158	3
Bombastus	Base cream DAC	299324	2
Bombastus	Base cream DAC	300014	5
Noweda/ Eimermacher	Base cream DAC	50211015	1
Caelo	Base cream DAC	16135901	6
Bombastus	Base cream DAC	297497	1
Caelo	Base cream DAC	16145901	1
Caelo	Base cream DAC	16135101	1
Euro OTC	Base cream DAC	1506026-011	1
Caelo	Base cream DAC	16134701	10
Phytocomm	Base cream DAC	16058801	1
Caelo	Base cream DAC	16136201	5
Caelo	Base cream DAC	16135201	3
Euro OTC	Base cream DAC	1507017-01	1
Caelo	Base cream DAC	16136001	4
Euro OTC	Base cream DAC	701228	1
Fagron	Base cream DAC	16b15-t01-030274	1
Caelo	Base cream DAC	16135801	2
Lamotte	Base cream DAC	16132001	1
Bombastus	Base cream DAC	301743	1
Fagron	Base cream DAC	16C14-T03	1
Gehe	Base cream DAC	1603029-01	1
Henry Lamotte	Base cream DAC	6002237003	1
Fagron	Base cream DAC	16b15-T01-030274	1
Caelo	Base cream DAC	16136101	1
Euro OTC	Base cream DAC	1603039-01	1
Bombastus	Base cream DAC	299319	1
Caelo	Base cream DAC	16145801	9
Caelo	Base cream DAC	16145601	6
Fagron	Base cream DAC	16C14-T03-031205	2
Caelo	Base cream DAC	301743	2
Euro OTC	Base cream DAC	1601027-01	1
Enzbona/Eimermacher	Base cream DAC	29220416	1
Ensbona/Sanacorp	Base cream DAC	29220416	1
EuRho	Base cream DAC	1603028-01	1
Euro OTC	Base cream DAC	1604040-01	2

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	16B15-T05-030285	1
Bombastus	Base cream DAC	301155	3
Caelo	Base cream DAC	16104001	1
Henry Lamotte Oils Gmbh	Base cream DAC	6002237004	1
Celo	Base cream DAC	16005101	1
Caelo	Base cream DAC	16D06-T10-031951	1
Euro OTC	Base cream DAC	160301601	1
Bombastus	Base cream DAC	299945	1
Bombastus	Base cream DAC	300015	3
Caelo	Base cream DAC	16145701	11
Caelo	Base cream DAC	16135001	15
Caelo	Base cream DAC	16146001	9
Caelo	Base cream DAC	16135701	4
Bombastus	Base cream DAC	301757	3
Bombastus	Base cream DAC	301756	1
Caelo	Base cream DAC	1604001-01	1
Caelo	Base cream DAC	16149901	9
Fagron	Base cream DAC	16D06-T04-031914	8
Ferd. Eimermacher GmbH ...	Base cream DAC	29220416	3
Caelo	Base cream DAC	16155801	3
Caelo	Base cream DAC	16155701	1
Bombastus	Base cream DAC	301758	3
Caelo	Base cream DAC	16C24-T05-031490	3
phönix	Base cream DAC	16C24-T06-031494	1
Bombastus	Base cream DAC	301148	1
Sanacorp 16.07.2016	Base cream DAC	1604023-01	1
Caelo	Base cream DAC	16158401	5
Caelo	Base cream DAC	16C24-To5-031490	1
Caelo	Base cream DAC	301157	1
Bombastus	Base cream DAC	301722	1
Fagron	Base cream DAC	16c24-t05-031490	1
Lamotte/AHD	Base cream DAC	600237004	1
Caelo	Base cream DAC	16205501	3
Fagron	Base cream DAC	16C24-T05-031490	9
Caelo	Base cream DAC	16203301	3
Fagron	Base cream DAC	15C11-T04-020383	1
Fagron	Base cream DAC	16C14T03-031205	1
Bombastus	Base cream DAC	301754	1
EuRho	Base cream DAC	44950616	1
Fagron	Base cream DAC	16C14-T02	1
Caelo	Base cream DAC	16150101	3
Lamotte	Base cream DAC	6002237002	1
Ensbona	Base cream DAC	14130715	1
Euro OTC	Base cream DAC	38540516	12
Euro OTC	Base cream DAC	44950616	18
Bombastus	Base cream DAC	301741	1
Euro OTC	Base cream DAC	150701701	1
Bombastus	Base cream DAC	300013	2
Caelo	Base cream DAC	6002237003	1
Bombastus	Base cream DAC	303052	2
Caelo	Base cream DAC	16150201	1
Caelo	Base cream DAC	29220416	6
Caesar&Loretz	Base cream DAC	16219401	1
Caesar & Loretz/AHC	Base cream DAC	38540516	3
Bombastus	Base cream DAC	301156	1
Caelo	Base cream DAC	16220301	13
Gehe	Base cream DAC	16205501	1
Bombastus	Base cream DAC	301160	6
Bombastus	Base cream DAC	301759	3
Caelo	Base cream DAC	16150301	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	16152401	5
Caeolo/Noweda	Base cream DAC	16152101	1
Caelo	Base cream DAC	16c24-T05-031490	1
Henry/Noweda	Base cream DAC	6002237004	1
Bombastus	Base cream DAC	301755	1
Fagron	Base cream DAC	16c14t02-031202	1
Caelo	Base cream DAC	16152201	11
Caelo	Base cream DAC	16227101	9
Caelo	Base cream DAC	16C14-T02-031202	1
Lamotte/ Anzag	Base cream DAC	6003682005	1
phönix	Base cream DAC	16b15-t01-030274	1
Bombastus	Base cream DAC	60090502	3
Fagron	Base cream DAC	16C24-T06-031494	6
Caelo	Base cream DAC	16220401	9
Fagron	Base cream DAC	16D06-T05-031923	5
Caelo	Base cream DAC	1650201	1
Bombastus	Base cream DAC	301153	1
Bombastus	Base cream DAC	303061	3
Caelo	Base cream DAC	16155401	4
Caelo	Base cream DAC	(2x)16005101	1
Sanacorp	Base cream DAC	16145701	1
Fagron	Base cream DAC	16B15-T01-0300274	1
Fagron	Base cream DAC	16b15-f04-030281	1
Caelo	Base cream DAC	161555601	1
Caelo	Base cream DAC	16205801	7
Fagron	Base cream DAC	16B15-T04-030282	1
Euro OTC	Base cream DAC	45380616	13
Bombastus	Base cream DAC	301745	6
Sanacorp/Henry Lamotte	Base cream DAC	6002237005	2
Bombastus	Base cream DAC	303058	2
Caelo	Base cream DAC	16220201	3
Fagron	Base cream DAC	16C14-T01-031199	3
Fagron	Base cream DAC	16c24-t06-031494	2
Euro OTC	Base cream DAC	45330616	18
WE:Sanacorp 10.08.2016...	Base cream DAC	16152201	1
Euro OTC	Base cream DAC	52490616	4
phönix	Base cream DAC	16c24t06031494	1
Caelo	Base cream DAC	16232601	5
Caelo	Base cream DAC	16232401	3
Caelo	Base cream DAC	16206801	6
Lamotte/AHD	Base cream DAC	6002237006	1
Caelo	Base cream DAC	16227201	3
Caelo	Base cream DAC	16232301	9
Caelo	Base cream DAC	16232102	3
Fagron	Base cream DAC	16D06-T09-031941	6
Ensbona/ Sanacorp	Base cream DAC		2
Caelo	Base cream DAC	16155601	7
Eurho	Base cream DAC	38540516	1
Apomix	Base cream DAC	3B250616	1
Caelo	Base cream DAC	303058	1
Caelo	Base cream DAC	16219501	3
Fagron	Base cream DAC	16f30-T14-034792	1
Caelo	Base cream DAC	16219401	1
Henry/Noweda	Base cream DAC	6002237006	1
Euro OTC	Base cream DAC	1512002-01	5
Fagron	Base cream DAC	16D06-T07-031931	1
Bombastus	Base cream DAC	301157	2
Caelo	Base cream DAC	16152101	2
Phoenix	Base cream DAC	16205601	1
Caelo	Base cream DAC	1623601	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	49650616	2
Caelo	Base cream DAC	16214801	12
Bombastus	Base cream DAC	303414	3
Caelo	Base cream DAC	16237901	4
WE:Sanacorp26.09.2016 ...	Base cream DAC	16155401	1
Henry Lamotte Oils / No...	Base cream DAC	6002237005	1
Lamotte/AHD	Base cream DAC	6003682005	1
Euro OTC	Base cream DAC	151200201	1
Bombastus	Base cream DAC	303060	3
Bombastus	Base cream DAC	301746	1
Caelo	Base cream DAC	303419	1
Caelo	Base cream DAC	16207101	1
Ensbona/Eimermacher	Base cream DAC	45150616	1
Bombastus	Base cream DAC	303062	4
AH Henry Lamotte GmbH	Base cream DAC	6003682017	2
Euro OTC	Base cream DAC	44960616	2
Lamotte/Sanacorp	Base cream DAC	6003682005	1
phönix	Base cream DAC	16D06-T06-0311926	1
Caelo	Base cream DAC	160809B	1
Caelo	Base cream DAC	45380616	4
Lamotte/Anzag	Base cream DAC	6003682004	1
Caelo	Base cream DAC	16155501	1
Caelo	Base cream DAC	16232001	5
Fagron	Base cream DAC	16D06-T08-031938	2
Caelo	Base cream DAC	303061	1
Caelo	Base cream DAC	16F30-T14-034792	2
Euro OTC	Base cream DAC	3854056	1
Bombastus	Base cream DAC	303415	2
Bombastus	Base cream DAC	303133	1
Euro OTC	Base cream DAC	35840516	1
Fagron	Base cream DAC	16D06-T06-031926	2
Caelo	Base cream DAC	16238301	10
Bombastus	Base cream DAC	303057	1
Henry Lamotte Oils	Base cream DAC	6002237006	1
Fagron	Base cream DAC	701228-0002	1
Fargon GmbH & Co.KG	Base cream DAC	16C24-T05-031490	1
Caelo	Base cream DAC	16238001	1
Fagron	Base cream DAC	16F30-T14-034792	12
Ensbona / Ferd. Eimerma...	Base cream DAC	55350716	5
Caelo	Base cream DAC	16220601	1
Bombastus	Base cream DAC	303417	1
Bombastus	Base cream DAC	303423	4
Caelo	Base cream DAC	1652101	1
Lamotte	Base cream DAC	6002237005	1
Caelo	Base cream DAC	16220501	2
Ichthyol-Gesellschaft	Base cream DAC	16232001	1
Ichthyol-Gesellschaft	Base cream DAC	16238001	1
Caelo	Base cream DAC	45348616	1
Caelo	Base cream DAC	16241001	4
Caelo	Base cream DAC	16240701	7
Euro OTC	Base cream DAC	45340616	9
Caelo	Base cream DAC	79/AKD16	1
Gehe	Base cream DAC	45330616	1
Sanacorp/Beyvers	Base cream DAC	640/1	3
Caelo	Base cream DAC	45340616	1
Caelo	Base cream DAC	6003682004	1
Caelo	Base cream DAC	16206902	1
Bombastus	Base cream DAC	303135	2
Gehe	Base cream DAC	16232201	1
Caelo	Base cream DAC	16240301	3

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Supplier	Substance	Batch	Spectra
WE:Sanacorp 31.10.2016 ...	Base cream DAC	16232301	1
Bombastus	Base cream DAC	303420	1
Caelo	Base cream DAC	16232201	1
Bombastus	Base cream DAC	303425	1
ALH	Base cream DAC	16227001	1
Caelo	Base cream DAC	16242001	6
Caelo	Base cream DAC	16232501	2
Caelo	Base cream DAC	16226901	1
Caelo	Base cream DAC	161111B/16155601	1
Ensbona	Base cream DAC	55350716	15
Caelo	Base cream DAC	19H04T08	1
Caelo	Base cream DAC	1623801	1
Alliance Healthcare	Base cream DAC	79000916	2
P. W. Beyvers GmbH	Base cream DAC	640/1	2
Bombastus	Base cream DAC	303419	3
Caelo	Base cream DAC	39210516	5
Caelo	Base cream DAC	303421	1
Euro OTC	Base cream DAC	B72430816	1
Caelo	Base cream DAC	16241701	1
Henry Lamotte/OG	Base cream DAC	6003682013	1
Caelo	Base cream DAC	162070	1
Caelo	Base cream DAC	16231901	1
Bombastus	Base cream DAC	16232201	1
Bombastus	Base cream DAC	303422	2
Caelo	Base cream DAC	16253101	2
Fagron	Base cream DAC	16c24-t05031490	1
Fagron	Base cream DAC	16A25-T02-029645	1
Caelo	Base cream DAC	15F30-T14-034792	1
Caelo	Base cream DAC	16241601	5
Caelo	Base cream DAC	16232701	1
Bombastus	Base cream DAC	1511002-01	1
Caelo	Base cream DAC	16249801	6
Bombastus	Base cream DAC	303416	1
Caelo	Base cream DAC	16240601	3
Gehe	Base cream DAC	16240301	1
Fagron	Base cream DAC	16F30-T13-034789	9
phönix	Base cream DAC	16c14-t01-031199	1
Alliance Healthcare	Base cream DAC	303417	1
Euro OTC	Base cream DAC	91310916	4
Euro/ Phönix	Base cream DAC	91310916	1
Fagron	Base cream DAC	16C-T06-031494	1
Fagron	Base cream DAC	16G20-T08-035321	3
Euro OTC	Base cream DAC	16249801	2
Caelo	Base cream DAC	16260701	9
Fagron	Base cream DAC	16D06-T10-031950	1
Caelo	Base cream DAC	16205601	1
Caelo	Base cream DAC	16207001	1
Bombastus	Base cream DAC	304352	4
Sanacorp 07.11 Ek.8,04	Base cream DAC	16241001	1
Caelo	Base cream DAC	16253501	4
Fagron	Base cream DAC	45340616	1
Fagron	Base cream DAC	16f30-t13-034789	1
Caelo	Base cream DAC	16260901	6
Caelo	Base cream DAC	16227001	3
Caelo	Base cream DAC	1291116	1
Caelo	Base cream DAC	16242201	2
Noweda/ Eimermacher	Base cream DAC	55350716	2
Euro OTC	Base cream DAC	524490616	1
Caelo	Base cream DAC	16237801	1
Caelo	Base cream DAC	303428	1

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Supplier	Substance	Batch	Spectra
Phoenix	Base cream DAC	72440816	1
Caelo	Base cream DAC	1620901	1
Fagron	Base cream DAC	16F01-T10-033893	1
Caelo	Base cream DAC	16261201	5
Fagron	Base cream DAC	39210516	2
Caelo	Base cream DAC	16232801	1
Bombastus	Base cream DAC	304341	1
Fagron	Base cream DAC	16F30-T15-034797	6
Caelo	Base cream DAC	16260801	7
Caelo	Base cream DAC	16261002	3
Caelo	Base cream DAC	16261101	11
Bombastus	Base cream DAC	303428	2
Bombastus	Base cream DAC	304351	2
Anzag/Lamotte	Base cream DAC	6003682004	1
Sana 03.12.16 EK 8,04EUR	Base cream DAC	16253101	1
Bombastus	Base cream DAC	303429	5
Ensbona	Base cream DAC	79000916	6
medphano	Base cream DAC	6500115	1
Caelo	Base cream DAC	16261701	2
Caelo	Base cream DAC	16261401	4
Fagron	Base cream DAC	16C24-T05031490	1
Bombastus	Base cream DAC	303063	2
WESanacorp 17.12.2016 ...	Base cream DAC	16260801	2
Caelo	Base cream DAC	16261301	3
Caelo	Base cream DAC	16261501	3
Fagron	Base cream DAC	16G20-T04-035305	9
Beyvers/Noweda	Base cream DAC	640/2	3
Caelo	Base cream DAC	16260501	2
Bombastus	Base cream DAC	303056	4
Lamotte/AHD	Base cream DAC	6003682013	1
PHÖNIX	Base cream DAC	16261002	1
Bombastus	Base cream DAC	303055	5
Bombastus	Base cream DAC	304361	2
Caelo	Base cream DAC	16325101	2
Caelo	Base cream DAC	6002237005	1
Bombastus	Base cream DAC	304356	1
Euro OTC	Base cream DAC	52500616	1
Eimmermacher	Base cream DAC	6681116	1
Caelo	Base cream DAC	16261801	1
18.10.2016 Phoenix 12,6...	Base cream DAC	303422	1
Fagron	Base cream DAC	16F30-T16-034800	3
Pölkneck Pharma / Gehe	Base cream DAC	16261101	1
Henry Lamotte Oils	Base cream DAC	6002237005	2
Caelo	Base cream DAC	16262101	8
Caelo	Base cream DAC	16261602	2
Euro OTC	Base cream DAC	39218516	1
Caelo	Base cream DAC	16262301	1
Caelo	Base cream DAC	16326001	10
Bombastus	Base cream DAC	304342	2
Defektur	Base cream DAC	16325901	2
Caelo	Base cream DAC	16261901	3
Caelo	Base cream DAC	16319501	2
Caelo	Base cream DAC	16319601	1
Fagron	Base cream DAC	16G20-T04-035304	2
Caelo	Base cream DAC	16318702	2
Fagron	Base cream DAC	16D06H07-031930	1
Bombastus	Base cream DAC	304359	2
F.Eimmermacher GmbH&Co.KG	Base cream DAC	79000916	3
Cealo/Sanacorp	Base cream DAC	16261501	1
Fagron	Base cream DAC	16F30-T15-034796	3

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Supplier	Substance	Batch	Spectra
PKH GmbH	Base cream DAC	34567890	1
Caelo	Base cream DAC	16326101	8
Caelo	Base cream DAC	16325801	9
AnzagIchthyol	Base cream DAC	16329201	1
Alliance Healthcare	Base cream DAC	304353	1
GEHE	Base cream DAC	305712	1
Caelo	Base cream DAC	16350101	4
Henry Lamotte /AHD	Base cream DAC	6003682017	1
Caelo	Base cream DAC	16349502	5
Gehe	Base cream DAC	16260801	1
Bombastus	Base cream DAC	304353	2
Euro OTC	Base cream DAC	55360616	7
eigene Herstellung	Base cream DAC	16261801	1
Bombastus	Base cream DAC	3042362	1
Fagron	Base cream DAC	16G20-T10-035327	1
Caelo	Base cream DAC	20011701	1
Caelo	Base cream DAC	304352	1
Caelo	Base cream DAC	16F30-T13-034789	1
Caeanlo	Base cream DAC	16232001	1
Euro OTC	Base cream DAC	91320916	1
Fagron	Base cream DAC	16D06-T07-031930	1
Beyvers	Base cream DAC	640/2	1
Caelo	Base cream DAC	6003682012	1
Caelo	Base cream DAC	6003682014	1
Caelo	Base cream DAC	16238102	2
Bombastus	Base cream DAC	305729	1
Henry Lamotte Oils GMBH	Base cream DAC	170124BC/6003682013	1
Caelo	Base cream DAC	16350301	4
Caelo	Base cream DAC	16352701	7
Gehe / Spinnrad	Base cream DAC	16325801	1
Fagron	Base cream DAC	16220401	1
Caelo	Base cream DAC	16318701	6
Sanacorp, 8,04EUR, 24.1.17	Base cream DAC	16350101	1
Caesar&Loretz	Base cream DAC	16350501	1
Euro OTC	Base cream DAC	91310616	1
Bombastus	Base cream DAC	304360	3
Caelo	Base cream DAC	44950616	1
Caelo	Base cream DAC	16262001	3
Fagron	Base cream DAC	16J11-T04-037619	4
Caelo	Base cream DAC	16350201	4
Caelo	Base cream DAC	16241707	1
Lamotte/Sanacorp	Base cream DAC	6002237010	1
Fagron	Base cream DAC	701228-0017	1
Caelo	Base cream DAC	166349502	1
pharmachem	Base cream DAC	640/2	2
henry lamotte	Base cream DAC	6003682013	2
Bombastus	Base cream DAC	303424	1
Caelo	Base cream DAC	16328901	1
Caelo	Base cream DAC	16360201	1
Caelo	Base cream DAC	16261101/1170117	1
Euro OTC	Base cream DAC	553600616	2
Fagron	Base cream DAC	16D06-T04-0311914	1
Beyvers GmbH	Base cream DAC	640/1	1
Caelo	Base cream DAC	16329201	3
AHD/ Beyvers	Base cream DAC	640/2	2
Euro OTC	Base cream DAC	11821116	8
Euro OTC	Base cream DAC	49660616	1
EuRho / Phoenix	Base cream DAC	55360616	1
Fagron	Base cream DAC	16J11-T01-037607	4
Bombastus	Base cream DAC	305731	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	17003201	3
Caelo	Base cream DAC	17003401	10
Euro OTC	Base cream DAC	11811116	5
Caelo	Base cream DAC	6671116	1
Caelo	Base cream DAC	16359502	1
Caelo	Base cream DAC	16319701	2
Caelo	Base cream DAC	273416352701	1
GEHE	Base cream DAC	304359	1
Bombastus	Base cream DAC	304358	1
Caelo	Base cream DAC	17006501	11
Caelo	Base cream DAC	305714	1
Bombastus	Base cream DAC	305711	3
Euro OTC	Base cream DAC	91330916	1
Euro OTC	Base cream DAC	160404101	1
P.W.Beyvers GmbH	Base cream DAC	640/2	4
Caelo	Base cream DAC	25021701	1
Bombastus	Base cream DAC	305712	1
Euro OTC	Base cream DAC	450380616	1
Euro OTC	Base cream DAC	91340916	4
Caelo	Base cream DAC	16352901	3
Caelo	Base cream DAC	16319401	1
Bombastus	Base cream DAC	305728	3
Euro OTC	Base cream DAC	16D06-T10-031949	1
Caelo	Base cream DAC	17003501	4
Fagron	Base cream DAC	16G20-T05-035308	12
Caelo	Base cream DAC	17010001	1
Caelo	Base cream DAC	16352801	1
Bombastus	Base cream DAC	304343	1
Fagron	Base cream DAC	16g20-t08-035321	1
Bombastus	Base cream DAC	305694	1
Caelo	Base cream DAC	17014401	5
Bombastus	Base cream DAC	305730	4
Caelo	Base cream DAC	17006601	8
Ferd. Eimermacher GmbH ...	Base cream DAC	6671116	3
Bombastus	Base cream DAC	305734	2
Caelo	Base cream DAC	17014501	9
Bombastus	Base cream DAC	306615	6
Fagron	Base cream DAC	16920-t05-035308	1
Caelo	Base cream DAC	17010201	2
Sanacorp 22.02.17 EK:8,04	Base cream DAC	16352701	1
Frago/Gehe	Base cream DAC	16J11-T01-037607	1
Gehe	Base cream DAC	305731	1
Phoenix	Base cream DAC	16349502	1
Caelo	Base cream DAC	17014601	4
Caelo	Base cream DAC	16350401	1
Caelo	Base cream DAC	17019501	3
Caelo	Base cream DAC	17006701	2
Noweda/ Lamotte	Base cream DAC	60036820015	1
Caelo	Base cream DAC	163505	1
Bombastus	Base cream DAC	305710	1
Bombastus	Base cream DAC	306611	4
Euro/ Phönix	Base cream DAC	1117Q-01309	1
Phönix	Base cream DAC	55360616	2
Ensbona	Base cream DAC	6671116	3
Caelo	Base cream DAC	2x16261801	1
Euro OTC	Base cream DAC	2981016	15
Euro OTC	Base cream DAC	11831116	3
Caelo	Base cream DAC	16325901	1
Anzag	Base cream DAC	39590217	1
Caelo	Base cream DAC	16319301	3

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Supplier	Substance	Batch	Spectra
Euro OTC	Base cream DAC	72440816	1
Fagron	Base cream DAC	16J11-T02-037610	1
Caelo	Base cream DAC	17003301	2
Bombastus	Base cream DAC	306621	3
Fagron	Base cream DAC	117U-01309	1
phönix	Base cream DAC	16F30-T15-034797	1
Sanacorp WE 20.02.17 E...	Base cream DAC	16350301	1
Bombastus	Base cream DAC	304354	2
Bombastus	Base cream DAC	306617	1
Caelo	Base cream DAC	17023301	5
Euro OTC	Base cream DAC	11841116	3
Caelo	Base cream DAC	17019601	4
Bombastus	Base cream DAC	306619	1
Caelo	Base cream DAC	17031901	1
Caelo	Base cream DAC	6003682015	1
Caelo	Base cream DAC	17023401	4
Caelo	Base cream DAC	17019301	1
Euro OTC	Base cream DAC	29870117	3
Eimermacher/Ensbona	Base cream DAC	63340317	1
Ensbona	Base cream DAC	39590217	1
Bombastus	Base cream DAC	306606	1
Caelo	Base cream DAC	17029301	2
P.W. Beyvers	Base cream DAC	640/2	1
Fagron	Base cream DAC	17023401	1
Caelo	Base cream DAC	17028901	4
Euro OTC	Base cream DAC	2991016	17
Caelo	Base cream DAC	306620	1
Caelo	Base cream DAC	1040417	1
AH Henry Lamotte Gmbh	Base cream DAC	6004860001	1
Fagron	Base cream DAC	17A03T13040067	1
Caelo	Base cream DAC	306619	1
Gehe	Base cream DAC	17003501	1
Bombastus	Base cream DAC	306616	1
Euro OTC	Base cream DAC	17023401	1
Caelo	Base cream DAC	17009902	6
EuRho	Base cream DAC	45340616	1
Fagron	Base cream DAC	16G20-T07-035317	1
Bombastus	Base cream DAC	306624	2
Eimermacher/Noweda	Base cream DAC	39590217	1
Bombastus	Base cream DAC	306623	3
Ensbona/Sanacorp	Base cream DAC	39590217	1
Bombastus	Base cream DAC	306618	2
Sanacorp 30.03.2017 ek:...	Base cream DAC	17028901	1
Caelo	Base cream DAC	126328901	1
EuRhoNoweda 11.3..17	Base cream DAC	91350916	2
Caelo	Base cream DAC	17029001	5
Euro OTC	Base cream DAC	29860117	3
Caelo	Base cream DAC	17023501	8
Caelo	Base cream DAC	17041702	1
Lamotte /Noweda	Base cream DAC	6002237002	1
Caesar&Loretz	Base cream DAC	17031901	1
Caelo	Base cream DAC	17035801	5
Bombastus	Base cream DAC	306601	1
Caelo	Base cream DAC	305732	1
Caelo	Base cream DAC	17029201	2
Lamotte/AHD	Base cream DAC	6003682016	1
Lamotte/AHD	Base cream DAC	6003682012	1
Gehe	Base cream DAC	17097401	1
Beyvers/Noweda	Base cream DAC	640/3	7
Fagron	Base cream DAC	26F30T14034792	1

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Supplier	Substance	Batch	Spectra
Ensbona/Gehe	Base cream DAC	44960616	1
Caelo	Base cream DAC	17031601	4
Fagron	Base cream DAC	17A03-T13-040067	4
Caelo	Base cream DAC	17035901	2
Caeli / Kehr	Base cream DAC	17029001	1
Henry/Sanacorp	Base cream DAC	600223705	1
Euro OTC	Base cream DAC	17031701	2
Noweda/ Lamotte	Base cream DAC	6004859001	2
Bombastus	Base cream DAC	307829	3
Noweda	Base cream DAC	16350201	1
Caelo	Base cream DAC	17031501	4
GEHE	Base cream DAC	306621	1
Noweda	Base cream DAC	17097401	4
GEHE	Base cream DAC	305713	1
Lamotte/Phönix	Base cream DAC	6003682016	1
Euro OTC	Base cream DAC	305711	1
Bombastus	Base cream DAC	306610	3
Euro OTC	Base cream DAC	91350916	2
Caelo	Base cream DAC	5x17031501	1
Caelo	Base cream DAC	17035701	1
AHD/ Beyvers	Base cream DAC	640/3	3
Bombastus	Base cream DAC	307830	3
Gehe	Base cream DAC	17090601	1
Euro OTC	Base cream DAC	17006701	1
Sanacorp WE 12.04.17 -8...	Base cream DAC	17029001	1
Bombastus	Base cream DAC	304355	1
Fagron	Base cream DAC	16J11-T03-037614	2
Caelo	Base cream DAC	17097401	4
Caelo	Base cream DAC	17089701	2
Euro OTC	Base cream DAC	6004860001	1
Caelo	Base cream DAC	17029101	2
Caelo	Base cream DAC	17009801	2
Bombastus	Base cream DAC	306620	1
Euro OTC	Base cream DAC	16G20-T06-035312	1
Frago/Gehe	Base cream DAC	17A03-T11-040060	1
Fagron	Base cream DAC	17A03-T12-040064	1
Bombastus	Base cream DAC	305733	2
Caelo	Base cream DAC	170100001	1
Euro OTC	Base cream DAC	29910169	1
Ensbona	Base cream DAC	52830317	9
Bombastus	Base cream DAC	306607	1
Caelo	Base cream DAC	17097101	7
P.W.Beyvers	Base cream DAC	640/1	2
Euro OTC	Base cream DAC	29880117	2
Fagron	Base cream DAC	17A03-T08-040047	13
Fagron	Base cream DAC	16G20-T06-035312	4
Euro OTC	Base cream DAC	39600117	1
Caelo	Base cream DAC	17100401	8
Phoenix	Base cream DAC	17031501	2
Caelo	Base cream DAC	17100301	4
Caelo	Base cream DAC	17100201	7
Caelo	Base cream DAC	171003101	1
Caelo	Base cream DAC	17090502	1
Fagron	Base cream DAC	11831116	1
Caelo	Base cream DAC	17000102	2
Fagron	Base cream DAC	16g20-t06-035312	1
Euro OTC	Base cream DAC	51560217	2
Bombastus	Base cream DAC	306608	1
Finteler Apotheke	Base cream DAC	16325801	1
henry lamotte	Base cream DAC	6004859001	2

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Supplier	Substance	Batch	Spectra
P.W.Beyvers GmbH	Base cream DAC	640/3	3
Fagron	Base cream DAC	17A03-T11-040060	1
Alliance/Henry	Base cream DAC	6004859002	1
Fagron	Base cream DAC	16D06-T07-0319930	1
P.W. Beyvers GmbH/Gehe	Base cream DAC	640/2	1
Bombastus	Base cream DAC	307964	1
Caelo	Base cream DAC	17097001	7
Caelo	Base cream DAC	305711	1
Ensbona/Nordwalde	Base cream DAC	63350317	1
Caelo	Base cream DAC	109647	1
Caelo	Base cream DAC	17103801	7
Caelo	Base cream DAC	306624	2
Caelo	Base cream DAC	17103701	3
Caelo	Base cream DAC	17108101	2
Euro OTC	Base cream DAC	3001016	6
Caelo	Base cream DAC	3061701	1
Caelo	Base cream DAC	17100501	6
Caelo	Base cream DAC	170909015284	1
Caelo	Base cream DAC	306615	1
Caelo	Base cream DAC	17104001	6
Henry Lamotte Oils GMBH...	Base cream DAC	170612BC/6004859002	1
Bombastus	Base cream DAC	307968	3
Caelo	Base cream DAC	17094401	4
Euro OTC	Base cream DAC	3661016	1
Caelo	Base cream DAC	170195501	1
Caelo	Base cream DAC	6004860001	1
Bombastus	Base cream DAC	305735	1
Caelo	Base cream DAC	17094601	1
Bombastus	Base cream DAC	307965	4
Euro OTC	Base cream DAC	51570217	5
Bombastus	Base cream DAC	306609	2
Bombastus	Base cream DAC	307967	3
Caelo	Base cream DAC	17097202	2
Fagron	Base cream DAC	17A03-T09-040052	1
phönix	Base cream DAC	16j11t02037610	1
Gehe	Base cream DAC	306620	1
Caelo	Base cream DAC	17108201	3
Caelo	Base cream DAC	16G20-T04-035305	1
Beyvers	Base cream DAC	640/3	1
Bombastus	Base cream DAC	305713	2
Fagron	Base cream DAC	17A03-T15-040074	8
Phoenix	Base cream DAC	55360616	2
Fagron	Base cream DAC	17A03-T10-040056	3
Bombastus	Base cream DAC	307963	1
Caelo	Base cream DAC	17023601	1
Caelo	Base cream DAC	17094501	1
Caelo	Base cream DAC	1110517/16326001	1
Phoenix Cottbus 27.06.17	Base cream DAC	17123901	1
Caelo	Base cream DAC	17A03-T07-040044	1
Caelo	Base cream DAC	17031801	1
Caelo	Base cream DAC	17116902	2
Phoenix	Base cream DAC	17121501	1
Fagron	Base cream DAC	17A03-T07-040044	6
Caelo	Base cream DAC	17097301	4
Caelo	Base cream DAC	17121401	6
Lamotte / Noweda	Base cream DAC	6004859002	1
GEHE	Base cream DAC	307965	1
Caelo	Base cream DAC	30061713	1
P. W. Beyvers GmbH	Base cream DAC	640/3	1
Caelo	Base cream DAC	17103701-20170704Ma1	1

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Supplier	Substance	Batch	Spectra
Gehe	Base cream DAC	29870117	1
Caelo	Base cream DAC	17116701	14
Ensbona	Base cream DAC	63350317	4
Fagron	Base cream DAC	17103801	1
Euro OTC	Base cream DAC	62991016	1
Caelo	Base cream DAC	17124001	7
Bombastus	Base cream DAC	307996	1
Bombastus	Base cream DAC	307834	6
Euro OTC	Base cream DAC	72260417	1
Caelo	Base cream DAC	17090701	1
Caelo	Base cream DAC	171003801	1
Eimermacher	Base cream DAC	86440517	1
Caelo	Base cream DAC	17116901	8
p w Beyvers	Base cream DAC	640/3	1
Caelo	Base cream DAC	17123901	2
Lamotte/AHD	Base cream DAC	6004859003	1
AHD Lamotte GmbH	Base cream DAC	6004860002	1
Caelo	Base cream DAC	17129901	6
Caelo	Base cream DAC	308795	3
Caelo	Base cream DAC	17136501	6
Noweda	Base cream DAC	91340916	1
Beyvers GmbH	Base cream DAC	12170717	1
Beyvers GmbH	Base cream DAC	13170717	1
Caelo	Base cream DAC	17136301	10
Caelo	Base cream DAC	17103901	3
Caelo	Base cream DAC	17121501	6
Beyvers/Anzag	Base cream DAC	640/3	1
Bombastus	Base cream DAC	305715	3
Euro OTC	Base cream DAC	298116	1
Euro OTC	Base cream DAC	300116	1
Euro OTC	Base cream DAC	55840317	2
Caelo	Base cream DAC	17124101	4
Caelo	Base cream DAC	1100717/17124001	1
Phoenix	Base cream DAC	17136301	1
Bombastus	Base cream DAC	307958	1
Sanacorp	Base cream DAC	17100201	1
Caelo	Base cream DAC	17116801	1
Bombastus	Base cream DAC	308796	3
Caelo	Base cream DAC	17133603	1
Bombastus	Base cream DAC	308801	3
Lamotte	Base cream DAC	6004859002	2
Noweda	Base cream DAC	6004859002	1
Bombastus	Base cream DAC	308794	2
Caelo	Base cream DAC	17117002	2
Caelo	Base cream DAC	3081702	1
Henry/Sanacorp	Base cream DAC	81/AKD16	1
Bombastus	Base cream DAC	308799	5
apomix/Noweda	Base cream DAC	17108101	1
Euro OTC	Base cream DAC	3011016	8
Caelo	Base cream DAC	17133602	2
Bombastus	Base cream DAC	308805	2
Ensbona/Sanacorp	Base cream DAC	63350317	1
Eimermacher	Base cream DAC	72240417	5
Bombastus	Base cream DAC	305714	1
Caelo	Base cream DAC	17147501	4
Fagron	Base cream DAC	17A03-T-08-040047	1
Lamotte / Noweda	Base cream DAC	6004859003	1
Euro OTC	Base cream DAC	16B15-T04-030281	1
Euro OTC	Base cream DAC	39620117	3
Caelo	Base cream DAC	307833	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	640/3	1
Delta	Base cream DAC	17154401	2
Bombastus	Base cream DAC	307970	2
Fagron	Base cream DAC	17a03t08040047	1
Noweda	Base cream DAC	305715	1
Fagron	Base cream DAC	17A03t10040056	1
Caelo	Base cream DAC	17136601	2
Caelo	Base cream DAC	17147301	7
Caelo	Base cream DAC	170824CB/17136501	1
Euro OTC	Base cream DAC	B55850317	1
Bombastus	Base cream DAC	307962	1
Bombastus	Base cream DAC	307832	1
Bombastus	Base cream DAC	307959	1
Noweda	Base cream DAC	17028801	1
Noweda	Base cream DAC	6004859003	1
Caelo	Base cream DAC	3811016	1
Fargon	Base cream DAC	17A03-T07-040044	4
Caelo	Base cream DAC	171476015345	1
Caelo	Base cream DAC	17155001	7
Kehr	Base cream DAC	307958	1
Caelo	Base cream DAC	17155201	4
Caelo	Base cream DAC	17154801	5
ENSBONA	Base cream DAC	63350317	1
Sanacorp WE: 24.08.17 ...	Base cream DAC	17155201	1
Caelo	Base cream DAC	17155401	3
GEHE	Base cream DAC	307964	1
Bombastus	Base cream DAC	308800	2
Caelo	Base cream DAC	17153701	2
Lamotte / AHC	Base cream DAC	6004859004	1
Bombastus	Base cream DAC	306602	1
Noweda	Base cream DAC	3011016	2
Fagron	Base cream DAC	17A03-To8-040047	1
Caelo	Base cream DAC	17147401	1
Caelo	Base cream DAC	17153802	9
Caelo	Base cream DAC	17147701	2
Caelo	Base cream DAC	17154401	3
Ensbona/Sanacorp	Base cream DAC	72240417	2
Fagron	Base cream DAC	17C16-T06-042610	1
Eimermacher/Alliance	Base cream DAC	63340317	2
Noweda	Base cream DAC	17136601	2
Bayvers	Base cream DAC	731/1	3
Caelo	Base cream DAC	17155701	2
Caesar & Loretz/Noweda	Base cream DAC	17154001	1
Euro OTC	Base cream DAC	86490517	7
Sanacorp	Base cream DAC	17154801	1
Caelo	Base cream DAC	17154501	2
Euro OTC	Base cream DAC	39580217	3
Caelo	Base cream DAC	17028801	4
Caelo	Base cream DAC	17224901	1
Caelo	Base cream DAC	1040917/17147401	1
Caelo	Base cream DAC	17154701	3
Henry Lamotte/AHD	Base cream DAC	6004859003	2
Caelo	Base cream DAC	17225201	6
Lamotte/AHD	Base cream DAC	6004860003	1
Beyvers	Base cream DAC	731/2	5
Ensbona/phönix	Base cream DAC	72240417	1
Bombastus	Base cream DAC	308804	2
Caelo	Base cream DAC	23091703	1
Bombastus	Base cream DAC	310722	1
Bombastus	Base cream DAC	306613	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	170928B/17155101	1
phönix	Base cream DAC	16J11-T03-037614	1
Caelo	Base cream DAC	17153601	3
Caelo	Base cream DAC	17154601	9
Caelo	Base cream DAC	17153901	2
Fagron	Base cream DAC	17F08-T02-045262	17
Caelo	Base cream DAC	17155101	4
Bombastus	Base cream DAC	309923	1
Gehe/P.W.Beyvers	Base cream DAC	731/1	1
Anzag	Base cream DAC	72270417	1
P. W. Beyvers GmbH	Base cream DAC	731/1	2
Caelo	Base cream DAC	731/1	2
Caelo	Base cream DAC	17225101	4
Caelo	Base cream DAC	171552015374	1
Lamotte / Noweda	Base cream DAC	6004859004	1
Euro OTC	Base cream DAC	8660717	4
Euro OTC	Base cream DAC	36920117	1
Caelo	Base cream DAC	17E11/T08-044210	1
Bombastus	Base cream DAC	310746	3
Euro OTC	Base cream DAC	35980217	1
Euro OTC	Base cream DAC	395802017	1
Euro OTC	Base cream DAC	39630217	4
Bombastus	Base cream DAC	310723	2
Eimer/ Noweda	Base cream DAC	72240417	1
AHD/ Beyvers	Base cream DAC	731/1	1
Bombastus	Base cream DAC	310747	2
Fagron	Base cream DAC	17E11-T07-044186	3
Caelo	Base cream DAC	17154101	1
Phoenix	Base cream DAC	16102017-BH-A	1
Euro OTC	Base cream DAC	3601016	1
Euro OTC	Base cream DAC	86480517	1
Caelo	Base cream DAC	17225002	3
Noweda	Base cream DAC	2981016	1
P.W.Beyvers GmbH	Base cream DAC	731/1	3
Caelo	Base cream DAC	17232402	1
Fagron	Base cream DAC	16G20-T09-035324	1
Klosterring	Base cream DAC	17229201	1
Sanacorp	Base cream DAC	17225002	1
Caelo	Base cream DAC	17225801	3
Noweda	Base cream DAC	6004859004	1
Lamotte/AHD	Base cream DAC	6004859004	1
Caelo	Base cream DAC	17153501	4
Bombastus	Base cream DAC	310753	8
Euro/ Phönix	Base cream DAC	4317E-01309	1
GEHE	Base cream DAC	310723	1
GEHE	Base cream DAC	310722	1
F.Eimermacher GmbH	Base cream DAC	79000916	1
Caelo	Base cream DAC	308796	1
Caelo	Base cream DAC	17229301	5
Caelo	Base cream DAC	17225601	6
Caelo	Base cream DAC	72270417	1
Sanacorp/Beyvers	Base cream DAC	731/2	3
Phoenix	Base cream DAC	17229201	1
Euro OTC	Base cream DAC	27300917	5
Bombastus	Base cream DAC	310756	4
Caelo	Base cream DAC	17154201	2
Beyvers GmbH	Base cream DAC	731/1	1
Bombastus	Base cream DAC	17000067	1
Caelo	Base cream DAC	17239901	9
Caelo	Base cream DAC	1722501	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	310749	2
Caelo	Base cream DAC	17154001	1
Caelo	Base cream DAC	17229401	4
Caelo	Base cream DAC	17125201	1
Sanacorp	Base cream DAC	17229301	1
Caelo	Base cream DAC	171114BC/17153802	1
Caelo	Base cream DAC	1081117/17229201	1
Caelo	Base cream DAC	17154901	12
Fagron	Base cream DAC	17229901	1
Bombastus	Base cream DAC	306614	2
Caesar und Loretz GmbH	Base cream DAC	17155001	1
Gehe	Base cream DAC	6004859005	2
P. W. Beyvers GmbH	Base cream DAC	731/2	1
Bombastus	Base cream DAC	310726	3
AHD Lamotte GmbH	Base cream DAC	800287008	1
Caelo	Base cream DAC	17240801	5
Bombastus	Base cream DAC	310725	1
Sanacop WE:10.11.17 1kg...	Base cream DAC	17225801	1
Caelo	Base cream DAC	17240301	1
Caelo	Base cream DAC	17240301-20171127Ma8	1
Caelo	Base cream DAC	17229201	1
Henry Lamotte/Noewda	Base cream DAC	6004859001	1
Eimermacher	Base cream DAC	14130817	1
Caelo	Base cream DAC	17229601	3
Klosterring	Base cream DAC	17225901	1
Caelo	Base cream DAC	171128BC/17153802	1
Caelo	Base cream DAC	17225501	2
Caelo	Base cream DAC	27111703	1
Caelo	Base cream DAC	28111708	1
Sanacorp	Base cream DAC	17229601	2
Beyvers/Noweda	Base cream DAC	731/1	1
Ensbona/Noweda	Base cream DAC	44960616	1
Caelo	Base cream DAC	17240401	2
Fagron	Base cream DAC	17E11-T10-044214	1
Caelo	Base cream DAC	17230001	5
Caelo	Base cream DAC	3011016	1
Bombastus	Base cream DAC	308795	1
GEHE	Base cream DAC	17000071	1
Caelo	Base cream DAC	17229801	3
Euro OTC	Base cream DAC	27290917	1
Bombastus	Base cream DAC	17000071	2
Caelo	Base cream DAC	17240001	3
Euro OTC	Base cream DAC	51580217	7
Beyvers/Anzag	Base cream DAC	731/2	2
Caelo	Base cream DAC	172230001	1
Gehe/P.W.Beyvers	Base cream DAC	731/2	1
Caelo	Base cream DAC	1734041	1
Eimermacher / Sanacorp	Base cream DAC	86440517	1
Apomix/Noweda	Base cream DAC	3001016	1
Fagron	Base cream DAC	17F08-T03-045267	5
Fagron	Base cream DAC	17A03-T13-040070	1
Caelo	Base cream DAC	17243601	9
Fagron	Base cream DAC	17F08-T05-045274	3
Bombastus	Base cream DAC	310724	1
Fagron	Base cream DAC	17F08-T07-045282	4
Kehr	Base cream DAC	17000200	1
Fagron	Base cream DAC	17F08-T06-045279	2
Caelo	Base cream DAC	17240201	1
Caeolo/Krieger	Base cream DAC	17240301	2
Caelo	Base cream DAC	17263901	2

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream DAC	17000919	2
Fagron	Base cream DAC	17F08-T04-045271	2
Bombastus	Base cream DAC	17000065	3
Caelo	Base cream DAC	17251601	5
Sanacorp	Base cream DAC	17240001	1
Caelo	Base cream DAC	17229501	2
Euro OTC	Base cream DAC	39570117	1
Bombstus	Base cream DAC	310752	1
Bombstus	Base cream DAC	1700907	1
Caelo	Base cream DAC	17251701	3
henry lamotte	Base cream DAC	8003325003	2
Bombastus	Base cream DAC	17000068	1
Bombastus	Base cream DAC	17000070	2
Caelo	Base cream DAC	17266001	4
Bombastus	Base cream DAC	310752	3
Sanacorp	Base cream DAC	17264501	1
Fagron	Base cream DAC	17F08T04-045271	1
Fagron	Base cream DAC	17H25-T06-047736	16
gehe	Base cream DAC	17230001	1
P.W. Beyvers / Noweda	Base cream DAC	731/3	8
	Base cream DAC	27290917	1
Caelo	Base cream DAC	17251501	3
Phönix	Base cream DAC	17f08-t04-045271	1
Bayvers	Base cream DAC	731/3	4
Fagron	Base cream DAC	17F08-T02-045262	1
Phoenix	Base cream DAC	17243501	1
apomix, Phönix, 09.01.2...	Base cream DAC	17243401	1
Fagron	Base cream DAC	17E11-T0744186	1
Caelo	Base cream DAC	17H25-T06-047736	1
Bombastus	Base cream DAC	17000910	3
Caelo	Base cream DAC	17240501	1
Bombastus	Base cream DAC	17000907	3
Caelo	Base cream DAC	13011808	1
Caelo	Base cream DAC	17264001	2
Caelo	Base cream DAC	17239915453	1
Noweda/Lamotte	Base cream DAC	6004859006	1
henry lamotte	Base cream DAC	6004859005	1
Fagron	Base cream DAC	17Fo8-T03-045267	1
Caelo	Base cream DAC	17C16-T06-042610	1
Euro OTC	Base cream DAC	86470517	1
Bombastus	Base cream DAC	310750	1
Sanacorp WE:5.01.18	Base cream DAC	17230001	1
Caelo	Base cream DAC	17263801	1
Cealo	Base cream DAC	17264601	1
Euro OTC	Base cream DAC	55850317	1
Caelo	Base cream DAC	17267001	6
Caelo	Base cream DAC	17243501	3
Caelo	Base cream DAC	17266501	7
Caelo	Base cream DAC	17240601	2
Caelo	Base cream DAC	17266801	10
Bombastus	Base cream DAC	6004859006	1
Lamotte / Noweda	Base cream DAC	6004859006	1
Caelo	Base cream DAC	17265801	2
Caelo	Base cream DAC	16349501	1
Bombastus	Base cream DAC	17000072	1
Sanacorp	Base cream DAC	310752	1
Caelo	Base cream DAC	17264401	3
Fagron	Base cream DAC	17243301	1
Bombastus	Base cream DAC	17000925	3
P. W. Beyvers GmbH	Base cream DAC	731/3	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream DAC	17230101	3
Euro OTC	Base cream DAC	46711117	1
Caelo	Base cream DAC	17265701	1
Sanacorp/Beyvers	Base cream DAC	731/3	2
Fagron	Base cream DAC	17H25-T10-047753	7
Gehe/P.W.Beyvers	Base cream DAC	731/3	3
Caelo	Base cream DAC	17265001	1
Caelo	Base cream DAC	17266601	5
Caelo	Base cream DAC	17266601-20180206Ma1	1
Bombastus	Base cream DAC	17000923	5
Caelo	Base cream DAC	17267301	7
Ferd. Eimermacher GmbH	Base cream DAC	72240417	1
Caelo	Base cream DAC	17153401	1
Caelo	Base cream DAC	17264501	2
Caelo	Base cream DAC	17229701	1
Euro OTC	Base cream DAC	180208BC/86498517	1
Euro OTC	Base cream DAC	69500118	8
Bombastus	Base cream DAC	17000897	2
Euro OTC	Base cream DAC	69510118	7
Bombastus	Base cream DAC	310755	1
EuRho	Base cream DAC	27320917	1
EuRho	Base cream DAC	3570117	1
Caelo	Base cream DAC	17243301	2
Anzag	Base cream DAC	69510118	1
Lamotte / Noweda	Base cream DAC	8003325003	1
Bombastus	Base cream DAC	310751	3
Noweda	Base cream DAC	17240201	1
Caelo	Base cream DAC	17264601	2
Caelo	Base cream DAC	17155601	1
chaelo/gehe	Base cream DAC	17251701	1
Krieger	Base cream DAC	86470517	3
Bombastus	Base cream DAC	17000922	1
Caelo	Base cream DAC	17264701	2
Bombastus	Base cream DAC	17000926	5
Caelo	Base cream DAC	17268701	2
Caelo	Base cream DAC	17265901	3
Caelo	Base cream DAC	17266301	2
Caelo	Base cream DAC	17267101	2
Caelo	Base cream DAC	17267201	2
AHD Lamotte GmbH	Base cream DAC	8003325009	1
Sanacorp	Base cream DAC	170000926	1
Fagron	Base cream DAC	17H25-T07-047741	3
Euro OTC	Base cream DAC	86479517	1
Euro OTC	Base cream DAC	69520118	5
Caelo	Base cream DAC	17264201	1
Caelo	Base cream DAC	172668015477	1
Bombastus	Base cream DAC	17000924	2
Caelo	Base cream DAC	17265101	1
Caelo	Base cream DAC	17090501	2
Caelo	Base cream DAC	69520118	1
Caelo	Base cream DAC	17266401	3
Fagron	Base cream DAC	17F08T02045262	1
Noweda	Base cream DAC	51580217	1
Caelo	Base cream DAC	17266901	2
Ferdinand Eimermacher	Base cream DAC	61361217	4
Caelo	Base cream DAC	17345801	3
Bombastus	Base cream DAC	17000896	1
Caelo	Base cream DAC	17349601	1
Euro OTC	Base cream DAC	46731117	2
Euro OTC	Base cream DAC	17A03-T08-040047	1

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Supplier	Substance	Batch	Spectra
Gehe	Base cream DAC	17000922	1
Caelo	Base cream DAC	15031805	1
Caelo	Base cream DAC	17267501	3
Fagron	Base cream DAC	17K24-T03-050489	5
Dermasence	Base cream DAC	260820	1
Lamotte/ Noweda	Base cream DAC	8003325004	1
Caelo	Base cream DAC	17267401	4
Caelo	Base cream DAC	17268901	2
Bombastus	Base cream DAC	18000497	1
Bombastus	Base cream DAC	17000920	3
Caelo	Base cream DAC	17267601	9
Sanacoro W.E:01.03.18 ...	Base cream DAC	17266901	1
Sanacorp W.E:17.03.18 ...	Base cream DAC	17266401	1
Bombastus	Base cream DAC	17000914	1
P. W. Beyvers GmbH	Base cream DAC	731/4	2
Caelo	Base cream DAC	17267701	3
Euro OTC	Base cream DAC	14140817	3
Caelo	Base cream DAC	17264301	2
Eimermacher/Noweda	Base cream DAC	8630717	2
Caelo	Base cream DAC	17268001	2
Caelo	Base cream DAC	731/4	3
Caelo	Base cream DAC	17269201	4
Caelo	Base cream DAC	17269101	1
Sanacorp	Base cream DAC	310756	1
Bombastus	Base cream DAC	18000966	2
EimermacherGmbH-Geschen...	Base cream DAC	14150817-20180404Ma9	1
Sanacorp	Base cream DAC	17268601	1
Caelo	Base cream DAC	17268301	6
Caelo	Base cream DAC	18015401	4
Euro OTC	Base cream DAC	8620717	4
Fiebig	Base cream DAC	17267701	1
Sanacorp	Base cream DAC	17349501	1
Bombastus	Base cream DAC	18000972	3
Fagron	Base cream DAC	17H25-T12-047760	2
Euro OTC	Base cream DAC	8003325004	1
Caelo	Base cream DAC	17267801	4
Fagron	Base cream DAC	17K24-T04-050494	2
Caesar & Loretz/ Caesar...	Base cream DAC	18037201	1
Noweda	Base cream DAC	17267801	1
Caelo	Base cream DAC	17349801	3
Bombastus	Base cream DAC	17000905	3
Caelo	Base cream DAC	17268501	3
Caelo	Base cream DAC	17349901	4
Caelo	Base cream DAC	18037201	1
Bombastus	Base cream DAC	17000911	1
Caelo	Base cream DAC	17268601	3
Caelo	Base cream DAC	17000927	1
Caelo	Base cream DAC	18037301	2
P.W. Beyvers GmbH	Base cream DAC	731/4	1
Caelo	Base cream DAC	17H25-T11-047756	2
Delta	Base cream DAC	18037101	1
Caelo	Base cream DAC	17269001	2
Bombastus	Base cream DAC	18000960	4
Fargon/Gehe	Base cream DAC	27348917	1
Caelo	Base cream DAC	17349501	1
Bombastus	Base cream DAC	17000069	3
Eimermacher	Base cream DAC	79000916	1
Bombastus	Base cream DAC	18000493	1
Bombastus	Base cream DAC	18000492	1
EuRho	Base cream DAC	86450517	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	17K24-T07-050507	7
Caelo	Base cream DAC	18001301	2
Caelo	Base cream DAC	310756	1
P.W. Beyver/Noweda	Base cream DAC	731/1	1
Caelo	Base cream DAC	16041802	1
Caelo	Base cream DAC	17352001	4
GEHE	Base cream DAC	18000964	1
Caelo	Base cream DAC	17351901	4
Bombastus	Base cream DAC	18000494	1
Caelo	Base cream DAC	18001401	6
Bombastus	Base cream DAC	18000964	2
Caelo	Base cream DAC	17352101	7
Caelo	Base cream DAC	18015101	4
Lamotte / Noweda	Base cream DAC	8003325004	2
Caelo	Base cream DAC	17352201	5
Sanacorp	Base cream DAC	18000497	1
Euro OTC	Base cream DAC	27350917	7
Bombastus	Base cream DAC	18000959	3
Caelo	Base cream DAC	18055601	3
Lamotte/AHD	Base cream DAC	8003325008	1
P.W. Beyvers / Noweda	Base cream DAC	731/4	2
Caelo	Base cream DAC	17349802	1
Bombastus	Base cream DAC	17000915	1
Caelo	Base cream DAC	18091101	4
Caelo	Base cream DAC	18033702	2
beyvers	Base cream DAC	731/4	1
Bombastus	Base cream DAC	17000909	1
Caelo	Base cream DAC	171535501	1
EuRho	Base cream DAC	51580217	1
Caelo	Base cream DAC	17268801	2
Caelo	Base cream DAC	29860117	2
Bombastus	Base cream DAC	18000954	2
Caelo	Base cream DAC	17000923	1
Caelo	Base cream DAC	18037101	3
Bombastus	Base cream DAC	17000917	1
Caelo	Base cream DAC	17269301	1
Fagron	Base cream DAC	17F08T04045271	1
henry lamotte	Base cream DAC	8003325006	1
Beyvers/Anzag	Base cream DAC	731/3	1
Caelo	Base cream DAC	18037402	1
Caelo	Base cream DAC	18085202	2
Caelo	Base cream DAC	18015301	3
Caelo	Base cream DAC	18085202/1300518	1
Fiebig	Base cream DAC	18091102	1
Kehr	Base cream DAC	17000897	1
Bombastus	Base cream DAC	18000963	1
Ferdinand Eimermacher	Base cream DAC	80340218	2
Caelo	Base cream DAC	18016701	2
Fagron	Base cream DAC	17K24-T02-050485	1
Bombastus	Base cream DAC	17000912	1
Bombastus	Base cream DAC	18000967	2
Caelo	Base cream DAC	172686015582	1
Caelo	Base cream DAC	18091202	5
Caelo	Base cream DAC	18091102	4
Caelo	Base cream DAC	18104701	1
Beyvers GmbH	Base cream DAC	731/4	4
Bombastus	Base cream DAC	18000690	1
Caelo	Base cream DAC	8061802	1
Euro OTC	Base cream DAC	7570418	2
Caelo	Base cream DAC	18081702	3

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	17K24-T04-050495	1
Caelo	Base cream DAC	17000912	1
Bombastus	Base cream DAC	18000956	2
Sanacorp	Base cream DAC	18000955	3
Fagron	Base cream DAC	17k24-T03-050489	1
Caelo	Base cream DAC	1768601	1
Caelo	Base cream DAC	18097702	8
Caesar & Loretz/ Noweda	Base cream DAC	18105101	1
Caelo	Base cream DAC	18105201	2
Euro OTC	Base cream DAC	80300218	1
Gehe	Base cream DAC	18015301	1
Caelo	Base cream DAC	18105101	1
Euro/ Phönix	Base cream DAC	27290917	1
Phoenix	Base cream DAC	27350917	1
18105101	Base cream DAC	18105101	1
Fagron	Base cream DAC	17K24-T06-050503	1
Sanacorp	Base cream DAC	18037901	1
Sanacorp/Fargon	Base cream DAC	17K24-T07-050507	1
Caelo	Base cream DAC	18129301	3
Beyvers/AEP	Base cream DAC	731/4	1
Caelo	Base cream DAC	18137601	10
Caelo	Base cream DAC	18105801	8
Allianz	Base cream DAC	69530118	1
Euro OTC	Base cream DAC	27340917	1
Bombastus	Base cream DAC	18000962	3
Caelo	Base cream DAC	18137301	4
Caelo	Base cream DAC	18105301	3
Caelo	Base cream DAC	18055602	1
Bombastus	Base cream DAC	18000957	1
Caelo	Base cream DAC	7071803	1
EnsbonaNoweda	Base cream DAC	72240417	1
Lamotte / Noweda	Base cream DAC	8003325007	1
Caelo	Base cream DAC	180977025637	1
Caelo	Base cream DAC	18081602	1
Caelo	Base cream DAC	18105001	6
Caelo	Base cream DAC	18137801	7
Euro OTC	Base cream DAC	7550418	5
Caelo	Base cream DAC	273717268701	1
Fagron	Base cream DAC	18C19-T18-053952	6
Delta	Base cream DAC	18105402	4
Euro OTC	Base cream DAC	93730318	1
Bombastus	Base cream DAC	18001964	1
Bombastus	Base cream DAC	18000969	1
Caelo	Base cream DAC	1805201	1
Ensbona	Base cream DAC	80340218	2
Caelo	Base cream DAC	18037901	1
Fagron	Base cream DAC	18C19-T22-053971	2
Fagron	Base cream DAC	18C19-T23-053974	2
Euro OTC	Base cream DAC	80330218	1
Caelo	Base cream DAC	18126301	3
Caelo	Base cream DAC	18138201	4
Caelo	Base cream DAC	18138001	6
Bombastus	Base cream DAC	18001969	1
Caelo	Base cream DAC	18137201	2
Sanacorp	Base cream DAC	18138001	1
Bomastus-Werke AG	Base cream DAC	18003108	1
Caelo	Base cream DAC	18105402	3
Bombastus	Base cream DAC	17000921	1
Lamotte/Phoenix	Base cream DAC	8003325005	1
Bombastus	Base cream DAC	18001968	4

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Supplier	Substance	Batch	Spectra
Sanacorp	Base cream DAC	18105602	1
Fagron	Base cream DAC	17K24-T07-050508	2
Caelo	Base cream DAC	181380015686	1
Caelo	Base cream DAC	7560418	2
Euro OTC	Base cream DAC	46721117	1
Fagron	Base cream DAC	18C19-T17-053948	6
Bombastus	Base cream DAC	18001970	1
Caelo	Base cream DAC	18138101	7
Caelo	Base cream DAC	11081803	1
Caelo	Base cream DAC	18137001	4
Caelo	Base cream DAC	18138401	4
Caelo	Base cream DAC	18104801	1
Bombastus	Base cream DAC	18003111	2
Bombastus	Base cream DAC	18000961	1
Bombastus	Base cream DAC	18003113	1
Caelo	Base cream DAC	18105701	1
Cealo/Sanacorp	Base cream DAC	171338001	1
Bombastus	Base cream DAC	18003110	1
ENSBONA	Base cream DAC	29580618	1
Caelo	Base cream DAC	18085201	3
Caelo	Base cream DAC	18137201-20180830Ma5	1
Eimerbacher Gmbh,Gesche...	Base cream DAC	61361217-20180830Ma6	1
Caelo	Base cream DAC	18137501	1
EuRho	Base cream DAC	80300218	1
Beyvers/Noweda	Base cream DAC	731/2	1
Caelo	Base cream DAC	18165401	5
Fagron	Base cream DAC	18E23-T15-056314	6
Bombastus	Base cream DAC	18001971	1
Caelo	Base cream DAC	18105501	3
Lamotte / AHC	Base cream DAC	8003325007	1
Bombastus	Base cream DAC	1800970	1
Cealo/Gehe	Base cream DAC	18138401	1
Caelo	Base cream DAC	8091808	1
Bombastus	Base cream DAC	18003107	4
Fagron	Base cream DAC	18E23-T15-156314	1
Ensbona/Noweda	Base cream DAC	14150817	1
Cealo/Gehe	Base cream DAC	18165301	2
Bombastus	Base cream DAC	18003097	1
P.W.Peyvers/ Sanacorp	Base cream DAC	18001	2
Caelo	Base cream DAC	18165301	2
Bombastus	Base cream DAC	18001974	2
Caelo	Base cream DAC	18137702	2
Ichthyol	Base cream DAC	18165401	1
Caelo	Base cream DAC	18165601	3
Caelo	Base cream DAC	22091802	1
Ensbona	Base cream DAC	15730518	3
Cealo/Phönix	Base cream DAC	18165301	1
Fagron	Base cream DAC	18E23-T22-056352	3
Cealo/ Noweda	Base cream DAC	17000921	1
Bombastus	Base cream DAC	18003102	1
Caelo	Base cream DAC	181656015738	1
Fagron	Base cream DAC	18-E23-T15-056414	1
Caelo	Base cream DAC	18001971	1
Caelo	Base cream DAC	18166101	6
Euro/ Phönix	Base cream DAC	15700518	1
Euro OTC	Base cream DAC	937770318	1
Euro OTC	Base cream DAC	15720518	4
Caelo	Base cream DAC	18166401	5
Caelo	Base cream DAC	18138301	4
Fagron	Base cream DAC	18c19-t18-053952	1

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Supplier	Substance	Batch	Spectra
Fagron	Base cream DAC	18C19-T20-053962	1
Caelo	Base cream DAC	18165801	7
Caelo	Base cream DAC	181666501	1
Caelo	Base cream DAC	18166602	5
Caelo	Base cream DAC	18137101	3
Fagron	Base cream DAC	18E23-T16-056321	3
Ensbona	Base cream DAC	95980718	2
Noweda/Eimermacher	Base cream DAC	80340218	1
Caelo	Base cream DAC	18166301	2
Caelo	Base cream DAC	18167101	3
Caelo	Base cream DAC	18192501	5
Bombastus	Base cream DAC	18003114	1
Fagron	Base cream DAC	18E23-T20-056346	1
Euro OTC	Base cream DAC	15690518	3
Caelo	Base cream DAC	18166501	3
Fagron	Base cream DAC	18C19-T21-053965	1
Bomastus-Werke AG	Base cream DAC	18001969	1
Fagron	Base cream DAC	18G13-T16-058086	1
Caelo	Base cream DAC	18192601	2
Beyvers	Base cream DAC	18001	1
Beyvers GmbH	Base cream DAC	18002	4
Sanacorp	Base cream DAC	18165801	1
Bombastus	Base cream DAC	18005233	1
Caelo	Base cream DAC	28111811	1
Kehr	Base cream DAC	45950718	1
Bombastus	Base cream DAC	LD251118	1
Beyvers/Gehe	Base cream DAC	180-01	1
Caelo	Base cream DAC	18165901	1
Fagron	Base cream DAC	18166901	1
Caelo	Base cream DAC	15690518	1
Gehe 07.12.18	Base cream DAC	18167001	1
Caelo	Base cream DAC	18192701	3
Euro OTC	Base cream DAC	93770318	1
Bombastus	Base cream DAC	18005743	1
Euro OTC	Base cream DAC	93760318	1
Sanacorp	Base cream DAC	18003938	2
Euro OTC	Base cream DAC	45970718	4
Bombastus	Base cream DAC	18005744	1
Bomastus-Werke AG	Base cream DAC	18005236	1
Sanacorp	Base cream DAC	18166801	1
Caelo	Base cream DAC	18166901	1
Caelo	Base cream DAC	18193101	3
Sanacorp	Base cream DAC	18003933	1
Caelo	Base cream DAC	18193301	3
Ensbona	Base cream DAC	87231118	5
Caelo	Base cream DAC	18003937	1
Bombastus	Base cream DAC	18003938	2
Bombastus	Base cream DAC	18005239	1
Sanacorp	Base cream DAC	18193201	1
Caelo	Base cream DAC	18220401	3
Caelo	Base cream DAC	18232501	2
Caelo	Base cream DAC	18211701	2
P.W.Beyvers GmbH	Base cream DAC	18002	1
Caelo	Base cream DAC	18166801	1
Bombastus	Base cream DAC	18003945	1
Bomastus-Werke / Noweda	Base cream DAC	18003939	1
Caelo	Base cream DAC	18232401	1
Caelo	Base cream DAC	19011902	1
Lamotte/AHD	Base cream DAC	8004134008	1
Gehe 21-01-2019	Base cream DAC	18192601	1

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Supplier	Substance	Batch	Spectra
Bomastus-Werke AG	Base cream DAC	18005240	1
Caelo	Base cream DAC	18192901	2
Caelo	Base cream DAC	18232601	2
Fagron	Base cream DAC	18G13-T11-058079	2
Caelo	Base cream DAC	18232701	3
Sanacorp	Base cream DAC	18232601	1
Caelo	Base cream DAC	18269001	1
Caelo	Base cream DAC	18269101	3
Euro OTC	Base cream DAC	62540918	1
Sanacorp	Base cream DAC	18269301	1
Sanacorp	Base cream DAC	18005242	1
Caelo	Base cream DAC	18269301	1
Caelo	Base cream DAC	18193001	1
Caelo	Base cream DAC	18165701	1
Caelo	Base cream DAC	18269601	2
Caelo	Base cream DAC	18269501	1

- 100 208 spectra from 581 *Apo-Ident* customers from a total of 28 259 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 *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	620	0	35 215
Type B	0	5439	41	73 518
Type C	0	7333	418	100 203

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 % (> 99.9705 %)	100.0000 % (> 99.0323 %)
Type B	100.0000 % (> 99.9692 %)	99.2518 % (> 99.1971 %)
Type C	100.0000 % (> 99.6522 %)	94.6071 % (> 94.5684 %)

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.

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	16.53
31964	31964	0.00	22.01
31252	31252	0.00	15.71
32345	31716	4.33	15.08
31043	34030	5.69	21.33
30923	31252	9.02	14.75
31711	31711	0.00	21.51
31712	31712	0.00	22.80
31713	31713	0.00	21.74
31714	31714	0.00	21.74
31709	31709	0.00	20.67
31715	31715	0.00	22.70
31710	31710	0.00	20.33
31716	31716	0.00	21.17
34030	34030	0.00	20.36

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Base cream, diluted
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31515-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Base cream, diluted

Special notes

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

no information

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>
Appendix F	Addition to the second-stage models

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.

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, diluted*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Base cream, dilu...	14242803	31515	40	not required
Caelo	Base cream, dilu...	181758	34267	40	20180716*

Validation samples

A total of 222 872 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 *Base cream, diluted*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 60 spectra of 2 reference samples from the substance/substance group *Base cream, diluted*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Base cream, diluted	14242803	31515 [†]	20
Caelo	Base cream, diluted	182407	34268	40

- 79 018 spectra from a total of 1828 batches from further 350 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 *Base cream, diluted*.
- 107 959 spectra from 582 *Apo-Ident* customers from a total of 30 680 batches from a further 338 substances. These spectra were recorded by *Apo-Ident* customers. *Type C* samples are docu-

*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.

[†]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*.

mented 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, diluted* 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, diluted* 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	35 755
Type B	0	59	1	79 018
Type C	0	0	0	107 959

The substance/substance group *Base cream, diluted* 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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	98.3333 % (> 93.3333 %)
Type C	100.0000 % (> 99.6449 %)	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.

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
31515	31515	0.00	17.93
34267	34267	0.00	14.65

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Basis Cordes® RK
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30892-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	1511145

Validation samples

A total of 222 872 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 *Basis Cordes® RK*. These samples are listed above in the [calibration samples](#) section.
- 35 695 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Basis Cordes® RK*.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Basis Cordes® RK	14A087	31660 [†]	20
Ichthyol	Basis Cordes® RK	16A035	32951	40
Ichthyol	Basis Cordes® RK	16A034	33617	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 596 spectra from 233 *Apo-Ident* customers from 63 batches from the substance/substance group *Basis Cordes® RK*.

Supplier	Substance	Batch	Spectra
Ichthyol	Basis Cordes® RK	11A067	4

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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
Ichthyol	Basis Cordes [®] RK	11A156	1
Noweda	Basis Cordes [®] RK	11A156	1
Ichthyol	Basis Cordes [®] RK	10A064	1
Ichthyol	Basis Cordes [®] RK	10A138	1
Ichthyol	Basis Cordes [®] RK	12A030	8
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	12A045	1
Gehe	Basis Cordes [®] RK	12A045	4
Ebert	Basis Cordes [®] RK	11A079	1
ICHTHYOL-GES/GEHE	Basis Cordes [®] RK	11A079	1
Phönix Gotha	Basis Cordes [®] RK	12A045	1
Ichthyol-Gesellschaft / E	Basis Cordes [®] RK	12A045	1
Ichtyol 004	Basis Cordes [®] RK	12A046	1
Gehe	Basis Cordes [®] RK	12A030	2
Phönix/Ichthyol	Basis Cordes [®] RK	12A046	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A046	1
Ichthyol/ Noweda	Basis Cordes [®] RK	12A046	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	12A046	1
Ichthyol	Basis Cordes [®] RK	19111208	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A030	1
Anzag/Ichtyol	Basis Cordes [®] RK	12A046	1
Sanacorp/ Ichthyol Gese...	Basis Cordes [®] RK	12A045	1
sanacorp	Basis Cordes [®] RK	12A046	1
Ichthyol	Basis Cordes [®] RK	12A046	1
Phönix	Basis Cordes [®] RK	12A167	2
Ichthyol - Gesellschaft	Basis Cordes [®] RK	11A079	1
Anzag/ Ichtyol	Basis Cordes [®] RK	12A046	2
Ichthyol - Gesellschaft	Basis Cordes [®] RK	12A046	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12A114	1
ICHTHYOL-GES.	Basis Cordes [®] RK	12A114	1
Cordes/Phoenix	Basis Cordes [®] RK	12A114	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	12A045	1
ichthyol	Basis Cordes [®] RK	1213Q-03300	1
Ichtyol	Basis Cordes [®] RK	12A114	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	11A079	1
Ichthyol	Basis Cordes [®] RK	12A167	4
Caelo	Basis Cordes [®] RK	12345	1
Ichthyol/N/17.04.2013/P...	Basis Cordes [®] RK	12A167	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	12A046	1
Ichthyol/Anzag	Basis Cordes [®] RK	12A045	1
Ichthyol	Basis Cordes [®] RK	11A079	1
Ichthyol	Basis Cordes [®] RK	12A114	4
Cordes/Anzag	Basis Cordes [®] RK	13A038	2
ICHTHYOL-GES/GEHE	Basis Cordes [®] RK	12A045	1
Ichthyol	Basis Cordes [®] RK	13A038	10
Cordes/AHD	Basis Cordes [®] RK	13A038	1
Ichtyol-Gesellschaft/Ph...	Basis Cordes [®] RK	12A114	1
Ichthyol / Anzag	Basis Cordes [®] RK	11A156	1
Noweda	Basis Cordes [®] RK	13A038	1
Caelo	Basis Cordes [®] RK	13A038	2
Ichthyol , Noweda	Basis Cordes [®] RK	13A038	1
Sanacorp / Ichthyol	Basis Cordes [®] RK	12A167	2
Phönix Gotha	Basis Cordes [®] RK	12A114	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A038	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A038	1
Ichthyol -Gesellschaft	Basis Cordes [®] RK	13A038	1
Caelo	Basis Cordes [®] RK	4312A-03300	1
Ichthyol Gmbh, Phönix	Basis Cordes [®] RK	13A038	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	13A038	1
Ichthyol Werke	Basis Cordes [®] RK	12A114	1
Alliance healthcare	Basis Cordes [®] RK	13A038	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Noweda	Basis Cordes [®] RK	13A104	1
Ichthyol	Basis Cordes [®] RK	11A156	1
Ichthyol	Basis Cordes [®] RK	13A038	1
Ichthyol/N/PZN:01114881	Basis Cordes [®] RK	13A104	1
Ichthyol / Noweda	Basis Cordes [®] RK	13A039	1
Ichthyol/Ebert	Basis Cordes [®] RK	12A114	1
Ichthyol	Basis Cordes [®] RK	13A039	2
Bombastus	Basis Cordes [®] RK	13A038	1
Ichthyol-Gesellschaft / G	Basis Cordes [®] RK	13A038	1
Sonnenberg-Apotheke	Basis Cordes [®] RK	4643491	1
Ichthyol /Noweda	Basis Cordes [®] RK	13A039	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	13A104	1
Ichthyol	Basis Cordes [®] RK	13A104	2
Ichthyol/gehe	Basis Cordes [®] RK	13A039	1
Gehe	Basis Cordes [®] RK	13A039	1
Ichthyol Cordes	Basis Cordes [®] RK	13A104	1
Ichthyol, Noweda	Basis Cordes [®] RK	13A039	1
Ichthyol/ Noweda	Basis Cordes [®] RK	11A079	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	13A039	2
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A039	2
Ichthyol/Phönix	Basis Cordes [®] RK	12A114	1
ichthyol/Gehe	Basis Cordes [®] RK	13A104	2
Gehe	Basis Cordes [®] RK	13A104	2
Ichthyol /Jenne 16.01.2014	Basis Cordes [®] RK	13A039	1
Ichthyol- Gesellschaft	Basis Cordes [®] RK	13A039	2
Ichthyol	Basis Cordes [®] RK	12A045	1
Gehe - Ichthyol	Basis Cordes [®] RK	13A039	1
ichthyol/AHD	Basis Cordes [®] RK	13A039	1
Ichthyol	Basis Cordes [®] RK	30041301	1
Phoenix	Basis Cordes [®] RK	13A039	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A104	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A103	3
Ichthyol/Noweda	Basis Cordes [®] RK	13A103	2
Ichthyol GmBH	Basis Cordes [®] RK	13A038	1
Ichthyol/Otto	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft/N...	Basis Cordes [®] RK	13A103	1
Ichthyol /Noweda	Basis Cordes [®] RK	13A103	3
Caelo	Basis Cordes [®] RK	13A103	1
Phönix Gotha	Basis Cordes [®] RK	13A103	2
Ichthyol-Gesellschaft/P...	Basis Cordes [®] RK	13A039	1
Ichthyol	Basis Cordes [®] RK	12A103	1
Ichthyol	Basis Cordes [®] RK	13A103	2
Ichthyol	Basis Cordes [®] RK	13A039	2
Ichthyol	Basis Cordes [®] RK	13A103	5
Ichthyol/gehe	Basis Cordes [®] RK	13A103	1
Ichthyol/Gehe	Basis Cordes [®] RK	13A103	1
Ichthyol/Alliance healt...	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft/V...	Basis Cordes [®] RK	13A103	1
Ichthyol	Basis Cordes [®] RK	14A038	1
Fagron	Basis Cordes [®] RK	13A103	2
Ichthyol/Gehe	Basis Cordes [®] RK	13A206	1
Ichthyol	Basis Cordes [®] RK	10071401	1
Caelo	Basis Cordes [®] RK	13A104	1
Ichthyol-Gesellschaft/N...	Basis Cordes [®] RK	13A206	2
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	13A103	1
Bombastus	Basis Cordes [®] RK	13A103	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	13A103	1
Noweda/Ichthyol	Basis Cordes [®] RK	14A038	1
Ichthyol	Basis Cordes [®] RK	13A206	7
Ichthyol/Gehe	Basis Cordes [®] RK	14A038	2

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Supplier	Substance	Batch	Spectra
Ichthyol/Sanacorp	Basis Cordes [®] RK	12A167	1
Caelo	Basis Cordes [®] RK	13A206	2
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	14A038	1
Caelo	Basis Cordes [®] RK	P160/14	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A206	1
Ichthyol-Gesellschaft/...	Basis Cordes [®] RK	13A206	1
Ichthyol/Phönix	Basis Cordes [®] RK	14A038	4
Ichthyol	Basis Cordes [®] RK	27102014B	1
Ichthyol/Anzag	Basis Cordes [®] RK	13A206	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	13A206	1
Cordes, Hermanni & Co	Basis Cordes [®] RK	13A206	2
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	13A206	1
Cordes, Hermanni / Gehe	Basis Cordes [®] RK	13A206	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	14A038	3
AHD17.11.14 EK 16,06	Basis Cordes [®] RK	13A206	1
Ichthyol/Gehe	Basis Cordes [®] RK	13A206	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	14A038	1
Ichthyol über Phoenix	Basis Cordes [®] RK	13A206	1
Ichthyol Gehe	Basis Cordes [®] RK	13A206	1
Ichthyol	Basis Cordes [®] RK	14a087	1
ichthyol Gesellschaft	Basis Cordes [®] RK	13A206	2
Ichthyol /Gehe	Basis Cordes [®] RK	14A087	1
Anzag/Ichthyol-Gesellsch...	Basis Cordes [®] RK	13A104	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A087	2
Ichthyol-Gesellschaft	Basis Cordes [®] RK	13A206	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	13A206	1
Ichthyol - Gesellschaft	Basis Cordes [®] RK	13A206	1
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	14A087	1
Ichthyol	Basis Cordes [®] RK	28011507	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A087	1
Ichthyol/ Noweda	Basis Cordes [®] RK	14A087	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	14A087	2
Noweda	Basis Cordes [®] RK	14A087	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	14A148	4
Ichthyol/Phönix	Basis Cordes [®] RK	14A087	1
200	Basis Cordes [®] RK	13A206	1
Ichthyol/Noweda	Basis Cordes [®] RK	14A087	2
AHD 04.02.15	Basis Cordes [®] RK	14A087	1
Caelo	Basis Cordes [®] RK	14D87	1
Ichthyol/Phönix	Basis Cordes [®] RK	14A148	5
Ichthyol/Otto	Basis Cordes [®] RK	14A087	1
Gehe/Ichthyol	Basis Cordes [®] RK	14A087	1
Ichthyol/Fiebig	Basis Cordes [®] RK	14A205	2
Ichthyol/Alliance Healt...	Basis Cordes [®] RK	14A087	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	14A148	1
Phönix Gotha	Basis Cordes [®] RK	13A2C6	1
ICHTHYOL/GEHE	Basis Cordes [®] RK	14A087	1
Ichthyol/Phoenix	Basis Cordes [®] RK	14A205	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A205	2
Ichthyol Gesellschaft	Basis Cordes [®] RK	14A205	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A205	5
Ichthyol/phönix	Basis Cordes [®] RK	14A205	3
Ichthyol/VDL	Basis Cordes [®] RK	14A205	1
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	14A148	2
Ichthyol/AHD	Basis Cordes [®] RK	14A205	1
Ichthyol	Basis Cordes [®] RK	20061501	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	14A205	3
Ichthyol-Gesellschaft	Basis Cordes [®] RK	14A148	1
Phönix Gotha	Basis Cordes [®] RK	14A205	1
Ichthyol	Basis Cordes [®] RK	15A057	4

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Supplier	Substance	Batch	Spectra
Ichthyol Ges. / Gehe	Basis Cordes [®] RK	15A057	1
ichthyol Gesellschaft ...	Basis Cordes [®] RK	14A205	1
Caelo	Basis Cordes [®] RK	14A205	3
Ichthyol/Noweda	Basis Cordes [®] RK	15A057	4
IchthyolAlliance Health...	Basis Cordes [®] RK	13A206	1
Sanacorp	Basis Cordes [®] RK	13A103	1
Caelo	Basis Cordes [®] RK	15A057	2
ICHTHYOL-GESELLSCHAFT	Basis Cordes [®] RK	14A205	1
Ichthyol/Phoenix	Basis Cordes [®] RK	15A051	7
Ichtyol-Gesellschaft	Basis Cordes [®] RK	15A057	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	14A205	1
Ichthyol	Basis Cordes [®] RK	15A057	1
Ichtyol Gesellschaft	Basis Cordes [®] RK	15A057	3
Ichthyol/GEHE	Basis Cordes [®] RK	15A057	1
Ichthyol	Basis Cordes [®] RK	14A205	1
Ichthyol/Anzag	Basis Cordes [®] RK	15A051	1
Ichtyol/Phoenix	Basis Cordes [®] RK	14A148	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A057	7
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A051	5
Ichthyol/ Sanacorp	Basis Cordes [®] RK	15A057	1
Ichtgyol	Basis Cordes [®] RK	15A057	1
Ichtyol/Phoenix	Basis Cordes [®] RK	15A057	1
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	15A057	1
Ichthyol/Gehe	Basis Cordes [®] RK	14A205	1
ichthyol gesellschaft	Basis Cordes [®] RK	14A205	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A051	1
ichthyol	Basis Cordes [®] RK	13A103	1
Phönix Gotha	Basis Cordes [®] RK	15A051	1
ICHTHYOL / 30	Basis Cordes [®] RK	15A057	1
Ichthyol	Basis Cordes [®] RK	14A087	2
Ichthyol-Gesellschaft/A...	Basis Cordes [®] RK	15A057	1
Ichthyol Ges.	Basis Cordes [®] RK	15A057	1
ICHTYOL GESELLSCHAFT Co...	Basis Cordes [®] RK	15A057	1
ichthyol/noweda	Basis Cordes [®] RK	15A057	1
Ichthyol/Fiebig	Basis Cordes [®] RK	12A114	1
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	15A115	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	15A057	1
Ichthyol/ Phönix	Basis Cordes [®] RK	15A115	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	15A057	1
Cordes, Hermani / Gehe	Basis Cordes [®] RK	15A115	1
Ichthyol/Gehe	Basis Cordes [®] RK	15A115	3
Noweda	Basis Cordes [®] RK	15A057	1
Ichthyol	Basis Cordes [®] RK	15A051	2
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A051	1
Ichthyol / Noweda	Basis Cordes [®] RK	15A057	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	15A115	2
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A115	2
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	15A057	1
Ichthyol	Basis Cordes [®] RK	15A115	4
Caelo	Basis Cordes [®] RK	15A115	2
Ichthyol/N	Basis Cordes [®] RK	15A115	1
Noweda 29.032016	Basis Cordes [®] RK	15A115	2
ICHTHYOL-GESELLSCHAFT C...	Basis Cordes [®] RK	15A115	1
Ichthyol Gesellsch./Now...	Basis Cordes [®] RK	15A194	1
Ichtyhol Gesellschaft	Basis Cordes [®] RK	15A115	2
Ichthyol/Noweda	Basis Cordes [®] RK	15a115	1
Anzag/Ichtyol-Gesellsch...	Basis Cordes [®] RK	14A051	1
Ichthyol / Sanacorp	Basis Cordes [®] RK	15A115	1
Ichthyol/Phönix	Basis Cordes [®] RK	15A194	4
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	15A194	1

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Supplier	Substance	Batch	Spectra
Ichthyol/ Anzag	Basis Cordes® RK	15A115	2
Ichthyol Werke	Basis Cordes® RK	15A115	1
Ichthyol-Gesellschaft C...	Basis Cordes® RK	15A172	4
Ichtyol/Noweda	Basis Cordes® RK	15A194	1
Ichthyol/Phönix	Basis Cordes® RK	15A172	3
Ichthyol/Noweda	Basis Cordes® RK	15a194	1
Ichthyol	Basis Cordes® RK	15A172	2
Ichthyol-Gesellschaft C...	Basis Cordes® RK	15A172	4
Ichthyol / G	Basis Cordes® RK	15A194	1
Ichthyol/Sanacorp	Basis Cordes® RK	15A194	2
Caelo	Basis Cordes® RK	15A194	3
Noweda	Basis Cordes® RK	15A194	1
Ichthyol Ges. / Gehe	Basis Cordes® RK	15A194	1
Ichthyol/Noweda	Basis Cordes® RK	15A194	1
Phönix	Basis Cordes® RK	15A194	2
Ichthyol/Alliance Healt...	Basis Cordes® RK	15A194	1
Ichthyol-Gesellschaft	Basis Cordes® RK	15A194	4
Ichthyol Gesellschaft- ...	Basis Cordes® RK	14A205	2
Ichthyol Werke	Basis Cordes® RK	15A194	1
Caelo	Basis Cordes® RK	15A172	1
Euro OTC	Basis Cordes® RK	15A194	2
ICHTHYOL / 20	Basis Cordes® RK	15A194	1
Ichthyol/ Krieger	Basis Cordes® RK	15A172	1
ICHTHYOL-GESELLSCHAFT	Basis Cordes® RK	16A035	1
Ichthyol-Gesellschaft	Basis Cordes® RK	16A035	2
Caelo	Basis Cordes® RK	16A035	1
Ichthyol	Basis Cordes® RK	15A194	1
Noweda/ Ichthyol	Basis Cordes® RK	16A0335	1
Ichtyol Gesllschaft	Basis Cordes® RK	15A194	1
Bombastus	Basis Cordes® RK	16A035	4
Ichthyol/Phoenix	Basis Cordes® RK	16A035	1
Ichthyol-Gesellschaft/AHD	Basis Cordes® RK	15A194	1
Ichtyol/Noweda	Basis Cordes® RK	16A035	1
Ichthyol Gesellschaft- ...	Basis Cordes® RK	15A194	1
AHD/ichthyol	Basis Cordes® RK	16A035	1
Ichthyol-Gesellschaft C...	Basis Cordes® RK	16A035	1
Ichthyol Gesellschaft/AHD	Basis Cordes® RK	15A194	1
Ichthyol/Phönix	Basis Cordes® RK	16A125	5
Ichthyol-Gesellschaft	Basis Cordes® RK	15A172	1
Gehe/Ichthyol 23.11.16	Basis Cordes® RK	16A035	1
Ichtyol	Basis Cordes® RK	16A035	1
Ichthyol/Phönix	Basis Cordes® RK	16A035	2
Phoe	Basis Cordes® RK	16A035	1
ichthyol	Basis Cordes® RK	16A035	1
Ichthyol	Basis Cordes® RK	16A035	2
Ichthyol Gesellschaft	Basis Cordes® RK	16A035	1
Ichthyol/ Phoenix	Basis Cordes® RK	16A035	1
ICHTHYOL-GESELLSCHAFT/P...	Basis Cordes® RK	16A035	1
AnzagIchthyol	Basis Cordes® RK	16A035	1
Ichthyol	Basis Cordes® RK	16A125	2
Ychthyol-Gesellschaft	Basis Cordes® RK	16A035	2
Ichthyol/Krieger	Basis Cordes® RK	14A087	1
Ichthyol-Gesellschaft/P...	Basis Cordes® RK	16A035	1
Ichthyol-Gesellschaft C...	Basis Cordes® RK	16A035	1
AHD 13.12.16 EK 16,54	Basis Cordes® RK	16A035	1
Gehe/ICHTHYOL	Basis Cordes® RK	16A035	1
Ichthyol-Gesellschaft C...	Basis Cordes® RK	16A125	1
Ichthyol/Phoenix	Basis Cordes® RK	16A034	1
Ichthyol-Gesellschaft	Basis Cordes® RK	16A034	5
Noweda/Wepa	Basis Cordes® RK	13A206	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Sanacorp	Basis Cordes [®] RK	15A172	1
phönix	Basis Cordes [®] RK	15A115	1
Ichthyol / Phönix	Basis Cordes [®] RK	16A034	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	16A034	1
Gehe/Ichthyol	Basis Cordes [®] RK	16A035	1
ICHTHYOL / Sanacorp	Basis Cordes [®] RK	16A034	1
Ichtyol Gesllschaft	Basis Cordes [®] RK	16A034	1
Ichthyol/ Phoenix	Basis Cordes [®] RK	16A034	5
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	16A035	1
Caelo	Basis Cordes [®] RK	16A034	2
Ichthyol-Gesellschaft C...	Basis Cordes [®] RK	16A034	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	1417E-03300	1
Ichthyol/AHD	Basis Cordes [®] RK	16A035	1
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	16A034	2
Ichthyol/Phönix	Basis Cordes [®] RK	16A034	1
Ichthyol	Basis Cordes [®] RK	16A034	4
Cordes/Gehe	Basis Cordes [®] RK	16A034	1
Ichthyol/Phönix	Basis Cordes [®] RK	16A034	3
Sanacorp	Basis Cordes [®] RK	16A034	1
Ichtyol/Noweda	Basis Cordes [®] RK	16A034	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	24061704	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	16A125	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	16A034	1
Ichthyol / Gehe	Basis Cordes [®] RK	17A046	5
Ichtyol-Gesellschaft	Basis Cordes [®] RK	16A034	1
apomix/Noweda	Basis Cordes [®] RK	16A034	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17A046	2
Ichthyol/Noweda	Basis Cordes [®] RK	17A046	1
Ichthyol	Basis Cordes [®] RK	17A046	3
ICHTYOL GESELLSCHAFT Co...	Basis Cordes [®] RK	16A197	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	17A046	2
Ichthyol/Gehe	Basis Cordes [®] RK	17A046	1
Noweda/Cordes	Basis Cordes [®] RK	17A046	1
Ichtyhol Gesellschaft	Basis Cordes [®] RK	16A035	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A046	2
Ichthyol Gesellschaft/N...	Basis Cordes [®] RK	17A046	1
Caelo	Basis Cordes [®] RK	17A046	3
Ichtyol - Gesellschaft	Basis Cordes [®] RK	17A046	1
WEPA	Basis Cordes [®] RK	17A046	1
Ichthyol Cordes/Gehe	Basis Cordes [®] RK	17A046	1
Ichthyol/Phönix	Basis Cordes [®] RK	17A046	1
Caelo	Basis Cordes [®] RK	17A0462ma1250g	1
Ichtyol/ Noweda	Basis Cordes [®] RK	17A046	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	17A046	1
Ichthyol/Ebert	Basis Cordes [®] RK	17A046	1
Ichtyol/Noweda	Basis Cordes [®] RK	17A046	1
GEHE	Basis Cordes [®] RK	17A083	1
Caelo	Basis Cordes [®] RK	17A083	1
Ichthyol/Sanacorp	Basis Cordes [®] RK	17A046	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17A083	2
Ichthyol- Gesellschaft ...	Basis Cordes [®] RK	17A083	2
Ichthyol Gesellsch./Pho...	Basis Cordes [®] RK	17A083	1
Krieger	Basis Cordes [®] RK	17A083	2
Ichthyol Gesellschaft C...	Basis Cordes [®] RK	17A046	1
Sanacorp	Basis Cordes [®] RK	17A083	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A083	1
ichthyol	Basis Cordes [®] RK	17A083	1
Ichthyol	Basis Cordes [®] RK	17A083	2
Ichthyol-Gesellschaft	Basis Cordes [®] RK	17a083	1
Ichthyol GmbH	Basis Cordes [®] RK	17A083	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Basis Cordes [®] RK	17A083	1
Ichthyol/Alliance Healt...	Basis Cordes [®] RK	17A083	1
Ichthyol	Basis Cordes [®] RK	16A197	1
Ichthyol/Fiebig	Basis Cordes [®] RK	17A083	1
Ichthyol-Gesellschaft	Basis Cordes [®] RK	12051803	1
ichthyol/noweda	Basis Cordes [®] RK	17A083	1
Ichthyol-Gesellschaft /...	Basis Cordes [®] RK	17A083	1
Ichthyol / Phönix	Basis Cordes [®] RK	17A083	1
Phönix/Ichthyol	Basis Cordes [®] RK	17A149	5
Ichthyol	Basis Cordes [®] RK	14A149	1
Ichthyol	Basis Cordes [®] RK	17A149	3
ichthyol/noweda	Basis Cordes [®] RK	17A149	1
Ichthyol Gesellschaft/K...	Basis Cordes [®] RK	17A149	1
Krieger	Basis Cordes [®] RK	17A149	1
Ichthyol Gesellschaft	Basis Cordes [®] RK	17A149	1
Infectopharm	Basis Cordes [®] RK	3318J-003300	1
Ichthyol/Noweda	Basis Cordes [®] RK	17A149	1
Caelo	Basis Cordes [®] RK	17A149	1
Ichthyol AG /Alliance H...	Basis Cordes [®] RK	17A149	1
Ichthyol/Anzag	Basis Cordes [®] RK	17A149	1
ICHTHYL-GESELLSCHAFT Co...	Basis Cordes [®] RK	17A149	1
Fagron	Basis Cordes [®] RK	18A106	1
Delta Apotheke	Basis Cordes [®] RK	17A149	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	17A149	1
Gehe/Ichtyol	Basis Cordes [®] RK	18A103	1
Ichthyol/Phönix	Basis Cordes [®] RK	18A108	1
Ichthyol/Noweda	Basis Cordes [®] RK	18A108	1
Ichtyol-Gesellschaft	Basis Cordes [®] RK	18A108	1
Cordes / Gehe	Basis Cordes [®] RK	18A108	1
Caelo	Basis Cordes [®] RK	18A108	1

- 107 363 spectra from 582 *Apo-Ident* customers from a total of 30 618 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 *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	140	0	35 695
Type B	0	100	0	78 948
Type C	0	579	17	107 113

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 % (> 99.9706 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9691 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6455 %)	97.1477 % (> 96.6443 %)

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.

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	42.86
31078	30892	6.07	48.34
31660	31660	0.00	41.45

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Benzalkonium chloride solution 50%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30667-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Euro OTC	Benzalkonium chl...	1105041V-03	31613	40	20130809
Caelo	Benzalkonium chl...	15051325	33605	40	20150804

Validation samples

A total of 222 872 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 *Benzalkonium chloride solution 50%*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 180 spectra of 5 reference samples from the substance/substance group *Benzalkonium chloride solution 50%*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Benzalkonium chloride soluti...	1105041-01	30646	40
Euro OTC	Benzalkonium chloride soluti...	1105041V-03	31613 [†]	20
Caelo	Benzalkonium chloride soluti...	15051305	32960	40
Caelo	Benzalkonium chloride soluti...	15051327	33834	40
Caelo	Benzalkonium chloride soluti...	182660	34334	40

- 78 898 spectra from a total of 1825 batches from further 350 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.

- 166 spectra from 117 *Apo-Ident* customers from 46 batches from the substance/substance group *Benzalkonium chloride solution 50%*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Benzalkonium chloride soluti...	11271919	3
Caelo	Benzalkonium chloride soluti...	12254603	1
Caelo	Benzalkonium chloride soluti...	11271906	2
Caelo	Benzalkonium chloride soluti...	11271912	1
Sanacorp	Benzalkonium chloride soluti...	12254608	1
Euro OTC	Benzalkonium chloride soluti...	1105041-01	4
Caelo	Benzalkonium chloride soluti...	12254610	2
Caelo	Benzalkonium chloride soluti...	12254608	2
Caelo	Benzalkonium chloride soluti...	12254615	2
Fagron	Benzalkonium chloride soluti...	7F21-N09	1
Löhr Center/	Benzalkonium chloride soluti...	2013U-01168	1
Euro OTC	Benzalkonium chloride soluti...	110041V-03	1
Noweda	Benzalkonium chloride soluti...	12254615	1
Caelo	Benzalkonium chloride soluti...	611benz	1
Euro OTC	Benzalkonium chloride soluti...	1105041V-03	2
Caelo	Benzalkonium chloride soluti...	13152105	5
Caelo	Benzalkonium chloride soluti...	12254620	3
Caelo	Benzalkonium chloride soluti...	31011402	1
Fagron	Benzalkonium chloride soluti...	2913A-01168	1
Caelo	Benzalkonium chloride soluti...	13152111	4
Caelo	Benzalkonium chloride soluti...	13152114	1
Caelo	Benzalkonium chloride soluti...	8041406	1
Caelo	Benzalkonium chloride soluti...	13152123	3
Sanacorp	Benzalkonium chloride soluti...	4/AKD2	1
Caelo	Benzalkonium chloride soluti...	13152121	1
Euro OTC	Benzalkonium chloride soluti...	1105041V	1
Caelo	Benzalkonium chloride soluti...	13152125	20
Phönix	Benzalkonium chloride soluti...	13152125	1
Caesar/Noweda	Benzalkonium chloride soluti...	5012m-01168	1
Sanacorp	Benzalkonium chloride soluti...	13152125	1
Caelo	Benzalkonium chloride soluti...	1315225	1
Caelo	Benzalkonium chloride soluti...	13152115	1
Caelo	Benzalkonium chloride soluti...	15119501	3
Phönix Gotha	Benzalkonium chloride soluti...	13152125	1
Fagron	Benzalkonium chloride soluti...	15119501	1
Caelo	Benzalkonium chloride soluti...	15119505	9
Caelo	Benzalkonium chloride soluti...	15051305	8
Caelo	Benzalkonium chloride soluti...	15051309	9
Phoenix	Benzalkonium chloride soluti...	15051309	1
Caelo	Benzalkonium chloride soluti...	15051317	9
Euro OTC	Benzalkonium chloride soluti...	15051309	1
Caelo	Benzalkonium chloride soluti...	15051312	6
Caelo	Benzalkonium chloride soluti...	15051320	1
Caelo	Benzalkonium chloride soluti...	15051323	8
Caelo	Benzalkonium chloride soluti...	15051325	11
Ebert-Jacobi	Benzalkonium chloride soluti...	15051325	1
Gehe	Benzalkonium chloride soluti...	15051325	1
Caelo	Benzalkonium chloride soluti...	15051327	2
Caelo	Benzalkonium chloride soluti...	17044901	6
Fischar	Benzalkonium chloride soluti...	17044901	1
Caelo	Benzalkonium chloride soluti...	17344901	1
Caelo	Benzalkonium chloride soluti...	180394505	1
Caelo	Benzalkonium chloride soluti...	18039405	7
Caelo	Benzalkonium chloride soluti...	180394095743	1
Caelo	Benzalkonium chloride soluti...	18039409	2
Caelo	Benzalkonium chloride soluti...	7111806	1
Gehe	Benzalkonium chloride soluti...	18039409	1
Caelo	Benzalkonium chloride soluti...	18039410	1

- 107 793 spectra from 582 *Apo-Ident* customers from a total of 30 636 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 *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	120	0	35 715
Type B	0	180	0	78 898
Type C	0	165	1	107 793

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 96.6667 %)
Type C	100.0000 % (> 99.6450 %)	99.3976 % (> 97.5904 %)

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.

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	57.86
31613	30667	7.31	57.30
33605	30667	12.56	57.40

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Benzyl alcohol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30574-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	50	20131028
Caelo	Benzyl alcohol	16277302	32969	40	20161024

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 130 spectra of 3 reference samples from the substance/substance group *Benzyl alcohol*. These samples are listed above in the [calibration samples](#) section.
- 35 705 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 90 spectra of 3 reference samples from the substance/substance group *Benzyl alcohol*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl alcohol	13292107	31369 [†]	10
Caelo	Benzyl alcohol	16341802	32968	40
Caelo	Benzyl alcohol	17191002	33857	40

- 78 988 spectra from a total of 1827 batches from further 350 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.

- 35 spectra from 13 *Apo-Ident* customers from 19 batches from the substance/substance group *Benzyl alcohol*.

Supplier	Substance	Batch	Spectra
Caelo	Benzyl alcohol	12256208	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*.

continued from previous page

Supplier	Substance	Batch	Spectra
Caelo	Benzyl alcohol	12108503	1
Caelo	Benzyl alcohol	13056803	1
Caelo	Benzyl alcohol	13292103	3
Caelo	Benzyl alcohol	13292107	2
Caelo	Benzyl alcohol	14206201	2
Caelo	Benzyl alcohol	14206209	1
Caelo	Benzyl alcohol	15014901	5
Caelo	Benzyl alcohol	15318403	3
Caelo	Benzyl alcohol	15014907	1
Sanacorp	Benzyl alcohol	15014907	1
Gehe	Benzyl alcohol	15318406	1
Caelo	Benzyl alcohol	15437503	3
Caelo	Benzyl alcohol	15318406	1
Gehe	Benzyl alcohol	15437509	1
Gehe	Benzyl alcohol	15437512	1
Gehe	Benzyl alcohol	15437503	1
Caelo	Benzyl alcohol	16341805	2
Caelo	Benzyl alcohol	16341802	1
Caelo	Benzyl alcohol	17191002	1
Caelo	Benzyl alcohol	17353903	1
Caelo	Benzyl alcohol	18087804	1

- 107 924 spectra from 582 *Apo-Ident* customers from a total of 30 661 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 *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	130	0	35 705
Type B	0	90	0	78 988
Type C	0	35	0	107 924

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 % (> 99.9707 %)	100.0000 % (> 95.3846 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 93.3333 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 82.8571 %)

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.

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	117.24
31369	31220	1.63	118.48
32969	31220	12.70	115.13

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Benzyl benzoate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31208-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Benzyl benzoate; Benzylum 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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140207
Caelo	Benzyl benzoate	171562	33695	40	20170530*

Validation samples

A total of 222 872 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 *Benzyl benzoate*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Benzyl benzoate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl benzoate	14029602	31435 [†]	20
Caelo	Benzyl benzoate	16140805	32959	40
Caelo	Benzyl benzoate	172351	33696	40
Caelo	Benzyl benzoate	181819	34219	40

- 78 938 spectra from a total of 1826 batches from further 350 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 9 *Apo-Ident* customers from 22 batches from the substance/substance group *Benzyl benzoate*.

*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.

[†]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*.

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

- 107 930 spectra from 582 *Apo-Ident* customers from a total of 30 659 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 *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	120	0	35 715
Type B	0	140	0	78 938
Type C	0	28	1	107 930

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6452 %)	96.5517 % (> 86.2069 %)

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.

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	43.47
31435	31208	2.15	45.87
33695	33695	0.00	40.20

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Benzyl nicotinate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30502-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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*

Validation samples

A total of 222872 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 *Benzyl nicotinate*. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Benzyl nicotinate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Benzyl nicotinate	15444804	32592	40
Caelo	Benzyl nicotinate	16358302	32966	40

- 78998 spectra from a total of 1828 batches from further 350 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.

- 54 spectra from 36 *Apo-Ident* customers from 28 batches from the substance/substance group *Benzyl nicotinate*.

*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	Spectra
Caelo	Benzyl nicotinate	12142004	1
VDL	Benzyl nicotinate	12D25-N07	1
Caelo	Benzyl nicotinate	12142008	2
Caelo	Benzyl nicotinate	12282802	2
anzag	Benzyl nicotinate	12282802	1
Anzag	Benzyl nicotinate	12282802	1
Fagron	Benzyl nicotinate	12I20-N01	1
Caelo	Benzyl nicotinate	13035402	2
Caelo	Benzyl nicotinate	12282804	1
Anzag/ichthyol	Benzyl nicotinate	13035408	1
Caelo	Benzyl nicotinate	2091301	1
Caelo	Benzyl nicotinate	13157205	3
Caelo	Benzyl nicotinate	13272502	2
Phönix 28.01.2014	Benzyl nicotinate	13272502	1
Caelo	Benzyl nicotinate	13157201	1
Caelo	Benzyl nicotinate	14112408	4
Caelo	Benzyl nicotinate	10111403	1
Caelo	Benzyl nicotinate	14112404	1
Caelo	Benzyl nicotinate	15124402	4
Caelo	Benzyl nicotinate	14112405	1
Caelo	Benzyl nicotinate	15124408	1
Caelo	Benzyl nicotinate	15293104	1
Beiersdorf AG	Benzyl nicotinate	15293104	1
Caelo	Benzyl nicotinate	15444803	1
Caelo	Benzyl nicotinate	1529304	1
Caelo	Benzyl nicotinate	15444804	3
Caelo	Benzyl nicotinate	16154409	1
Caelo	Benzyl nicotinate	16358302	6
Anzag	Benzyl nicotinate	16358302	1
Caelo	Benzyl nicotinate	16358308	3
Anzag	Benzyl nicotinate	17236704	1
Caelo	Benzyl nicotinate	180321125750	1
Caelo	Benzyl nicotinate	18032105	1

- 107 905 spectra from 582 *Apo-Ident* customers from a total of 30 652 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 *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	160	0	35 675
Type B	0	80	0	78 998
Type C	0	53	1	107 905

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6451 %)	98.1481 % (> 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.

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	31.88
31383	31199	3.24	29.69
32967	33055	1.61	33.33
33055	33055	0.00	33.59

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Bergamot oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31678-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	AR-15-FG-008850-02
Caelo	Bergamot oil	15042001	31696	40	20150217

Validation samples

A total of 222 872 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 *Bergamot oil*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 846 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 200 spectra of 6 reference samples from the substance/substance group *Bergamot oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Bergamot oil	15042001	31678 [†]	20
Caelo	Bergamot oil	15042001	31696 [†]	20
Caelo	Bergamot oil	16083611	33497	40
Caelo	Bergamot oil	16083611	33655	40
Caelo	Bergamot oil	171992	33894	40
Caelo	Bergamot oil	180207	34230	40

- 78 878 spectra from a total of 1826 batches from further 350 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.

- 28 spectra from 16 *Apo-Ident* customers from 13 batches from the substance/substance group *Bergamot oil*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Bergamot oil	15042001	2
Caelo	Bergamot oil	15042008	1
Taoasis	Bergamot oil	19821-122171	1
Bombastus	Bergamot oil	300470	1
Caelo	Bergamot oil	16083601	13
Caelo	Bergamot oil	17199201	1
Taoasis	Bergamot oil	53731-127819	1
Caelo	Bergamot oil	15042011	1
Bombastus	Bergamot oil	309494	1
Caelo	Bergamot oil	17199204	1
Fagron	Bergamot oil	17199205	3
Caelo	Bergamot oil	18020711	1
Caelo	Bergamot oil	18020702	1

- 107 931 spectra from 582 *Apo-Ident* customers from a total of 30 667 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 *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	80	0	35 755
Type B	0	194	6	78 878
Type C	0	28	0	107 931

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9688 %)	97.0000 % (> 95.5000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 78.5714 %)

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.

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	60.57
31696	31678	1.30	61.40

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Cajeput (essential oil)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31502-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Cajeput (essential oil); Oleum Cajeputi artificiale

Special notes

When selecting the *Cajeput (essential oil)* substance/substance group, the following information is displayed to the user:

no information

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>
Appendix F	Addition to the second-stage models

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.

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 (essential oil)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cajeput (essenti...	13141409	31502	40	1412341
Caelo	Cajeput (essenti...	14225206	31605	40	20140730

Validation samples

A total of 222 872 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 *Cajeput (essential oil)*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 160 spectra of 5 reference samples from the substance/substance group *Cajeput (essential oil)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cajeput (essential oil)	13141409	31502 [†]	20
Caelo	Cajeput (essential oil)	14225206	31605 [†]	20
Caelo	Cajeput (essential oil)	162770	32688	40
Caelo	Cajeput (essential oil)	16277003	33620	40
Caelo	Cajeput (essential oil)	172410	33910	40

- 78 918 spectra from a total of 1825 batches from further 350 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 4 *Apo-Ident* customers from 8 batches from the substance/substance group *Cajeput (essential oil)*.

[†]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*.

Supplier	Substance	Batch	Spectra
Taoasis	Cajeput (essential oil)	6781012-119058	1
Taoasis	Cajeput (essential oil)	6781010-120111	1
Taoasis	Cajeput (essential oil)	1518-122595	1
Caelo	Cajeput (essential oil)	15063501	2
Caesar & Loretz/Noweda	Cajeput (essential oil)	14225210	1
Fagron	Cajeput (essential oil)	15063511	1
Caelo	Cajeput (essential oil)	16277004	1
Caelo	Cajeput (essential oil)	21111818	1

- 107 950 spectra from 582 *Apo-Ident* customers from a total of 30 672 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 *Cajeput (essential 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 (essential 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	80	0	35 755
Type B	0	160	0	78 918
Type C	0	8	1	107 950

The substance/substance group *Cajeput (essential 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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 96.2500 %)
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.

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	21.19
31605	31502	11.20	19.35

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Camphor oil 20%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30551-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20131112

Validation samples

A total of 222 872 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 oil 20%*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Camphor oil 20%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Camphor oil 20%	13369902	31347 [†]	20
Caelo	Camphor oil 20%	17083502	33494	40
Caelo	Camphor oil 20%	17083502	33495	40

- 78 978 spectra from a total of 1828 batches from further 350 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.

- 53 spectra from 30 *Apo-Ident* customers from 17 batches from the substance/substance group *Camphor oil 20%*.

Supplier	Substance	Batch	Spectra
Caelo	Camphor oil 20%	12122502	6

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*.

continued from previous page

Supplier	Substance	Batch	Spectra
Caelo	Camphor oil 20%	9250001	2
Phönix	Camphor oil 20%	13039603	1
Caelo	Camphor oil 20%	13039603	1
Caelo	Camphor oil 20%	12261203	2
Caelo	Camphor oil 20%	1226103	1
Sanacorp	Camphor oil 20%	13039603	1
Caelo	Camphor oil 20%	13369902	4
ahd/lamotte	Camphor oil 20%	133699902	1
Caelo	Camphor oil 20%	14028202	2
Caelo	Camphor oil 20%	14147303	1
Caelo	Camphor oil 20%	15056907	11
Caelo	Camphor oil 20%	15246805	2
gehe	Camphor oil 20%	15246805	1
Caelo	Camphor oil 20%	15246809	7
Caelo	Camphor oil 20%	15056906	1
Noweda	Camphor oil 20%	14147303	1
Caelo	Camphor oil 20%	16085301	1
Caelo	Camphor oil 20%	16316101	2
Phoenix	Camphor oil 20%	16316101	1
Caelo	Camphor oil 20%	17083502	2
Caelo	Camphor oil 20%	17301902	2

- 107 906 spectra from 582 *Apo-Ident* customers from a total of 30 663 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 *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	80	0	35 755
Type B	0	100	0	78 978
Type C	0	52	1	107 906

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6451 %)	98.1132 % (> 92.4528 %)

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.

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	29.05
31347	31154	2.20	28.50

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Camphor ointment
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	32515-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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 222 872 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.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 40 spectra of 1 reference samples from the substance/substance group *Camphor ointment*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Camphor ointment	180955	34159	40

- 79 038 spectra from a total of 1829 batches from further 350 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*.
- 107 959 spectra from 582 *Apo-Ident* customers from a total of 30 680 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](#).

*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 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	35 755
Type B	0	40	0	79 038
Type C	0	0	0	107 959

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9690 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6449 %)	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.

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	21.98
33224	32515	7.82	27.04

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Camphor spirit
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30937-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Euro OTC	Camphor spirit	1506006	31700	40	20150625*
Euro OTC	Camphor spirit	1506007	31701	40	20150625*
Caelo	Camphor spirit	16039501	32307	40	20160229

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 210 spectra of 5 reference samples from the substance/substance group *Camphor spirit*. These samples are listed above in the [calibration samples](#) section.
- 35 625 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Camphor spirit*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Camphor spirit	1506006	31700 [†]	20
Euro OTC	Camphor spirit	1506007	31701 [†]	20
Caelo	Camphor spirit	170923	33327	40
Caelo	Camphor spirit	182721	34328	40

- 78 958 spectra from a total of 1826 batches from further 350 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.

*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.

[†]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*.

- 85 spectra from 49 *Apo-Ident* customers from 41 batches from the substance/substance group *Camphor spirit*.

Supplier	Substance	Batch	Spectra
Caelo	Camphor spirit	11347401	1
Euro OTC	Camphor spirit	1108022-01	1
Euro OTC	Camphor spirit	19071208	1
Anzag ek:13.14EUR 14.08.12	Camphor spirit	11347401	1
Euro OTC	Camphor spirit	1108022-02	1
Caelo	Camphor spirit	22101201	1
Euro OTC	Camphor spirit	1210028-01	6
Sanacorp	Camphor spirit	1210026-01	1
Caleo/ Anzag	Camphor spirit	11347401	1
Euro OTC	Camphor spirit	110022-02	1
Caelo	Camphor spirit	12196803	4
Euro OCT	Camphor spirit	1210028-01	1
Caelo	Camphor spirit		1
Caelo	Camphor spirit	10058403	1
Euro OTC	Camphor spirit	121028-01	1
ANZAG	Camphor spirit	121002801	1
Caelo	Camphor spirit	12196804	1
Spreewälder/AHD	Camphor spirit	1301024-02	1
Euro OTC	Camphor spirit	1301024-02	2
Euro OTC	Camphor spirit	1307039-01	4
Caelo	Camphor spirit	30101309	1
Phoenix 03.12.12	Camphor spirit	1307039-01	1
GEHE	Camphor spirit	1301024-02	1
SprewälderArzneimittel ...	Camphor spirit	702110	1
Euro OTC	Camphor spirit	1307040-01	1
Euro OTC	Camphor spirit	1307040	1
Euro OTC	Camphor spirit	1405029-01	4
Caelo	Camphor spirit	13354204	2
Caelo	Camphor spirit	5031507	1
Eu Rho	Camphor spirit	1405029-01	1
Euro OTC	Camphor spirit	1405030-01	3
PKH GmbH	Camphor spirit	1405030-01	1
Euro OTC	Camphor spirit	1405030	1
Euro OTC	Camphor spirit	140503010	1
Caelo	Camphor spirit	13354206	1
Caelo	Camphor spirit	62143436	1
Caelo	Camphor spirit	10514C	1
Caelo	Camphor spirit	13354210	1
Caelo	Camphor spirit	16039501	1
Caelo	Camphor spirit	16039505	2
Caelo	Camphor spirit	16141101	1
Caelo	Camphor spirit	16141105	3
Eigen	Camphor spirit	5016E-02319	1
Euro OTC	Camphor spirit	1506006-01	6
gepepharm/Gehe	Camphor spirit	17092303	1
Caelo	Camphor spirit	17092302	3
Caelo	Camphor spirit	17092303	1
Fagron	Camphor spirit	17092303	1
Caelo	Camphor spirit	17092305	4
Caelo	Camphor spirit	17318502	3
Caelo	Camphor spirit	17318506	2

- 107874 spectra from 582 *Apo-Ident* customers from a total of 30640 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 *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	210	0	35 625
Type B	0	113	7	78 958
Type C	0	79	6	107 874

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 % (> 99.9706 %)	100.0000 % (> 97.1429 %)
Type B	100.0000 % (> 99.9689 %)	94.1667 % (> 91.6667 %)
Type C	100.0000 % (> 99.6450 %)	92.9412 % (> 89.4118 %)

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.

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
31389	31389	0.00	100.19
31700	31700	0.00	95.77
31701	31701	0.00	98.33
32307	31389	5.81	101.00
30937	31700	5.51	94.41

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Caraway oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30876-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Fagron	Caraway oil	12J22-N03	30876	39	20121025
Caelo	Caraway oil	12043508	31024	40	AR-14-FG-012307-01
Caelo	Caraway oil	14166811	31666	40	20140604

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 119 spectra of 3 reference samples from the substance/substance group *Caraway oil*. These samples are listed above in the [calibration samples](#) section.
- 35 716 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Caraway oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Caraway oil	14166811	31666 [†]	20
Caelo	Caraway oil	16252906	33252	40
Caelo	Caraway oil	181649	34229	40

- 78 978 spectra from a total of 1827 batches from further 350 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 86 *Apo-Ident* customers from 80 batches from the substance/substance group *Caraway oil*.

Supplier	Substance	Batch	Spectra
Fagron	Caraway oil	11A19-N08	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
Fagron	Caraway oil	11/13-N03	2
Bombastus	Caraway oil	270424	3
Caelo	Caraway oil	10319115	2
Caelo	Caraway oil	28091205	1
Caelo	Caraway oil	10319117	1
Caelo	Caraway oil	10319118	4
Bombastus	Caraway oil	268955	1
Caelo	Caraway oil	12043503	4
	Caraway oil	81816288	1
Caelo	Caraway oil	10319120	2
Klenk	Caraway oil	274361	1
Caelo	Caraway oil	19121207	1
Fagron	Caraway oil	11L13-N03	2
Caelo	Caraway oil	12043507	3
Phönix	Caraway oil	12J22-N03	1
Caelo	Caraway oil	12013508	1
Caelo	Caraway oil	22051306	1
Caelo	Caraway oil	10319116	1
Fagron	Caraway oil	13c08-N08	1
Bombastus	Caraway oil	276856	3
Caelo	Caraway oil	12043513	8
Bombastus	Caraway oil	274361	1
Phönix	Caraway oil	276856	1
Fagron	Caraway oil	12J2-N03	1
Caelo	Caraway oil	12043508	3
Fagron	Caraway oil	13C08-N03	3
Caelo	Caraway oil	12043511	8
Caelo	Caraway oil	17101301	1
Bombastus	Caraway oil	280523	1
Caelo	Caraway oil	10319108	1
Phönix	Caraway oil	12043511	1
Caesar/Noweda	Caraway oil	712Q-01968	2
Caelo	Caraway oil	12043512	1
Bombastus	Caraway oil	272320	1
Caelo	Caraway oil	12043502	1
Caelo	Caraway oil	12043516	1
Fagron	Caraway oil	12J22-N03	1
Bombastus	Caraway oil	284758	3
Caelo	Caraway oil	12043518	1
Schubert	Caraway oil	1031E0-801	1
Caelo	Caraway oil	5091402	1
Caelo	Caraway oil	6091401	1
Fagron	Caraway oil	13E06-N13	1
Caelo	Caraway oil	14166802	4
Bombastus	Caraway oil	287725	1
Caelo	Caraway oil	14166803	3
Caelo	Caraway oil	14166807	1
Fagron	Caraway oil	287725	1
Caelo	Caraway oil	14166810	3
Caelo	Caraway oil	14166806	2
Bombastus	Caraway oil	290759	1
Caelo	Caraway oil	2031504	1
Caelo	Caraway oil	27041503	1
Caelo	Caraway oil	14166811	1
Bombastus	Caraway oil	291934	5
Fagron	Caraway oil	6999440	1
Gehe	Caraway oil	14166811	1
Caelo	Caraway oil	15085704	4
Bombastus	Caraway oil	295572	1
Bombastus	Caraway oil	287889	1

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Supplier	Substance	Batch	Spectra
Bombastus	Caraway oil	295058	5
Caelo	Caraway oil	14166812	1
Caelo	Caraway oil	15085706	2
Caelo	Caraway oil	15085707	4
Caelo	Caraway oil	1508506	1
Caelo	Caraway oil	15085703	1
Bombastus	Caraway oil	297505	3
Caelo	Caraway oil	15085709	2
Caelo	Caraway oil	15085710	5
Bombastus	Caraway oil	300797	5
Caelo	Caraway oil	300797	1
Caelo	Caraway oil	15085714	1
Bombastus	Caraway oil	299609	1
Caelo	Caraway oil	15085713	1
Caelo	Caraway oil	1041705	1
Bombastus	Caraway oil	303305	5
Caelo	Caraway oil	16252903	4
Caelo	Caraway oil	16252902	1
Caelo	Caraway oil	297505	1
Caelo	Caraway oil	16252906	3
Caelo	Caraway oil	16252917	1
Bombastus	Caraway oil	17001363	2
Bombastus	Caraway oil	308902	1
Bombastus	Caraway oil	308593	1
Caelo/Gehe	Caraway oil	16252909	1
Caelo	Caraway oil	18164901	1
Caelo	Caraway oil	2011903	1

- 107 790 spectra from 582 *Apo-Ident* customers from a total of 30 601 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 *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	119	0	35 716
Type B	0	100	0	78 978
Type C	0	163	6	107 790

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 % (> 99.9707 %)	100.0000 % (> 94.9580 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	96.4497 % (> 94.6746 %)

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.

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	7.69	32.69
31024	31024	0.00	35.54
31666	31024	10.96	33.16

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Castor oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30432-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Castor oil; Oleum ricini

Special notes

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

no information

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>
Appendix F	Addition to the second-stage models

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.

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*:

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
Euro OTC	Castor oil	1509003	31739	45	20150918*
Caelo	Castor oil	14304807	31751	40	20141106
Fagron	Castor oil	15D02-B02-314240	31824	40	20150410
Euro OTC	Castor oil	1512024	31845	40	20160111*
Fagron	Castor oil	16J12-B01-328159	32943	40	20161121

Validation samples

A total of 222872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 285 spectra of 7 reference samples from the substance/substance group *Castor oil*. These samples are listed above in the [calibration samples](#) section.
- 35550 spectra from a total of 840 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 755 spectra of 21 reference samples from the substance/substance group *Castor oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Castor oil	1109001-01	30608	40
Caelo	Castor oil	12149306	30776	40
Euro OTC	Castor oil	1509003	31739 [†]	15
Caelo	Castor oil	14304807	31751 [†]	20
Fagron	Castor oil	15D02-B02-314240	31824 [†]	20
Euro OTC	Castor oil	1512024	31845 [†]	20
Euro OTC	Castor oil	1604019	32192	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
Euro OTC	Castor oil	1611005	32858	40
Caelo	Castor oil	170272	33071	40
Caelo	Castor oil	163146	33072	40
Caelo	Castor oil	170271	33073	40
Euro OTC	Castor oil	1705035	33596	40
Caelo	Castor oil	171899	33678	40
Euro OTC	Castor oil	1801007	34004	40
Euro OTC	Castor oil	1807003-01	34211	40

*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.

[†]These spectra were recorded from material of the same package as the corresponding calibration spectra (*Type A*).

- 78 323 spectra from a total of 1809 batches from further 350 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.

- 1799 spectra from 369 *Apo-Ident* customers from 386 batches from the substance/substance group *Castor oil*.

Supplier	Substance	Batch	Spectra
Henry Lamotte/AHD	Castor oil	1000001128	2
Noweda	Castor oil	273390	1
Caelo	Castor oil	11359508	1
Caelo	Castor oil	12071107	1
Caelo	Castor oil	272591	1
Fagron	Castor oil	12H29-N04	2
Geo-Chem/sanacorp	Castor oil	1206039-01	1
Bombastus	Castor oil	273390	5
Euro OTC	Castor oil	1206039-01	2
Euro OTC	Castor oil	1202041-01	1
Caelo	Castor oil	12114605	10
Lamotte	Castor oil	5188401	1
Anzag	Castor oil	5334001	4
Caelo	Castor oil	269565	1
Noweda / Henry Lamotte	Castor oil	5280301	1
Bombastus	Castor oil	273389	1
HenryLamotte/Phoenix	Castor oil	5280301	1
Bombastus	Castor oil	271753	2
Fagron	Castor oil	12D04-N09	2
Noweda / Henry Lamotte	Castor oil	5334001	2
Otto Fischar GmbH	Castor oil	5334001	1
Henry Lamotte	Castor oil	5334001	1
Caelo	Castor oil	12149306	4
Lamotte	Castor oil	5334001	2
Bombastus	Castor oil	273882	9
Caelo	Castor oil	11359507	1
Caelo	Castor oil	5334001	1
Caelo	Castor oil	12114603	2
Sanacorp	Castor oil	12149306	1
Lamotte / Gehe	Castor oil	5334001	1
Caelo	Castor oil	12270106	8
Caelo	Castor oil	12114606	2
Henry Lamotte Oils/Gehe	Castor oil	5334001	1
Caelo	Castor oil	30031302	1
Bombastus	Castor oil	275938	12
Geo-Chem/sanacorp	Castor oil	1212008-01	1
Euro OTC	Castor oil	1513A03553	2
Caelo	Castor oil	12270111	5
Caelo	Castor oil	13043601	10
Sanacorp	Castor oil	12270111	1

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Hence, these spectra are not independent and are not of *Type B*.

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Supplier	Substance	Batch	Spectra
Bombastus	Castor oil	275937	10
Caelo	Castor oil	1206039-01	1
Euro OTC	Castor oil	1212008-02	8
Euro OTC	Castor oil	121008-01	1
Phönix	Castor oil	123384	1
Noweda / Henry Lamotte	Castor oil	123384	2
Caelo	Castor oil	123384	2
Jenne,Lamotte	Castor oil	123384	1
Caelo	Castor oil	11359502	1
Phönix	Castor oil	13043601	1
Lamotte / Gehe	Castor oil	123384	2
Caelo	Castor oil	12270108	3
Caelo	Castor oil	22051303	1
Fagron	Castor oil	13C08-N08	2
Gehe	Castor oil	275937	1
Phönix	Castor oil	1212008-01	1
GEHE	Castor oil	11359507	1
Caelo	Castor oil	13096304	9
Lamotte/N/04.06.13/PZN:...	Castor oil	123384	1
Henry Lamotte Oils	Castor oil	5334001	1
Henry Lamotte/Sanacorp	Castor oil	123384	3
Euro OTC	Castor oil	126279	1
Caelo	Castor oil	12318204	1
Cealo	Castor oil	13096304	1
phö	Castor oil	5450801	1
Caelo	Castor oil	275938	3
Fagron	Castor oil		1
lamotte	Castor oil	5450801	1
Bombastus	Castor oil	273881	2
Bombastus	Castor oil	278661	13
Caelo	Castor oil	13134603	3
Euro OTC	Castor oil	1304013-01	8
Caelo	Castor oil	13134604	20
Gehe	Castor oil	1304013-01	2
Euro OTC	Castor oil	13071301	2
Fagron	Castor oil	13D29-N01	1
Lamotte	Castor oil	5450801	4
Fargon /12.07.2013 / No...	Castor oil	13D29-N01	1
lamotte/anzag	Castor oil	5334001	1
Caelo	Castor oil	12318207	1
Caelo	Castor oil	22071302	1
Bombastus	Castor oil	270580	1
Henry Lamotte / Noweda	Castor oil	5450801	2
Euro OTC	Castor oil	1212008-01	3
Caelo	Castor oil	1/AKD1	1
Henry Lamotte / Noweda	Castor oil	123384	1
Ph.Eur.	Castor oil	6861795	1
Lamotte Phönix	Castor oil	5450801	2
Euro OTC	Castor oil	3313U-03553	1
Bombastus	Castor oil	280791	17
Henry Lamotte/Ebert	Castor oil	5450801	3
Euro OTC	Castor oil	3413U03553	1
Caelo	Castor oil	1913A-02009	1
Bombastus	Castor oil	278660	3
Euro OTC	Castor oil	3513I-03553	1
Eurho / Sanacorp	Castor oil	121008-02	1
Henry Lamotte Oils/Gehe	Castor oil	123384	1
Caelo	Castor oil	5450801	4
Henry Lamotte Oils GmbH	Castor oil	5450801	1
Caelo	Castor oil	1304013-01	1

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Supplier	Substance	Batch	Spectra
Noweda	Castor oil	1304013-01	1
Bombastus	Castor oil	60082103	3
Euro OTC	Castor oil	1304013-02	11
Caelo	Castor oil	13065405	18
Caelo	Castor oil	13065401	1
Henry Lamotte	Castor oil	5450801	1
Bombastus	Castor oil	281943	15
Lamotte/L3	Castor oil	5450801	1
Caelo	Castor oil	278661	2
Caelo	Castor oil	13134609	14
Caelo	Castor oil	13G29-B01	1
EuRho/Geilenkirchen	Castor oil	1304013-02	1
Henry Lamotte Oils GmbH...	Castor oil	123384	1
Fagron	Castor oil	13G29-B01-285422	1
EuRho	Castor oil	1206039-02	1
Sanacorp	Castor oil	128224	1
Euro OTC	Castor oil	1112013C	1
Caelo	Castor oil	13134603-3417310103	1
Caelo	Castor oil	13134608	6
Caelo	Castor oil	13134608-3438311151	1
Sanacorp	Castor oil	281943	1
Henry Lamotte Oils, Gehe	Castor oil	5450801	1
Noweda/Henry Lamotte	Castor oil	123812	4
Euro OTC	Castor oil	1308019-01	9
Sanacorp	Castor oil	123812	3
Caelo	Castor oil	12121307	1
Bombastus	Castor oil	283620	7
Henry Lamotte Oils GmbH...	Castor oil	123812	2
Bombastu-Werke AG/Gehe	Castor oil	278660	1
Gehe	Castor oil	283620	3
Fagron	Castor oil	13134609	1
Henry Lamotte/Gehe	Castor oil	5450801	2
EuRho	Castor oil	1304013-02	1
Bombastus	Castor oil	281944	7
Bombastu-Werke AG/Gehe	Castor oil	281944	1
Phoenix/Lamotte	Castor oil	123812	2
Lamotte	Castor oil	123812	2
Noweda	Castor oil	1308019-01	1
Caelo	Castor oil	1308019-02	1
Fagron	Castor oil	13065405	1
Euro OTC	Castor oil	128224	1
Fagron	Castor oil	5450801	1
Caelo	Castor oil	13196309	8
Caelo	Castor oil	10021402	1
Caelo	Castor oil	131344604	1
Bom	Castor oil	280791	1
Euro OTC	Castor oil	130801902	1
Henry Lamotte Oils/Noweda	Castor oil	123812	1
Euro OTC	Castor oil	130401313-02	1
Euro OTC	Castor oil	1014A03553	1
Euro OTC	Castor oil	1308019-02	3
Anzag 04.03.2014	Castor oil	1308019-02	1
Henry Lamotte	Castor oil	123812	1
H.Lamotte/Noweda	Castor oil	123812	1
Phönix	Castor oil	1308019-01	1
Lamotte/Anzag	Castor oil	123812	1
Caelo	Castor oil	13196313	12
Bombastus	Castor oil	284505	6
Henry Lamotte/Noweda	Castor oil	123812	1
Caelo	Castor oil	124189	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Castor oil	13196308	1
Bombastus	Castor oil	285801	11
Caelo	Castor oil	1319609	1
Fagron	Castor oil	13/27-B01-287857	1
Stumpf/Henry Lamotte	Castor oil	124189	4
Caelo	Castor oil	26041403	1
Gehe 05.03.2014	Castor oil	278660	1
Fagron	Castor oil	127170	1
Lamotte/Sanacorp	Castor oil	123812	1
Lamotte/Sanacorp	Castor oil	124189	3
Henry Lamotte Oils GmbH	Castor oil	123812	1
Caelo	Castor oil	13174505	2
Henry Lamotte Oils GmbH...	Castor oil	124189	1
	Castor oil	13341606	1
Lamotte	Castor oil	124189	2
Caelo	Castor oil	13357506	1
Caelo	Castor oil	14020105	3
Caelo	Castor oil	6051411	1
Caelo	Castor oil	284505	1
lamotte/Gehe	Castor oil	124189	2
Bombastus	Castor oil	287167	10
Caelo	Castor oil	13I27-B01-287858	1
Fagron	Castor oil	13G29B01	1
Caelo	Castor oil	13196308	1
Caelo	Castor oil	13174507	1
Bombastus	Castor oil	288126	13
Caelo	Castor oil	287167	2
Fagron	Castor oil	13I27-B01-287858	1
	Castor oil	288126	1
Euro OTC	Castor oil	1403024-01	9
Euro OTC	Castor oil	15072014B	1
Henry Lamotte/Sanacorp	Castor oil	124189	1
Bombastus	Castor oil	4958	2
Euro OTC	Castor oil	1403024-02	8
Noweda	Castor oil	13196313	1
Caelo	Castor oil	1403024-02	2
Bombastus	Castor oil	285757	3
Sanacorp	Castor oil	14020105	1
Caelo	Castor oil	14058810	2
GEHE 17.07.2014	Castor oil	285757	1
Caelo	Castor oil	14020109	6
Caelo	Castor oil	14020104	2
Euro OTC	Castor oil	290714b	1
Bombastus	Castor oil	290714a	1
Lamotte/Alliance	Castor oil	5450801	1
Bombasus/ Anzag	Castor oil	288126	1
Fagron	Castor oil	14c17-b01-293832	1
Fagron	Castor oil	14C17-B01	3
Fagron	Castor oil	13I27-B01-287857	1
Fagron	Castor oil	14C17-B01-293834	1
AHD/Caealo 15.08.14	Castor oil	14020109	1
Caelo	Castor oil	14181102	1
Caelo	Castor oil	14020108	11
Sanacorp	Castor oil	130260	1
lamotte/Gehe	Castor oil	124637	1
Caelo	Castor oil	14058809	1
Bombastus	Castor oil	288639	16
Caelo	Castor oil	14199501	12
Caelo	Castor oil	14199603	4
Caelo	Castor oil	124637	1

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Supplier	Substance	Batch	Spectra
Bombastus	Castor oil	288638	6
Fagron	Castor oil	14020108	1
Caelo	Castor oil	P161/14	1
Euro OTC	Castor oil	140302401	1
Phönix	Castor oil	1403024-01	1
Caelo	Castor oil	14181103	6
Caelo	Castor oil	14199502	3
Defektur	Castor oil	5052	3
Henry Lamotte Oils/GEHE	Castor oil	124637	1
Caelo	Castor oil	14199604	5
Caelo	Castor oil	288126	1
Caelo	Castor oil	24101402	1
Euro OTC	Castor oil	140705301	2
VDL;17.10.14.3,96EUR	Castor oil	288639	1
Lamotte/Alliance	Castor oil	124637	2
Caelo	Castor oil	1420106	1
Caelo	Castor oil	14058808	1
Caelo	Castor oil	14115405	1
AHD	Castor oil	14199604	2
Lamotte/Sanacorp	Castor oil	125162	1
H.Lamotte/Noweda	Castor oil	125162	2
lamotte Phoenix	Castor oil	288721	1
Bombastus	Castor oil	290213	16
Caelo	Castor oil	6861795	1
Euro OTC	Castor oil	1407053-02	9
Caelo	Castor oil	14199605	7
Eur	Castor oil	1407053-01	1
Lamotte/gehe	Castor oil	1241892	1
Hedinger / Noweda	Castor oil	1407053-02	3
Fagron	Castor oil	14C17-B01-293833	2
Noweda/Henry Lamotte	Castor oil	124637	1
AHD 27.11.14 EK 2,53	Castor oil	1407053-01	1
Caelo	Castor oil	14199609	8
Defektur	Castor oil	5196	1
Stumpf/Henry Lamotte	Castor oil	125162	1
Euro OTC	Castor oil	ChB120115	1
Defektur	Castor oil	5253	2
Cealo	Castor oil	14199609	1
Phoenix/ Henry Lamotte	Castor oil	125162	1
Bombastus	Castor oil	415Q-02009	1
Henry Lamotte/Noweda	Castor oil	124637	1
Euro OTC	Castor oil	2022015C	1
VDL	Castor oil	290213	1
Bombastus	Castor oil	290212	4
Ph.Eur.8.0	Castor oil	140705301	1
Fagron	Castor oil	14330601	1
Euro OTC	Castor oil	10022015D	1
Caelo	Castor oil	290212	6
Bombastus	Castor oil	291722	17
Lamotte / Noweda	Castor oil	125162	1
Sana 10.02.15 EK 2,57	Castor oil	1407053-02	1
Caelo	Castor oil	1407053-01	1
Euro OTC	Castor oil	140302402	1
Lamotte/gehe	Castor oil	125162	1
Gehe Kassel	Castor oil	288638	2
Caelo	Castor oil	18021505	1
Euro OTC	Castor oil	1407053-01	4
Henry Lamotte/Phoenix	Castor oil	125473	2
Noweda/Henry Lamotte	Castor oil	125473	1
Fagron	Castor oil	1407053-02	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Castor oil	1412006-01	5
Bombastus	Castor oil	91696	1
Defektur	Castor oil	5334	3
Caelo	Castor oil	14304806	1
Lamotte/Sanacorp	Castor oil	125473	2
Caelo	Castor oil	14330601	2
Euro OTC	Castor oil	141200601	1
Caelo	Castor oil	1412006-01	2
Euro OTC	Castor oil	60082103	1
Caelo	Castor oil	30031504	1
Euro OTC	Castor oil	31032015A	1
Euro OTC	Castor oil	1412006-02	12
Caelo	Castor oil	14330604	6
Bombastus	Castor oil	292409	12
Caelo	Castor oil	1412006-02	2
Anzag	Castor oil	292409	1
Caelo	Castor oil	14304807	1
Bombastus	Castor oil	1412006-01	1
Sanacorp;09,04.15; 3,33EUR	Castor oil	291722	1
Caelo	Castor oil	14330605	6
Euro/Noweda	Castor oil	1412006-02	1
Defektur	Castor oil	5408	2
Caelo	Castor oil	28051512	1
Bombastus	Castor oil	294668	14
Fagron	Castor oil	133085	1
Euro OTC	Castor oil	141200602	2
Caelo	Castor oil	292409	1
Henry Lamotte Oils/GEHE	Castor oil	5899201	1
Fagron	Castor oil	15A28-B07-304816	2
Noweda/Henry Lamotte	Castor oil	5899201	2
Gehe Kassel 06.06.2015	Castor oil	290212	1
Caelo	Castor oil	14304803	5
Henry Lamotte/Sanacorp	Castor oil	5899201	2
Caelo	Castor oil	14330606	10
Henry la Motte	Castor oil	125162	1
Henry la Motte	Castor oil	5899201	1
HenryLamotte/Anzag	Castor oil	2114I-02009	1
Henning/ Phoenix	Castor oil	5899201	2
Gehe	Castor oil	1412006/02	1
Rez	Castor oil	5519	2
Euro OTC	Castor oil	1504006-01	8
Caelo	Castor oil	14199602	1
Sanacorp	Castor oil	14330601	1
Caelo	Castor oil	4330605	1
Caelo	Castor oil	15145105	1
Caelo	Castor oil	294668	3
Bombastus	Castor oil	294667	6
lamotte/Phönix	Castor oil	5899201	1
Lamotte/gehe	Castor oil	125473	1
Hedinger/Sanacorp	Castor oil	290213	1
Caelo	Castor oil	15144302	7
Bombastus	Castor oil	295412	21
Caelo	Castor oil	1504006-02	3
Fagron	Castor oil	294668	1
Sanacorp	Castor oil	1504006-01	1
Euro OCT	Castor oil	14112006-02	1
Gehe	Castor oil	1412006-02	1
Euro OTC	Castor oil	1504006-02	5
Caelo	Castor oil	15145101	5
Caelo	Castor oil	5899201	1

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Supplier	Substance	Batch	Spectra
ACM	Castor oil	KNC0899J15	1
Caelo	Castor oil	15145106	1
EuRho / 11	Castor oil	1504006-02	2
Fagron	Castor oil	1504006-01	1
Caelo	Castor oil	1091505	1
Fagron	Castor oil	1528-B07-3048	1
Euro OTC	Castor oil	150400602	1
Caelo	Castor oil	15144304	6
Euro OTC	Castor oil	5581	1
Caelo	Castor oil	295412	2
Caelo	Castor oil	150400602	1
Henry Lamotte / Kehr	Castor oil	1000000714	1
EuRho	Castor oil	141-2006-02	1
Euro OTC	Castor oil	154006-02	1
Henry Lamotte Oils GmbH	Castor oil	1000000714	1
Henry Lamotte	Castor oil	1000000714	1
Caelo	Castor oil	15067306	1
Unisan	Castor oil	1504006-02	1
lamotte phönix	Castor oil	125162	1
Caelo	Castor oil	15144303	6
Fagron	Castor oil	15A28B07	1
Anzag/Henry Lamotte	Castor oil	1504006-02	1
VDL; 9.58EUR; 6.10.2015	Castor oil	294667	2
Henry Lamotte/Phoenix	Castor oil	1000000714	1
Henry Lamotte	Castor oil	1000001128	3
Caesar&Loretz/Caesar&Lo...	Castor oil	15144304	1
Bombastus	Castor oil	296751	15
Phönix Gotha	Castor oil	1509003-01	1
Henry Lamotte/Gehe	Castor oil	1000001128	1
AllianceHealthcare	Castor oil	15144304	1
Caelo	Castor oil	1509003-01	8
Euro OTC	Castor oil	1509003-01	22
Caelo	Castor oil	14144305	2
Caelo	Castor oil	294667	1
Fagron	Castor oil	14A28-B07-304816	1
Henry Lamotte oils GmbH...	Castor oil	1000001128	1
Henry Lamotte oils GmbH...	Castor oil	10000000714	1
Caelo	Castor oil	15/355/Ri	1
Caelo	Castor oil	1509003-001	1
Caelo	Castor oil	15253404	4
Caelo	Castor oil	296751	3
Euro OTC	Castor oil	1509003-02	19
Rondell Apotheke	Castor oil	15145101	1
Sanacorp	Castor oil	1509003-01	1
Caelo	Castor oil	15253403	1
Fagron	Castor oil	15A28-B07-304817	1
Caelo	Castor oil	15144305	2
sanacorp	Castor oil	15144302	2
Caelo	Castor oil	4614M-02009	1
EuRho	Castor oil	1509003-01	1
Sanacorp	Castor oil	15D02-Bo2-311714	1
Bombastus	Castor oil	29730	1
LaMotte / Phoenix	Castor oil	1000001128	3
Caelo	Castor oil	15144307	2
Bomastus	Castor oil	297429	5
Lamotte/Sanacorp	Castor oil	1000001128	2
Caelo	Castor oil	15012016	1
Euro OTC	Castor oil	150900301	1
Fagron	Castor oil	15A28-B07-304818	1
Lamotte/Phönix	Castor oil	1128	1

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	15392001	11
Bombastus	Castor oil	298699	26
Caelo	Castor oil	15383201	1
Bombastus	Castor oil	297430	10
Noweda/Henry Lamotte	Castor oil	1000001914	1
Caelo	Castor oil	20161102-3	1
Defektur	Castor oil	5775	1
Fagron	Castor oil	15D02-B02-311714	1
Caelo	Castor oil	15392002	2
Caelo	Castor oil	15392003	5
Castor/Phönix	Castor oil	1509003-02	1
Caelo	Castor oil	15145104	1
Fagron	Castor oil	15D02-B02-314240	1
Euro OTC	Castor oil	1512024-01	13
Caelo	Castor oil	16016206	4
Caelo	Castor oil	298698	1
Lamotte/Anzag	Castor oil	1000001914	2
Caelo	Castor oil	297430	1
Henry Lamotte	Castor oil	1000001914	5
Bombastus	Castor oil	297429	1
Caelo	Castor oil	16/081/R	1
H.Lamotte/Noweda	Castor oil	1000001914	1
Henry Lamotte/Sanacorp	Castor oil	1000001914	3
Bombastus	Castor oil	298698	4
Caelo	Castor oil	16016202	5
Otto Fischar	Castor oil	1000001914	1
Defektur Abfüllung	Castor oil	5945	1
Bombastus	Castor oil	300629	18
Euro OTC	Castor oil	1512024-02	14
Henry Lamotte/Phoenix	Castor oil	1000001914	3
Defektur Abfüllung	Castor oil	6001	2
Bombastus	Castor oil	268699	1
Fagron	Castor oil	15J15-B08	4
Caelo	Castor oil	300629	2
Fagron	Castor oil	15J15-B08-318730	1
Henry Lamotte/Noweda	Castor oil	1000001914	1
Alliance	Castor oil	300629	1
Caelo	Castor oil	15392007	4
Bombastus	Castor oil	301591	15
Bombastus	Castor oil	300628	1
Caelo	Castor oil	15399806	1
Henry Lamotte Oils GmbH	Castor oil	1000001914	1
Fagron	Castor oil	15J15-B08-316099	1
Euro OTC	Castor oil	1220616	1
Caelo	Castor oil	16017102	1
EuRho	Castor oil	1512024-01	1
Euro OTC	Castor oil	1604019-01	18
Caelo	Castor oil	301591	4
Bombastus	Castor oil	301590	3
Alliance Healthcare	Castor oil	1512024-02	1
Euro OTC	Castor oil	1512004-02	1
Bomastus-Werke/Phönix	Castor oil	300629	1
Caelo	Castor oil	16016203	7
Lamotte/Anzag	Castor oil	1000002384	1
Henry Lamotte/Noewda	Castor oil	100000238	1
Caelo	Castor oil	1604019-01	1
Lamotte/Sanacorp	Castor oil	1000002384	2
Euro OTC	Castor oil	151204-02	1
Henry Lamotte Oils GmbH	Castor oil	1000002384	1
Bombastus	Castor oil	301587	2

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Supplier	Substance	Batch	Spectra
Bombastus	Castor oil	110816-3	1
Caelo	Castor oil	15J15-B08-318730	1
Caelo	Castor oil	151202402	2
Defektur Abfüllung	Castor oil	6081	1
Caelo	Castor oil	301587	1
Fagron	Castor oil	301591	1
Bombastus	Castor oil	104356	1
Henry Lamotte	Castor oil	1000002766	3
Fagron	Castor oil	16C29-B01	1
Caelo	Castor oil	16016207	4
LaMotte / Phoenix	Castor oil	1000002766	2
Henry Lamotte/ Phönix	Castor oil	1000003564	1
Caelo	Castor oil	16167203	1
Caelo	Castor oil	1000002384	1
Henry Lamotte	Castor oil	1000002384	2
Lamotte/Gehe	Castor oil	1914	2
Anzag	Castor oil	16016207	1
Henry Lamotte/Noweda	Castor oil	1000002384	1
Bombastus	Castor oil	161101R/301591	1
Euro OTC	Castor oil	1512024	1
Defektur Abfüllung	Castor oil	6189	1
Caelo	Castor oil	303857	3
Bombastus	Castor oil	303858	14
LaMotte / Phoenix	Castor oil	1000002384	1
ALH	Castor oil	1000002766	1
Bombastus	Castor oil	303857	2
Lamotte/Krieger	Castor oil	1000001128	1
Caelo	Castor oil	16102801	9
Lamotte/Phönix	Castor oil	1000003564	7
Alte Apotheke	Castor oil	1000002384	1
Caelo	Castor oil	1000003564	5
Caelo	Castor oil	16102802	5
Defektur Abfüllung	Castor oil	6260	1
Fagron	Castor oil	16H05-B03-326864	7
Euro OTC	Castor oil	303858	1
13.10.2016 Phoenix 3,77EUR	Castor oil	1512024-02	1
Castor Pruducts Company...	Castor oil	1407053-02	1
Caesar & Loretz GmbH	Castor oil	16102802	1
Bombastus	Castor oil	305229	5
Caesar & Loretz GmbH	Castor oil	16236202	1
Calo/Sanacorp	Castor oil	16102802	2
Henry Lamotte	Castor oil	1000003564	4
Caelo	Castor oil	16236205	1
Bombastus	Castor oil	305230	17
Noweda	Castor oil	1000003564	1
Castor Pruducts Company...	Castor oil	1512024-01	1
Caelo	Castor oil	1604019-02	1
Caesar & Loretz GmbH	Castor oil	16273105	1
Sanacorp, 9,48EUR, 17.1.17	Castor oil	301587	1
Defektur Abfüllung	Castor oil	6333	1
Fagron	Castor oil	16F07-B06-324379	3
Fagron	Castor oil	126F07-B06-324379	1
Lamotte/Sanacorp	Castor oil	1000004198	1
Henry Lamotte/ Phönix	Castor oil	1000004198	1
Now/Cael030.12.16 EUR2,25	Castor oil	16236202	1
Anzag	Castor oil	305230	1
Euro OTC	Castor oil	1604019-02	4
Euro OTC	Castor oil	1611005-01	9
Bombastus	Castor oil	3888	1
lamotte/ Phoenix	Castor oil	1000003564	1

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Supplier	Substance	Batch	Spectra
Euro/Noweda	Castor oil	1604019-02	1
Defektur Abfüllung	Castor oil	6414	1
Castor Pruducts Company...	Castor oil	1512024-02	1
Henry Lamotte Oils/ San...	Castor oil	16102804	1
phönix	Castor oil	305230	2
Fagron	Castor oil	16F07-B06	1
Bombastus	Castor oil	307457	11
ALH	Castor oil	1000004198	2
Bombastus	Castor oil	307456	9
lamotte/ Phoenix	Castor oil	1000004198	1
Henry Lamotte	Castor oil	1000004198	1
Defektur	Castor oil	6442	1
Allianz Healthcare	Castor oil	16102804	1
Hubertus Apotheke	Castor oil	16J12-B01-328159	1
Euro OTC	Castor oil	161100501	2
Bombastus	Castor oil	6861789	1
Euro OTC	Castor oil	160401902	1
Gehe	Castor oil	305229	1
Caelo	Castor oil	307457	3
Fagron	Castor oil	16J12-B01-328159	2
Fagron	Castor oil	16H05-B03	3
Caelo	Castor oil	16200007	6
Lamotte/Phönix	Castor oil	1000004198	2
Caelo	Castor oil	16273101	1
Caelo	Castor oil	16314603	1
Lamotte/Gehe	Castor oil	4198	1
Caelo	Castor oil	8041711	1
Fagron	Castor oil	16h05-b03-326864	2
Caelo	Castor oil	100004198	1
lamotte	Castor oil	1000004198	1
Ebert-Jacobi	Castor oil	6861795	1
Caelo	Castor oil	17027201	1
Caelo	Castor oil	16314602	1
Noweda/ Bombatus	Castor oil	305230	1
Caelo	Castor oil	305230	2
Finteler Apotheke	Castor oil	1611005-01	1
Euro/Noweda	Castor oil	1604019-01	2
Caelo	Castor oil	1611005-012x	1
Lamotte Jenne	Castor oil	1000004554	2
Henry Lamotte	Castor oil	2X1000004554	1
Fagron	Castor oil	16J12-B01	1
Bombastus	Castor oil	308825	18
Euro OTC	Castor oil	1611005-02	3
lamotte/ Phoenix	Castor oil	1000004554	1
Noweda / H. Lamotte	Castor oil	1000004198	1
Fiebig	Castor oil	1000004554	1
Caelo	Castor oil	1620007	1
Caelo	Castor oil	16102804	2
Caelo	Castor oil	17027206	1
Caelo	Castor oil	3071713	1
H.Lamotte	Castor oil	1000004554	2
Gehe/Lamotte	Castor oil	1000004198	1
Caelo	Castor oil	1000004554	3
Spinnrad	Castor oil	31730112	1
Caelo	Castor oil	1713803	1
Bomastus-Werke AG	Castor oil	307456	1
Noweda/Euro	Castor oil	1611005-02	1
Kehr	Castor oil	308824	5
Euro OTC	Castor oil	135277	1
Caesar & Loretz GmbH	Castor oil	17113803	1

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	17107401	1
Caelo	Castor oil	17113803	10
Fagron	Castor oil	16J12-B328159	1
Sanacorp	Castor oil	307459	1
Caelo	Castor oil	16314604	2
Caelo	Castor oil	17107503	2
Caelo	Castor oil	17107403	3
Caelo	Castor oil	16091703	1
Henry Lamotte/Noweda	Castor oil	1000004554	3
Caelo	Castor oil	308824	1
Caelo	Castor oil	17107504	1
Caelo	Castor oil	135277	1
Caelo	Castor oil	17107501	1
Caelo	Castor oil	308825	3
Gehe/Lamotte	Castor oil	1000004554	1
Sanacorp	Castor oil	17107403	1
Caelo	Castor oil	17113802	2
Henry Lamotte Oils/Ebert	Castor oil	1000004554	1
Bombastus	Castor oil	308824	2
Fagron	Castor oil	1705035-01	1
Gehe/Lamotte	Castor oil	1000005199	1
Euro OTC	Castor oil	1705035-01	12
Bombastus	Castor oil	30825	1
GEHE	Castor oil	17107506	1
Caelo	Castor oil	17107407	7
Caelo	Castor oil	17107506	1
Caelo	Castor oil	1611005-01	1
Sanacorp	Castor oil	308824	1
Caelo	Castor oil	3791723	1
Euro OTC	Castor oil	170503-01	1
Caelo	Castor oil	18121704	1
Bombastus	Castor oil	311684	10
Lamotte	Castor oil	10000045545455	1
Lamotte/Phönix	Castor oil	1000005818	2
Lamotte/Phönix	Castor oil	1000005199	1
Noweda	Castor oil	1000004554	1
Bombastus	Castor oil	17001711	7
Henry Lamotte/Noewda	Castor oil	1000004198	1
Caelo	Castor oil	1705035-01	2
Caelo	Castor oil	17189909	1
Caelo	Castor oil	17251901	9
Henry la Motte	Castor oil	1000005818	1
Bombastus	Castor oil	180306R/311684	1
Caelo	Castor oil	17001711	2
Caelo	Castor oil	Fertigarzneimittel	1
Caelo	Castor oil	1000005818	4
Bombastus	Castor oil	17002279	2
Bombastus	Castor oil	18001340	13
Caelo	Castor oil	1140318/17113803	1
Lamotte/Noweda	Castor oil	1000005199	1
Phönix/Fischar	Castor oil	17002280	1
Lamotte Jenne	Castor oil	1000005818	1
Delta	Castor oil	17251906	1
Caelo	Castor oil	13041803	1
Caelo	Castor oil	30041808	1
Kehr	Castor oil	311683	3
Caelo	Castor oil	8003726001	4
Bombastus	Castor oil	17002280	2
Sanacorp	Castor oil	17002279	1
Allianz	Castor oil	18001340	1

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Supplier	Substance	Batch	Spectra
Caelo	Castor oil	17307702	2
Fagron	Castor oil	17H22-B01-341047	1
AHD	Castor oil	1000005818	1
Caelo	Castor oil	9061817	1
Bombastus	Castor oil	17001710	2
Lamotte	Castor oil	8003726001	2
Kehr/Henry Lamotte	Castor oil	1000005818	1
Caelo	Castor oil	17002280	2
Caelo	Castor oil	18033501	11
Phoenix	Castor oil	1000006447	1
Caelo	Castor oil	17359306	1
Euro OTC	Castor oil	1801007-01	4
Caelo	Castor oil	17251906	1
Fagron	Castor oil	1801007-01	1
Lamotte / Gehe	Castor oil	8003726001	1
Lamotte / Sanacorp	Castor oil	10000051995648	1
Caelo	Castor oil	19091802	1
Euro OTC	Castor oil	18033501	1
Caelo	Castor oil	311683	1
Bombastus	Castor oil	18001339	1
Bombastus	Castor oil	18003729	1
Bombastus	Castor oil	18003730	3
Kehr	Castor oil	18001339	1
Caelo	Castor oil	5121809	1
Caelo	Castor oil	18154904	1
Lamotte/Gehe	Castor oil	8003726002	1
Euro OTC	Castor oil	180100701	1
Caelo	Castor oil	18114502	2
Caelo	Castor oil	18238102	1

- 106 160 spectra from 582 *Apo-Ident* customers from a total of 30 324 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 *Castor 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 *Castor 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	285	0	35 550
Type B	0	755	0	78 323
Type C	0	1796	3	106 067

The substance/substance group *Castor 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 % (> 99.9705 %)	100.0000 % (> 97.8947 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.2053 %)
Type C	100.0000 % (> 99.6450 %)	99.8332 % (> 99.6665 %)

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.

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
30741	31343	2.05	47.74
31343	31343	0.00	49.95
31739	31739	0.00	47.04
31751	31739	1.74	47.43
31824	31739	0.78	46.57
31845	31845	0.00	45.56
32943	31739	4.18	48.36

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Cedar leaf oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31106-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20131011

Validation samples

A total of 222 872 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 *Cedar leaf oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 60 spectra of 2 reference samples from the substance/substance group *Cedar leaf oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cedar leaf oil	13337902	31421 [†]	20
Caelo	Cedar leaf oil	15305207	33607	40

- 79 018 spectra from a total of 1828 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Caelo	Cedar leaf oil	15305206	12

[†]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*.

- 107 947 spectra from 582 *Apo-Ident* customers from a total of 30 679 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 *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	120	0	35 715
Type B	0	60	0	79 018
Type C	0	12	0	107 947

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 90.0000 %)
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.

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
31200	31106	1.35	88.16
31421	31106	2.13	87.94
31106	31106	0.00	88.08

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Cedar wood oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30938-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 130 spectra of 3 reference samples from the substance/substance group *Cedar wood oil*. These samples are listed above in the [calibration samples](#) section.
- 35 705 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Cedar wood oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cedar wood oil	14230211	32748	40
Caelo	Cedar wood oil	16028815	33785	40

- 78 998 spectra from a total of 1828 batches from further 350 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 9 *Apo-Ident* customers from 9 batches from the substance/substance group *Cedar wood oil*.

Supplier	Substance	Batch	Spectra
Caelo	Cedar wood oil	12180703	1
Caelo	Cedar wood oil	12180709	1
Caelo	Cedar wood oil	12180710	1
Caelo	Cedar wood oil	1218718	1
Caelo	Cedar wood oil	14230211	3
Caelo	Cedar wood oil	12180715	1

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Supplier	Substance	Batch	Spectra
Caelo	Cedar wood oil	16028805	1
Phönix	Cedar wood oil	308062	1
Caelo	Cedar wood oil	16028815	1

- 107 948 spectra from 582 *Apo-Ident* customers from a total of 30 671 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 *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	130	0	35 705
Type B	0	80	0	78 998
Type C	0	10	1	107 948

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 % (> 99.9707 %)	100.0000 % (> 95.3846 %)
Type B	100.0000 % (> 99.9689 %)	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.

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	30.52
30938	30938	0.00	25.33
31267	30938	1.99	25.69

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Cinnamon bark oil, artificial**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30605-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20150107
Caelo	Cinnamon bark oi...	180217	34057	40	20180124*

Validation samples

A total of 222 872 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 *Cinnamon bark oil, artificial*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Cinnamon bark oil, artificial*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cinnamon bark oil, artificial	14377301	31617 [†]	20
Caelo	Cinnamon bark oil, artificial	16026505	33609	40
Caelo	Cinnamon bark oil, artificial	16026505	33610	40

- 78 978 spectra from a total of 1828 batches from further 350 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*.

*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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Cinnamon bark oil, artificial	14377304	1
Caelo	Cinnamon bark oil, artificial	12019604	1
Caelo	Cinnamon bark oil, artificial	11275903	1
Caelo	Cinnamon bark oil, artificial	2031501	1
Caelo	Cinnamon bark oil, artificial	10112014	1
Caelo	Cinnamon bark oil, artificial	14377307	1

- 107 953 spectra from 582 *Apo-Ident* customers from a total of 30 674 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 *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	80	0	35 755
Type B	0	100	0	78 978
Type C	0	5	1	107 953

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
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.

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	2.58	20.92
34057	34057	0.00	21.49

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Cinnamon bark oil, Ceylon**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30251-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	AR-15-FG-001171-01
Caelo	Cinnamon bark oi...	163243	33091	40	20161129*

Validation samples

A total of 222 872 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 *Cinnamon bark oil, Ceylon*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Cinnamon bark oil, Ceylon*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cinnamon bark oil, Ceylon	14092802	31560 [†]	20
Caelo	Cinnamon bark oil, Ceylon	15278210	33480	40
Caelo	Cinnamon bark oil, Ceylon	15278218	33783	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 38 spectra from 23 *Apo-Ident* customers from 22 batches from the substance/substance group *Cinnamon bark oil, Ceylon*.

*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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Cinnamon bark oil, Ceylon	14071203	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	13044802	4
Caelo	Cinnamon bark oil, Ceylon	12181408	1
/Noweda	Cinnamon bark oil, Ceylon	13044802	2
Caelo	Cinnamon bark oil, Ceylon	12181403	1
Caelo	Cinnamon bark oil, Ceylon	13044810	3
Caelo	Cinnamon bark oil, Ceylon	13044808	1
Caelo	Cinnamon bark oil, Ceylon	13044809	1
Caelo	Cinnamon bark oil, Ceylon	14092802	3
Caelo	Cinnamon bark oil, Ceylon	14092805	5
Dr.Schlegels Resana/NOW	Cinnamon bark oil, Ceylon	1407-4584	1
Dr.Schlegels Resana/NOW	Cinnamon bark oil, Ceylon	1205-3566	1
Caelo	Cinnamon bark oil, Ceylon	15278206	3
Caelo	Cinnamon bark oil, Ceylon	15151106	1
Caelo	Cinnamon bark oil, Ceylon	14092806	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	16324308	2
Caelo	Cinnamon bark oil, Ceylon	18013005	1

- 107 921 spectra from 582 *Apo-Ident* customers from a total of 30 658 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 *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	80	0	35 755
Type B	0	100	0	78 978
Type C	0	34	4	107 921

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6452 %)	89.4737 % (> 81.5789 %)

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.

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	33.93
33091	33091	0.00	31.75

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Citronella oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30208-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140825

Validation samples

A total of 222 872 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 *Citronella oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Citronella oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Citronella oil	14229803	31631 [†]	20
Caelo	Citronella oil	162791	32692	40
Caelo	Citronella oil	172831	33675	40

- 78 978 spectra from a total of 1827 batches from further 350 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 38 *Apo-Ident* customers from 49 batches from the substance/substance group *Citronella oil*.

Supplier	Substance	Batch	Spectra
Caelo	Citronella oil	11074201	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	Citronella oil	10193312	1
Kaders	Citronella oil	131097	1
Bombastus	Citronella oil	269807	1
Caelo	Citronella oil	11074203	1
Bombastus	Citronella oil	1213A-01974	1
Caelo	Citronella oil	12359902	1
Bombastus	Citronella oil	276241	1
Caelo	Citronella oil	276241	1
Bombastus	Citronella oil	280657	1
Caesar/Lorenz	Citronella oil	12224603	1
Caelo	Citronella oil	11101301	1
Caelo	Citronella oil	12359909	1
Caelo	Citronella oil	13287804	1
Caelo	Citronella oil	13287802	1
Caelo	Citronella oil	12359903	1
Caelo	Citronella oil	12359907	1
Caelo	Citronella oil	1328780	1
Caelo	Citronella oil	13287807	2
Caelo	Citronella oil	286270	1
Bergland	Citronella oil	C400822	1
Bombastus	Citronella oil	286270	2
Caelo	Citronella oil	13287809	1
Caelo	Citronella oil	14229803	1
Phönix Gotha	Citronella oil	288826	1
Caelo	Citronella oil	14229805	1
Caelo	Citronella oil	14229806	2
Caelo	Citronella oil	15222302	1
Caelo	Citronella oil	15257304	3
Caelo	Citronella oil	15222303	1
Caelo	Citronella oil	15257305	1
Caelo	Citronella oil	15257308	1
Bombastus	Citronella oil	297193	1
Bombastus	Citronella oil	302908	1
Bombastus	Citronella oil	297194	1
Bombastus	Citronella oil	302910	1
Taoasis	Citronella oil	104719-125577	1
Caelo	Citronella oil	15257309	2
Resana	Citronella oil	1701-5627	1
Caelo	Citronella oil	303977	2
Bombastus	Citronella oil	303977	1
Caelo	Citronella oil	3216M-01974	1
Caelo	Citronella oil	16014103	1
Caelo	Citronella oil	16279105	2
Bombastus	Citronella oil	309032	1
Caelo	Citronella oil	5117E-01974	1
Caelo	Citronella oil	18084103	2
Caelo	Citronella oil	9208297	1
Caelo	Citronella oil	17364801	1
Caelo	Citronella oil	18084105	1
Bombastus	Citronella oil	18004736	1
Bombastus	Citronella oil	310645	1

- 107 898 spectra from 582 *Apo-Ident* customers from a total of 30 632 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	59	2	107 898

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6451 %)	96.7213 % (> 91.8033 %)

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.

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	42.45
31408	31251	7.07	42.81
31631	31251	2.46	43.31

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Citrus oils**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31017-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	Grapefruit oil	12367403	31017	40	1404621
Fagron	Citric oil	13E06-N10	31046	40	20130618
Caelo	Sweet orange oil	12043412	31164	40	1405105
Caelo	Sweet orange oil	13378901	31206	40	1405107

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Citric oil	12G13-B06-287454	31261	40	1407356
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	Grapefruit oil	13252306	31417	40	20130802
Caelo	Citric oil	13259522	31432	40	20130816
Euro OTC	Citric oil	1202024-01	31524	40	20120312
Caelo	Bitter orange oil	13303803	31861	40	1606482
Caelo	Bitter orange oil	15397901	32181	40	20151125
Caelo	Bitter orange oil	170369	33062	30	20170224*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 590 spectra of 15 reference samples from the substance/substance group *Citrus oils*. These samples are listed above in the [calibration samples](#) section.
- 35 245 spectra from a total of 833 batches from further 210 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 500 spectra of 14 reference samples from the substance/substance group *Citrus oils*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Grapefruit oil	13252306	31417 [†]	20
Caelo	Sweet orange oil	13378906	31418	60
Caelo	Citric oil	13259522	31432 [†]	20
Euro OTC	Citric oil	1202024-01	31524 [†]	20
Caelo	Bitter orange oil	13303803	31861 [†]	20
Caelo	Bitter orange oil	15397901	32351	40
Caelo	Citric oil	162752	32687	40
Caelo	Citric oil	171068	33305	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
Caelo	Sweet orange oil	171596	33307	40
Caelo	Sweet orange oil	16015501	33467	40
Caelo	Grapefruit oil	15429104	33630	40
Caelo	Grapefruit oil	172307	34054	40
Caelo	Bitter orange oil	180889	34078	40
Caelo	Grapefruit oil	182318	34237	40

- 78578 spectra from a total of 1816 batches from further 347 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.

- 376 spectra from 168 *Apo-Ident* customers from 187 batches from the substance/substance group *Citrus oils*.

Supplier	Substance	Batch	Spectra
Bombastus	Citric oil	256839	1
Fagron	Citric oil	11I05-N13	1
Taoasis	Citric oil	2LI08M-73396	1
Taoasis	Citric oil	3805201	1
Caelo	Citric oil	11231807	1
Fagron	Citric oil	11B04-N02	1
Caelo	Citric oil	3710A-01973	1
Caelo	Citric oil	10375012	1
Caelo	Citric oil	10375003	1
Caelo	Citric oil	9322815	1
Caelo	Citric oil	12040502	3
Bombastus	Citric oil	269281	1
Caelo	Citric oil	9322802	1
Taoasis	Citric oil	5LI12M-109229	1
Anzag 15.11.12 ek:17,18	Citric oil	12040507	1
Fagron	Citric oil	12A23-N05	8
Caelo	Citric oil	12040504	9
Caelo	Citric oil	31121206	1
Fagron	Citric oil	268961	1
Fagron	Citric oil	645920	3
Fagron	Citric oil	11K28-N04	1
Caelo	Citric oil	10375014	1
Caelo	Citric oil	12360002	6
Fagron	Citric oil	12A23-N05	1
Fagron	Citric oil	12G04-N21	2
Caelo	Citric oil	28051308	1
Caelo	Citric oil	15051314	1
Bombastus	Citric oil	266679	1
Fagron	Citric oil	13B01-N02	5

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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
Noweda	Citric oil	12360002	1
Sanacorp	Citric oil	12040504	1
Cealo	Citric oil	12360002	1
Caelo	Citric oil	123600002	1
Fagron	Citric oil	13E06-N10	5
Caelo	Citric oil	123600001	1
Caelo	Citric oil	12360011	11
Bombastus	Citric oil	280999	4
Caelo	Citric oil	12360001	2
Fagron	Citric oil	13B01N02	2
Fagron	Citric oil	602796	1
Caelo	Citric oil	1359512	1
Caelo	Citric oil	20111307	1
Sanacorp	Citric oil	13259504	1
Caelo	Citric oil	12360012	7
Fagron	Citric oil	13b01-n02	1
Caelo	Citric oil	12360010c	1
Bombastus	Citric oil	284351	1
Caelo	Citric oil	13259504	8
Caelo	Citric oil	132259504	1
Caelo	Citric oil	1325904	1
Caelo	Citric oil	1135408	1
Fagron	Citric oil	11C28-N060363/440	2
Caelo	Citric oil	13259508	8
Caelo	Citric oil	12367408	1
Fagron	Citric oil	12G13-B06-287454	1
Bombastus	Citric oil	284045	1
Fagron	Citric oil	12g13-b06-287454	1
Caelo	Citric oil	12360012x2	1
Fagron	Citric oil	13K14-B03-289819	1
Fagron	Citric oil	709110	1
Caelo	Citric oil	13259523	6
Sanacorp	Citric oil	5/AKD1	1
Taoasis	Citric oil	140116-115338	1
Fagron	Citric oil	13K14-B03-294706	5
Fagron	Citric oil	13K14-B03	1
Sanacorp	Citric oil		1
Fagron	Citric oil	13K14-B03	2
Caelo	Citric oil	14121807	4
Caelo	Citric oil	15121403	1
Bombastus	Citric oil	285568	1
Caelo	Citric oil	14121808	2
Bombastus	Citric oil	289673	1
Fagron	Citric oil	733117	1
Taoasis	Citric oil	4LI14M-118369	1
Caelo	Citric oil	14121815	5
Fagron	Citric oil	14H06-B02-299949	5
VDL;4,32EUR;25.04.15	Citric oil	14121815	1
Caelo	Citric oil	14365202	4
Fagron	Citric oil	13K14-B03-787033	1
Caelo	Citric oil	14365212	14
Bombastus	Citric oil	294951	1
Bombastus	Citric oil	294337	2
Caelo	Citric oil	15182703	11
Fagron	Citric oil	14H06B02308273	1
Fagron	Citric oil	14H06-B02	1
Taoasis	Citric oil	122527-122620	1
Taoasis	Citric oil	1401270-121612	1
Caelo	Citric oil	15182702	1
Caelo	Citric oil	14365201	3

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Supplier	Substance	Batch	Spectra
Fagron	Citric oil	14H06-B02-308273	3
Taoasis	Citric oil	122650-123634	1
Fagro/Gehe	Citric oil	14H06-B02-299949	1
Bombastus	Citric oil	297734	1
Caelo	Citric oil	2515I-01973	1
Bombastus	Citric oil	300294	1
Fagron	Citric oil	15F29-B04-309901	1
Caelo	Citric oil	15182711	4
Sanacorp	Citric oil	15182711	1
Caelo	Citric oil	16028709	1
Fagron	Citric oil	15F29-B04-322985	3
Caelo	Citric oil	16028702	7
Taoasis	Citric oil	3J16M-125453	1
Fagron	Citric oil		1
Taoasis	Citric oil	1786-125280	1
Caelo	Citric oil	15182718	2
Caelo	Citric oil	16028719	7
Caelo	Citric oil	16028712	1
Caelo	Citric oil	202170C16028702	1
Gehe	Citric oil	306549	1
Caelo	Citric oil	16028715	2
Fagron	Citric oil	15F29-B04-327600	3
Bombastus	Citric oil	308515	1
Caelo	Citric oil	16275203	2
Caelo	Citric oil	16275202	4
Fagron	Citric oil	15F29-B04	2
Fagron	Citric oil	881578	2
Bombastus	Citric oil	305855	1
Fagron	Citric oil	17B14-B04-334835	1
Caelo	Citric oil	16275216	5
Bombastus	Citric oil	17000590	1
Bombastus	Citric oil	299753	1
Fagron	Citric oil	17B14-B04	1
Caelo	Citric oil	1706807	1
Caelo	Citric oil	14B14-B04-338799	1
Caelo	Citric oil	17106807	2
Caelo	Citric oil	17321102	1
Caelo	Citric oil	18092202	3
Caelo	Citric oil	24071801	1
Caelo	Citric oil	173201	1
Bombastus	Citric oil	18001850	6
Caelo	Citric oil	18328003	1
Caelo	Grapefruit oil	12367403	1
Caelo	Grapefruit oil	13252306	1
Caelo	Grapefruit oil	13252303	1
Taoasis	Grapefruit oil	333555-111392	1
Caelo	Grapefruit oil	14107304	1
Taoasis	Grapefruit oil	31564-120540	1
Apotheker-Bauer	Grapefruit oil		1
Caelo	Grapefruit oil	15171201	1
Taoasis	Grapefruit oil	44040A-124468	1
Caelo	Grapefruit oil	15429101	2
Caelo	Grapefruit oil	15429103	1
Caelo	Grapefruit oil	15429105	2
Caelo	Grapefruit oil	17072302	1
Fiebig 09.11.12 ek:6,92	Sweet orange oil	11031802	1
Caelo	Sweet orange oil	8121204	1
Caelo	Sweet orange oil	12043403	5
Anzag	Sweet orange oil	11310411	1
Caelo	Sweet orange oil	15051313	1

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Supplier	Substance	Batch	Spectra
Caelo	Sweet orange oil	7051301	1
Bombastus	Sweet orange oil	271897	1
Caelo	Sweet orange oil	12322603	1
Caelo	Sweet orange oil	10375113	1
Primavera	Sweet orange oil	530914	1
Caelo	Sweet orange oil	1302404	1
Caelo	Sweet orange oil	13024202	1
Caelo	Sweet orange oil	12043410	1
Caelo	Sweet orange oil	13024204	4
Caelo	Sweet orange oil	13389401	1
Caelo	Sweet orange oil	13389407	1
Caelo	Sweet orange oil	12043406	1
Caelo	Sweet orange oil	13303803	1
Caelo	Sweet orange oil	13378906	1
Bombastus	Sweet orange oil	285361	1
Taoasis	Sweet orange oil	140129-115917	1
Caelo	Sweet orange oil	12043409	1
Caelo	Sweet orange oil	13389406	3
Caelo	Sweet orange oil	14133505	1
Caelo	Sweet orange oil	14348803	3
Caelo	Sweet orange oil	14150105	2
Caelo	Sweet orange oil	14348809	1
Caelo	Sweet orange oil	15045101	5
Caelo	Sweet orange oil	15045104	2
Caelo	Sweet orange oil	15182904	1
Caelo	Sweet orange oil	14133504	1
Caelo	Sweet orange oil	15402404	1
Caelo	Sweet orange oil	15285	1
Caelo	Sweet orange oil	15051701	1
Caelo	Sweet orange oil	15316601	2
Caelo	Sweet orange oil	16083501	1
Phoenix	Sweet orange oil	16015502	1
Caelo	Sweet orange oil	16015501	1
Caelo	Sweet orange oil	26041703	1
Caelo	Sweet orange oil	4111710	1
Taoasis GmbH	Sweet orange oil	128129	1
Bombastus	Sweet orange oil	17001382	2
Jenne	Sweet orange oil	17347509	1
Caelo	Sweet orange oil	18171603	1
Caelo	Sweet orange oil	17159603	1
Caelo	Sweet orange oil	17347513	1
Caelo	Bitter orange oil	12121802	1
Caelo	Bitter orange oil	170369035481	1
Caelo	Bitter orange oil	15397903	1
Caelo	Bitter orange oil	23061815	1

- 107 583 spectra from 582 *Apo-Ident* customers from a total of 30 493 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 *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	590	0	35 245
Type B	0	500	0	78 578
Type C	0	358	18	107 583

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 % (> 99.9705 %)	100.0000 % (> 98.9831 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.8000 %)
Type C	100.0000 % (> 99.6450 %)	95.2128 % (> 94.4149 %)

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.

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
31861	31861	0.00	29.69
32181	31861	8.40	39.11
33062	33062	0.00	38.11
31017	31017	0.00	41.80
31417	31164	2.36	45.39
31164	31164	0.00	42.15
31206	31206	0.00	45.00
31273	31206	2.61	48.31
31295	31295	0.00	45.86
31297	31295	2.63	49.14
31411	31295	1.93	47.63
31046	31261	9.36	36.17
31261	31261	0.00	31.24
31432	31261	2.12	30.87
31524	31261	5.36	31.04

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Clotrimazole 10% Cordes® RK
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30213-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20140606

Validation samples

A total of 222 872 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 *Clotrimazole 10% Cordes® RK*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Clotrimazole 10% Cordes® RK*.

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	Clotrimazole 10% Cordes® RK	14D009	31806 [†]	20
Ichthyol	Clotrimazole 10% Cordes® RK	14D009	32950	40
Ichthyol	Clotrimazole 10% Cordes® RK	16D003	33498	40

- 78 978 spectra from a total of 1828 batches from further 350 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.

- 80 spectra from 19 *Apo-Ident* customers from 11 batches from the substance/substance group *Clotrimazole 10% Cordes® RK*.

Supplier	Substance	Batch	Spectra
Ichthyol	Clotrimazole 10% Cordes® RK	9D036	9

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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
Ichthyol	Clotrimazole 10% Cordes® RK	11D044	25
Ichthyol Gesellschaft C...	Clotrimazole 10% Cordes® RK	11D044	1
Cordes	Clotrimazole 10% Cordes® RK	11D044	1
Ichthyol	Clotrimazole 10% Cordes® RK	11D044	1
Ichthyol-Gesellschaft	Clotrimazole 10% Cordes® RK	12D016	2
Ichthyol/Jenne	Clotrimazole 10% Cordes® RK	11D044	1
Ichthyol	Clotrimazole 10% Cordes® RK	12D016	8
Noweda/Ichthyol-Gesells...	Clotrimazole 10% Cordes® RK	12D016	3
Caelo	Clotrimazole 10% Cordes® RK	12D016	11
Ichthyol Noweda	Clotrimazole 10% Cordes® RK	12D016	1
Ichthyol-Gesellschaft / K	Clotrimazole 10% Cordes® RK	12D016	1
Ichthyol/Alliance Healt...	Clotrimazole 10% Cordes® RK	12D016	1
Ichthyol-Gesellschaft/N...	Clotrimazole 10% Cordes® RK	11D044	1
Ichthyol/AHD	Clotrimazole 10% Cordes® RK	12D016	1
Ichthyol-Gesellschaft/ N...	Clotrimazole 10% Cordes® RK	14D009	2
Ichthyol4D/ Noweda	Clotrimazole 10% Cordes® RK	14D009	1
Noweda	Clotrimazole 10% Cordes® RK	14D009	1
ICHTHYOL-GESELLSCHAFT C...	Clotrimazole 10% Cordes® RK	14D009	1
AHD/ichthyol	Clotrimazole 10% Cordes® RK	14D0089	1
Ichthyol/Noweda	Clotrimazole 10% Cordes® RK	14D009	1
WE 29.11.16 Ichthyol/Sa...	Clotrimazole 10% Cordes® RK	14D009	1
ICHTHYOL / Noweda	Clotrimazole 10% Cordes® RK	16D003	1
Ichthyol/Phönix	Clotrimazole 10% Cordes® RK	16D003	1
Caelo	Clotrimazole 10% Cordes® RK	16D003	2
Ichthyol	Clotrimazole 10% Cordes® RK	17D005	1

- 107 879 spectra from 582 *Apo-Ident* customers from a total of 30 669 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	80	0	107 879

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	100.0000 % (> 92.5000 %)

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.

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	4.94	93.32
31101	31101	0.00	91.04
31806	31101	18.72	105.23

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Clove oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30858-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	AR-14-FG-013260-01
Euro OTC	Clove oil	1505022	31707	40	0000010252

Validation samples

A total of 222 872 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 *Clove oil*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 200 spectra of 6 reference samples from the substance/substance group *Clove oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Clove oil	1210057-01	31526 [†]	20
Euro OTC	Clove oil	1505022	31707 [†]	20
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

- 78 878 spectra from a total of 1824 batches from further 350 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.

- 468 spectra from 148 *Apo-Ident* customers from 135 batches from the substance/substance group *Clove oil*.

[†]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*.

Supplier	Substance	Batch	Spectra
Euro OTC	Clove oil	1108015-01	2
Caelo	Clove oil	10272014	2
Fagron	Clove oil	204211969	1
Bombastus	Clove oil	267699	1
Caelo	Clove oil	265130	1
Caelo	Clove oil	10272012	3
Fagron	Clove oil	11K17-N07	1
Caelo	Clove oil	11231703	4
Fagron	Clove oil	208211969	1
Caelo	Clove oil	267700	1
Caelo	Clove oil	11231702	8
Wolf	Clove oil	6811	1
Caelo	Clove oil	272735	2
Euro OTC	Clove oil	1206013-01	8
Caelo	Clove oil	11231706	8
Caelo	Clove oil	3512M-01969	1
Fagron	Clove oil	11L21-N07	2
Bombastus	Clove oil	273027	1
Fagron	Clove oil	1512211969	1
Bombastus	Clove oil	265673	1
Caelo	Clove oil	11231709	3
Anzag	Clove oil	10272002	3
Caelo	Clove oil	20021308	1
Fagron	Clove oil	11L21-N07	1
Caelo	Clove oil	11231704	3
Bombastus	Clove oil	274829	1
Caelo	Clove oil	12165905	14
Euro OTC	Clove oil	1206012-01	1
Caelo	Clove oil	28051313	1
Taoasis	Clove oil	130301-110695	2
Taoasis	Clove oil	97204	1
Caelo	Clove oil	0-130513-1	1
Caelo	Clove oil	12165902	6
Caelo	Clove oil	11K17-No7	1
Caelo	Clove oil	13182301	18
Caelo	Clove oil	18071302	1
Bombastus	Clove oil	274495	1
Euro OTC	Clove oil	274495	1
Sanacorp	Clove oil	12165905	1
Fagron	Clove oil	3113Q01969	1
Caelo	Clove oil	12165905	1
Phönix	Clove oil	12165905	1
Caelo	Clove oil	12380601	10
Taoasis/ Sanacorp	Clove oil	B130612-112414	1
Caelo	Clove oil	2091306	1
Caesar/Noweda	Clove oil	12165902	1
Bombastus	Clove oil	60010610	1
Caelo	Clove oil	3613Q01969	1
Caelo	Clove oil	13182301-3373319042	1
Caelo	Clove oil	13106501	11
Fagron	Clove oil	12C27-N04	1
EuRho	Clove oil	1210057-01	2
Fagron	Clove oil	12C27N04	1
Euro OTC	Clove oil	1210057-01	1
Calo	Clove oil	13106501	1
Fagron	Clove oil	12F01-N01	2
Caelo	Clove oil	30111304	1
Caelo	Clove oil	16121305	1
Euro OTC	Clove oil	121005701	1
Bombastus	Clove oil	279262	2

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Supplier	Substance	Batch	Spectra
Caelo	Clove oil	13106502	4
Gehe	Clove oil	13106501	1
Caelo	Clove oil	13334902	14
Caelo	Clove oil	123806012x	1
Caelo	Clove oil	11231705	1
Caelo	Clove oil	23041404	1
Noweda	Clove oil	13334902	1
Fagron	Clove oil	13L03-B01-292270	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
Caesar/Noweda	Clove oil	13334905	1
Euro OTC	Clove oil	5210A-01969	1
Phonix	Clove oil	13334905	1
Caelo	Clove oil	2081402	1
Caelo	Clove oil	23081402	1
Fischar/Gehe	Clove oil	13334905	1
Caelo	Clove oil	14133602	7
Euro OTC	Clove oil	725892	1
Euro/Gehe	Clove oil	1210057-01	1
Caelo	Clove oil	15101401	1
Fagron	Clove oil	13L03-B01294950	1
Caelo	Clove oil	12165904	1
Caelo	Clove oil	14133603	4
Bombastus	Clove oil	288875	2
Caelo	Clove oil	14243101	4
Caelo	Clove oil	14133608	9
Caelo	Clove oil	18121411	1
Caelo	Clove oil	12011502	1
Fagron	Clove oil	13L03-B01	2
Caelo	Clove oil	14243104	18
Caelo	Clove oil	14243105	1
Caelo	Clove oil	294000	2
Caelo	Clove oil	28051510	1
Caelo	Clove oil	15051508	1
Bombastus	Clove oil	294000	1
Caelo	Clove oil	6071501	1
Caelo	Clove oil	14243103	12
Caelo	Clove oil	15119304	18
Caelo	Clove oil	15316103	12
Caelo	Clove oil	15316102	41
Caelo	Clove oil	15119303	2
Caelo	Clove oil	1519304	1
Caelo	Clove oil	15316101	1
Bombastus	Clove oil	295672	2
Bombastus	Clove oil	296568	3
Caelo	Clove oil	2965568	1
Fagron	Clove oil	14G11-B04-297218	3
phönix	Clove oil	297263	1
Phoenix	Clove oil	15316102	1
Caelo	Clove oil	15316012	1
Bombastus	Clove oil	297263	1
Bombastus	Clove oil	296979	1
Bombastus	Clove oil	300901	1
Caelo	Clove oil	15402101	4
WE:Sanacorp 13.08.2016...	Clove oil	15316103	1
Caesar & Loretz	Clove oil	15402102	1
Bombastus	Clove oil	1612020C/296428	1

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Supplier	Substance	Batch	Spectra
Gehe	Clove oil	15316103	1
Bombastus	Clove oil	296428	1
Fagron	Clove oil	826188	1
Caelo	Clove oil	15402108	24
Caelo	Clove oil	15402102	2
Caelo	Clove oil	303337	1
Caelo	Clove oil	302858	1
Gehe	Clove oil	303338	1
Caelo	Clove oil	15402109	2
Caelo	Clove oil	402109	1
Euro OTC	Clove oil	15402101	1
Euro OTC	Clove oil	1505022-02	1
Sanacorp EK:17,64 EU...	Clove oil	15402109	1
Caelo	Clove oil	16131412	9
Caelo	Clove oil	19081706	1
Sanacorp	Clove oil	16131401	1
Bombastus	Clove oil	302858	1
Bombastus	Clove oil	308074	1
Caelo	Clove oil	16131401	9
Bombastus	Clove oil	308728	1
Caelo	Clove oil	1540208	1
GEHE	Clove oil	15402108	1
Vögele	Clove oil	2017107539	1
Gehe/Lamotte	Clove oil	16131401	1
Caelo	Clove oil	16131413	15
Bombastus	Clove oil	310830	2
Bombastus	Clove oil		1
Bombastus	Clove oil	307074	1
Vögele	Clove oil	2018100124	1
Euro OTC	Clove oil	171003601	1
Vögele	Clove oil	2018102519	1
AHD	Clove oil	16131413	1
Caelo	Clove oil	16131416	1
Caelo	Clove oil	7051806	1
Bombastus	Clove oil	18000797	2
Caelo	Clove oil	9308768	1
Caelo	Clove oil	16081806	1
Caelo	Clove oil	17354205	4
Caelo	Clove oil	17354209	2
Caelo	Clove oil	17354203	3
Caelo	Clove oil	21111817	1

- 107 491 spectra from 582 *Apo-Ident* customers from a total of 30 546 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 *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	200	0	35 635
Type B	0	200	0	78 878
Type C	0	458	10	107 491

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6450 %)	97.8632 % (> 97.2222 %)

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.

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
30858	31707	3.50	41.88
31526	31526	0.00	27.92
31299	31707	4.60	36.88
31409	31707	5.55	36.27
31707	31707	0.00	39.21

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Coal tar spirit SR
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31126-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Fagron	Coal tar spirit SR	13D05-M14	31126	40	1403343
apomix	Coal tar spirit SR	04C151014	31626	40	20141022
apomix	Coal tar spirit SR	05B170715	33466	40	20150728

Validation samples

A total of 222 872 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 *Coal tar spirit SR*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Coal tar spirit SR*.

Supplier	Substance	Batch	Sample ID	Spectra
apomix	Coal tar spirit SR	04C151014	31626 [†]	20
Fagron	Coal tar spirit SR	04B200916	33464	40
Fagron	Coal tar spirit SR	04B200916	33465	40

- 78 978 spectra from a total of 1828 batches from further 350 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.

- 93 spectra from 62 *Apo-Ident* customers from 55 batches from the substance/substance group *Coal tar spirit SR*.

Supplier	Substance	Batch	Spectra
Fagron	Coal tar spirit SR	11E18-M02	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	Coal tar spirit SR	3C230508	1
Apomix	Coal tar spirit SR	1A040112	1
Gehe	Coal tar spirit SR	6B211212	1
apomix 004	Coal tar spirit SR	4A190712	1
apomix	Coal tar spirit SR	7633599	1
Apomix	Coal tar spirit SR	5A101210	1
Apomix/ Noweda	Coal tar spirit SR	6A211212	1
ApoMix	Coal tar spirit SR	4B221009	1
Apomix / Sanacorp	Coal tar spirit SR	2C040413	1
Caelo	Coal tar spirit SR	5C271112	1
Apomix Anzag	Coal tar spirit SR	3B270613	1
Gehe	Coal tar spirit SR	13D05-M14	1
apomix/Anzag	Coal tar spirit SR	4B220813	1
PKH GmbH	Coal tar spirit SR	5B181113	1
Fagron	Coal tar spirit SR	13D05-M14	1
Caelo	Coal tar spirit SR	6A031213	1
Caelo	Coal tar spirit SR	6B031213	1
Fagron	Coal tar spirit SR	13G16-M01	1
Apomix	Coal tar spirit SR	5B271112	1
Apomix Anzag	Coal tar spirit SR	6B031213	1
Fagron	Coal tar spirit SR	14A30-M01	2
Apomix	Coal tar spirit SR	1B120214	2
Fagron	Coal tar spirit SR	14/04-M02	1
Euro OTC	Coal tar spirit SR	1414/04-M02	1
Fagron	Coal tar spirit SR	3A130614	1
Fagron	Coal tar spirit SR	14I04-M02	1
Apomix	Coal tar spirit SR	2C280414	1
Bombastus	Coal tar spirit SR	4C151014	1
PKH Halle / Anzag	Coal tar spirit SR	4C151014	1
Apomix/Noweda	Coal tar spirit SR	4C151014	1
Fagron	Coal tar spirit SR	1404-M02	1
Sanacorp	Coal tar spirit SR	4B151014	1
Apomix /AllianceHC	Coal tar spirit SR	1A140115	1
pkh halle,phönix	Coal tar spirit SR	4A170615	1
PKH Halle/Sanacorp	Coal tar spirit SR	3A010415	1
apomix / Anzag	Coal tar spirit SR	1A140115	1
apomix PKH GmbH Halle	Coal tar spirit SR	4A170615	1
AHD /apomix	Coal tar spirit SR	2B270215	2
Apomix	Coal tar spirit SR	3B010415	1
Fagron	Coal tar spirit SR	15C11-M09	2
Apomix / Alliance Healt...	Coal tar spirit SR	5B170715	1
Fagron	Coal tar spirit SR	2A270215	1
Fagron	Coal tar spirit SR	6B210915	2
PKH Halle	Coal tar spirit SR	4C151014	1
Apomix	Coal tar spirit SR	5B170715	1
Apomix	Coal tar spirit SR	1A190216	3
apomix	Coal tar spirit SR	5B170715	1
Fagron	Coal tar spirit SR	6b210915	1
Fagron	Coal tar spirit SR	2A070316	4
Fagron	Coal tar spirit SR	170209SKTS02A070316	1
AHD /apomix	Coal tar spirit SR	4B200916	1
PKH GmbH/ Gehe	Coal tar spirit SR	3C170616	1
PKH GmbH/Noweda	Coal tar spirit SR	2A070316	2
Apomix/Phoenix	Coal tar spirit SR	1B190216	1
PKH Halle	Coal tar spirit SR	5B170715	1
Fagron	Coal tar spirit SR	4B200916	1
AHD /apomix	Coal tar spirit SR	5C231116	1
Apomix/Noweda	Coal tar spirit SR	5B170715	1
Caelo	Coal tar spirit SR	2A070316	1
apomix	Coal tar spirit SR	5A231116	1

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Supplier	Substance	Batch	Spectra
Apomix / Alliance Healt...	Coal tar spirit SR	4A170615	1
Apomix	Coal tar spirit SR	5C231116	2
Apomix / Alliance Healt...	Coal tar spirit SR	5B231116	1
Apomix/Noweda	Coal tar spirit SR	5C231116	2
apomix	Coal tar spirit SR	5C231116	1
Sanacorp/ apomix	Coal tar spirit SR	5B231116	1
Phönix/Apomix	Coal tar spirit SR	3B170616	1
Noweda/Aapomix	Coal tar spirit SR	5B170715	1
apomix	Coal tar spirit SR	1C300617	1
Apomix / Gehe	Coal tar spirit SR	5C231116	1
Apomix/Noweda	Coal tar spirit SR	1B020718	1
Apomix/Alliance	Coal tar spirit SR	2A161017	1
Apomix / Gehe	Coal tar spirit SR	1C020718	1
PKH/ Noweda	Coal tar spirit SR	1B020718	1
Apomix/Phoenix	Coal tar spirit SR	2A161017	1
Apomix	Coal tar spirit SR	3B270613	1
ApomixNoweda	Coal tar spirit SR	1C020718	1
Fagron	Coal tar spirit SR	2A120918	1
apomix	Coal tar spirit SR	3A111018	1

- 107 866 spectra from 582 *Apo-Ident* customers from a total of 30 626 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	92	1	107 866

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	98.9247 % (> 95.6989 %)

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.

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	100.35
31626	31126	5.40	100.41
33466	31126	12.32	95.66

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Collodion 4%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30210-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20131016
Caelo	Collodion 4%	16284201	32962	40	20161107

Validation samples

A total of 222 872 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 *Collodion 4%*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Collodion 4%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Collodion 4%	13325411	31434 [†]	20
Caelo	Collodion 4%	16337201	33514	40
Caelo	Collodion 4%	18070501	34070	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 59 spectra from 29 *Apo-Ident* customers from 22 batches from the substance/substance group *Collodion 4%*.

Supplier	Substance	Batch	Spectra
Gehe	Collodion 4%	11336004	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
Caelo	Collodion 4%	11336001	1
Caelo	Collodion 4%	90266259	1
Caelo	Collodion 4%	12035903	2
Caelo	Collodion 4%	12035913	2
Caelo	Collodion 4%	20021305	1
Caesar&loretz,Phoenix	Collodion 4%	12035916	1
Defektur	Collodion 4%	12035916	1
Caelo	Collodion 4%	12035916	5
Caelo	Collodion 4%	13325402	3
Caelo	Collodion 4%	13325401	1
Caelo	Collodion 4%	7031404	1
Caelo	Collodion 4%	13325403	3
Caelo	Collodion 4%	13325405	3
Caelo	Collodion 4%	13325411	2
Caelo	Collodion 4%	14079101	4
Caelo	Collodion 4%	14079105	3
Caesar&Loretz GmbH /Anzag	Collodion 4%	14079105	1
Caelo	Collodion 4%	27041502	1
Euro OTC	Collodion 4%	14079105	1
Caelo	Collodion 4%	15199203	6
Caelo	Collodion 4%	15199206	3
Euro OTC	Collodion 4%	15199203	1
Caesar & Loretz/Sanacorp	Collodion 4%	15199206	1
Caelo	Collodion 4%	16284201	3
Caelo	Collodion 4%	15429002	1
Caelo	Collodion 4%	16337201	5
Caelo	Collodion 4%	5011905	1

- 107 900 spectra from 582 *Apo-Ident* customers from a total of 30 658 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	58	1	107 900

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6451 %)	98.3051 % (> 93.2203 %)

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.

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	196.60
31434	31186	11.02	197.97
32962	31186	25.69	185.14

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Cooling cream / Cooling cream with rose oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30889-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Cooling cream DAB	12364802	30889	120	20121217
Bombastus	Cooling cream DAB	275667	30890	80	20121221
Henry Lamotte	Cooling cream DAB	5321500	30921	80	20120627
Caelo	Cooling cream DAB	13051601	31052	40	20130221

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Cooling cream DAB	13315101	31224	70	20130925
Caelo	Cooling cream DA...	13317001	31249	40	1405180
Caelo	Cooling cream DA...	14085901	31457	40	20140326
Caelo	Cooling cream DAB	14118002	31471	40	AR-14-FG-012400-01
Caelo	Cooling cream DA...	153029	31922	40	20150911*
Caelo	Cooling cream DAB	153277	31992	40	20150930*
Caelo	Cooling cream DA...	160896	32294	40	20160405*
Caelo	Cooling cream DA...	162223	32506	40	20160727*
Caelo	Cooling cream DAB	172551	33779	30	20170927*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 700 spectra of 13 reference samples from the substance/substance group *Cooling cream / Cooling cream with rose oil*. These samples are listed above in the [calibration samples](#) section.
- 35 135 spectra from a total of 834 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 3000 spectra of 77 reference samples from the substance/substance group *Cooling cream / Cooling cream with rose oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Cooling cream DAB	12364802	30889 [†]	10
Bombastus	Cooling cream DAB	275667	30890 [†]	10
Caelo	Cooling cream DAB 6 (stabili...	12306001	31037	40
Caelo	Cooling cream DAB 6 (stabili...	153029	31922 [†]	20
Caelo	Cooling cream DAB	153277	31992 [†]	20
Caelo	Cooling cream DAB	153281	31993	60
Caelo	Cooling cream DAB	161293	32227	40
Caelo	Cooling cream DAB	161293	32228	40
Caelo	Cooling cream DAB	161294	32229	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
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 6 (stabili...	160897	32293	40
Caelo	Cooling cream DAB	161718	32408	40
Caelo	Cooling cream DAB	161719	32409	40
Caelo	Cooling cream DAB	161719	32410	40
Caelo	Cooling cream DAB	161720	32411	40
Caelo	Cooling cream DAB	161720	32412	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 6 (stabili...	162224	32507	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	170004	33166	40
Caelo	Cooling cream DAB	170005	33167	40
Caelo	Cooling cream DAB	170003	33168	40
Caelo	Cooling cream DAB	170006	33169	40
Caelo	Cooling cream DAB 6 (stabili...	170413	33180	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
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

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Supplier	Substance	Batch	Sample ID	Spectra
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 6 (stabili...	180218	34142	40
Caelo	Cooling cream DAB	180424	34150	40
Caelo	Cooling cream DAB 6 (stabili...	181897	34265	40
Caelo	Cooling cream DAB	182729	34354	40

- 76 078 spectra from a total of 1758 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.

- 4194 spectra from 456 *Apo-Ident* customers from 1168 batches from the substance/substance group *Cooling cream / Cooling cream with rose oil*.

Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	12182701	2
Caelo	Cooling cream DAB 6 (stabili...	12179001	1
Caelo	Cooling cream DAB 6 (stabili...	14268101	2
Caelo	Cooling cream DAB 6 (stabili...	20130912-3	1
Gehe	Cooling cream DAB 6 (stabili...	12312601	1
Caelo	Cooling cream DAB 6 (stabili...	12312401	1
Caelo	Cooling cream DAB 6 (stabili...	213E-02541	1
Caelo	Cooling cream DAB 6 (stabili...	12312701	1
Caelo	Cooling cream DAB 6 (stabili...	13004401	1
Caelo	Cooling cream DAB 6 (stabili...	12312501	1
Caelo	Cooling cream DAB 6 (stabili...	13051501	3
Caelo	Cooling cream DAB 6 (stabili...	13051401	1
Caelo	Cooling cream DAB 6 (stabili...	12187201	2
Caelo	Cooling cream DAB 6 (stabili...	13047201	1
Caelo	Cooling cream DAB 6 (stabili...	13120901	2
Caelo	Cooling cream DAB 6 (stabili...	12364802	1
Caelo	Cooling cream DAB 6 (stabili...	13121201	3
Caelo	Cooling cream DAB 6 (stabili...	13121401	1
Caelo	Cooling cream DAB 6 (stabili...	12364801	1
Caelo	Cooling cream DAB 6 (stabili...	13051601	2
Caelo	Cooling cream DAB 6 (stabili...	13174901	1
Sanacorp	Cooling cream DAB 6 (stabili...	13191301	1
Sanacorp	Cooling cream DAB 6 (stabili...	13121601	1
Caelo	Cooling cream DAB 6 (stabili...	13059901	3
Caelo	Cooling cream DAB 6 (stabili...	13175301	2
Caelo	Cooling cream DAB 6 (stabili...	13121701	1
Caelo	Cooling cream DAB 6 (stabili...	13192101	4

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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	Cooling cream DAB 6 (stabili...	13191501	1
Caelo	Cooling cream DAB 6 (stabili...	13175101	1
Noweda	Cooling cream DAB 6 (stabili...	13026301	1
Caelo	Cooling cream DAB 6 (stabili...	13226801	1
Caelo	Cooling cream DAB 6 (stabili...	13121001	2
Caelo	Cooling cream DAB 6 (stabili...	13191701	1
Caelo	Cooling cream DAB 6 (stabili...	13226302	1
Caelo	Cooling cream DAB 6 (stabili...	13226601	4
Caelo	Cooling cream DAB 6 (stabili...	13226501	2
Caelo	Cooling cream DAB 6 (stabili...	13191901	1
Caelo	Cooling cream DAB 6 (stabili...	14129801	1
Caelo	Cooling cream DAB 6 (stabili...	14145501	2
Caelo	Cooling cream DAB 6 (stabili...	14086301	1
Caelo	Cooling cream DAB 6 (stabili...	14085901	1
Gehe	Cooling cream DAB 6 (stabili...	14184501	1
Caelo	Cooling cream DAB 6 (stabili...	14271401	2
Gehe	Cooling cream DAB 6 (stabili...	14268301	1
Caelo	Cooling cream DAB 6 (stabili...	14271201	1
Caelo	Cooling cream DAB 6 (stabili...	14184801	1
Caelo	Cooling cream DAB 6 (stabili...	14278401	1
Bombastus	Cooling cream DAB 6 (stabili...	290486	1
Caelo	Cooling cream DAB 6 (stabili...	14288601	1
Caelo	Cooling cream DAB 6 (stabili...	14329001	1
phönix	Cooling cream DAB 6 (stabili...	14329501	1
Caelo	Cooling cream DAB 6 (stabili...	14328801	4
Caelo	Cooling cream DAB 6 (stabili...	14329301	2
Caelo	Cooling cream DAB 6 (stabili...	14329401	1
Caelo	Cooling cream DAB 6 (stabili...	15049202	4
Caelo	Cooling cream DAB 6 (stabili...	14328702	3
Caelo	Cooling cream DAB 6 (stabili...	14329601	1
Caelo	Cooling cream DAB 6 (stabili...	15059001	2
Caelo	Cooling cream DAB 6 (stabili...	15066601	1
Sanacorp	Cooling cream DAB 6 (stabili...	15066601	2
Caelo	Cooling cream DAB 6 (stabili...	14184601	1
Caelo	Cooling cream DAB 6 (stabili...	15049201	3
Caelo	Cooling cream DAB 6 (stabili...	14278301	2
Caelo	Cooling cream DAB 6 (stabili...	15153001	1
Caelo	Cooling cream DAB 6 (stabili...	15153301	2
Caelo	Cooling cream DAB 6 (stabili...	14329201	1
Caelo	Cooling cream DAB 6 (stabili...	15059201	2
Caelo	Cooling cream DAB 6 (stabili...	14184401	1
Caelo	Cooling cream DAB 6 (stabili...	15153201	2
Caelo	Cooling cream DAB 6 (stabili...	1328702	1
Caelo	Cooling cream DAB 6 (stabili...	15153501	6
Caelo	Cooling cream DAB 6 (stabili...	15228502	3
Bombastus	Cooling cream DAB 6 (stabili...	295191	1
Caelo	Cooling cream DAB 6 (stabili...	15014701	1
Caelo	Cooling cream DAB 6 (stabili...	15052801	1
gehe	Cooling cream DAB 6 (stabili...	15228601	3
Caelo	Cooling cream DAB 6 (stabili...	15134404	1
Caelo	Cooling cream DAB 6 (stabili...	15228401	2
Caelo	Cooling cream DAB 6 (stabili...	15228601	5
Caelo	Cooling cream DAB 6 (stabili...	15237101	4
Caelo	Cooling cream DAB 6 (stabili...	15228501	5
Caelo	Cooling cream DAB 6 (stabili...	15236801	1
Caelo	Cooling cream DAB 6 (stabili...	15236901	6
Hubertus Apotheke	Cooling cream DAB 6 (stabili...	15236901	1
Caelo	Cooling cream DAB 6 (stabili...	15327901	1
Caelo	Cooling cream DAB 6 (stabili...	5328001	1
Caelo	Cooling cream DAB 6 (stabili...	152327901	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	15413601	2
Caelo	Cooling cream DAB 6 (stabili...	15413501	2
Caelo	Cooling cream DAB 6 (stabili...	15328001	18
Caelo	Cooling cream DAB 6 (stabili...	15327801	1
Caelo	Cooling cream DAB 6 (stabili...	15417301	2
Caelo	Cooling cream DAB 6 (stabili...	15434501	7
Caelo	Cooling cream DAB 6 (stabili...	15417401	1
Caelo	Cooling cream DAB 6 (stabili...	15417501	1
Caelo	Cooling cream DAB 6 (stabili...	15413901	1
Caelo	Cooling cream DAB 6 (stabili...	1547501	1
Caelo	Cooling cream DAB 6 (stabili...	15434503	4
Caelo	Cooling cream DAB 6 (stabili...	15434401	2
Euro OTC	Cooling cream DAB 6 (stabili...	15435101	1
Caelo	Cooling cream DAB 6 (stabili...	15434402	2
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	15328001	2
Caelo	Cooling cream DAB 6 (stabili...	15434502	6
Caelo	Cooling cream DAB 6 (stabili...	16000501	1
Bombastus	Cooling cream DAB 6 (stabili...	298319	1
Caelo/AHD	Cooling cream DAB 6 (stabili...	16011901	1
Caelo	Cooling cream DAB 6 (stabili...	1608601	1
Caelo	Cooling cream DAB 6 (stabili...	16086101	3
Caelo	Cooling cream DAB 6 (stabili...	16129401	2
Caelo	Cooling cream DAB 6 (stabili...	15435101	2
Caelo	Cooling cream DAB 6 (stabili...	16085801	2
Caelo	Cooling cream DAB 6 (stabili...	15435102	1
Caelo	Cooling cream DAB 6 (stabili...	16086001	1
Caelo	Cooling cream DAB 6 (stabili...	16089702	1
Caelo	Cooling cream DAB 6 (stabili...	16129501	3
Caelo	Cooling cream DAB 6 (stabili...	16000201	2
Phoenix	Cooling cream DAB 6 (stabili...	16000501	2
Caelo	Cooling cream DAB 6 (stabili...	16134201	12
Caelo	Cooling cream DAB 6 (stabili...	16123501	1
Caelo	Cooling cream DAB 6 (stabili...	16134001	2
Phönix	Cooling cream DAB 6 (stabili...	15434502	1
Caelo	Cooling cream DAB 6 (stabili...	16134101	3
Caelo	Cooling cream DAB 6 (stabili...	16171901	1
Euroct/Gehe	Cooling cream DAB 6 (stabili...	16089701	2
Ichthyol/Phönix	Cooling cream DAB 6 (stabili...	16172601	2
Caelo	Cooling cream DAB 6 (stabili...	16172601	13
Caelo	Cooling cream DAB 6 (stabili...	16085901	3
Caelo	Cooling cream DAB 6 (stabili...	16172701	3
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	16172601	1
Henry Lamotte/ Henry La...	Cooling cream DAB 6 (stabili...	16171901	1
Caelo	Cooling cream DAB 6 (stabili...	16172001	1
Caelo	Cooling cream DAB 6 (stabili...	16172501	1
Caelo	Cooling cream DAB 6 (stabili...	16244701	21
Caelo	Cooling cream DAB 6 (stabili...	1617260	1
Caelo	Cooling cream DAB 6 (stabili...	16172801	1
Caelo	Cooling cream DAB 6 (stabili...	16244601	1
Euro OTC	Cooling cream DAB 6 (stabili...	16172801	1
Bombastus	Cooling cream DAB 6 (stabili...	303621	1
Caelo	Cooling cream DAB 6 (stabili...	16172902	3
Caelo	Cooling cream DAB 6 (stabili...	16129701	1
Lamotte/Noweda	Cooling cream DAB 6 (stabili...	8002112004	1
Caelo	Cooling cream DAB 6 (stabili...		1
Bombastus	Cooling cream DAB 6 (stabili...	304585	1
Caesar & Loretz/Noweda	Cooling cream DAB 6 (stabili...	16134201	1
Caelo	Cooling cream DAB 6 (stabili...	16172901	6
Caelo	Cooling cream DAB 6 (stabili...	16246301	3
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	8002112004	11

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB 6 (stabili...	303620	1
Caelo	Cooling cream DAB 6 (stabili...	16301801	13
Caelo	Cooling cream DAB 6 (stabili...	1097214	1
Caelo	Cooling cream DAB 6 (stabili...	16302001	2
Caelo	Cooling cream DAB 6 (stabili...	16323101	2
Caelo	Cooling cream DAB 6 (stabili...	17000601	5
Caelo	Cooling cream DAB 6 (stabili...	17035301	3
Bombastus	Cooling cream DAB 6 (stabili...	305953	1
Caelo	Cooling cream DAB 6 (stabili...	16301702	2
Caelo	Cooling cream DAB 6 (stabili...	16354401	3
Caelo	Cooling cream DAB 6 (stabili...	16222401	1
hochhaus-Apotheke	Cooling cream DAB 6 (stabili...	17033001	1
Caelo	Cooling cream DAB 6 (stabili...	16222402	1
Gehe	Cooling cream DAB 6 (stabili...	16301901	1
Caelo	Cooling cream DAB 6 (stabili...	17000401	2
Caelo	Cooling cream DAB 6 (stabili...	17000301	3
Caelo	Cooling cream DAB 6 (stabili...	17074801	11
Caelo	Cooling cream DAB 6 (stabili...	17033001	15
Fagron	Cooling cream DAB 6 (stabili...	17000301	2
Caesar & Loretz GmbH	Cooling cream DAB 6 (stabili...	16222401	1
Caelo	Cooling cream DAB 6 (stabili...	17041301	4
Gehe	Cooling cream DAB 6 (stabili...	17035501	1
Caelo	Cooling cream DAB 6 (stabili...	17035401	1
Caelo	Cooling cream DAB 6 (stabili...	17038501	1
Caelo	Cooling cream DAB 6 (stabili...	170522UL/16323101	1
Caelo	Cooling cream DAB 6 (stabili...	16311604	1
Finteler Apotheke	Cooling cream DAB 6 (stabili...	16244701	2
Anzag	Cooling cream DAB 6 (stabili...	17075102	1
Bombastus	Cooling cream DAB 6 (stabili...	2/2018	1
Caelo	Cooling cream DAB 6 (stabili...	17075301	3
Caelo	Cooling cream DAB 6 (stabili...	17075102	1
Caelo	Cooling cream DAB 6 (stabili...	17075001	15
Gehe	Cooling cream DAB 6 (stabili...	16302001	1
Caelo	Cooling cream DAB 6 (stabili...	17117402	4
Caelo	Cooling cream DAB 6 (stabili...	17075401	1
Caelo	Cooling cream DAB 6 (stabili...	17081801	4
Caelo	Cooling cream DAB 6 (stabili...	17115901	1
Finteler Apotheke	Cooling cream DAB 6 (stabili...	17000601	1
Caelo	Cooling cream DAB 6 (stabili...	1705401	1
Caelo	Cooling cream DAB 6 (stabili...	17075101	4
Caelo	Cooling cream DAB 6 (stabili...	17115701	13
Bombastus	Cooling cream DAB 6 (stabili...	308711	1
Caelo	Cooling cream DAB 6 (stabili...	17116001	2
phönix	Cooling cream DAB 6 (stabili...	17075201	1
Caelo	Cooling cream DAB 6 (stabili...	17075201	3
Caelo	Cooling cream DAB 6 (stabili...	17115601	4
Caelo	Cooling cream DAB 6 (stabili...	17125002	2
Caelo	Cooling cream DAB 6 (stabili...	17125101	2
Caelo	Cooling cream DAB 6 (stabili...	17156801	7
Caelo	Cooling cream DAB 6 (stabili...	17124801	4
Phönix	Cooling cream DAB 6 (stabili...	17075101	1
Caelo	Cooling cream DAB 6 (stabili...	17157002	3
Caesar und Loretz GmbH	Cooling cream DAB 6 (stabili...	17157201	1
Caelo	Cooling cream DAB 6 (stabili...	13121717	1
Bombastus	Cooling cream DAB 6 (stabili...	310976	1
Caelo	Cooling cream DAB 6 (stabili...	17157101	1
Bombastus	Cooling cream DAB 6 (stabili...	17189701	5
Caelo	Cooling cream DAB 6 (stabili...	8003478005	1
Caelo	Cooling cream DAB 6 (stabili...	1718970101	1
Caelo	Cooling cream DAB 6 (stabili...	17157001	4

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	17189701	1
Caelo	Cooling cream DAB 6 (stabili...	17254501	2
Caelo	Cooling cream DAB 6 (stabili...	17157301	1
Caelo	Cooling cream DAB 6 (stabili...	17156901	1
Caelo	Cooling cream DAB 6 (stabili...	17254601	2
Caelo	Cooling cream DAB 6 (stabili...	1712901	1
Caelo	Cooling cream DAB 6 (stabili...	29011801	1
Caelo	Cooling cream DAB 6 (stabili...	17254301	1
Sanacorp W.E: 18.01.18 ...	Cooling cream DAB 6 (stabili...	17157001	2
Caelo	Cooling cream DAB 6 (stabili...	17189801	1
Caelo	Cooling cream DAB 6 (stabili...	17254301-20180206Ma1	1
Caelo	Cooling cream DAB 6 (stabili...	1715002	1
Caelo	Cooling cream DAB 6 (stabili...	17254401	1
Caelo	Cooling cream DAB 6 (stabili...	18021803	1
Caelo	Cooling cream DAB 6 (stabili...	17254901	1
Caelo	Cooling cream DAB 6 (stabili...	172545015478	1
Caelo	Cooling cream DAB 6 (stabili...	17124901	1
Caelo	Cooling cream DAB 6 (stabili...	17298301	1
Phönix/Hedinger	Cooling cream DAB 6 (stabili...	17254101	2
Caelo	Cooling cream DAB 6 (stabili...	17255001	1
Caelo	Cooling cream DAB 6 (stabili...	17330802	4
Caelo	Cooling cream DAB 6 (stabili...	17298401	7
Caesar&Loretz	Cooling cream DAB 6 (stabili...	17298001	4
Caelo	Cooling cream DAB 6 (stabili...	17298002	1
Caelo	Cooling cream DAB 6 (stabili...	18002802	1
Caelo	Cooling cream DAB 6 (stabili...	23051809	1
Caelo	Cooling cream DAB 6 (stabili...	23051806	1
Caelo	Cooling cream DAB 6 (stabili...	18106401	2
Caelo	Cooling cream DAB 6 (stabili...	172983015595	1
Caelo	Cooling cream DAB 6 (stabili...	17298701	1
Caelo	Cooling cream DAB 6 (stabili...	17331001	2
Caelo	Cooling cream DAB 6 (stabili...	18042701	2
Caelo	Cooling cream DAB 6 (stabili...	18042801	11
Caelo	Cooling cream DAB 6 (stabili...	20061802	1
Caelo	Cooling cream DAB 6 (stabili...	172983010	1
Caelo	Cooling cream DAB 6 (stabili...	18104501	2
Caelo	Cooling cream DAB 6 (stabili...	18042401	3
Fagron	Cooling cream DAB 6 (stabili...	18182301	3
Fagron	Cooling cream DAB 6 (stabili...	18/182/K	1
Caelo	Cooling cream DAB 6 (stabili...	18182301	2
Caelo	Cooling cream DAB 6 (stabili...	18104601	2
Caelo	Cooling cream DAB 6 (stabili...	18182701	1
Caelo	Cooling cream DAB 6 (stabili...	18183001	1
Caelo	Cooling cream DAB 6 (stabili...	18182401	6
Caelo	Cooling cream DAB 6 (stabili...	18182901	1
Caelo	Cooling cream DAB 6 (stabili...	18182501	1
Caelo	Cooling cream DAB 6 (stabili...	181829015742	1
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	8003478009	7
Caelo	Cooling cream DAB 6 (stabili...	6111802	1
Caelo	Cooling cream DAB 6 (stabili...	18183201	1
Caelo	Cooling cream DAB 6 (stabili...	311218182501	1
Caelo	Cooling cream DAB 6 (stabili...	18218601	1
Caelo	Cooling cream DAB 6 (stabili...	18272801	1
Caelo	Cooling cream DAB 6 (stabili...	5011902	1
Lamotte/Spangro	Cooling cream DAB 6 (stabili...	6012127002	8
Caelo	Cooling cream DAB 6 (stabili...	18218901	1
Sanacorp	Cooling cream DAB 6 (stabili...	18218302	1
Sanacorp	Cooling cream DAB 6 (stabili...	18272901	1
Sanacorp	Cooling cream DAB 6 (stabili...	18182601	1
Caelo	Cooling cream DAB 6 (stabili...	18219201	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB 6 (stabili...	18272901	1
Bombastus	Cooling cream DAB	264601	1
Caesar & Loretz GmbH 40...	Cooling cream DAB	11299001	1
Caelo	Cooling cream DAB	11268501	1
Bombastus	Cooling cream DAB	266717	1
Bombastus	Cooling cream DAB	265549	1
Caelo	Cooling cream DAB	11322901	1
Caelo	Cooling cream DAB	12045901	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12046001	1
Bombastus	Cooling cream DAB	265548	1
Bombastus	Cooling cream DAB	268194	1
Bombastus	Cooling cream DAB	268073	3
Gehe	Cooling cream DAB	266839	2
Caelo	Cooling cream DAB	12002501	3
Caelo	Cooling cream DAB	11323101	2
Bombastus	Cooling cream DAB	268981	1
Caelo	Cooling cream DAB	12002401	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12046201	2
Caelo	Cooling cream DAB	4061203	1
Bombastus	Cooling cream DAB	2405212541	1
Gehe	Cooling cream DAB	269098	3
Gehe	Cooling cream DAB	269093	2
Caelo	Cooling cream DAB	11323501	1
Caelo	Cooling cream DAB	120601202	1
Bombastus	Cooling cream DAB	269088	1
Caelo	Cooling cream DAB	12089901	1
Caelo	Cooling cream DAB	12046401	1
Henry Lamotte/GEHE	Cooling cream DAB	5163700	1
Phönix	Cooling cream DAB	268978	1
Caelo	Cooling cream DAB	7071203	1
Caelo	Cooling cream DAB	27061201	1
Caelo	Cooling cream DAB	12001901	3
Caelo	Cooling cream DAB	14071204	1
Bombastus	Cooling cream DAB	270315	1
Caelo	Cooling cream DAB	12089402	2
Bombastus	Cooling cream DAB	266941	1
Bombastus	Cooling cream DAB	270381	1
Gehe	Cooling cream DAB	271535	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12174401	2
Bombastus	Cooling cream DAB	270309	1
Caelo	Cooling cream DAB	12089201	1
Caelo	Cooling cream DAB	2081201	1
Caelo	Cooling cream DAB	12089701	1
Caelo	Cooling cream DAB	12090201	2
Caelo	Cooling cream DAB	10081209	1
Caelo	Cooling cream DAB	10081210	1
Caelo	Cooling cream DAB	12174401	4
Caelo	Cooling cream DAB	12090501	2
Bombastus	Cooling cream DAB	92086	1
DAB 2008	Cooling cream DAB	12089601	1
Caelo	Cooling cream DAB	12089601	5
VDL	Cooling cream DAB	12090501	1
Phönix Gotha	Cooling cream DAB	12089501	1
Bombastus	Cooling cream DAB	22487	1
Bombastus	Cooling cream DAB	271623	1
Bombastus	Cooling cream DAB	269092	1
Gehe	Cooling cream DAB	270314	1
Fiebig ek: 9.07EUR	Cooling cream DAB	1204001	1
Caelo	Cooling cream DAB	7091201	1
Caelo	Cooling cream DAB	12179001	3

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	12052001	1
Bombastus	Cooling cream DAB	271624	1
Bombastus	Cooling cream DAB	1109212541	1
Caelo	Cooling cream DAB	12178801	2
Bombastus	Cooling cream DAB	271726	1
Anzag	Cooling cream DAB	5253700	1
Caelo	Cooling cream DAB	12187301	4
Caelo	Cooling cream DAB	12182801	3
Anzag	Cooling cream DAB	272348	1
Phoenix	Cooling cream DAB	269094	1
Bombastus	Cooling cream DAB	272482	1
Caelo	Cooling cream DAB	12178902	3
Bombastus	Cooling cream DAB	272564	2
Caelo	Cooling cream DAB	12089301	2
Caelo	Cooling cream DAB	16101201	1
Caelo	Cooling cream DAB	12253101	4
Caelo	Cooling cream DAB	12090601	1
Caelo	Cooling cream DAB	12187201	1
Bombastus	Cooling cream DAB	271627	1
Caelo	Cooling cream DAB	272479	1
Sanacorp	Cooling cream DAB	12187301	1
Caelo	Cooling cream DAB	12174601	2
Sanacorp	Cooling cream DAB	12187201	1
Caelo	Cooling cream DAB	6111201	1
Caelo	Cooling cream DAB	6111202	1
Caelo	Cooling cream DAB	12253201	2
Caelo	Cooling cream DAB	271631	1
Anzag 31.10.12 ek:9.12EUR	Cooling cream DAB	12187301	1
Bombastus	Cooling cream DAB	272571	1
Henry Lamotte/GEHE	Cooling cream DAB	5316800	1
Caelo	Cooling cream DAB	8111201	1
Caesar & Loretz GmbH	Cooling cream DAB	12178901	1
Anzag 25.10.12	Cooling cream DAB	272484	1
Cealo/Gehe	Cooling cream DAB	12052002	2
Phönix 26.10.12	Cooling cream DAB	12187301	1
Caesar & Loretz GmbH, 4. . .	Cooling cream DAB	12182801	2
Caelo	Cooling cream DAB	12253301	2
Henry Lamotte/N/19.11.12	Cooling cream DAB	5253700	1
Caelo	Cooling cream DAB	273441	3
Bombastus	Cooling cream DAB	272485	1
Caelo	Cooling cream DAB	12174301	2
Bombastus	Cooling cream DAB	272349	1
Anzag	Cooling cream DAB	272347	1
Caelo	Cooling cream DAB	12182701	5
Caelo	Cooling cream DAB	27111201	1
Bombastus	Cooling cream DAB	274042	1
Caelo	Cooling cream DAB	12292201	6
Bombastus	Cooling cream DAB	271541	1
Bombastus	Cooling cream DAB	273503	1
Bombastus	Cooling cream DAB	60082801	2
Bombastus	Cooling cream DAB	270310	1
Phönix	Cooling cream DAB	271541	1
Caelo	Cooling cream DAB	12253401	2
Bombastus	Cooling cream DAB	273444	1
Caelo	Cooling cream DAB	1287201	1
Caelo	Cooling cream DAB	12292102	12
ANZAG	Cooling cream DAB	273504	1
Bombastus	Cooling cream DAB	273499	1
Caelo	Cooling cream DAB	18121205	1
Bombastus	Cooling cream DAB	273501	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	5132	1
Bombastus	Cooling cream DAB	2112212541	1
Caelo	Cooling cream DAB	12312201	4
Caelo	Cooling cream DAB	12312401	9
Caelo	Cooling cream DAB	28121203	1
Anzag	Cooling cream DAB	274042	1
Caelo	Cooling cream DAB	11269101	1
Caelo	Cooling cream DAB	12312301	1
Anzag	Cooling cream DAB	60082802	1
Bombastus	Cooling cream DAB	274044	2
Bombastus	Cooling cream DAB	272573	2
Caelo	Cooling cream DAB	12292401	4
Bombastus	Cooling cream DAB	274077	1
Bombastus	Cooling cream DAB	274791	2
Bombastus	Cooling cream DAB	274079	1
Caelo	Cooling cream DAB	15011304	1
Bombastus	Cooling cream DAB	274080	2
Anzag 27.12.12 ek:9,09	Cooling cream DAB	12312301	1
Gehe	Cooling cream DAB	274044	2
Caelo	Cooling cream DAB	12292301	3
Caelo	Cooling cream DAB	12312501	3
Caelo	Cooling cream DAB	12090401	3
Caelo	Cooling cream DAB	31011301	1
Gehe	Cooling cream DAB	12292401	1
Fagron	Cooling cream DAB	12G25-T02	2
Sanacorp	Cooling cream DAB	12312401	1
Bombastus	Cooling cream DAB	274914	1
Bombastus	Cooling cream DAB	513A-02541	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	12292301	1
Caelo	Cooling cream DAB	613I-02541	1
Caelo	Cooling cream DAB	7021301	1
Caelo	Cooling cream DAB	12312101	2
Caelo	Cooling cream DAB	12291301	1
Caelo	Cooling cream DAB	12312102	5
Caelo	Cooling cream DAB	12312601	3
Bombastus	Cooling cream DAB	274083	2
Caelo	Cooling cream DAB	1289501	1
Gehe	Cooling cream DAB	274909	2
Bombastus	Cooling cream DAB	275663	1
Caelo	Cooling cream DAB	12178901	2
Henry Lamotte Oils GmbH	Cooling cream DAB	12292301	3
Caelo	Cooling cream DAB	12312801	3
Caelo	Cooling cream DAB	22021305	1
Caelo	Cooling cream DAB	12291901	2
Bombastus	Cooling cream DAB	272353	1
Noweda	Cooling cream DAB	12992301	1
Caelo	Cooling cream DAB	13004101	5
Sanacorp	Cooling cream DAB	274077	1
Caelo	Cooling cream DAB	12312701	3
Bombastus	Cooling cream DAB	274785	1
Caelo	Cooling cream DAB	12174501	1
Gehe	Cooling cream DAB	12312801	1
Caelo	Cooling cream DAB	28021306	1
Caelo	Cooling cream DAB	12364601	13
Bombastus	Cooling cream DAB	275665	1
Caelo	Cooling cream DAB	913I-02541	1
Caelo	Cooling cream DAB	13004402	4
Bombastus	Cooling cream DAB	276281	1
Sanacorp	Cooling cream DAB	12312801	1
Caelo	Cooling cream DAB	12364801	4

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Supplier	Substance	Batch	Spectra
Anzag 05.02.13 ek: 9,38EUR	Cooling cream DAB	12312801	1
Anzag 21.02.2013	Cooling cream DAB	12291901	1
Caelo	Cooling cream DAB	1113Q-02541	1
Bombastus	Cooling cream DAB	275664	2
Anzag	Cooling cream DAB	274911	1
Sanacorp	Cooling cream DAB	13004401	2
Bombastus	Cooling cream DAB	275668	1
Caelo	Cooling cream DAB	13004301	3
phönix	Cooling cream DAB	12292201	1
Bombastus	Cooling cream DAB	275670	1
Henry Lamotte/GEHE	Cooling cream DAB	5321500	1
Caelo	Cooling cream DAB	1213M-02541	2
Caelo	Cooling cream DAB	13004601	4
Caelo	Cooling cream DAB	12364701	2
Caelo	Cooling cream DAB	13004501	7
Bombastus	Cooling cream DAB	274783	1
Caesar & Loretz GmbH D-...	Cooling cream DAB	12253001	1
Bombastus	Cooling cream DAB	277275	2
Caelo	Cooling cream DAB		6
Bomba/AHD	Cooling cream DAB	277269	1
Caelo	Cooling cream DAB	12364802	1
Caelo	Cooling cream DAB	13004201	4
Caelo	Cooling cream DAB	8041304	1
Caelo	Cooling cream DAB	13059601	7
Caelo	Cooling cream DAB	12312001	1
Phönix	Cooling cream DAB	12312101	2
Bombastus	Cooling cream DAB	276419	2
Alliance Healthcare	Cooling cream DAB	277368	1
Sanacorp	Cooling cream DAB	13059601	1
Alliance Healthcare	Cooling cream DAB	277534	1
Phönix Gotha	Cooling cream DAB	SRTM1104	1
phönix	Cooling cream DAB	12312102	1
Gehe	Cooling cream DAB	12364601	1
Caelo	Cooling cream DAB	12253001	1
Bombastus	Cooling cream DAB	276288	1
Henry Lamotte/GEHE	Cooling cream DAB	5407300	1
Caelo	Cooling cream DAB	1290301	1
Bombastus	Cooling cream DAB	276418	3
Gehe	Cooling cream DAB	13004701	1
Caelo	Cooling cream DAB	13051501	7
Caelo	Cooling cream DAB	13051401	6
Bombastus	Cooling cream DAB	277534	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13059601	1
Caelo	Cooling cream DAB	13051602	3
cael	Cooling cream DAB	13004201	1
Bombastus	Cooling cream DAB	277363	1
Bombastus	Cooling cream DAB	278437	1
Caelo	Cooling cream DAB	13059901	8
Caesar/Lorenz	Cooling cream DAB	13004401	1
Caelo	Cooling cream DAB	13047201	1
Caelo	Cooling cream DAB	72/AD2	1
Bombastus	Cooling cream DAB	278337	1
Bombastus	Cooling cream DAB	277371	1
Anzag 07.05.13 ek: 9,38EUR	Cooling cream DAB	13059701	1
Bombastus	Cooling cream DAB	273443	1
Caelo	Cooling cream DAB	13059701	6
calo	Cooling cream DAB	13004701	2
Bombastus	Cooling cream DAB	275667	1
Caelo	Cooling cream DAB	13068101	3
Bombastus	Cooling cream DAB	277525	2

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	22051307	1
Caelo	Cooling cream DAB	13059501	2
Caelo	Cooling cream DAB	13004401	3
Bombastus	Cooling cream DAB	277367	1
Phönix	Cooling cream DAB	13059501	1
Noweda	Cooling cream DAB	274043	1
Caelo	Cooling cream DAB	13120901	18
Phönix	Cooling cream DAB	13051602	1
Bombastus	Cooling cream DAB	277369	1
Gehe	Cooling cream DAB	276283	3
Caelo	Cooling cream DAB	13059902	3
Caelo	Cooling cream DAB	6061303	1
Caesar & Loretz GmbH	Cooling cream DAB	12306001	1
Fagron	Cooling cream DAB	277533	1
GEHE	Cooling cream DAB	12364801	1
Bombastus	Cooling cream DAB	276422	2
Caelo	Cooling cream DAB	275666	2
Caelo	Cooling cream DAB	5321500	1
Alliance Healthcare	Cooling cream DAB	277366	1
Noweda	Cooling cream DAB	13121002	1
Caelo	Cooling cream DAB	13051601	9
Caelo	Cooling cream DAB	13121201	7
Caelo	Cooling cream DAB	13121701	7
Bombastus	Cooling cream DAB	278439	2
Bombastus	Cooling cream DAB	278335	3
Bombastus	Cooling cream DAB	2413Q02541	1
Bombastus	Cooling cream DAB	278438	1
Bombastus	Cooling cream DAB	277526	1
Caelo	Cooling cream DAB	22061301	1
Bombastus	Cooling cream DAB	278342	1
Phönix	Cooling cream DAB	13059901	1
Bombastus	Cooling cream DAB	278674	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13121401	2
Caelo	Cooling cream DAB	13121002	2
Caelo	Cooling cream DAB	13121301	5
Noweda	Cooling cream DAB	276284	1
Caelo	Cooling cream DAB	1312091	1
Bombastus	Cooling cream DAB	276282	1
Caelo	Cooling cream DAB	13175101	7
Bombastus	Cooling cream DAB	2713Q2541	1
Bombastus	Cooling cream DAB	278341	2
Caelo	Cooling cream DAB	13121501	1
Bombastus	Cooling cream DAB	277530	2
Caelo	Cooling cream DAB	13121401	8
Alliance Healthcare	Cooling cream DAB	278444	1
Caelo	Cooling cream DAB	13175301	24
Bombastus	Cooling cream DAB	278442	1
Gehe	Cooling cream DAB	279681	2
Caelo	Cooling cream DAB	13175201	7
Bombastus	Cooling cream DAB	279765	2
Caelo	Cooling cream DAB	13191301	2
Caelo	Cooling cream DAB	26071307	1
Caelo	Cooling cream DAB	13192101	9
Caelo	Cooling cream DAB	1312601	1
Bombastus	Cooling cream DAB	279680	2
Phönix	Cooling cream DAB	13121701	1
Bombastus	Cooling cream DAB	277533	1
Anzag	Cooling cream DAB	13175101	1
Caelo	Cooling cream DAB	12290102	1
Bombastus	Cooling cream DAB	12082013A	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	13121601	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13121701	2
Caelo	Cooling cream DAB	16081303	1
Bombastus	Cooling cream DAB	278436	1
Bombastus	Cooling cream DAB	279681	1
Phönix	Cooling cream DAB	278516	2
Fagron	Cooling cream DAB	13E10-T01-003539	2
Bombastus	Cooling cream DAB	276284	1
Caelo	Cooling cream DAB	13121001	7
Caelo	Cooling cream DAB	13191601	6
Bombastus	Cooling cream DAB	279676	2
Caelo	Cooling cream DAB	13191401	10
Bombastus	Cooling cream DAB	278441	1
Caelo	Cooling cream DAB	3413E-02541	1
Bombastus	Cooling cream DAB	278440	2
Caelo	Cooling cream DAB	30081302	1
Henry Lamotte	Cooling cream DAB	5407300	1
Caelo	Cooling cream DAB	13191501	4
Caelo	Cooling cream DAB	10091306	1
Caelo	Cooling cream DAB	13175001	2
A.H.D.	Cooling cream DAB	13226301	1
Caelo	Cooling cream DAB	13191701	7
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13175101	4
Caelo	Cooling cream DAB	3963/V12/14	1
Bombastus	Cooling cream DAB	278525	3
Caelo	Cooling cream DAB	3964/V01/15	1
Pharmachem/AHD	Cooling cream DAB	279680	1
Caelo	Cooling cream DAB	25091308	1
Phönix	Cooling cream DAB	13192101	1
Gehe	Cooling cream DAB	13191501	1
Sanacorp	Cooling cream DAB	13192101	1
Bombastus	Cooling cream DAB	279755	3
Sanacorp	Cooling cream DAB	13121001	1
Caelo	Cooling cream DAB	13226801	20
Maros/Phoenix	Cooling cream DAB	13191901	1
Caelo	Cooling cream DAB	13226901	8
Bombastus	Cooling cream DAB	4013Q2541	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5407600	1
Caelo	Cooling cream DAB	13191801	7
Caelo	Cooling cream DAB	13191901	4
Phönix	Cooling cream DAB	13191801	1
Bombastus	Cooling cream DAB	279682	1
Caelo	Cooling cream DAB	13226501	7
Caelo	Cooling cream DAB	13192201	1
Bombastus	Cooling cream DAB	281033	1
Caelo	Cooling cream DAB	13225701	2
Caelo	Cooling cream DAB	4313I-02541	1
Caelo	Cooling cream DAB	13121503	1
Klenk	Cooling cream DAB	13226801	1
Caelo	Cooling cream DAB	28101302	1
Gehe	Cooling cream DAB	278518	1
Caelo	Cooling cream DAB	279753	1
Alliance Healthcare	Cooling cream DAB	278523	1
Caelo	Cooling cream DAB	13192001	7
Caelo	Cooling cream DAB	13226302	6
AHD, 08.11.13	Cooling cream DAB	13225801	1
Bombastus	Cooling cream DAB	281820	1
Bombastus	Cooling cream DAB	281030	1
Bombastus	Cooling cream DAB	272480	1
Bomba/AHD	Cooling cream DAB	281031	2

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	151113a	1
Caelo	Cooling cream DAB	13226701	4
Caelo	Cooling cream DAB	13226301	5
Caelo	Cooling cream DAB	13226601	24
Bombastus	Cooling cream DAB	282019	2
Bombastus	Cooling cream DAB	77309	1
Lamotte Sanacorp	Cooling cream DAB	5496200	3
Caelo	Cooling cream DAB	13227101	6
Sanacorp	Cooling cream DAB	13226701	1
Caelo	Cooling cream DAB	1322601	1
Anzag/Lamotte	Cooling cream DAB	5407300	1
Caelo	Cooling cream DAB	13227001	3
Caelo	Cooling cream DAB	13327101	1
Phönix	Cooling cream DAB	13226302	1
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13192001	1
Caelo	Cooling cream DAB	13315201	8
Bombastus	Cooling cream DAB	281823	1
Bombastus	Cooling cream DAB	281134	1
Fagron	Cooling cream DAB	13D19-T01-002941	1
Caelo	Cooling cream DAB	13226602	1
Gehe	Cooling cream DAB	283053	1
Lamotte/Anzag	Cooling cream DAB	5496200	2
gehe 7.12.13	Cooling cream DAB	13226701	1
Sanacorp	Cooling cream DAB	13226501	1
Caelo	Cooling cream DAB	17121301	1
Sanacorp	Cooling cream DAB	281037	1
Caelo	Cooling cream DAB	13227301	4
Caelo	Cooling cream DAB	13315101	26
Caelo	Cooling cream DAB	13227201	7
Bombastus	Cooling cream DAB	281912	1
Bombastus	Cooling cream DAB	281140	1
Euro OTC	Cooling cream DAB	13227101	1
Bombastus	Cooling cream DAB	283057	1
Bombastus	Cooling cream DAB	279751	1
Caelo	Cooling cream DAB	281822	2
Bombastus	Cooling cream DAB	283118	1
Bombastus	Cooling cream DAB	281139	2
Bombastus	Cooling cream DAB	283054	1
Phönix	Cooling cream DAB	13227401	1
Gehe	Cooling cream DAB	282020	1
Caelo	Cooling cream DAB	13227401	9
Gehe	Cooling cream DAB	13315201	1
Caelo	Cooling cream DAB	12011402	1
Bombastus	Cooling cream DAB	13012014A	1
Caelo	Cooling cream DAB	13401801	26
Bombastus	Cooling cream DAB	283058	1
Caelo	Cooling cream DAB	13315601	6
Bombastus	Cooling cream DAB	282021	2
Caesar & Loretz GmbH, 4...	Cooling cream DAB	13315601	1
Gehe	Cooling cream DAB	283114	1
Caelo	Cooling cream DAB	13315801	4
Bombastus	Cooling cream DAB	281919	1
Bombastus	Cooling cream DAB	281824	1
Caelo	Cooling cream DAB	13315102	3
Bombastus	Cooling cream DAB	281138	1
Bombastus	Cooling cream DAB	283117	1
gehe	Cooling cream DAB	13315102	1
Caelo	Cooling cream DAB	133227401	1
Caelo	Cooling cream DAB	13402001	5
Caelo	Cooling cream DAB	13402101	7

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Supplier	Substance	Batch	Spectra
Lamotte	Cooling cream DAB	13226601	1
Gehe	Cooling cream DAB	281036	1
ichthyol/AHD	Cooling cream DAB	281921	2
Gehe	Cooling cream DAB	282022	1
Caelo	Cooling cream DAB	13315401	1
Bombastus	Cooling cream DAB	283116	1
Caelo	Cooling cream DAB	73/AKD3	1
Sanacorp	Cooling cream DAB	13402001	1
Berkel AHK	Cooling cream DAB	13226301	3
Bombastus	Cooling cream DAB	13315701	1
Bombastus	Cooling cream DAB	284265	1
Caelo	Cooling cream DAB	13402201	16
Caelo	Cooling cream DAB	14000101	2
Caesar & Loretz GmbH	Cooling cream DAB	282019	1
Caelo	Cooling cream DAB	14000201	7
Bombastus	Cooling cream DAB	614U2541	1
Bombastus	Cooling cream DAB	7022014B	1
Gehe am 03.02.2014	Cooling cream DAB	1322701	1
Gehe	Cooling cream DAB	284300	1
Bomba/AHD	Cooling cream DAB	281920	1
Caelo	Cooling cream DAB	13225801	1
Bombastus	Cooling cream DAB	13315101	2
Caelo	Cooling cream DAB	14000301	11
Bombastus	Cooling cream DAB	282017	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5496200	1
Bombastus	Cooling cream DAB	284302	2
Caelo	Cooling cream DAB	25021414	1
Bomba/AHD	Cooling cream DAB	283115	1
Caelo	Cooling cream DAB	13401901	13
Caelo	Cooling cream DAB	14000401	2
Bombastus	Cooling cream DAB	283051	1
Caesar & Loretz GmbH	Cooling cream DAB	13315101	1
Caesar & Loretz GmbH	Cooling cream DAB	13315201	1
Noweda	Cooling cream DAB	13315101	1
Caelo	Cooling cream DAB	14000501	5
Bombastus	Cooling cream DAB	285069	3
Bombastus	Cooling cream DAB	284300	3
Sanacorp	Cooling cream DAB	13227001	1
Bombastus	Cooling cream DAB	284263	1
Caelo	Cooling cream DAB	281140	1
Bombastus	Cooling cream DAB	19032014A	1
Caelo	Cooling cream DAB	3012M-02541	1
Lamotte/AHD	Cooling cream DAB	5600300	2
lamotte/sanacorb	Cooling cream DAB	5496200	1
Bombastus	Cooling cream DAB	285068	2
Gehe	Cooling cream DAB	285066	1
Caelo	Cooling cream DAB	1315601	1
Sanacorp	Cooling cream DAB	13401801	1
Caelo	Cooling cream DAB	14055703	2
Henry Lamotte Olis GmbH...	Cooling cream DAB	5600300	2
Bombastus	Cooling cream DAB	285499	2
Caelo	Cooling cream DAB	14055301	7
Caelo	Cooling cream DAB	14055601	10
Caelo	Cooling cream DAB	14055702	11
Bombastus	Cooling cream DAB	284298	1
Caelo	Cooling cream DAB	5600300	1
Caelo	Cooling cream DAB	14055401	1
Caelo	Cooling cream DAB	14086101	3
Bombastus	Cooling cream DAB	284303	3
Caelo	Cooling cream DAB	13315901	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	14085902	4
Lamotte/ Phönix	Cooling cream DAB	5600300	1
Bombastus	Cooling cream DAB	284299	2
GEHE 3.04.2014	Cooling cream DAB	14055703	2
Phönix	Cooling cream DAB	14055401	2
Bombastus	Cooling cream DAB	285070	1
Caelo	Cooling cream DAB	14085901	14
Bombastus	Cooling cream DAB	285502	2
Caelo	Cooling cream DAB	14086201	5
Caelo	Cooling cream DAB	13316001	1
Caelo	Cooling cream DAB	12051401	1
Bombastus	Cooling cream DAB	283119	1
Bombastus	Cooling cream DAB	14052014B	1
Bombastus	Cooling cream DAB	284264	1
Bombastus	Cooling cream DAB	285634	2
Caelo	Cooling cream DAB	14086301	9
Henry Lamotte Oils/GEHE	Cooling cream DAB	5600300	1
Lamotte Sanacorp	Cooling cream DAB	5600300	1
Bombastus	Cooling cream DAB	286648	3
Bombastus	Cooling cream DAB	285637	1
Caesar & Loretz GmbH	Cooling cream DAB	14085901	3
Bombastus	Cooling cream DAB	285063	1
Caelo	Cooling cream DAB	14086401	3
Sanacorp	Cooling cream DAB	73AKD4	1
Gutenberg-Apotheke	Cooling cream DAB	84187	1
Gehe	Cooling cream DAB	286565	1
Bombastus	Cooling cream DAB	285639	1
Caelo	Cooling cream DAB	285504	2
Caelo	Cooling cream DAB	1408631	1
Bombastus	Cooling cream DAB	285503	1
Caelo	Cooling cream DAB	14086601	3
Caelo	Cooling cream DAB	13315701	3
Caleo/Phönix	Cooling cream DAB	14086501	1
Caelo	Cooling cream DAB	14086801	4
Fontapharm/Phönix	Cooling cream DAB	286565	1
Caelo	Cooling cream DAB	4061405	1
Bombastus	Cooling cream DAB	285644	1
Caelo	Cooling cream DAB	1408601	1
Henry Lamotte	Cooling cream DAB	5496300	1
Noweda	Cooling cream DAB	14085901	1
Cealo	Cooling cream DAB	14086201	1
Euro OTC	Cooling cream DAB	286563	1
Bombastus	Cooling cream DAB	285645	2
Caelo	Cooling cream DAB	14129801	20
Bombastus	Cooling cream DAB	286654	2
Gehe	Cooling cream DAB	14129402	1
Caelo	Cooling cream DAB	1412801	1
Caelo	Cooling cream DAB	14132301	8
Caelo	Cooling cream DAB	14086001	3
Noweda	Cooling cream DAB	14129801	2
Caelo	Cooling cream DAB	14129501	4
Phoenix 20.06.2014	Cooling cream DAB	14086001	1
Bombastus	Cooling cream DAB	285638	2
Caelo	Cooling cream DAB	1071407	1
Caelo	Cooling cream DAB	14132201	4
Caelo	Cooling cream DAB	14129402	2
Bombastus	Cooling cream DAB	286564	3
Bombastus	Cooling cream DAB	287485	2
Bombastus	Cooling cream DAB	286652	1
Caelo	Cooling cream DAB	14086501	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	14145501	19
Caelo	Cooling cream DAB	21071401	1
Caelo	Cooling cream DAB	14132401	12
Bombastus	Cooling cream DAB	286650	1
Sanacorp	Cooling cream DAB	14145501	1
Herbasinica	Cooling cream DAB	14085901	1
Bombastus	Cooling cream DAB	285635	2
Caelo	Cooling cream DAB	14145701	5
Bombastus	Cooling cream DAB	287539	1
Bombastus	Cooling cream DAB	285065	1
Caelo	Cooling cream DAB	14145602	1
Henry Lamotte Oils/GEHE	Cooling cream DAB	5691200	1
Caelo	Cooling cream DAB	14055501	2
Caelo	Cooling cream DAB	1484701	1
Caelo	Cooling cream DAB	14145901	10
Caelo	Cooling cream DAB	14184601	22
Fagron	Cooling cream DAB	14132001	1
Bombastus	Cooling cream DAB	288109	2
Caelo	Cooling cream DAB	14186601	1
Caelo	Cooling cream DAB	2091404	1
Bombastus	Cooling cream DAB	3092014A	1
Caelo	Cooling cream DAB	14129401	13
Caelo	Cooling cream DAB	14184402	3
Bombastus	Cooling cream DAB	287543	1
Bombastus	Cooling cream DAB	288152	3
Bombastus	Cooling cream DAB	287542	1
Bombastus	Cooling cream DAB	286653	2
Caelo	Cooling cream DAB	14184901	5
Caelo	Cooling cream DAB	1418401	2
Caelo	Cooling cream DAB	14184801	5
Sanacorp	Cooling cream DAB		1
Caelo	Cooling cream DAB	P158/14	1
Caelo	Cooling cream DAB	30091402	1
Caelo	Cooling cream DAB	14185001	8
Caelo	Cooling cream DAB	14184701	5
Phönix	Cooling cream DAB	14850901	1
Caelo	Cooling cream DAB	14271101	4
Euro OTC	Cooling cream DAB	caelo	1
Caelo	Cooling cream DAB	142681012	1
Bombastus	Cooling cream DAB	289188	1
Caelo	Cooling cream DAB	14101401	1
Bombastus	Cooling cream DAB	289191	3
Bombastus	Cooling cream DAB	287544	2
Caelo	Cooling cream DAB	14271201	2
Caelo	Cooling cream DAB	14185101	5
Bombastus	Cooling cream DAB	289251	1
Bombastus	Cooling cream DAB	289189	1
Phönix	Cooling cream DAB	287486	1
Caelo	Cooling cream DAB	14268301	15
Caelo/ Noweda	Cooling cream DAB	14c06-t02010890	1
Phönix	Cooling cream DAB	289188	1
Caelo	Cooling cream DAB	14184501	17
Caelo	Cooling cream DAB	14145801	2
Caelo	Cooling cream DAB	14132001	1
Bombastus	Cooling cream DAB	289260	3
Bombastus	Cooling cream DAB	286562	1
Bombastus	Cooling cream DAB	288110	1
Bombastus	Cooling cream DAB	287483	1
sanacorp/Lamotte	Cooling cream DAB	5735600	1
Bombastus	Cooling cream DAB	289265	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	1097071	1
Caelo	Cooling cream DAB	14268201	3
Caelo	Cooling cream DAB	14271401	7
Bombastus	Cooling cream DAB	288112	2
Caelo	Cooling cream DAB	14184401	8
Henry Lamotte Olis GmbH	Cooling cream DAB	5735600	1
Caelo	Cooling cream DAB	1468201	1
Caelo	Cooling cream DAB	289265	1
Caelo	Cooling cream DAB	14278502	5
Bombastus	Cooling cream DAB	289187	1
Fagron	Cooling cream DAB	14A20	1
Caelo	Cooling cream DAB	8121403	1
Caelo	Cooling cream DAB	14278601	4
Bombastus	Cooling cream DAB	290490	1
Bombastus	Cooling cream DAB	288107	1
Bombastus	Cooling cream DAB	290380	2
Caelo	Cooling cream DAB	5735600	1
Caelo	Cooling cream DAB	14258301	1
Bombastus	Cooling cream DAB	289253	2
Caelo	Cooling cream DAB	23121412	1
Caelo	Cooling cream DAB	14278201	9
Caelo	Cooling cream DAB	14288601	6
Bombastus	Cooling cream DAB	288159	1
Caelo	Cooling cream DAB	14271501	3
Sana 29.12.14 EK 5,59	Cooling cream DAB	14268301	1
Caelo	Cooling cream DAB	14288701	4
Bombastus	Cooling cream DAB	290483	2
Henry Lamotte Oils/GEHE	Cooling cream DAB	5735600	1
Caelo	Cooling cream DAB	14200401	1
Sanacorp	Cooling cream DAB	14268101	1
Caelo	Cooling cream DAB	14278401	3
Gehe	Cooling cream DAB	290485	2
Caelo	Cooling cream DAB	14288701	1
Caelo	Cooling cream DAB	14278301	14
Bombastus	Cooling cream DAB	291619	1
Bombastus	Cooling cream DAB	288158	1
Caelo	Cooling cream DAB	14329001	4
Caelo	Cooling cream DAB	14268002	1
Bombastus	Cooling cream DAB	290489	1
Caelo	Cooling cream DAB	14268101	7
Caelo	Cooling cream DAB	30011505	1
Bombastus	Cooling cream DAB	3022015B	1
DAB 2010	Cooling cream DAB	14269301	1
Bombastus	Cooling cream DAB	291620	2
Bombastus	Cooling cream DAB	290487	1
Caelo	Cooling cream DAB	13214010	1
Bombastus	Cooling cream DAB	291618	1
Caelo	Cooling cream DAB	14268102	1
Caelo	Cooling cream DAB	14328801	21
Caelo	Cooling cream DAB	142728301	1
Bombastus	Cooling cream DAB	289256	1
Bombastus	Cooling cream DAB	289258	1
Bombastus	Cooling cream DAB	286567	1
Bombastus	Cooling cream DAB	291552	1
Caesar & Loretz GmbH	Cooling cream DAB	14184501	1
Bombastus	Cooling cream DAB	4032015B	1
Sanacorp	Cooling cream DAB	76/AKD3	1
Bombastus	Cooling cream DAB	292106	3
Caelo	Cooling cream DAB	5031509	1
Lamotte/Spangro	Cooling cream DAB	5735700	1

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Supplier	Substance	Batch	Spectra
Berkel AHK	Cooling cream DAB	14268101	1
Bombastus	Cooling cream DAB	291555	1
Bombastus	Cooling cream DAB	292280	1
Caelo	Cooling cream DAB	14328701	2
Bombastus	Cooling cream DAB		1
Sanacorp	Cooling cream DAB	14328801	2
Caelo	Cooling cream DAB	14329201	4
Caelo	Cooling cream DAB	14329301	5
Caelo	Cooling cream DAB	14328702	8
Gehe	Cooling cream DAB	14329501	1
Caelo	Cooling cream DAB	1427801	1
Caelo	Cooling cream DAB	14329601	8
Bombastus	Cooling cream DAB	292107	1
Caelo	Cooling cream DAB	14329401	8
Caelo	Cooling cream DAB	14271301	2
Caelo	Cooling cream DAB	15052801	19
Calo/AHD	Cooling cream DAB	14328702	1
Caelo	Cooling cream DAB	14329501	3
Lamotte/Spangro	Cooling cream DAB	5861100	12
Caelo	Cooling cream DAB	15053001	3
Phönix	Cooling cream DAB	14328801	1
Caelo	Cooling cream DAB	14328901	3
Henry Lamotte	Cooling cream DAB	14328702	1
Caelo	Cooling cream DAB	15058901	3
Caelo	Cooling cream DAB	15059201	31
Bombastus	Cooling cream DAB	292931	2
Caelo	Cooling cream DAB	1502801	1
Bombastus	Cooling cream DAB	292936	1
Caelo	Cooling cream DAB	14184301	1
Bombastus	Cooling cream DAB	292997	4
Caelo	Cooling cream DAB	15066701	4
Caelo	Cooling cream DAB	15049202	2
Beiersdorf / E	Cooling cream DAB	290486	1
	Cooling cream DAB	14328801	1
Bombastus	Cooling cream DAB	293616	2
Bombastus	Cooling cream DAB	292103	1
Caelo	Cooling cream DAB	123test	2
Caelo	Cooling cream DAB	15058801	4
Caelo	Cooling cream DAB	1915M-02541	1
Kremer/Phönix	Cooling cream DAB	15/158/K	1
Caelo	Cooling cream DAB	15066801	5
Caelo	Cooling cream DAB	4051503	2
Caelo	Cooling cream DAB	15049201	17
Bombastus	Cooling cream DAB	292930	2
Gehe	Cooling cream DAB	293618	1
Caelo	Cooling cream DAB	15017601	1
Allianz Healthcare 05.1...	Cooling cream DAB	14271101	1
Gehe	Cooling cream DAB	293677	1
Bombastus	Cooling cream DAB	91709	1
Caesar & Loretz GmbH	Cooling cream DAB	14278701	1
Caelo	Cooling cream DAB	19051505	1
Caelo	Cooling cream DAB	15059001	3
Caelo	Cooling cream DAB	15152801	3
Caelo	Cooling cream DAB	15066601	16
Bombastus	Cooling cream DAB	293621	3
Bombastus	Cooling cream DAB	292281	1
Bombastus	Cooling cream DAB	293622	2
Caelo	Cooling cream DAB	15152901	4
Caelo	Cooling cream DAB	14097214	1
Caelo	Cooling cream DAB	15153501	17

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Supplier	Substance	Batch	Spectra
Gehe	Cooling cream DAB	294121	1
Caelo	Cooling cream DAB	15066501	2
Caelo	Cooling cream DAB	15069201	1
Bombastus	Cooling cream DAB	292202	1
Caelo	Cooling cream DAB	16071505	1
Bombastus	Cooling cream DAB	295019	3
Caelo	Cooling cream DAB	15153301	3
Caelo	Cooling cream DAB	15153101	3
Caelo	Cooling cream DAB	15153001	3
Caelo	Cooling cream DAB	15153701	8
Bombastus	Cooling cream DAB	29072015A	1
Bombastuts/Gehe	Cooling cream DAB	60082802	1
Alliance	Cooling cream DAB	15066601	1
Fagron	Cooling cream DAB	B15A30T07018676	1
Caelo	Cooling cream DAB	1513101	2
Caelo	Cooling cream DAB	15048701	1
Caelo	Cooling cream DAB	15066901	2
cealo	Cooling cream DAB	15066901	1
Sanacorp	Cooling cream DAB	77/AKD6	1
Caelo	Cooling cream DAB	15153201	7
Noweda	Cooling cream DAB	15066601	1
Caelo	Cooling cream DAB	29081509	1
Fagron	Cooling cream DAB	15236801	1
Caelo	Cooling cream DAB	293748	1
Bombastus	Cooling cream DAB	293749	1
Caelo	Cooling cream DAB	15228701	8
Bombastus	Cooling cream DAB	293747	1
Bombastus	Cooling cream DAB	295184	2
Caelo	Cooling cream DAB	15228601	36
Bombastus	Cooling cream DAB	293750	1
Bombastus	Cooling cream DAB	6861938	1
Caelo	Cooling cream DAB	14143101	1
Caelo	Cooling cream DAB	15228502	1
Chiesi	Cooling cream DAB	15228701	1
Bombastus	Cooling cream DAB	296312	3
Caelo	Cooling cream DAB	15228501	19
Bombastus	Cooling cream DAB	295756	1
Caelo	Cooling cream DAB	1509201	1
Bombastus	Cooling cream DAB	295189	1
Caelo	Cooling cream DAB	15228401	4
Bombastus	Cooling cream DAB	295185	1
Caelo	Cooling cream DAB	15228801	9
Cealo/ Noweda	Cooling cream DAB	15228501	1
Caelo	Cooling cream DAB	15066801test	1
Caelo	Cooling cream DAB	1513201	1
Caelo	Cooling cream DAB	15236701	1
Gehe	Cooling cream DAB	295023	1
Caelo	Cooling cream DAB	15153401	1
Bombastus	Cooling cream DAB	295021	1
Caelo	Cooling cream DAB	15236901	20
Bombastus	Cooling cream DAB	296314	1
Caelo	Cooling cream DAB	15338601	2
EB-Ho	Cooling cream DAB	295184	1
sanacorp	Cooling cream DAB	15228601	1
Caelo	Cooling cream DAB	1506601	1
Caelo	Cooling cream DAB	15237101	8
bomb	Cooling cream DAB	296316	1
Caelo	Cooling cream DAB	15236801	3
Caelo	Cooling cream DAB	295762	1
Bombastus	Cooling cream DAB	297099	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	295120	1
Cae/Phönix	Cooling cream DAB	15228601	1
Bombastus	Cooling cream DAB	295190	1
Caelo	Cooling cream DAB	1523609	1
Rondell Apotheke	Cooling cream DAB	15228601	1
Bombastus	Cooling cream DAB	297205	2
Sanacorp/Henry Lamotte	Cooling cream DAB	6000083005	1
Caelo	Cooling cream DAB	15327701	6
Bombastus	Cooling cream DAB	296316	1
Fagron	Cooling cream DAB	15A30-T07-018974	1
Caelo	Cooling cream DAB	15328001	33
Bombastus	Cooling cream DAB	297214	2
Caelo	Cooling cream DAB	15327901	4
Bombastus	Cooling cream DAB	297209	1
Bombastus	Cooling cream DAB	298113	3
Caelo	Cooling cream DAB	295123	1
Bombastus	Cooling cream DAB	296317	1
Caesar & Loretz GmbH	Cooling cream DAB	15228601	1
Caelo	Cooling cream DAB	15327801	3
Bombastus	Cooling cream DAB	295183	1
Caelo	Cooling cream DAB	15413601	4
Bombastus	Cooling cream DAB	295760	2
Bombastus	Cooling cream DAB	297097	2
Bombastus	Cooling cream DAB	297102	1
Bombastus	Cooling cream DAB	295192	1
Caelo	Cooling cream DAB	15417601	5
Bombastus	Cooling cream DAB	297213	1
Bombastus	Cooling cream DAB	298120	1
Bombastus	Cooling cream DAB	298119	2
Caesar&Loretz	Cooling cream DAB	15228501	2
Caelo	Cooling cream DAB	15413501	3
Caelo	Cooling cream DAB	15413901	4
Caelo	Cooling cream DAB	15434501	17
Bombastus	Cooling cream DAB	298121	1
Sanacorp	Cooling cream DAB	15413901	1
Bombastus	Cooling cream DAB	297211	2
Lamotte/Spangroh	Cooling cream DAB	6000744001	3
Bombastus	Cooling cream DAB	295124	1
Bombastus	Cooling cream DAB	298881	3
Caelo	Cooling cream DAB	15417201	6
Bombastus	Cooling cream DAB	297210	2
Caelo	Cooling cream DAB	15413701	5
Caelo	Cooling cream DAB	15328101	2
Caelo	Cooling cream DAB	15417501	5
Gehe	Cooling cream DAB	15417201	1
Caelo	Cooling cream DAB	15434401	15
Sanacorp	Cooling cream DAB	77/AKD10	1
Caelo	Cooling cream DAB	16000501	7
Caelo	Cooling cream DAB	15417301	2
Caelo	Cooling cream DAB	15434401/20160309/1	1
Caelo	Cooling cream DAB	15434401/20160309/2	1
Caelo	Cooling cream DAB	15434401/201603093	1
Lamotte/Spangro	Cooling cream DAB	6001092002	8
Caelo	Cooling cream DAB	15417401	2
Caelo	Cooling cream DAB	15434503	2
Bombastus	Cooling cream DAB	295761	1
Caesar & Loretz GmbH	Cooling cream DAB	15434401	1
Caelo	Cooling cream DAB	15434402	14
apomix Fiebig	Cooling cream DAB	299362	1
Bombastus	Cooling cream DAB	298879	2

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	297206	1
Bombastus	Cooling cream DAB	298882	1
Noweda	Cooling cream DAB	15417201	1
Bombastus	Cooling cream DAB	160321 (intern)	1
Caelo	Cooling cream DAB	16000201	7
Bombastus	Cooling cream DAB	299358	1
Bumbastus	Cooling cream DAB	297213	1
Bombastus	Cooling cream DAB	299354	1
Cordes/Phönix	Cooling cream DAB	15434402	1
Caelo	Cooling cream DAB	16000601	11
Bombastus	Cooling cream DAB	298117	1
Bombastus	Cooling cream DAB	299362	1
Alliance H.	Cooling cream DAB	15434401	1
Bombastus	Cooling cream DAB	299973	1
Caelo	Cooling cream DAB	1547501	1
Bombastus	Cooling cream DAB	299974	1
Bombastus	Cooling cream DAB	298118	1
Bombastus	Cooling cream DAB	299970	1
Phönix	Cooling cream DAB	15434401	1
Bombastus	Cooling cream DAB	299976	3
Caelo	Cooling cream DAB	16086001	6
Caelo	Cooling cream DAB	16085902	5
Caelo	Cooling cream DAB	16085801	8
Bombastus	Cooling cream DAB	300717	1
Bombastus	Cooling cream DAB	299966	1
Bombastus	Cooling cream DAB	300728	3
Caelo	Cooling cream DAB	1686101	1
Bombastus	Cooling cream DAB	300727	3
Caelo	Cooling cream DAB	16000801	4
Bombastus	Cooling cream DAB	299981	2
Caelo	Cooling cream DAB	15435101	12
Bombastus	Cooling cream DAB	300715	1
Bombastus	Cooling cream DAB	299967	1
Bombastus	Cooling cream DAB	300720	2
Caelo	Cooling cream DAB	16086101	7
Bombastus	Cooling cream DAB	299361	1
Bombastus	Cooling cream DAB	300724	1
Caelo/AHD	Cooling cream DAB	15434402	1
	Cooling cream DAB	15L03-T06-028365	1
Caelo	Cooling cream DAB	15435102	19
Bombastus	Cooling cream DAB	300730	3
Caelo	Cooling cream DAB	1543502	1
sanacorp/ichthyol	Cooling cream DAB	16086001	1
Bombastus	Cooling cream DAB	299355	1
Henry Lamotte Oils	Cooling cream DAB	6001092001	1
Caelo	Cooling cream DAB	1256856	1
Caelo	Cooling cream DAB	15434502	8
Phoenix	Cooling cream DAB	16085801	1
Euro OTC	Cooling cream DAB	299976	1
Caelo	Cooling cream DAB	15000501	1
Bombastus	Cooling cream DAB	299968	1
Caelo	Cooling cream DAB	16129401	8
phönix	Cooling cream DAB	15435101	1
Caelo	Cooling cream DAB	16086001-20160615Ma1	1
Bombastus	Cooling cream DAB	300729	1
Bombastus	Cooling cream DAB	300722	1
Gehe	Cooling cream DAB	6001092002	1
Bombastus	Cooling cream DAB	301672	2
Bombastus	Cooling cream DAB	104948	1
Euro OTC	Cooling cream DAB	15435101	1

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Supplier	Substance	Batch	Spectra
Lamotte/AHD	Cooling cream DAB	6001092001	1
Bombastus	Cooling cream DAB	299980	3
Caelo	Cooling cream DAB	2x16129501	1
Phoenix	Cooling cream DAB	16086001	1
Bombastus	Cooling cream DAB	299352	1
Caelo	Cooling cream DAB	16129502	1
Caelo	Cooling cream DAB	16129501	9
Bombastus	Cooling cream DAB	301701	3
Bombastus	Cooling cream DAB	301700	3
Caelo	Cooling cream DAB	16134201	17
Caelo	Cooling cream DAB	1543512	1
Caelo	Cooling cream DAB	16129701	4
Bombastus	Cooling cream DAB	299351	1
Caelo	Cooling cream DAB	1543501	1
Caelo	Cooling cream DAB	299352	1
Caelo	Cooling cream DAB	160850801	1
Caelo	Cooling cream DAB	16129601	3
Ichthyol	Cooling cream DAB	16000801	1
Bombastus	Cooling cream DAB	301669	1
Euro OTC	Cooling cream DAB	16129501	1
Ebert & Jacobi 02.08.16	Cooling cream DAB	301701	1
Bombastus	Cooling cream DAB	302374	2
Caelo	Cooling cream DAB	1629401	1
Euro OTC	Cooling cream DAB	16134201	1
Caelo	Cooling cream DAB	16134001	4
Caelo	Cooling cream DAB	16133901	3
Lamotte/Noweda	Cooling cream DAB	6002062003	1
Bombastus	Cooling cream DAB	299978	1
Bombastus	Cooling cream DAB	301693	1
Bombastus	Cooling cream DAB	301676	1
Caelo	Cooling cream DAB	161333801	1
Caelo	Cooling cream DAB	16134202	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	6002062002	1
Bombastus	Cooling cream DAB	301673	1
Caelo	Cooling cream DAB	16172001	7
Bombastus	Cooling cream DAB	301674	1
Caelo	Cooling cream DAB	16134101	4
Hedinger/Gehe	Cooling cream DAB	16134201	1
Phoenix	Cooling cream DAB	16134001	1
Caelo	Cooling cream DAB	16172601	28
Bombastus	Cooling cream DAB	301699	2
Bombastus	Cooling cream DAB	301675	2
Noweda	Cooling cream DAB	16000801	1
Bombastus	Cooling cream DAB	302370	2
Bombastus	Cooling cream DAB	302382	1
Caelo	Cooling cream DAB	16000401	1
Bombastuts/Noweda	Cooling cream DAB	300726	1
Caelo	Cooling cream DAB	16085901	7
Caelo	Cooling cream DAB	160859	1
sanacorp, 9,51EUR, 27.09....	Cooling cream DAB	16172001	1
Phoenix	Cooling cream DAB	16172001	1
Bombastus	Cooling cream DAB	302385	4
AHL	Cooling cream DAB	302385	1
Ichthyol-Gesellschaft	Cooling cream DAB	16172601	1
Bombastus	Cooling cream DAB	303163	2
Caelo	Cooling cream DAB	16171901	5
Bombastus	Cooling cream DAB	303153	1
Lamotte/Anzag	Cooling cream DAB	6002062003	1
Caelo	Cooling cream DAB	16172701	4
Henry Lamotte Oils	Cooling cream DAB	6003682010	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	304582	3
Anzag	Cooling cream DAB	6002062002	1
lamotte/anzag	Cooling cream DAB	8002112004	1
Bombastus	Cooling cream DAB	303158	1
Bombastus	Cooling cream DAB	301670	1
Phoenix	Cooling cream DAB	16172701	1
Bombastus	Cooling cream DAB	302377	1
Caelo	Cooling cream DAB	6002062002	1
Bombastus	Cooling cream DAB	303621	2
Bomastus/Phönix	Cooling cream DAB	304582	1
Caelo	Cooling cream DAB	16172801	6
Caelo	Cooling cream DAB	16172902	4
Bombastus	Cooling cream DAB	301692	1
Bombastus	Cooling cream DAB	302380	1
Bombastus	Cooling cream DAB	304593	4
Caelo	Cooling cream DAB	16173001	1
Caelo	Cooling cream DAB	1097065	1
Bombastus	Cooling cream DAB	303625	1
Celo/ Kehr	Cooling cream DAB	16172001	1
Bombastus	Cooling cream DAB	302371	1
Bombastus	Cooling cream DAB	304580	1
Bombastus	Cooling cream DAB	302372	2
Bombastus	Cooling cream DAB	303155	1
Bombastus	Cooling cream DAB	304584	1
Caelo	Cooling cream DAB	5215A-02541	1
Caelo	Cooling cream DAB	16244601	9
Caelo	Cooling cream DAB	1605901	1
Gehe	Cooling cream DAB	16244601	1
Bombastus	Cooling cream DAB	304585	1
Caelo	Cooling cream DAB	1291116	1
Gehe	Cooling cream DAB	6003682010	3
Fagron	Cooling cream DAB	304595	1
Sanacorp/Henry Lamotte	Cooling cream DAB	6003682010	3
Caelo	Cooling cream DAB	16244701	30
Caelo	Cooling cream DAB	16172901	9
Caelo	Cooling cream DAB	16246201	10
Bombastus	Cooling cream DAB	303622	1
Caelo	Cooling cream DAB	304590	1
Bombastus	Cooling cream DAB	304591	1
Euro OTC	Cooling cream DAB	16129701	1
Bombastus	Cooling cream DAB	305022	1
Caelo	Cooling cream DAB	16246301	8
Bombastus	Cooling cream DAB	302375	2
Bombastus	Cooling cream DAB	305021	1
Caelo	Cooling cream DAB	16301702	3
Caelo	Cooling cream DAB	16301901	5
Bombastus	Cooling cream DAB	305131	3
Bombastus	Cooling cream DAB	305017	2
Bombastus	Cooling cream DAB	305129	3
Caelo	Cooling cream DAB	16301801	16
Caelo	Cooling cream DAB	163020001	1
Caelo	Cooling cream DAB	16302101	3
Caelo	Cooling cream DAB	162446901	1
Caelo	Cooling cream DAB	304582	1
Gehe	Cooling cream DAB	8002320007	1
Lamotte/Noweda	Cooling cream DAB	8002320008	1
Caelo	Cooling cream DAB	16302001	4
Caelo	Cooling cream DAB	304591	2
Caelo	Cooling cream DAB	8002320007	2
Caelo	Cooling cream DAB	17000601	30

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	170207UL/16323101	1
Bombastus	Cooling cream DAB	303620	1
Caelo	Cooling cream DAB	17000301	6
Caelo	Cooling cream DAB	16354402	6
AIH	Cooling cream DAB	305131	1
Caelo	Cooling cream DAB	17035301	7
Caelo	Cooling cream DAB	17000501	2
GEHE	Cooling cream DAB	304594	1
lamotte/anzag	Cooling cream DAB	8002320008	1
Bombastus	Cooling cream DAB	306530	1
Caelo	Cooling cream DAB	17000401	6
Bombastus	Cooling cream DAB	16095503	1
Caelo	Cooling cream DAB	16322901	2
Caelo	Cooling cream DAB	16323001	6
HenryL/Spangro	Cooling cream DAB	61360	1
Bombastus	Cooling cream DAB	305961	2
Caelo	Cooling cream DAB	16354401	16
Bombastus	Cooling cream DAB	306937	1
Caelo	Cooling cream DAB	17033001	30
Bombastus	Cooling cream DAB	307358	1
Caelo	Cooling cream DAB	305131	1
Caelo	Cooling cream DAB	17038501	8
Lamotte/Spangro	Cooling cream DAB	8002320008	2
Caelo	Cooling cream DAB	17035401	5
Caesar&Loretz	Cooling cream DAB	16354401	2
Sanacorp 08.03.2017 EK:...	Cooling cream DAB	16301801	1
Caelo	Cooling cream DAB	1700601	1
Bombastus	Cooling cream DAB	307353	2
Caelo	Cooling cream DAB	123456	1
Gehe	Cooling cream DAB	305961	1
Caelo	Cooling cream DAB	16031707	1
Gehe	Cooling cream DAB	8002320008	1
Bombastus	Cooling cream DAB	306939	1
Caeolo/Phönix	Cooling cream DAB	16354401	1
Bombastus	Cooling cream DAB	306529	3
Bombastus	Cooling cream DAB	305953	2
Bombastuts/Gehe	Cooling cream DAB	307350	1
Caelo	Cooling cream DAB	16323101	1
Lamotte/Spangro	Cooling cream DAB	8002696003	8
Henry Lamotte/Anzag	Cooling cream DAB	8002320007	1
Caelo	Cooling cream DAB	1041702	1
Bombastus	Cooling cream DAB	306932	3
phönix	Cooling cream DAB	17033001	1
Bombastus	Cooling cream DAB	305957	1
AHD	Cooling cream DAB	16354401	2
Henry Lamotte oils GmbH...	Cooling cream DAB	8002320008	1
Bombastus	Cooling cream DAB	305949	1
Bombastus	Cooling cream DAB	305954	1
Caelo	Cooling cream DAB	307356	1
Bombastus	Cooling cream DAB	304592	1
Klenk	Cooling cream DAB	17033001	3
Caelo	Cooling cream DAB	170000301	1
Phoenix	Cooling cream DAB	306932	1
Bombastuts/Gehe	Cooling cream DAB	307919	1
Fagron	Cooling cream DAB	16301801	1
Bombastus	Cooling cream DAB	306528	1
Caelo	Cooling cream DAB	163230001	1
Caelo	Cooling cream DAB	306941	1
Lamotte/AHC	Cooling cream DAB	8002696003	1
Henry Lamotte Oils GmbH...	Cooling cream DAB	8002320007	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Cooling cream DAB	16354401	1
Caelo	Cooling cream DAB	6051702	1
Bombastus	Cooling cream DAB	306930	1
Caelo	Cooling cream DAB	301701	1
Bombastus	Cooling cream DAB	307916	2
Bombastus	Cooling cream DAB	307931	1
Euro OTC	Cooling cream DAB	306931	1
Noweda	Cooling cream DAB	306943	1
Noweda	Cooling cream DAB	16323101	1
Bombastus	Cooling cream DAB	307932	1
GEHE	Cooling cream DAB	305953	1
Sanacorp	Cooling cream DAB	307932	1
Phoenix	Cooling cream DAB	17038501	1
Caelo	Cooling cream DAB	17075301	7
Ebert/Lamotte	Cooling cream DAB	8002696003	1
Bombastus	Cooling cream DAB	307929	3
GEHE	Cooling cream DAB	307933	1
Bombastus	Cooling cream DAB	308710	1
Caelo	Cooling cream DAB	17061702	1
Bombastus	Cooling cream DAB	306532	2
Caelo	Cooling cream DAB	17075201	17
Bombastus	Cooling cream DAB	305952	2
Bombastus	Cooling cream DAB	308489	1
Caelo	Cooling cream DAB	8002875004	1
Henry Lamotte Oils / Gehe	Cooling cream DAB	8002875004	1
Caelo	Cooling cream DAB	17075401	4
Gehe	Cooling cream DAB	308723	5
Caelo	Cooling cream DAB	17075102	2
Caelo	Cooling cream DAB	307358	1
Caelo	Cooling cream DAB	10071705	1
Caelo	Cooling cream DAB	17081801	10
Euro OTC	Cooling cream DAB	308491	1
Bombastus	Cooling cream DAB	307923	1
phoenix	Cooling cream DAB	308717	1
Bombastus	Cooling cream DAB	306940	1
Kehr	Cooling cream DAB	8002875004	1
Henry L/Spangro	Cooling cream DAB	80026960003	1
Lamotte/AHD	Cooling cream DAB	8002696003	3
Bombastus	Cooling cream DAB	305955	1
Bombastus	Cooling cream DAB	306941	1
Bombastuts/Gehe	Cooling cream DAB	308712	1
Caelo	Cooling cream DAB	170728UL/17081801	1
Caelo	Cooling cream DAB	170754015325	1
Bombastus	Cooling cream DAB	308720	1
Bombastus	Cooling cream DAB	308491	1
Bombastus	Cooling cream DAB	307927	1
Caelo	Cooling cream DAB	17122701	5
Caelo	Cooling cream DAB	17081801-20170818Ma8	1
Caelo	Cooling cream DAB	17116001	5
Phoenix	Cooling cream DAB	17075401	1
Caelo	Cooling cream DAB	17075101	11
Caelo	Cooling cream DAB	17115601	13
Bombastus	Cooling cream DAB	307917	1
Bombastus	Cooling cream DAB	308490	1
Henry L/Spangro	Cooling cream DAB	8003158005	4
Caelo	Cooling cream DAB	170975201	1
Bombastus	Cooling cream DAB	306944	1
Caelo	Cooling cream DAB	1040917/17075201	1
Bombastus	Cooling cream DAB	307933	1
Caelo	Cooling cream DAB	170926UL/17122701	1

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Supplier	Substance	Batch	Spectra
Bombastus	Cooling cream DAB	310002	2
Caelo	Cooling cream DAB	310004	1
Caelo	Cooling cream DAB	17124901	6
Bombastus	Cooling cream DAB	309999	2
Caelo	Cooling cream DAB	17125002	4
Caelo	Cooling cream DAB	14101713	1
GEHE	Cooling cream DAB	308725	1
GEHE	Cooling cream DAB	309370	1
Bombastus	Cooling cream DAB	310003	2
Bombastus	Cooling cream DAB	310975	1
Caelo	Cooling cream DAB	17122801	4
Henry Lamotte Oils/ Gehe	Cooling cream DAB	8003158004	2
Bombastus	Cooling cream DAB	308713	1
Bombastus	Cooling cream DAB	310974	3
Caelo	Cooling cream DAB	17125101	4
Henry Lamotte Oils GmbH	Cooling cream DAB	6002062002	1
Bombastus	Cooling cream DAB	309369	2
Sanacorp	Cooling cream DAB	17075101	1
AHL	Cooling cream DAB	8003158005	2
Henry Lamotte	Cooling cream DAB	8003158004	3
Caelo	Cooling cream DAB	3144-17156801	1
Caelo	Cooling cream DAB	17124802	1
Caelo	Cooling cream DAB	17156801	7
Noweda	Cooling cream DAB	17122801	3
Caesar und Loretz GmbH	Cooling cream DAB	17122801	1
Bombastus	Cooling cream DAB	17000221	2
Bombastus	Cooling cream DAB	309371	2
Bombastus	Cooling cream DAB	310989	1
Bombastus	Cooling cream DAB	308715	1
Bombastus	Cooling cream DAB	310005	2
Caelo	Cooling cream DAB	17157001	3
Caelo	Cooling cream DAB	17157101	6
Henry L/Spangro	Cooling cream DAB	8003478005	6
Bombastus	Cooling cream DAB	17000227	1
Caelo	Cooling cream DAB	17157002	4
Alliance	Cooling cream DAB	17189701	1
Sanacorp	Cooling cream DAB	17157001	2
Caelo	Cooling cream DAB	17189701	7
Caelo	Cooling cream DAB	309370	1
Henry Lamotte/Noweda	Cooling cream DAB	8003478005	1
Caelo	Cooling cream DAB	17000226	3
Caelo	Cooling cream DAB	17189802	6
Fagron	Cooling cream DAB	8003478004	3
Bombastus	Cooling cream DAB	310000	2
Sanacorp	Cooling cream DAB	17000228	4
Caelo	Cooling cream DAB	171229UL/17122801	1
Bombastus	Cooling cream DAB	17000976	2
Caelo	Cooling cream DAB	17254201	16
gehe	Cooling cream DAB	17189701	1
Caelo	Cooling cream DAB	17157201	2
Bombastus	Cooling cream DAB	310979	1
Caelo	Cooling cream DAB	17115901	1
Bombastus	Cooling cream DAB	17000225	1
Sanacorp/Ebert	Cooling cream DAB	17156901	1
Bombastus	Cooling cream DAB	309370	1
Bombastus	Cooling cream DAB	17000222	2
Caelo	Cooling cream DAB	17156901	3
Caelo	Cooling cream DAB	17157301	5
Caelo	Cooling cream DAB	17189801	5
Bombastus	Cooling cream DAB	310984	1

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Supplier	Substance	Batch	Spectra
Caelo	Cooling cream DAB	17254601	3
Caelo	Cooling cream DAB	17254101	15
Bombastus	Cooling cream DAB	17000983	1
Caelo	Cooling cream DAB	17254501	4
Bombastus	Cooling cream DAB	310976	1
Bombastus	Cooling cream DAB	310986	2
Bombastus	Cooling cream DAB	17000228	1
Bombastus	Cooling cream DAB	17000229	1
Bombastus	Cooling cream DAB	17000972	1
Caelo	Cooling cream DAB	17254801	4
Bombastus	Cooling cream DAB	17000979	1
AHDFiebig	Cooling cream DAB	17075101	1
AHD	Cooling cream DAB	17189701	1
Bombastus	Cooling cream DAB	310987	2
Lamotte/AHD	Cooling cream DAB	8003478005	2
Sanacorp	Cooling cream DAB	17189701	1
Bombastus	Cooling cream DAB	17000982	2
Bombastus	Cooling cream DAB	17001958	1
Caelo	Cooling cream DAB	17254401	3
Caelo	Cooling cream DAB	170750101	1
Noweda	Cooling cream DAB	8003478005	1
chaelo/gehe	Cooling cream DAB	17254101	1
Bombastus	Cooling cream DAB	310977	2
Noweda	Cooling cream DAB	17075101	1
Caelo	Cooling cream DAB	17255901	2
Caelo	Cooling cream DAB	8003158005	1
Ichthyol Gesellschaft	Cooling cream DAB	17254501	1
Sanacorp	Cooling cream DAB	17254501	1
Bombastus	Cooling cream DAB	17001966	1
Bombastus	Cooling cream DAB	17001957	1
Bombastus	Cooling cream DAB	308724	1
Noweda	Cooling cream DAB	17157201	1
Caelo	Cooling cream DAB	17298001	8
Bombastus	Cooling cream DAB	17001964	1
Kehr	Cooling cream DAB	301702	1
Bombastus	Cooling cream DAB	17000977	1
Caelo	Cooling cream DAB	17255101	3
Caelo	Cooling cream DAB	17298002	5
Caelo	Cooling cream DAB	17298101	6
GEHE	Cooling cream DAB	17254101	1
Caelo	Cooling cream DAB	17254901	1
Caelo	Cooling cream DAB	1718980	1
Gehe	Cooling cream DAB	17002971	1
Bombastus	Cooling cream DAB	17000984	1
Bionorica Ethics	Cooling cream DAB	17001966	1
Cordes/Gehe	Cooling cream DAB	17255101	1
Lamotte/Phoenix	Cooling cream DAB	8003478007	4
Caelo	Cooling cream DAB	17255001	4
Bombastus	Cooling cream DAB	18000333	2
Sanacorp	Cooling cream DAB	17000984	1
Kehr	Cooling cream DAB	17000986	1
Caelo	Cooling cream DAB	1798201	1
Bombastus	Cooling cream DAB	17001961	1
Bombastus	Cooling cream DAB	17000973	1
Fagron	Cooling cream DAB	7070001	1
Caelo	Cooling cream DAB	17296401	1
Caelo	Cooling cream DAB	17330801	5
Bombastus	Cooling cream DAB	17000985	1
Bombastus	Cooling cream DAB	17001969	1
Noweda	Cooling cream DAB	17254301	2

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Supplier	Substance	Batch	Spectra
Sanacorp	Cooling cream DAB	17001970	1
Caelo	Cooling cream DAB	17330802	13
Caelo	Cooling cream DAB	17298401	5
Caelo	Cooling cream DAB	17298301	2
Bombastus	Cooling cream DAB	18000331	1
Bombastus	Cooling cream DAB	18000337	1
Bombastus	Cooling cream DAB	18000325	1
Sanacorp	Cooling cream DAB	18000337	1
Caelo	Cooling cream DAB	19198501	1
Bombastus	Cooling cream DAB	17000970	1
Caelo	Cooling cream DAB	17331001	5
Caelo	Cooling cream DAB	12051809	1
Bombastus	Cooling cream DAB	18000332	1
Lamotte/AHD	Cooling cream DAB	8003478007	2
Bombastus	Cooling cream DAB	18001084	2
Bombastus	Cooling cream DAB	17001962	1
Bombastus	Cooling cream DAB	18002087	2
Sanacorp	Cooling cream DAB	18001077	1
Caelo	Cooling cream DAB	18042401	11
Caelo	Cooling cream DAB	17298501	4
Bombastus	Cooling cream DAB	17001970	4
Bombastus	Cooling cream DAB	18002093	1
Caelo	Cooling cream DAB	17345103	1
bombast	Cooling cream DAB	17001964	1
Caelo	Cooling cream DAB	18002087	1
Bombastus	Cooling cream DAB	18001079	3
Caelo	Cooling cream DAB	17298701	1
Caelo	Cooling cream DAB	18001083	1
Lamotte/Phoenix	Cooling cream DAB	8003478008	7
Bombastus	Cooling cream DAB	18002240	2
Caelo	Cooling cream DAB	18042701	4
Noweda/Henry	Cooling cream DAB	8003478007	1
Caelo	Cooling cream DAB	8003478008	2
Bombastus	Cooling cream DAB	18002096	2
Bombastus	Cooling cream DAB	18001082	2
Bombastus	Cooling cream DAB	17001963	1
AHL/Henry	Cooling cream DAB	8003478008	1
AHL/Henry	Cooling cream DAB	61360	1
Bombastus	Cooling cream DAB	18002085	6
Euro OTC	Cooling cream DAB	8003478007	1
Bombastus	Cooling cream DAB	18002243	2
Bombastus	Cooling cream DAB	18002239	1
Caelo	Cooling cream DAB	18042402	3
Caelo	Cooling cream DAB	8003478006	1
Bombastus	Cooling cream DAB	18001078	1
Caelo	Cooling cream DAB	16071809	1
Lamotte/AHD	Cooling cream DAB	8003478008	1
Hepart	Cooling cream DAB	18042402	1
Lamotte / AHD	Cooling cream DAB	8003478004	1
Caelo	Cooling cream DAB	18042801	3
Bombastus	Cooling cream DAB	18002244	2
Caelo	Cooling cream DAB	18001082	2
Bombastus	Cooling cream DAB	18002088	1
Caelo	Cooling cream DAB	18182301	8
AHC/Lamotte	Cooling cream DAB	8003478009	1
Caelo	Cooling cream DAB	18104601	2
Bombastus	Cooling cream DAB	18000336	1
Delta	Cooling cream DAB	18042401	1
Caelo	Cooling cream DAB	18181201	1
Bombastus	Cooling cream DAB	18002083	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Cooling cream DAB	18002239	1
Bombastus	Cooling cream DAB	18002306	2
Caelo	Cooling cream DAB	16081812	1
Caelo	Cooling cream DAB	16081813	1
Bombastus	Cooling cream DAB	18003175	1
Caelo	Cooling cream DAB	18104501	4
Fiebig	Cooling cream DAB	18182701	2
Caelo	Cooling cream DAB	18183001	2
Bombastus	Cooling cream DAB	18000327	2
Caelo	Cooling cream DAB	18002243	2
Caelo	Cooling cream DAB	8091807	1
Caelo	Cooling cream DAB	18042403	2
Caelo	Cooling cream DAB	18182901	1
Caelo	Cooling cream DAB	18182702	3
Caelo	Cooling cream DAB	18183301	3
Bombastus	Cooling cream DAB	18002309	2
Caelo	Cooling cream DAB	18218301	3
Caelo	Cooling cream DAB	18182701	2
Fagron	Cooling cream DAB	1807d001	1
HenryFiebig	Cooling cream DAB	8003478007	1
Caelo	Cooling cream DAB	18182401	7
Bombastus	Cooling cream DAB	18001075	1
Bombastus	Cooling cream DAB	18004428	1
Caelo	Cooling cream DAB	18183101	3
Bombastus	Cooling cream DAB	18004434	1
Caelo	Cooling cream DAB	18183201	1
Bombastus	Cooling cream DAB	18003753	1
Delta Apotheke	Cooling cream DAB	18182501	1
Delta Apotheke	Cooling cream DAB	18182301	1
Bombastus	Cooling cream DAB	18003746	1
Caelo	Cooling cream DAB	18183401	1
Bombastus	Cooling cream DAB	18005204	1
Bombastus	Cooling cream DAB	18004427	1
Caelo	Cooling cream DAB	18182602	1
Bombastus	Cooling cream DAB	18002090	1
Caelo	Cooling cream DAB	18182501	3
Caelo	Cooling cream DAB	18218701	6
Euro OTC	Cooling cream DAB	311218182501	1
Lamotte/AHD	Cooling cream DAB	8003478009	1
Bombastus	Cooling cream DAB	18004435	2
Phoenix 07.12.18	Cooling cream DAB	18218601	1
Fagron	Cooling cream DAB	18218801	1
Caelo	Cooling cream DAB	18218601	2
Henry Lamotte Oils GmbH	Cooling cream DAB	6012127001	1
Caelo	Cooling cream DAB	18218503	1
Caelo	Cooling cream DAB	18218801	2
Caelo	Cooling cream DAB	18182601	2
Lamotte/AHD	Cooling cream DAB	6012127002	1
Bomastus-Werke AG	Cooling cream DAB	18005195	1
Caelo	Cooling cream DAB	18218901	2
Bombastus	Cooling cream DAB	18004433	1
Fagron	Cooling cream DAB	18219201	1
Caelo	Cooling cream DAB	18218302	4
Sanacorp	Cooling cream DAB	18005199	1
Kehr	Cooling cream DAB	18182701	1
Bombastus	Cooling cream DAB	18006323	1
Bombastus	Cooling cream DAB	18005604	1

- 103 765 spectra from 581 *Apo-Ident* customers from a total of 29 531 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 *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	700	0	35 135
Type B	0	2980	20	76 078
Type C	0	4136	58	103 765

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 % (> 99.9705 %)	100.0000 % (> 99.1429 %)
Type B	100.0000 % (> 99.9688 %)	99.3333 % (> 99.2333 %)
Type C	100.0000 % (> 99.6449 %)	98.6171 % (> 98.5455 %)

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.

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	44.62
31457	33779	11.41	37.25
30889	33779	8.22	36.90
31922	31922	0.00	43.52
30890	31249	9.80	49.63
32294	32294	0.00	36.63
32506	32506	0.00	46.30
30921	31249	5.27	43.19

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31052	31922	6.94	40.22
31224	31992	7.53	40.45
31471	31471	0.00	37.39
31992	31992	0.00	41.49
33779	33779	0.00	37.64

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Coriander oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31192-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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*

Validation samples

A total of 222 872 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 *Coriander oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Coriander oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Coriander oil	16140410	33253	40
Caelo	Coriander oil	181257	34056	40

- 78 998 spectra from a total of 1828 batches from further 350 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 36 *Apo-Ident* customers from 45 batches from the substance/substance group *Coriander oil*.

Supplier	Substance	Batch	Spectra
Caelo	Coriander oil	10293307	1
Caelo	Coriander oil	11324002	1

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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	Spectra
Caelo	Coriander oil	11324003	1
Caelo	Coriander oil	18061201	1
Noweda	Coriander oil	11324005	1
Caelo	Coriander oil	11324005	4
Caelo	Coriander oil	11324004	1
Caelo	Coriander oil	31081203	1
Kaders	Coriander oil	131528	1
Caelo	Coriander oil	7021303	1
Taoasis	Coriander oil	32040-108625	1
Taoasis	Coriander oil	31920-1111173	1
AHD, 19.07.2013	Coriander oil	12228507	1
Caelo	Coriander oil	2081306	1
Caelo	Coriander oil	12228501	1
Taoasis	Coriander oil	33485-112618	1
AHD, 26.09.2013	Coriander oil	12228509	2
AHD, 05.11.2013	Coriander oil	12228510	1
Caelo	Coriander oil	14011403	1
Caelo	Coriander oil	12228503	2
Caelo	Coriander oil	12061413	1
Caelo	Coriander oil	12228509	1
Caelo	Coriander oil	13288109	4
Caelo	Coriander oil	13288112	4
Caelo	Coriander oil	13288113	1
Caelo	Coriander oil	14319902	3
Caelo	Coriander oil	14319904	4
VDI	Coriander oil	14319902	1
Caelo	Coriander oil	15229601	5
Caelo	Coriander oil	15229607	3
Caelo	Coriander oil	15229608	1
Caelo	Coriander oil	15229613	2
Caelo	Coriander oil	16140403	1
Caelo	Coriander oil	15229610	1
Taoasis	Coriander oil	104709-125892	1
Caelo	Coriander oil	16140401	2
Caelo	Coriander oil	152229601	1
Caelo	Coriander oil	1612210C/16140401	1
Caelo	Coriander oil	16140406	1
Caelo	Coriander oil	16140405	6
GEHE	Coriander oil	16140405	1
Caelo	Coriander oil	16140410	2
Caelo	Coriander oil	17050408	5
Caelo	Coriander oil	16140409	1
Caelo	Coriander oil	1711200C/17050403	1
Caelo	Coriander oil	17364701	5
Caelo	Coriander oil	17364702	1
Caelo/Sanacorp	Coriander oil	17364701	1
Caelo	Coriander oil	18125703	3
Caelo	Coriander oil	18125708	1

- 107 869 spectra from 582 *Apo-Ident* customers from a total of 30 635 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 *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	120	0	35 715
Type B	0	80	0	78 998
Type C	0	88	2	107 869

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6450 %)	97.7778 % (> 94.4444 %)

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.

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	72.07
31407	33913	4.86	64.90
33913	33913	0.00	64.89

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	D-alpha tocopherol
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30485-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	1507770
Caelo	D-alpha tocopherol	16005002	32072	40	20160203
Fagron	D-alpha tocopherol	16D14-B05-324514	32725	40	20160422
Fagron	D-alpha tocopherol	16H29-B08-334064	33419	40	20161027

Validation samples

A total of 222 872 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 D-*alpha* tocopherol. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group D-*alpha* tocopherol.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	D- <i>alpha</i> tocopherol	13248808	31501 [†]	20
Caelo	D- <i>alpha</i> tocopherol	16005002	32072 [†]	20
Fagron	D- <i>alpha</i> tocopherol	16H29-B08-334064	33418	40
Fagron	D- <i>alpha</i> tocopherol	17B14-B02-336290	34036	40

- 78 958 spectra from a total of 1826 batches from further 350 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.

- 66 spectra from 44 *Apo-Ident* customers from 40 batches from the substance/substance group D-*alpha* tocopherol.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	D-alpha tocopherol	5012I-03257	1
Caelo	D-alpha tocopherol	11313308	3
Caelo	D-alpha tocopherol		1
Caelo	D-alpha tocopherol	12106901	1
Caelo	D-alpha tocopherol	12106907	2
Caelo	D-alpha tocopherol	11313311	2
Caelo	D-alpha tocopherol	12106910	2
Caelo	D-alpha tocopherol	11313302	1
Caelo	D-alpha tocopherol	11313309	1
Caelo	D-alpha tocopherol	12106908	1
Caelo	D-alpha tocopherol	13248802	2
Caelo	D-alpha tocopherol	11313301	1
Caelo	D-alpha tocopherol	13248803	1
Sanacorp	D-alpha tocopherol	13248801	1
Caelo	D-alpha tocopherol	13248801	1
Caelo	D-alpha tocopherol	14159303	1
Caelo	D-alpha tocopherol	13248804	1
Caelo	D-alpha tocopherol	14159302	1
Caelo	D-alpha tocopherol	14159305	1
Caelo	D-alpha tocopherol	712015	1
Caelo	D-alpha tocopherol	14353806	2
Caelo	D-alpha tocopherol	132488003	1
Caelo	D-alpha tocopherol	8705007	1
Caelo	D-alpha tocopherol	14353802	1
Caelo	D-alpha tocopherol	15102606	2
Caelo	D-alpha tocopherol	15102611	1
Caelo	D-alpha tocopherol	16005002	9
Audor Pharma	D-alpha tocopherol	16D14-B05-322951	1
Caelo	D-alpha tocopherol	16187604	6
Fagron	D-alpha tocopherol	16D14-B05-324514	1
Alte Apotheke	D-alpha tocopherol	16D14B05324514	1
Gehe	D-alpha tocopherol	16187606	1
Euro/Phönix	D-alpha tocopherol	16187606	1
Frago/Noweda	D-alpha tocopherol	17B14-B02	1
Fagron	D-alpha tocopherol	20170816-03257	1
Caelo	D-alpha tocopherol	16187606	1
Fagron	D-alpha tocopherol	17B14-B02336290	1
Caelo	D-alpha tocopherol	17057501	2
Caelo	D-alpha tocopherol	17057508	1
Caelo	D-alpha tocopherol	18068402	1
Fagron	D-alpha tocopherol	17J31-B01	1
Caelo	D-alpha tocopherol	18068403	1
Fagron	D-alpha tocopherol	17J31-B01-342312	2

- 107 893 spectra from 582 *Apo-Ident* customers from a total of 30 641 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	66	0	107 893

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6451 %)	100.0000 % (> 90.9091 %)

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.

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	55.44
32072	31501	6.82	57.39
32725	31501	17.91	70.91
33419	31501	29.20	77.66

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Dexpanthenol
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30884-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Euro OTC	Dexpanthenol	1309030-03	31532	40	AR-15-FG-005869-01
Euro OTC	Dexpanthenol	1510008	31769	40	20151102*
Fagron	Dexpanthenol	17B06-B04-332078	33239	40	20170315

Validation samples

A total of 222872 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 *Dexpanthenol*. These samples are listed above in the [calibration samples](#) section.
- 35635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 517 spectra of 14 reference samples from the substance/substance group *Dexpanthenol*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Dexpanthenol	1309030-03	31532 [†]	20
Euro OTC	Dexpanthenol	1510008	31769 [†]	17
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
Caelo	Dexpanthenol	171721	33716	40
Caelo	Dexpanthenol	172877	33903	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
Caelo	Dexpanthenol	190087	34337	40

- 78561 spectra from a total of 1816 batches from further 350 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the

*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.

[†]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*.

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.

- 1710 spectra from 388 *Apo-Ident* customers from 447 batches from the substance/substance group *Dexpanthenol*.

Supplier	Substance	Batch	Spectra
Noweda	Dexpanthenol	11010703	1
Fagron	Dexpanthenol	11H26-N03	4
Caelo	Dexpanthenol	11293501	2
EuRho	Dexpanthenol	1110032-01	1
EuRho	Dexpanthenol	1107023-01	1
Caelo	Dexpanthenol	11293506	3
Caelo	Dexpanthenol	11293507	4
Fagron	Dexpanthenol	11B21-N01	1
Caelo	Dexpanthenol	12018702	1
Caelo	Dexpanthenol	12018706	2
Caelo	Dexpanthenol	20061203	1
Caelo	Dexpanthenol	1193507	1
Caelo	Dexpanthenol	12018707	4
Gehe	Dexpanthenol	12E11-N02	2
Caelo	Dexpanthenol	20071205	1
Euro OTC	Dexpanthenol	1204010-01	9
Sanacorp/ euRho	Dexpanthenol	1103053-01	1
Euro OTC	Dexpanthenol	E0EIE22902	1
Caelo	Dexpanthenol	9081206	1
Caelo	Dexpanthenol	12018703	8
Phönix Gotha	Dexpanthenol	1204010-01	1
Fagron	Dexpanthenol	12E11-N02	22
Caelo	Dexpanthenol	3101202	1
Caelo	Dexpanthenol	25101203	1
Caelo	Dexpanthenol	11293503	1
Fagron	Dexpanthenol	TL01110074	1
Caelo	Dexpanthenol	12018713	4
Euro OTC	Dexpanthenol	1204010-02	12
Caelo	Dexpanthenol	12126702	13
Fagron	Dexpanthenol	TL01110074	4
Caelo	Dexpanthenol	12E11-N02	1
Caelo	Dexpanthenol	24111201	1
Euro OTC	Dexpanthenol	129401002	1
Fragron	Dexpanthenol	12E11-N02	1
Fagron	Dexpanthenol	12B13-N07	2
Caelo	Dexpanthenol	12126704	5
Anzag	Dexpanthenol	12E11-N02	3
Caelo	Dexpanthenol	19121204	1
Caelo	Dexpanthenol	19121205	1
Fagron	Dexpanthenol	12e11-no2	1
Caelo	Dexpanthenol	20261012-1	1
Caelo	Dexpanthenol	12126705	11
Caelo	Dexpanthenol	TL01110076	1
Caelo	Dexpanthenol	18011303	1
Caelo	Dexpanthenol	12285201	6
EuRho	Dexpanthenol	1204010-02	1
Fagron	Dexpanthenol	12H28-N07	5

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	12018715	1
Caesar&lorenz,Phoenix	Dexpanthenol	12285201	1
Caelo	Dexpanthenol	13021305	1
Anzag	Dexpanthenol	12126705	2
Caelo	Dexpanthenol	22021304	1
Caelo	Dexpanthenol	12126707	2
Fagron	Dexpanthenol	12E11-No2	1
Anzag	Dexpanthenol	12K27-N04	1
Caelo	Dexpanthenol	12285202	7
Fagron	Dexpanthenol	12K27-N04	6
Caelo	Dexpanthenol	12285204	4
Caelo	Dexpanthenol	25031305	1
Anzag	Dexpanthenol	12H28-N07	1
Phönix	Dexpanthenol	12285204	1
fargon/Sanacorp	Dexpanthenol	12E11-N02	1
Fagron	Dexpanthenol	12L28-N03	6
Euro OTC	Dexpanthenol	1301009-01	18
Euro OTC	Dexpanthenol	E0EJD41902	1
Fagron	Dexpanthenol	11B21-N01	1
Caelo	Dexpanthenol	12285203	4
Noweda	Dexpanthenol	12285211	2
Caelo	Dexpanthenol	12285211	7
Caelo	Dexpanthenol	3051305	1
EUro/AHD	Dexpanthenol	1301009-01	2
Caelo	Dexpanthenol	12285212	3
sanaEuro	Dexpanthenol	311V-01082	1
Caelo	Dexpanthenol	122852211	1
Fagron	Dexpanthenol	TL01203018	3
Caelo	Dexpanthenol	12285205	1
Fagron	Dexpanthenol	12L28-N02	1
Caelo	Dexpanthenol	12285214	6
Caelo	Dexpanthenol	13084702	15
Caelo	Dexpanthenol	5061306	1
Euro OTC	Dexpanthenol	1301009-001	1
cesar&lorenz/Phönix	Dexpanthenol	12285203	1
Caelo	Dexpanthenol	12L28-N03	1
Caelo	Dexpanthenol	13084706	6
Caelo	Dexpanthenol	15071304	1
Fagron	Dexpanthenol	13D22-N12	14
Caelo	Dexpanthenol	13084707	2
A.H.D.	Dexpanthenol	13D22-N12	1
Caelo	Dexpanthenol	13084703	7
Gehe	Dexpanthenol	12285203	1
EuRho	Dexpanthenol	1301009-01	4
Fagron	Dexpanthenol	TL01212052	1
Fagron	Dexpanthenol	8572983	1
Alliance	Dexpanthenol	1301009-01	1
Fagron	Dexpanthenol	12e11-N02	1
Caelo	Dexpanthenol	1213A-01082	1
Fagron	Dexpanthenol	12K27-N04	1
Noweda	Dexpanthenol	12E11-N02	2
Caelo	Dexpanthenol	13084704	6
Caelo	Dexpanthenol	1513F-01082	1
Caelo	Dexpanthenol	3713A-01082	1
Gehe	Dexpanthenol	11293501	1
Caelo	Dexpanthenol	13091309	1
Euroo/Ebert	Dexpanthenol	3813E-01082	1
Caelo	Dexpanthenol	2101303	1
Euro OTC	Dexpanthenol	130100901	2
Euro OTC	Dexpanthenol	1301009-02	12

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Supplier	Substance	Batch	Spectra
Euro OTC	Dexpanthenol	1301009	1
Caelo	Dexpanthenol	16101305	1
Europ Ots Pharma	Dexpanthenol	13084705	1
Caelo	Dexpanthenol	13084705	3
Caelo	Dexpanthenol	13189502	3
Fagron	Dexpanthenol	12L28-N03	1
Fagron	Dexpanthenol	TL01212052	1
Euro OTC	Dexpanthenol	130100902	2
Daiichi Fine Chemicals	Dexpanthenol	1301009-01	1
Fagron	Dexpanthenol	13I04-N04	15
Caelo	Dexpanthenol	82729498	1
Caelo	Dexpanthenol	18111306	1
Sanacorp	Dexpanthenol	36/AKD22	1
Caelo	Dexpanthenol	13189504	2
Caelo	Dexpanthenol	1301009-02	1
Caelo	Dexpanthenol	3121303	1
Hedinger/AHD	Dexpanthenol	1301009-02	1
Caelo	Dexpanthenol	13189506	8
Caelo	Dexpanthenol	13084709	5
Fagron	Dexpanthenol	12I04-N04	1
Caelo	Dexpanthenol	13189503	13
Caelo	Dexpanthenol	20121301	1
Fagron	Dexpanthenol	12L28-No3	1
Phönix	Dexpanthenol	1301009-02	1
Anzag	Dexpanthenol	13/04-N04	1
Caesar/Noweda	Dexpanthenol	4811A-01082	1
Fagron	Dexpanthenol	13/04-N04	3
Fagron	Dexpanthenol	12E11-N02	1
Sanacorp	Dexpanthenol	13342601	1
Caelo	Dexpanthenol	13084711	1
Caelo	Dexpanthenol	16021307	1
Caelo	Dexpanthenol	13342601	5
Noweda	Dexpanthenol	13342601	1
Caelo	Dexpanthenol	13342602	4
Caelo	Dexpanthenol		2
Euro OTC	Dexpanthenol	95700556P0	2
Caelo	Dexpanthenol	25021405	1
Caelo	Dexpanthenol	13342603	2
Euro OTC	Dexpanthenol	1309030-01	7
Anzag	Dexpanthenol	12J30-B03-287502	1
Caelo	Dexpanthenol	14031410	1
Fagron	Dexpanthenol	13J29-B05-287526	7
Euro OTC	Dexpanthenol	130903001	2
Caelo	Dexpanthenol	13342605	8
Holdermann	Dexpanthenol	13/04-N04	1
Fagron	Dexpanthenol	TL01305030	8
Fagron	Dexpanthenol	13J04-N04	2
Phönix	Dexpanthenol	1309030-01	1
Fagron	Dexpanthenol	13J29-B05	8
Fagron	Dexpanthenol	13i04-n04	1
Caelo	Dexpanthenol	23041401	1
Noweda	Dexpanthenol	13342605	1
Bombastus	Dexpanthenol	13342605	1
Anzag	Dexpanthenol	13j29-B05-287527	1
Caelo	Dexpanthenol	13342611	4
BASF AG	Dexpanthenol	1309030-01	1
Caelo	Dexpanthenol	13342610	6
	Dexpanthenol	13J29-B05-287527	6
Caelo	Dexpanthenol	2187	1
BASF	Dexpanthenol	2181	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	13342606	12
Caelo	Dexpanthenol	2614E-01082	1
Fagron	Dexpanthenol	12J30-B03-287502	1
Euro OTC	Dexpanthenol	1309030-02	9
Fagron	Dexpanthenol	13J29-B05-287527	2
Caelo	Dexpanthenol	14051903	5
Fagron	Dexpanthenol	246019-0001	1
Fagron	Dexpanthenol	13J29-b05-287526	1
Fagron	Dexpanthenol	1309030-02	1
Caelo	Dexpanthenol	14051901	1
Caelo	Dexpanthenol	1304023	1
	Dexpanthenol	13J29B05287527	1
Caelo	Dexpanthenol	1302009	1
Fagron	Dexpanthenol	13J29B05287526	1
Euro OTC	Dexpanthenol	130903002	1
GEHE 17.06.2014	Dexpanthenol	13342610	1
Caelo	Dexpanthenol	14051904	7
Caesar/Noweda	Dexpanthenol	13084709	2
Noweda	Dexpanthenol	13342606	1
Euro OTC	Dexpanthenol	2081403	1
Fagron	Dexpanthenol	13L02-B04-292068	8
Caelo	Dexpanthenol	14051905	7
Caelo	Dexpanthenol	26081401	1
Fagron	Dexpanthenol	14051908	2
Caelo	Dexpanthenol	13J29-B05-287526	1
Caelo	Dexpanthenol	1309030-03	1
Euro OTC	Dexpanthenol	17091401	1
Fagron	Dexpanthenol	13J29-B05-287528	1
Raben-Apotheke Mildena	Dexpanthenol	1309030-03	1
Euro OTC	Dexpanthenol	1309030-03	3
Fagron	Dexpanthenol	13L02-B04	2
Caelo	Dexpanthenol	14214501	3
Fagron	Dexpanthenol	2914E-01082	1
Fagron	Dexpanthenol	13L02B04292068	1
anzag	Dexpanthenol	14E01-B11-293624	7
Fagron	Dexpanthenol	13L02-BB04-292067	1
Euro OTC	Dexpanthenol	23101409	1
Fagron	Dexpanthenol	14E01-B11	8
Fagron	Dexpanthenol	13j29-B05-287525	1
Fagron	Dexpanthenol	13/29-B05-287528	1
Alliance health	Dexpanthenol	1204010-01	1
Euro OTC	Dexpanthenol	1407039-01	10
Caelo	Dexpanthenol	14214504	6
Caelo	Dexpanthenol	13342608	1
Euro OTC	Dexpanthenol	14070399-01	1
Euro OTC	Dexpanthenol	1111406	1
Fagron	Dexpanthenol	14E01-B11-293624	2
Fagron	Dexpanthenol	TL01312070	1
Caelo	Dexpanthenol	14051913	1
Caelo	Dexpanthenol	14214502	5
Euro OTC	Dexpanthenol	140703901	3
Fagron	Dexpanthenol	13L02-B04-292067	2
Euro OTC	Dexpanthenol	28111404	1
Alliance Health 03.12.2...	Dexpanthenol	1309030-03	1
Phönix	Dexpanthenol	13J29-B05287525	1
Caelo	Dexpanthenol	14214507	3
Caelo	Dexpanthenol	14214505	5
Caelo	Dexpanthenol	1407039-01	2
Euro OTC	Dexpanthenol	140703902	1
Euro OTC	Dexpanthenol	7011503	1

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Supplier	Substance	Batch	Spectra
BASF	Dexpanthenol	1407039-01	1
	Dexpanthenol	1407039-02	2
Caelo	Dexpanthenol	14214508	1
Euro OTC	Dexpanthenol	14070390	1
Caelo	Dexpanthenol	22011511	1
Caelo	Dexpanthenol	14051908	1
Caelo	Dexpanthenol	14214511	5
Euro OTC	Dexpanthenol	11021503	1
Caelo	Dexpanthenol	142141508	1
Fagron	Dexpanthenol	14E01-B11-295544	2
Caelo	Dexpanthenol	14214510	3
Euro OTC	Dexpanthenol	1407039-1	1
Euro OTC	Dexpanthenol	1407039-02	7
Fagron	Dexpanthenol	14E01-B11-295534	1
Caelo	Dexpanthenol	14E01-B11	1
Caelo	Dexpanthenol	14214512	5
Caelo	Dexpanthenol	4031502	1
Fagron	Dexpanthenol	14E01-B11-295533	1
Anzag	Dexpanthenol	14E01-B11-295534	3
Fagron	Dexpanthenol	14E01-B11-295577	3
Fagron	Dexpanthenol	14E01-811-295577	1
Fagron	Dexpanthenol	13J29-B05-287525	1
EuRho	Dexpanthenol	1309030-01	1
Caelo	Dexpanthenol	1421508	1
Euro OTC	Dexpanthenol	27031503	1
Alliance Health 27.03.2...	Dexpanthenol	1407039-02	1
Caelo	Dexpanthenol	14051909	2
Fagron	Dexpanthenol	14214510	1
Euro OTC	Dexpanthenol	17041503	1
Phoenix goettin	Dexpanthenol	14214512	1
Caelo	Dexpanthenol	14356203	2
A.H.D.	Dexpanthenol	14E01-B11-300068	1
Fagron	Dexpanthenol	14e01-b11-293623	1
14356201	Dexpanthenol	14356201	2
BASF AG	Dexpanthenol	94515888Q0	1
Fagron	Dexpanthenol	14E01B11293623	1
Caelo	Dexpanthenol	14356201	8
Fagron	Dexpanthenol	14E01-B11-300065	2
Euro OTC	Dexpanthenol	1502019-01	20
Fagron	Dexpanthenol	14E01-B11-300068	12
Sanacorp	Dexpanthenol	1407039-02	1
Caelo	Dexpanthenol	14356204	5
Euro OTC	Dexpanthenol	5051504	1
Fagron	Dexpanthenol	14E01-B11-3000068	1
Fagron	Dexpanthenol	295544	1
Fagron	Dexpanthenol	14E01-B11-295578	11
Euro OTC	Dexpanthenol	10061508	1
Fagron	Dexpanthenol	14E01-b11-295544	1
Caelo	Dexpanthenol	14356210	5
Sanacorp	Dexpanthenol	2/AKD4	1
Euro OTC	Dexpanthenol	1502010-01	1
Sanacorp	Dexpanthenol	14E01-B11	1
Fagron	Dexpanthenol	14e01-811-300068	1
Caelo	Dexpanthenol	1502019-01	2
Fagron	Dexpanthenol	14H05-B02	2
Fagron	Dexpanthenol	14E01-B11-293623	1
apomix/Holdermann	Dexpanthenol	14H05-B02-300066	1
Fargon/Alliance HC	Dexpanthenol	14E01-B11295578	1
Anzag	Dexpanthenol	14H05-B02-305656	3
Gehe/Euro 30.06.15	Dexpanthenol	1502019-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	15097704	8
Fagron	Dexpanthenol	14H05-B02-300066	1
Caelo	Dexpanthenol	15097703	8
Euro OTC	Dexpanthenol	28071501	1
Euro OTC	Dexpanthenol	31071501	1
Fagron	Dexpanthenol	15A30-B08-306695	7
Euro OTC	Dexpanthenol	140739	1
Phönix Gotha	Dexpanthenol	1502019-01	1
Caelo	Dexpanthenol	15097705	5
Fagron	Dexpanthenol	14E01-B11-300068	1
Caelo	Dexpanthenol	15097701	7
Fagron	Dexpanthenol	14H05-B02-300069	12
Euro OTC	Dexpanthenol	150201901	1
Caelo	Dexpanthenol	14H05-B02-3000066	1
Euro OTC	Dexpanthenol	4091514	1
Fagron	Dexpanthenol	15097709	1
Fagron	Dexpanthenol	14H05-B02-305656	2
Euro OTC	Dexpanthenol	1502019-02	16
Phönix Gotha	Dexpanthenol	1502019-02	1
ACM	Dexpanthenol	KNC0684J15	1
Caelo	Dexpanthenol	15097710	6
Euro OTC	Dexpanthenol	150201902	2
Fagron	Dexpanthenol	15A30-B08-306694	4
Caelo	Dexpanthenol	15097709	6
Euro OTC	Dexpanthenol	150219-02	1
EuRho/Noweda	Dexpanthenol	1407039-02	1
Caelo	Dexpanthenol	15097714	13
Caelo	Dexpanthenol	15097713	6
BASF/ Phönix	Dexpanthenol	1502019-02	2
Euro OTC	Dexpanthenol	14H05-B02-300069	2
Bombastus	Dexpanthenol	1502019-02	2
Anzag	Dexpanthenol	14H05-B02-300067	1
Euro OTC	Dexpanthenol	1502010-02	1
Caelo	Dexpanthenol	1502019	1
Caelo	Dexpanthenol	15097711	12
Caesar & Loretz GmbH Hi...	Dexpanthenol	15097714	2
Caelo	Dexpanthenol	15097708	10
ACM	Dexpanthenol	KNC1152J15	1
Euro OTC	Dexpanthenol	1510008-01	28
Fagron	Dexpanthenol	15A30-B08	4
Sanacorp	Dexpanthenol	15097714	1
Caelo	Dexpanthenol	13022-N12	1
Euro OTC	Dexpanthenol	151000801	1
Caelo	Dexpanthenol	14H05-B02-305656	1
Fagron	Dexpanthenol	15A30-B08-312353	5
Caelo	Dexpanthenol	1510008-01	2
Caelo	Dexpanthenol	15260907	8
Caelo	Dexpanthenol	15395502	11
Caelo	Dexpanthenol	15097712	3
Caelo	Dexpanthenol	12031602	1
Caelo	Dexpanthenol	15097716	1
Euro OTC	Dexpanthenol	151008-01	2
Noweda	Dexpanthenol	15097712	1
Alliance H.	Dexpanthenol	15260905	1
Caelo	Dexpanthenol	15260905	6
Caelo	Dexpanthenol	1560907	1
Euro OTC	Dexpanthenol	15100008-01	1
phönix	Dexpanthenol	15a30b08312353	1
DSM Nutritional Prod./...	Dexpanthenol	TL01212052	1
Caelo	Dexpanthenol	14H05B02300069	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	15260906	10
Fagron	Dexpanthenol	14H05-B02-0001	1
Caelo	Dexpanthenol	15260908	1
Caelo	Dexpanthenol	14H05-B02-300069	1
Caelo	Dexpanthenol	15395506	1
Fagron	Dexpanthenol	15F26-B01-314370	10
Fagron	Dexpanthenol	15A30-B08-310962	2
Caelo	Dexpanthenol	1235899	1
Gehe/ Euro	Dexpanthenol	1510008-01	1
Caelo	Dexpanthenol	15A30-B08-312353	1
Alliance	Dexpanthenol	15A30-B08-310962	2
Euro OTC	Dexpanthenol	73709736W0	1
Euro OTC	Dexpanthenol	1510008-02	16
Sanacorp	Dexpanthenol		1
Euro OTC	Dexpanthenol	151000802	1
Caelo	Dexpanthenol	15395507	4
Euro OTC	Dexpanthenol	15F26-B01-314370	1
Caelo	Dexpanthenol	TL01508051	1
Caelo	Dexpanthenol	15395508	8
Caelo	Dexpanthenol	15395504	5
DSM Nutritional Products UK	Dexpanthenol	15F26-B01-314370	1
Caelo	Dexpanthenol	16043505	5
Euro OTC	Dexpanthenol	15100008-02	2
Caolo	Dexpanthenol	15395506	1
Euro OTC	Dexpanthenol	1606015-01	18
Euro OTC	Dexpanthenol	15260908	1
Caelo	Dexpanthenol	16043503	5
Fagron	Dexpanthenol	13D11-N12	1
Caelo	Dexpanthenol	16043506	5
Phoenix	Dexpanthenol	1510008-02	1
Caelo	Dexpanthenol	23081602	1
Caelo	Dexpanthenol	23081603	1
Caelo	Dexpanthenol	1604305	1
Fagron	Dexpanthenol	15F26-B01-317519	2
Noweda	Dexpanthenol	16043505	1
Alliance	Dexpanthenol	15F26-B01-317520	2
Caelo	Dexpanthenol	16043504	3
Caelo	Dexpanthenol	16043512	11
BASF AG/Noweda	Dexpanthenol	1510008-01	1
BASF AG/Noweda	Dexpanthenol	1607027-01	1
caesar	Dexpanthenol	16043512	1
Fagron	Dexpanthenol	15F26-B01-317520	1
DSM Nutritional Prod./...	Dexpanthenol	16043505	1
Caelo	Dexpanthenol	16043510	11
Hedinger	Dexpanthenol	16043505	1
Caelo	Dexpanthenol	16043502	10
Fagron	Dexpanthenol	15F26-B01-319991	6
Fagron	Dexpanthenol	16007-804-322508	1
Euro OTC	Dexpanthenol	160702701	4
ALH	Dexpanthenol	1510008-02	1
Caelo	Dexpanthenol	16043511	4
Euro OTC	Dexpanthenol	1607027-01	12
Fagron	Dexpanthenol	16D07-B04-322508	9
Caelo	Dexpanthenol	16164808	7
Fagron	Dexpanthenol	16D07-B04-322110	4
Caelo	Dexpanthenol	TL01503022	1
Euro OTC	Dexpanthenol	161220D/1606015-01	1
Caelo	Dexpanthenol	16164809	6
Fagron	Dexpanthenol	TL01601003	1
Caelo	Dexpanthenol	16D07-804-322508	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	16164813	10
Caelo	Dexpanthenol	16164810	6
Caelo	Dexpanthenol	117M-01082	1
Caelo	Dexpanthenol	1616488	1
BASF/Noweda	Dexpanthenol	5116I-01082	1
Alliance	Dexpanthenol	16D07-B04-323097	1
Ichtyol gesellschaft GmbH	Dexpanthenol	16043511	1
Sanacorp	Dexpanthenol	160601501	1
Caelo	Dexpanthenol	16D07-B04-322110	1
Fagron	Dexpanthenol	16D07-B04322508	1
Nachprüfung	Dexpanthenol	1407039-01	1
Fagron	Dexpanthenol	16D07-B04-323096	7
Euro/Noweda30.01.17	Dexpanthenol	1606015-01	1
Euro OTC	Dexpanthenol	1610041-01	19
Caelo	Dexpanthenol	1610041-01	4
Caelo	Dexpanthenol	16311603	5
siehe Protokoll	Dexpanthenol	16043502	1
Caelo	Dexpanthenol	16164811	3
Caelo	Dexpanthenol	16D07-B04-323096	1
Caelo	Dexpanthenol	16164816	2
Caelo	Dexpanthenol	16311605	12
Euro OTC	Dexpanthenol	9031703	1
Caelo	Dexpanthenol	16311604	7
Euro OTC	Dexpanthenol	161004101	2
Noweda/EuRo	Dexpanthenol	1610041-01	1
phönix	Dexpanthenol	16D07-B04-322110	1
Euro/Noweda	Dexpanthenol	1610041-01	3
europarm/gehe	Dexpanthenol	1610041-01	1
Fagron	Dexpanthenol	16D07-B04-327322	3
hochhaus-Apotheke	Dexpanthenol	1610041-01	1
Euro OTC	Dexpanthenol	1610041-02	12
Fagron	Dexpanthenol	16D07-B04-323097	2
Caelo	Dexpanthenol	16311610	7
Fagron	Dexpanthenol	TL01503022	1
Fagron	Dexpanthenol	17B06-B04-332077	3
Noweda	Dexpanthenol	16D07B04322508	1
Euro OTC	Dexpanthenol	28041729	1
GEHE	Dexpanthenol	161004101	1
Fagron	Dexpanthenol	16D07-B04	1
Anzag	Dexpanthenol	64778675L0	1
DSM Nutritional Prod./...	Dexpanthenol	16311610	1
Caelo	Dexpanthenol	3815464	1
Caelo	Dexpanthenol	17065403	2
Noweda	Dexpanthenol	17B06-B04-332078	2
Fagron	Dexpanthenol	17B06-B04-332075	6
Alliance	Dexpanthenol	15F26-B01-319991	1
Caelo	Dexpanthenol	16311606	2
Gehe	Dexpanthenol	1703029-01	1
Caelo	Dexpanthenol	17065406	5
Caelo	Dexpanthenol	16311611	2
Anzag	Dexpanthenol	1610041-02	1
Fagron	Dexpanthenol	17B06-B04-332078	3
Sanacorp	Dexpanthenol	1703029-01	1
Caelo	Dexpanthenol	1703029-01	2
Caelo	Dexpanthenol	17065411	10
Fagron	Dexpanthenol	17B06-B04	4
Caelo	Dexpanthenol	17065407	1
Euro OTC	Dexpanthenol	14071702	1
Euro OTC	Dexpanthenol	1703029-01	13
Caelo	Dexpanthenol	17065404	6

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Supplier	Substance	Batch	Spectra
Sanaorp	Dexpanthenol	17B06-B04-332077	2
Eurho	Dexpanthenol	1610041-01	1
Fagron	Dexpanthenol	TL01611112	1
Noweda	Dexpanthenol	1510008	1
Caelo	Dexpanthenol	17065412	11
Caelo	Dexpanthenol	170654060	1
Phoenix	Dexpanthenol	17065412	1
Euro	Dexpanthenol	2091710	1
Kehr	Dexpanthenol	16D07-B04-327322	1
Krieger	Dexpanthenol	17172105	1
Fagron	Dexpanthenol	17B0619	1
Caelo	Dexpanthenol	17065405	2
Sanacorp	Dexpanthenol	1610041-02	1
Euro OTC	Dexpanthenol	23223009T0	1
Anzag	Dexpanthenol	1703029	1
GEHE	Dexpanthenol	17065413	1
Caelo	Dexpanthenol	17172106	8
Gehe	Dexpanthenol	17B06-B04-332077	1
Caelo	Dexpanthenol	17172103	9
Noweda	Dexpanthenol	17D07-B04-322508	1
Caelo	Dexpanthenol	17065413	2
Caelo	Dexpanthenol	17172110	2
Caelo	Dexpanthenol	17B06-B04-332076	1
Caelo	Dexpanthenol	17172105	3
Euro OTC	Dexpanthenol	171106D/1703029-01	1
beyvers	Dexpanthenol	1703029-01	1
Fagron	Dexpanthenol	17B06-B04-332076	1
Fagron	Dexpanthenol	171120D/TL01601003	1
GEHE	Dexpanthenol	1607027-01	1
Eurho	Dexpanthenol	170302901	1
DSM Nutritional Prod./...	Dexpanthenol	17065412	1
Fagron	Dexpanthenol	17B06-B04-3322078	1
Caelo	Dexpanthenol	17172102	2
Caelo	Dexpanthenol	4121701	1
Caelo	Dexpanthenol	1717203	1
Caelo	Dexpanthenol	17172107	8
Noweda	Dexpanthenol	17B06-B04-322078	1
Euro OTC	Dexpanthenol	1708013-01	8
Anzag	Dexpanthenol	1708013-01	1
Euro/ Phönix	Dexpanthenol	5117E-01082	1
Caelo	Dexpanthenol	17172111	2
Noweda	Dexpanthenol	17/21-B01-340264	1
Euro OTC	Dexpanthenol	1703029-02	3
Caelo	Dexpanthenol	1708013-01	1
Caelo	Dexpanthenol	17287707	4
Phönix	Dexpanthenol	1721b01-340264	1
Noweda	Dexpanthenol	1708013-01	2
Euro OTC	Dexpanthenol	13011809	1
Fagron	Dexpanthenol	17I21-B01-340264	1
Caelo	Dexpanthenol	172587709	1
Caelo	Dexpanthenol	17172112	3
Fagron	Dexpanthenol	17I21-B01	1
Sanacorp	Dexpanthenol	17172106	1
Caelo	Dexpanthenol	17287701	1
Fagron	Dexpanthenol	17I21-B01-340265	3
Caelo	Dexpanthenol	17287708	3
Gehe	Dexpanthenol	17I21-B01	1
Fagron	Dexpanthenol	17I21-B01-340264	2
Caelo	Dexpanthenol	17287704	3
Fagron	Dexpanthenol	1703029-01	1

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Supplier	Substance	Batch	Spectra
Fagron	Dexpanthenol	17/21-B01-340266	2
Fagron	Dexpanthenol	1801011-01	1
Fagron	Dexpanthenol	17/21-B01-340264	2
Caelo	Dexpanthenol	17335103	2
Euro OTC	Dexpanthenol	1801011-01	15
Gehe	Dexpanthenol	17335103	1
Gehe	Dexpanthenol	17335105	1
Euro OTC	Dexpanthenol	1801011	1
Caelo	Dexpanthenol	17287705	2
europarm/gehe	Dexpanthenol	1801011-01	2
Caelo	Dexpanthenol	17172113	5
apo ident	Dexpanthenol	1703029-01	1
Eurho	Dexpanthenol	1801011-01	3
Caelo	Dexpanthenol	17335104	2
Noweda	Dexpanthenol	17I21B01340269	1
Caelo	Dexpanthenol	17335105	10
Caelo	Dexpanthenol	17335101	2
Noweda	Dexpanthenol	1801011-01	1
Fagron	Dexpanthenol	17I21-B01-340274	1
Euro OTC	Dexpanthenol	28031801	1
Allianz	Dexpanthenol	1801011-01	2
Fagron	Dexpanthenol	17K30-B01-343821	3
Fagron	Dexpanthenol	17I21-B01-340269	1
Sanacorp	Dexpanthenol	1801011-01	1
Caelo	Dexpanthenol	30041803	1
Fagron	Dexpanthenol		1
Fagron	Dexpanthenol	17K30-B01-344320	1
Fagron	Dexpanthenol	TL01706056	1
Fagron	Dexpanthenol	1721-B01-340266	1
Caelo	Dexpanthenol	17335106	7
Fagron	Dexpanthenol	17/21-B01-340265	1
Phoenix	Dexpanthenol	1801011-01	1
Gehe	Dexpanthenol	17K30-B01-343822	2
Caelo	Dexpanthenol	27041801	1
	Dexpanthenol	17287705	1
Euro OTC	Dexpanthenol	17335105	1
Euro OTC	Dexpanthenol	1803008-01	4
Caelo	Dexpanthenol	17335102	1
Caelo	Dexpanthenol	17335108	7
Caelo	Dexpanthenol	17339106	1
EuRho	Dexpanthenol	1801011-01	1
Euro OTC	Dexpanthenol	57545077L0	1
Caelo	Dexpanthenol	8069002	1
Caelo	Dexpanthenol	18069003	1
Krieger	Dexpanthenol	17335108	2
Euro OTC	Dexpanthenol	1806019-01	2
Caelo	Dexpanthenol	18069107	3
Gehe	Dexpanthenol	18C20-B07-349944	1
Caelo	Dexpanthenol	10869002	1
Euro OTC	Dexpanthenol	12091801	1
Fagron	Dexpanthenol	18C20-B07-349242	2
Caelo	Dexpanthenol	18069001	9
Caelo	Dexpanthenol	18069103	1
Caelo	Dexpanthenol	18069002	2
Caelo	Dexpanthenol	18197202	6
Caelo	Dexpanthenol	18197204	6
Euro OTC	Dexpanthenol	1803008-02	3
Euro OTC	Dexpanthenol	5121806	1
Caelo	Dexpanthenol	18069110	2
Euro OTC	Dexpanthenol	5121807	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol	18176605	2
Pharmachem Pölkneck/AHD	Dexpanthenol	18C20-B07-351396	1
Fagron	Dexpanthenol	5021904	1
Caelo	Dexpanthenol	18197203	3
Euro/Noweda	Dexpanthenol	180300802	1
Fagron	Dexpanthenol	18C20-B07-350624	1
Caelo	Dexpanthenol	19008707	1
Euro OTC	Dexpanthenol	1808007-01	1
Caelo	Dexpanthenol	19008706	1
Caelo	Dexpanthenol	19008703	1

- 106 249 spectra from 582 *Apo-Ident* customers from a total of 30 239 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 *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	200	0	35 635
Type B	0	517	0	78 561
Type C	0	1699	11	106 249

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.8395 %)
Type C	100.0000 % (> 99.6449 %)	99.3567 % (> 99.1813 %)

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.

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
30884	31532	3.76	129.27
31317	31532	1.62	139.41
31532	31532	0.00	142.67
31769	31769	0.00	130.11
33239	31532	1.92	139.67

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Dexpanthenol concentrate 50%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30492-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Dexpanthenol concentrate 50%; Pantothenolum 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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20151211
Caelo	Dexpanthenol con...	153314	31879	40	20151014*
Caelo	Dexpanthenol con...	162483	32579	40	20160901*
Caelo	Dexpanthenol con...	18050802	34130	40	20180213

Validation samples

A total of 222 872 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 *Dexpanthenol concentrate 50%*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 220 spectra of 6 reference samples from the substance/substance group *Dexpanthenol concentrate 50%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dexpanthenol concentrate 50%	14116302	31461	60
Caelo	Dexpanthenol concentrate 50%	15408002	31835 [†]	20
Caelo	Dexpanthenol concentrate 50%	153314	31879 [†]	20
Caelo	Dexpanthenol concentrate 50%	163336	33161	40
Caelo	Dexpanthenol concentrate 50%	173261	33974	40
Caelo	Dexpanthenol concentrate 50%	172781	33975	40

- 78 858 spectra from a total of 1824 batches from further 350 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.

*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.

[†]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*.

- 614 spectra from 160 *Apo-Ident* customers from 102 batches from the substance/substance group *Dexpanthenol concentrate 50%*.

Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol concentrate 50%	11279704	1
Caelo	Dexpanthenol concentrate 50%	12171803	2
Caelo	Dexpanthenol concentrate 50%	11279703	1
Caelo	Dexpanthenol concentrate 50%	12256002	2
Caelo	Dexpanthenol concentrate 50%	11358202	1
Noweda	Dexpanthenol concentrate 50%	12171802	1
Caelo	Dexpanthenol concentrate 50%	12256001	4
Gehe	Dexpanthenol concentrate 50%	11358204	1
Noweda	Dexpanthenol concentrate 50%	12340303	2
Caelo	Dexpanthenol concentrate 50%	12340302	3
Noweda	Dexpanthenol concentrate 50%	12340302	1
Sanacorp	Dexpanthenol concentrate 50%	12340302	1
Caelo	Dexpanthenol concentrate 50%	13019203	9
Gehe	Dexpanthenol concentrate 50%	13019203	1
Alliance Healthcare	Dexpanthenol concentrate 50%	12256001	1
Caelo	Dexpanthenol concentrate 50%	13068003	5
Caelo	Dexpanthenol concentrate 50%	p-050413-2	1
Caelo	Dexpanthenol concentrate 50%	13019204	1
Gehe	Dexpanthenol concentrate 50%	13019204	1
Caelo	Dexpanthenol concentrate 50%	12127003	2
Caelo	Dexpanthenol concentrate 50%	13068004	4
Alliance Health	Dexpanthenol concentrate 50%	13068003	1
Caelo	Dexpanthenol concentrate 50%	13174703	5
Caelo	Dexpanthenol concentrate 50%	13174702	7
Caelo	Dexpanthenol concentrate 50%	13305003	9
Alliance Healthcare	Dexpanthenol concentrate 50%	13174703	1
Sanacorp	Dexpanthenol concentrate 50%	AKD29	1
Sonnenberg-Apotheke	Dexpanthenol concentrate 50%	13305004	1
Caelo	Dexpanthenol concentrate 50%	13305004	4
Caelo	Dexpanthenol concentrate 50%		1
Caelo	Dexpanthenol concentrate 50%	11358201	2
gehe 31.01.2014	Dexpanthenol concentrate 50%	13068004	1
Caelo	Dexpanthenol concentrate 50%	13382102	3
Caelo	Dexpanthenol concentrate 50%	14020804	7
Audor Pharma	Dexpanthenol concentrate 50%	AP83943088Q0P	1
VDL	Dexpanthenol concentrate 50%	14020804	1
Caelo	Dexpanthenol concentrate 50%	14020803	5
Audor Pharma	Dexpanthenol concentrate 50%	AP83943088Q0P	1
Sanacorp	Dexpanthenol concentrate 50%	14116302	1
Caelo	Dexpanthenol concentrate 50%	14116302	6
Gehe 17.06.2014	Dexpanthenol concentrate 50%	13382102	1
Lamotte	Dexpanthenol concentrate 50%	AP83943088Q0P	1
Anzag	Dexpanthenol concentrate 50%	14020803	2
Caelo	Dexpanthenol concentrate 50%	1402003	1
sanacorp	Dexpanthenol concentrate 50%	14116301	1
Caesar&lorenz,Phoenix	Dexpanthenol concentrate 50%	14116302	2
Caelo	Dexpanthenol concentrate 50%	14116301	6
Caelo	Dexpanthenol concentrate 50%	14199101	1
Caelo	Dexpanthenol concentrate 50%	12081406	1
Caelo	Dexpanthenol concentrate 50%	14198101	14
Raben-Apotheke Mildenau	Dexpanthenol concentrate 50%	14116302	1
Caelo	Dexpanthenol concentrate 50%	2101404	1
Fagron	Dexpanthenol concentrate 50%	14198103	1
Caelo	Dexpanthenol concentrate 50%	14275203	8
sanacorp	Dexpanthenol concentrate 50%	14198103	1

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Supplier	Substance	Batch	Spectra
Caelo	Dexpanthenol concentrate 50%	14198103	2
Caelo	Dexpanthenol concentrate 50%	14275204	4
Audor Pharma	Dexpanthenol concentrate 50%	AP65524488QOP	2
Caelo	Dexpanthenol concentrate 50%	14275202	1
Caelo	Dexpanthenol concentrate 50%	14373302	8
Gehe	Dexpanthenol concentrate 50%	14373302	1
Caelo	Dexpanthenol concentrate 50%	14373301	4
Caelo	Dexpanthenol concentrate 50%	14275207	4
Caelo	Dexpanthenol concentrate 50%	15050802	19
Caelo	Dexpanthenol concentrate 50%	15142902	3
Caelo	Dexpanthenol concentrate 50%	15050801	2
Caelo	Dexpanthenol concentrate 50%	15142901	7
Caelo	Dexpanthenol concentrate 50%	13100408	1
Caelo	Dexpanthenol concentrate 50%	15196203	14
Caelo	Dexpanthenol concentrate 50%	15196202	8
Caelo	Dexpanthenol concentrate 50%	1514902	1
Noweda	Dexpanthenol concentrate 50%	15196202	1
Caelo	Dexpanthenol concentrate 50%	15331404	18
Caelo	Dexpanthenol concentrate 50%	15331402	2
Caelo	Dexpanthenol concentrate 50%	15408002	13
Caelo	Dexpanthenol concentrate 50%	15408003	10
Caelo	Dexpanthenol concentrate 50%	1508002	1
Euro OTC	Dexpanthenol concentrate 50%	15142902	1
Rondell Apotheke	Dexpanthenol concentrate 50%	15331404	1
Caelo	Dexpanthenol concentrate 50%	16025303	13
Caelo	Dexpanthenol concentrate 50%	1602503	1
Caesar&Loretz GmbH,Phön...	Dexpanthenol concentrate 50%	15408002	1
Audor Pharma	Dexpanthenol concentrate 50%	AP36716516KOP	1
Noweda	Dexpanthenol concentrate 50%	15408002	1
Bombastus	Dexpanthenol concentrate 50%	16025303	1
Sanacorp	Dexpanthenol concentrate 50%		1
Caelo	Dexpanthenol concentrate 50%	16136504	15
Caelo	Dexpanthenol concentrate 50%	16136503	16
Caesar&Loretz GmbH	Dexpanthenol concentrate 50%	15408003	1
Ebert & Jacobi 01.06. ...	Dexpanthenol concentrate 50%	16025303	1
Caelo	Dexpanthenol concentrate 50%	16136505	8
Sanacorp	Dexpanthenol concentrate 50%	16136505	1
Caelo	Dexpanthenol concentrate 50%	16248303	20
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16248301	1
Caelo	Dexpanthenol concentrate 50%	16248301	33
Alliance Healthcare	Dexpanthenol concentrate 50%	16136503	2
Caelo	Dexpanthenol concentrate 50%	162483	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16315102	2
caesar&Loretz GmbH,AHC,...	Dexpanthenol concentrate 50%	16248301	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16248303	1
Caelo	Dexpanthenol concentrate 50%	16315102	6
Caelo	Dexpanthenol concentrate 50%	16333603	33
Fagron	Dexpanthenol concentrate 50%	16333603	1
Caelo	Dexpanthenol concentrate 50%	16333602	14
Caelo	Dexpanthenol concentrate 50%	16248301/1210217	1
Caelo	Dexpanthenol concentrate 50%	17031303	2
Euro OTC	Dexpanthenol concentrate 50%	16333603	2
Caesar&Loretz GmbH,27.0. ...	Dexpanthenol concentrate 50%	17059203	1
Caelo	Dexpanthenol concentrate 50%	17059203	1
Caelo	Dexpanthenol concentrate 50%	17059202	20
Finteler Apotheke	Dexpanthenol concentrate 50%	17031303	1
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	16333603	1
Caelo	Dexpanthenol concentrate 50%	17059203	9
Caelo	Dexpanthenol concentrate 50%	17031301	4
Caelo	Dexpanthenol concentrate 50%	170313035279	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	17135701	1
Caelo	Dexpanthenol concentrate 50%	1633603	1
Caelo	Dexpanthenol concentrate 50%	17135701	2
Caesar & Loretz GmbH	Dexpanthenol concentrate 50%	17135702	1
Caelo	Dexpanthenol concentrate 50%	17135702	14
Caelo	Dexpanthenol concentrate 50%	2090817/17135701	1
Bombastus	Dexpanthenol concentrate 50%	17135702	1
Caelo	Dexpanthenol concentrate 50%	17194605	1
Caelo	Dexpanthenol concentrate 50%	17059201	1
Caelo	Dexpanthenol concentrate 50%	17194602	4
Caelo	Dexpanthenol concentrate 50%	1021117/17059203	1
Caelo	Dexpanthenol concentrate 50%	17194603	7
Caelo	Dexpanthenol concentrate 50%	17194601	12
Caelo	Dexpanthenol concentrate 50%	17278101	4
Caelo	Dexpanthenol concentrate 50%	11121706	1
Apomix/Noweda	Dexpanthenol concentrate 50%	17059203	1
Alliance	Dexpanthenol concentrate 50%	17194601	1
Caelo	Dexpanthenol concentrate 50%	17326102	16
Caelo	Dexpanthenol concentrate 50%	17278103	4
Fagron	Dexpanthenol concentrate 50%	17194602	1
Caelo	Dexpanthenol concentrate 50%	1220218/17194603	1
Caelo	Dexpanthenol concentrate 50%	17326101	12
Caesar & Lorenz GmbH	Dexpanthenol concentrate 50%	17194601	2
Caelo	Dexpanthenol concentrate 50%	17059203/2230418	1
Caelo	Dexpanthenol concentrate 50%	7051805	1
Caelo	Dexpanthenol concentrate 50%	18050802	6
GEHE	Dexpanthenol concentrate 50%	17326102	1
Caelo	Dexpanthenol concentrate 50%	18050803	7
Caesar & Loretz	Dexpanthenol concentrate 50%	18050803	1
Caelo	Dexpanthenol concentrate 50%	18050803(2)	1
Caesar & Lorenz GmbH	Dexpanthenol concentrate 50%	17326102	1
Caelo	Dexpanthenol concentrate 50%	1805082	1
Caelo	Dexpanthenol concentrate 50%	18131403	2
Caelo	Dexpanthenol concentrate 50%	18131301	5
Caelo	Dexpanthenol concentrate 50%	18050804	1
Caelo	Dexpanthenol concentrate 50%	18131402	2
Caelo	Dexpanthenol concentrate 50%	18247901	2

- 107 345 spectra from 582 *Apo-Ident* customers from a total of 30 579 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 *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	200	0	35 635
Type B	0	220	0	78 858
Type C	0	613	1	107 345

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.2727 %)
Type C	100.0000 % (> 99.6449 %)	99.8371 % (> 99.3485 %)

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.

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
31835	32579	3.06	58.48
31879	31879	0.00	61.04
32579	32579	0.00	58.18
34130	31879	2.84	61.15
30664	31879	23.22	49.65

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Dextrorotary lactic acid 20%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30740-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20150622
Caelo	Dextrorotary lac...	162572	33318	40	20170216*

Validation samples

A total of 222 872 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 *Dextrorotary lactic acid 20%*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 180 spectra of 5 reference samples from the substance/substance group *Dextrorotary lactic acid 20%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Dextrorotary lactic acid 20%	15113303	31720 [†]	20
Caelo	Dextrorotary lactic acid 20%	161639	32341	40
Caelo	Dextrorotary lactic acid 20%	172086	33711	40
Caelo	Dextrorotary lactic acid 20%	172086	34083	40
Caelo	Dextrorotary lactic acid 20%	181763	34343	40

- 78 898 spectra from a total of 1826 batches from further 350 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.

- 5 spectra from 5 *Apo-Ident* customers from 3 batches 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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Dextrorotary lactic acid 20%	15113303	2
Caelo	Dextrorotary lactic acid 20%	15334302	1
Caelo	Dextrorotary lactic acid 20%	16257201	2

- 107 954 spectra from 582 *Apo-Ident* customers from a total of 30 677 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 *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	120	0	35 715
Type B	0	180	0	78 898
Type C	0	5	0	107 954

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 96.6667 %)
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.

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
30740	30740	0.00	23.15
31720	30740	3.93	21.59
33318	33318	0.00	20.75

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Diethyl ether**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31651-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Diethyl ether

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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	9337
Otto Fischar	Diethyl ether	5975088	31855	40	20150817
Hedinger	Diethyl ether	052162	34122	40	20170216

Validation samples

A total of 222 872 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 *Diethyl ether*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Diethyl ether*.

Supplier	Substance	Batch	Sample ID	Spectra
Hedinger	Diethyl ether	052159	31854 [†]	20
Otto Fischar	Diethyl ether	5975088	31855 [†]	20
Hedinger	Diethyl ether	052161	33214	40
Otto Fischar	Diethyl ether	5977054	33633	40

- 78 958 spectra from a total of 1826 batches from further 350 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.

- 187 spectra from 88 *Apo-Ident* customers from 94 batches from the substance/substance group *Diethyl ether*.

Supplier	Substance	Batch	Spectra
Fischar	Diethyl ether	5971081	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
Hedinger	Diethyl ether	52152	1
Otto Fischar GmbH& Co.KG	Diethyl ether	5972049	1
Fischer Saarbrücken/GEHE	Diethyl ether	5972047	1
fischar	Diethyl ether	5972083	1
Otto Fischar GmbH	Diethyl ether	5972048	1
Fischar 001	Diethyl ether	597204B	1
Otto Fischar GmbH& Co.KG	Diethyl ether	597204C	1
Fischar/Sanacorp	Diethyl ether	5972042	1
Noweda	Diethyl ether	5971381	1
Otto Fischar GmbH	Diethyl ether	5972088	1
Otto Fischar GmbH	Diethyl ether	5972045	1
hedinger/anzag	Diethyl ether	52153	2
Fischar	Diethyl ether	597208C	1
Gehe	Diethyl ether	5972082	1
Hedinger/Sanacorp	Diethyl ether	12114902	1
Otto Fischar GmbH	Diethyl ether	597208	1
Phönix	Diethyl ether	597204B	1
Phönix	Diethyl ether	52153	1
Fischar	Diethyl ether	5973013	1
Hedinger	Diethyl ether	52153	4
Caelo	Diethyl ether	28051304	1
Fischar	Diethyl ether	5972082	1
Hedinger/Gehe	Diethyl ether	52153	1
Hedinger	Diethyl ether	52155	1
Gehe/Fischar	Diethyl ether	597301	2
Otto Fischar GmbH	Diethyl ether	5972082	1
Hebinger	Diethyl ether	52153	2
Hedinger/V.d.L.	Diethyl ether	52153	1
Fischar/Anzag	Diethyl ether	5973063	1
Caelo	Diethyl ether	5973014	1
Fischar/Gehe	Diethyl ether	5973018	1
Fischar	Diethyl ether	5972089	1
Hedinger/Noweda	Diethyl ether	52153	1
Fischar	Diethyl ether	5973063	1
Caelo	Diethyl ether	52156	1
Fischar/ Now	Diethyl ether	597301C	1
Otto Fischar GmbH	Diethyl ether	5972089	1
Otto Fischar GmbH	Diethyl ether	597301B	1
Fischar/Sanacorp	Diethyl ether	5973066	1
Otto Fischar/GEHE	Diethyl ether	597301B/311152/2	1
Fischer	Diethyl ether	5973066	1
Phoenix/Fischarl	Diethyl ether	5973066	1
Hedinger	Diethyl ether	30011406	1
Sanacorp	Diethyl ether	52152	1
gepepharm GmbH	Diethyl ether	52155	1
Hedinger / Noweda	Diethyl ether	52156	4
Fischar	Diethyl ether	5973069	1
Fischar/Phönix	Diethyl ether	5973064	1
Fischar/Phoenix	Diethyl ether	5974014	1
Alliance Healthcare/Fis...	Diethyl ether	5973065	1
Fischer	Diethyl ether	597306A	1
Fischar/ Now	Diethyl ether	597306C	1
Hedinger/Gehe	Diethyl ether	52156	2
Fischar	Diethyl ether	5974013	1
Fischar	Diethyl ether	5973067	1
Hedinger	Diethyl ether	14070804	1
Otto Fischar/Sanacorp	Diethyl ether	597301A	1
Fischar	Diethyl ether	5973065	1
otto fischar/Sana	Diethyl ether	597401B	1
Otto FischerGmbH / Alli...	Diethyl ether	597401B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Diethyl ether	52156	1
Fischar	Diethyl ether	597401A	1
Stumpf/Fischer	Diethyl ether	5974052	1
Hedinger/Noweda	Diethyl ether	52157	3
Fischar /Zentrum-Apotheke	Diethyl ether	5974013	1
Fischar	Diethyl ether	52157	1
Hedinger/Gehe	Diethyl ether	52157	1
Fischar	Diethyl ether	5974051	1
Fischar	Diethyl ether	597401C	1
FISCHER GMBH / GEHE	Diethyl ether	5974051	1
Fischar/Noweda	Diethyl ether	5973019	1
Fischar/Gehe	Diethyl ether	597405A	1
Fischar	Diethyl ether	5974059	2
Caelo	Diethyl ether	5974058	1
Alliance Healthcare/Fis...	Diethyl ether	597401A	1
noweda/fischar	Diethyl ether	5974056	1
Fischar/Phoenix	Diethyl ether	5974058	1
Otto Fischar GmbH & Co...	Diethyl ether	5974102	2
Hedinger/Kehr	Diethyl ether	52157	1
fishar	Diethyl ether	5975012	1
fishar	Diethyl ether	597601C	1
Otto Fischar	Diethyl ether	5975089	1
E+J, 28.09.2016	Diethyl ether	597601C	1
Otto Fischar / Sanacorp	Diethyl ether	5975015	1
Otto Fischer/ Kehr	Diethyl ether	5976062	1
Otto Fischar	Diethyl ether	5976019	1
Fischer/AEP	Diethyl ether	5976061	1
Ichthyol-Gesellschaft	Diethyl ether	5976011	1
Otto Fischar GmbH & Co...	Diethyl ether	5976065	1
Caelo	Diethyl ether	5976064	1
noweda/ Otto Fischar	Diethyl ether	5976066	1
Fischar / Alliance Heal...	Diethyl ether	5976067	3
Fischar	Diethyl ether	597601C	1
Caelo	Diethyl ether	597606B	2
Fischar / Kehr	Diethyl ether	597606B	2
Otto Fischar	Diethyl ether	597606B	1
Allianc. Health. / Otto...	Diethyl ether	597606B	1
Hedinger/Anzag	Diethyl ether	52161	1
Hedinger/Noweda	Diethyl ether	52161	2
Fischar/Sanacorp	Diethyl ether	597606B	1
Fischer/Phönix	Diethyl ether	597606b	1
Fischar / Gehe	Diethyl ether	5976063	1
Otto Fischar/ Anzag	Diethyl ether	5977017	1
Caelo	Diethyl ether	5977016	5
Kehr/Fischar	Diethyl ether	5977052	1
Otto Fischer /Noweda	Diethyl ether	5977018	1
Fischar/Sanacorp	Diethyl ether	5977018	1
Heninger	Diethyl ether	52162	3
Phönix/Fischer	Diethyl ether	5977018	1
Otto Fischar / Noweda	Diethyl ether	77016	1
fishar/ Sanacorp	Diethyl ether	5977054	2
Fischar/Kehr	Diethyl ether	5977055	1
Fischar	Diethyl ether	597606B	1
Hedinger	Diethyl ether	52162	1
Fischar/Sanacorp	Diethyl ether	597606	1
Fischar/Sanacorp	Diethyl ether	5977056	3
fishar	Diethyl ether	5977056	1
fISHA Noweda	Diethyl ether	5977054	1
Hedinger/Gehe	Diethyl ether	52162	1
Hedinger	Diethyl ether	52161	1

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Supplier	Substance	Batch	Spectra
Otto Fischer/Kehr	Diethyl ether	5977056	1
Otto Fischer GmbH	Diethyl ether	5976069	1
Hedinger	Diethyl ether	13011812	1
Hedinger/Phönix	Diethyl ether	52162	1
Fischar/ Alliance Healt...	Diethyl ether	5977051	6
Otto Fischar GmbH &Co. KG	Diethyl ether	5977057	1
Otto Fischar/Gehe	Diethyl ether	597705B	1
Fischar	Diethyl ether	5977059	1
Fischar/Sanacorp	Diethyl ether	5978014	1
Sanacorp/Hedinger	Diethyl ether	52163	2
Hedinger / Gehe	Diethyl ether	52163	1
Otto Fischer GmbH & Co...	Diethyl ether	5978012	1
hedinger/gehe	Diethyl ether	52163	1
Hedinger	Diethyl ether	21071803	1
Fischar/Sanacorp	Diethyl ether	5978017	1
Otto Fischar/Gehe	Diethyl ether	5977059	1
Fischar/Sanacorp	Diethyl ether	5978016	1
Gehe /Hedinger	Diethyl ether	52163	1
Hedinger	Diethyl ether	5121813	1
Fischar / Alliance Heal...	Diethyl ether	5978061	6
Fischar / Alliance Heal...	Diethyl ether	597801C	6
Hedinger/Anzag	Diethyl ether	52163	1

- 107 772 spectra from 582 *Apo-Ident* customers from a total of 30 586 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 *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	120	0	35 715
Type B	0	120	0	78 958
Type C	0	184	3	107 772

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6450 %)	98.3957 % (> 96.7914 %)

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.

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	143.36
31855	31854	0.78	143.44
34122	31854	6.06	140.44

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Dimethyl sulfoxide
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31498-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Euro OTC	Dimethyl sulfoxide	131000802	31498	40	AR-15-FG-002774-01
Fagron	Dimethyl sulfoxide	15A16-C01-16194	31732	40	20150130
Euro OTC	Dimethyl sulfoxide	1508018	31734	40	0000010817
Euro OTC	Dimethyl sulfoxide	1511013	31803	40	20151124*
Euro OTC	Dimethyl sulfoxide	1511028	31813	40	20151202*
Euro OTC	Dimethyl sulfoxide	1601048	31848	40	20160129*
Euro OTC	Dimethyl sulfoxide	1604010	32280	40	20160513*

Validation samples

A total of 222872 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 *Dimethyl sulfoxide*. These samples are listed above in the [calibration samples](#) section.
- 35555 spectra from a total of 840 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 880 spectra of 25 reference samples from the substance/substance group *Dimethyl sulfoxide*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Dimethyl sulfoxide	131000802	31498 [†]	20
Fagron	Dimethyl sulfoxide	15A16-C01-16194	31732 [†]	20
Euro OTC	Dimethyl sulfoxide	1508018	31734 [†]	20
Euro OTC	Dimethyl sulfoxide	1511013	31803 [†]	20
Euro OTC	Dimethyl sulfoxide	1511028	31813 [†]	20
Euro OTC	Dimethyl sulfoxide	1601048	31848 [†]	20
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
Caelo	Dimethyl sulfoxide	181976	34221	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	Dimethyl sulfoxide	1809024	34301	40
Euro OTC	Dimethyl sulfoxide	1809025	34305	40

- 78 198 spectra from a total of 1805 batches from further 350 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.

- 639 spectra from 271 *Apo-Ident* customers from 127 batches from the substance/substance group *Dimethyl sulfoxide*.

Supplier	Substance	Batch	Spectra
Euro OTC	Dimethyl sulfoxide	1106006-01	4
Fagron	Dimethyl sulfoxide	11E03-M04	2
Noweda	Dimethyl sulfoxide	1111059-01	1
Euro OTC	Dimethyl sulfoxide	1004041-01	1
Fagron	Dimethyl sulfoxide	27061203	1
Fagron	Dimethyl sulfoxide	13071201	1
Caelo	Dimethyl sulfoxide	29081202	1
Fagron	Dimethyl sulfoxide	11G18-N15	1
EuRho	Dimethyl sulfoxide	1111059-02	1
Noweda	Dimethyl sulfoxide	1111059-02	1
Phönix Gotha	Dimethyl sulfoxide	1111059-02	1
Gehe	Dimethyl sulfoxide	1111059-01	1
Fagron	Dimethyl sulfoxide	11K29-N03	1
Euro OTC	Dimethyl sulfoxide	1207008-01	2
Gehe	Dimethyl sulfoxide	1111059-02	1
Audor Pharma	Dimethyl sulfoxide	1111059-01D	1
Euro OTC	Dimethyl sulfoxide	26011301	1
Euro OTC	Dimethyl sulfoxide	12101202	1
Sanacorp	Dimethyl sulfoxide	1207008-01	1
Phönix/EuRho	Dimethyl sulfoxide	1207008-01	1
Euro OTC	Dimethyl sulfoxide	613A-01336	1
Euro OTC	Dimethyl sulfoxide	1210059-01	18
Audor Pharma	Dimethyl sulfoxide	AP1210059-01D	1
EuRho	Dimethyl sulfoxide	1210059-01	1
Euro OTC	Dimethyl sulfoxide	110600601	1
Euro OTC	Dimethyl sulfoxide	PHS111205	1
Alliance Healthcare	Dimethyl sulfoxide	1210059-01	1
gaylord	Dimethyl sulfoxide	1210059-01	1
Euro OTC	Dimethyl sulfoxide	13003010-01	1
Euro OTC	Dimethyl sulfoxide	121005901	1
Euro OTC	Dimethyl sulfoxide	1303010-01	14
Euro OTC	Dimethyl sulfoxide	2071301	1
Phönix	Dimethyl sulfoxide	1210059-01	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
Euro OTC	Dimethyl sulfoxide	1306010-01	24
Euro OTC	Dimethyl sulfoxide		3
Euro OTC	Dimethyl sulfoxide	1306010-02	19
Sanacorp/ PZN08597061	Dimethyl sulfoxide	1306010-01-339413100	1
Caelo	Dimethyl sulfoxide	1306010-01	2
Euro OTC	Dimethyl sulfoxide	5111303	1
AHD,17.10.13	Dimethyl sulfoxide	1306010-02	1
Gaylord/Sanacorp	Dimethyl sulfoxide	1306010-01	1
Audor Pharma	Dimethyl sulfoxide	AP1303010-01D	1
Euro OTC	Dimethyl sulfoxide	1207008-02	1
Euro/ Fiebig	Dimethyl sulfoxide	1306010-02	1
Euro OTC	Dimethyl sulfoxide	13011403	1
Sanacorp	Dimethyl sulfoxide	1306010-02	1
gehe 07.01.2014	Dimethyl sulfoxide	1306010-02	2
Caeöo	Dimethyl sulfoxide	1310008-01	1
Euro OTC	Dimethyl sulfoxide	1310008-01	11
Phönix	Dimethyl sulfoxide	1310008-01	1
Caelo	Dimethyl sulfoxide	131000801	1
PHOENIX 06.03.2014	Dimethyl sulfoxide	1306010-01	1
Euro OTC	Dimethyl sulfoxide	131000801	1
Fagron	Dimethyl sulfoxide	1306010-02	1
Euro OTC	Dimethyl sulfoxide	1310008-02	8
Caelo	Dimethyl sulfoxide	1306010-02	1
Euro OTC	Dimethyl sulfoxide	130008-01	1
Euro OTC	Dimethyl sulfoxide	14051404	1
	Dimethyl sulfoxide	1306010-02	1
Audor Pharma	Dimethyl sulfoxide	AP1306010-01D	3
Euro OTC	Dimethyl sulfoxide	13063010-01	1
Euro OTC	Dimethyl sulfoxide	1404031	1
Caelo	Dimethyl sulfoxide	1310008-02	1
Euro OTC	Dimethyl sulfoxide	1404031-01	9
Caelo	Dimethyl sulfoxide	1404031-01	3
Fagron	Dimethyl sulfoxide	1310008-02	1
Gaylord/Sanacorp 28.08.14	Dimethyl sulfoxide	1404031-01	1
Chemical corp. / Noweda	Dimethyl sulfoxide	1306010-02	1
Euro OTC	Dimethyl sulfoxide	1813A-01336	1
Caelo	Dimethyl sulfoxide	140403101	1
Phönix Gotha	Dimethyl sulfoxide	1404031-02	1
Phoenix 10.06.14	Dimethyl sulfoxide	131008-01	1
Audor Pharma	Dimethyl sulfoxide	1306010-01D	1
Chemical Corp.	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	1404031-02	8
EuRho/Phönix	Dimethyl sulfoxide	1310008-02	1
phoenix 06.03.14	Dimethyl sulfoxide	1306010-02	1
phoenix 06.05.14	Dimethyl sulfoxide	1310008-01	1
Chemical Corp./Sanacorp	Dimethyl sulfoxide	1310008-02	1
Euro	Dimethyl sulfoxide	140403-01	1
Fagron	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	15011503	1
Fagron	Dimethyl sulfoxide	14H28-M03	1
Gaylord ChemicalCorp./ ...	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	14H28-M01	2
Euro OTC	Dimethyl sulfoxide	141103901	1
Euro/ Gehe	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	1411039-01	15
Fagron	Dimethyl sulfoxide	14H28-M01	2
Fagron	Dimethyl sulfoxide	14H28-M02	1
Euro OTC	Dimethyl sulfoxide	1411039-02	7
Noweda	Dimethyl sulfoxide	1404031-02	1
Euro OTC	Dimethyl sulfoxide	SYN140623	1

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Supplier	Substance	Batch	Spectra
	Dimethyl sulfoxide	1411039-02	1
EuRho	Dimethyl sulfoxide	1411039-02	1
Euro OTC	Dimethyl sulfoxide	141039-02	1
Euro OTG/ AHD	Dimethyl sulfoxide	1411039-02	1
Euro OTC	Dimethyl sulfoxide	1505021-01	16
Euro OTC	Dimethyl sulfoxide	141103902	1
Phönix Gotha	Dimethyl sulfoxide	1505021-01	1
Euro OTC	Dimethyl sulfoxide	1505021	1
Euro OTC	Dimethyl sulfoxide	1411039-2	1
Caelo	Dimethyl sulfoxide	SYN140623	1
Caelo	Dimethyl sulfoxide	1411039-02	3
Euro OTC	Dimethyl sulfoxide	1508018-01	23
Noweda	Dimethyl sulfoxide	140403101	1
Gaylord Chemical Corp./...	Dimethyl sulfoxide	1508018-01	1
Euro OTC	Dimethyl sulfoxide	1508018-02	23
Gaylord / Fiebig	Dimethyl sulfoxide	1505021-01	1
Caeol / Gehe	Dimethyl sulfoxide	1508018-01	1
Fagron	Dimethyl sulfoxide	15A16-C01-16195	1
Caelo	Dimethyl sulfoxide	1508018-01	3
Euro OTC	Dimethyl sulfoxide	1508013-01	1
Fagron	Dimethyl sulfoxide	15A16-C01-16194	2
EuRho/Fiebig	Dimethyl sulfoxide	SYN150525	1
Caelo	Dimethyl sulfoxide	1508018-02	1
Euroct/Gehe	Dimethyl sulfoxide	1508018-02	1
Euro OTC	Dimethyl sulfoxide	1601048-01	9
Euro OTC	Dimethyl sulfoxide	1511028-01	3
vitalundfitmit100/ Sana...	Dimethyl sulfoxide		1
Euro OTC	Dimethyl sulfoxide	150801801	1
Caelo	Dimethyl sulfoxide	1601048-02	1
AHD	Dimethyl sulfoxide	151102801	1
Euro OTC	Dimethyl sulfoxide	1601048-02	7
Euro OTC	Dimethyl sulfoxide	160048-02	1
Euro OTC	Dimethyl sulfoxide	1511028-01	1
EuRho/Noweda	Dimethyl sulfoxide	1601048-01	2
Alliance	Dimethyl sulfoxide	1601048-02	1
Euro/Gehe	Dimethyl sulfoxide	1601048-01	1
Phoenix	Dimethyl sulfoxide	1601048-01	1
Bombastus	Dimethyl sulfoxide	1601048-02	1
Gaylord Chemical Corp./...	Dimethyl sulfoxide	1508018-02	2
Euro OTC	Dimethyl sulfoxide	1601048	1
Euro OTC	Dimethyl sulfoxide	151102801	2
Euro OTC	Dimethyl sulfoxide	1604010-01	12
Phönix	Dimethyl sulfoxide	1511028-01	1
Caelo	Dimethyl sulfoxide	1601048-01	1
Ebert 09.08.16 KKH	Dimethyl sulfoxide	1604010-01	1
Sanacorp	Dimethyl sulfoxide	1508018-01	1
Ebert 12.08.16	Dimethyl sulfoxide	1604040-01	1
Euro OTC	Dimethyl sulfoxide	1606007-01	19
Caelo	Dimethyl sulfoxide	1206010-01	1
Alliance	Dimethyl sulfoxide	1606007-01	1
Caelo	Dimethyl sulfoxide	106007-01	1
Ebert KKH29.09.16	Dimethyl sulfoxide	16060074-01	1
Anzag	Dimethyl sulfoxide	1606007-01	2
Caelo	Dimethyl sulfoxide	1511028-01	1
phönix	Dimethyl sulfoxide	1606007-01	1
Alliance Healthcare	Dimethyl sulfoxide	1604010-01	1
Hedinger/Noweda	Dimethyl sulfoxide	1006007-01	1
EuRho	Dimethyl sulfoxide	1606007-01	2
Alte Apotheke	Dimethyl sulfoxide	1606007-01	1
Caelo	Dimethyl sulfoxide	1609006-01	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Dimethyl sulfoxide	1609006-01	16
Euro OTC	Dimethyl sulfoxide	160401001	2
Sanacorp	Dimethyl sulfoxide	160600701	1
Euro OTC	Dimethyl sulfoxide	1606007	1
Gehe	Dimethyl sulfoxide	160600701	1
Euro OTC	Dimethyl sulfoxide	1610015-01	21
Gehe/EuRo	Dimethyl sulfoxide	1609006-01	1
apo ident	Dimethyl sulfoxide	1610015-01	1
Euro OTC	Dimethyl sulfoxide	161005-01	1
Euro OTC	Dimethyl sulfoxide	1610015-02	37
EuRho/Noweda	Dimethyl sulfoxide	1610015-02	1
Gehe	Dimethyl sulfoxide	1610015-1	1
Phoenix WE 05.04.17 -7,...	Dimethyl sulfoxide	1610015-01	2
Noweda	Dimethyl sulfoxide	1610015-01	2
Euro OTC	Dimethyl sulfoxide	170522DS/1610015-01	1
Sanacorp	Dimethyl sulfoxide	161001502	1
Gaylord Chemical Corpor...	Dimethyl sulfoxide	1610015-02	1
Euro/Noweda	Dimethyl sulfoxide	1610015-01	1
euopharm/gehe	Dimethyl sulfoxide	1610015-01	1
phoenix	Dimethyl sulfoxide	1610015-01	1
Caelo	Dimethyl sulfoxide	1610015-02	4
Fagron	Dimethyl sulfoxide	1610015-02	1
Euro/phönix	Dimethyl sulfoxide	1411039-01	1
Alliance	Dimethyl sulfoxide	1705025-01	1
Euro OTC	Dimethyl sulfoxide	1705025-01	26
Euro OTG/ AHD	Dimethyl sulfoxide	1705025-01	3
EuRho / Alliance Health...	Dimethyl sulfoxide	SYN160215	1
EuRho/Phoenix	Dimethyl sulfoxide	1705025-01	4
Euro OTC	Dimethyl sulfoxide	17525-01	1
Bombastus	Dimethyl sulfoxide	1705025-01	1
euro//Noweda	Dimethyl sulfoxide	1705025-01	2
Euro OTC	Dimethyl sulfoxide	SYN160215	2
Noweda	Dimethyl sulfoxide	1705025-01	1
Euro OTC	Dimethyl sulfoxide	4817A-01336	1
Euro OTC	Dimethyl sulfoxide	175025-01	1
Phönix	Dimethyl sulfoxide	1705025-01	1
Noweda	Dimethyl sulfoxide	170502501	1
Noweda	Dimethyl sulfoxide	1709010-01	1
EuRho	Dimethyl sulfoxide	SYN160216	1
Fagron	Dimethyl sulfoxide	1705025-01	1
EuRho	Dimethyl sulfoxide	1705025	1
Euro OTC	Dimethyl sulfoxide	170505-01	1
Euro OT/Phönix	Dimethyl sulfoxide	SYN1608022	1
EuRho/Sanacorp	Dimethyl sulfoxide	1610015-02	1
Euro OTC	Dimethyl sulfoxide	170502	1
Euro OTC	Dimethyl sulfoxide	1709010-01	9
Euro OTC	Dimethyl sulfoxide	SYN170605	1
Caelo	Dimethyl sulfoxide	1705025-01	1
Sanacorp	Dimethyl sulfoxide	171000101	2
Sanacorp W.E: 23.01.18 ...	Dimethyl sulfoxide	1710001-01	1
EuRho/Anzag	Dimethyl sulfoxide	1710001-01	1
GEHE	Dimethyl sulfoxide	1610015-01	1
Euro OTC	Dimethyl sulfoxide	171000-01	1
Gaylord	Dimethyl sulfoxide	1709010-01	1
Euro OTC	Dimethyl sulfoxide	1710001-01	2
Euro OTC	Dimethyl sulfoxide	170001-01	1
Euro OTC	Dimethyl sulfoxide	1711020-01	11
Kehr	Dimethyl sulfoxide	1711020-01	1
Noweda	Dimethyl sulfoxide	170001-01	1
Caelo	Dimethyl sulfoxide	170901001	1

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Supplier	Substance	Batch	Spectra
EuRho/Phoenix	Dimethyl sulfoxide	1711020-01	2
Bombastus	Dimethyl sulfoxide	1710001-01	1
Euro OTC	Dimethyl sulfoxide	1709090-01	1
Euro OTC	Dimethyl sulfoxide	1805002-01	9
Euro/ Phönix	Dimethyl sulfoxide	1711020-01	1
gaylord chemical corpor...	Dimethyl sulfoxide	1711020-01	2
Caelo	Dimethyl sulfoxide	1711020-01	1
Euro OTG/ AHD	Dimethyl sulfoxide	1711020-01	1
Euro OTC	Dimethyl sulfoxide	SYN170717	1
Euro OTC	Dimethyl sulfoxide	1806021-01	8
Euro OTC	Dimethyl sulfoxide	29091809	1
Euro OTC	Dimethyl sulfoxide	1705025	1
Caelo	Dimethyl sulfoxide	7111807	1
Caelo	Dimethyl sulfoxide	17111806	1
Euro OTC	Dimethyl sulfoxide	1805002-02	3
Euro OTC	Dimethyl sulfoxide	1808012-01	2
Euro OTC	Dimethyl sulfoxide	SYN180319	1
Euro OTC	Dimethyl sulfoxide	5121810	1
Euro OTC	Dimethyl sulfoxide	180602101	1
Euro OTC	Dimethyl sulfoxide	19011906	1
Sanacorp	Dimethyl sulfoxide	1808012-01	1
Euro OTC	Dimethyl sulfoxide	1809024-01	1
Euro OTC	Dimethyl sulfoxide	6021902	1
apo-ident	Dimethyl sulfoxide	1805002-02	1

- 107 320 spectra from 582 *Apo-Ident* customers from a total of 30 554 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 *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	280	0	35 555
Type B	0	860	20	78 198
Type C	0	625	14	107 320

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 % (> 99.9705 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9688 %)	97.7273 % (> 97.3864 %)
Type C	100.0000 % (> 99.6449 %)	97.8091 % (> 97.3396 %)

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.

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	136.85
31732	31848	1.70	140.60
31734	31734	0.00	140.88
31803	31803	0.00	141.44
31813	31813	0.00	141.66
31848	31848	0.00	140.68
32280	32280	0.00	145.76

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Dimeticon 100 / 350 / 1000**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30660-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 350	13236306	31334	40	AR-15-FG-009277-01
Fagron	Dimeticone 350	14C20-B05-292285	31659	40	20140331

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Dimeticone 1000	161307	32169	40	20160427*
Caelo	Dimeticone 1000	15349907	32587	40	20151106
Euro OTC	Dimeticone 350	1702002	33234	40	20170302*
Fagron	Dimeticone 350	14D30-B07-330851	33278	40	20140513
Caelo	Dimeticone 1000	16348504	33654	40	20170111
Caelo	Dimeticone 100	172164	33918	40	20170809*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 400 spectra of 10 reference samples from the substance/substance group *Dimeticone 100 / 350 / 1000*. These samples are listed above in the [calibration samples](#) section.
- 35 435 spectra from a total of 837 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 240 spectra of 7 reference samples from the substance/substance group *Dimeticone 100 / 350 / 1000*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Dimeticone 350	14C20-B05-292285	31659 [†]	20
Caelo	Dimeticone 1000	161307	32169 [†]	20
Caelo	Dimeticone 350	160754	32208	40
Caelo	Dimeticone 100	15199409	32304	40
Fagron	Dimeticone 1000	14C20-B04-306781	32485	40
Caelo	Dimeticone 100	15404609	33628	40
Caelo	Dimeticone 1000	171981	33919	40

*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.

[†]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*.

- 78 838 spectra from a total of 1823 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.

- 163 spectra from 64 *Apo-Ident* customers from 61 batches from the substance/substance group *Dimeticon 100 / 350 / 1000*.

Supplier	Substance	Batch	Spectra
Caelo	Dimeticon 350	11042104	1
Fagron	Dimeticon 350	9B10	1
Caelo	Dimeticon 350	12186301	1
Fagron	Dimeticon 350	3111Q-02251	1
Caelo	Dimeticon 350	12193307	2
Caelo	Dimeticon 350	12193302	1
Caelo	Dimeticon 350	12193303	2
Anzag 24.01.2013	Dimeticon 350	12186301	1
Caelo	Dimeticon 350	12193313	1
Caelo	Dimeticon 350		1
Caelo	Dimeticon 350	12193308	1
Caelo	Dimeticon 350	10111314	1
Caelo	Dimeticon 350	9371810	1
Caelo	Dimeticon 350	12193315	1
Euro OTC	Dimeticon 350	1207015-01	1
Caelo	Dimeticon 350	13049804	2
Caelo	Dimeticon 350	13049803	2
AHD, 07.11.13	Dimeticon 350	13049804	1
Caelo	Dimeticon 350	13049802	2
Caelo	Dimeticon 350	13049809	1
EuRo/Phönix	Dimeticon 350	1207015-01	1
Caelo	Dimeticon 350	13236302	2
Beiersdorf Ag	Dimeticon 350	1207015-02	1
Caelo	Dimeticon 350	13236306	12
Caelo	Dimeticon 350	13236308	2
Euro OTC	Dimeticon 350	1207015-02	1
Caelo	Dimeticon 350	13049813	1
Fagron	Dimeticon 350	14C20-B05-292285	5
cae	Dimeticon 350	13236306	1
Caelo	Dimeticon 350	13236312	2
Caelo	Dimeticon 350	14074509	15
Gehe	Dimeticon 350	1407004-01	1
Ph.Eur.8.0	Dimeticon 350	14C20B05292285	1
Caelo	Dimeticon 350	14704509	1
Fagron	Dimeticon 350	14C20-B05	1
Caelo	Dimeticon 350	14074511	1
Euro OTC	Dimeticon 350	1407004-01	1
Caelo	Dimeticon 350	14074512	15
Caelo	Dimeticon 350	14336402	7
Caelo	Dimeticon 350	14074518	1
Caelo	Dimeticon 350	301115	1
Caelo	Dimeticon 350	14336403	1
Caelo	Dimeticon 350	13236307	1
Caelo	Dimeticon 350	14C20-B05-292285	1
Fargon	Dimeticon 350	14C20-B05292282	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Dimeticone 350	14C20-B05-292285	1
Jenne	Dimeticone 350	14074509	1
Caelo	Dimeticone 350	1407004-01	1
Caelo	Dimeticone 350	16075401	4
Fagron	Dimeticone 350	14D30-B07-300432	2
Fagron	Dimeticone 350	16075401	1
Caelo	Dimeticone 350	14D30-B07-300432	2
Fagron	Dimeticone 350	14D30-B07	1
Caelo	Dimeticone 350	16075407	4
Caelo	Dimeticone 350	16075405	2
Caelo	Dimeticone 350	17090201	10
Caelo	Dimeticone 350	15349907	1
Caelo	Dimeticone 350	17090204	1
Caelo	Dimeticone 350	17090203	12
Fagron	Dimeticone 350	14D30-B07-334577	1
Fagron	Dimeticone 350	14030-807	1
Fagron	Dimeticone 350	14D30-B07-343668	1
AHD	Dimeticone 350	17090204	1
Caelo	Dimeticone 350	16348504	1
Caelo	Dimeticone 350	17366905	3
Nachtestung-Verlängerung	Dimeticone 350	3/16	1
Caelo	Dimeticone 100	12310801	1
Caelo	Dimeticone 100	12140101	1
Caelo	Dimeticone 100	11215905	1
Noweda	Dimeticone 100	12316701	1
Caelo	Dimeticone 100	13049603	1
Caelo	Dimeticone 100	13362904	1
Caelo	Dimeticone 100	15199401	1
Caelo	Dimeticone 1000	16348503	2

- 107 796 spectra from 582 *Apo-Ident* customers from a total of 30 622 batches from a further 335 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 *Dimeticone 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 *Dimeticone 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	400	0	35 435
Type B	0	240	0	78 838
Type C	0	163	0	107 796

The substance/substance group *Dimeticone 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 % (> 99.9705 %)	100.0000 % (> 98.5000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.5000 %)
Type C	100.0000 % (> 99.6450 %)	100.0000 % (> 96.3190 %)

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.

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	433.09
31333	32169	1.77	441.39
33918	33918	0.00	426.02
32169	32169	0.00	446.65
32587	33234	2.14	428.45
33654	33918	2.17	437.85
31334	31334	0.00	443.73
31659	33918	2.39	439.61
33234	33234	0.00	428.86
33278	33234	1.99	425.38

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Dwarf pine oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30204-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Fagron	Dwarf pine oil	12C29-N17	31184	40	1403167
Caelo	Dwarf pine oil	11375614	31189	40	20120102
Euro OTC	Dwarf pine oil	1210024-02	31529	40	20140806
Euro OTC	Dwarf pine oil	1511014	31818	40	20151214*
Caelo	Dwarf pine oil	16114705	33266	40	20160420
Caelo	Dwarf pine oil	16114706	33282	40	20160420

Validation samples

A total of 222872 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 *Dwarf pine oil*. These samples are listed above in the [calibration samples](#) section.
- 35595 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 280 spectra of 8 reference samples from the substance/substance group *Dwarf pine oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Dwarf pine oil	1210024-02	31529 [†]	20
Euro OTC	Dwarf pine oil	1511014	31818 [†]	20
Euro OTC	Dwarf pine oil	1606003	32470	40
Euro OTC	Dwarf pine oil	1703031	33235	40
Fagron	Dwarf pine oil	15A05-B06-322743	33276	40
Caelo	Dwarf pine oil	172158	33679	40
Euro OTC	Dwarf pine oil	1801001	33931	40
Euro OTC	Dwarf pine oil	1807002	34194	40

- 78798 spectra from a total of 1822 batches from further 350 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

*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.

[†]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*.

provided by the customer regarding manufacturer and batch number.

- 178 spectra from 86 *Apo-Ident* customers from 77 batches from the substance/substance group *Dwarf pine oil*.

Supplier	Substance	Batch	Spectra
Fagron	Dwarf pine oil	11G18-N10	2
Taoasis	Dwarf pine oil	30985-106654	1
PVL	Dwarf pine oil	1360313	1
Caelo	Dwarf pine oil	12239903	2
Fagron	Dwarf pine oil	27111207	1
Caelo	Dwarf pine oil	1792977	2
Caelo	Dwarf pine oil	11375601	9
Caelo	Dwarf pine oil	1137575601	1
Caelo	Dwarf pine oil	12239904	3
Fagron	Dwarf pine oil	12G12-N11	2
Caelo	Dwarf pine oil	23021301	1
Alliance	Dwarf pine oil	11375601	1
Taoasis	Dwarf pine oil	30985-111105	2
Taoasis GmbH	Dwarf pine oil	30985-110461	1
Fagron	Dwarf pine oil	13C04-N02	6
Fargo	Dwarf pine oil	13C04-N02	1
Caelo	Dwarf pine oil	12239902	2
Taoasis	Dwarf pine oil	30985-110461	1
Franz GmbH/Phönix	Dwarf pine oil	12C29-N17	2
Caelo	Dwarf pine oil	11375608	1
Taoasis	Dwarf pine oil	33347-112503	1
Fagron	Dwarf pine oil	13C04-N02	1
Caelo	Dwarf pine oil	17012014	2
Caelo	Dwarf pine oil	11375613	3
Caelo	Dwarf pine oil	11375614	3
Fagron	Dwarf pine oil	13E06-N04	5
Caelo	Dwarf pine oil	13084309	1
Caelo	Dwarf pine oil	21051403	1
Fagron	Dwarf pine oil	13H28-N04	3
Fagron	Dwarf pine oil	736339	3
Fagron	Dwarf pine oil	12K06-N06	1
Fagron	Dwarf pine oil	12-K06-N06	1
Caelo	Dwarf pine oil	14083302	3
Caelo	Dwarf pine oil	14083301	7
Fagron	Dwarf pine oil	14D14-B01	5
Taoasis	Dwarf pine oil	586/116867	1
Frey & Lau GmbH/Phoenix	Dwarf pine oil	13C04-N020133/265	1
Caelo	Dwarf pine oil	14083310	1
Phönix	Dwarf pine oil	11/19-N12	1
Caelo	Dwarf pine oil	14083311	1
Taoasis	Dwarf pine oil	586-116867	1
Taoasis	Dwarf pine oil	25599-117839	1
Euro OTC	Dwarf pine oil	1210024-02	1
Taoasis	Dwarf pine oil	25599-118829	1
Caelo	Dwarf pine oil	14083315	1
Caelo	Dwarf pine oil	14083303	1
Euro OTC	Dwarf pine oil	1411021-01	5
Fagron	Dwarf pine oil	15051509	1
Fagron	Dwarf pine oil	15A05B06	1
VDL; 7.50EUR; 28.9.2015	Dwarf pine oil	15239201	1
Fagron	Dwarf pine oil	15A05-B06-305065	1
Caelo	Dwarf pine oil	15239201	3
Fagron	Dwarf pine oil	15A05-B06-305064	1
Caelo	Dwarf pine oil	153239202	1

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Supplier	Substance	Batch	Spectra
Fagron	Dwarf pine oil	15A05-B06	5
Fritz Schiele	Dwarf pine oil		1
Caelo	Dwarf pine oil	15239202	2
Caelo	Dwarf pine oil	15375501	6
Euro OTC	Dwarf pine oil	1511014-01	4
Caelo	Dwarf pine oil	15375505	4
Caelo	Dwarf pine oil	621H23	1
Caelo	Dwarf pine oil	16114701	6
Caelo	Dwarf pine oil	15239203	1
Ichthyol-Gesellschaft	Dwarf pine oil	1610280P/15375501	1
Taoasis	Dwarf pine oil	8783-125163	1
Euro OTC	Dwarf pine oil	1606003-01	1
Caelo	Dwarf pine oil	15375502	1
Caelo	Dwarf pine oil	16114705	8
Caelo	Dwarf pine oil	16114702	2
Caelo	Dwarf pine oil	24061712	1
Noweda/EuRoh	Dwarf pine oil	160600301	1
Caelo	Dwarf pine oil	16114706	4
Fagron	Dwarf pine oil	1606003-01	1
Caelo	Dwarf pine oil	1606003-01	1
Taoasis	Dwarf pine oil	1148-148	1
Caelo	Dwarf pine oil	17215802	5
Caelo	Dwarf pine oil	17215801	4
Caelo	Dwarf pine oil	1703031-01	1
Euro OTC	Dwarf pine oil	1703031-01	1
Caelo	Dwarf pine oil	17219801	1
Caelo	Dwarf pine oil	17364201	3
Caelo	Dwarf pine oil	17364202	1
Caelo	Dwarf pine oil	5011903	1
Caelo	Dwarf pine oil	17364206	1

- 107 781 spectra from 582 *Apo-Ident* customers from a total of 30 604 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 *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	240	0	35 595
Type B	0	280	0	78 798
Type C	0	171	7	107 781

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 % (> 99.9705 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.8571 %)
Type C	100.0000 % (> 99.6450 %)	96.0674 % (> 94.3820 %)

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.

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
31184	31184	0.00	31.01
31189	31184	4.51	32.09
31529	31818	2.13	26.05
31818	31818	0.00	26.56
33266	31818	6.42	28.73
33282	31818	7.30	30.29

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Ethanol 90% pure / denatured**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30379-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ethanol 90% pure / denatured; Ethanolum 90% rein / vergällt

Special notes

When selecting the *Ethanol 90% pure / denatured* 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*
Appendix F [Addition to the second-stage models](#)

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.

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% pure / denatured*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
apomix	Ethanol 90% pure...	25A040913	31056	40	1404654
Caelo	Ethanol 90% pure...	14052802	31392	40	20140225
Caelo	Ethanol 90% pure...	163144	33102	40	20161209*

Validation samples

A total of 222 872 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 *Ethanol 90% pure / denatured*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 240 spectra of 6 reference samples from the substance/substance group *Ethanol 90% pure / denatured*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ethanol 90% pure / denatured	161944	32324	40
Caelo	Ethanol 90% pure / denatured	163142	33103	40
Caelo	Ethanol 90% pure / denatured	163143	33104	40
Caelo	Ethanol 90% pure / denatured	171741	33714	40
Caelo	Ethanol 90% pure / denatured	171739	33715	40
Caelo	Ethanol 90% pure / denatured	183064	34322	40

- 78 838 spectra from a total of 1824 batches from further 350 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.

- 546 spectra from 203 *Apo-Ident* customers from 307 batches from the substance/substance group *Ethanol 90% pure / denatured*.

*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	Spectra
Apomix	Ethanol 90% pure / denatured	32A141211	1
Caelo	Ethanol 90% pure / denatured	11329304	1
Caesar & Loretz GmbH, 4...	Ethanol 90% pure / denatured	12068301	1
Caelo	Ethanol 90% pure / denatured	11329402	1
Gehe	Ethanol 90% pure / denatured	12068201	1
Caelo	Ethanol 90% pure / denatured	12068301	1
Caelo	Ethanol 90% pure / denatured	12068202	1
Gutenberg-Apotheke	Ethanol 90% pure / denatured	Defektur	1
Anzag 06.10.12	Ethanol 90% pure / denatured	25A290812	1
Eigenherstellung	Ethanol 90% pure / denatured	4161112	1
Defektur	Ethanol 90% pure / denatured	26112012D01	1
Caelo	Ethanol 90% pure / denatured	12355401	2
Caesar & Loretz GmbH, 4...	Ethanol 90% pure / denatured	12275402	1
Caelo	Ethanol 90% pure / denatured	12355501	2
Caelo	Ethanol 90% pure / denatured	12355601	4
Caelo	Ethanol 90% pure / denatured	12275403	1
Caelo	Ethanol 90% pure / denatured	12275301	1
Apomix	Ethanol 90% pure / denatured	35A211112	1
Caelo	Ethanol 90% pure / denatured	13019601	1
Eigenherstellung	Ethanol 90% pure / denatured	1312I-07057	1
Caelo	Ethanol 90% pure / denatured	13019701	2
Caelo	Ethanol 90% pure / denatured	13019602	2
Eigenherstellung	Ethanol 90% pure / denatured	1613A-07057	1
Apomix	Ethanol 90% pure / denatured	37A101212	1
Phoenix	Ethanol 90% pure / denatured	13019703	1
Caelo	Ethanol 90% pure / denatured	13019703	1
phönix	Ethanol 90% pure / denatured		1
Caelo	Ethanol 90% pure / denatured	2413Q-03042	1
Caelo	Ethanol 90% pure / denatured	13085901	3
Germania Apo	Ethanol 90% pure / denatured	219060	1
Caelo	Ethanol 90% pure / denatured	AKD6	1
Caelo	Ethanol 90% pure / denatured	13160601	3
Caelo	Ethanol 90% pure / denatured	10250602	1
Caelo	Ethanol 90% pure / denatured	13085801	1
Apotärze/Zentrum	Ethanol 90% pure / denatured	10092013-D	1
Caelo	Ethanol 90% pure / denatured	13086001	4
Caelo	Ethanol 90% pure / denatured	13160501	2
Caelo	Ethanol 90% pure / denatured	13086002	1
Rondell-Apotheke	Ethanol 90% pure / denatured	3913Q-03042	1
Apomix	Ethanol 90% pure / denatured	12A150513	1
Caelo	Ethanol 90% pure / denatured	13290202	2
Römer-Apotheke	Ethanol 90% pure / denatured	4213E-03042	1
Caelo	Ethanol 90% pure / denatured	13290203	1
Caelo	Ethanol 90% pure / denatured	13160703	2
Eigenherstellung	Ethanol 90% pure / denatured	4313Q-07057	1
Apotärze	Ethanol 90% pure / denatured	4513M-02303	1
Gütte/Phönix	Ethanol 90% pure / denatured	20112013-M	1
Caesar & Loretz GmbH, 4...	Ethanol 90% pure / denatured	13290202	1
Martinus-Apotheke	Ethanol 90% pure / denatured	A-160913-2D	1
Eigenherstellung	Ethanol 90% pure / denatured	4733	1
Eigenherstellung	Ethanol 90% pure / denatured	4713Q-07057	1
Noweda	Ethanol 90% pure / denatured	13290203	1
Hirsch	Ethanol 90% pure / denatured	5013Q-02303	2
Caelo	Ethanol 90% pure / denatured	13290402	3
Caelo	Ethanol 90% pure / denatured	13290201	4
Caelo	Ethanol 90% pure / denatured	13290401	2
Caelo	Ethanol 90% pure / denatured	13290301	2
Caelo	Ethanol 90% pure / denatured	12275402	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-080114-1D	1
Caelo	Ethanol 90% pure / denatured	13399606	2

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Supplier	Substance	Batch	Spectra
Post-Apotheke 15.01.2014	Ethanol 90% pure / denatured	15012014	1
Apomix	Ethanol 90% pure / denatured	21A310713	1
Caelo	Ethanol 90% pure / denatured	13399601	1
Caelo	Ethanol 90% pure / denatured	13399605	4
Caelo	Ethanol 90% pure / denatured	13160701	2
Caelo	Ethanol 90% pure / denatured	13399801	1
Eigenherstellung	Ethanol 90% pure / denatured	514E-07057	1
Zentrum-Apotheke	Ethanol 90% pure / denatured	514I-03042	1
Phönix	Ethanol 90% pure / denatured	13399604	1
Apomix	Ethanol 90% pure / denatured	2A130114	1
Caelo	Ethanol 90% pure / denatured	814E-03042	1
Caelo	Ethanol 90% pure / denatured	814E-02303	1
Caelo	Ethanol 90% pure / denatured	14027401	4
Caelo	Ethanol 90% pure / denatured	5A130214	1
Caelo	Ethanol 90% pure / denatured	12275501	1
Caelo	Ethanol 90% pure / denatured	13399803	2
Gutenberg-Apotheke	Ethanol 90% pure / denatured	140324001	1
Kastner	Ethanol 90% pure / denatured	1314I-03042	1
Post-Apotheke	Ethanol 90% pure / denatured	1414A-02303	1
Caelo	Ethanol 90% pure / denatured	80933148	1
Caelo	Ethanol 90% pure / denatured	14027501	2
Martinus-Apotheke	Ethanol 90% pure / denatured	E-040414-1D	1
Caelo	Ethanol 90% pure / denatured	13399802	1
Audor Pharma	Ethanol 90% pure / denatured	1614E-03042	1
Caelo	Ethanol 90% pure / denatured	14027502	1
Caelo	Ethanol 90% pure / denatured	713E-02303	1
Phoenix	Ethanol 90% pure / denatured	13399802	1
GEHE 29.04.2014	Ethanol 90% pure / denatured	14027502	2
Caelo	Ethanol 90% pure / denatured	14027302	1
Caelo	Ethanol 90% pure / denatured	13399701	2
	Ethanol 90% pure / denatured	Hergestellt070514	1
Apomix / Phönix	Ethanol 90% pure / denatured	5A130214	1
Caelo	Ethanol 90% pure / denatured	14027301	1
Caelo	Ethanol 90% pure / denatured	14027402	1
Apomix/Phönix	Ethanol 90% pure / denatured	16A210610	1
VDL 09.05.14	Ethanol 90% pure / denatured	13399801	1
Römer-Apotheke	Ethanol 90% pure / denatured	1914E-03042	1
Caelo	Ethanol 90% pure / denatured	14052601	3
Caelo	Ethanol 90% pure / denatured	14052801	3
Hirsch	Ethanol 90% pure / denatured	11233	1
Eigenherstellung	Ethanol 90% pure / denatured	2614I-02303	1
Apomix	Ethanol 90% pure / denatured	14A120514	1
Caelo	Ethanol 90% pure / denatured	14027303	1
Fagron	Ethanol 90% pure / denatured	270614P1	1
Caelo	Ethanol 90% pure / denatured	14052701	2
Phonix	Ethanol 90% pure / denatured	14052601	1
Eigenherstellung Hubert...	Ethanol 90% pure / denatured	2014072222DF	1
Caelo	Ethanol 90% pure / denatured	14052802	2
Kastner (eigen)	Ethanol 90% pure / denatured	3114E-03042	1
Noweda	Ethanol 90% pure / denatured	10A170314	1
Caelo	Ethanol 90% pure / denatured	14060201	5
Caelo	Ethanol 90% pure / denatured	14027305	1
Eigenherstellung	Ethanol 90% pure / denatured	3416E-07057	1
Römer-Apotheke	Ethanol 90% pure / denatured	3614I-03042	1
Caelo	Ethanol 90% pure / denatured	14060301	3
Fagron	Ethanol 90% pure / denatured	14027303	2
Caelo	Ethanol 90% pure / denatured	14122201	4
Martinus-Apotheke	Ethanol 90% pure / denatured	E-211014-1D	1
Eigenherstellung	Ethanol 90% pure / denatured	4414A-07057	1
Apotärze	Ethanol 90% pure / denatured	4414E-03042	1

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 90% pure / denatured	14122401	4
Caelo	Ethanol 90% pure / denatured	5209A-02303	1
Defektur	Ethanol 90% pure / denatured	4714E-03042	1
Rondell Apotheke	Ethanol 90% pure / denatured	4814E-02303	1
Caelo	Ethanol 90% pure / denatured	14122302	4
Apomix/Noweda	Ethanol 90% pure / denatured		1
Caelo	Ethanol 90% pure / denatured	14122101	2
Caelo	Ethanol 90% pure / denatured	14060302	1
Caelo	Ethanol 90% pure / denatured	5214E-02303	1
Sanacorp 24.11.14 EK 63...	Ethanol 90% pure / denatured	14122101	1
Eigenherstellung	Ethanol 90% pure / denatured	115Q-07057	1
Caelo	Ethanol 90% pure / denatured	14122303	1
Caelo	Ethanol 90% pure / denatured		2
Caelo	Ethanol 90% pure / denatured	14208901	3
Caelo	Ethanol 90% pure / denatured	14208702	2
Caelo	Ethanol 90% pure / denatured	21105102	1
Apomix	Ethanol 90% pure / denatured	37A021214	1
Caelo	Ethanol 90% pure / denatured	14208802	4
Caelo	Ethanol 90% pure / denatured	1415A-02303	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-170215-1D	1
HirschApotheke	Ethanol 90% pure / denatured	10151-02303	1
Kastner (eigen)	Ethanol 90% pure / denatured	1215I-02303	1
Caelo	Ethanol 90% pure / denatured	15010501	3
Caelo	Ethanol 90% pure / denatured	1915L-02303	1
Eigenherstellung	Ethanol 90% pure / denatured	1515I-02303	1
Caelo	Ethanol 90% pure / denatured	14208801	5
Libellen Apotheke	Ethanol 90% pure / denatured	1515Q-02303	1
Caelo	Ethanol 90% pure / denatured	15010502	1
Caelo	Ethanol 90% pure / denatured	15010503	1
Römer-Apotheke	Ethanol 90% pure / denatured	150428003	1
Caelo	Ethanol 90% pure / denatured	15010602	1
Defektur	Ethanol 90% pure / denatured	2115A-03042	1
Caelo	Ethanol 90% pure / denatured	15010504	1
Caelo	Ethanol 90% pure / denatured	15014002	8
Brinn- Holtz	Ethanol 90% pure / denatured	1258-06/17	1
Brinn-Holtz	Ethanol 90% pure / denatured	190615	2
Stern	Ethanol 90% pure / denatured	150622004	1
Caelo	Ethanol 90% pure / denatured	15073201	3
apomix	Ethanol 90% pure / denatured	8A170215	1
Caelo	Ethanol 90% pure / denatured	15073202	2
Caelo	Ethanol 90% pure / denatured	15014001	1
Eigene Herstellung	Ethanol 90% pure / denatured	SP9090	1
Defektur	Ethanol 90% pure / denatured	3015M-03042	1
Caelo	Ethanol 90% pure / denatured	15080301	4
Caelo	Ethanol 90% pure / denatured	15010601	1
PKH	Ethanol 90% pure / denatured	23A180615	1
apomix	Ethanol 90% pure / denatured	7A170215	1
apomix	Ethanol 90% pure / denatured	18A080615	1
Caelo	Ethanol 90% pure / denatured	2515A-03042	1
Caelo	Ethanol 90% pure / denatured	15150701	7
Eigen/Neue Apotheke	Ethanol 90% pure / denatured	4315I-02303	2
Caelo	Ethanol 90% pure / denatured	15150705	1
Caelo	Ethanol 90% pure / denatured	15073203	2
Engel/Engel	Ethanol 90% pure / denatured	4415A-07014	1
Rondell Apotheke	Ethanol 90% pure / denatured	4615E-07209	1
Rondell Apotheke	Ethanol 90% pure / denatured	4615E-03042	1
Eigene Herstellung	Ethanol 90% pure / denatured	SPV9024	1
Rondell Apotheke	Ethanol 90% pure / denatured	4615E-02303	1
Caelo	Ethanol 90% pure / denatured	15150704	3
Caelo	Ethanol 90% pure / denatured	15219302	2

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Supplier	Substance	Batch	Spectra
Defektur	Ethanol 90% pure / denatured	5015I-03042	1
Caelo	Ethanol 90% pure / denatured	15328201	7
Noweda	Ethanol 90% pure / denatured	15219302	1
Eigenherstellung	Ethanol 90% pure / denatured	4211215	1
Caelo	Ethanol 90% pure / denatured	15219501	3
Caelo	Ethanol 90% pure / denatured	15328301	13
Caelo	Ethanol 90% pure / denatured	15328202	2
Noweda	Ethanol 90% pure / denatured	15328301	1
Caelo	Ethanol 90% pure / denatured	15328401	3
Eigenherstellung	Ethanol 90% pure / denatured	416A-02303	1
Caelo	Ethanol 90% pure / denatured	15442502	2
eigene Herstellung	Ethanol 90% pure / denatured	SP9025	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-130216-1D	1
apomix PKH GmbH Halle	Ethanol 90% pure / denatured	30A310815	1
Noweda	Ethanol 90% pure / denatured	15442602	1
Caelo	Ethanol 90% pure / denatured	15442602	3
Apomix	Ethanol 90% pure / denatured	46A071215	1
Herstellung	Ethanol 90% pure / denatured	110416P1	1
apomix	Ethanol 90% pure / denatured	45A261015	1
Caelo	Ethanol 90% pure / denatured	15442702	6
Caelo	Ethanol 90% pure / denatured	15442601	4
Caelo	Ethanol 90% pure / denatured	15442603	1
Apomix / Phoenix	Ethanol 90% pure / denatured	47A071215	1
Noweda	Ethanol 90% pure / denatured	15442603	1
Caelo	Ethanol 90% pure / denatured	14122202	1
Eigenherstellung	Ethanol 90% pure / denatured	1716Q-02303	1
Defektur	Ethanol 90% pure / denatured	1816A-03042	1
Fagron	Ethanol 90% pure / denatured	15442602	1
Caelo	Ethanol 90% pure / denatured	15442701	1
Caelo	Ethanol 90% pure / denatured	15442801	3
Defektur	Ethanol 90% pure / denatured	60616/50Hk	1
PKH Halle	Ethanol 90% pure / denatured	9A270416	1
Hochhaus-Apotheke	Ethanol 90% pure / denatured	4514A-03042	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-160416-1D	1
Caelo	Ethanol 90% pure / denatured	9A270416	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-220716-1P	1
Caelo	Ethanol 90% pure / denatured	16107002	1
Apomix / Alliance Healt...	Ethanol 90% pure / denatured	13A170516	1
Apotheke	Ethanol 90% pure / denatured	3116Q-03042	1
Apomix	Ethanol 90% pure / denatured	21A110416	1
Eigenherstellung	Ethanol 90% pure / denatured	3416E-02303	1
Defektur	Ethanol 90% pure / denatured	3216N-03042	1
Gehe	Ethanol 90% pure / denatured	16106901	1
Caelo	Ethanol 90% pure / denatured	15442703	2
Caelo	Ethanol 90% pure / denatured	16106802	4
Caelo	Ethanol 90% pure / denatured	16194501	3
Caelo	Ethanol 90% pure / denatured	16106801	1
Caelo	Ethanol 90% pure / denatured	16107003	3
Caelo	Ethanol 90% pure / denatured	1616902	1
Apomix / Phoenix	Ethanol 90% pure / denatured	5A150216	1
Caelo	Ethanol 90% pure / denatured	16194401	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-021116-3D	1
Nachprüfung	Ethanol 90% pure / denatured	913Q-03042	1
Alte Apotheke	Ethanol 90% pure / denatured	4716E-03042	1
Caelo	Ethanol 90% pure / denatured	16194402	2
Defektur	Ethanol 90% pure / denatured	4916E-03042	1
Caelo	Ethanol 90% pure / denatured	16194403	4
Caelo	Ethanol 90% pure / denatured	16106803	3
Caelo	Ethanol 90% pure / denatured	16194701	5
Caelo	Ethanol 90% pure / denatured	16194601	4

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Supplier	Substance	Batch	Spectra
Hochhaus-Apotheke	Ethanol 90% pure / denatured	2616Q-03042	1
Apomix	Ethanol 90% pure / denatured	39A281116	1
Apomix	Ethanol 90% pure / denatured	37A071116	1
Eigenherstellung	Ethanol 90% pure / denatured	217I-02303	1
Martinus-Apotheke	Ethanol 90% pure / denatured	E-030117-1Praxis	1
Caelo	Ethanol 90% pure / denatured	16194702	4
Caelo	Ethanol 90% pure / denatured	16314201	4
Fagron	Ethanol 90% pure / denatured	16314201	3
Eigen	Ethanol 90% pure / denatured	817Q-03042	1
Caelo	Ethanol 90% pure / denatured	16314302	5
Caelo	Ethanol 90% pure / denatured	16314401	1
Caelo	Ethanol 90% pure / denatured	42A151216	1
bison	Ethanol 90% pure / denatured	616H2	1
Caelo	Ethanol 90% pure / denatured	16314301	2
Caelo	Ethanol 90% pure / denatured	1260117	1
Caelo	Ethanol 90% pure / denatured	17047804	2
AHD	Ethanol 90% pure / denatured	16314401	1
Wolf-Apotheke / Defektur	Ethanol 90% pure / denatured	70428/50Hk	1
Caelo	Ethanol 90% pure / denatured	17047802	4
Sanacorp	Ethanol 90% pure / denatured	16194501	1
apomix	Ethanol 90% pure / denatured	7A200317	1
Caelo	Ethanol 90% pure / denatured	16314403	1
Sanacorp	Ethanol 90% pure / denatured	16194601	1
Apomix / Alliance Healt...	Ethanol 90% pure / denatured	5A200217	1
Rosenapotheke	Ethanol 90% pure / denatured	2417E-07094	1
Taoasis	Ethanol 90% pure / denatured	VE4038-127890	1
Caelo	Ethanol 90% pure / denatured	16314202	1
Apomix/Kehr	Ethanol 90% pure / denatured	8A200317	1
apomix	Ethanol 90% pure / denatured	39A281116	1
DEFEKTUR Schwanen-Apoth...	Ethanol 90% pure / denatured	170620-1	1
Apomix	Ethanol 90% pure / denatured	8A200317	1
Caelo	Ethanol 90% pure / denatured	17047902	3
Caelo	Ethanol 90% pure / denatured	17047901	4
Noweda	Ethanol 90% pure / denatured	16314302	1
Apomix / Phoenix	Ethanol 90% pure / denatured	2040030717	1
Caelo	Ethanol 90% pure / denatured	17048004	2
Delta	Ethanol 90% pure / denatured	17048003	1
Eigen Apotheke	Ethanol 90% pure / denatured	3417E-03042	1
Caelo	Ethanol 90% pure / denatured	17173902	1
Caelo	Ethanol 90% pure / denatured	17173903	3
Apomix	Ethanol 90% pure / denatured	11A150517	1
Apomix	Ethanol 90% pure / denatured	19A120617	1
Taoasis	Ethanol 90% pure / denatured	VE40438-127890	1
Caelo	Ethanol 90% pure / denatured	17174001	1
Caelo	Ethanol 90% pure / denatured	17048002	3
Eigenherstellung	Ethanol 90% pure / denatured	3917E-02303	1
GEHE	Ethanol 90% pure / denatured	28A110917	1
Caelo	Ethanol 90% pure / denatured	17048001	3
Eigene Herstellung	Ethanol 90% pure / denatured	4317A-02303	1
Apomix	Ethanol 90% pure / denatured	12A150517	1
Caelo	Ethanol 90% pure / denatured	17047803	1
apomix	Ethanol 90% pure / denatured	17A290517	1
Gehe / Apomix	Ethanol 90% pure / denatured	31a041017	1
Berkel AHK	Ethanol 90% pure / denatured		1
Caelo	Ethanol 90% pure / denatured	17206401	5
Caelo	Ethanol 90% pure / denatured	17174002	1
Phönix	Ethanol 90% pure / denatured	1694702	1
Apomix	Ethanol 90% pure / denatured	34A231017	1
Caelo	Ethanol 90% pure / denatured	17174102	4
Phönix	Ethanol 90% pure / denatured	17306002	1

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Supplier	Substance	Batch	Spectra
Hedinger	Ethanol 90% pure / denatured	716020Be	1
Caelo	Ethanol 90% pure / denatured	17306001	2
eigene	Ethanol 90% pure / denatured	518U-02303	1
Caelo	Ethanol 90% pure / denatured	17306002	4
Caelo	Ethanol 90% pure / denatured	17306202	2
Caelo	Ethanol 90% pure / denatured	17306101	4
Caelo	Ethanol 90% pure / denatured	17306205	3
ApoAmKlini	Ethanol 90% pure / denatured	918Q-02303	1
apomix	Ethanol 90% pure / denatured	35A061117	1
Caelo	Ethanol 90% pure / denatured	17306302	3
Tsiripidou	Ethanol 90% pure / denatured	180324	1
Löwen-Apotheke	Ethanol 90% pure / denatured	1218Q-03042	1
Fagron	Ethanol 90% pure / denatured	17306003	1
Sanacorp	Ethanol 90% pure / denatured	1618E-02303	1
Caelo	Ethanol 90% pure / denatured	17306203	1
Caelo	Ethanol 90% pure / denatured	17306003	2
Caelo	Ethanol 90% pure / denatured	Defektur	1
Caelo	Ethanol 90% pure / denatured	23051805	1
Apomix	Ethanol 90% pure / denatured	2A070518	1
Wolf Apotheke/Defektur	Ethanol 90% pure / denatured	80615/50Kr	1
Tsiripidou (Fortuna Apo...	Ethanol 90% pure / denatured		1
Caelo	Ethanol 90% pure / denatured	17306004	1
Caelo	Ethanol 90% pure / denatured	18089902	4
Wolf-Apotheke-Defektur	Ethanol 90% pure / denatured	80711/50Hk	1
Gehe	Ethanol 90% pure / denatured	3118I-02303	1
Gehe / Apomix	Ethanol 90% pure / denatured	5A160718	1
Kruppa	Ethanol 90% pure / denatured	818H3	1
Alte Apo Defektur	Ethanol 90% pure / denatured	3318M-03019	1
Caelo	Ethanol 90% pure / denatured	18090001	1
Caelo	Ethanol 90% pure / denatured	18089801	3
Apomix	Ethanol 90% pure / denatured	9A240417	1
Apo Ident/ Noweda	Ethanol 90% pure / denatured	18200201	1
Caelo	Ethanol 90% pure / denatured	18200203	1
Adler	Ethanol 90% pure / denatured	5018E-03042	1
Adler	Ethanol 90% pure / denatured	4618Q-03042	1
Caesar & Loretz	Ethanol 90% pure / denatured	16194501	1
Caelo	Ethanol 90% pure / denatured	18306401	1

- 107 413 spectra from 582 *Apo-Ident* customers from a total of 30 378 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 *Ethanol 90% pure / denatured* 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% pure / denatured* 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	35 715
Type B	0	240	0	78 758
Type C	0	544	2	107 321

The substance/substance group *Ethanol 90% pure / denatured* 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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9692 %)	100.0000 % (> 97.5000 %)
Type C	100.0000 % (> 99.6465 %)	99.6337 % (> 99.0842 %)

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.

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	127.41
31392	31056	11.80	113.62
33102	33102	0.00	104.67

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Ethanol 96% pure / denatured**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31488-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Ethanol 96% pure / denatured; Ethanolum 96% rein / vergällt

Special notes

When selecting the *Ethanol 96% pure / denatured* 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*
Appendix F [Addition to the second-stage models](#)

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.

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% pure / denatured*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Merck KGaA	Ethanol 96% pure...	K45197671406	31488	40	1503676
Laborchemie A...	Ethanol 96% pure...	21001382	31564	40	20100725
Caelo	Ethanol 96% pure...	182621	34330	40	20181119*

Validation samples

A total of 222 872 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 *Ethanol 96% pure / denatured*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Ethanol 96% pure / denatured*.

Supplier	Substance	Batch	Sample ID	Spectra
Merck	Ethanol 96% pure / denatured	K45197671406	31488 [†]	20
Laborchemie Apolda	Ethanol 96% pure / denatured	21001382	31564 [†]	20
Laborchemie Apolda	Ethanol 96% pure / denatured	24001427	33852	40
Laborchemie Apolda	Ethanol 96% pure / denatured	25000305	34123	40

- 78 958 spectra from a total of 1826 batches from further 350 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.

- 739 spectra from 248 *Apo-Ident* customers from 407 batches from the substance/substance group *Ethanol 96% pure / denatured*.

*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.

[†]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*.

Supplier	Substance	Batch	Spectra
Brüggemann	Ethanol 96% pure / denatured	7815040634	1
Brüggemann	Ethanol 96% pure / denatured	7816041610	1
Laborch. Apolda	Ethanol 96% pure / denatured	18001881	1
Caelo	Ethanol 96% pure / denatured		11
Werner Hoffmann	Ethanol 96% pure / denatured		1
Euro OTC	Ethanol 96% pure / denatured	18001042	1
Caelo	Ethanol 96% pure / denatured	5678	1
Fiebig	Ethanol 96% pure / denatured		2
Berkel AHK	Ethanol 96% pure / denatured	2906211085	1
Fagron	Ethanol 96% pure / denatured		1
Hoffmann	Ethanol 96% pure / denatured	28081201	1
VDL	Ethanol 96% pure / denatured	K43005871151	1
Bundesmonopolverwaltung...	Ethanol 96% pure / denatured	2032012GI	1
Berkel AHK	Ethanol 96% pure / denatured	VE28587	1
Noweda	Ethanol 96% pure / denatured	19001935	1
PVL	Ethanol 96% pure / denatured	1204131	1
Noweda	Ethanol 96% pure / denatured	1202124	2
sanacorp	Ethanol 96% pure / denatured	K40787471	1
Gehe Laborchemie Apolda...	Ethanol 96% pure / denatured	19000689	1
Fiebig	Ethanol 96% pure / denatured	12020161/1	1
Noweda	Ethanol 96% pure / denatured	19002422	1
Klenk	Ethanol 96% pure / denatured	10059387-15102	1
Bundesmonopolverwaltung...	Ethanol 96% pure / denatured		5
Bioenergie Icking	Ethanol 96% pure / denatured	201102170016	1
Laborchemie Apolda	Ethanol 96% pure / denatured	19001519	2
Anzag	Ethanol 96% pure / denatured	19000121	1
Applichem	Ethanol 96% pure / denatured	220113PML01	1
Schmittmann/Hoffmann	Ethanol 96% pure / denatured	20020112-1	1
Berkel AHK	Ethanol 96% pure / denatured	1410T31141212	1
Berkel AHK	Ethanol 96% pure / denatured	1410T31080113	1
Caelo	Ethanol 96% pure / denatured	12345	1
Apolda Laborchemie	Ethanol 96% pure / denatured	19002599	1
Apolda / Gehe	Ethanol 96% pure / denatured	20000065	1
Caelo	Ethanol 96% pure / denatured	K43619871227	1
Werner Hofmann	Ethanol 96% pure / denatured	8021304	1
Caelo	Ethanol 96% pure / denatured	7813010053	2
Gehe	Ethanol 96% pure / denatured	DE00001237810	1
BFB	Ethanol 96% pure / denatured	keinevorhanden	1
Kottkamp Alkoholvertrieb	Ethanol 96% pure / denatured	180213	1
Phönix/berkel	Ethanol 96% pure / denatured	130208	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	20000071	1
Werner Hofmann	Ethanol 96% pure / denatured	20120106	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	19001937	1
A.H.D.	Ethanol 96% pure / denatured	20000305	1
W. Hoffmann/Noweda	Ethanol 96% pure / denatured	20120106	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	20000305	3
Berkel AHK	Ethanol 96% pure / denatured	1410T311060513	1
BfB	Ethanol 96% pure / denatured	1/2/3/4	1
Apolda, Phönix	Ethanol 96% pure / denatured	20000307	1
Gehe	Ethanol 96% pure / denatured	LieferungMai2013	1
Kost/Krieger/12.08.13	Ethanol 96% pure / denatured	410130313059	2
Noweda	Ethanol 96% pure / denatured	19000663	1
Brand GmbH Alkoholvertr...	Ethanol 96% pure / denatured	24052013/60	1
Kassner & Sasse	Ethanol 96% pure / denatured	12/11/23	1
DHL	Ethanol 96% pure / denatured	11062013	1
Hofmann, Branntweinmonopol	Ethanol 96% pure / denatured		1
Berkel AHK	Ethanol 96% pure / denatured	1410T31040613	1
Tereos 20131470D	Ethanol 96% pure / denatured	1410T31040613	1
eal Euro-Alkohol	Ethanol 96% pure / denatured		1
Branntweinmonopol	Ethanol 96% pure / denatured	613Et0H96	1

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Supplier	Substance	Batch	Spectra
Brüggemann	Ethanol 96% pure / denatured	7813050119	1
Merck	Ethanol 96% pure / denatured	K43729871232	3
Noweda / Apolda	Ethanol 96% pure / denatured	20000974	1
Bergchemie	Ethanol 96% pure / denatured		1
Apolda GmbH	Ethanol 96% pure / denatured	19001936	1
Alkoholvertrieb Süd GmbH	Ethanol 96% pure / denatured	2/0713	1
Apolda GmbH	Ethanol 96% pure / denatured	20000305	1
Kost/Krieger/26.06.13	Ethanol 96% pure / denatured	410140513060	1
Laborchemie Apolda	Ethanol 96% pure / denatured	20000071	1
Miller	Ethanol 96% pure / denatured	1413040904/16042013	1
Caelo	Ethanol 96% pure / denatured	AKD7	1
Gehe/Laborchemie Apolda	Ethanol 96% pure / denatured	20000973	1
Kost/Krieger/04.07.13	Ethanol 96% pure / denatured	410040713061	2
Caelo	Ethanol 96% pure / denatured	19002599	1
Apolda / Gehe	Ethanol 96% pure / denatured	20000974	1
Bergchemie	Ethanol 96% pure / denatured	13/03/06	1
hetterich	Ethanol 96% pure / denatured	3574702	1
Bundesmonopolstelle für...	Ethanol 96% pure / denatured	xxxx	1
Alkoholvertrieb Süd GmbH	Ethanol 96% pure / denatured	keine	1
Apolda/Phönix	Ethanol 96% pure / denatured	3613M-02304	1
Alkoholvertrieb Süd GmbH	Ethanol 96% pure / denatured	1313081029/26082013	1
Bundesmonopolverw.	Ethanol 96% pure / denatured	20130903	1
Berkel AHK	Ethanol 96% pure / denatured	3613Q2304	1
Sonnenberg/Zentrum	Ethanol 96% pure / denatured	4711E-03041	1
Krieger / Kost / 27.08.13	Ethanol 96% pure / denatured	410090813062	2
	Ethanol 96% pure / denatured		1
Hoffmann	Ethanol 96% pure / denatured	E-200412-1	2
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	20000974	1
Laborchemie Apolda	Ethanol 96% pure / denatured	20001199	1
Berkel AHK	Ethanol 96% pure / denatured	13/09/05	1
Werner Hofmann	Ethanol 96% pure / denatured	30091302	1
Merck	Ethanol 96% pure / denatured	K44538471324	1
Werner Hoffmann	Ethanol 96% pure / denatured	20130033	1
Alkoholvertrieb Süd GmbH...	Ethanol 96% pure / denatured	1313081029/26082013	1
Werner Hofmann	Ethanol 96% pure / denatured	111111	1
Kost/Krieger/18.10.13	Ethanol 96% pure / denatured	410081013063	2
Apolda, Noweda	Ethanol 96% pure / denatured	20001212	1
Laborchemie APOLDA/ Now...	Ethanol 96% pure / denatured	20001574	1
Apolda GmbH/N/PZN:10137...	Ethanol 96% pure / denatured	20000975	1
kottkamp,gehe	Ethanol 96% pure / denatured	130513	1
BfB-Betrieb München	Ethanol 96% pure / denatured		1
Brüggemann	Ethanol 96% pure / denatured	7813110228	1
BMV Branntwein	Ethanol 96% pure / denatured	Ch19	1
kost	Ethanol 96% pure / denatured	410031212052	1
Sanacorp	Ethanol 96% pure / denatured	20001830	1
Apolda Laborchemie	Ethanol 96% pure / denatured	20001887	1
Berkel AHK	Ethanol 96% pure / denatured	13/11/08	1
Berkel	Ethanol 96% pure / denatured	1410T31191113	1
Berkel AHK	Ethanol 96% pure / denatured	1410T31191113	1
Laborchemie / Noweda	Ethanol 96% pure / denatured	20001830	1
BMV Branntwein	Ethanol 96% pure / denatured		5
Kost/Krieger/05.12.13	Ethanol 96% pure / denatured	410111113064	2
Laborchemie Apolda	Ethanol 96% pure / denatured	20001886	2
Heyl / AHD	Ethanol 96% pure / denatured	20001830	1
Caelo	Ethanol 96% pure / denatured	20001887	1
Taoasis/K	Ethanol 96% pure / denatured	VE30892-112552	1
Kost/13.12.13	Ethanol 96% pure / denatured	410051213065	3
Hoffmann/ Noweda	Ethanol 96% pure / denatured	E-231213-1	2
Spangro/Laborchemie Apo...	Ethanol 96% pure / denatured	20001583	1
Noweda/Labochemie	Ethanol 96% pure / denatured	20001566	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Ethanol 96% pure / denatured	20001574	1
Apolda, Gehe	Ethanol 96% pure / denatured	20001887	1
Laborchemie Apolda Heyl...	Ethanol 96% pure / denatured	20001887	1
Apolda/VDL	Ethanol 96% pure / denatured	20001830	1
Berkel AHK	Ethanol 96% pure / denatured	1410T31181213	1
Laborchemie Apolda	Ethanol 96% pure / denatured	20001885	1
Monopolstelle Jenne	Ethanol 96% pure / denatured	J150114	1
Schmittmann Gmbh	Ethanol 96% pure / denatured	20130105	1
Alkoholvertrieb Dr. Ber...	Ethanol 96% pure / denatured	15132014/02122013	1
Kost/kost/sophien	Ethanol 96% pure / denatured	410051213065	2
BfB	Ethanol 96% pure / denatured	10065927	1
Laborchemie Apolda	Ethanol 96% pure / denatured	20000065	1
Caelo	Ethanol 96% pure / denatured	1/12	1
Kost/kost/sophien	Ethanol 96% pure / denatured	4065280513	1
Apolda, Gehe	Ethanol 96% pure / denatured	20002192	1
Applichem/Diagonal	Ethanol 96% pure / denatured	70214PJK05	1
Kottkamp/Gehe	Ethanol 96% pure / denatured	121213	1
Laborchemie Apolda	Ethanol 96% pure / denatured	20002191	1
Bergchemie	Ethanol 96% pure / denatured	13/11/27	1
Gehe am 18.02.2014	Ethanol 96% pure / denatured	20002191	1
Brüggemann/Alkohol	Ethanol 96% pure / denatured	7814020283	1
Apolda / Sanacorp	Ethanol 96% pure / denatured	20002191	1
Gehe-Apolda	Ethanol 96% pure / denatured	20001885	2
Post-Apotheke	Ethanol 96% pure / denatured	111a-02304	1
Berkel AHK	Ethanol 96% pure / denatured	200214/567	1
Apolda/Gehe	Ethanol 96% pure / denatured	20002193	1
Laborchemie Apolda/Jenn...	Ethanol 96% pure / denatured	20002191	1
Laborchemie Apolda/Jenn...	Ethanol 96% pure / denatured	12345	4
Kost/Krieger/18.03.14	Ethanol 96% pure / denatured	410220114066	1
Brüggemann	Ethanol 96% pure / denatured	1514020991	1
Gutenberg-Apotheke	Ethanol 96% pure / denatured	904214	1
Taosis / G	Ethanol 96% pure / denatured	VE31397-114015	1
Bundes...	Ethanol 96% pure / denatured	8042014	1
Laborchemie Apolda	Ethanol 96% pure / denatured	17041401	1
Merck	Ethanol 96% pure / denatured		1
Berkel AHK Alkoholhandel	Ethanol 96% pure / denatured	VE32323	1
Kost/sophien	Ethanol 96% pure / denatured	410010414067	1
Phoenix	Ethanol 96% pure / denatured	200000973	1
Apolda/ Sanacorp	Ethanol 96% pure / denatured	21000154	2
Berkel AHK Alkoholhandel	Ethanol 96% pure / denatured	VE32507	1
Kammer Kirschner	Ethanol 96% pure / denatured		1
AgrAlko	Ethanol 96% pure / denatured	410-1405	1
Spinnrad	Ethanol 96% pure / denatured	713310072	1
Kottkamp Alkoholvertr.	Ethanol 96% pure / denatured	230414	1
Laborchemie	Ethanol 96% pure / denatured	21000152	1
bergchemie	Ethanol 96% pure / denatured	14-06-04	1
Hoffmann	Ethanol 96% pure / denatured	16061405	1
Brüggemann	Ethanol 96% pure / denatured	7814060362	1
Laborchemie Apolda	Ethanol 96% pure / denatured	21000152	2
Brüggemann	Ethanol 96% pure / denatured	1514041040	1
Bergchemie	Ethanol 96% pure / denatured	14-06-04	1
Brüggemann/Alkohol	Ethanol 96% pure / denatured	7814060362	1
BERKEL AHK GmbH	Ethanol 96% pure / denatured	170712/334	4
Eal Euro-Alkohol	Ethanol 96% pure / denatured	20140100	1
Bundesm.Brandwein	Ethanol 96% pure / denatured	140710	1
Noweda	Ethanol 96% pure / denatured	21000197	1
Apolda/Phoenix	Ethanol 96% pure / denatured	21000197	1
Bergchemie	Ethanol 96% pure / denatured	5/0810	1
Laborchemie Apolda	Ethanol 96% pure / denatured	21000197	1
Berkel AHK	Ethanol 96% pure / denatured	260411/145	2

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Supplier	Substance	Batch	Spectra
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	3297636/11062014	1
Alkoholvertrieb Süd/Gehe	Ethanol 96% pure / denatured	3297636/11062014	1
Berkel AHK	Ethanol 96% pure / denatured	210714/598	1
Apolda GmbH	Ethanol 96% pure / denatured	21001379	2
Merck	Ethanol 96% pure / denatured	45056971	1
Brüggemann Alcohol	Ethanol 96% pure / denatured	7814070382	1
LaborchemieApolda/Sanac...	Ethanol 96% pure / denatured	21001053	1
Berkel	Ethanol 96% pure / denatured	1410T31260814	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	160714/505/004	1
Merck	Ethanol 96% pure / denatured	K45475971416	3
Laborchemie Apolda	Ethanol 96% pure / denatured	21001054	1
All.Heal./laborchemie A...	Ethanol 96% pure / denatured	21001053	1
/Phönix	Ethanol 96% pure / denatured	140604	1
Sanacorp	Ethanol 96% pure / denatured		1
Berkel AHK	Ethanol 96% pure / denatured	1410T31050914	1
Bergchemie	Ethanol 96% pure / denatured	14-08-12	2
Noweda / Aploda	Ethanol 96% pure / denatured	21000197	1
alliance Health. 23.10.14	Ethanol 96% pure / denatured	21001379	1
Kwst/Walther CMP	Ethanol 96% pure / denatured	290814	1
Laborchemie Apolda/Phönix	Ethanol 96% pure / denatured	21000152	1
Apolda GmbH	Ethanol 96% pure / denatured	100050	1
Schmittmann GmbH	Ethanol 96% pure / denatured	20140100	1
Apolda GmbH	Ethanol 96% pure / denatured	21001382	1
Laborchemie APOLDA GmbH	Ethanol 96% pure / denatured	21001561	1
bergchemie	Ethanol 96% pure / denatured	UN1170	1
Alkoholvertrieb Dr. Ber...	Ethanol 96% pure / denatured	41010414052992014	1
All.Heal./laborchemie A...	Ethanol 96% pure / denatured	21001561	1
LaborchemieApolda/Phönix	Ethanol 96% pure / denatured	21000152	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	410-104-1405/2909201	1
Heyl / Sanacorp	Ethanol 96% pure / denatured		1
Heyl / Sanacorp	Ethanol 96% pure / denatured	21001379	1
Apolda/ Sanacorp	Ethanol 96% pure / denatured	21001560	1
Berkel AHK	Ethanol 96% pure / denatured	14/11/13	1
Brüggemann	Ethanol 96% pure / denatured	7814110456	1
Apolda/ Sanacorp	Ethanol 96% pure / denatured	21001380	1
Brüggemann Alcohol	Ethanol 96% pure / denatured	7814120470	1
Caelo	Ethanol 96% pure / denatured	21001964	1
Apolda, direkt best.	Ethanol 96% pure / denatured	21001560	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	211114/505/008	1
AHD 03.12.14 EK 85,21	Ethanol 96% pure / denatured	21002075	1
Merck	Ethanol 96% pure / denatured	Index-No603-002-00-5	1
Agralko	Ethanol 96% pure / denatured	2015010901	1
Laborchemie APOLDA	Ethanol 96% pure / denatured	21002269	1
Laborchemie Apolda	Ethanol 96% pure / denatured	21002075	3
Berkel AHK	Ethanol 96% pure / denatured	1137111/08	1
Hofmann,Branntweinmonopol	Ethanol 96% pure / denatured	20140162	1
Heyl / Sanacorp	Ethanol 96% pure / denatured	21001373	1
Berkel AHK	Ethanol 96% pure / denatured	91214/632	1
Merck	Ethanol 96% pure / denatured	K45475971	1
Gehe/Dr. Wollff	Ethanol 96% pure / denatured	21002237	2
Caelo	Ethanol 96% pure / denatured	21002244	1
Laborchemie Apolda über...	Ethanol 96% pure / denatured	21001964	1
Bergchemie	Ethanol 96% pure / denatured	14-10-16	1
Apolda gmbH/N	Ethanol 96% pure / denatured	21002064	1
Apolda/ Sanacorp	Ethanol 96% pure / denatured	21002239	1
Laborchemie Apolda GMBH...	Ethanol 96% pure / denatured	21002244	1
Berkel AHK	Ethanol 96% pure / denatured	14/01/30	1
Phönix 06.2.15	Ethanol 96% pure / denatured	21002075	1
Laborchemie APOLDA GmbH...	Ethanol 96% pure / denatured	21002237	1
Apolda/Phönix	Ethanol 96% pure / denatured	21002269	1

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Supplier	Substance	Batch	Spectra
bergchemie	Ethanol 96% pure / denatured	14-12-10	1
Caelo	Ethanol 96% pure / denatured	915A-03041	1
Phoenix	Ethanol 96% pure / denatured	21001561	1
Phoenix Goettin	Ethanol 96% pure / denatured	21002269	1
Caelo	Ethanol 96% pure / denatured	21002269	1
Caelo	Ethanol 96% pure / denatured	22000096	1
Laborchemie/Noweda	Ethanol 96% pure / denatured	19001836	1
Fagron	Ethanol 96% pure / denatured	22000096	1
Apolda/ Sanacorp	Ethanol 96% pure / denatured	22000090	1
Noweda/laborchemie Apolda	Ethanol 96% pure / denatured	21002237	1
Sanacorp	Ethanol 96% pure / denatured	21002268	1
Apolda/Sanacorp	Ethanol 96% pure / denatured	22000090	1
Caelo	Ethanol 96% pure / denatured	220000086	1
Merck	Ethanol 96% pure / denatured	K46405471507	2
Heyl/Noweda	Ethanol 96% pure / denatured	22000326	1
eal	Ethanol 96% pure / denatured	20150108	1
Schmittmann GmbH	Ethanol 96% pure / denatured	2041503	1
Laborchemie Apolda/Gehe	Ethanol 96% pure / denatured	22000394	2
Laborchemie Apolda	Ethanol 96% pure / denatured	21002244	2
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	22000086	1
Apolda/Phönix	Ethanol 96% pure / denatured	22000096	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	22000603	3
Apolda	Ethanol 96% pure / denatured	21002268	1
Laborchemie Apolda/Alli...	Ethanol 96% pure / denatured	22000392	1
Brüggemann	Ethanol 96% pure / denatured	7815030598	1
Laborchemie Apolda/Phoe...	Ethanol 96% pure / denatured	21001736	1
Berkel AHK	Ethanol 96% pure / denatured	14/09/17	1
Schmittmann	Ethanol 96% pure / denatured	20150108	1
Heyl	Ethanol 96% pure / denatured	22000394	1
Gehe Kassel	Ethanol 96% pure / denatured		1
Hoffmann/Schmittmann	Ethanol 96% pure / denatured	20150108	1
Laborchemie Apolda	Ethanol 96% pure / denatured	22000394	1
Agralko	Ethanol 96% pure / denatured	1062015	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	22000394	1
Laborchemie Apold GmbH	Ethanol 96% pure / denatured	21002269	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	5643/VALU38679/23	1
Laborchemie Apolda ,Gehe	Ethanol 96% pure / denatured	21002075	1
Berkel AHK /TEREOS	Ethanol 96% pure / denatured	190515/669	1
Laborchemie Apolda ,Gehe	Ethanol 96% pure / denatured	22000641	1
Euro Alkohol GmbH	Ethanol 96% pure / denatured	20150108	1
Caelo	Ethanol 96% pure / denatured	22000392	1
Fagron	Ethanol 96% pure / denatured	19001836	1
Caelo	Ethanol 96% pure / denatured	22000641	1
Apolda/Phönix	Ethanol 96% pure / denatured	22000616	1
Heyl(Laborchemie Apolda...	Ethanol 96% pure / denatured	21002064	1
Brüggemann Alcohol	Ethanol 96% pure / denatured	7815060735	2
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	22000616	1
Heyl	Ethanol 96% pure / denatured	22000392	1
Bergchemie	Ethanol 96% pure / denatured	15-5-07	1
Laborchemie/Sanacorp	Ethanol 96% pure / denatured	22000616	1
Hessische Spezialitäten...	Ethanol 96% pure / denatured	4101081501	1
Laborchemie Apolda	Ethanol 96% pure / denatured	22000616	1
Senge& Butz GmbH WE: 0...	Ethanol 96% pure / denatured	41209	1
Hoffmann/ Martinus-Apot...	Ethanol 96% pure / denatured	E-060815-1	1
Werner Hoffmann	Ethanol 96% pure / denatured	7081503	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	21002269	1
Laborch. Apolda/ Noweda	Ethanol 96% pure / denatured	21002237	1
Bergchemie	Ethanol 96% pure / denatured	15-05-07	1
Laborchemie APOLDA GmbH	Ethanol 96% pure / denatured	22001291	1
Berkel AHK	Ethanol 96% pure / denatured	15/07/23	2

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Supplier	Substance	Batch	Spectra
Brüggemann	Ethanol 96% pure / denatured	7815080789	3
Hofmann	Ethanol 96% pure / denatured	20150278	1
Lamotte/PX	Ethanol 96% pure / denatured	200201121	1
heyl	Ethanol 96% pure / denatured	22001291	1
Alkoholvertrieb Süd/DPD	Ethanol 96% pure / denatured	41010315061020072015	1
Noweda 04.08.15	Ethanol 96% pure / denatured	22000616	1
Laborchemie Apolda	Ethanol 96% pure / denatured	22000999	1
Miller Alkoholvertrieb ...	Ethanol 96% pure / denatured	410-103-150508/26052	1
Laborchemie/Noweda	Ethanol 96% pure / denatured	22000161	1
Caelo	Ethanol 96% pure / denatured	22000999	1
Caelo	Ethanol 96% pure / denatured	20150908	1
Laborchemie Apolda/Alli...	Ethanol 96% pure / denatured	22001291	1
Werner Hofmann	Ethanol 96% pure / denatured	20150278	1
All. Healthc. / Laborph...	Ethanol 96% pure / denatured	22000616	1
Caelo	Ethanol 96% pure / denatured	K46109471	1
Apolda/Phoenix	Ethanol 96% pure / denatured	22000616	1
Bergchemie	Ethanol 96% pure / denatured	15/06/10	1
Apolda/Phönix	Ethanol 96% pure / denatured	22001291	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	21002268	1
Apolda gmbH/N	Ethanol 96% pure / denatured	22000999	1
Laborchemie Apolda	Ethanol 96% pure / denatured	22001385	1
Laborchemie Apolda/Phönix	Ethanol 96% pure / denatured	22001291	1
Berkel	Ethanol 96% pure / denatured	1410T31310715	1
AgrAlko	Ethanol 96% pure / denatured	A2014000328	2
spinnrad	Ethanol 96% pure / denatured	815310072	1
AllianceHealthcare	Ethanol 96% pure / denatured	22001291	1
Laborchemie Apolda/Sana...	Ethanol 96% pure / denatured	22000999	1
Laborchemie Apolda/Phoe...	Ethanol 96% pure / denatured	22001948	2
Berkel	Ethanol 96% pure / denatured	1410T31051115	1
Laborch. Apolda/ Noweda	Ethanol 96% pure / denatured	22001718	1
Tereos/Berkel AHK	Ethanol 96% pure / denatured	31115/705	1
Laborchemie / Sanacorp	Ethanol 96% pure / denatured	22001717	1
Hedinger	Ethanol 96% pure / denatured	22001720	1
Laborch. Apolda/ Noweda	Ethanol 96% pure / denatured	22001291	1
Karl-Josef Kost Alkohol...	Ethanol 96% pure / denatured	41004115082	1
Heyl/Gehe	Ethanol 96% pure / denatured	22001717	1
Laborchemie Apolda/Phönix	Ethanol 96% pure / denatured	22000392	1
kottkamp/Anzag	Ethanol 96% pure / denatured	61015/505/017	1
Apolda	Ethanol 96% pure / denatured	22001718	1
BerkelAHK	Ethanol 96% pure / denatured	1410T31271115	1
Apolda / Sanacorp	Ethanol 96% pure / denatured	22001985	1
Caelo	Ethanol 96% pure / denatured	22001985	2
Brüggemann	Ethanol 96% pure / denatured	7815110957	1
Berkel	Ethanol 96% pure / denatured	1410T31141015	1
Berkel AHK	Ethanol 96% pure / denatured	151125	1
Apolda GmbH	Ethanol 96% pure / denatured	22001717	1
Apolda / Anzag	Ethanol 96% pure / denatured	22001717	1
Agraralkohol AG München	Ethanol 96% pure / denatured		1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	9012016/05112015	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	1512155050519	1
Bergchemie	Ethanol 96% pure / denatured	15-10-09	1
Sophien-AM / K.J.Kost	Ethanol 96% pure / denatured	410041115082	1
Laborchemie Apolda/Phönix	Ethanol 96% pure / denatured	21002268	1
Taoasis	Ethanol 96% pure / denatured	VE36425-122428	1
Laborchemie APOLDA GmbH	Ethanol 96% pure / denatured	22000616	1
Laborchemie Apolda/ San...	Ethanol 96% pure / denatured	22002231	1
.....	Ethanol 96% pure / denatured	22001720	1
Caelo	Ethanol 96% pure / denatured	90309001/PR	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	22001985	1
Brüggemann/ Delicom	Ethanol 96% pure / denatured	N781601155	1

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Supplier	Substance	Batch	Spectra
Taoasis	Ethanol 96% pure / denatured	122428	1
Brüggemann Wittenberg	Ethanol 96% pure / denatured	7815030598	1
Apolda GmbH	Ethanol 96% pure / denatured	22001948	1
Hofmann/Schmittmann	Ethanol 96% pure / denatured	20160007	1
Rondell Apotheke	Ethanol 96% pure / denatured	410040216085	1
Laborchemie Apold GmbH	Ethanol 96% pure / denatured	22001948	1
Brüggeman Alkohol	Ethanol 96% pure / denatured	7815040634	1
Kottkamp/Phönix	Ethanol 96% pure / denatured	151215/505/019	1
Laborchemie Apolda über...	Ethanol 96% pure / denatured	22002230	1
Heyl	Ethanol 96% pure / denatured	23000188	1
Kammer-Kirsch	Ethanol 96% pure / denatured	120216	1
Apolda/Spangro	Ethanol 96% pure / denatured	22002231	1
Kottkamp/Anzag	Ethanol 96% pure / denatured	130116/505/020	1
Heyl	Ethanol 96% pure / denatured	23000189	1
Caelo	Ethanol 96% pure / denatured	2394894	2
Fa. Karl Kost Koblenz	Ethanol 96% pure / denatured	410041115082	1
Brüggemann Alcohol	Ethanol 96% pure / denatured	N781601503	1
Heyl/Gehe	Ethanol 96% pure / denatured	22001948	1
Fa. Karl Kost Koblenz	Ethanol 96% pure / denatured	410040216085	1
Apolda	Ethanol 96% pure / denatured	22002230	1
Berkel AHK	Ethanol 96% pure / denatured	1410T31280116	1
Fagron	Ethanol 96% pure / denatured	22001291	1
Karl-Josef Kost	Ethanol 96% pure / denatured	410040216085	1
Bergchemie	Ethanol 96% pure / denatured	16/01/06	2
Brüggemann	Ethanol 96% pure / denatured	N781601257	1
Caelo	Ethanol 96% pure / denatured	23000480	1
Laborchemie Apoldo GmbH	Ethanol 96% pure / denatured	22002231	1
Gehe	Ethanol 96% pure / denatured	23000175	1
Berkel AHK	Ethanol 96% pure / denatured	VE37799	1
Kassner & Sasse	Ethanol 96% pure / denatured	16/02/02	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	23000188	2
Berkel AHK	Ethanol 96% pure / denatured	120516/746	1
Laborchemie Apolda/ Now...	Ethanol 96% pure / denatured	23000750	6
Bergchemie	Ethanol 96% pure / denatured	16/02/02	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	220030	1
anzag	Ethanol 96% pure / denatured	25439	1
Caelo	Ethanol 96% pure / denatured	22001718	1
Fagron	Ethanol 96% pure / denatured	1410T31200516	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	22002231	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	23000749	3
Hoffmann	Ethanol 96% pure / denatured	20160007	1
Alkoholvertrieb Süd Dr. ...	Ethanol 96% pure / denatured	39552016/28012016	1
Laborchemie Apolda	Ethanol 96% pure / denatured	22001720	1
Karl-Josef Kost Alkohol...	Ethanol 96% pure / denatured	410190516087	1
Heyl	Ethanol 96% pure / denatured	22001292	1
Bionorica	Ethanol 96% pure / denatured	22001720	1
Laborch. Apolda/ Noweda	Ethanol 96% pure / denatured	23000997	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	80452016/01062016	1
Heyl/Noweda	Ethanol 96% pure / denatured	23000749	1
Laborchemie Apolda	Ethanol 96% pure / denatured	23000997	2
Apolda/ Alliance Health...	Ethanol 96% pure / denatured	23000175	1
Laborchemie APOLDA GmbH	Ethanol 96% pure / denatured	23000997	1
LABORCHEMIE/Gehe	Ethanol 96% pure / denatured	23000750	1
Laborchemie Apolda über...	Ethanol 96% pure / denatured	23000997	1
Bergchemie	Ethanol 96% pure / denatured	aaaaaa	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	21001736	1
AllianceHealthcare	Ethanol 96% pure / denatured	23000997	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	23001368	1
Anzag/Hedinger	Ethanol 96% pure / denatured	23000749	1
Berkel AHK	Ethanol 96% pure / denatured	60919/1La	1

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Supplier	Substance	Batch	Spectra
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	23000749	1
Caelo	Ethanol 96% pure / denatured	20001583	1
Sanacop	Ethanol 96% pure / denatured	23000780	1
Caelo	Ethanol 96% pure / denatured	23000749	1
Alfred Quadflieg, Gelse...	Ethanol 96% pure / denatured	K16/08/03	1
Laborchemie Apolda/Phönix	Ethanol 96% pure / denatured	23001368	1
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	23000997	1
Alkoholvertrieb Süd GmbH...	Ethanol 96% pure / denatured	6282017/24102016	2
Caelo	Ethanol 96% pure / denatured	23001357	1
Laborchemie Apolda	Ethanol 96% pure / denatured	23001368	1
Laborchemie Apolda/ All...	Ethanol 96% pure / denatured	23001368	1
Bergchemie	Ethanol 96% pure / denatured	16/08/03	1
Caelo	Ethanol 96% pure / denatured	23001368	3
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	23001357	1
Heyl	Ethanol 96% pure / denatured	23000750	1
Apolda	Ethanol 96% pure / denatured	23001368	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	23001368	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	116702016/05092016	1
laborchemie apolda gmbh	Ethanol 96% pure / denatured	23001368	1
Berkel AHK	Ethanol 96% pure / denatured	111016/786	2
Apolda / Gehe	Ethanol 96% pure / denatured	23001357	1
Noweda/Laborchem. Apolda	Ethanol 96% pure / denatured	23001055	4
Laborchemie Apolda	Ethanol 96% pure / denatured	23000188	1
Heyl / Noweda	Ethanol 96% pure / denatured	23001368	1
Heyl Laborchemie Apolda...	Ethanol 96% pure / denatured	23002116	1
Phönix	Ethanol 96% pure / denatured	18122017/25112016	1
BerkelAHK	Ethanol 96% pure / denatured	16/11/23	1
Heyl/Noweda	Ethanol 96% pure / denatured	23002116	2
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	23001368	1
Laborchemie Apolda/Gehe	Ethanol 96% pure / denatured	23001357	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	23002116	1
Karl-Josef KG	Ethanol 96% pure / denatured	410110117094	1
Brüggemann Alcohol/Heil...	Ethanol 96% pure / denatured	7816123659	3
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	18122017/25112016	1
K.J. Kost/Krieger	Ethanol 96% pure / denatured	410220114066	1
Schmittmann GmbH	Ethanol 96% pure / denatured	20160426	1
Caelo	Ethanol 96% pure / denatured	120117/505/032	3
Caelo	Ethanol 96% pure / denatured	23000998/1050816	1
Kottkamp Alkoholver.	Ethanol 96% pure / denatured	120117/505/032	1
Berkel AHK	Ethanol 96% pure / denatured	17/01/11	1
BrüggemannAlcohol Witte...	Ethanol 96% pure / denatured	N781703809	5
LaborChemie/Noweda	Ethanol 96% pure / denatured	23000997	1
Alkoholvertrieb Bernd M...	Ethanol 96% pure / denatured	3074201709012017	1
Laborchemie Apolda/ Now...	Ethanol 96% pure / denatured	23001785	4
Euro Alkohol Schmittmann	Ethanol 96% pure / denatured	11031708	1
Hubertus Apotheke	Ethanol 96% pure / denatured	23001968	1
Tereos,Origny/ Kassner&...	Ethanol 96% pure / denatured	17/02/08	1
Bioenergi Icking GmbH	Ethanol 96% pure / denatured	N781601635	8
Berkel	Ethanol 96% pure / denatured	220217/824	1
Laborchemie Apolda	Ethanol 96% pure / denatured	24000161	1
Gehe	Ethanol 96% pure / denatured	23001968	1
Laborchemie Apolda	Ethanol 96% pure / denatured	24000188	1
Finteler Apotheke	Ethanol 96% pure / denatured	170407	1
Hedinger / Anzag	Ethanol 96% pure / denatured	24000161	1
Fagron	Ethanol 96% pure / denatured	23002116	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	23001368	1
Laborchemie Apold GmbH	Ethanol 96% pure / denatured	23001968	1
TAOASIS	Ethanol 96% pure / denatured	VE39261-125696	1
euro-alkohol/schmittmann	Ethanol 96% pure / denatured	20170160	1
Berkel AHK	Ethanol 96% pure / denatured	310317/835	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Ethanol 96% pure / denatured	27042017	1
Berkel AHK	Ethanol 96% pure / denatured	310317/834	1
Euro OTC	Ethanol 96% pure / denatured		1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	1200117/505/032	1
LABORCHEMIE APOLDA GmbH...	Ethanol 96% pure / denatured	23001968	1
Brüggemann	Ethanol 96% pure / denatured	V781704599(4)	1
Brüggemann	Ethanol 96% pure / denatured	V781704599(3)	1
Brüggemann	Ethanol 96% pure / denatured	V781704599(1)	1
Brüggemann	Ethanol 96% pure / denatured	V781704599(2)	1
Apolda/Noweda	Ethanol 96% pure / denatured	24000163	1
Euro Alkohol GmbH	Ethanol 96% pure / denatured	20170160	1
Laborchemie Apolda Heyl...	Ethanol 96% pure / denatured	24000186	1
Heyl/Phönix	Ethanol 96% pure / denatured	23001368	1
Bioenergi Icking GmbH	Ethanol 96% pure / denatured	N781704668	4
Apolda/Noweda	Ethanol 96% pure / denatured	23001368	1
Bergchemie/Bergchemie	Ethanol 96% pure / denatured	17-05-19	2
SAV LP	Ethanol 96% pure / denatured	601826	1
Brüggemann	Ethanol 96% pure / denatured	N781704589	1
Berkel AHK	Ethanol 96% pure / denatured	40517/843	1
Euro OTC	Ethanol 96% pure / denatured	24000186	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	23001357	1
Alkoholvertrieb Sued	Ethanol 96% pure / denatured	87872017/29052017	1
Kottkamp	Ethanol 96% pure / denatured	71026022	1
BrüggemannAlcohol Witte...	Ethanol 96% pure / denatured	N781704731	4
Laborchemie Apolda	Ethanol 96% pure / denatured	23002116	1
Brüggemann	Ethanol 96% pure / denatured	n781704927	1
Kehr	Ethanol 96% pure / denatured	24000186	1
Werner Hofmann	Ethanol 96% pure / denatured	15071707	1
Phönix / Heyl	Ethanol 96% pure / denatured	24000856	1
Phönix/Heyl	Ethanol 96% pure / denatured	24000863	1
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	24000102	1
Noweda	Ethanol 96% pure / denatured	24000856	1
VWR	Ethanol 96% pure / denatured	16E034127	1
Caelo	Ethanol 96% pure / denatured	24000863	2
Werner Hofmann	Ethanol 96% pure / denatured	20170160	1
LABORCHEMIE/Gehe	Ethanol 96% pure / denatured	24000163	1
LABORCHEMIE/Gehe	Ethanol 96% pure / denatured	24000856	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	121952017/21082017	1
Apolda / Alliance Healt...	Ethanol 96% pure / denatured	24000927	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	120117/505/32	1
BerkelAHK	Ethanol 96% pure / denatured	1410T31060717	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	24001427	1
Taoasis	Ethanol 96% pure / denatured	VE40497-128163	2
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	24000856	2
Alkohol Vertrieb Süd	Ethanol 96% pure / denatured	121952017/21082017	1
Alkoholvertrieb Süd	Ethanol 96% pure / denatured	138512107/28092017	1
Tereos/Berkel AHK	Ethanol 96% pure / denatured	101017/884	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	220817/505/038	1
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	24001427	2
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	24000186	1
Kammer/Kirsch	Ethanol 96% pure / denatured	V131702621	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	24001427	1
Sanacorp	Ethanol 96% pure / denatured	24001427	1
Gehe-Apolda	Ethanol 96% pure / denatured	2000/1895	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	201017/505/040	3
Laborchemie Apolda	Ethanol 96% pure / denatured	24000186	1
Berkel/Ebert	Ethanol 96% pure / denatured	1410T31271115	1
Apolda GmbH	Ethanol 96% pure / denatured	24001427	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	24001427	1
Berkel AHK	Ethanol 96% pure / denatured	101017/884	1

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Supplier	Substance	Batch	Spectra
Laborchemie	Ethanol 96% pure / denatured	24000856	1
Caelo	Ethanol 96% pure / denatured	20982018/05122017	1
Laborchemie Apolda	Ethanol 96% pure / denatured	24001427	1
Apolda/ Gehe	Ethanol 96% pure / denatured	24001427	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	21117/505/041	1
Laborchemie APOLDA gmbH...	Ethanol 96% pure / denatured	24000863	1
Berkel AHK	Ethanol 96% pure / denatured	17/09/07-1	1
Karl-Josef Kost	Ethanol 96% pure / denatured	410181217102	1
Apolda/Sanacorp	Ethanol 96% pure / denatured	24002163	1
Allchem/Phönix	Ethanol 96% pure / denatured	15266298	1
Spinnrad	Ethanol 96% pure / denatured	1017310124	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	221117/505/042	1
Bioenergi Icking GmbH	Ethanol 96% pure / denatured	N781602528	3
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	24001427	1
Bioenergi Icking GmbH	Ethanol 96% pure / denatured	N781062528	1
Apolda/Spangro	Ethanol 96% pure / denatured	24001494	1
Apolda/Ebert	Ethanol 96% pure / denatured	24000920	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	70218/505/043	2
Alkoholvertrieb süd	Ethanol 96% pure / denatured	53472018/0032018	1
Hoffmann	Ethanol 96% pure / denatured	123456	1
Apolda GmbH	Ethanol 96% pure / denatured	24002163	1
Kraul und Wilkening	Ethanol 96% pure / denatured	281217/74282/008	1
Laborchemie Apolda	Ethanol 96% pure / denatured	24002163	1
Gehe/ApoldaGmbH	Ethanol 96% pure / denatured	24002163	1
Karl JosefKost	Ethanol 96% pure / denatured	410181217102	1
Caelo	Ethanol 96% pure / denatured	24002163	1
brüggmann	Ethanol 96% pure / denatured	60100575563	1
Berkel AHK	Ethanol 96% pure / denatured	80318/931	1
Laborchemie Apolda ,Gehe	Ethanol 96% pure / denatured	24002263	1
Anzag/Heyl	Ethanol 96% pure / denatured	25000305	1
Taoasis	Ethanol 96% pure / denatured	VE42394-1530	1
Berkel AHK	Ethanol 96% pure / denatured	180327	1
Eckerts Wacholder Brenn...	Ethanol 96% pure / denatured	1718A03041	1
Anzag	Ethanol 96% pure / denatured	25000305	1
Kottkamp Alkoholvertrieb	Ethanol 96% pure / denatured	90318/505/044	1
Alkoholvertrieb süd	Ethanol 96% pure / denatured	71192018/23042018	1
Werner Hofmann	Ethanol 96% pure / denatured	5031809	1
Berkel AHK Berlin	Ethanol 96% pure / denatured	80318/931	1
Laborchemie/Gehe	Ethanol 96% pure / denatured	25000305	1
Laborchemie Apolda/Noweda	Ethanol 96% pure / denatured	25000305	2
Anzag/Apolda	Ethanol 96% pure / denatured	24001494	1
Werner Hofmann	Ethanol 96% pure / denatured	29061804	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	25000305	1
Heyl	Ethanol 96% pure / denatured	25000305	1
Caelo	Ethanol 96% pure / denatured	23000998	1
Laborchemie Apolda GmbH...	Ethanol 96% pure / denatured	29000309	1
Laborchemie APOLDA GmbH...	Ethanol 96% pure / denatured	25000305	1
Laborchemie Apolda/Span...	Ethanol 96% pure / denatured	25000361	1
Laborchemie Apolda GmbH	Ethanol 96% pure / denatured	25000305	1
Caelo	Ethanol 96% pure / denatured	410300518106	1
Werner Hofmann	Ethanol 96% pure / denatured	18/02/09	1
Kost Alkohole	Ethanol 96% pure / denatured	410050718107	1
Caelo	Ethanol 96% pure / denatured	170718/505/048	2
Caelo	Ethanol 96% pure / denatured	18181401	5
KWST / KWST	Ethanol 96% pure / denatured	190618/74282/012	3
Laborchemie / Anzag	Ethanol 96% pure / denatured	25001144	1
Kottkamp Alkoholvertrie...	Ethanol 96% pure / denatured	200918/505/050	2
laborchemie apolda gmbh...	Ethanol 96% pure / denatured	25001144	1
Karl Josef Kost	Ethanol 96% pure / denatured	410191018111	1
Kottkamp Alkoholvertrieb	Ethanol 96% pure / denatured	71118/505/051	3

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Supplier	Substance	Batch	Spectra
Caelo	Ethanol 96% pure / denatured	18181402	2
Brüggemann Wittenberg	Ethanol 96% pure / denatured	N781809140	1
Laborchemie Apolda	Ethanol 96% pure / denatured	25000361	1
Werner Hofmann	Ethanol 96% pure / denatured	5121821	1
Laborchemie Apolda	Ethanol 96% pure / denatured	25001138	1
Laborchemie Apolda	Ethanol 96% pure / denatured	25001144	1
Laborchemie Apolda/AHD	Ethanol 96% pure / denatured	25001980	1
Berkel AKK	Ethanol 96% pure / denatured	190220	1

- 107 220 spectra from 582 *Apo-Ident* customers from a total of 30 277 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 *Ethanol 96% pure / denatured* 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% pure / denatured* 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	35 715
Type B	0	119	1	78 937
Type C	0	698	41	107 188

The substance/substance group *Ethanol 96% pure / denatured* 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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9691 %)	99.1667 % (> 96.6667 %)
Type C	100.0000 % (> 99.6452 %)	94.4520 % (> 94.0460 %)

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.

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	53.06
31564	31488	4.61	50.01
34330	34330	0.00	50.52

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Ethyl acetate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30719-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 222 872 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.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Ethyl acetate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ethyl acetate	15362301	32568	40
Caelo	Ethyl acetate	15362303	33215	40

- 78 998 spectra from a total of 1828 batches from further 350 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 spectra from 12 *Apo-Ident* customers from 11 batches from the substance/substance group *Ethyl acetate*.

Supplier	Substance	Batch	Spectra
Caelo	Ethyl acetate	11357003	2
Caelo	Ethyl acetate	12357601	1

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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	Spectra
Caelo	Ethyl acetate	9081304	1
Caelo	Ethyl acetate	10286201	1
Caelo	Ethyl acetate	12357604	1
Caelo	Ethyl acetate	13366101	1
Caelo	Ethyl acetate	15182402	2
Caelo	Ethyl acetate	15182404	1
Caelo	Ethyl acetate	15362301	1
Caelo	Ethyl acetate	15362304	1
Caelo	Ethyl acetate	16943801	1

- 107 946 spectra from 582 *Apo-Ident* customers from a total of 30 669 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 *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	35 715
Type B	0	80	0	78 998
Type C	0	13	0	107 946

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6456 %)	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.

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	57.25
31385	34075	7.22	49.12
34075	34075	0.00	58.10

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Eucalyptus oil / Rosmary oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30875-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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 / Rosmary oil*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Rosemary oil	12E08-N05	30875	40	1502124
Bombastus	Eucalyptus oil	279796	31110	40	73399
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

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Euro OTC	Rosemary oil	1303016-01	31311	40	1502125
Caelo	Eucalyptus oil	14121904	31314	40	AR-15-FG-004302-01
Euro OTC	Eucalyptus oil	1406028-01	31527	40	20140716
Euro OTC	Rosemary oil	1511016	31822	40	20151214*
Euro OTC	Eucalyptus oil	1511015	31823	40	20151214*
Caelo	Eucalyptus oil	14039626	31864	40	20140211
Caelo	Eucalyptus oil	15316504	31865	40	20150925
Fagron	Eucalyptus oil	16C15-B05-331849	33277	40	20160411

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 520 spectra of 13 reference samples from the substance/substance group *Eucalyptus oil* / *Rosemary oil*. These samples are listed above in the [calibration samples](#) section.
- 35 315 spectra from a total of 834 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 500 spectra of 15 reference samples from the substance/substance group *Eucalyptus oil* / *Rosemary oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Eucalyptus oil	11104312	30859	40
Euro OTC	Eucalyptus oil	1406028-01	31527 [†]	20
Euro OTC	Rosemary oil	1511016	31822 [†]	20
Euro OTC	Eucalyptus oil	1511015	31823 [†]	20
Caelo	Eucalyptus oil	14039626	31864 [†]	20
Caelo	Eucalyptus oil	15316504	31865 [†]	20
Caelo	Rosemary oil	162769	32686	40
Euro OTC	Eucalyptus oil	1608042	32773	40
Euro OTC	Rosemary oil	1608043	32774	40
Caelo	Eucalyptus oil	163513	33084	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	Eucalyptus oil	1703030	33237	40
Euro OTC	Eucalyptus oil	1801002	33928	40
Euro OTC	Rosemary oil	1803038	34088	40
Euro OTC	Eucalyptus oil	1806016	34189	40
Euro OTC	Rosemary oil	1903001	34420	40

- 78578 spectra from a total of 1815 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.

- 650 spectra from 213 *Apo-Ident* customers from 290 batches from the substance/substance group *Eucalyptus oil* / *Rosemary oil*.

Supplier	Substance	Batch	Spectra
Euro OTC	Eucalyptus oil	1202030-01	1
Bombastus	Eucalyptus oil	269495	1
Caelo	Eucalyptus oil	10051816	1
Caelo	Eucalyptus oil	270421	1
Caesar & Loretz GmbH D-...	Eucalyptus oil	11102507	1
Taoasis	Eucalyptus oil	502745-108325	1
PVL	Eucalyptus oil	1260813	1
Caelo	Eucalyptus oil	11324107	5
Bombastus	Eucalyptus oil	270004	1
Caelo	Eucalyptus oil	11324112	8
Fagron	Eucalyptus oil	12B23-N08	8
Caelo	Eucalyptus oil	2112I-01978	1
Sanacorp	Eucalyptus oil	11324112	1
Caelo	Eucalyptus oil	9351601	1
Caelo	Eucalyptus oil	12103605	1
Bombastus	Eucalyptus oil	273707	1
Caelo	Eucalyptus oil	7011302	1
Caelo	Eucalyptus oil	11104312	1
Taoasis	Eucalyptus oil	521399-108557	1
Caelo	Eucalyptus oil	12103607	4
Caelo	Eucalyptus oil	513I-01978	1
Caelo	Eucalyptus oil	11102507	2
Fagron	Eucalyptus oil	11/27-N03	1
Caelo	Eucalyptus oil	11324108	1
Caelo	Eucalyptus oil	12114107	2
Caelo	Eucalyptus oil	276113	1
Anzag	Eucalyptus oil	273707	1
Caelo	Eucalyptus oil	12114112	5
Bombastus	Eucalyptus oil	275646	2
phönix	Eucalyptus oil		2

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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
Fagron	Eucalyptus oil	12G25-N11	3
Fagron	Eucalyptus oil	11102506	1
Bombastus	Eucalyptus oil	261706	1
Bombastus	Eucalyptus oil	278619	2
Caelo	Eucalyptus oil	10318506	1
Caelo	Eucalyptus oil	12103611	4
Taoasis GmbH	Eucalyptus oil	33364-110969	1
Caelo	Eucalyptus oil	12114111	1
Bombastus	Eucalyptus oil	276113	1
Taoasis	Eucalyptus oil	53970-110969	1
Bombastus	Eucalyptus oil	277671	1
Caelo	Eucalyptus oil	13106401	4
Fagron	Eucalyptus oil	11D11-N02	1
Phönix	Eucalyptus oil	273707	1
Caelo	Eucalyptus oil	13106403	3
Caelo	Eucalyptus oil		1
Taoasis	Eucalyptus oil	527885-109905	1
Fagron	Eucalyptus oil	13E15-N04	3
Caelo	Eucalyptus oil	13106402	2
Euro OTC	Eucalyptus oil	1211028-01	2
Noveda	Eucalyptus oil	13106402	1
Bombastus	Eucalyptus oil	281667	2
Caelo	Eucalyptus oil	4136096	2
Euro OTC	Eucalyptus oil	12D05-N03	1
Caelo	Eucalyptus oil	13106301	1
Caelo	Eucalyptus oil	12103612	1
Euro OTC	Eucalyptus oil	278619	1
Caelo	Eucalyptus oil	13106304	1
Euro OTC	Eucalyptus oil	1211028-02	2
Bombastu-Werke AG/Gehe	Eucalyptus oil	282165	1
Taoasis	Eucalyptus oil	543495-112704	1
Bombastus	Eucalyptus oil	279798	1
Bergland / Gehe	Eucalyptus oil	K301874	1
AHD 03.12.2013	Eucalyptus oil	282165	1
Bergland / Gehe	Eucalyptus oil	K302509	1
Taoasis	Eucalyptus oil	557095-114030	1
Bombastu-Werke AG/Gehe	Eucalyptus oil	283991	1
Bombastus	Eucalyptus oil	285362	2
Bombastus	Eucalyptus oil	284861	1
Bombastus	Eucalyptus oil	283384	1
Caelo	Eucalyptus oil	3012E-01978	1
Caelo	Eucalyptus oil	13106411	3
Taoasis	Eucalyptus oil	8745-115428	1
Fagron	Eucalyptus oil	11K23-N05	2
Bombastus	Eucalyptus oil	285615	1
Caelo	Eucalyptus oil	1439603	1
Caelo	Eucalyptus oil	14039604	1
VDL 26.04.14 Preis 5,25	Eucalyptus oil		1
ahd/lamotte	Eucalyptus oil	14039604	1
Caelo	Eucalyptus oil	13106412	3
Bombastus	Eucalyptus oil	286454	1
Caelo	Eucalyptus oil	14039609	17
Caelo	Eucalyptus oil	14039602	1
Taoasis	Eucalyptus oil	8745-116747	1
Caelo	Eucalyptus oil	14039603	1
Caelo	Eucalyptus oil	14039601	2
Bombastus	Eucalyptus oil	286740	2
Fagron	Eucalyptus oil	14E09-B06-294681	1
Fagron	Eucalyptus oil	14A17-B40	2
Caelo	Eucalyptus oil	14121904	5

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Supplier	Substance	Batch	Spectra
Fagron	Eucalyptus oil	14A17-B40-291551	1
Caelo	Eucalyptus oil	13106413	1
Bombastus	Eucalyptus oil	288085	3
Caelo	Eucalyptus oil	14039610	1
Caelo	Eucalyptus oil	14039618	2
Fagron	Eucalyptus oil	14e09-b06-294679	1
Phönix	Eucalyptus oil	14A17-B40	2
Caelo	Eucalyptus oil	14121905	1
sana 05.12.14 5,25	Eucalyptus oil	14039609	1
Bombastus	Eucalyptus oil	91101	1
Caelo	Eucalyptus oil	290094	1
Caelo	Eucalyptus oil	14039622	2
Bombastus	Eucalyptus oil	290094	1
Caelo	Eucalyptus oil	14039625	5
Caelo	Eucalyptus oil	13106326	3
phönix	Eucalyptus oil	14E09-B06-294681	1
Sanacorp	Eucalyptus oil	48/AKD3	1
Caelo	Eucalyptus oil	15011703	1
Euro OTC	Eucalyptus oil	1406028-01	1
Gehe 20.02.15	Eucalyptus oil	1406028-02	1
Caelo	Eucalyptus oil	14039627	2
Bombastus	Eucalyptus oil	292317	1
Caelo	Eucalyptus oil	15011701	5
Bombastus	Eucalyptus oil	293175	1
Caelo	Eucalyptus oil	1214E-01978	1
Frey & Lau GmbH/Phoenix	Eucalyptus oil	12G25-N11	1
14039625	Eucalyptus oil	14039625	1
Caelo	Eucalyptus oil	14039612	1
Caelo	Eucalyptus oil	14039630	1
Caelo	Eucalyptus oil	292087	1
Caelo	Eucalyptus oil	14039626	6
Bombastus	Eucalyptus oil	291597	2
VDL;5,40EUR;11.04.15	Eucalyptus oil	14039625	1
Bombastus	Eucalyptus oil	293227	3
Caelo	Eucalyptus oil	15011704	1
Caelo	Eucalyptus oil	15063303	1
Bombastus	Eucalyptus oil	293087	2
Fagron	Eucalyptus oil	15B03-B02-304362	3
Caelo	Eucalyptus oil	15063301	4
Caelo	Eucalyptus oil	28071502	1
Phönix	Eucalyptus oil	14A17-B40-291551	1
Bombastus	Eucalyptus oil	294181	1
Caelo	Eucalyptus oil	15063302	1
Caelo	Eucalyptus oil	13106316	1
Caelo	Eucalyptus oil	15063312	9
Caelo	Eucalyptus oil	15063309	14
Bombastus	Eucalyptus oil	294460	1
Caelo	Eucalyptus oil	293087	1
Bombastus	Eucalyptus oil	296325	1
ACM	Eucalyptus oil		1
Caelo	Eucalyptus oil	15316501	7
Caelo	Eucalyptus oil	301115	1
Caelo	Eucalyptus oil	15011702	1
Bombastus	Eucalyptus oil	296079	2
Caelo	Eucalyptus oil	296079	1
Bomastus direkt	Eucalyptus oil	293624	1
Caelo	Eucalyptus oil	15316502	6
Fagron	Eucalyptus oil	15B03-B03-304361	1
Bombastus	Eucalyptus oil	294687	1
Bombastus	Eucalyptus oil	295573	1

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Supplier	Substance	Batch	Spectra
Bombastus	Eucalyptus oil	298985	4
Caelo	Eucalyptus oil	1515Q-01978	1
Caelo	Eucalyptus oil	15316504	11
Caelo	Eucalyptus oil	15400202	11
Bombastus	Eucalyptus oil	300063	4
Bombastus	Eucalyptus oil	299699	2
Fagron	Eucalyptus oil	14B03-B02-304361	1
Fagro/Gehe	Eucalyptus oil	14/20-B02-302706	1
Caelo	Eucalyptus oil	15316507	1
Caelo	Eucalyptus oil	15316505	1
Bombastus	Eucalyptus oil	301205	1
Sanacorp	Eucalyptus oil	15400202	1
Caelo	Eucalyptus oil	15400203	2
Ichthyol-Gesellschaft	Eucalyptus oil	1610280E/15316504	2
Bombastus	Eucalyptus oil	300881	2
Bombastus	Eucalyptus oil	298889	1
Caelo	Eucalyptus oil	15316512	5
Fagron	Eucalyptus oil	16C15-B05-322992	2
Bombastus	Eucalyptus oil	302670	1
Celo	Eucalyptus oil	15400202	1
Euro OTC	Eucalyptus oil	1511015-01	2
Caelo	Eucalyptus oil	15316514	1
Euro OTC	Eucalyptus oil	1608042-01	3
Bombastus	Eucalyptus oil	304517	2
Caelo	Eucalyptus oil	15326512	1
Bombastus	Eucalyptus oil	303327	1
Caelo	Eucalyptus oil	1608042	2
Caelo	Eucalyptus oil	15400210	7
L10/Bambastus	Eucalyptus oil	303336	1
Bombastus	Eucalyptus oil	306025	2
Caelo	Eucalyptus oil	15063309/1100516	1
Caelo	Eucalyptus oil	916M-01978	1
Phoenix WE:27.01.2017 ...	Eucalyptus oil	15400210	1
Caelo	Eucalyptus oil	15400211	3
Allianz Healthcare	Eucalyptus oil	15400202	1
Bombastus	Eucalyptus oil	300798	1
Euro OTC	Eucalyptus oil	151101501	1
Fagron	Eucalyptus oil	15Bo3-Bo2-30462	1
Caelo	Eucalyptus oil	16235505	6
Caelo	Eucalyptus oil	16351301	4
Caelo	Eucalyptus oil	1608042-01	1
Caelo	Eucalyptus oil	24061708	1
Caelo	Eucalyptus oil	16235508	1
Sanacorp	Eucalyptus oil	16351301	1
Bombastus	Eucalyptus oil	308248	2
Bombastus	Eucalyptus oil	306637	4
Bombastus	Eucalyptus oil	307667	6
Caelo	Eucalyptus oil	170303001	1
Fagron	Eucalyptus oil	16C15-B05-327603	1
Caelo	Eucalyptus oil	16351302	1
Sanacorp	Eucalyptus oil	16351309	1
Caelo	Eucalyptus oil	16351309	4
Sanacorp	Eucalyptus oil	16351313	3
Bombastus	Eucalyptus oil	308260	1
Caelo	Eucalyptus oil	16351313	4
Caelo	Eucalyptus oil	17198802	2
Caelo	Eucalyptus oil	297732	1
Caelo	Eucalyptus oil	16351312	9
AHD	Eucalyptus oil	307667	1
Noweda	Eucalyptus oil	16351312	1

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Supplier	Substance	Batch	Spectra
Bombastus	Eucalyptus oil	308151	1
Bombastus	Eucalyptus oil	17000947	3
Bombastus	Eucalyptus oil	18000176	1
Bombastus	Eucalyptus oil	17000944	3
Caelo	Eucalyptus oil	17337701	2
Sanacorp	Eucalyptus oil	17337707	1
Caelo	Eucalyptus oil	9061815	1
Caelo	Eucalyptus oil	17337707	1
Caelo	Eucalyptus oil	18171704	2
Caelo	Eucalyptus oil	18171701	3
Fagron	Eucalyptus oil	18171701	1
Sanacorp	Eucalyptus oil	18171702	2
Sanacorp	Eucalyptus oil	18171701	1
Caelo	Eucalyptus oil	18171702	1
Caelo	Rosemary oil	3091206	1
Noweda	Rosemary oil	10374817	1
Caelo	Rosemary oil	11287208	3
PVL	Rosemary oil	491212	1
Fagron	Rosemary oil	11K21-N05	3
Anzag 05.11.12 ek:7,37	Rosemary oil	11287211	1
Caelo	Rosemary oil	12246501	5
Fagron	Rosemary oil	12E08-N05	3
Caelo	Rosemary oil	11287211	6
Caelo	Rosemary oil	1209034-01	2
Noweda	Rosemary oil	11287211	1
Bombastus	Rosemary oil	273724	3
Fagron	Rosemary oil	693655-N12	1
Caelo	Rosemary oil	273098	1
Taoasis	Rosemary oil	121217-110772	1
Anzag 12.03.13 ek: 7,37EUR	Rosemary oil	12246508	1
Caelo	Rosemary oil	12246508	5
Caelo	Rosemary oil	10374817	2
Taoasis GmbH	Rosemary oil	7028-105285	1
Caelo	Rosemary oil	28051309	1
Caelo	Rosemary oil	275963	1
Fagron	Rosemary oil	13A28-N03	3
Bombastus	Rosemary oil	278907	4
Fagron	Rosemary oil	13B18-N01	3
Euro OTC	Rosemary oil	1202025-01	2
AHD , 03.09.13	Rosemary oil	12246515	2
Euro OTC	Rosemary oil	1303016-01	1
Bombastus	Rosemary oil	281945	1
Taoasis	Rosemary oil	130313-111912	1
Caelo	Rosemary oil	4101301	1
Caelo	Rosemary oil	12246515	3
Caelo	Rosemary oil	279984	1
Bergland/Sanacorp	Rosemary oil	C301101-3448311132	1
Euro OTC	Rosemary oil	290203901	1
Euro OTC	Rosemary oil	1209034-01	1
Taoasis GmbH	Rosemary oil	130815-113178	1
Caelo	Rosemary oil	17012014	1
fargo	Rosemary oil	13A28-N03	2
Caelo	Rosemary oil	12246520	3
Caelo	Rosemary oil	12246517	2
Fagron	Rosemary oil	13/19-B04-287289	1
Phönix	Rosemary oil	282665	1
Caelo	Rosemary oil	11031402	1
Taoasis GmbH	Rosemary oil	3231016-115522	1
Bombastus	Rosemary oil	282541	1
Euro OTC	Rosemary oil	130801401	2

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Supplier	Substance	Batch	Spectra
Caelo	Rosemary oil	18091402	1
noweda	Rosemary oil		1
Taoasis	Rosemary oil	3231031-117639	1
Fagron	Rosemary oil	13I19-B04	2
Caelo	Rosemary oil	13I19-B04-293599	1
Bombastus	Rosemary oil	285668	1
Fagron	Rosemary oil	13I19-B04-293577	2
Phönix	Rosemary oil	131119-B04	1
Caelo	Rosemary oil	14092904	1
Phoenix/ Taoasis	Rosemary oil	3231016	1
Noweda/Phoenix/ Taoasis	Rosemary oil	3231031-117639	1
Taoasis	Rosemary oil	26057-118014	1
Caelo	Rosemary oil	14092910	5
Fagron	Rosemary oil	13/19-B04-293577	9
Bombastus	Rosemary oil	2872889	1
Caelo	Rosemary oil	31031502	1
Taoasis/Noweda	Rosemary oil	3231015-118416	1
Frey & Lau GmbH/Phoenix	Rosemary oil	13/19-B04-293575	1
Caelo	Rosemary oil	14092911	4
Caelo	Rosemary oil	2613M-02012	1
Fagron	Rosemary oil	13I19B04	1
Bombastus	Rosemary oil	289392	2
Bombastus	Rosemary oil	288951	1
Euro OTC	Rosemary oil	1404037-01	1
Euro OTC	Rosemary oil	1404037-02	1
Caelo	Rosemary oil	13/19-B04-293577	3
Bombastus	Rosemary oil	295093	1
Bombastus	Rosemary oil	296037	1
Taoasis/Noweda	Rosemary oil	1921019-121067	1
Fagron	Rosemary oil	13/19-B04-308855	2
Caelo	Rosemary oil	15316703	1
Caelo	Rosemary oil	296036	1
Caelo	Rosemary oil	1511016-01	1
Caelo	Rosemary oil	15316704	3
Caelo	Rosemary oil	2715E-02012	1
Caelo	Rosemary oil	15316706	1
Bombastus	Rosemary oil	298408	1
Euro OTC	Rosemary oil	1511016-02	1
Euro OTC	Rosemary oil	1511016-01	1
Bombastus	Rosemary oil	301180	1
Caelo	Rosemary oil	15442001	2
Caelo	Rosemary oil	15442017	5
Caelo	Rosemary oil	15442018	1
Gehe	Rosemary oil	301180	1
Bombastus	Rosemary oil	304472	1
Sanacorp, 21.02.17, 8,73EUR	Rosemary oil	15442017	1
Caelo	Rosemary oil	16276903	2
Caelo	Rosemary oil	15442019	1
Caelo	Rosemary oil	24061709	1
Fagron	Rosemary oil	16L22B84329543	1
Fagron	Rosemary oil	1608043-01	1
Bombastus	Rosemary oil	306506	3
Caelo	Rosemary oil	16276904	1
Caelo	Rosemary oil	16276903-20170704Ma1	1
Sanacorp	Rosemary oil	306506	2
Caelo	Rosemary oil	16276908	3
Caelo	Rosemary oil	382H25	1
Caelo	Rosemary oil	16276910	2
Caelo	Rosemary oil	17326702	7
rosma	Rosemary oil	17000647	1

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Supplier	Substance	Batch	Spectra
Caelo	Rosemary oil	9061816	1
Sanacorp	Rosemary oil	17000647	1
Caelo	Rosemary oil	17326716	2
Caelo	Rosemary oil	16276917	1
Sanacorp	Rosemary oil	18001783	1
Caelo	Rosemary oil	17326713	1
Primavera/Phoenix	Rosemary oil	207J26	1
Caelo	Rosemary oil	28111813	1

- 107 309 spectra from 582 *Apo-Ident* customers from a total of 30 395 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 *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	520	0	35 315
Type B	0	500	0	78 578
Type C	0	641	9	107 309

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 % (> 99.9705 %)	100.0000 % (> 98.8462 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.8000 %)
Type C	100.0000 % (> 99.6449 %)	98.6154 % (> 98.1538 %)

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.

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	40.15
31314	31314	0.00	41.99
31865	31314	6.20	41.92
30875	30875	0.00	42.04
31311	31311	0.00	40.69
31822	31822	0.00	41.48
31110	31823	4.81	41.04
31285	31285	0.00	39.58
31298	31285	1.53	39.44
31527	31823	3.14	39.25
31823	31823	0.00	41.58
31864	31823	2.37	41.43
33277	31823	11.40	38.76

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Eugenol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31286-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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*

Validation samples

A total of 222 872 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 *Eugenol*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Eugenol*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Eugenol	15H11-B03-322946	32731	40
Fagron	Eugenol	15H11-B03-322946	33220	40

- 78 998 spectra from a total of 1829 batches from further 350 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 7 batches from the substance/substance group *Eugenol*.

Supplier	Substance	Batch	Spectra
Fagron	Eugenol	13H14-B40-286617	1
Caelo	Eugenol	14165401	1

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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	Spectra
Caelo	Eugenol	15255901	2
Caelo	Eugenol	14165403	1
Caelo	Eugenol	15255904	2
Caelo	Eugenol	16034701	1
Caelo	Eugenol	18147002	1

- 107 950 spectra from 582 *Apo-Ident* customers from a total of 30 673 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 *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	120	0	35 715
Type B	0	80	0	78 998
Type C	0	9	0	107 950

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
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.

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	37.53
31397	31286	1.57	39.46
33896	33896	0.00	39.12

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Fennel honey (conserved)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30900-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Fennel honey (conserved); Mel foeniculi (konserviert)

Special notes

When selecting the *Fennel honey (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*
Appendix F [Addition to the second-stage models](#)

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.

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 honey (conserved)*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Fennel honey (co...	12247203	30900	40	1402574
Caelo	Fennel honey (co...	14045202	31598	40	20140317
Caelo	Fennel honey (co...	181580	34233	40	20180704*

Validation samples

A total of 222 872 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 *Fennel honey (conserved)*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 3 reference samples from the substance/substance group *Fennel honey (conserved)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Fennel honey (conserved)	12247203	30900 [†]	20
Caelo	Fennel honey (conserved)	14045202	31598 [†]	20
Caelo	Fennel honey (conserved)	16039406	33153	40

- 78 998 spectra from a total of 1827 batches from further 350 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 5 batches from the substance/substance group *Fennel honey (conserved)*.

*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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Fennel honey (conserved)	13152605	1
Caelo	Fennel honey (conserved)	13152606	1
Caelo	Fennel honey (conserved)	16039406	1
Sanacorp	Fennel honey (conserved)	17032805	2
Sanacorp	Fennel honey (conserved)	18158002	2

- 107 952 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *Fennel honey (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 *Fennel honey (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	120	0	35 715
Type B	0	79	1	78 998
Type C	0	7	0	107 952

The substance/substance group *Fennel honey (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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	98.7500 % (> 95.0000 %)
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.

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
30900	30900	0.00	16.86
31598	30900	10.31	21.01
34233	34233	0.00	21.40

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Fennel oil, bitter**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30398-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Caelo	Fennel oil, bitter	14190402	31706	40	20140625
Caelo	Fennel oil, bitter	15160103	31805	40	1703170
Bombastus	Fennel oil, bitter	295236	32922	40	1704221

Validation samples

A total of 222 872 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 *Fennel oil, bitter*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Fennel oil, bitter*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Fennel oil, bitter	14190402	31706 [†]	20
Caelo	Fennel oil, bitter	15160103	31805 [†]	20
Caelo	Fennel oil, bitter	16008606	32961	40
Caelo	Fennel oil, bitter	171809	33680	40

- 78 958 spectra from a total of 1826 batches from further 350 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.

- 45 spectra from 30 *Apo-Ident* customers from 22 batches from the substance/substance group *Fennel oil, bitter*.

Supplier	Substance	Batch	Spectra
Caelo	Fennel oil, bitter	268017	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
Bombastus	Fennel oil, bitter	278909	2
Caelo	Fennel oil, bitter	12218103	1
Caelo	Fennel oil, bitter	12218104	4
Bombastus	Fennel oil, bitter	274253	1
Caelo	Fennel oil, bitter	12370303	1
Sanacorp	Fennel oil, bitter	278909	1
Caelo	Fennel oil, bitter	12370306	4
Bombastus	Fennel oil, bitter	281715	1
Bombastus	Fennel oil, bitter	285544	1
Caelo	Fennel oil, bitter	12370312	1
Caelo	Fennel oil, bitter	12061412	1
Bombastus	Fennel oil, bitter	289232	1
Caelo	Fennel oil, bitter	24101403	1
Bombastus	Fennel oil, bitter	291598	1
Celo / Kehr	Fennel oil, bitter	12370314	1
Caelo	Fennel oil, bitter	14190402	2
Gehe	Fennel oil, bitter	291598	1
Caelo	Fennel oil, bitter	15160101	2
Caelo	Fennel oil, bitter	15160106	2
Caelo	Fennel oil, bitter	16008601	2
Gehe	Fennel oil, bitter	16008601	1
Caelo	Fennel oil, bitter	16008606	5
Sanacorp	Fennel oil, bitter	16008606	1
Caelo	Fennel oil, bitter	17337601	4
Sanacorp	Fennel oil, bitter	17337601	1
Caelo	Fennel oil, bitter	17337606	1

- 107 914 spectra from 582 *Apo-Ident* customers from a total of 30 658 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 *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	120	0	35 715
Type B	0	120	0	78 958
Type C	0	42	3	107 914

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6451 %)	93.3333 % (> 86.6667 %)

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.

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
32922	32922	0.00	45.86
31706	31805	1.53	62.60
31805	31805	0.00	62.29

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Gel Cordes®
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30632-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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®	13A007	31083	40	20130513
Ichthyol	Gel Cordes®	15A099	31876	40	20150624
Ichthyol	Gel Cordes®	15A099	32911	40	20150624

Validation samples

A total of 222 872 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 *Gel Cordes*[®]. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Gel Cordes*[®].

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	<i>Gel Cordes</i> [®]	15A099	31876 [†]	20
Ichthyol	<i>Gel Cordes</i> [®]	15A099	32910	40
Ichthyol	<i>Gel Cordes</i> [®]	17A047	33987	40

- 78 978 spectra from a total of 1828 batches from further 350 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.

- 63 spectra from 18 *Apo-Ident* customers from 6 batches from the substance/substance group *Gel Cordes*[®].

[†]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*.

Supplier	Substance	Batch	Spectra
Ichthyol/Anzag	Gel Cordes [®]	12A035	2
Caelo	Gel Cordes [®]	13A007	2
Ichthyol-Gesellschaft C...	Gel Cordes [®]	13A007	1
Spangro/Ichthyol-Gesell...	Gel Cordes [®]	14A017	3
Ichthyol/Alliance Healt...	Gel Cordes [®]	15A099	3
Ichthyol/Sanacorp	Gel Cordes [®]	14A017	1
Noweda/Ichthyol-Gesells...	Gel Cordes [®]	15A099	1
Ichthyol/Gehe	Gel Cordes [®]	15A099	1
Cordes GmbH/Noweda	Gel Cordes [®]	15A099	2
Ichthyol/Sanacorp	Gel Cordes [®]	16A169	1
Ichthyol	Gel Cordes [®]	15A099	25
Ichthyol/Spangro	Gel Cordes [®]	16A169	1
Ichthyol	Gel Cordes [®]	16A169	12
Ichthyol Gesellschaft	Gel Cordes [®]	17A047	1
Ichthyol	Gel Cordes [®]	17A047	2
AHD	Gel Cordes [®]	16A169	1
Ichthyol/Sanacorp	Gel Cordes [®]	17A047	1
Caelo	Gel Cordes [®]	17A047	1
Ivthyol/Phoenix	Gel Cordes [®]	17A047	1
Ichthyol/Phönix	Gel Cordes [®]	17A047	1

- 107 896 spectra from 582 *Apo-Ident* customers from a total of 30 674 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 *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	160	0	35 675
Type B	0	100	0	78 978
Type C	0	63	0	107 896

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6451 %)	100.0000 % (> 90.4762 %)

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.

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	41.00
31083	30632	15.14	40.34
31876	30632	15.56	40.54
32911	30632	12.16	40.60

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Geranium oil, genuine
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30468-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20150608

Validation samples

A total of 222 872 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 *Geranium oil, genuine*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Geranium oil, genuine*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Geranium oil, genuine	15172205	31789 [†]	20
Caelo	Geranium oil, genuine	171503	33316	40
Caelo	Geranium oil, genuine	16070404	33438	40
Caelo	Geranium oil, genuine	180259	34053	40

- 78 938 spectra from a total of 1826 batches from further 350 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.

- 5 spectra from 5 *Apo-Ident* customers from 5 batches from the substance/substance group *Geranium oil, genuine*.

Supplier	Substance	Batch	Spectra
Caelo	Geranium oil, genuine	35434343	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
Caelo	Geranium oil, genuine	11275605	1
Caelo	Geranium oil, genuine	16070403	1
Caelo	Geranium oil, genuine	18025903	1
Caelo	Geranium oil, genuine	153670202	1

- 107 954 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *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	80	0	35 755
Type B	0	140	0	78 938
Type C	0	5	0	107 954

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
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.

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
31193	31193	0.00	73.26
31789	31193	4.73	72.24

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Glucose syrup**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30934-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20150120
Fagron	Glucose syrup	16I02-T07-039136	33632	40	20161222

Validation samples

A total of 222 872 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 *Glucose syrup*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Glucose syrup*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Glucose syrup	14G16-T01-018036	31603 [†]	20
Fagron	Glucose syrup	14G16-T01-018036	32272	40
Fagron	Glucose syrup	16B02-T11-029595	32273	40

- 78 978 spectra from a total of 1828 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Phönix	Glucose syrup	13D23-N02	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
Fagron	Glucose syrup	13G03-N01	1
Fagron	Glucose syrup	13D23-N02	1
Fagron	Glucose syrup	10J25-T52-013485	1
Fagron	Glucose syrup	16B02-T11-029595	1
Fagron	Glucose syrup	14G16-T01-018036	1
Fagron	Glucose syrup	16I02-T07-039136	2
Caelo	Glucose syrup	16I02-T07-039136	1

- 107 950 spectra from 582 *Apo-Ident* customers from a total of 30 674 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	9	0	107 950

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
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.

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	36.29
31603	30934	6.54	35.88
33632	30934	3.00	33.03

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Glycerine ointment (conserved)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30986-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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

Validation samples

A total of 222 872 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 *Glycerine ointment (conserved)*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Glycerine ointment (conserved)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerine ointment (conserved)	16192001	32589	40
Caelo	Glycerine ointment (conserved)	17049101	33240	40
Caelo	Glycerine ointment (conserved)	18095401	34206	40

- 78 958 spectra from a total of 1827 batches from further 350 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.

- 22 spectra from 9 *Apo-Ident* customers from 10 batches from the substance/substance group *Glycerine ointment (conserved)*.

Supplier	Substance	Batch	Spectra
Caelo	Glycerine ointment (conserved)	13250102	2
Caelo	Glycerine ointment (conserved)	14183401	5
Caelo	Glycerine ointment (conserved)	14031701	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerine ointment (conserved)	15025101	2
Caelo	Glycerine ointment (conserved)	16021501	2
Caelo	Glycerine ointment (conserved)	16192002	1
Caelo	Glycerine ointment (conserved)	16192001	2
Caelo	Glycerine ointment (conserved)	17049101	4
Caelo	Glycerine ointment (conserved)	17048101	1
Caelo	Glycerine ointment (conserved)	18095401	2

- 107 937 spectra from 582 *Apo-Ident* customers from a total of 30 671 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 *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	80	0	35 755
Type B	0	120	0	78 958
Type C	0	20	2	107 937

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6453 %)	90.9091 % (> 77.2727 %)

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.

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	11.10	34.80
31296	31296	0.00	35.53

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Glycerol >99%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30189-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Glycerol >99%; Glycerinum anhydricum >99%

Special notes

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

no information

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>
Appendix F	Addition to the second-stage models

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.

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 >99%*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Glycerol >99%	12111504	30871	40	20120418
Caelo	Glycerol >99%	13127603	31152	40	1405278
Caelo	Glycerol >99%	13370502	31352	40	20131115
Caelo	Glycerol >99%	162308	32693	40	20160809*

Validation samples

A total of 222872 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 *Glycerol* >99%. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 220 spectra of 6 reference samples from the substance/substance group *Glycerol* >99%.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerol >99%	13370502	31352 [†]	20
Caelo	Glycerol >99%	162308	32325	40
Caelo	Glycerol >99%	171857	33703	40
Caelo	Glycerol >99%	171857	33708	40
Caelo	Glycerol >99%	180984	34064	40
Caelo	Glycerol >99%	183222	34327	40

- 78858 spectra from a total of 1825 batches from further 350 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.

*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.

[†]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*.

- 518 spectra from 201 *Apo-Ident* customers from 78 batches from the substance/substance group *Glycerol >99%*.

Supplier	Substance	Batch	Spectra
Caelo	Glycerol >99%	11217403	1
Caelo	Glycerol >99%	11305102	3
Caelo	Glycerol >99%	11118104	1
Caelo	Glycerol >99%	1004211590	1
Caelo	Glycerol >99%	11305101	1
Caelo	Glycerol >99%	2061201	1
Caelo	Glycerol >99%	12014304	13
Gehe	Glycerol >99%	12014304	1
Caelo	Glycerol >99%	510211590	1
Phönix 22.08.12	Glycerol >99%	11305102	1
Caelo	Glycerol >99%	12111503	4
Caelo	Glycerol >99%	1211503	1
Phönix/EuRho	Glycerol >99%	12111503	1
Caelo	Glycerol >99%	12111504	3
Gehe	Glycerol >99%	12111504	2
Caelo	Glycerol >99%	13002902	1
Caelo	Glycerol >99%	11061303	1
Caelo	Glycerol >99%	13002903	7
Caesar/Lorenz	Glycerol >99%	13002904	2
Caelo	Glycerol >99%	12111505	1
Caelo	Glycerol >99%	13002904	4
Caelo	Glycerol >99%	2713M1590	1
Caesar & Lorenz	Glycerol >99%	13002904	1
Gehe	Glycerol >99%	13002904	1
Fagron	Glycerol >99%	13002904	1
Phönix	Glycerol >99%	13002904	2
Ichthyol/Sanacorp	Glycerol >99%	13002902	2
Caelo	Glycerol >99%	1300291	1
Caelo	Glycerol >99%	13127603	15
Gehe	Glycerol >99%	13127603	2
Caelo	Glycerol >99%	13127604	9
Caelo	Glycerol >99%	1317604	1
Phönix	Glycerol >99%	13127604	1
Caelo	Glycerol >99%	13002907	1
Caesar & Loretz GmbH Hi...	Glycerol >99%	13127608	1
apomix/ Phoenix	Glycerol >99%	13127608	1
Caelo	Glycerol >99%	13127608	3
Anzag	Glycerol >99%	13127610	2
Caelo	Glycerol >99%	13370502	9
Caelo	Glycerol >99%	13127610	2
Caelo	Glycerol >99%	17041403	1
Caelo	Glycerol >99%	13370501	2
Caelo	Glycerol >99%	2114Q1590	1
Caelo	Glycerol >99%	13127607	2
Caelo	Glycerol >99%	13370503	15
Phönix	Glycerol >99%	13127610	1
Caelo	Glycerol >99%	14074302	17
Caelo	Glycerol >99%	13370507	1
Caelo	Glycerol >99%	133370507	1
Caelo	Glycerol >99%	13111403	1
Caesar & Loretz GmbH Hi...	Glycerol >99%	14074302	1
Caelo	Glycerol >99%	14074303	4
Gehe 16.12.14	Glycerol >99%	13370503	1
Caelo	Glycerol >99%	1474303	1
Caelo	Glycerol >99%	4031501	1

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Supplier	Substance	Batch	Spectra
Fagron	Glycerol >99%	14074302	1
Caelo	Glycerol >99%	14373403	19
Caelo	Glycerol >99%		1
Caelo	Glycerol >99%	1473403	1
Caesar & Loretz GmbH	Glycerol >99%	14373403	1
Caelo	Glycerol >99%	14373404	3
Caelo	Glycerol >99%	14373401	2
Caelo	Glycerol >99%	14373409	17
Caelo	Glycerol >99%	18081504	1
Caelo	Glycerol >99%	1473409	1
Fagron	Glycerol >99%	14373409	2
Caelo	Glycerol >99%	14373413	27
Noweda	Glycerol >99%	14373403	1
Noweda	Glycerol >99%	14373413	1
Caelo	Glycerol >99%	14373412	3
Caelo	Glycerol >99%	15406502	16
Caelo	Glycerol >99%	15406504	10
Caelo	Glycerol >99%	15406501	17
Caesar & Loretz GmbH	Glycerol >99%	15406502	1
Caelo	Glycerol >99%	15283603	1
Beiersdorf AG	Glycerol >99%	15406501	1
Caelo	Glycerol >99%	1546502	1
Caelo	Glycerol >99%	733514373412	1
Caelo	Glycerol >99%	16023503	7
Caelo	Glycerol >99%	16023504	20
Phoenix	Glycerol >99%	16023504	2
Caelo	Glycerol >99%	1623504	1
Caelo	Glycerol >99%	15406503	25
Euro OTC	Glycerol >99%	15406503	1
Euro OTC	Glycerol >99%	16023503	1
Caelo	Glycerol >99%	16023506	25
Caesar & Loretz GmbH Hi...	Glycerol >99%	16023506	1
GEHE	Glycerol >99%	16023506	1
ALH	Glycerol >99%	15406504	1
Caelo	Glycerol >99%	16230802	4
Caelo	Glycerol >99%	1623506	1
INTR/Phönix	Glycerol >99%	16023506	1
Caelo	Glycerol >99%	16023508	9
Caelo	Glycerol >99%	16230804	37
Caelo	Glycerol >99%	16320804	1
Caesar & Loretz GmbH	Glycerol >99%	16230804	1
Caelo	Glycerol >99%	17037504	16
Caelo	Glycerol >99%	1620804	1
Caelo	Glycerol >99%	17037503	11
Noweda	Glycerol >99%	16230804	1
Caelo	Glycerol >99%	17185702	1
Caelo	Glycerol >99%	17185704	1
Caelo	Glycerol >99%	17185703	17
Caelo	Glycerol >99%	16230805	1
Caelo	Glycerol >99%	17292803	6
Sanacorp	Glycerol >99%	17292803	2
Caelo	Glycerol >99%	18098405	15
Bombastus	Glycerol >99%	18098405	1
Caesar & Lorenz GmbH	Glycerol >99%	17292803	1
Caelo	Glycerol >99%	18096405	1
Caelo	Glycerol >99%	18098406	1
Caelo	Glycerol >99%	18126602	1
Caelo	Glycerol >99%	18126602	12
Caelo	Glycerol >99%	19091803	1
Caelo	Glycerol >99%	18126605	2

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol >99%	1826605	1

- 107 441 spectra from 582 *Apo-Ident* customers from a total of 30 604 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 *Glycerol >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 *Glycerol >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	160	0	35 675
Type B	0	220	0	78 858
Type C	0	514	4	107 441

The substance/substance group *Glycerol >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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.2727 %)
Type C	100.0000 % (> 99.6449 %)	99.2278 % (> 98.6486 %)

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.

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	4.04	104.16
31152	31152	0.00	106.78
31352	31152	4.23	99.96
32693	32693	0.00	169.82

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Glycerol 85%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30886-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	70	20120731
Fagron	Glycerol 85%	12H16-N04	30980	80	20120905
Caelo	Glycerol 85%	13356404	31360	40	20131112
Caelo	Glycerol 85%	13406202	31377	40	20131219
Euro OTC	Glycerol 85%	1409035-01	31588	40	AR-15-FG-007030-02

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Euro OTC	Glycerol 85%	1506036	31719	40	0000010478
Euro OTC	Glycerol 85%	1509023	31737	40	20151005*
Euro OTC	Glycerol 85%	1601059	31956	40	20160225*
Caelo	Glycerol 85%	17197706	34031	40	AR-18-FG-009772-02

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 430 spectra of 9 reference samples from the substance/substance group *Glycerol 85%*. These samples are listed above in the [calibration samples](#) section.
- 35 405 spectra from a total of 838 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 910 spectra of 26 reference samples from the substance/substance group *Glycerol 85%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Glycerol 85%	12216606	30886 [†]	10
Caelo	Glycerol 85%	13356404	31360 [†]	20
Euro OTC	Glycerol 85%	1409035-01	31588 [†]	20
Euro OTC	Glycerol 85%	1506036	31719 [†]	20
Euro OTC	Glycerol 85%	1509023	31737 [†]	20
Euro OTC	Glycerol 85%	1601059	31956 [†]	20
Caelo	Glycerol 85%	160637	32203	40
Caelo	Glycerol 85%	160637	32314	40
Caelo	Glycerol 85%	162153	32326	40
Caelo	Glycerol 85%	162189	32328	40
Caelo	Glycerol 85%	162978	32694	40
Euro OTC	Glycerol 85%	1607037	32703	40
Euro OTC	Glycerol 85%	1610032	32828	40
Caelo	Glycerol 85%	163550	33097	40
Caelo	Glycerol 85%	163472	33098	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
Caelo	Glycerol 85%	171577	33320	40
Euro OTC	Glycerol 85%	1703003	33449	40
Euro OTC	Glycerol 85%	1708022	33661	40
Caelo	Glycerol 85%	172155	33704	40
Caelo	Glycerol 85%	171977	33705	40
Caelo	Glycerol 85%	171977	33706	40
Caelo	Glycerol 85%	171577	33709	40
Euro OTC	Glycerol 85%	1801025	33996	40
Euro OTC	Glycerol 85%	1804017	34091	40
Euro OTC	Glycerol 85%	1808009	34218	40
Caelo	Glycerol 85%	183270	34326	40

- 78 168 spectra from a total of 1807 batches from further 350 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.

- 2438 spectra from 470 *Apo-Ident* customers from 554 batches from the substance/substance group *Glycerol 85%*.

Supplier	Substance	Batch	Spectra
Bombastus	Glycerol 85%	266584	1
Caelo	Glycerol 85%	112117302	1
Euro OTC	Glycerol 85%	1108032-01	5
Caelo	Glycerol 85%	11217302	1
Euro OTC	Glycerol 85%	1108032	1
Gehe	Glycerol 85%	11355301	1
Hedinger	Glycerol 85%	40452	1
Hedinger	Glycerol 85%	40447	1
Kehr / Fischar	Glycerol 85%	5061071	1
Hedinger/Holdermann 18...	Glycerol 85%	40452	1
Bombastus	Glycerol 85%	269070	1
Bombastus	Glycerol 85%	266037	1
Fagron	Glycerol 85%	1203C003	1
Euro OTC	Glycerol 85%	1201038-01	6
Caelo	Glycerol 85%	2405211589	1
Gehe	Glycerol 85%	1001017-01	1
Henry Lamotte	Glycerol 85%	5226901	2
Caelo	Glycerol 85%	11324201	3
Caelo	Glycerol 85%	11217303	1
Hedinger / Sanacorp	Glycerol 85%	40451	1
Caelo	Glycerol 85%	20061210	1
Lamotte	Glycerol 85%	5142501	1
Caelo	Glycerol 85%	607211589	1
Caelo	Glycerol 85%	11324202	2

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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
Gehe	Glycerol 85%	5226901	1
Fischar/E	Glycerol 85%	5062011	1
Euro OTC	Glycerol 85%	120103801	1
Caelo	Glycerol 85%	12108201	18
Otto Fischar GmbH	Glycerol 85%	5062051	1
Caesar/Noweda	Glycerol 85%	2611I-01589	1
Gehe	Glycerol 85%	1201038-01	1
Caelo	Glycerol 85%	23081201	1
Fischar	Glycerol 85%	5062051	3
Noweda	Glycerol 85%	40464	1
Henry Lamotte GmbH Bremen	Glycerol 85%	5142501	1
Noweda	Glycerol 85%	12108201	1
Otto Fischar	Glycerol 85%	5062011	2
Eurompharm/Otto	Glycerol 85%	1108032-01	1
Anzag	Glycerol 85%	40467	1
Bombastus	Glycerol 85%	272305	6
Noweda	Glycerol 85%	5226901	1
Lamotte	Glycerol 85%	5360201	5
Fagron	Glycerol 85%	11L06-N02	4
Caelo	Glycerol 85%	271511	1
Sanacorp	Glycerol 85%	273719	1
Fischar	Glycerol 85%	5061101	1
Caelo	Glycerol 85%	123142	2
Sanacorp/ Hedding	Glycerol 85%	4071	1
Caesar & Loretz GmbH	Glycerol 85%	12108201	1
Hedinger Phönix	Glycerol 85%	40471	1
Anzag/	Glycerol 85%	12108201	1
Fagron	Glycerol 85%	12H17-N01	2
Gehe	Glycerol 85%	5062051	1
Caelo	Glycerol 85%	3121202	1
Fagron	Glycerol 85%	12J04-N02	1
Caelo	Glycerol 85%	12216601	6
Hedinger	Glycerol 85%	40471	2
Phönix	Glycerol 85%	12108201	2
Fischar/Phönix	Glycerol 85%	5062051	1
Anzag	Glycerol 85%	40471	1
Hedinger	Glycerol 85%	40464	2
Euro OTC	Glycerol 85%	1201038-01	1
Noweda	Glycerol 85%	272305	1
Caelo	Glycerol 85%	11324208	1
Lamotte	Glycerol 85%	5424901	4
Fagron	Glycerol 85%	1209C001	1
Caelo	Glycerol 85%	12216603	15
Henry Lamotte	Glycerol 85%		1
Caelo	Glycerol 85%	20211212-2	1
Henry Lamotte	Glycerol 85%	123142	1
Anzag	Glycerol 85%	40475	2
Fischar	Glycerol 85%	5062111	4
Anzag 20.12.2012	Glycerol 85%	40467	2
Sanacorp	Glycerol 85%		1
Caelo	Glycerol 85%	213E-01589	1
Sanacorp/ Hedding	Glycerol 85%	400473	1
Caelo	Glycerol 85%	12069605	1
HEDINGER	Glycerol 85%	40467	1
HEDINGER	Glycerol 85%	40475	1
Caelo	Glycerol 85%	140113PML02	1
Euro OTC	Glycerol 85%	1210047-01	8
Caelo	Glycerol 85%	4711A-01589	1
Fagron	Glycerol 85%	12J04-N09	2
Caelo	Glycerol 85%	12216606	12

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	12069601	1
Caelo	Glycerol 85%	5062111	1
Fagron	Glycerol 85%	12G11-N02	1
Otto Fischar GmbH	Glycerol 85%	5062121	2
Hedinger Jenne	Glycerol 85%	40462	1
Caelo	Glycerol 85%	12069603	1
Caelo	Glycerol 85%	613Q-01589	1
Otto Fischar	Glycerol 85%	5062051	1
Hedinger Phönix	Glycerol 85%	40475	1
Caelo	Glycerol 85%		4
Bombastus	Glycerol 85%	275076	1
Bombastus	Glycerol 85%	275075	2
Caelo	Glycerol 85%	19021301	1
Caelo	Glycerol 85%	40480	2
Caelo	Glycerol 85%	1113E-01589	1
Caelo	Glycerol 85%	5062012	4
Phönix Gotha	Glycerol 85%	275075	1
Sanacorp	Glycerol 85%	12273604	3
Hedinger	Glycerol 85%	40478	1
Noweda	Glycerol 85%	40475	1
Caelo	Glycerol 85%	12216602	5
Caelo	Glycerol 85%	12273604	22
Hedinger/Anzag	Glycerol 85%	40483	2
Hedinger	Glycerol 85%	40473	1
Caesar & Loretz GmbH	Glycerol 85%	12216603	1
Geo-Chem/sanacorp	Glycerol 85%	12216606	1
Lamotte	Glycerol 85%	5424101	2
Noweda	Glycerol 85%	5062121	2
Gehe	Glycerol 85%	276850	2
Hedinger/ Sanacorp	Glycerol 85%	40479	1
Hedinger/Gehe	Glycerol 85%	40473	1
GEHE	Glycerol 85%	12216606	1
Caelo	Glycerol 85%	12216604	3
Caelo	Glycerol 85%	12278507	3
Lamotte	Glycerol 85%	5487801	2
Fischar	Glycerol 85%	5063011	3
Gehe	Glycerol 85%	1210047-01	1
Caelo	Glycerol 85%	12278508	3
Bartel	Glycerol 85%	40475	1
Phönix	Glycerol 85%	13039203	1
Hedinger/Sanacorp	Glycerol 85%	40475	1
Fagron	Glycerol 85%	12L04-N09	1
fischer, Gehe	Glycerol 85%	5062051	1
Bombastus	Glycerol 85%	276852	3
Fagron	Glycerol 85%	12J05-N01	1
hedinger	Glycerol 85%	40483	1
Anzag/ Hedinger	Glycerol 85%	40478	1
Euro OTC	Glycerol 85%	1301025-01	8
Hedinger/Phönix	Glycerol 85%	40483	2
Hedinger/Noweda	Glycerol 85%	40478	1
Fischar/Anzag	Glycerol 85%	5062111	1
Phoenix	Glycerol 85%	12273604	1
Caelo	Glycerol 85%	5062052	1
Caelo	Glycerol 85%	40481	1
Caelo	Glycerol 85%	12278502	1
Caelo	Glycerol 85%	13039202	6
Caelo	Glycerol 85%	13060002	2
Henry Lamotte	Glycerol 85%	123304	1
Lamotte/Noweda	Glycerol 85%	123464	1
Caelo	Glycerol 85%	2413Q01589	1

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Supplier	Substance	Batch	Spectra
EuRho	Glycerol 85%	1301025-01	2
Hedinger/ Anzag	Glycerol 85%	40491	1
Caelo	Glycerol 85%	12278501	1
Bombastus	Glycerol 85%	276850	2
Lamotte	Glycerol 85%	123304	1
A.H. 18.06.13 ek: 6,78EUR	Glycerol 85%	12273604	1
Caelo	Glycerol 85%	1309202	1
Hedinger/Gehe	Glycerol 85%	40491	1
Lamotte	Glycerol 85%	5512001	2
Hedinger/ Sanacorp	Glycerol 85%	40480	1
Hedinger/Gehe	Glycerol 85%	4091	1
Sanacorp	Glycerol 85%	40480	1
Hedinger	Glycerol 85%	40486	2
hedinger	Glycerol 85%	40494	1
Sanacorp	Glycerol 85%	278655	1
HEDINGER	Glycerol 85%	40491	1
Otto Fischar/Phoenix	Glycerol 85%	5063011	1
Phönix	Glycerol 85%	40481	1
Caelo	Glycerol 85%	13039203	19
Gehe	Glycerol 85%	40491	2
Phoenix	Glycerol 85%	13039203	2
Fagron	Glycerol 85%	13C28-N02	6
Otto Fischer GmbH	Glycerol 85%	5062121	1
Fagron	Glycerol 85%	13C-N02	1
Hedinger	Glycerol 85%	40483	2
Anzag/ Hedinger	Glycerol 85%	40495	2
Caelo	Glycerol 85%	12108206	1
Phönix	Glycerol 85%	5063011	1
Euro OTC	Glycerol 85%	1301025-02	2
Hedinger	Glycerol 85%	40481	1
Caelo	Glycerol 85%	12069604	1
Phönix	Glycerol 85%	12273604	1
Fischar	Glycerol 85%	5062121	1
Otto Fischar	Glycerol 85%	5060121	1
Hedinger/Gehe	Glycerol 85%	40483	1
Caelo	Glycerol 85%	5x12273604	1
Caelo	Glycerol 85%	5x13039203	1
Bombastus	Glycerol 85%	278655	1
Caelo	Glycerol 85%	13060001	4
Fagron	Glycerol 85%	13c28-n02	2
Caelo	Glycerol 85%	123464	2
Caelo	Glycerol 85%	1309203	1
Caelo	Glycerol 85%	2013A-01589	1
Bombastus	Glycerol 85%	279852	4
Fagron	Glycerol 85%	13E24-N11	2
Sanacorp	Glycerol 85%	40495	1
Hedinger/Ebert	Glycerol 85%	40483	1
Hedinger Phönix	Glycerol 85%	40495	1
Noweda/Hedinger	Glycerol 85%	40499	1
Hedinger	Glycerol 85%	40497	2
Otto Fischar/Gehe	Glycerol 85%	5063012	1
Caelo	Glycerol 85%	13039204	22
Caelo	Glycerol 85%	70913Gly	1
Caelo	Glycerol 85%	13060006	2
Caelo	Glycerol 85%	1309204	1
Sanacorp	Glycerol 85%	280855	2
Hedinger/Sanacorp	Glycerol 85%	40499-3354319071	1
Hedinger/ Sanacorp	Glycerol 85%	40499	1
Euro OTC	Glycerol 85%	1306016-01	3
Hedinger/Gehe	Glycerol 85%	40497	2

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	14101304	1
LAMOTTE/NOWEDA	Glycerol 85%	5538401	2
Caelo	Glycerol 85%	13144604	6
Hedinger	Glycerol 85%	40499	3
Fagron	Glycerol 85%	13060006	1
Lamotte/Noweda	Glycerol 85%	5538401	1
Euro OTC	Glycerol 85%	1306016-02	7
Fagron	Glycerol 85%	13D11-N05	1
Caelo	Glycerol 85%	13144605	18
Hedinger/Gehe	Glycerol 85%	3112Q-01589	1
Gehe	Glycerol 85%	1301025-01	1
Phönix	Glycerol 85%	40501	1
Alliance Healthcare	Glycerol 85%	13144605	1
Caelo	Glycerol 85%	13248201	12
Caelo	Glycerol 85%	13144606	6
Sanacorp	Glycerol 85%	13039204	1
Hedinger Jenne	Glycerol 85%	40501	1
Henry	Glycerol 85%	123304	1
Otto Fischar GmbH	Glycerol 85%	5062052	2
Gehe	Glycerol 85%	5063012	1
Gehe	Glycerol 85%	5062121	1
Bombastus	Glycerol 85%	282731	5
hedinger/anzag	Glycerol 85%	5538401	1
Hedinger	Glycerol 85%	40506	2
Henry Lamotte	Glycerol 85%	5538401	2
Spinnrad	Glycerol 85%	713048084	1
Henry Lamotte/Jenne	Glycerol 85%	123464	1
Hedinger/ Sanacorp	Glycerol 85%	40501	1
Caelo	Glycerol 85%	13144607	21
Hedinger/Sanacorp	Glycerol 85%	40501	1
Caelo	Glycerol 85%	40483	1
Caelo	Glycerol 85%	1213E-01589	1
Bombastus	Glycerol 85%	280855	1
Henry Lamotte Phönix	Glycerol 85%	123142	1
Lamotte	Glycerol 85%	5538401	2
Sanacorp	Glycerol 85%	40506	1
Ahd/PharmachemPößneck	Glycerol 85%	13248201	1
fischar gmbh	Glycerol 85%	5063012	1
Lamotte/Krieger/27.11.13	Glycerol 85%	5538401	3
HEDINGER	Glycerol 85%	40497	1
Noweda	Glycerol 85%	278655	1
Herbeta / Noweda	Glycerol 85%		2
Caelo	Glycerol 85%	40507	1
Euro OTC	Glycerol 85%	20122013A	1
Fischar/Anzag	Glycerol 85%	5063012	1
Fagron	Glycerol 85%	1312B03285613	1
Caelo	Glycerol 85%	13060007	4
Caesar & Loretz GmbH	Glycerol 85%	13144606	1
Hedinger	Glycerol 85%	40507	1
hedinger/Gehe	Glycerol 85%	40501	1
Fischar/V.d.L.	Glycerol 85%	5062111	1
Fischar	Glycerol 85%	5063052	1
lamotte/phönix	Glycerol 85%	5538401	2
Caelo	Glycerol 85%	5062121	1
Caelo	Glycerol 85%	13276203	17
Phönix	Glycerol 85%	40507	1
Phönix 14.01.2014	Glycerol 85%	13060001	1
Caesar & Loretz GmbH Hi...	Glycerol 85%	13144607	1
Bombastus	Glycerol 85%	2812731	1
Hedinger/Sanacorp	Glycerol 85%	40507	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	13276204	11
PHOENIX am 14.01.2014	Glycerol 85%	13060007	1
Caelo	Glycerol 85%	1327603	1
Herbeta Arzneimittel	Glycerol 85%		2
Kehr / Lamotte	Glycerol 85%	290114PML04	1
Caelo	Glycerol 85%	2/AKD52	1
Caelo	Glycerol 85%	13276201	1
Hedinger Phönix	Glycerol 85%	40507	1
HEDINGER	Glycerol 85%	40501	1
Caelo	Glycerol 85%	16121301	1
Lamotte	Glycerol 85%	5603001	7
Fischar	Glycerol 85%	5063051	1
Caelo	Glycerol 85%	24021402	1
Phoenix	Glycerol 85%	13144607	2
Fagron	Glycerol 85%	250214PJK01	1
Fischar	Glycerol 85%	5063091	1
Caelo	Glycerol 85%	40515	1
Hedinger / Alliance	Glycerol 85%	40506	2
Caelo	Glycerol 85%	13248204	2
Caelo	Glycerol 85%	5063111	1
Anzag	Glycerol 85%	1306016-02	1
Caelo	Glycerol 85%	13276205	21
Sanacorp/ Hedinger	Glycerol 85%	40502	1
Fischer	Glycerol 85%	5063091	1
Noweda/Hedinger	Glycerol 85%	40509	1
Euro OTC	Glycerol 85%	1401009	1
Gehe	Glycerol 85%	284401	1
Euro OTC	Glycerol 85%	1401009-01	7
Lamotte	Glycerol 85%	5603002	1
Hedinger Gehe	Glycerol 85%	40519	1
Caelo	Glycerol 85%	13406202	6
Hedinger / Gehe	Glycerol 85%	40515	1
Gehe am 05.04.2014	Glycerol 85%	13276205	2
Caelo	Glycerol 85%	13406203	1
Fagron	Glycerol 85%	13J01-B01-285781	2
Hedinger/Phönix	Glycerol 85%	40481	1
Caelo	Glycerol 85%	13276024	1
Bombastus	Glycerol 85%	285366	4
Bartel/Sanacorp	Glycerol 85%	40515	1
Fagron	Glycerol 85%	13I12-B03-285611	1
Fischbar/Anzag	Glycerol 85%	5064011	3
Fagron	Glycerol 85%	13J01-B01	1
Bombastus	Glycerol 85%	284400	5
Sanacorp	Glycerol 85%	72/AKD1	1
Hedinger	Glycerol 85%	40519	3
Fagron	Glycerol 85%	13J29-B01	1
Caelo	Glycerol 85%	13276206	1
Fagron	Glycerol 85%	13J01-B01-285777	1
Bombastus	Glycerol 85%	284401	1
Hedinger/Gehe	Glycerol 85%	40519	1
Cealo	Glycerol 85%	13276205	1
Hedinger/Gehe	Glycerol 85%	40524	1
Euro OTC	Glycerol 85%	1403006-01	8
Hedinger/Phoenix	Glycerol 85%	40515	1
Caelo	Glycerol 85%	13356404	10
Caelo	Glycerol 85%	17061404	1
Caelo	Glycerol 85%	13276208	3
Hedinger	Glycerol 85%	40502	1
	Glycerol 85%	13356404	1
Fagron	Glycerol 85%	14A10-B01-291982	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	2714M-01589	1
Caelo	Glycerol 85%	1404024-01	1
Hedinger	Glycerol 85%	40522	1
Caesar&Loretz GmbH	Glycerol 85%	13406202	2
AHD	Glycerol 85%	13406202	1
Fagron	Glycerol 85%	56-81-5	1
Euro OTC	Glycerol 85%	1405021-01	4
Fishar / Phönix	Glycerol 85%	5064011	1
Aug. Hedinger GmbH & Co	Glycerol 85%	40519	1
Bombastus	Glycerol 85%	2823731	1
Alliance Health 24.06.2...	Glycerol 85%	5538401	1
noweda	Glycerol 85%	13276202	1
Hedinger/ Noweda	Glycerol 85%	40515	1
Hedinger	Glycerol 85%	40528	1
noweda	Glycerol 85%	13356403	1
Caelo	Glycerol 85%	40524	1
Caelo	Glycerol 85%	13356405	12
Caelo	Glycerol 85%	11355301	1
Bombastus	Glycerol 85%	287120	3
Caelo	Glycerol 85%	13356403	3
hedinger/Gehe	Glycerol 85%	40529	1
Caelo	Glycerol 85%	13406204	6
Sanacorp	Glycerol 85%	13276205	1
Henry Lamotte	Glycerol 85%	5603001	1
Gehe	Glycerol 85%	13356405	1
Alliance Healthcare/Fis...	Glycerol 85%	5063011	1
Caelo	Glycerol 85%	P136/14	1
Euro OTC	Glycerol 85%	140502101	2
Hedinger/Noweda	Glycerol 85%	40522	1
Otto Fischar	Glycerol 85%	5064021	1
Otto Fischer	Glycerol 85%	5064011	1
Caelo	Glycerol 85%	13356406	11
Caelo	Glycerol 85%	13406205	4
Bombastus	Glycerol 85%	287890	2
Euro OTC	Glycerol 85%	1405021-02	7
fischar gmbh	Glycerol 85%	5064021	1
Phönix	Glycerol 85%	13356406	1
Phoenix	Glycerol 85%	1405021-01	1
Jenne/Lamotte	Glycerol 85%	5603001	1
Fischar/V.d.L.	Glycerol 85%	5064071	1
Hedinger	Glycerol 85%	40531	2
Hedinger/ Sanacorp	Glycerol 85%	40531-1	1
Caelo	Glycerol 85%	14149403	6
Hedinger/Noweda	Glycerol 85%	40515	1
Bombastus	Glycerol 85%	260914PAS01	1
Caelo	Glycerol 85%	14149404	10
Phönix	Glycerol 85%	14149403	1
Caelo	Glycerol 85%	1405021	1
Euro OTC	Glycerol 85%	40524	1
Caelo	Glycerol 85%	40529	1
Caelo	Glycerol 85%	13396407	1
noweda	Glycerol 85%		1
Hedinger	Glycerol 85%	40529	3
Hedinger/Gehe	Glycerol 85%	4052B	1
Caelo	Glycerol 85%	135406204	1
Bombastus	Glycerol 85%	289296	2
Noweda/Fischar	Glycerol 85%	5064021	1
Caelo	Glycerol 85%	14149411	11
Anzag,7,17 Euro,16.1014	Glycerol 85%	13356405	1
Caelo	Glycerol 85%	24101401	1

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Supplier	Substance	Batch	Spectra
sanacorp	Glycerol 85%	14149411	1
Fischar	Glycerol 85%	5064021	1
Caelo	Glycerol 85%	13205003	1
Euro OTC	Glycerol 85%	10112014D	1
Fagron	Glycerol 85%	14A10-B01-291983	1
Caelo	Glycerol 85%	14148104	3
Henry Lamotte Olis GmbH	Glycerol 85%	5603001	1
Hedinger/Phönix	Glycerol 85%	40531-1	1
Caelo	Glycerol 85%	14148103	5
Stumpf/Hedinger	Glycerol 85%	40531	1
Caelo	Glycerol 85%	14149406	12
fishar gmbh	Glycerol 85%	5064011	1
Fagron	Glycerol 85%	13J29-B01-285782	1
Euro OTC	Glycerol 85%	1409035-01	19
Hedinger	Glycerol 85%	40531-1	2
Caelo	Glycerol 85%	14194911	1
Caelo	Glycerol 85%	14148105	1
Hedinger/ Sanacorp	Glycerol 85%	40538	1
eurho	Glycerol 85%	287120	1
Euro OTC	Glycerol 85%	140903501	1
Perrigo/Phönix	Glycerol 85%	284401	1
Bombastus	Glycerol 85%	289295	5
Alliance Health 27.11.2...	Glycerol 85%		1
Hedinger	Glycerol 85%	40524	1
Caelo	Glycerol 85%	14149404	1
Gehe	Glycerol 85%	14149404	1
Caelo	Glycerol 85%	8121402	1
Noweda/Ichthyol	Glycerol 85%	5064071	1
Fischar/Phönix	Glycerol 85%	5064071	1
Hedinger/Gehe	Glycerol 85%	40540	2
Caelo	Glycerol 85%	73/AKD2	1
Hedinger	Glycerol 85%	40538	3
Caelo	Glycerol 85%	14149410	18
Lamotte/Alliance	Glycerol 85%	5603001	1
spinnrad	Glycerol 85%	914409013	1
Fagron	Glycerol 85%	14D25-B02-295895	1
Hedinger	Glycerol 85%	40540	1
Laborchemie APOLDA	Glycerol 85%	14149410	1
hedinger	Glycerol 85%	40538	1
Test	Glycerol 85%	Test	1
Gehe-Hedinger	Glycerol 85%	40522	1
Bombastus	Glycerol 85%	40215PJK01	1
Caelo	Glycerol 85%	1409035-01	2
Ph.Eur.7.0	Glycerol 85%	14148106	1
Euro OTC	Glycerol 85%	10022015C	1
Caelo	Glycerol 85%	1419411	1
Caelo	Glycerol 85%	5064021	2
HirschApotheke	Glycerol 85%	40541	1
Hedinger/Noweda	Glycerol 85%	40542	1
Hedinger/Noweda	Glycerol 85%	40538	2
Fagron	Glycerol 85%	14H11-B05-298257	2
Fischar	Glycerol 85%	506407	1
Fagron	Glycerol 85%	14D25-B02-293384	1
Sanacorp	Glycerol 85%	14149410	2
Bombastus	Glycerol 85%	291086	5
Caelo	Glycerol 85%	14306203	15
Bombastus	Glycerol 85%	291085	3
Caelo	Glycerol 85%	1418103	1
Fagron	Glycerol 85%	14306202	2
Caelo	Glycerol 85%	14306204	12

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Supplier	Substance	Batch	Spectra
Bombastus	Glycerol 85%	290715	3
Henry Lamotte	Glycerol 85%	124654	1
AHD	Glycerol 85%	14306203	1
Caelo	Glycerol 85%	14249301	4
Otto Fischar GmbH	Glycerol 85%	5064021	1
Caelo	Glycerol 85%	40542	3
Caelo	Glycerol 85%	14148106	1
Herbeta Berlin	Glycerol 85%		1
Caelo	Glycerol 85%	5064091	1
Caelo	Glycerol 85%	14306202	1
Fischar GmbH/AHD	Glycerol 85%	5064091	1
Hedinger/ Sanacorp	Glycerol 85%	40546	2
Bombastus	Glycerol 85%	292791	16
Caelo	Glycerol 85%	14306205	8
Fagron	Glycerol 85%	13J20-B01-285782	1
Hedinger/Gehe	Glycerol 85%	40548	1
Anzag,7,62EUR; 27.0415	Glycerol 85%	14306204	1
Allianc. Healthc./Fischar	Glycerol 85%	5064091	1
Caelo	Glycerol 85%	15049801	2
Otto Fischar	Glycerol 85%	5065012	1
Gehe,06.05.15	Glycerol 85%	14306205	1
Fagron	Glycerol 85%	3111	1
Caelo	Glycerol 85%	40548	2
Fischar	Glycerol 85%	5065011	3
Hedinger/Phoenix	Glycerol 85%	40546	1
Caelo	Glycerol 85%	5051501	1
Fagron	Glycerol 85%	5763701	1
Fischar	Glycerol 85%	5064091	1
Caelo	Glycerol 85%	15036903	14
Euro OTC	Glycerol 85%	1502010-01	16
Caelo	Glycerol 85%	13356402	1
Phoenix	Glycerol 85%	15036903	1
Caelo	Glycerol 85%	15050102	6
Caelo	Glycerol 85%	13276202	1
fischar/Noweda	Glycerol 85%	5064091	1
Hedinger/Sanacorp	Glycerol 85%	40548	2
Bombastus	Glycerol 85%	293387	4
fischbar	Glycerol 85%	5064091	1
Hedinger/Sanacorp	Glycerol 85%	61016B	1
Caelo	Glycerol 85%	15050101	2
Caelo	Glycerol 85%	40556	1
Fischar / Phönix	Glycerol 85%	5065031	2
Hedinger/Phönix	Glycerol 85%	40546	1
Hedinger	Glycerol 85%	40541	1
Caelo	Glycerol 85%	15036902	9
Fischer/Noweda	Glycerol 85%	5065011	1
Fagron	Glycerol 85%	15036903	1
Sanacop	Glycerol 85%	15036903	1
Hedinger/Gehe	Glycerol 85%	40557	1
Fischar/Phönix	Glycerol 85%	5065031	2
Hedinger/Phoenix	Glycerol 85%	40542	1
2959	Glycerol 85%	2959	1
Noweda/ Fischar	Glycerol 85%	5065011	1
Caelo	Glycerol 85%	15036904	13
August Hedinger	Glycerol 85%	40557	1
Hedinger	Glycerol 85%	40556	2
Fischar	Glycerol 85%	5055031	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5065031	1
Fischar	Glycerol 85%	5065012	3
Hedinger/Noweda	Glycerol 85%	40557	1

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Supplier	Substance	Batch	Spectra
Gehe	Glycerol 85%	1502010-01	1
Caelo	Glycerol 85%	15036905	2
Bombastus	Glycerol 85%	295501	6
Caelo	Glycerol 85%	15146303	1
Bombastus	Glycerol 85%	294927	4
Fischar	Glycerol 85%	5065031	2
Hedinger	Glycerol 85%	25082015B	1
Caelo	Glycerol 85%	15036901	1
Otto Fischar GmbH & Co....	Glycerol 85%	5065012	1
Hedinger	Glycerol 85%	40557	3
Hedinger	Glycerol 85%	40542	1
Otto	Glycerol 85%		1
Caelo	Glycerol 85%	14373412	1
Caleo	Glycerol 85%	15036903	1
Hedinger	Glycerol 85%	40546	1
Bombastus	Glycerol 85%	15146303	1
Caelo	Glycerol 85%	15146305	4
Henry Lamotte Oils GmbH	Glycerol 85%	125545	1
Caelo	Glycerol 85%	15146301	6
Hedinger/Noweda	Glycerol 85%	40559	1
Eigenherstellung	Glycerol 85%	295501	1
Euro OTC	Glycerol 85%	1506036-01	19
Caelo	Glycerol 85%	15146304	2
Stumpf / Hedinger	Glycerol 85%	40557	1
AHD / Hedinger	Glycerol 85%	40557	1
Euro OTC	Glycerol 85%	14380504	1
Fischar	Glycerol 85%	5063092	1
Fischer	Glycerol 85%	1075012	1
Hedinger/Gehe	Glycerol 85%	40559	1
Fischar/Gehe	Glycerol 85%	5065081	1
Phönix Gotha	Glycerol 85%	15146301	1
Caelo	Glycerol 85%	15292201	15
Fischar/AHD	Glycerol 85%	5065081	1
Hedinger/ Sanacorp	Glycerol 85%	40559	1
Fischar	Glycerol 85%	5065061	5
Lamotte//AHD	Glycerol 85%	125545	1
heidringer	Glycerol 85%	40559	1
Noweda	Glycerol 85%	1506036-01	1
Caelo	Glycerol 85%	40566	2
Hedinger/PX	Glycerol 85%	40547	1
Bombastus	Glycerol 85%	296480	3
Hedinger	Glycerol 85%	40566	2
Caelo	Glycerol 85%	1514604	1
Fischar/AHD	Glycerol 85%	5065061	1
Caelo	Glycerol 85%	1528503	1
Hedinger	Glycerol 85%	40559	2
Hedinger/Phoenix	Glycerol 85%	40559	1
Hedinger/Sanacorp	Glycerol 85%	40566	1
Fischar/ Now	Glycerol 85%	5065011	1
Caelo	Glycerol 85%	15115005	2
Caelo	Glycerol 85%	1529201	1
Hedinger/ Gehe	Glycerol 85%	40566	1
Hedinger/Gehe	Glycerol 85%	40566	1
fischar	Glycerol 85%	5065061	2
Bombastus	Glycerol 85%	296481	5
Caelo	Glycerol 85%	5065061	1
Caelo	Glycerol 85%	15292202	13
Caelo	Glycerol 85%	5065081	1
Fischer	Glycerol 85%	5065101	1
Euro OTC	Glycerol 85%	1509023-01	16

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Supplier	Substance	Batch	Spectra
Fischar/AHD	Glycerol 85%	5065031	1
Fagron	Glycerol 85%	15E18-B02-309484	1
Bombastus	Glycerol 85%	1502010-01	1
Otto Fischer	Glycerol 85%	5065081	1
Hedinger Phönix	Glycerol 85%	40548	1
Noweda/ Fischar	Glycerol 85%	5065061	2
Hedinger Phönix	Glycerol 85%	40542	1
Caelo	Glycerol 85%	15292203	13
Caelo	Glycerol 85%	15283503	1
Caelo	Glycerol 85%	1529202	1
Sanacorp 09.12.15	Glycerol 85%	152902202	1
Sanacorp	Glycerol 85%	78/AKD7	1
Fagron	Glycerol 85%	1529220	1
Fischer / Phoenix Leipz...	Glycerol 85%	5065081	1
Caelo	Glycerol 85%	15379201	5
Caelo	Glycerol 85%	15283505	1
Gehe	Glycerol 85%	15292201	1
Hedinger/Sanacorp	Glycerol 85%	40559	1
Fischar/ Phönix	Glycerol 85%	5065101	2
Caelo	Glycerol 85%	1509023-01	1
Hedinger/ Sanacorp	Glycerol 85%	40567	1
Hedinger/Phönix	Glycerol 85%	40567	1
Bombastus	Glycerol 85%	295502	1
Fischar	Glycerol 85%	1075061	1
Caelo	Glycerol 85%	15292205	18
Otto Fischer	Glycerol 85%	1075061	1
Sanacorp	Glycerol 85%	15036902	1
Noweda/Hedinger	Glycerol 85%	40574	2
EuRho/Phönix	Glycerol 85%	1509023-01	2
Bombastus	Glycerol 85%	297034	2
Fischar / Noweda	Glycerol 85%	50655081	1
Hedinger/Noweda	Glycerol 85%	40574	1
Hedinger/Sanacorp	Glycerol 85%	40557	1
Fagron	Glycerol 85%	5065111	2
Caelo	Glycerol 85%	15379208	2
Fischar/ Now	Glycerol 85%	5065111	2
Fischar GmbH/Krieger	Glycerol 85%	5065111	1
Fischar	Glycerol 85%	5065081	2
Hedinger	Glycerol 85%	40567	3
Hanry Lanotte/Phönix	Glycerol 85%	8001116001	1
Caelo	Glycerol 85%	15379207	3
Hedinger/Phönix	Glycerol 85%	40559	1
Euro OTC	Glycerol 85%	150902	1
Caelo	Glycerol 85%	465911	1
Caelo	Glycerol 85%	5065111	1
Hedinger/Phönix	Glycerol 85%	40576	1
Caelo	Glycerol 85%	15292204	23
Euro/Gehe	Glycerol 85%	1509023-01	1
Cael/Phoenix	Glycerol 85%	15292203	1
Hedinger/ Noweda	Glycerol 85%	40574	1
Hedinger/Gehe	Glycerol 85%	40576	1
Stumpf/Hedinger	Glycerol 85%	40576	1
Caelo	Glycerol 85%	15378203	14
Caesar & Loretz GmbH Hi...	Glycerol 85%	15292204	1
Caelo	Glycerol 85%	5015Q-01589	1
Heedinger/Noweda	Glycerol 85%	40576	1
Sanacop	Glycerol 85%	15292204	1
Caelo	Glycerol 85%	15283506	3
Hedinger	Glycerol 85%	40576	4
Fischar/ Noweda	Glycerol 85%	5066011	1

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	15283504	1
otto fischar	Glycerol 85%	1075111	1
Fagron	Glycerol 85%	5065101	1
Sanacorp	Glycerol 85%	15292205	2
Fischar	Glycerol 85%	5065111	1
VDL;16.3.16;7,57EUR	Glycerol 85%	15292205	1
Hedinger/Sanacorp	Glycerol 85%	40576	1
Euro OTC	Glycerol 85%	151690	3
Rondell Apotheke	Glycerol 85%	40576	1
Fischar/AEP	Glycerol 85%	5065111	3
WE:23.03.2016 Sanacorp	Glycerol 85%	15292205	1
Hedinger/Noweda	Glycerol 85%	40583	1
Caelo	Glycerol 85%	1292201	1
Otto Fischar	Glycerol 85%	10751111	1
Gehe/fischar	Glycerol 85%	5065101	1
Caelo	Glycerol 85%	15404505	4
Hedinger/Noweda	Glycerol 85%	40567	1
Otto Fischar GmbH/ Noweda	Glycerol 85%	5066011	4
Hedinger	Glycerol 85%	40584	2
Hedinger/Phoenix	Glycerol 85%	40579	1
Hedinger/Gehe	Glycerol 85%	40584	3
Bombastus	Glycerol 85%	298592	3
Henry Lamotte	Glycerol 85%	15292204	1
Fagron	Glycerol 85%	15292201	1
Bombastus	Glycerol 85%	298593	7
Fischer	Glycerol 85%	5066021	1
Bombastus	Glycerol 85%	300393	1
Hedinger/ Sanacorp	Glycerol 85%	40584	2
Fischar	Glycerol 85%	5066021	1
Euro OTC	Glycerol 85%	1601059-01	29
Hedinger/Phönix	Glycerol 85%	40583	1
Anzag	Glycerol 85%	40579	1
Caelo	Glycerol 85%	15378202	12
Caelo	Glycerol 85%	15378201	1
Hedinger	Glycerol 85%	40579	1
Fischar	Glycerol 85%	5066011	1
Otto Fischar GmbH/Gehe	Glycerol 85%	5066011	1
Fischar GmbH/Krieger	Glycerol 85%	5066021	1
Bombastus	Glycerol 85%	300395	5
Hedinger	Glycerol 85%	40583	2
Caelo	Glycerol 85%	15378210	1
Hedinger	Glycerol 85%	40586	1
Otto Fischar GmbH / Gehe	Glycerol 85%	1076021	1
Caelo	Glycerol 85%	15404502	1
Phoenix	Glycerol 85%	40586	1
Sanacorp	Glycerol 85%	79/AKD12	1
Herbeta Arzneimittel Be...	Glycerol 85%		1
Caesar & Loretz/Noweda	Glycerol 85%	15379208	1
Bombastus	Glycerol 85%	300394	5
Fischar/Phönix	Glycerol 85%	5066011	1
Caelo	Glycerol 85%	15404504	6
Caelo	Glycerol 85%	153782019	1
phönix	Glycerol 85%	40586	1
Hedinger	Glycerol 85%	40578	1
Fischar / Phönix	Glycerol 85%	5066031	1
Caelo	Glycerol 85%	16063701	23
otto Fischar	Glycerol 85%	5065111	1
Fischar/ Now	Glycerol 85%	5066031	1
Caelo	Glycerol 85%	16063706	2
Hedinger/Noweda	Glycerol 85%	40579	2

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Supplier	Substance	Batch	Spectra
Lamotte/AHD	Glycerol 85%	8001116001	1
Caelo	Glycerol 85%	15378209	2
Bombastus	Glycerol 85%	301816	6
Caelo	Glycerol 85%	1601059-01	7
Caelo	Glycerol 85%	300395	1
Fischar/Gehe	Glycerol 85%	5066031	1
Caelo	Glycerol 85%	16063702	18
Fischar	Glycerol 85%	5065101	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066021	1
Fischar	Glycerol 85%	5066021	1
aug. hedinger GmbH & Co...	Glycerol 85%	40579	1
Hedinger/Sanacorp	Glycerol 85%	40579	1
Bombastus	Glycerol 85%	298594	1
Bombastus	Glycerol 85%	301817	5
otto fischer	Glycerol 85%	23081604	1
Aug. Hedinger	Glycerol 85%	40586	1
Fischar	Glycerol 85%	5066031	1
Caelo	Glycerol 85%	153782032Flasche	1
Hedinger/Gehe	Glycerol 85%	40586	1
Caelo	Glycerol 85%	153782021Flasche	1
Fischar/ Gehe	Glycerol 85%	1076011	1
Noweda	Glycerol 85%	5066071	1
Caelo	Glycerol 85%	15404511	1
Caelo	Glycerol 85%	16963701	1
Phoenix	Glycerol 85%	40596	1
Caelo	Glycerol 85%	160637025	1
Otto Fischer GmbH	Glycerol 85%	5066031	1
Hedinger/Phoenix	Glycerol 85%	40596	1
Otto Fischer/Krieger	Glycerol 85%	5066061	1
Euro OTC	Glycerol 85%	160105901	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066061	1
Phönix	Glycerol 85%	40596	1
sanacorp, 7,66EUR, 17.09...	Glycerol 85%	16063701	1
Fischar/Noweda	Glycerol 85%	5066071	1
Caelo	Glycerol 85%	16063707	2
Hedinger	Glycerol 85%	40596	1
Otto Fischar	Glycerol 85%	5066031	1
Sanacorp/Fischar	Glycerol 85%	1076021	1
Fischar	Glycerol 85%	5066071	1
Fischar/ Now	Glycerol 85%	5066071	4
Euro OTC	Glycerol 85%	160703701	3
Caelo	Glycerol 85%	16215301	12
Bombastus	Glycerol 85%	301818	3
Hedinger/ Sanacorp	Glycerol 85%	40599	2
Euro OTC	Glycerol 85%	1607037-01	14
Hedinger	Glycerol 85%	40598	2
Bombastus	Glycerol 85%	5065101	1
Fischar	Glycerol 85%	5066081	2
fischar/Phönix	Glycerol 85%	5066071	1
Otto Fischar	Glycerol 85%	5066081	2
fischar/Phönix	Glycerol 85%	50666061	1
Hendiger/Sanacorp	Glycerol 85%	40599	1
Fischer	Glycerol 85%	5066061	2
Fischer	Glycerol 85%	50660631	1
Anzag	Glycerol 85%	40599	1
Otto Fischar GmbH / Gehe	Glycerol 85%	5066071	1
Caelo	Glycerol 85%	16218902	3
Caesar & Loretz GmbH Hi...	Glycerol 85%	16063702	1
Fischer	Glycerol 85%	5066071	1
Alliance Healthcare	Glycerol 85%	5066061	1

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Supplier	Substance	Batch	Spectra
phönix	Glycerol 85%	40598	1
Fischer	Glycerol 85%	5065111	1
Caelo	Glycerol 85%	160215301	1
Hedinger/Phönix	Glycerol 85%	40598	1
Euro OTC	Glycerol 85%	160105	1
Caelo	Glycerol 85%	16218901	8
Hedinger	Glycerol 85%	40599	6
Noweda/Otto Fischar GmbH	Glycerol 85%	5066071	1
Jenne	Glycerol 85%	40599	1
Caelo	Glycerol 85%	40598	1
Alte Apotheke	Glycerol 85%	40599	2
Otto Fischar	Glycerol 85%	1076021	1
Bombastus	Glycerol 85%	302749	6
Euro OTC	Glycerol 85%	302749	2
Bombastus	Glycerol 85%	302750	2
fischer/ Phoenix / 02.1...	Glycerol 85%	5066071	1
Caelo	Glycerol 85%	16215302	15
Hedinger/Gehe	Glycerol 85%	40599	1
Gehe	Glycerol 85%	40607	1
Bombastus	Glycerol 85%	302751	1
Hedinger/Phönix	Glycerol 85%	40599	2
Caelo	Glycerol 85%	1215302	1
Caelo	Glycerol 85%	40607	1
Caelo	Glycerol 85%	16297803	10
fischar/noweda	Glycerol 85%	5066081	2
Caelo	Glycerol 85%	16215303	21
ALH	Glycerol 85%	40599	1
Phönix	Glycerol 85%	40599	1
Otto Fischar GmbH	Glycerol 85%	5066061	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5066111	3
Caelo	Glycerol 85%	16215308	1
Fischar/ Phönix	Glycerol 85%	5066081	1
Euro OTC	Glycerol 85%	GG61870088	1
Fischar / Alliance Hea...	Glycerol 85%	5065111	1
Hedinger/Noweda	Glycerol 85%	40599	1
Euro OTC	Glycerol 85%	16215302	1
Caelo	Glycerol 85%	1601059	1
Caelo	Glycerol 85%	1607037	1
Caeolo/Gehe	Glycerol 85%	16297802	3
Fischar	Glycerol 85%	5066101	3
Caelo	Glycerol 85%	305200	3
Bombastus	Glycerol 85%	1607037-01	1
Caelo	Glycerol 85%	1625303	1
Gehe/Fischar	Glycerol 85%	5066071	1
Caelo	Glycerol 85%	40599	1
Otto Fischer/Gehe	Glycerol 85%	5066101	1
Bombastus	Glycerol 85%	305199	1
Fischar GmbH/Krieger	Glycerol 85%	5066111	1
Caelo	Glycerol 85%	16215310	3
Euro OTC	Glycerol 85%	1610032-01	20
Otto Fischer	Glycerol 85%	5067011	1
Anzag	Glycerol 85%	40607	2
Fischer/ Noweda	Glycerol 85%	1076111	1
Fischer/ Noweda	Glycerol 85%	1610032-01	1
Caelo	Glycerol 85%	169215903	1
Euro/Noweda	Glycerol 85%	1607037-01	1
Bombastus	Glycerol 85%	305201	6
Gehe/Hedinger	Glycerol 85%	40599	2
Caelo	Glycerol 85%	1610032-01	6
Caelo	Glycerol 85%	5066111	4

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Supplier	Substance	Batch	Spectra
Bombastus	Glycerol 85%	105698	1
Hedinger	Glycerol 85%	40607	3
Bombastus	Glycerol 85%	305200	5
Hedinger/Noweda	Glycerol 85%	40607	2
Caelo	Glycerol 85%	16297806	33
Euro OTC	Glycerol 85%	160703	1
Caelo	Glycerol 85%	16218906	5
Caelo	Glycerol 85%	5066081	1
Phönix	Glycerol 85%	5066081	1
Otto Fischar	Glycerol 85%	5066111	1
Bombastus	Glycerol 85%	306830	6
hochhaus-Apotheke	Glycerol 85%	5066111	1
Caelo	Glycerol 85%	16218907	1
Fischar/Gehe	Glycerol 85%	5066111	1
Caelo	Glycerol 85%	161003201	2
phönix	Glycerol 85%	16218907	1
Caelo	Glycerol 85%	16297802	1
Fischar/Phönix	Glycerol 85%	5066111	1
Caelo	Glycerol 85%	1290317	1
Henry Lamotte oils GmbH...	Glycerol 85%	8002208001	2
Hedinger/Noweda	Glycerol 85%	40612	2
Fischar/Gehe	Glycerol 85%	1077011	2
Gehe/Hedinger	Glycerol 85%	40607	1
Lamotte/AHD	Glycerol 85%	8002208001	1
Caelo	Glycerol 85%	1629706	1
Hedinger/ Sanacorp	Glycerol 85%	40612	1
Henry Lamotte	Glycerol 85%	8002208001	1
Euro OTC	Glycerol 85%	170509G/1607037-01	1
Hedinger/VDL	Glycerol 85%	40599	1
Hedinger/Phönix	Glycerol 85%	40612	1
Bombastus	Glycerol 85%	306829	4
Cordes/Noweda	Glycerol 85%	1627803	1
Caesar&Loretz/Noweda	Glycerol 85%	16218906	2
GEHE	Glycerol 85%	16215301	1
Hedinger/Ebert	Glycerol 85%	40612	1
Bombastus	Glycerol 85%	6474	1
Fischar/Phoenix	Glycerol 85%	5066081	1
Hedinger Phönix	Glycerol 85%	40607	1
Euro OTC	Glycerol 85%	1610032-1	1
AEP/ Fischar	Glycerol 85%	5067011	1
Euro OTC	Glycerol 85%	1703003-01	29
Caelo	Glycerol 85%	16297808	1
Caelo	Glycerol 85%	14061701	1
Otto Fischar	Glycerol 85%	5066061	1
phönix	Glycerol 85%	40612	1
Caelo	Glycerol 85%	15404503	1
Caelo	Glycerol 85%	16347203	3
Caleo/Phönix	Glycerol 85%	16355002	2
Phoenix Leipzig / 23.06...	Glycerol 85%	5066101	1
Caelo	Glycerol 85%	16347202	6
Hedinger	Glycerol 85%	40612	3
Caelo	Glycerol 85%	1607037-01	1
Euro OTC	Glycerol 85%	7406HH7011	1
Caelo	Glycerol 85%	16297809	1
Otto Fischar/Gehe	Glycerol 85%	5067011	1
Caelo	Glycerol 85%	16355002	10
fischar/Noweda	Glycerol 85%	5067011	1
Caelo	Glycerol 85%	15071703	1
Hedinger Phönix	Glycerol 85%	40618	2
Hedinger	Glycerol 85%	40618	2

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Supplier	Substance	Batch	Spectra
Caelo	Glycerol 85%	16347206	5
Euro OTC	Glycerol 85%	16297806	1
Caelo	Glycerol 85%	16355001	2
Caelo	Glycerol 85%	1621806	1
Fischar	Glycerol 85%	5067061	2
eurho	Glycerol 85%	1703003-01	3
Phoenix Leipzig 18.08.17	Glycerol 85%	5067031	1
Euro OTC	Glycerol 85%	1703003	2
Hedinger/ AHD	Glycerol 85%	40620	1
040607	Glycerol 85%	40607	1
Caelo	Glycerol 85%	1703003-01	4
Euro/Noweda	Glycerol 85%	1610032-01	1
Noweda/Fischar	Glycerol 85%	5067061	1
Hedinger/Phönix	Glycerol 85%	40620	1
Otto Fischar GmbH	Glycerol 85%	15092017-MW-A	1
Otto Fischar GmbH & Co...	Glycerol 85%	1077011	1
Bombastus	Glycerol 85%	308737	3
Caelo	Glycerol 85%	17157702	22
EuRho / Phoenix	Glycerol 85%	1610032-01	1
Hedinger	Glycerol 85%	40620	1
Caelo	Glycerol 85%	16347205	1
Hedinger	Glycerol 85%	406205369	1
Caelo	Glycerol 85%	1715772	1
Sanacorp	Glycerol 85%	17157702	2
Hedinger/Noweda	Glycerol 85%	40618	2
Caelo	Glycerol 85%	40618	1
Otto Fischar	Glycerol 85%	5067061	1
Noweda	Glycerol 85%	5067061	1
Caelo	Glycerol 85%	163472202-20171106Ma	1
Phönix / Lamotte	Glycerol 85%	8002720001	1
fischar	Glycerol 85%	5067081	1
Otto Fschar GmbH & Co. KG	Glycerol 85%	5067081	1
Henry Lamotte	Glycerol 85%	1703003-01	1
Caelo	Glycerol 85%	16355005	1
Otto Fischar GmbH & Co.KG	Glycerol 85%	5067061	1
Anzag	Glycerol 85%	40620	2
Caesar und Loretz GmbH	Glycerol 85%	17157702	1
Fischar/Gehe	Glycerol 85%	5067061	1
Hedinger/Sanacorp	Glycerol 85%	40628	2
Caelo	Glycerol 85%	171121G/17157702	1
Phönix Hedinger	Glycerol 85%	40620	1
Fischar/AEP	Glycerol 85%	5067081	1
Gehe/Hedinger	Glycerol 85%	40620	1
Hedinger	Glycerol 85%	40626	1
fischar/gehe	Glycerol 85%	5067021	1
Caelo	Glycerol 85%	4121702	1
Gehe / Fischar	Glycerol 85%	1077081	1
Bombastus	Glycerol 85%	17157703	1
Caelo	Glycerol 85%	16347209	3
Hedinger/ Phoenix	Glycerol 85%	40628	1
AHD/Fischar	Glycerol 85%	5067091	1
Hedinger/Phönix	Glycerol 85%	40628	3
Otto Fischar GmbH	Glycerol 85%	506711	1
Au.HedingerGmbH&CoKG/Al...	Glycerol 85%	40626	1
Otto Fischer	Glycerol 85%	5067111	1
Bombastus	Glycerol 85%	308738	1
Caelo	Glycerol 85%	17215501	20
Hedinger/Phönix	Glycerol 85%	40629	3
Fischar/Noweda	Glycerol 85%	5067061	1
Hedinger	Glycerol 85%	40628	1

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Supplier	Substance	Batch	Spectra
Phönix	Glycerol 85%	40628	1
fischar/gehe	Glycerol 85%	5067111	2
Bombastus	Glycerol 85%	1708022-01	4
Hedinger/Gehe	Glycerol 85%	40628	1
Caelo	Glycerol 85%	17197701	3
Caelo	Glycerol 85%	16347208	8
Euro OTC	Glycerol 85%	1708022-01	8
Noweda / Hedinger	Glycerol 85%	40626	1
Gehe - Hedinger	Glycerol 85%	40618	1
fischar	Glycerol 85%	5067061	1
Bombastus	Glycerol 85%	310593	5
Hedinger Phönix	Glycerol 85%	40626	1
Sanacorp/Fischar	Glycerol 85%	5067061	1
Fischar/AHD	Glycerol 85%	5067091	1
Hedinger/Ebert	Glycerol 85%	40628	1
Caelo	Glycerol 85%	17215502	1
Caelo	Glycerol 85%	17197705	1
Bombastus	Glycerol 85%	310592	3
Caelo	Glycerol 85%	19021809	1
otto fischer gmbh/ Phoe...	Glycerol 85%	5067111	1
Caelo	Glycerol 85%	17157911	1
Hedinger/Sanacorp	Glycerol 85%	40629	1
Fischar	Glycerol 85%	1077081	1
Taoasis/Sanacorp	Glycerol 85%	17197702	1
EuRho	Glycerol 85%	1708022-01	1
Caelo	Glycerol 85%	17328201	1
Caelo	Glycerol 85%	1708022-01	2
Sanacorp	Glycerol 85%	17215501	1
Caelo	Glycerol 85%	17322101	10
eurho	Glycerol 85%	1801025-01	4
Fischar	Glycerol 85%	5067091	1
Hedinger Phönix	Glycerol 85%	40632	2
Caelo	Glycerol 85%	30041804	1
Fischar / Gehe	Glycerol 85%	5068012	3
Lamotte/AHD	Glycerol 85%	8003194001	1
Caelo	Glycerol 85%	170822-01	1
Euro OTC	Glycerol 85%	1801025-01	7
calo	Glycerol 85%	17322101	1
Hedinger / Gehe	Glycerol 85%	40612	1
apo ident	Glycerol 85%	1801025-01	1
Caelo	Glycerol 85%	23051813	1
Caelo	Glycerol 85%	5068012	1
Fischer GmbH / Phoenix ...	Glycerol 85%	5068012	1
Caelo	Glycerol 85%	17197706	4
Hedinger	Glycerol 85%	40635	1
Caelo	Glycerol 85%	18020002	9
Hedinger / Gehe	Glycerol 85%	40635	1
Otto Fischar/AHD	Glycerol 85%	5068012	1
Caelo	Glycerol 85%	18020001	1
Sanacorp	Glycerol 85%	173222104	1
Otto Fischar	Glycerol 85%	5068012	1
Caelo	Glycerol 85%	17322104	10
Fischar/AHD	Glycerol 85%	5068012	1
Bombastus	Glycerol 85%	18000211	1
Delta	Glycerol 85%	310593	1
Caelo	Glycerol 85%	18000211	1
Caelo	Glycerol 85%	17322108	2
Caelo	Glycerol 85%	1738202	1
Otto Fischar/Gehe	Glycerol 85%	5068031	1
Euro OTC	Glycerol 85%	1804017-01	6

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Supplier	Substance	Batch	Spectra
AHD	Glycerol 85%	40642	1
Otto Fischer GmbH	Glycerol 85%	5068031	1
Phoenix	Glycerol 85%	5068031	1
Fischar	Glycerol 85%	5068021	2
otto fischer gmbh/ Phoe...	Glycerol 85%	5068031	3
Caelo	Glycerol 85%	30081805	1
Sanacorp	Glycerol 85%	17322104	1
Bombastus	Glycerol 85%	40635	1
Hedinger / Gehe	Glycerol 85%	40644	1
Otto Fischar	Glycerol 85%	5068031	1
Euro/Noweda	Glycerol 85%	180102501	1
Paul W. Beyvers GmbH/ A...	Glycerol 85%	17003	1
Fischar/Noweda	Glycerol 85%	5068012	1
fischar	Glycerol 85%	5068021	1
Fagron	Glycerol 85%	18020001	1
Caelo	Glycerol 85%	18020005	3
Bombastus	Glycerol 85%	18001896	1
Hedinger Phönix	Glycerol 85%	40649	1
Euro OTC	Glycerol 85%	18000211	1
Hedinger	Glycerol 85%	40644	1
BambynekFiebig	Glycerol 85%	18000211	1
Hedinger/Sanacorp	Glycerol 85%	40635	1
Caelo	Glycerol 85%	18153702	4
Caelo	Glycerol 85%	1801025-01	1
Hedinger Gehe	Glycerol 85%	40646	1
Otto Fischar GmbH / Pho...	Glycerol 85%	5068081	2
Caelo	Glycerol 85%	40646	1
Caelo	Glycerol 85%	1802002	1
Caelo	Glycerol 85%	17322107	3
Fischar GmbH	Glycerol 85%	5068031	1
Caelo	Glycerol 85%	17157707	1
Sanacorp	Glycerol 85%	18153702	1
Hedinger/Sanacorp	Glycerol 85%	40647	1
Hedinger Phönix	Glycerol 85%	40647	2
Hedinger/Ebert	Glycerol 85%	40642	1
BambynekFiebig	Glycerol 85%	18004342	1
Henry Lamotte Oils/ Gehe	Glycerol 85%	1801025-01	1
Otto Fischar GmbH & Co...	Glycerol 85%	50068031	1
Bombastus	Glycerol 85%	28111803	1
Bombastus	Glycerol 85%	18001893	1
Caelo	Glycerol 85%	506012	1
Euro OTC	Glycerol 85%	1808009-01	2
Caelo	Glycerol 85%	1733322107	1
Bombastus	Glycerol 85%	18004343	1
Caelo	Glycerol 85%	15121803	1
Hedinger	Glycerol 85%	40652	1
Fischar	Glycerol 85%	5068031	1
Fischar	Glycerol 85%	5068012	1
Hedinger/Ebert	Glycerol 85%	40652	1
Lamotte/AHD	Glycerol 85%	1000007843	1
EuRho	Glycerol 85%	1804017-01	1
Caelo	Glycerol 85%	18020002-G20190115Ma	1
Hedinger/Phönix	Glycerol 85%	1808009-01	1
Bombastus	Glycerol 85%	18004342	2
Caelo	Glycerol 85%	18253402	1
Hedinger/Sanacorp	Glycerol 85%	40652	2
euro//Noweda	Glycerol 85%	18253402	1
Euro OTC	Glycerol 85%	1868009-02	1

- 105 521 spectra from 581 *Apo-Ident* customers from a total of 30 136 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 *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	430	0	35 405
Type B	0	910	0	78 168
Type C	0	2409	29	105 521

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 % (> 99.9705 %)	100.0000 % (> 98.6047 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.3407 %)
Type C	100.0000 % (> 99.6449 %)	98.8105 % (> 98.6874 %)

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.

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	2.47	58.77
30980	31956	1.56	60.15
31360	31956	1.65	59.37
31377	31737	1.20	61.91
31588	31588	0.00	59.11
31719	31719	0.00	61.64
31737	31737	0.00	62.42
31956	31956	0.00	61.36
34031	34031	0.00	58.81

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Glycolic acid 70%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30491-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140708
Euro OTC	Glycolic acid 70%	1406006-01	31647	40	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 222872 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 *Glycolic acid 70%*. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 3 reference samples from the substance/substance group *Glycolic acid 70%*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Glycolic acid 70%	1406006-01	31620 [†]	20
Euro OTC	Glycolic acid 70%	1406006-01	31647 [†]	20
Euro OTC	Glycolic acid 70%	1604050-01	33225	40

- 78998 spectra from a total of 1828 batches from further 350 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 9 batches from the substance/substance group *Glycolic acid 70%*.

*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.

[†]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*.

Supplier	Substance	Batch	Spectra
Euro OTC	Glycolic acid 70%	1109027-01	1
Phoenix	Glycolic acid 70%	1205037-01	1
Caelo	Glycolic acid 70%	121002201	1
Euro OTC	Glycolic acid 70%	1210022-01	1
Euro OTC	Glycolic acid 70%	1401014-01	1
Euro OTC	Glycolic acid 70%	1604050-01	3
Euro OTC	Glycolic acid 70%	160405001	2
Euro OTC	Glycolic acid 70%	16040501-01	1
Euro OTC	Glycolic acid 70%	1604050-02	3

- 107 945 spectra from 582 *Apo-Ident* customers from a total of 30 671 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 *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	160	0	35 675
Type B	0	80	0	78 998
Type C	0	14	0	107 945

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6456 %)	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.

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	1.52	147.61
31647	32281	3.71	141.66
32281	32281	0.00	147.86
34184	32281	8.14	139.46

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Guaiazulene 25%, water-soluble
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30857-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20140423

Validation samples

A total of 222 872 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 *Guaiazulene 25%, water-soluble*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Guaiazulene 25%, water-soluble*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Guaiazulene 25%, water-soluble	14130601	31462 [†]	20
Caelo	Guaiazulene 25%, water-soluble	161905	32321	40
Caelo	Guaiazulene 25%, water-soluble	173365	34100	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 161 spectra from 86 *Apo-Ident* customers from 44 batches from the substance/substance group *Guaiazulene 25%, water-soluble*.

Supplier	Substance	Batch	Spectra
Sanacorp	Guaiazulene 25%, water-soluble	12246701	2

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
Fagron	Guaiazulene 25%, water-soluble	11H30-N03	1
Caelo	Guaiazulene 25%, water-soluble	11303703	1
Caelo	Guaiazulene 25%, water-soluble	12019802	1
Caelo	Guaiazulene 25%, water-soluble	12246701	2
Caelo	Guaiazulene 25%, water-soluble	12246703	3
Fagron	Guaiazulene 25%, water-soluble	12G31-N03	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	13044901	7
Fagron	Guaiazulene 25%, water-soluble	513936	1
Fagron	Guaiazulene 25%, water-soluble	13g31-n03	1
Caelo	Guaiazulene 25%, water-soluble	13044904	6
Caelo	Guaiazulene 25%, water-soluble		1
Alliance Healthcare	Guaiazulene 25%, water-soluble	13044901	1
Noweda	Guaiazulene 25%, water-soluble	13044901	1
Caelo	Guaiazulene 25%, water-soluble	13044906	4
Caelo	Guaiazulene 25%, water-soluble	13334401	6
Gehe	Guaiazulene 25%, water-soluble	13334406	1
Caelo	Guaiazulene 25%, water-soluble	13334406	3
Caelo	Guaiazulene 25%, water-soluble	13334407	4
Gehe	Guaiazulene 25%, water-soluble	13334401	1
Caelo	Guaiazulene 25%, water-soluble	17041405	1
Euro OTC	Guaiazulene 25%, water-soluble	13334406	1
Caelo	Guaiazulene 25%, water-soluble	14130601	9
Sanacorp	Guaiazulene 25%, water-soluble	4/AKD2	1
	Guaiazulene 25%, water-soluble	14B12-B07-292053	1
Fagron	Guaiazulene 25%, water-soluble	152716-0001	1
Caelo	Guaiazulene 25%, water-soluble	14130605	6
Caelo	Guaiazulene 25%, water-soluble	11303702	1
Caelo	Guaiazulene 25%, water-soluble	14252102	5
Fagron	Guaiazulene 25%, water-soluble	14B12-B07-292053	1
Caelo	Guaiazulene 25%, water-soluble	1514U-03150	1
Caelo	Guaiazulene 25%, water-soluble	14252104	6
sanacorp	Guaiazulene 25%, water-soluble	14G24-B03	1
Caelo	Guaiazulene 25%, water-soluble	15075501	9
Fagron	Guaiazulene 25%, water-soluble	14G24B03	1
anzag	Guaiazulene 25%, water-soluble	14G24-B03-301884	1
Caelo	Guaiazulene 25%, water-soluble	15075503	10
Caelo	Guaiazulene 25%, water-soluble	1515M-03150	1
Caelo	Guaiazulene 25%, water-soluble	15402302	8
Caelo	Guaiazulene 25%, water-soluble	154022302	1
Caelo	Guaiazulene 25%, water-soluble	15402306	6
Caesar & Loretz GmbH Hi...	Guaiazulene 25%, water-soluble	15402306	1
Caelo	Guaiazulene 25%, water-soluble	516Q-03150	1
Caelo	Guaiazulene 25%, water-soluble	16190502	8
Caelo	Guaiazulene 25%, water-soluble	16190504	4
Gehe	Guaiazulene 25%, water-soluble	17021503	1
Phoenix	Guaiazulene 25%, water-soluble	17021503	1
Caelo	Guaiazulene 25%, water-soluble	17021503	2
gehe	Guaiazulene 25%, water-soluble	17021503	1
Noweda	Guaiazulene 25%, water-soluble	17021508	1
Fagron	Guaiazulene 25%, water-soluble	17021503	1
Caelo	Guaiazulene 25%, water-soluble	17192601	5
Caelo	Guaiazulene 25%, water-soluble	17021508	2
Caelo	Guaiazulene 25%, water-soluble	17336503	4
Caelo	Guaiazulene 25%, water-soluble	2011905	1

- 107 798 spectra from 582 *Apo-Ident* customers from a total of 30 638 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	154	7	107 798

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	95.6522 % (> 93.7888 %)

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.

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	2.66	60.37
31157	31157	0.00	60.00
31462	31157	4.04	62.67

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Hard fat 649**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30770-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Hard fat 649; Adeps solidus 649

Special notes

When selecting the *Hard fat 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*
Appendix F [Addition to the second-stage models](#)

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.

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 *Hard fat 649*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Hard fat 649	12I10-N12	30770	40	1407601
Fagron	Hard fat 649	15E13-B01-307859	31699	40	20150527

Validation samples

A total of 222 872 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 *Hard fat 649*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 137 spectra of 4 reference samples from the substance/substance group *Hard fat 649*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Hard fat 649	13C19-N03	31118	37
Fagron	Hard fat 649	15E13-B01-307859	31699 [†]	20
Fagron	Hard fat 649	16H30-B03-325618	33249	40
Fagron	Hard fat 649	18H13-B02-352761	34273	40

- 78 941 spectra from a total of 1826 batches from further 350 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 *Hard fat 649*.

Supplier	Substance	Batch	Spectra
Fagron	Hard fat 649	105945	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
Fagron	Hard fat 649	15E13-B01-315602	1
Cremer Oleo/Anzag	Hard fat 649	409134	1
Fagron	Hard fat 649	503154	1
Cremer Oleo GmbH	Hard fat 649	150430	1
Cremer Oleo/Anzag	Hard fat 649	150430	1
Cremer	Hard fat 649	605218	1
Pharmachem	Hard fat 649	605218	1
Oleochemicals	Hard fat 649	605218	1
Apotheke Leutenberg/AHD	Hard fat 649	605218	1
cremer oleo GmbH	Hard fat 649	703250	1
Apotheke Leutenberg	Hard fat 649	605218	1
Apotheke Leutenberg	Hard fat 649	801297	1
Fagron	Hard fat 649	708279	1
Fa. Cremer Oleon GmbH	Hard fat 649	9041803	1

- 107 944 spectra from 582 *Apo-Ident* customers from a total of 30 670 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 *Hard fat 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 *Hard fat 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	80	0	35 755
Type B	0	136	1	78 941
Type C	0	15	0	107 944

The substance/substance group *Hard fat 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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	99.2701 % (> 97.0803 %)
Type C	100.0000 % (> 99.6455 %)	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.

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	25.90
31699	30770	10.81	21.19

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Honeys
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30761-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	Rose honey	15406006	31957	40	20160120
Caelo	Rose honey	16104802	32988	40	1708304
Caelo	Rose honey	171208	33333	40	20170619*
Caelo	Honey	171332	33719	40	20170809*

Validation samples

A total of 222872 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 *Honeys*. These samples are listed above in the [calibration samples](#) section.
- 35595 spectra from a total of 841 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 300 spectra of 8 reference samples from the substance/substance group *Honeys*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Honey	11187911	30610	40
Caelo	Rose honey	15406006	31957 [†]	20
Caelo	Honey	150791	32214	40
Caelo	Honey	162659	32698	40
Caelo	Honey	171325	33718	40
Caelo	Honey	171325	33720	40
Caelo	Rose honey	171208	33721	40
Caelo	Rose honey	181215	34050	40

- 78778 spectra from a total of 1823 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

*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.

[†]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*.

provided by the customer regarding manufacturer and batch number.

- 62 spectra from 26 *Apo-Ident* customers from 40 batches from the substance/substance group *Honeys*.

Supplier	Substance	Batch	Spectra
Caelo	Rose honey	11258901	1
Caelo	Rose honey	12105302	1
Caelo	Rose honey	12105305	2
Caelo	Rose honey	4811M-02884	1
Caelo	Rose honey	12315005	1
Caelo	Rose honey	13170904	1
Caelo	Rose honey	13170906	1
Caelo	Rose honey	13170902	1
Caelo	Rose honey	5091401	1
Caelo	Rose honey	14125603	1
Caelo	Rose honey	14125605	1
Caelo	Rose honey	15100801	2
Caelo	Rose honey	14125607	1
Caelo	Rose honey	15406004	2
Caelo	Rose honey	15406006	3
Caelo	Rose honey	15100803	1
Ebert & Jacobi 02.08.16	Rose honey	15406006	1
Caelo	Rose honey	17120803	1
Caesar & Loretz GmbH, 4...	Honey	12132011	2
Caelo	Honey	12132007	1
Caesar & Loretz GmbH, 4...	Honey	12382405	3
Caelo	Honey	12382406	1
Caesar & Loretz GmbH, 4...	Honey	12382410	2
Caesar & Loretz GmbH, 4...	Honey	13269401	3
Caelo	Honey	12132012	1
Caesar & Loretz GmbH, 4...	Honey	13269404	1
Caelo	Honey	13269405	2
Caelo	Honey	13269403	4
Caelo	Honey	13269413	1
Caelo	Honey	13269412	3
Noweda/Apomix	Honey	13269401	1
Phönix	Honey	13269403	1
Caelo	Honey	15079103	1
Caelo	Honey	15079111	1
Caelo	Honey	15079102	1
Noweda	Honey	15079102	1
Caelo	Honey	16265901	1
Caelo	Honey	15417714	1
Caelo	Honey	L051150	1
Caelo	Honey	L064168	1
Caelo	Honey	17132502	2
Noweda	Honey	16265911	1
Caelo	Honey	9011902	1
Caelo	Honey	18026703	1

- 107 897 spectra from 582 *Apo-Ident* customers from a total of 30 640 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 *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	240	0	35 595
Type B	0	300	0	78 778
Type C	0	60	2	107 897

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 % (> 99.9705 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.0000 %)
Type C	100.0000 % (> 99.6451 %)	96.7742 % (> 91.9355 %)

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.

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
31957	32988	2.79	28.16
32988	32988	0.00	27.05
33333	33333	0.00	27.99
30761	30761	0.00	36.08
31341	33719	5.08	20.26
33719	33719	0.00	22.25

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Hydrophilic base emulsion (NRF p.25)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30709-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	30	20120628
Caelo	Hydrophilic base...	13305501	31176	40	1403535
Caelo	Hydrophilic base...	14063502	31340	20	20140307
Caelo	Hydrophilic base...	161155	32291	40	20160415*
Caelo	Hydrophilic base...	170444	33154	40	20170217*
Caelo	Hydrophilic base...	163400	33156	40	20161215*

Validation samples

A total of 222872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 210 spectra of 6 reference samples from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*. These samples are listed above in the [calibration samples](#) section.
- 35625 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 670 spectra of 18 reference samples from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydrophilic base emulsion (N...	12173002	30709 [†]	10
Caelo	Hydrophilic base emulsion (N...	14063502	31340 [†]	20
Caelo	Hydrophilic base emulsion (N...	161156	32290	40
Caelo	Hydrophilic base emulsion (N...	161154	32292	40
Caelo	Hydrophilic base emulsion (N...	170443	33155	40
Caelo	Hydrophilic base emulsion (N...	163398	33157	40
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

*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.

[†]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*.

- 78 408 spectra from a total of 1812 batches from further 350 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.

- 1379 spectra from 258 *Apo-Ident* customers from 208 batches from the substance/substance group *Hydrophilic base emulsion (NRF p.25)*.

Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	10071203	1
Caelo	Hydrophilic base emulsion (N...	12071901	4
Caelo	Hydrophilic base emulsion (N...	12072002	2
Caelo	Hydrophilic base emulsion (N...	12128401	5
Caelo	Hydrophilic base emulsion (N...	19091204	1
Fiebig ek:4,26EUR 18.09.12	Hydrophilic base emulsion (N...	12173003	1
Caelo	Hydrophilic base emulsion (N...	1218401	1
Caelo	Hydrophilic base emulsion (N...	12173003	1
Caelo	Hydrophilic base emulsion (N...	12173002	5
Caelo	Hydrophilic base emulsion (N...	23101202	1
Sanacorp	Hydrophilic base emulsion (N...	12128401	2
Caelo	Hydrophilic base emulsion (N...	1213003	1
Caelo	Hydrophilic base emulsion (N...	12230302	4
Anzag 27.11.12 ek:4,33	Hydrophilic base emulsion (N...	12230301	1
Caelo	Hydrophilic base emulsion (N...	28111203	1
Caelo	Hydrophilic base emulsion (N...	12230203	5
Caelo	Hydrophilic base emulsion (N...	12230301	8
Noweda	Hydrophilic base emulsion (N...	12230301	1
Caelo	Hydrophilic base emulsion (N...	28121206	1
Anzag 19.12.12 ek:4,33	Hydrophilic base emulsion (N...	12310102	3
Sanacorp	Hydrophilic base emulsion (N...	12230203	1
Caelo	Hydrophilic base emulsion (N...	12310102	16
Sanacorp	Hydrophilic base emulsion (N...	13039702	1
Caesar/Noweda	Hydrophilic base emulsion (N...	12071901	1
Caesar/Noweda	Hydrophilic base emulsion (N...	5011E-03325	1
Caelo	Hydrophilic base emulsion (N...	12310101	10
Caelo	Hydrophilic base emulsion (N...	13039701	14
Caelo	Hydrophilic base emulsion (N...	20031306	1
Caelo	Hydrophilic base emulsion (N...	26031302	1
Phönix	Hydrophilic base emulsion (N...	13039701	1
Anzag 03.04.13 ek: 4,56EUR	Hydrophilic base emulsion (N...	13039701	4
Caelo	Hydrophilic base emulsion (N...	13039702	2
Caelo	Hydrophilic base emulsion (N...	13076803	18
Caelo	Hydrophilic base emulsion (N...	12288103	2
Caelo	Hydrophilic base emulsion (N...	30041304	1
Caelo	Hydrophilic base emulsion (N...	6051304	1
Caelo	Hydrophilic base emulsion (N...	10051303	1
Caelo	Hydrophilic base emulsion (N...	13076801	16
Caesar/Lorenz	Hydrophilic base emulsion (N...	13076702	1
Noweda	Hydrophilic base emulsion (N...	13076801	1
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

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	1306801	1
Caelo	Hydrophilic base emulsion (N...	13076802	1
Caesar & Loretz GmbH, 4...	Hydrophilic base emulsion (N...	12310101	1
Bombastus	Hydrophilic base emulsion (N...	1288103	1
Caelo	Hydrophilic base emulsion (N...	13107703	17
Caelo	Hydrophilic base emulsion (N...		2
Caelo	Hydrophilic base emulsion (N...	1310773	2
Caelo	Hydrophilic base emulsion (N...	16071701	1
Phönix	Hydrophilic base emulsion (N...	13076803	1
Caesar & Loretz GmbH, 4...	Hydrophilic base emulsion (N...	13107703	1
Caelo	Hydrophilic base emulsion (N...	13107702	1
Caelo	Hydrophilic base emulsion (N...	9081301	1
Caelo	Hydrophilic base emulsion (N...	10082013A	1
Maros	Hydrophilic base emulsion (N...	5006613	1
Caelo	Hydrophilic base emulsion (N...	13195902	4
Caelo	Hydrophilic base emulsion (N...	13195901	19
Caelo	Hydrophilic base emulsion (N...	13196001	11
AHC 15.08.13 EK4,56	Hydrophilic base emulsion (N...	13107703	1
Euro OTC	Hydrophilic base emulsion (N...	13196001	1
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	13195901	1
Gehe	Hydrophilic base emulsion (N...	13195801	1
Caelo	Hydrophilic base emulsion (N...	13195801	10
Fagron	Hydrophilic base emulsion (N...	13195901	1
Sanacorp	Hydrophilic base emulsion (N...	13195901	1
Phönix Gotha	Hydrophilic base emulsion (N...	13195801	1
Caelo	Hydrophilic base emulsion (N...	13305401	29
Caelo	Hydrophilic base emulsion (N...	2101304	1
Sanacorp	Hydrophilic base emulsion (N...	13305401	5
Caesar & Lorenz	Hydrophilic base emulsion (N...	13195901	1
EuRho/Sanac	Hydrophilic base emulsion (N...	13305601	3
Caelo	Hydrophilic base emulsion (N...	13305501	5
Fagron	Hydrophilic base emulsion (N...	13305401	5
Caelo	Hydrophilic base emulsion (N...	13305601	10
Caelo	Hydrophilic base emulsion (N...	18111307	1
Sanacorp	Hydrophilic base emulsion (N...		1
Caesar & Loretz	Hydrophilic base emulsion (N...	13195801	1
Herstellung	Hydrophilic base emulsion (N...	13305501	2
Caelo	Hydrophilic base emulsion (N...	12121308	1
aliance healthcare 5.12...	Hydrophilic base emulsion (N...	13305501	1
Caelo	Hydrophilic base emulsion (N...	13305503	5
Caelo	Hydrophilic base emulsion (N...	13397601	45
Caelo	Hydrophilic base emulsion (N...	24011403	1
Gehe	Hydrophilic base emulsion (N...	13397601	2
PHOENIX am 27.01.2014	Hydrophilic base emulsion (N...	13305401	1
Caelo	Hydrophilic base emulsion (N...	30011504	1
Eigene Herstellung	Hydrophilic base emulsion (N...	13305601	1
Caelo	Hydrophilic base emulsion (N...	13394402	4
Alliance Health 23.01.2...	Hydrophilic base emulsion (N...	13394302	2
Phoenix	Hydrophilic base emulsion (N...	13195901	1
Phoenix	Hydrophilic base emulsion (N...	13397601	1
Caelo	Hydrophilic base emulsion (N...	13394302	10
Sanacorp	Hydrophilic base emulsion (N...	13397601	2
Caelo	Hydrophilic base emulsion (N...	13394304	9
Gehe am 6.03.2014	Hydrophilic base emulsion (N...	13195801	1
Henry Lamotte Oils GmbH...	Hydrophilic base emulsion (N...	13397601	1
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	13397601	1
Caelo	Hydrophilic base emulsion (N...	21031403	1
GEHE 10.03.2014	Hydrophilic base emulsion (N...	14063502	2
Caelo	Hydrophilic base emulsion (N...	14063502	10
Caelo	Hydrophilic base emulsion (N...	14063702	10

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	29041406	1
Phoenix	Hydrophilic base emulsion (N...	14063502	1
Caelo	Hydrophilic base emulsion (N...	14063601	26
Phoenix	Hydrophilic base emulsion (N...	14063701	1
Euro OTC	Hydrophilic base emulsion (N...	14063702	2
PHOENIX 03.06.2014	Hydrophilic base emulsion (N...	14063701	1
Sanacorp	Hydrophilic base emulsion (N...	14063601	3
Phonix	Hydrophilic base emulsion (N...	14063601	1
Caelo	Hydrophilic base emulsion (N...	20061407	1
Caelo	Hydrophilic base emulsion (N...	14063503	1
AHD	Hydrophilic base emulsion (N...	14063502	2
Caesar&loretz,AHC	Hydrophilic base emulsion (N...	14063601	1
Caelo	Hydrophilic base emulsion (N...	13394303	1
Caelo	Hydrophilic base emulsion (N...	14140901	12
caesar & Loretz GmbH	Hydrophilic base emulsion (N...	13394304	2
Caelo	Hydrophilic base emulsion (N...	14141004	13
Caelo	Hydrophilic base emulsion (N...	15081402	1
Caelo	Hydrophilic base emulsion (N...	1463502	1
Caelo	Hydrophilic base emulsion (N...	14238802	6
Caelo	Hydrophilic base emulsion (N...	14141003	2
Sanacorp	Hydrophilic base emulsion (N...	14141004	1
Caelo	Hydrophilic base emulsion (N...	14238701	11
Caelo	Hydrophilic base emulsion (N...	14238801	15
Caelo	Hydrophilic base emulsion (N...	14238901	29
Caelo	Hydrophilic base emulsion (N...	1428901	2
Caelo	Hydrophilic base emulsion (N...	29101402	1
Caelo	Hydrophilic base emulsion (N...	14238702	4
06,15	Hydrophilic base emulsion (N...	13394302	1
Caelo	Hydrophilic base emulsion (N...	14239002	3
Sanacorp	Hydrophilic base emulsion (N...	14238901	1
Caesar & Lorenz	Hydrophilic base emulsion (N...	14238901	1
Caelo	Hydrophilic base emulsion (N...	14239103	8
Caelo	Hydrophilic base emulsion (N...	14360301	26
Caelo	Hydrophilic base emulsion (N...	14351202	6
Caelo	Hydrophilic base emulsion (N...	23011503	1
Caelo	Hydrophilic base emulsion (N...	14360201	11
Sanacorp	Hydrophilic base emulsion (N...	14360301	2
Caelo	Hydrophilic base emulsion (N...	14360403	5
Caelo	Hydrophilic base emulsion (N...	11031504	1
Caelo	Hydrophilic base emulsion (N...	914E-03325	1
Caelo	Hydrophilic base emulsion (N...	1514U-03325	1
Caelo	Hydrophilic base emulsion (N...	14360401	2
Caelo	Hydrophilic base emulsion (N...	22042015A	1
Alliance health	Hydrophilic base emulsion (N...	14360201	2
Caelo	Hydrophilic base emulsion (N...	29041502	1
Caelo	Hydrophilic base emulsion (N...	15077101	25
Caelo	Hydrophilic base emulsion (N...	15076901	12
Caelo	Hydrophilic base emulsion (N...	15077002	10
Caelo	Hydrophilic base emulsion (N...	2061501	1
Caelo	Hydrophilic base emulsion (N...	30051501	1
Caelo	Hydrophilic base emulsion (N...	14360202	4
Caesar&Loretz GmbH/Anzag	Hydrophilic base emulsion (N...	15077101	2
Cealo	Hydrophilic base emulsion (N...	15077101	3
Caelo	Hydrophilic base emulsion (N...	23062015D	1
Caesar & Loretz GmbH	Hydrophilic base emulsion (N...	15077002	1
Caelo	Hydrophilic base emulsion (N...	15076803	7
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...	15077003	5

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	15209902	8
Noweda	Hydrophilic base emulsion (N...	15209801	1
Caelo	Hydrophilic base emulsion (N...	1507002	1
Caelo	Hydrophilic base emulsion (N...	1507702	1
Caelo	Hydrophilic base emulsion (N...	15210001	14
Caelo	Hydrophilic base emulsion (N...	15209901	11
Caelo	Hydrophilic base emulsion (N...	153337801	1
Caelo	Hydrophilic base emulsion (N...	15337801	21
Hubertus Apotheke	Hydrophilic base emulsion (N...	15209901	1
cealo/noveda	Hydrophilic base emulsion (N...	15209901	1
Caelo	Hydrophilic base emulsion (N...	15029901	1
Caelo	Hydrophilic base emulsion (N...	15337601	7
Caelo	Hydrophilic base emulsion (N...	152009902	1
Sanacorp	Hydrophilic base emulsion (N...	15337301	2
Caelo	Hydrophilic base emulsion (N...	15337301	23
Eigen/Defektur	Hydrophilic base emulsion (N...	15337602	1
Caelo	Hydrophilic base emulsion (N...	13730153	1
Caelo	Hydrophilic base emulsion (N...	15337602	4
Caelo	Hydrophilic base emulsion (N...	1515J-03325	1
Caelo	Hydrophilic base emulsion (N...	152100001	1
Bombastus	Hydrophilic base emulsion (N...	15337601	4
sanacorp	Hydrophilic base emulsion (N...	15210001	2
Caelo	Hydrophilic base emulsion (N...	15337701	11
Caelo	Hydrophilic base emulsion (N...	1537301	1
Caelo	Hydrophilic base emulsion (N...	15440001	22
Caelo/Noweda	Hydrophilic base emulsion (N...	15440001	1
Caelo	Hydrophilic base emulsion (N...	15440101	23
Caelo	Hydrophilic base emulsion (N...	15440102	3
Caelo	Hydrophilic base emulsion (N...	15439801	23
Caelo	Hydrophilic base emulsion (N...	15439901	8
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	15439801	1
Caesar/Noweda	Hydrophilic base emulsion (N...	15440101	1
Caesar&Loretz GmbH/ Gehe	Hydrophilic base emulsion (N...	15439801	1
Caesar&Loretz GmbH	Hydrophilic base emulsion (N...	15439801	1
Caesar&Loretz GmbH	Hydrophilic base emulsion (N...	15337301	1
wepa/Sanaco	Hydrophilic base emulsion (N...	16115303	1
Caelo	Hydrophilic base emulsion (N...	15440002	8
Caelo	Hydrophilic base emulsion (N...	16115602	29
Caelo	Hydrophilic base emulsion (N...	16115303	11
Caelo	Hydrophilic base emulsion (N...	1071602	1
Caelo	Hydrophilic base emulsion (N...	16115302	11
Caelo	Hydrophilic base emulsion (N...	154401014	1
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	16115602	1
Euro OTC	Hydrophilic base emulsion (N...	16115602	1
Ebert 12.09.2016	Hydrophilic base emulsion (N...	16115602	1
Caelo	Hydrophilic base emulsion (N...	16115401	6
Fagron	Hydrophilic base emulsion (N...	16115302	1
Caelo	Hydrophilic base emulsion (N...	16249201	11
Caesar & Loretz/AHD	Hydrophilic base emulsion (N...	16249201	1
caesar & loretz	Hydrophilic base emulsion (N...	16115302	1
Anzag	Hydrophilic base emulsion (N...	16115602	1
Caelo	Hydrophilic base emulsion (N...	6115401	1
Caelo	Hydrophilic base emulsion (N...	15442001	1
Caelo	Hydrophilic base emulsion (N...	16249301	11
Caelo	Hydrophilic base emulsion (N...	161115401	1
Allianc. Health. /ca	Hydrophilic base emulsion (N...	16264202	1
Caesar & Loretz GmbH Hi...	Hydrophilic base emulsion (N...	16151602	1
Caelo	Hydrophilic base emulsion (N...	16249202	5
Caelo	Hydrophilic base emulsion (N...	16264202	6
Euro OTC	Hydrophilic base emulsion (N...	16249302	2

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	16264101	23
Caelo	Hydrophilic base emulsion (N...	15255816	1
Caelo	Hydrophilic base emulsion (N...	162433201	1
Caesar&Loretz GmbH/ All...	Hydrophilic base emulsion (N...	16264202	1
Caelo	Hydrophilic base emulsion (N...	16249302	6
Caelo	Hydrophilic base emulsion (N...	16244101	1
Caelo	Hydrophilic base emulsion (N...	16339801	9
Caelo	Hydrophilic base emulsion (N...	16264203	1
Caelo	Hydrophilic base emulsion (N...	16264201	5
Caelo	Hydrophilic base emulsion (N...	16264101/1310117	1
Caelo	Hydrophilic base emulsion (N...	16339901	29
Caelo	Hydrophilic base emulsion (N...	16325801	1
Caelo	Hydrophilic base emulsion (N...	1634002	1
Caelo	Hydrophilic base emulsion (N...	21031704	1
phönix	Hydrophilic base emulsion (N...	16339901	1
Caelo	Hydrophilic base emulsion (N...	16340001	4
Caelo	Hydrophilic base emulsion (N...	19041711	1
Caelo	Hydrophilic base emulsion (N...	17044401	19
Anzag	Hydrophilic base emulsion (N...	17044401	1
Noweda	Hydrophilic base emulsion (N...	1626402	1
Allianz Healthcare	Hydrophilic base emulsion (N...	16340001	1
phönix	Hydrophilic base emulsion (N...	17044401	2
Caelo	Hydrophilic base emulsion (N...	17118401	7
Caelo	Hydrophilic base emulsion (N...	1704401	1
Fagron	Hydrophilic base emulsion (N...	17118401	1
Caelo	Hydrophilic base emulsion (N...	17061705	1
Phoenix	Hydrophilic base emulsion (N...	16249302	1
Caelo	Hydrophilic base emulsion (N...	17118301	11
Sanacorp	Hydrophilic base emulsion (N...	17124701	1
Caelo	Hydrophilic base emulsion (N...	17124702	11
Noweda	Hydrophilic base emulsion (N...	17118401	1
Phönix/Phönix	Hydrophilic base emulsion (N...	17118301	1
Caelo	Hydrophilic base emulsion (N...	3140817	1
Caelo	Hydrophilic base emulsion (N...	21081705	1
Caelo	Hydrophilic base emulsion (N...	17124701-20170818Ma9	1
Bayvers	Hydrophilic base emulsion (N...	17124702	2
Caelo	Hydrophilic base emulsion (N...	16091701	1
Lamotte	Hydrophilic base emulsion (N...	16264102	1
Caelo	Hydrophilic base emulsion (N...	17124703	1
Caelo	Hydrophilic base emulsion (N...	17124701	1
Caelo	Hydrophilic base emulsion (N...	17170101	5
Caelo	Hydrophilic base emulsion (N...	17170301	21
Anzag	Hydrophilic base emulsion (N...	17170301	1
Caelo	Hydrophilic base emulsion (N...	1710301	1
Caelo	Hydrophilic base emulsion (N...	6121702	1
Caelo	Hydrophilic base emulsion (N...	17226801	27
Caelo	Hydrophilic base emulsion (N...	17227001	7
Caelo	Hydrophilic base emulsion (N...	17170201	4
Cealo	Hydrophilic base emulsion (N...	17170201	1
Caelo	Hydrophilic base emulsion (N...	19021803	1
Caelo	Hydrophilic base emulsion (N...	17342203	2
Caelo	Hydrophilic base emulsion (N...	17342101	14
Sanacorp	Hydrophilic base emulsion (N...	17227001	1
Caelo	Hydrophilic base emulsion (N...	17226903	7
Phönix	Hydrophilic base emulsion (N...	17342202	1
Caelo	Hydrophilic base emulsion (N...	17342202	6
Caelo	Hydrophilic base emulsion (N...	17342301	3
Caelo	Hydrophilic base emulsion (N...	25041803	1
Caelo	Hydrophilic base emulsion (N...	18031601	6
Caelo	Hydrophilic base emulsion (N...	23051803	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic base emulsion (N...	18031701	13
Caelo	Hydrophilic base emulsion (N...	9061831	1
Caesar & Lorenz GmbH	Hydrophilic base emulsion (N...	17342101	1
Sanacorp	Hydrophilic base emulsion (N...	18031702	1
Caelo	Hydrophilic base emulsion (N...	18107501	9
lamotte phönix	Hydrophilic base emulsion (N...	18107602	1
Caelo	Hydrophilic base emulsion (N...	18031802	8
Caelo	Hydrophilic base emulsion (N...	30081803	1
Caelo	Hydrophilic base emulsion (N...	12091802	1
Caelo	Hydrophilic base emulsion (N...	18107701	4
Caelo	Hydrophilic base emulsion (N...	18107602	3
Caelo	Hydrophilic base emulsion (N...	18107604	1
Caelo	Hydrophilic base emulsion (N...	10831701	1
Noweda	Hydrophilic base emulsion (N...	18107501	1
Caelo	Hydrophilic base emulsion (N...	28111808	1
Sanacorp	Hydrophilic base emulsion (N...	18107602	1
Caelo	Hydrophilic base emulsion (N...	18180701	3
Caelo	Hydrophilic base emulsion (N...	18180702	2
Caelo	Hydrophilic base emulsion (N...	18107603	4
Caelo	Hydrophilic base emulsion (N...	18180601	1
Gehe 21-01-2019	Hydrophilic base emulsion (N...	18180601	1
Anzag	Hydrophilic base emulsion (N...	18258801	1
euro//Noweda	Hydrophilic base emulsion (N...	18258801	1
Caelo	Hydrophilic base emulsion (N...	18259001	1

- 106 580 spectra from 582 *Apo-Ident* customers from a total of 30 482 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 *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	210	0	35 625
Type B	0	670	0	78 408
Type C	0	1316	63	106 579

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 % (> 99.9706 %)	100.0000 % (> 97.1429 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.1045 %)
Type C	100.0000 % (> 99.6451 %)	95.4315 % (> 95.2139 %)

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.

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
30709	33156	3.22	35.03
31176	31176	0.00	32.63
32291	32291	0.00	34.17
33156	33156	0.00	33.01
31340	33154	7.89	28.73
33154	33154	0.00	34.81

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Hydrophilic ointments
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30631-2019-05-24
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, 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	<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>
Appendix F	Addition to the second-stage models

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.

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
Dr. Wolff	Wolff [®] base half...	230200	30631	40	20120210
Caelo	Base cream, hydr...	12151602	30758	40	20120612
Bombastus	Hydrophilic crea...	00273130	30769	40	1405255
Dr. Wolff	Wolff [®] base half...	236420	30837	40	1410330
Caelo	Anionic hydrophi...	12221002	30880	50	20120911
apomix	Anionic hydrophi...	25A210812	30895	60	20120821
Caelo	Base cream, hydr...	12308102	30931	40	20121031
Caelo	Base cream, hydr...	13085601	31002	40	20130404
Fagron	Transdermal base...	12H17-T02-000281	31008	40	1406052
apomix	Skin care ointme...	01B110113	31039	40	1403321
apomix	Skin care ointme...	88B111212	31040	40	20121211
Fagron	Transdermal base...	12H17-T02-000281	31042	40	20130110
Bombastus	Anionic hydrophi...	280574	31054	40	1405103
Dr. Wolff	Wolff [®] base half...	331551	31086	40	20130221
apomix	Hydrophilic crea...	21B141013	31188	40	1405386
Caelo	Anionic hydrophi...	13343401	31231	40	1403496
Caelo	Anionic hydrophi...	13244401	31241	30	20130726
Caelo	Anionic hydrophi...	14138901	31440	40	AR-15-FG-008131-01
Caelo	Anionic hydrophi...	14063303	31450	40	20140512
Caelo	Anionic hydrophi...	14030701	31470	40	20140204
Caelo	Hydrophilic crea...	14127002	31477	40	20140512
Caelo	Base cream, hydr...	14028101	31478	40	AR-15-FG-009038-01
Dr. Wolff	Wolff [®] base half...	432611	31487	40	20140410
apomix	Hydrophilic crea...	14B240614	31500	20	1411613
apomix	Skin care ointme...	10A050214	31503	40	1412041
apomix	Anionic hydrophi...	11B020914	31537	40	1411614
apomix	Hydrophilic crea...	22B061114	31565	40	20141106
Bombastus	Hydrophilic crea...	288882	31568	40	20140722
Caelo	Hydrophilic crea...	14304902	31591	40	20141013
Fagron	Hydrophilic crea...	14E07-M04	31593	40	20140513
apomix	Hydrophilic crea...	01B120115	31599	40	20150114
apomix	Skin care ointme...	31B020714	31600	40	20140702
Pharmachem	Base cream, hydr...	150404	31644	40	20150306
apomix	Anionic hydrophi...	05B200415	31661	50	20150422
Caelo	Anionic hydrophi...	15048501	31741	40	9128
Caelo	Base cream, hydr...	15221202	31799	40	1605111
Caelo	Base cream, hydr...	154212	31906	40	20151211*
Caelo	Base cream, hydr...	154213	31907	40	20151211*
apomix	Hydrophilic crea...	25B081215	31962	40	20151209
Caelo	Hydrophilic crea...	153656	31996	40	20151211*
Caelo	Anionic hydrophi...	154004	32022	40	20151117*
Caelo	Anionic hydrophi...	153971	32039	40	20151113*
Caelo	Anionic hydrophi...	153573	32052	40	20151015*
Caelo	Anionic hydrophi...	153295	32123	40	20150924*
Caelo	Anionic hydrophi...	160673	32132	40	20160310*
Caelo	Anionic hydrophi...	160677	32142	40	20160310*
Pharmachem	Base cream, hydr...	160825	32303	40	20160517
Fagron	Transdermal base...	15A28-T10-018922	32346	40	20150804
Caelo	Anionic hydrophi...	161525	32435	40	20160518*
Caelo	Anionic hydrophi...	161916	32620	40	20160630*
Caelo	Anionic hydrophi...	161917	32621	40	20160630*
Caelo	Anionic hydrophi...	162901	32882	40	20161018*
Pharmachem	Skin care ointme...	170117	33295	40	20180131
Caelo	Anionic hydrophi...	171023	33354	40	20170419*
Caelo	Base cream, hydr...	171920	33595	40	20170710*
apomix	Skin care ointme...	24B200617	33641	40	20170620
Fagron	Base cream, hydr...	17C06-T08-042287	33964	40	20170425

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 2290 spectra of 57 reference samples from the substance/substance group *Hydrophilic ointments*. These samples are listed above in the [calibration samples](#) section.
- 33 545 spectra from a total of 791 batches from further 203 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 13 443 spectra of 325 reference samples from the substance/substance group *Hydrophilic ointments*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Base cream, hydrophobic DAC	12025003	30467	20
Caelo	Anionic hydrophilic cream wi...	12117002	30577	40
apomix	Skin care ointment W/L SR	10A050214	31503 [†]	20
apomix	Hydrophilic cream, non-ionic...	14B240614	31516	60
apomix	Anionic hydrophilic cream wit...	11B020914	31537 [†]	20
apomix	Hydrophilic cream, non-ionic...	22B061114	31565 [†]	20
Bombastus	Hydrophilic cream, non-ionic...	288882	31568 [†]	20
Caelo	Hydrophilic cream, non-ionic...	14304902	31591 [†]	20
Fagron	Hydrophilic cream, non-ionic...	14E07-M04	31593 [†]	20
apomix	Hydrophilic cream, non-ionic...	01B120115	31599 [†]	20
apomix	Skin care ointment W/L SR (w...	31B020714	31600 [†]	20
Pharmachem	Base cream, hydrophobic DAC	150404	31644 [†]	20
apomix	Anionic hydrophilic cream wit...	05B200415	31661 [†]	20
Caelo	Anionic hydrophilic cream wi...	15048501	31741 [†]	20
Caelo	Base cream, hydrophobic DAC	15221202	31799 [†]	20
Caelo	Base cream, hydrophobic DAC	154212	31906 [†]	20
Caelo	Base cream, hydrophobic DAC	154213	31907 [†]	20
Caelo	Base cream, hydrophobic DAC	154214	31908	60
apomix	Hydrophilic cream, non-ionic...	25B081215	31962 [†]	20
Caelo	Hydrophilic cream, non-ionic...	160175	31994	60
Caelo	Hydrophilic cream, non-ionic...	153258	31995	60
Caelo	Anionic hydrophilic cream DAB	154004	32022 [†]	20
Caelo	Anionic hydrophilic cream DAB	154005	32023	60
Caelo	Anionic hydrophilic cream DAB	154007	32024	60
Caelo	Anionic hydrophilic cream DAB	154009	32025	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	154012	32026	60
Caelo	Anionic hydrophilic cream DAB	154012	32027	60
Caelo	Anionic hydrophilic cream DAB	154013	32028	60
Caelo	Anionic hydrophilic cream DAB	154014	32029	60
Caelo	Anionic hydrophilic cream DAB	154015	32030	60
Caelo	Anionic hydrophilic cream DAB	154317	32031	60
Caelo	Anionic hydrophilic cream DAB	154317	32032	60
Caelo	Anionic hydrophilic cream DAB	154321	32033	60
Caelo	Anionic hydrophilic cream DAB	154321	32034	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
Caelo	Anionic hydrophilic cream DAB	153971	32038	60
Caelo	Anionic hydrophilic cream DAB	153971	32039 [†]	20
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	153969	32044	60
Caelo	Anionic hydrophilic cream DAB	154281	32045	60
Caelo	Anionic hydrophilic cream DAB	154282	32046	45
Caelo	Anionic hydrophilic cream DAB	154282	32047	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	153573	32052 [†]	20
Caelo	Anionic hydrophilic cream DAB	153573	32053	60
Caelo	Anionic hydrophilic cream DAB	153575	32054	60
Caelo	Anionic hydrophilic cream DAB	154284	32055	60
Caelo	Anionic hydrophilic cream DAB	154284	32056	60
Caelo	Anionic hydrophilic cream DAB	153194	32057	60
Caelo	Anionic hydrophilic cream DAB	154281	32058	60
Caelo	Anionic hydrophilic cream DAB	154285	32059	60
Caelo	Anionic hydrophilic cream DAB	154285	32060	60
Caelo	Anionic hydrophilic cream DAB	154283	32061	60
Caelo	Anionic hydrophilic cream DAB	154283	32062	60
Caelo	Anionic hydrophilic cream DAB	153968	32063	60
Caelo	Anionic hydrophilic cream SR...	161075	32115	40
Caelo	Anionic hydrophilic cream SR...	161075	32116	40
Caelo	Hydrophilic cream, non-ionic...	161141	32119	40
Caelo	Hydrophilic cream, non-ionic...	161141	32120	40
Caelo	Hydrophilic cream, non-ionic...	161142	32121	40
Caelo	Hydrophilic cream, non-ionic...	161142	32122	40
Caelo	Anionic hydrophilic cream SR...	153296	32124	40
Caelo	Anionic hydrophilic cream SR...	153865	32125	40
Caelo	Anionic hydrophilic cream SR...	153866	32126	40
Caelo	Anionic hydrophilic cream SR...	160196	32127	40
Caelo	Anionic hydrophilic cream SR...	160198	32128	40
Caelo	Anionic hydrophilic cream wi...	160673	32129	40
Caelo	Anionic hydrophilic cream wi...	160673	32130	40
Caelo	Anionic hydrophilic cream wi...	160673	32131	40
Caelo	Anionic hydrophilic cream wi...	160674	32133	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	32137	40
Caelo	Anionic hydrophilic cream wi...	160675	32138	40
Caelo	Anionic hydrophilic cream wi...	160676	32139	40
Caelo	Anionic hydrophilic cream wi...	160676	32140	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream wi...	160677	32141	40
Caelo	Anionic hydrophilic cream wi...	160678	32143	40
Caelo	Anionic hydrophilic cream wi...	160679	32144	40
Caelo	Anionic hydrophilic cream DAB	160578	32145	40
Caelo	Anionic hydrophilic cream DAB	161031	32146	40
Caelo	Anionic hydrophilic cream DAB	161031	32147	40
Caelo	Anionic hydrophilic cream DAB	161033	32148	40
Caelo	Base cream, hydrophobic DAC	160748	32149	40
Caelo	Base cream, hydrophobic DAC	160748	32150	40
Caelo	Base cream, hydrophobic DAC	160749	32151	40
Caelo	Base cream, hydrophobic DAC	160749	32152	40
Caelo	Base cream, hydrophobic DAC	160751	32153	40
Caelo	Base cream, hydrophobic DAC	160751	32154	40
Caelo	Base cream, hydrophobic DAC	160750	32155	40
Caelo	Base cream, hydrophobic DAC	160752	32156	40
Caelo	Anionic hydrophilic cream DAB	161510	32218	40
Caelo	Anionic hydrophilic cream DAB	161510	32219	40
Caelo	Anionic hydrophilic cream DAB	161507	32220	40
Caelo	Anionic hydrophilic cream DAB	161507	32221	40
Caelo	Anionic hydrophilic cream DAB	161508	32222	40
Caelo	Anionic hydrophilic cream SR...	161267	32225	40
Caelo	Base cream, hydrophobic DAC	160750	32226	40
Caelo	Base cream, hydrophobic DAC	161654	32370	41
Caelo	Base cream, hydrophobic DAC	161654	32371	41
Caelo	Base cream, hydrophobic DAC	161655	32372	41
Caelo	Base cream, hydrophobic DAC	161655	32373	41
Caelo	Base cream, hydrophobic DAC	161656	32374	41
Caelo	Base cream, hydrophobic DAC	161656	32375	40
Caelo	Base cream, hydrophobic DAC	161657	32376	41
Caelo	Base cream, hydrophobic DAC	161657	32377	41
Caelo	Base cream, hydrophobic DAC	161742	32378	41
Caelo	Hydrophilic cream, non-ionic...	161694	32382	40
Caelo	Hydrophilic cream, non-ionic...	161694	32383	40
Caelo	Hydrophilic cream, non-ionic...	161695	32384	40
Caelo	Hydrophilic cream, non-ionic...	161695	32385	40
Caelo	Anionic hydrophilic cream SR...	162155	32386	40
Caelo	Anionic hydrophilic cream SR...	162156	32387	40
Caelo	Anionic hydrophilic cream SR...	162157	32388	40
Caelo	Anionic hydrophilic cream wi...	161918	32422	40
Caelo	Anionic hydrophilic cream wi...	161918	32423	40
Caelo	Anionic hydrophilic cream wi...	161919	32424	40
Caelo	Anionic hydrophilic cream wi...	161919	32425	40
Caelo	Anionic hydrophilic cream DAB	161506	32426	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	32431	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	161525	32436	40
Caelo	Anionic hydrophilic cream DAB	161529	32437	40
Caelo	Anionic hydrophilic cream DAB	161529	32438	40
Caelo	Anionic hydrophilic cream DAB	161529	32439	40
Caelo	Anionic hydrophilic cream DAB	161526	32440	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	32444	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream DAB	161527	32445	40
Caelo	Anionic hydrophilic cream DAB	161527	32446	40
Caelo	Anionic hydrophilic cream DAB	161528	32447	40
Caelo	Anionic hydrophilic cream DAB	161528	32448	40
Caelo	Anionic hydrophilic cream DAB	161528	32449	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	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	Anionic hydrophilic cream SR...	162586	32550	40
Caelo	Anionic hydrophilic cream SR...	162587	32551	40
Caelo	Anionic hydrophilic cream SR...	162587	32552	40
Caelo	Anionic hydrophilic cream SR...	162587	32553	40
Caelo	Hydrophilic cream, non-ionic...	161694	32582	40
Caelo	Hydrophilic cream, non-ionic...	161695	32583	40
Caelo	Hydrophilic cream, non-ionic...	162220	32584	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	32596	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	32602	40
Caelo	Hydrophilic cream, non-ionic...	162579	32603	40
Caelo	Anionic hydrophilic cream wi...	161915	32619	40
Caelo	Anionic hydrophilic cream wi...	161918	32622	40
Caelo	Anionic hydrophilic cream wi...	161919	32623	40
Caelo	Anionic hydrophilic cream DAB	161561	32642	40
Caelo	Anionic hydrophilic cream DAB	161563	32643	40
Caelo	Anionic hydrophilic cream DAB	161589	32644	40
Caelo	Anionic hydrophilic cream DAB	161796	32645	40
Caelo	Anionic hydrophilic cream DAB	161796	32646	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	162500	32650	40
Caelo	Anionic hydrophilic cream DAB	162501	32651	40
Caelo	Anionic hydrophilic cream DAB	162501	32652	40
Caelo	Anionic hydrophilic cream DAB	162502	32653	40
Caelo	Anionic hydrophilic cream DAB	162589	32654	40
Caelo	Anionic hydrophilic cream DAB	162589	32655	40
Caelo	Anionic hydrophilic cream DAB	162590	32656	40
Caelo	Anionic hydrophilic cream DAB	162590	32657	40
Caelo	Anionic hydrophilic cream DAB	162591	32658	40
Caelo	Anionic hydrophilic cream DAB	162591	32659	40
Caelo	Anionic hydrophilic cream DAB	162591	32660	40
Caelo	Anionic hydrophilic cream DAB	162592	32661	40
Caelo	Anionic hydrophilic cream DAB	162592	32662	40
Caelo	Anionic hydrophilic cream DAB	162593	32663	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

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Anionic hydrophilic cream DAB	162594	32667	40
Caelo	Anionic hydrophilic cream DAB	162594	32668	40
Caelo	Anionic hydrophilic cream DAB	162596	32669	40
Caelo	Anionic hydrophilic cream DAB	162596	32670	40
Caelo	Anionic hydrophilic cream DAB	162596	32671	40
Caelo	Anionic hydrophilic cream DAB	162597	32672	40
Caelo	Anionic hydrophilic cream DAB	162597	32673	40
Caelo	Anionic hydrophilic cream DAB	162599	32674	40
Caelo	Anionic hydrophilic cream DAB	162599	32675	40
Caelo	Anionic hydrophilic cream DAB	162600	32676	40
Caelo	Anionic hydrophilic cream DAB	162600	32677	40
Caelo	Anionic hydrophilic cream DAB	162645	32678	40
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	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 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 DAB	170451	33122	40
Caelo	Anionic hydrophilic cream DAB	170452	33123	40
Caelo	Anionic hydrophilic cream SR...	170419	33125	40
Caelo	Base cream, hydrophobic DAC	170732	33127	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 SR...	170418	33139	40
Caelo	Anionic hydrophilic cream DAB	163281	33170	40
Caelo	Anionic hydrophilic cream DAB	163282	33171	40
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	Hydrophilic cream, non-ionic...	170097	33187	40
apomix	Skin care ointment W/L SR (w...	14B060417	33264	40
apomix	Hydrophilic cream, non-ionic...	07B030417	33283	40
Pharmachem	Skin care ointment W/L SR	180117	33294	40
Caelo	Anionic hydrophilic cream SR...	171258	33338	40
Caelo	Anionic hydrophilic cream SR...	171442	33339	40
Caelo	Anionic hydrophilic cream wi...	171021	33350	40
Caelo	Anionic hydrophilic cream wi...	171024	33351	40
Caelo	Anionic hydrophilic cream wi...	170302	33352	40
Caelo	Anionic hydrophilic cream wi...	171020	33353	40
Caelo	Anionic hydrophilic cream wi...	171022	33355	40
Caelo	Anionic hydrophilic cream wi...	170299	33356	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	171504	33377	40
Caelo	Hydrophilic cream, non-ionic...	171134	33378	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydrophilic cream, non-ionic...	171140	33379	40
Fagron	Transdermal base cream	1609813	33479	40
Dr. Wolff	Wolff® base half-fat cream	702500	33484	40
Dr. Wolff	Wolff® base half-fat cream	701451	33485	40
apomix	Anionic hydrophilic cream wit...	05B310517	33516	40
apomix	Anionic hydrophilic cream wit...	05B310517	33517	40
Caelo	Hydrophilic cream, non-ionic...	172126	33551	40
Caelo	Anionic hydrophilic cream SR...	172117	33552	40
Caelo	Anionic hydrophilic cream SR...	172118	33553	40
Caelo	Anionic hydrophilic cream wi...	171565	33557	40
Caelo	Anionic hydrophilic cream wi...	171566	33558	40
Caelo	Anionic hydrophilic cream wi...	171854	33559	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
apomix	Skin care ointment W/L SR	31A130717	33627	40
apomix	Hydrophilic cream, non-ionic...	16B230817	33643	40
Caelo	Hydrophilic cream, non-ionic...	172610	33754	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 SR...	172568	33768	40
Caelo	Anionic hydrophilic cream SR...	172569	33769	40
apomix	Skin care ointment W/L SR (w...	37A021117	33792	40
apomix	Anionic hydrophilic cream wit...	01B080118	33947	40
Caelo	Hydrophilic cream, non-ionic...	173139	34019	40
Caelo	Hydrophilic cream, non-ionic...	172940	34020	40
Caelo	Anionic hydrophilic cream SR...	172944	34021	40
Caelo	Anionic hydrophilic cream SR...	173195	34022	40
Caelo	Base cream, hydrophobic DAC	172552	34023	40
Caelo	Anionic hydrophilic cream wi...	173353	34028	40
Caelo	Anionic hydrophilic cream wi...	180414	34140	40
Caelo	Hydrophilic cream, non-ionic...	180503	34144	40
Caelo	Hydrophilic cream, non-ionic...	181752	34145	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	Base cream, hydrophobic DAC	180512	34163	40
Caelo	Base cream, hydrophobic DAC	181739	34164	40
Fagron	Transdermal base cream	1802650/2	34204	40
Caelo	Anionic hydrophilic cream SR...	182181	34260	40
Caelo	Anionic hydrophilic cream wi...	181808	34262	40
Caelo	Anionic hydrophilic cream DAB	182434	34264	40
Caelo	Base cream, hydrophobic DAC	182398	34269	40
Caelo	Hydrophilic cream, non-ionic...	182180	34272	40
Caelo	Base cream, hydrophobic DAC	182867	34306	40
Caelo	Hydrophilic cream, non-ionic...	182595	34310	40
Caelo	Anionic hydrophilic cream wi...	182973	34316	40
Caelo	Anionic hydrophilic cream wi...	182483	34350	40

- 65 635 spectra from a total of 1601 batches from further 340 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.

- 11 972 spectra from 535 *Apo-Ident* customers from 3448 batches from the substance/substance group *Hydrophilic ointments*.

Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	11289204	1
Caelo	Base cream, hydrophobic DAC	11038802	2
Caesar & Loretz GmbH, 4...	Base cream, hydrophobic DAC	11289203	1
Noweda	Base cream, hydrophobic DAC	11289203	1
Caelo	Base cream, hydrophobic DAC	11341301	2
Caelo	Base cream, hydrophobic DAC	113401301	1
Caelo	Base cream, hydrophobic DAC	11222003	1
Caelo	Base cream, hydrophobic DAC	11222002	1
Caelo	Base cream, hydrophobic DAC	11153902	1
Bombastus	Base cream, hydrophobic DAC	264854	1
Taoasis	Base cream, hydrophobic DAC	120214-2023	1
Caelo	Base cream, hydrophobic DAC	11341402	2
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	131211	2
Caelo	Base cream, hydrophobic DAC	12025002	2
Pharmachem	Base cream, hydrophobic DAC	131211	1
Caelo	Base cream, hydrophobic DAC	12064705	6
Bombastus	Base cream, hydrophobic DAC	271092	3
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	90512	3
Caelo	Base cream, hydrophobic DAC	12025003	1
Noweda	Base cream, hydrophobic DAC	12025002	1
Caelo	Base cream, hydrophobic DAC	12064704	5
Caelo	Base cream, hydrophobic DAC	12064703	1
Bombastus	Base cream, hydrophobic DAC	269276	1
Caelo	Base cream, hydrophobic DAC	12064047	1
Caelo	Base cream, hydrophobic DAC	12151601	9
Taoasis	Base cream, hydrophobic DAC	120601-2137	1
Taoasis	Base cream, hydrophobic DAC	120719-2199	1
Caelo	Base cream, hydrophobic DAC	12151602	6
Bombastus	Base cream, hydrophobic DAC	271091	1
Fagron	Base cream, hydrophobic DAC	12G026-0001	1
Pharmachem GmbH	Base cream, hydrophobic DAC	120712	1
Caelo	Base cream, hydrophobic DAC	2111201	1
Anzag 30.10.12 ek:12,68EUR	Base cream, hydrophobic DAC	12151601	1
Phamachem GmbH	Base cream, hydrophobic DAC	120712	2
Sanacorp	Base cream, hydrophobic DAC	12151602	1
Caelo	Base cream, hydrophobic DAC	12217603	6
Caelo	Base cream, hydrophobic DAC	1215601	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	120712	2
Noweda/ Ichtyol	Base cream, hydrophobic DAC	12151601	2

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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	Base cream, hydrophobic DAC	12229302	7
Sanacorp	Base cream, hydrophobic DAC	12308102	2
Caelo	Base cream, hydrophobic DAC	12308102	4
Taoasis	Base cream, hydrophobic DAC	121205-2299	1
Taoasis	Base cream, hydrophobic DAC	121205-2276	1
Caelo	Base cream, hydrophobic DAC	12308201	5
Bombastus	Base cream, hydrophobic DAC	271093	1
Sanacorp	Base cream, hydrophobic DAC	12229304	1
Caelo	Base cream, hydrophobic DAC	12229304	1
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	261112	2
Fagron	Base cream, hydrophobic DAC	513A-03497	1
Fagron	Base cream, hydrophobic DAC	12G09-T03	2
Bombastus	Base cream, hydrophobic DAC	12229302	1
Fagron	Base cream, hydrophobic DAC	12D10-T02	1
Fagron	Base cream, hydrophobic DAC	12J24-T01	5
Pharmachem GmbH	Base cream, hydrophobic DAC	261112	3
Pharmachem Pöckneck 004	Base cream, hydrophobic DAC	261112	1
Caelo	Base cream, hydrophobic DAC	123082011	1
Anzag/Pharmachem	Base cream, hydrophobic DAC	120712	2
Bombastus	Base cream, hydrophobic DAC	276085	1
Sanacorp	Base cream, hydrophobic DAC	13019303	1
Caelo	Base cream, hydrophobic DAC	12308103	1
Caesar & Loretz GmbH, 4. . .	Base cream, hydrophobic DAC	13019303	1
Caelo	Base cream, hydrophobic DAC	13019303	14
Caelo	Base cream, hydrophobic DAC	13019304	3
Caelo	Base cream, hydrophobic DAC	12308202	2
Pharmachem GmbH	Base cream, hydrophobic DAC	240113	2
Caelo	Base cream, hydrophobic DAC	13019302	6
Caelo	Base cream, hydrophobic DAC	1309302	1
AHD, 02.04.2013	Base cream, hydrophobic DAC	12308102	1
Taoasis	Base cream, hydrophobic DAC	130124-3021	1
Taoasis	Base cream, hydrophobic DAC	130312-3053	1
Phönix Gotha	Base cream, hydrophobic DAC	276087	2
Pharmachen Pöckneck	Base cream, hydrophobic DAC	261112	1
Bombastus	Base cream, hydrophobic DAC	276087	1
Caelo	Base cream, hydrophobic DAC	13085601	12
Hirsch	Base cream, hydrophobic DAC	12J24-T01	2
Caelo	Base cream, hydrophobic DAC	13086701	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	240113	2
Phönix Gotha	Base cream, hydrophobic DAC	277696	1
Caelo	Base cream, hydrophobic DAC	13085701	20
Anzag 07.05.13 ek:12,66EUR	Base cream, hydrophobic DAC	12229302	1
calo	Base cream, hydrophobic DAC	13072602	3
Pharmachem/AHD	Base cream, hydrophobic DAC	26112	1
Fagron	Base cream, hydrophobic DAC	13B04-T17-001040	1
Sanacorp	Base cream, hydrophobic DAC	13085701	1
Caelo	Base cream, hydrophobic DAC	13072602	5
Caelo	Base cream, hydrophobic DAC	13085602	7
Bombastus	Base cream, hydrophobic DAC	279147	2
Gehe	Base cream, hydrophobic DAC	13019304	1
Caelo	Base cream, hydrophobic DAC	13B04-T17-001037	2
Pharmachem/AHD	Base cream, hydrophobic DAC	261112	1
Pharmachem	Base cream, hydrophobic DAC	110413	7
Bombastus	Base cream, hydrophobic DAC	277696	1
pharmachen	Base cream, hydrophobic DAC	240113	1
Noweda	Base cream, hydrophobic DAC	110413	2
Phoenix/Pharmachem	Base cream, hydrophobic DAC	110413	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	240113	1
Bombastus	Base cream, hydrophobic DAC	279145	2
Caelo	Base cream, hydrophobic DAC	13085504	2

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	13127502	2
Fagron	Base cream, hydrophobic DAC	13B04-T17-001037	4
Bombastus	Base cream, hydrophobic DAC	271095	1
Caelo	Base cream, hydrophobic DAC	13175901	15
Bombastus	Base cream, hydrophobic DAC	279148	3
Caelo	Base cream, hydrophobic DAC	13176003	11
Phönix	Base cream, hydrophobic DAC	13085701	1
Caelo	Base cream, hydrophobic DAC	13175902	8
Sanacorp	Base cream, hydrophobic DAC	13175902	2
Phoenix	Base cream, hydrophobic DAC	13175902	1
Sanacorp	Base cream, hydrophobic DAC	13175901	3
PharmaChem	Base cream, hydrophobic DAC	110413	1
Pharmachem/AHD	Base cream, hydrophobic DAC	110413	2
Gehe	Base cream, hydrophobic DAC	12308102	1
Caelo	Base cream, hydrophobic DAC	230713	3
pharmachem	Base cream, hydrophobic DAC	110413	1
Taoasis	Base cream, hydrophobic DAC	130719-3198	1
Caelo	Base cream, hydrophobic DAC	13085702	1
Caelo	Base cream, hydrophobic DAC	13176002	2
Bombastus	Base cream, hydrophobic DAC	280809	1
Caelo	Base cream, hydrophobic DAC	13275301	11
Fagron	Base cream, hydrophobic DAC	13E13-T01-003619	6
Pharmachem/AHD	Base cream, hydrophobic DAC	230713	1
Sanacorp	Base cream, hydrophobic DAC	13275301	2
Pharmachem/Gehe	Base cream, hydrophobic DAC	21013	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	13275302	2
Gehe	Base cream, hydrophobic DAC	13175902	1
Caelo	Base cream, hydrophobic DAC	13275302	7
Pharmachem / Anzag	Base cream, hydrophobic DAC	230713	2
Sanacorp	Base cream, hydrophobic DAC	13275302	2
Fagron	Base cream, hydrophobic DAC	13E13T01003619	1
Ahd/PharmachemPößneck	Base cream, hydrophobic DAC	21013	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	21013	1
Caelo	Base cream, hydrophobic DAC	13274902	2
Caelo	Base cream, hydrophobic DAC	13275303	5
Bombastus	Base cream, hydrophobic DAC	284170	1
Pharmachem	Base cream, hydrophobic DAC	230713	1
Gehe	Base cream, hydrophobic DAC	13386402	1
Caelo	Base cream, hydrophobic DAC	21122013B	1
Fagron	Base cream, hydrophobic DAC	13E13-T01-003620	1
Caelo	Base cream, hydrophobic DAC	13386403	3
Fagron	Base cream, hydrophobic DAC	13H13-T06-006165	5
Caesar&lorenz,Phoenix	Base cream, hydrophobic DAC	13386401	1
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	21013	1
Pharmachem/30	Base cream, hydrophobic DAC	21013	1
Fagron	Base cream, hydrophobic DAC	13H13T06	1
Pharmachen	Base cream, hydrophobic DAC	21013	1
Phönix	Base cream, hydrophobic DAC	13386402	2
Caelo	Base cream, hydrophobic DAC		12
cealo	Base cream, hydrophobic DAC	13274902	1
Euro OTC	Base cream, hydrophobic DAC		1
Gehe	Base cream, hydrophobic DAC	13175901	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	21013	1
Pharmachen	Base cream, hydrophobic DAC	240113	1
Bombastus	Base cream, hydrophobic DAC	282163	1
Bombastus	Base cream, hydrophobic DAC	280811	2
Bombastus	Base cream, hydrophobic DAC	282162	2
Caelo	Base cream, hydrophobic DAC	13386401	12
Pharmachem/Noweda	Base cream, hydrophobic DAC	230713	1
Caelo	Base cream, hydrophobic DAC	14000701	19

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	14000601	7
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	231213	2
Pharmachem	Base cream, hydrophobic DAC	21013	1
Phönix	Base cream, hydrophobic DAC	14000701	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	13386401	2
Caelo	Base cream, hydrophobic DAC	410211-1-P	1
Caelo	Base cream, hydrophobic DAC	14028002	2
Pharmachem	Base cream, hydrophobic DAC	231213	1
Pharmachen	Base cream, hydrophobic DAC	231213	1
Bombastus	Base cream, hydrophobic DAC	282161	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14000701	3
Pharmachem/Noweda	Base cream, hydrophobic DAC	231213	1
Pharmachem/AHD	Base cream, hydrophobic DAC	231213	2
PharmaChin/ Anzag	Base cream, hydrophobic DAC	230713	1
Caelo	Base cream, hydrophobic DAC	14061601	5
Caelo	Base cream, hydrophobic DAC	14028101	22
Pharmachem/Gehe	Base cream, hydrophobic DAC	231213	1
pharmachem	Base cream, hydrophobic DAC	231213	1
Bombastus	Base cream, hydrophobic DAC	284171	1
Fagron	Base cream, hydrophobic DAC	14A06T08009038	1
Sanacorp	Base cream, hydrophobic DAC	140885	1
Fagron	Base cream, hydrophobic DAC	13E13-T06-006	2
Caelo	Base cream, hydrophobic DAC	14028102	10
Caelo	Base cream, hydrophobic DAC	13H13-T06-006165	1
Caelo	Base cream, hydrophobic DAC	140885	1
Bombastus	Base cream, hydrophobic DAC	285437	2
Pharmachem	Base cream, hydrophobic DAC	140885	1
Pharmachem GmbH	Base cream, hydrophobic DAC	140885	1
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	230713	1
Pharmachen	Base cream, hydrophobic DAC	140885	1
Bombastus	Base cream, hydrophobic DAC	285435	2
Caelo	Base cream, hydrophobic DAC	282163	1
Caesar & Lorenz	Base cream, hydrophobic DAC	14061501	1
Phoenix	Base cream, hydrophobic DAC	14028101	1
Fagron	Base cream, hydrophobic DAC	14A06-T08-009037	6
Phoenix	Base cream, hydrophobic DAC	14061501	2
Pharmachem	Base cream, hydrophobic DAC	140886	2
Pharmachem GmbH	Base cream, hydrophobic DAC	140886	1
Fagron	Base cream, hydrophobic DAC	14A06-T07-009033	3
Caelo	Base cream, hydrophobic DAC	14061501	18
Caelo	Base cream, hydrophobic DAC	1400701	1
Caelo	Base cream, hydrophobic DAC	14061402	5
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	140886	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	140318	1
Caelo	Base cream, hydrophobic DAC	1406140	1
Bombastus	Base cream, hydrophobic DAC	285434	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14061501	3
Fagron	Base cream, hydrophobic DAC	13H13-T06	2
Bombastus	Base cream, hydrophobic DAC	284173	1
	Base cream, hydrophobic DAC	141318	1
Pharmachem/ /Sanacorp	Base cream, hydrophobic DAC	140885	1
Bombastus	Base cream, hydrophobic DAC	286515	1
Faoron/Anzag	Base cream, hydrophobic DAC	14A06-T08-009037	4
Faoron/anzag	Base cream, hydrophobic DAC	14A06-t08-009037	1
Pharmachem Pösneck/ Now...	Base cream, hydrophobic DAC	141318	1
Raben-Apotheke Mildenau	Base cream, hydrophobic DAC	14061501	4
Fagron	Base cream, hydrophobic DAC	13T13-T06-006166	1
Pharmachen	Base cream, hydrophobic DAC	141318	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	141318	1
Bombastus	Base cream, hydrophobic DAC	286516	3

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Supplier	Substance	Batch	Spectra
pharmachem	Base cream, hydrophobic DAC	140886	1
Kehr / Pharmachem	Base cream, hydrophobic DAC	141489	1
PharmaChem	Base cream, hydrophobic DAC	141318	2
Noweda	Base cream, hydrophobic DAC	14028101	1
Pharmachem	Base cream, hydrophobic DAC	141317	2
PHARMACHEM / 20	Base cream, hydrophobic DAC	140885	1
Pharmachem Anzag	Base cream, hydrophobic DAC	141318	1
caesar & Loretz GmbH	Base cream, hydrophobic DAC	14061601	2
Caelo	Base cream, hydrophobic DAC	14145401	24
Caelo	Base cream, hydrophobic DAC	14120903	3
Caelo	Base cream, hydrophobic DAC	286516	4
Phoenix	Base cream, hydrophobic DAC	14145401	2
Bombastus	Base cream, hydrophobic DAC	286514	2
Pharmachem/ Noweda	Base cream, hydrophobic DAC	141489	1
AHD	Base cream, hydrophobic DAC	14145401	1
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	141489	1
PHOENIX 11.09.2014	Base cream, hydrophobic DAC	14061501	1
Pharmachem/ Sanacorp	Base cream, hydrophobic DAC	140886	1
Caelo	Base cream, hydrophobic DAC	14145301	18
Phönix	Base cream, hydrophobic DAC	14061501	1
Pharmachem/30	Base cream, hydrophobic DAC	141317	2
Phönix	Base cream, hydrophobic DAC	14145301	1
Caelo	Base cream, hydrophobic DAC	14207002	3
Bombastus	Base cream, hydrophobic DAC	288499	4
Caelo	Base cream, hydrophobic DAC	14145202	4
Caelo	Base cream, hydrophobic DAC	142154	2
Pharmachem/GEHE	Base cream, hydrophobic DAC	141489	1
Bombastus	Base cream, hydrophobic DAC	60080401	2
Pharmachem	Base cream, hydrophobic DAC	142154	5
Bombastus	Base cream, hydrophobic DAC	289720	2
Caelo	Base cream, hydrophobic DAC	1414501	2
Pharmachem/ Noweda	Base cream, hydrophobic DAC	142154	1
Pharmachem	Base cream, hydrophobic DAC	142155	2
Bombastus	Base cream, hydrophobic DAC	288497	4
Pharmachem/Gehe	Base cream, hydrophobic DAC	141489	1
Noweda/Pharmachem	Base cream, hydrophobic DAC	142154	1
Caesar & Lorenz	Base cream, hydrophobic DAC	14028002	1
GEHE 08.12.2014	Base cream, hydrophobic DAC	14145301	1
pharmachem Pöckneck	Base cream, hydrophobic DAC	143119	1
Fagron	Base cream, hydrophobic DAC	14215701	2
Gehe/apomix/17.12.2014	Base cream, hydrophobic DAC	289719	1
Caelo	Base cream, hydrophobic DAC	14215701	8
Sanacorp/ Pharmachem	Base cream, hydrophobic DAC	142155	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	143094	1
Caelo	Base cream, hydrophobic DAC	13012015A	1
Pharmachen	Base cream, hydrophobic DAC	142154	3
Pröckneck	Base cream, hydrophobic DAC	142154	2
Fagron	Base cream, hydrophobic DAC	14E06-T13-012209	1
Noweda/Pharmachem0	Base cream, hydrophobic DAC	143094	1
Bombastus	Base cream, hydrophobic DAC	289718	1
Berkel AHK	Base cream, hydrophobic DAC	14145401	1
Caelo	Base cream, hydrophobic DAC	14335501	12
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	143093	2
Gehe	Base cream, hydrophobic DAC	289721	1
Pharmachem	Base cream, hydrophobic DAC	143094	7
Pharmachem/Noweda	Base cream, hydrophobic DAC	142154	2
Caelo	Base cream, hydrophobic DAC	10022015F	1
Pharmachem	Base cream, hydrophobic DAC	143093	6
pharmachem/spangro	Base cream, hydrophobic DAC	142154	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	141318	1

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream, hydrophobic DAC	143093	1
Caelo	Base cream, hydrophobic DAC	230115/2	1
Pharamachem/Alliance He...	Base cream, hydrophobic DAC	142154	1
Caelo	Base cream, hydrophobic DAC	14335502	11
Caelo	Base cream, hydrophobic DAC	289720	1
Sanacorp	Base cream, hydrophobic DAC	4/AKD3	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	14335501	2
AH 24.02.15	Base cream, hydrophobic DAC	14335502	1
Caelo	Base cream, hydrophobic DAC	15001002	10
Pharmachem	Base cream, hydrophobic DAC	141489	1
Gehe 10.03.15	Base cream, hydrophobic DAC	143094	2
Caelo	Base cream, hydrophobic DAC	10032015B	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	143093	1
Bombastus	Base cream, hydrophobic DAC	289717	1
Caesar&Loretz GmbH/Anzag	Base cream, hydrophobic DAC	14145301	1
Bombastus	Base cream, hydrophobic DAC	291593	3
Caelo	Base cream, hydrophobic DAC	14379902	4
Caelo	Base cream, hydrophobic DAC	5013q-03497	1
Caelo	Base cream, hydrophobic DAC	18031505	1
Caesar/Noweda	Base cream, hydrophobic DAC	15001002	1
Caelo	Base cream, hydrophobic DAC	14335601	4
Caelo	Base cream, hydrophobic DAC	14145402	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	143094	3
Pharmachem Pößneck/Sana...	Base cream, hydrophobic DAC	143093	2
Caelo	Base cream, hydrophobic DAC	15001001	9
Bombastus	Base cream, hydrophobic DAC	293162	3
Bombastus	Base cream, hydrophobic DAC	291590	4
Caelo	Base cream, hydrophobic DAC	15046402	6
Pharmachem/ Noweda	Base cream, hydrophobic DAC	143094	1
Caelo	Base cream, hydrophobic DAC	15048701	13
Caesar&loretz,Phoenix	Base cream, hydrophobic DAC	14335502	1
Caesar&loretz,Phoenix	Base cream, hydrophobic DAC	15001002	1
Caelo	Base cream, hydrophobic DAC	15046401	11
Pharmachen	Base cream, hydrophobic DAC	143094	1
Gehe,27.0415	Base cream, hydrophobic DAC	15001003	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	143094	1
Phoenix	Base cream, hydrophobic DAC	15001001	1
Pharmachem	Base cream, hydrophobic DAC	150404	3
Caelo	Base cream, hydrophobic DAC	15030702	1
Caelo	Base cream, hydrophobic DAC	150405	1
Bombastus	Base cream, hydrophobic DAC	293167	1
Caelo	Base cream, hydrophobic DAC	15001003	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15048701	2
Pharmachem	Base cream, hydrophobic DAC	151257	5
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15046401	1
Phönix 01.06.15	Base cream, hydrophobic DAC	15048701	2
Pharmachem Pößneck/Sana...	Base cream, hydrophobic DAC	151257	1
Fagron	Base cream, hydrophobic DAC	14L18-T21-018127	1
Caelo	Base cream, hydrophobic DAC	151259	3
Caelo	Base cream, hydrophobic DAC	15111403	3
Bombastus	Base cream, hydrophobic DAC	293163	5
Caelo	Base cream, hydrophobic DAC	15132503	3
Pharmachem/Gehe	Base cream, hydrophobic DAC	151259	5
Caelo	Base cream, hydrophobic DAC	1435501	1
Caelo	Base cream, hydrophobic DAC	293163	1
Fagron	Base cream, hydrophobic DAC	14H04-T05-014482	6
Pharmachem	Base cream, hydrophobic DAC	151259	5
Caelo	Base cream, hydrophobic DAC	15111402	14
Pharmachem GmbH/Noweda	Base cream, hydrophobic DAC	150405	1
Pharmachen Pößneck	Base cream, hydrophobic DAC	150405	2

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Supplier	Substance	Batch	Spectra
Bombastus	Base cream, hydrophobic DAC	293168	4
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	151259	2
pharma/phönix	Base cream, hydrophobic DAC	143094	1
pharmachem	Base cream, hydrophobic DAC	151258	2
Caelo	Base cream, hydrophobic DAC	15111401	5
Caelo	Base cream, hydrophobic DAC	15048702	3
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15111402	1
Anzag	Base cream, hydrophobic DAC	151257	1
Pöskneck Pharma / Gehe	Base cream, hydrophobic DAC	151258	1
Pharmachem Anzag	Base cream, hydrophobic DAC	151257	1
Caelo	Base cream, hydrophobic DAC	14277401	1
Nachprüfung 3083	Base cream, hydrophobic DAC	141318	1
Bombastus	Base cream, hydrophobic DAC	294685	6
Pharmachem GmbH	Base cream, hydrophobic DAC	151259	1
AHD/Pharmachem	Base cream, hydrophobic DAC	150404	1
Pharamachem/Alliance He...	Base cream, hydrophobic DAC	151258	1
Pharmachem	Base cream, hydrophobic DAC	152211	3
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	151258	2
Pharmachem/ Noweda	Base cream, hydrophobic DAC	151259	1
Pharmachen Pöskneck	Base cream, hydrophobic DAC	151258	1
Caelo	Base cream, hydrophobic DAC	15044702	6
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	150405	1
Pharmachem/AHD	Base cream, hydrophobic DAC	150405	1
Pharmachem/ Alliance He...	Base cream, hydrophobic DAC	152209	1
Caelo	Base cream, hydrophobic DAC	294686	3
Bombastus	Base cream, hydrophobic DAC	297044	1
AHD/ Pharmachem	Base cream, hydrophobic DAC	152210	2
Bombastus	Base cream, hydrophobic DAC	294686	3
AHD /Pharmachem Pöskneck	Base cream, hydrophobic DAC	151257	1
Caelo	Base cream, hydrophobic DAC	15132502	6
Pharmachem	Base cream, hydrophobic DAC	152209	4
Pharmachem	Base cream, hydrophobic DAC	152210	2
Bombastus	Base cream, hydrophobic DAC	297046	5
Caelo	Base cream, hydrophobic DAC	15221301	20
Pharmachem Pöskneck/Sana...	Base cream, hydrophobic DAC	152210	1
Caelo	Base cream, hydrophobic DAC	1513502	1
Caelo	Base cream, hydrophobic DAC	4004319	1
Caelo	Base cream, hydrophobic DAC	15221202	19
Pharmachem/Gehe	Base cream, hydrophobic DAC	152209	1
Pharmachem GmbH / Anzag	Base cream, hydrophobic DAC	152209	1
Caelo	Base cream, hydrophobic DAC	15221401	5
Caelo	Base cream, hydrophobic DAC	14L18-T21-018124	1
AHD/Pharmachem	Base cream, hydrophobic DAC	152210	1
Pharmachem	Base cream, hydrophobic DAC	151258	3
Fagron	Base cream, hydrophobic DAC	14L18-T21-018124	4
Bombastus	Base cream, hydrophobic DAC	297047	6
Pharmachem /Phönix	Base cream, hydrophobic DAC	152209	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	15221	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	152210	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	152211	3
Fagron	Base cream, hydrophobic DAC	14L18-T21-018124	1
Pharmachen	Base cream, hydrophobic DAC	151258	2
AHD/Pharmachem	Base cream, hydrophobic DAC	153625	4
Pharmachem/ Noweda	Base cream, hydrophobic DAC	152209	1
Caelo	Base cream, hydrophobic DAC	15240801	1
Fagron	Base cream, hydrophobic DAC	14L18-T21-018125	1
Bombastus	Base cream, hydrophobic DAC		1
Fagron	Base cream, hydrophobic DAC	15D03-T05-021168	1
Pharmachem	Base cream, hydrophobic DAC	153625	8
Pharmachen GmbH	Base cream, hydrophobic DAC	152209	1

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Supplier	Substance	Batch	Spectra
Caelo	Base cream, hydrophobic DAC	1522301	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15221401	1
Pharmachem /Phönix	Base cream, hydrophobic DAC	153627	1
Pharmachem	Base cream, hydrophobic DAC	153627	5
Pharmachem Pöckneck/Sana...	Base cream, hydrophobic DAC	153625	1
Bombastus	Base cream, hydrophobic DAC	15221301	1
Caesar&Loretz GmbH /Anzag	Base cream, hydrophobic DAC	15221301	1
Bombastus	Base cream, hydrophobic DAC	297043	2
Pharmachem/ Gehe	Base cream, hydrophobic DAC	150404	1
Pharmachem/Anzag	Base cream, hydrophobic DAC	152209	3
Caesar&Loretz GmbH	Base cream, hydrophobic DAC	15221301	1
Caelo	Base cream, hydrophobic DAC	15421401	13
Sanacorp	Base cream, hydrophobic DAC	15421201	3
Caelo	Base cream, hydrophobic DAC	15421201	30
Caelo	Base cream, hydrophobic DAC	293162	1
Noweda	Base cream, hydrophobic DAC	15221301	4
Caelo	Base cream, hydrophobic DAC	26011603	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	153627	1
Pöckneck Pharma / Gehe	Base cream, hydrophobic DAC	152210	2
Cael/Sanacorp	Base cream, hydrophobic DAC	15421302	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	153625	2
Bombastus	Base cream, hydrophobic DAC	298350	1
Caelo	Base cream, hydrophobic DAC	15421302	10
Pöckneck/Gehe	Base cream, hydrophobic DAC	153626	1
Caelo	Base cream, hydrophobic DAC	20160222	1
Pharmachem/Kehr	Base cream, hydrophobic DAC	153627	1
Pharmachen	Base cream, hydrophobic DAC	152209	1
Caesar & Loretz GmbH Hi...	Base cream, hydrophobic DAC	115421302	1
Bombastus	Base cream, hydrophobic DAC	289721	1
Pharmachem	Base cream, hydrophobic DAC	153626	5
AHD/Pharmachem GmbH	Base cream, hydrophobic DAC	153627	1
AHD/Pharmachem	Base cream, hydrophobic DAC	153626	1
Bombastus	Base cream, hydrophobic DAC	298353	5
Caelo	Base cream, hydrophobic DAC	15/13-T01-026887	1
Noweda	Base cream, hydrophobic DAC	152209	1
Pharmachem Pöckneck/Sana...	Base cream, hydrophobic DAC	153626	1
Pharmachem /Phönix	Base cream, hydrophobic DAC	153626	1
Caelo	Base cream, hydrophobic DAC	15421303	1
Caelo	Base cream, hydrophobic DAC	153627	1
Fagron	Base cream, hydrophobic DAC	15J13-T01-026888	1
Pharmachem	Base cream, hydrophobic DAC	160136	6
Fagron	Base cream, hydrophobic DAC	15J13-T01-026887	5
Bombastus	Base cream, hydrophobic DAC	297045	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	153627	1
Fagron	Base cream, hydrophobic DAC	15/13-T01-026887	2
Pharmachem	Base cream, hydrophobic DAC	160130	6
Pharma/Phönix	Base cream, hydrophobic DAC	153627	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	153625	2
WE:06.04.2016 Phönix ...	Base cream, hydrophobic DAC	15421201	1
AHD/ Pharmachem	Base cream, hydrophobic DAC	160137	3
Pharmachem/Anzag	Base cream, hydrophobic DAC	160136	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	160136	1
Caelo	Base cream, hydrophobic DAC	16074802	18
Caelo	Base cream, hydrophobic DAC	5421201	1
Fagron	Base cream, hydrophobic DAC	15J13-T01-036887	1
Euro OTC	Base cream, hydrophobic DAC	300415	1
Bombastus	Base cream, hydrophobic DAC	298354	2
Caelo	Base cream, hydrophobic DAC	16074803	5
Caelo	Base cream, hydrophobic DAC	160136	2
Caelo	Base cream, hydrophobic DAC	16074901	16

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Supplier	Substance	Batch	Spectra
Pharmachem	Base cream, hydrophobic DAC	160137	2
Pharmachem Pölsneck/Sana. ...	Base cream, hydrophobic DAC	160137	2
Bombastus	Base cream, hydrophobic DAC	298351	1
Pharmachen GmbH/Gehe	Base cream, hydrophobic DAC	160130	2
Gehe-Pharmachem	Base cream, hydrophobic DAC	160136	1
Caelo	Base cream, hydrophobic DAC	16075101	8
Caelo	Base cream, hydrophobic DAC	16074801	8
pharmachem	Base cream, hydrophobic DAC	160130	1
phönix	Base cream, hydrophobic DAC	2/AKD12	1
pharmachem pölsneck	Base cream, hydrophobic DAC	160130	1
Caelo	Base cream, hydrophobic DAC	16075003	4
Caelo	Base cream, hydrophobic DAC	160575101	1
Pharmachem GmbH & Co.KG	Base cream, hydrophobic DAC	160130	1
Caelo	Base cream, hydrophobic DAC	123588	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	160136	1
Noweda	Base cream, hydrophobic DAC	16074901	2
Noweda/Pharmachem	Base cream, hydrophobic DAC	160137	1
Gehe/Pharmachem	Base cream, hydrophobic DAC	160137	1
Fagron	Base cream, hydrophobic DAC	15J13-T02-026891	1
Caelo	Base cream, hydrophobic DAC	46074802	1
Phoenix	Base cream, hydrophobic DAC	16075101	2
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	15421201	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16074901	1
Bombastus	Base cream, hydrophobic DAC	301457	6
Pharma/Phönix	Base cream, hydrophobic DAC	160136	2
Bombastus	Base cream, hydrophobic DAC	300417	5
Bombastus	Base cream, hydrophobic DAC	301455	2
Fagron	Base cream, hydrophobic DAC	26887	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	160136	1
Caelo	Base cream, hydrophobic DAC	160130	3
Pharmachem/Alliance Hea. ...	Base cream, hydrophobic DAC	160138	1
Pharmachem	Base cream, hydrophobic DAC	160138	2
Pharmachem/ Gehe	Base cream, hydrophobic DAC	160814	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	160136	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	1600825	1
Pharmachem;	Base cream, hydrophobic DAC	160136	1
Caelo	Base cream, hydrophobic DAC	16075201	11
Pharmachem Pölsneck/Phoe. ...	Base cream, hydrophobic DAC	153627	1
Bombastus	Base cream, hydrophobic DAC	300352	1
pharmachem	Base cream, hydrophobic DAC	160136	1
Pharmachen	Base cream, hydrophobic DAC	160130	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	160825	2
Fagron	Base cream, hydrophobic DAC	16E03-T02-032869	2
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	160825	1
Caesar & Loretz/AHD	Base cream, hydrophobic DAC	16074901	1
Pharmachem	Base cream, hydrophobic DAC	160825	7
AHD / Pharmachem Pölsneck	Base cream, hydrophobic DAC	160814	1
Caelo	Base cream, hydrophobic DAC	16165501	27
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	160814	1
Ebert u. Jacobi 16.0. ...	Base cream, hydrophobic DAC	160130	1
Caesar & Loretz/Noweda	Base cream, hydrophobic DAC	16074802	1
Caelo	Base cream, hydrophobic DAC	16174201	13
phönix	Base cream, hydrophobic DAC	160136	1
Noweda	Base cream, hydrophobic DAC	16165403	1
Pharmachem Pölsneck	Base cream, hydrophobic DAC	160825	2
Caelo	Base cream, hydrophobic DAC	16165403	23
Bombastus	Base cream, hydrophobic DAC	160814	1
Anzag	Base cream, hydrophobic DAC	160136	1
AHD / Pharmachem Pölsneck	Base cream, hydrophobic DAC	160138	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	160814	1

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Supplier	Substance	Batch	Spectra
Pharmachem	Base cream, hydrophobic DAC	160826	4
Bombastus	Base cream, hydrophobic DAC	303376	5
Caelo	Base cream, hydrophobic DAC	1615501	1
Caelo	Base cream, hydrophobic DAC	16165502	4
Phoenix	Base cream, hydrophobic DAC	16174201	1
Fagron	Base cream, hydrophobic DAC	16E03-T02-032868	6
Caelo	Base cream, hydrophobic DAC	16654403	1
Pharmachem GmbH Pöckneck	Base cream, hydrophobic DAC	160825	1
Pharmachem GmbH & CoKG	Base cream, hydrophobic DAC	160814	1
Pharmachem/ Gehe	Base cream, hydrophobic DAC	160826	1
Bombastus	Base cream, hydrophobic DAC	302133	1
Pharmachem	Base cream, hydrophobic DAC	160814	1
Pharmachem Pöckneck/Sana...	Base cream, hydrophobic DAC	160826	2
Caelo	Base cream, hydrophobic DAC	303376	3
Pharmachem GmbH&Co.KG	Base cream, hydrophobic DAC	160825	3
Bombastus	Base cream, hydrophobic DAC	302131	1
Pharmachem/Kehr	Base cream, hydrophobic DAC	162168	1
phönix	Base cream, hydrophobic DAC	160825	1
Pharmachem	Base cream, hydrophobic DAC	162167	4
Caelo	Base cream, hydrophobic DAC	9AKD15	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	160826	1
Pharmachen GmbH/Allianc...	Base cream, hydrophobic DAC	162169	1
Pharmachem Pöckneck/Phönix	Base cream, hydrophobic DAC	160825	1
Pharmachem Anzag	Base cream, hydrophobic DAC	162168	1
Pharmachem	Base cream, hydrophobic DAC	7676	1
Euro OTC	Base cream, hydrophobic DAC	16165501	1
Caelo	Base cream, hydrophobic DAC	1615403	1
Pharmachem	Base cream, hydrophobic DAC	162169	6
caesar&Loretz GmbH,Phön...	Base cream, hydrophobic DAC	16165701	1
Pharmachem GmbH	Base cream, hydrophobic DAC	160826	1
Caelo	Base cream, hydrophobic DAC	16165701	9
Fagron	Base cream, hydrophobic DAC	16F27-T22-034684	3
medphano/Phönix	Base cream, hydrophobic DAC	6510115	4
Bombastus	Base cream, hydrophobic DAC	303377	2
Caelo	Base cream, hydrophobic DAC	1233	1
Pharmachem	Base cream, hydrophobic DAC	162170	4
Pharmachem/ Gehe	Base cream, hydrophobic DAC	162169	1
Caelo	Base cream, hydrophobic DAC	16293701	23
Caesar & Loretz	Base cream, hydrophobic DAC	16075201	1
AHD / Pharmachem Pöckneck	Base cream, hydrophobic DAC	162169	1
Pharmachem/ Noweda	Base cream, hydrophobic DAC	162167	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	162168	2
pharmachem	Base cream, hydrophobic DAC	160825	1
GEHE	Base cream, hydrophobic DAC	303373	1
Pharmachen Pöckneck	Base cream, hydrophobic DAC	162167	1
Alte Apotheke	Base cream, hydrophobic DAC	16165701	1
Pharmchem/Sanacorp	Base cream, hydrophobic DAC	162169	1
Fagron	Base cream, hydrophobic DAC	16B10-T01-030202	1
PHÖNIX	Base cream, hydrophobic DAC	16165701	1
PharmacheGehe	Base cream, hydrophobic DAC	162167	3
Pöckneck Pharma / Gehe	Base cream, hydrophobic DAC	162169	1
	Base cream, hydrophobic DAC	160825	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16174201	2
Pharmachem/ Noweda	Base cream, hydrophobic DAC	162169	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	160825	1
Bombastus	Base cream, hydrophobic DAC	305083	6
Caelo	Base cream, hydrophobic DAC	301457	1
PhCHEM/Phönix	Base cream, hydrophobic DAC	162170	2
Caelo	Base cream, hydrophobic DAC	162170	1
Anzag/Bambastus	Base cream, hydrophobic DAC	305079	1

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Supplier	Substance	Batch	Spectra
Pharmachen/gehe	Base cream, hydrophobic DAC	162170	1
AHD/Pharmachem	Base cream, hydrophobic DAC	162170	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	162168	1
Fagron	Base cream, hydrophobic DAC	16E03T02032868	1
pharmachem	Base cream, hydrophobic DAC	162168	1
pharmachem	Base cream, hydrophobic DAC	162170	1
Gehe-Pharmachem	Base cream, hydrophobic DAC	162168	1
Caelo	Base cream, hydrophobic DAC	162168	2
Anzag /Pharmachem	Base cream, hydrophobic DAC	160825	1
Pharmachem	Base cream, hydrophobic DAC	162168	6
Pharmachem	Base cream, hydrophobic DAC	163237	4
Caelo	Base cream, hydrophobic DAC	302134	1
Bombastus	Base cream, hydrophobic DAC	160136	1
Bombastus	Base cream, hydrophobic DAC	303374	1
Pharma/Phönix	Base cream, hydrophobic DAC	162168	1
Bombastus	Base cream, hydrophobic DAC	306397	5
AHD/ Pharmachem	Base cream, hydrophobic DAC	163238	2
Caelo	Base cream, hydrophobic DAC	23021712	1
siehe Protokoll	Base cream, hydrophobic DAC	305080	1
Caelo	Base cream, hydrophobic DAC	16293601	5
Pharmachem GmbH & Co.KG	Base cream, hydrophobic DAC	162168	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	163238	1
Caelo	Base cream, hydrophobic DAC	16293701/1020317	1
Caelo	Base cream, hydrophobic DAC	16330301	13
Pharmachem/ Anzag	Base cream, hydrophobic DAC	163238	1
Pharmachen	Base cream, hydrophobic DAC	162170	1
Caelo	Base cream, hydrophobic DAC	1615500	1
Pharmachem	Base cream, hydrophobic DAC	163238	2
Bombastus	Base cream, hydrophobic DAC	305080	1
Bombastus	Base cream, hydrophobic DAC	306395	3
Caelo	Base cream, hydrophobic DAC	16330201	10
Sanacorp	Base cream, hydrophobic DAC	16293701	1
Bombastus	Base cream, hydrophobic DAC	306396	2
Pharmachem Anzag	Base cream, hydrophobic DAC	163238	1
Sanacorp WE 25.02.17 -1. . .	Base cream, hydrophobic DAC	16293701	1
Bombastus	Base cream, hydrophobic DAC	307766	2
Bombastus	Base cream, hydrophobic DAC	307770	2
Caelo	Base cream, hydrophobic DAC	16293902	6
Pölsneck/Gehe	Base cream, hydrophobic DAC	170008	1
Bombastus	Base cream, hydrophobic DAC	307771	7
Bombastus	Base cream, hydrophobic DAC	307767	1
Caelo	Base cream, hydrophobic DAC	170008	2
apomix/ Anzag	Base cream, hydrophobic DAC	307766	1
Phönix	Base cream, hydrophobic DAC	16293901	1
Fagron	Base cream, hydrophobic DAC	16E03T02-032868	1
Noweda	Base cream, hydrophobic DAC	16293701	1
Pharmachem Pölsneck GmbH. . .	Base cream, hydrophobic DAC	170008	1
Bombastus	Base cream, hydrophobic DAC	307769	3
Pharmachem Pölsneck/Phoe. . .	Base cream, hydrophobic DAC	170010	1
Pharmachem	Base cream, hydrophobic DAC	170008	1
Allianc. Health. / Phar. . .	Base cream, hydrophobic DAC	170010	1
Pharmachem / AHD	Base cream, hydrophobic DAC	170009	1
Caelo	Base cream, hydrophobic DAC	170009	2
Caelo	Base cream, hydrophobic DAC	17073202	11
Caelo	Base cream, hydrophobic DAC	16293901	7
Caelo	Base cream, hydrophobic DAC	16330203	10
Pharmachem/Noweda	Base cream, hydrophobic DAC	163237	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	170008	1
Pharmachem GmbH	Base cream, hydrophobic DAC	162169	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	170010	1

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Supplier	Substance	Batch	Spectra
	Base cream, hydrophobic DAC	16293901	1
Bombastus	Base cream, hydrophobic DAC	163237	1
Ebert/Pharmachem	Base cream, hydrophobic DAC	170008	1
Fagron	Base cream, hydrophobic DAC	16293601	1
AHD/Pharmachem.	Base cream, hydrophobic DAC	170008	1
Pharmachem	Base cream, hydrophobic DAC	170010	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	162168	1
Pharmachem/ Phönix	Base cream, hydrophobic DAC	170010	2
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	170009	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	170010	1
Bombstus/San	Base cream, hydrophobic DAC	162168	1
Bombastus	Base cream, hydrophobic DAC	310823	5
Bombastus	Base cream, hydrophobic DAC	171126	2
Alliance	Base cream, hydrophobic DAC	170010	2
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	162170	1
Pharmachem GmbH	Base cream, hydrophobic DAC	162168	1
Phönix / InfectoPharm	Base cream, hydrophobic DAC		1
Sanacorp	Base cream, hydrophobic DAC	16330301	1
Caelo	Base cream, hydrophobic DAC	16330302	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	170010	2
GEHE	Base cream, hydrophobic DAC	17073202	1
Bombastus	Base cream, hydrophobic DAC	308508	4
Caelo	Base cream, hydrophobic DAC	171126	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	16330203	1
Pharmachem	Base cream, hydrophobic DAC	170009	3
Bombastus	Base cream, hydrophobic DAC	170009	1
Caelo	Base cream, hydrophobic DAC	308507	1
Euro OTC	Base cream, hydrophobic DAC	16293901	2
Caelo	Base cream, hydrophobic DAC	171128	2
Pharmachem	Base cream, hydrophobic DAC	171128	6
Caelo	Base cream, hydrophobic DAC	17073201	3
Bombastus	Base cream, hydrophobic DAC	308504	1
Sanacorp	Base cream, hydrophobic DAC	17073201	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	171127	1
Noweda	Base cream, hydrophobic DAC	17073202	1
Caelo	Base cream, hydrophobic DAC	17112903	6
Pharmachem GmbH	Base cream, hydrophobic DAC	171128	1
Caelo	Base cream, hydrophobic DAC	17150401	14
AHD /Pharmachem Pößneck	Base cream, hydrophobic DAC	171128	2
Bombastus	Base cream, hydrophobic DAC	308506	1
Pharmachen/Noweda	Base cream, hydrophobic DAC	171126	3
Bombastus	Base cream, hydrophobic DAC	308509	2
Caelo	Base cream, hydrophobic DAC	171816	1
pharmachem pößneck	Base cream, hydrophobic DAC	171127	3
Bombastus	Base cream, hydrophobic DAC	171128	1
Caelo	Base cream, hydrophobic DAC	17073103	3
Caelo	Base cream, hydrophobic DAC	171127	2
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	170008	1
Anzag	Base cream, hydrophobic DAC	171127	2
Pharmachem	Base cream, hydrophobic DAC	2x171816	1
Pharmachem	Base cream, hydrophobic DAC	171816	1
Caesar & Loretz GmbH	Base cream, hydrophobic DAC	17112903	1
Noweda	Base cream, hydrophobic DAC	17112903	1
Pharmachem/AHD	Base cream, hydrophobic DAC	171127	2
Pharmachem Anzag	Base cream, hydrophobic DAC	171128	1
Bombastus	Base cream, hydrophobic DAC	60080402	1
Pharmachem GmbH	Base cream, hydrophobic DAC	17009	1
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	171816	1
Caelo	Base cream, hydrophobic DAC	171117HB/17150401	1
Caelo	Base cream, hydrophobic DAC	17150402	2

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Supplier	Substance	Batch	Spectra
Pharmachem / Gehe	Base cream, hydrophobic DAC	171817	1
Bombastus	Base cream, hydrophobic DAC	308505	1
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	171815	1
Noweda	Base cream, hydrophobic DAC	17073103	1
Pharmachem	Base cream, hydrophobic DAC	171127	2
Bombastus	Base cream, hydrophobic DAC	310827	8
GEHE	Base cream, hydrophobic DAC	310824	1
Pharmachem	Base cream, hydrophobic DAC	171817	4
Caelo	Base cream, hydrophobic DAC	308508	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	170010	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	171816	3
Caelo	Base cream, hydrophobic DAC	17255201	3
Bombastus	Base cream, hydrophobic DAC	310824	1
Caelo	Base cream, hydrophobic DAC	4004302	1
Caelo	Base cream, hydrophobic DAC	17150501	9
Pharmachem	Base cream, hydrophobic DAC	171B16	1
Gehe	Base cream, hydrophobic DAC	17150401	1
Pharmachen GmbH	Base cream, hydrophobic DAC	171817	1
Caelo	Base cream, hydrophobic DAC	17150401/2041217	1
Caeolo/Krieger	Base cream, hydrophobic DAC	16330301	1
Pharmachem GmbH & Co. K...	Base cream, hydrophobic DAC	17185	1
Caelo	Base cream, hydrophobic DAC	171219HB/17150401	1
Pharmachen/Gehe	Base cream, hydrophobic DAC	171815	4
Pharmachem/Phönix	Base cream, hydrophobic DAC	171815	2
Noweda	Base cream, hydrophobic DAC	17255301	2
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	171817	1
Pharmachem	Base cream, hydrophobic DAC	171815	4
Fagron	Base cream, hydrophobic DAC	171817	1
Caelo	Base cream, hydrophobic DAC	171815	1
Pharmachem	Base cream, hydrophobic DAC	171817(2x)	2
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	171127	2
Fagron	Base cream, hydrophobic DAC	17C06	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	172194	3
Pharmachem/AHD	Base cream, hydrophobic DAC	172194	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	172195	1
Caelo	Base cream, hydrophobic DAC	17255302	4
Pharmachem / Gehe	Base cream, hydrophobic DAC	172195	1
Bombastus	Base cream, hydrophobic DAC	307768	1
Pharmachem GmbH/AHD	Base cream, hydrophobic DAC	171815	1
Caelo	Base cream, hydrophobic DAC	1715050	1
Fagron	Base cream, hydrophobic DAC	17C06-T08-042287	3
Pharmachem	Base cream, hydrophobic DAC	172194	3
Sanacorp/Pharmachem	Base cream, hydrophobic DAC	172195	2
Caelo	Base cream, hydrophobic DAC	172194	2
Pharmachem	Base cream, hydrophobic DAC	172195	6
Caelo	Base cream, hydrophobic DAC	17255301	7
Sanacorp W.E: 26.01.18 ...	Base cream, hydrophobic DAC	17150401	1
Pharmachem/AHD	Base cream, hydrophobic DAC	172195	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	172195	3
Pharmachem/GEHE	Base cream, hydrophobic DAC	172194	4
Pharmachen/Gehe	Base cream, hydrophobic DAC	172194	1
Kehr	Base cream, hydrophobic DAC	310825	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	171185	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	172194	2
Pharmachem	Base cream, hydrophobic DAC	172196	3
Pharmachem	Base cream, hydrophobic DAC	1721195	1
Caelo	Base cream, hydrophobic DAC	17255202	6
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	172196	3
Pharmachem / Gehe	Base cream, hydrophobic DAC	172196	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	172196	2

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Supplier	Substance	Batch	Spectra
Pharmachem	Base cream, hydrophobic DAC	1721945506	1
Caelo	Base cream, hydrophobic DAC	1018A-03497	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	172196	1
Caelo	Base cream, hydrophobic DAC	17001093	1
Caelo	Base cream, hydrophobic DAC	180308HB/17255301	1
Gehe/Pharmachem	Base cream, hydrophobic DAC	172194	2
Phoenix/Cealo	Base cream, hydrophobic DAC	172194	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	172196	1
Caleo	Base cream, hydrophobic DAC	17150402	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	172194	1
Bombastus	Base cream, hydrophobic DAC	310828	1
Caelo	Base cream, hydrophobic DAC	17255402	2
Pharmachem/Noweda	Base cream, hydrophobic DAC	171815	1
Pharmachen GmbH	Base cream, hydrophobic DAC	172195	1
Fagron	Base cream, hydrophobic DAC	17C06-T08-04287	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	172194	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180517	2
Caelo	Base cream, hydrophobic DAC	1290318	1
Pharmachem GmbH&Co.KG/N...	Base cream, hydrophobic DAC	172194	1
Bombastus	Base cream, hydrophobic DAC	180515	1
Pharmachem GmbH	Base cream, hydrophobic DAC	172194	1
Caelo	Base cream, hydrophobic DAC	18051101	19
Pharmachem/Gehe	Base cream, hydrophobic DAC	180517	2
Bombastus	Base cream, hydrophobic DAC	18002000	3
Bombastus	Base cream, hydrophobic DAC	18001995	2
GEHE	Base cream, hydrophobic DAC	18051101	1
Caelo	Base cream, hydrophobic DAC	18051001	11
Pharmachen/Gehe	Base cream, hydrophobic DAC	180515	2
Pharmachem	Base cream, hydrophobic DAC	180515	4
Noweda	Base cream, hydrophobic DAC	180515	1
Caelo	Base cream, hydrophobic DAC	180515	1
Caelo	Base cream, hydrophobic DAC	18051401	6
Pharmachem Pößneck/AHD	Base cream, hydrophobic DAC	180757	2
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180757	7
Bombastus	Base cream, hydrophobic DAC	18002001	2
Caelo	Base cream, hydrophobic DAC	18051301	2
Pharmachem	Base cream, hydrophobic DAC	180517	3
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	180755	2
Pharmachem / Gehe	Base cream, hydrophobic DAC	180754	1
Pharmachem/Sanacorp	Base cream, hydrophobic DAC	180755	1
Bombastus	Base cream, hydrophobic DAC	18001997	2
Pharmachem/ Anzag	Base cream, hydrophobic DAC	171817	1
Caelo	Base cream, hydrophobic DAC	26051807	1
Caelo	Base cream, hydrophobic DAC	180756	1
Bombastus	Base cream, hydrophobic DAC	18001999	2
Pharmachem	Base cream, hydrophobic DAC	17196	1
Pharmachem/Alliance Hea...	Base cream, hydrophobic DAC	180756	1
Pharmachem/Phönix	Base cream, hydrophobic DAC	180756	1
Bombastus	Base cream, hydrophobic DAC	310826	1
Pharmachem/ Anzag	Base cream, hydrophobic DAC	180757	1
Caelo	Base cream, hydrophobic DAC	18061805	1
Caelo	Base cream, hydrophobic DAC	18100801	8
Pharmachem	Base cream, hydrophobic DAC	180860	2
Allianz	Base cream, hydrophobic DAC	180756	1
Sanacorp	Base cream, hydrophobic DAC	18051101	1
Pharmachem	Base cream, hydrophobic DAC	180757	1
Bombastus	Base cream, hydrophobic DAC	18002829	1
Pharmachem	Base cream, hydrophobic DAC	2x180757	1
Caelo	Base cream, hydrophobic DAC	18551001	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	180860	3

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Supplier	Substance	Batch	Spectra
Pharmachem/Noweda	Base cream, hydrophobic DAC	180755	2
Pharmachen/Gehe	Base cream, hydrophobic DAC	180755	3
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	180754	1
Pharmachem/Gehe	Base cream, hydrophobic DAC	180756	1
Caelo	Base cream, hydrophobic DAC	180755	2
Caelo	Base cream, hydrophobic DAC	180860	2
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180860	1
Caelo	Base cream, hydrophobic DAC	17192002	1
Pharmachem	Base cream, hydrophobic DAC	180755	3
Caelo	Base cream, hydrophobic DAC	30081812	1
Caelo	Base cream, hydrophobic DAC	18100901	1
Pharmachem	Base cream, hydrophobic DAC	180756	2
Caelo	Base cream, hydrophobic DAC	181194	3
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	181194	2
Noweda/Pharmachem	Base cream, hydrophobic DAC	180756	1
Caelo	Base cream, hydrophobic DAC	18119901	3
Pharmachem/AHD	Base cream, hydrophobic DAC	181198	2
Gehe/Pharmachem	Base cream, hydrophobic DAC	180755	1
Cealo/GEHE	Base cream, hydrophobic DAC	18051101	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	180756	1
Pharmachem GmbH & Co. KG	Base cream, hydrophobic DAC	180755	1
Hepart	Base cream, hydrophobic DAC	18002830	1
Pharmachem	Base cream, hydrophobic DAC	181198	2
Noweda	Base cream, hydrophobic DAC	18100801	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	181194	1
Pharmachem	Base cream, hydrophobic DAC	181194	2
Bombastus	Base cream, hydrophobic DAC	18002826	1
Caelo	Base cream, hydrophobic DAC	18173902	8
Pharmachem GmbH&Co.KG/N...	Base cream, hydrophobic DAC	181198	1
Pharmachem GmbH	Base cream, hydrophobic DAC	181198	1
Caelo	Base cream, hydrophobic DAC	18173903	2
Pharmachem Pößneck/AHD	Base cream, hydrophobic DAC	181194	1
Fagron	Base cream, hydrophobic DAC	18C23-T04-054141	1
Pharmachem/Phoenix	Base cream, hydrophobic DAC	181198	1
Kehr	Base cream, hydrophobic DAC	18002826	1
Pharmachem Pößneck GmbH...	Base cream, hydrophobic DAC	181196	1
Bombastus	Base cream, hydrophobic DAC	18002831	1
Pharmachem / Gehe	Base cream, hydrophobic DAC	181196	1
Kehr	Base cream, hydrophobic DAC	18002827	1
Caelo	Base cream, hydrophobic DAC	18174101	1
Alliance/Pharmachem	Base cream, hydrophobic DAC	181196	1
Pharmachem GmbH	Base cream, hydrophobic DAC	182221	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	181196	1
Caelo	Base cream, hydrophobic DAC	18242501	2
Pharmachem/ Anzag	Base cream, hydrophobic DAC	181197	1
Pharmachem/AHD	Base cream, hydrophobic DAC	182220	2
Pößneck/Gehe	Base cream, hydrophobic DAC	181197	2
Pharmachem/Phönix	Base cream, hydrophobic DAC	181197	1
Pharmachem/Noweda	Base cream, hydrophobic DAC	181197	1
Caelo	Base cream, hydrophobic DAC	18242601	1
Caelo	Anionic hydrophilic cream DAB	15401401	16
Caelo	Anionic hydrophilic cream DAB	15431701	9
Sana 08.10.14 EK 5,76	Anionic hydrophilic cream DAB	14232901	1
Caesar & Loretz GmbH 40...	Anionic hydrophilic cream DAB	11253201	1
Caelo	Anionic hydrophilic cream DAB	11120201	1
Bombastus	Anionic hydrophilic cream DAB	263981	5
Bombastus	Anionic hydrophilic cream DAB	266175	1
Caelo	Anionic hydrophilic cream DAB	11258201	1
Bombastus	Anionic hydrophilic cream DAB	262772	1
Caelo	Anionic hydrophilic cream DAB	11229001	2

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	11331501	2
Gehe	Anionic hydrophilic cream DAB	262935	1
Caelo	Anionic hydrophilic cream DAB	11331601	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	11311101	3
Caelo	Anionic hydrophilic cream DAB	11311501	1
Caelo	Anionic hydrophilic cream DAB	11332001	1
Caelo	Anionic hydrophilic cream DAB	11180201	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	11320801	1
Caelo	Anionic hydrophilic cream DAB	11253501	1
Caelo	Anionic hydrophilic cream DAB	11321101	1
Caelo	Anionic hydrophilic cream DAB	11253201	1
Caelo	Anionic hydrophilic cream DAB	12010201	1
Bombastus	Anionic hydrophilic cream DAB	267442	1
Caelo	Anionic hydrophilic cream DAB	2704212540	1
Caelo	Anionic hydrophilic cream DAB	11332101	1
Gehe	Anionic hydrophilic cream DAB	11311202	1
Caelo	Anionic hydrophilic cream DAB	11332401	1
Caelo	Anionic hydrophilic cream DAB	12010801	1
Caelo	Anionic hydrophilic cream DAB	11326701	3
Caelo	Anionic hydrophilic cream DAB	12010901	1
Caelo	Anionic hydrophilic cream DAB	2405212540	1
Caesar & Loretz GmbH D-...	Anionic hydrophilic cream DAB	11326701	1
Caelo	Anionic hydrophilic cream DAB	12098801	1
Caelo	Anionic hydrophilic cream DAB	12012201	1
Caelo	Anionic hydrophilic cream DAB	12011302	2
Fiebig	Anionic hydrophilic cream DAB	269445	1
Caelo	Anionic hydrophilic cream DAB	11332501	1
Caelo	Anionic hydrophilic cream DAB	11311101	1
Bombastus	Anionic hydrophilic cream DAB	270704	1
Caelo	Anionic hydrophilic cream DAB	12099001	2
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	12010501	1
Caelo	Anionic hydrophilic cream DAB	12099201	3
DAB 2008	Anionic hydrophilic cream DAB	12099901	1
Phönix	Anionic hydrophilic cream DAB	270703	1
Caelo	Anionic hydrophilic cream DAB	12100201	1
Caelo	Anionic hydrophilic cream DAB	12100101	1
Caelo	Anionic hydrophilic cream DAB	12099301	1
Caelo	Anionic hydrophilic cream DAB	12083702	1
Gehe	Anionic hydrophilic cream DAB	12026001	1
Phoenix	Anionic hydrophilic cream DAB	270705	1
Caelo	Anionic hydrophilic cream DAB	12100701	2
Sanacorp	Anionic hydrophilic cream DAB	12187901	4
Caelo	Anionic hydrophilic cream DAB	12187901	4
Caelo	Anionic hydrophilic cream DAB	12100401	2
Caelo	Anionic hydrophilic cream DAB	12083802	1
Bombastus	Anionic hydrophilic cream DAB	269513	2
Caelo	Anionic hydrophilic cream DAB	12100901	5
DAB	Anionic hydrophilic cream DAB	270951	1
Bombastus	Anionic hydrophilic cream DAB	271014	2
Phoenix	Anionic hydrophilic cream DAB	12011001	1
Caelo	Anionic hydrophilic cream DAB	12010601	1
Caelo	Anionic hydrophilic cream DAB	12099101	1
Bombastus	Anionic hydrophilic cream DAB	269517	1
Caelo	Anionic hydrophilic cream DAB	12218001	2
Caelo	Anionic hydrophilic cream DAB	12084101	3
Caelo	Anionic hydrophilic cream DAB	22091202	1
Caelo	Anionic hydrophilic cream DAB	12204501	2
Caelo	Anionic hydrophilic cream DAB	12187701	3
Anzag	Anionic hydrophilic cream DAB	12204601	2
Caelo	Anionic hydrophilic cream DAB	12100501	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	12101201	1
Caelo	Anionic hydrophilic cream DAB	12100601	5
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12100601	1
Bombastus	Anionic hydrophilic cream DAB	269441	1
Caelo	Anionic hydrophilic cream DAB	1119387	1
Gehe	Anionic hydrophilic cream DAB	11219901	1
Anzag	Anionic hydrophilic cream DAB	12218501	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	12217801	5
Caelo	Anionic hydrophilic cream DAB	12218301	2
Caelo	Anionic hydrophilic cream DAB	12195301	1
Caelo	Anionic hydrophilic cream DAB	12204601	1
Bombastus	Anionic hydrophilic cream DAB	271011	1
Anzag	Anionic hydrophilic cream DAB	271710	1
Caelo	Anionic hydrophilic cream DAB	12245701	2
Sanacorp	Anionic hydrophilic cream DAB	12245701	1
Caelo	Anionic hydrophilic cream DAB	270943	2
Bombastus	Anionic hydrophilic cream DAB	271008	2
Bombastus	Anionic hydrophilic cream DAB	270824	3
Caelo	Anionic hydrophilic cream DAB	12218801	3
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	12101101	1
Bombastus	Anionic hydrophilic cream DAB	270711	2
Bombastus	Anionic hydrophilic cream DAB	267436	1
Caelo	Anionic hydrophilic cream DAB	12195501	1
Caelo	Anionic hydrophilic cream DAB	12195401	2
Caelo	Anionic hydrophilic cream DAB	12010501	1
Gehe	Anionic hydrophilic cream DAB	270949	1
Caelo	Anionic hydrophilic cream DAB	12264401	1
Sanacorp	Anionic hydrophilic cream DAB	12218501	2
Caelo	Anionic hydrophilic cream DAB	12218701	1
Sanacorp	Anionic hydrophilic cream DAB	12264401	1
Caelo	Anionic hydrophilic cream DAB	12217901	1
Caelo	Anionic hydrophilic cream DAB	12195201	8
Caelo	Anionic hydrophilic cream DAB	12218501	1
Caelo	Anionic hydrophilic cream DAB	112212540	1
Caelo	Anionic hydrophilic cream DAB	12264502	1
Caelo	Anionic hydrophilic cream DAB	12264901	1
Caelo	Anionic hydrophilic cream DAB	12218601	2
Caelo	Anionic hydrophilic cream DAB	12265201	6
Caelo	Anionic hydrophilic cream DAB	12245503	1
Caelo	Anionic hydrophilic cream DAB	12188001	1
Bombastus	Anionic hydrophilic cream DAB	271009	1
Bombastus	Anionic hydrophilic cream DAB	273538	1
Noweda	Anionic hydrophilic cream DAB	12217801	1
Caelo	Anionic hydrophilic cream DAB	12265301	4
Sanacorp	Anionic hydrophilic cream DAB	12265301	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12195201	2
Caelo	Anionic hydrophilic cream DAB	2112212540	1
Caelo	Anionic hydrophilic cream DAB	12264501	5
Bombastus	Anionic hydrophilic cream DAB	274695	2
Caelo	Anionic hydrophilic cream DAB	12266101	4
Caelo	Anionic hydrophilic cream DAB	12265801	2
Caelo	Anionic hydrophilic cream DAB	20301012-3	1
Caelo	Anionic hydrophilic cream DAB	12195601	7
Bombastus	Anionic hydrophilic cream DAB	274593	1
Caelo	Anionic hydrophilic cream DAB	12265501	3
Caelo	Anionic hydrophilic cream DAB	12265701	3
Bombastus	Anionic hydrophilic cream DAB	274698	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	12264701	2
Caelo	Anionic hydrophilic cream DAB	12264801	2
Bombastus	Anionic hydrophilic cream DAB	6861306	1
Caelo	Anionic hydrophilic cream DAB	15011301	1
Caelo	Anionic hydrophilic cream DAB	12245801	2
Bombastus	Anionic hydrophilic cream DAB	270947	1
Bombastus	Anionic hydrophilic cream DAB	273407	1
Caelo	Anionic hydrophilic cream DAB	1601312540	2
Bombastus	Anionic hydrophilic cream DAB	274695/273533	1
Noweda	Anionic hydrophilic cream DAB	1218701	1
Fagron	Anionic hydrophilic cream DAB	12265501	1
Caelo	Anionic hydrophilic cream DAB	12265001	4
Caelo	Anionic hydrophilic cream DAB	12218201	2
Caelo	Anionic hydrophilic cream DAB	12265901	1
Caelo	Anionic hydrophilic cream DAB		11
Caelo	Anionic hydrophilic cream DAB	3321	1
Caelo	Anionic hydrophilic cream DAB	654879	1
Caelo	Anionic hydrophilic cream DAB	413I-02540	1
Caelo	Anionic hydrophilic cream DAB	12245401	3
Caelo	Anionic hydrophilic cream DAB	12265101	1
Bombastus	Anionic hydrophilic cream DAB	274696	1
Caelo	Anionic hydrophilic cream DAB	12265601	1
Caelo	Anionic hydrophilic cream DAB	12313601	4
Bombastus	Anionic hydrophilic cream DAB	273534	1
Anzag 25.01.2013	Anionic hydrophilic cream DAB	12266101	1
Caelo	Anionic hydrophilic cream DAB	12266201	2
Bombastus	Anionic hydrophilic cream DAB	270804	1
Bombastus	Anionic hydrophilic cream DAB	274596	1
Caelo	Anionic hydrophilic cream DAB	12313901	9
Bombastus	Anionic hydrophilic cream DAB	276315	3
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12264501	1
Hedinger	Anionic hydrophilic cream DAB	12264501	1
Caelo	Anionic hydrophilic cream DAB	12313301	3
Caelo	Anionic hydrophilic cream DAB	12313701	8
Noweda	Anionic hydrophilic cream DAB	12265701	1
Bombastus	Anionic hydrophilic cream DAB	274697	3
Anzag	Anionic hydrophilic cream DAB	12314101	1
Caelo	Anionic hydrophilic cream DAB	12265401	3
Caelo	Anionic hydrophilic cream DAB	20021311	1
Bombastus	Anionic hydrophilic cream DAB	274594	1
Bombastus	Anionic hydrophilic cream DAB	274592	1
Bombastus	Anionic hydrophilic cream DAB	274595	2
Caelo	Anionic hydrophilic cream DAB	4131I-02540	1
Caelo	Anionic hydrophilic cream DAB	12313202	8
Gehe/ 28.12.12 Bambastus	Anionic hydrophilic cream DAB	274594	1
Caelo	Anionic hydrophilic cream DAB	12314101	9
Gehe	Anionic hydrophilic cream DAB	274765	1
Caelo	Anionic hydrophilic cream DAB	12314201	4
Fagron	Anionic hydrophilic cream DAB	12313202	1
Bombastus	Anionic hydrophilic cream DAB	276318	1
Sanacorp	Anionic hydrophilic cream DAB	12314301	1
Caelo	Anionic hydrophilic cream DAB	1303312540	1
Bombastus	Anionic hydrophilic cream DAB	274597	1
Caelo	Anionic hydrophilic cream DAB	12314301	5
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream DAB	12313202	2
Bombastus	Anionic hydrophilic cream DAB	277293	5
Caelo	Anionic hydrophilic cream DAB	12314001	1
Caelo	Anionic hydrophilic cream DAB	12316001	1
Caelo	Anionic hydrophilic cream DAB	12314404	1
Sanacorp	Anionic hydrophilic cream DAB	12314401	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	12314401	9
Caelo	Anionic hydrophilic cream DAB	12314601	8
Bombastus	Anionic hydrophilic cream DAB	274765	2
Caelo	Anionic hydrophilic cream DAB	2103312540	1
Gehe	Anionic hydrophilic cream DAB	12265001	1
Bombastus	Anionic hydrophilic cream DAB	274600	2
Bombastus	Anionic hydrophilic cream DAB	276316	1
Caelo	Anionic hydrophilic cream DAB	28031319	1
Bombastus	Anionic hydrophilic cream DAB	277297	2
Caelo	Anionic hydrophilic cream DAB	204312540	1
Bombastus	Anionic hydrophilic cream DAB	277457	6
Caelo	Anionic hydrophilic cream DAB	1234301	1
Caelo	Anionic hydrophilic cream DAB	1231401	1
Phönix	Anionic hydrophilic cream DAB	12314101	1
Caelo	Anionic hydrophilic cream DAB	12313501	6
Caelo	Anionic hydrophilic cream DAB	12204301	1
Bombastus	Anionic hydrophilic cream DAB	270950	1
Caelo	Anionic hydrophilic cream DAB	1234569	1
Caelo	Anionic hydrophilic cream DAB	12314801	6
Caelo	Anionic hydrophilic cream DAB	12314701	9
Phoenix	Anionic hydrophilic cream DAB	12313301	1
Gehe	Anionic hydrophilic cream DAB	12313401	1
Caelo	Anionic hydrophilic cream DAB	12245501	1
Caelo	Anionic hydrophilic cream DAB	12264601	1
Caelo	Anionic hydrophilic cream DAB	12245601	1
Noweda	Anionic hydrophilic cream DAB	12314801	1
Caelo	Anionic hydrophilic cream DAB	12188101	1
Caelo	Anionic hydrophilic cream DAB	1218501	1
Caelo	Anionic hydrophilic cream DAB	13070301	5
Caelo	Anionic hydrophilic cream DAB	12314501	2
Bombastus	Anionic hydrophilic cream DAB	277462	1
AHD,15.04.2013	Anionic hydrophilic cream DAB	12314701	1
Hirsch	Anionic hydrophilic cream DAB	12314701	1
Phoenix	Anionic hydrophilic cream DAB	13038201	1
Caelo	Anionic hydrophilic cream DAB	8051301	1
GEHE	Anionic hydrophilic cream DAB	12314101	1
Caelo	Anionic hydrophilic cream DAB	1913R-02540	1
Caelo	Anionic hydrophilic cream DAB	1913Q-02540	1
Caelo	Anionic hydrophilic cream DAB	12314901	5
Bombastus	Anionic hydrophilic cream DAB	277459	2
Bombastus	Anionic hydrophilic cream DAB	277455	2
Caelo	Anionic hydrophilic cream DAB	13036001	5
Caelo	Anionic hydrophilic cream DAB	13070601	6
Caelo	Anionic hydrophilic cream DAB	13070401	2
Phönix	Anionic hydrophilic cream DAB	1231451	1
Caelo	Anionic hydrophilic cream DAB	13035902	4
Noweda	Anionic hydrophilic cream DAB	12313202	1
Noweda	Anionic hydrophilic cream DAB	13002705	1
Caelo	Anionic hydrophilic cream DAB	13038301	5
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	12313501	1
Caelo	Anionic hydrophilic cream DAB	13070502	4
Phönix	Anionic hydrophilic cream DAB	276433	1
Caelo	Anionic hydrophilic cream DAB	13036301	5
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	12314201	1
Noweda	Anionic hydrophilic cream DAB	13035902	1
Caelo	Anionic hydrophilic cream DAB	1061302	1
Caelo	Anionic hydrophilic cream DAB	3061302	1
Caelo	Anionic hydrophilic cream DAB	13128701	11
Caelo	Anionic hydrophilic cream DAB	13072501	4
Caelo	Anionic hydrophilic cream DAB	U-310513-1	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	U-030513-1	1
Bombastus	Anionic hydrophilic cream DAB	277461	3
Noweda	Anionic hydrophilic cream DAB	13070301	1
Caelo	Anionic hydrophilic cream DAB	13036302	1
Caelo	Anionic hydrophilic cream DAB	276319	1
Caelo	Anionic hydrophilic cream DAB	2413Q02540	1
Bombastus	Anionic hydrophilic cream DAB	277298	2
Caelo	Anionic hydrophilic cream DAB	13154202	1
Bombastus	Anionic hydrophilic cream DAB	273532	1
Bombastus	Anionic hydrophilic cream DAB	277292	1
Caelo	Anionic hydrophilic cream DAB	13154301	6
Sanacorp	Anionic hydrophilic cream DAB	13154301	1
Bombastus	Anionic hydrophilic cream DAB	278846	1
Caelo	Anionic hydrophilic cream DAB	13164901	3
Bombastus	Anionic hydrophilic cream DAB	279055	7
Caelo	Anionic hydrophilic cream DAB	13165001	9
Noweda	Anionic hydrophilic cream DAB	13154301	1
Caelo	Anionic hydrophilic cream DAB	278848	3
Bombastus	Anionic hydrophilic cream DAB	276320	2
Phönix	Anionic hydrophilic cream DAB	13164901	1
Caelo	Anionic hydrophilic cream DAB	13165901	4
Bombastus	Anionic hydrophilic cream DAB	276433	1
Caelo	Anionic hydrophilic cream DAB	13128601	6
Bombastus	Anionic hydrophilic cream DAB	277465	2
Caelo	Anionic hydrophilic cream DAB	13165801	6
Caelo	Anionic hydrophilic cream DAB	13154101	4
Caelo	Anionic hydrophilic cream DAB	13071304	1
AHC 28.05.13 EK2,95	Anionic hydrophilic cream DAB	13036301	1
Sanacorp	Anionic hydrophilic cream DAB	13154101	1
Caelo	Anionic hydrophilic cream DAB	13168501	8
Caelo	Anionic hydrophilic cream DAB	13168301	5
Caelo	Anionic hydrophilic cream DAB	13166001	3
Bombastus	Anionic hydrophilic cream DAB	280289	4
Caelo	Anionic hydrophilic cream DAB	13035901	1
Caelo	Anionic hydrophilic cream DAB	13168801	4
Gehe	Anionic hydrophilic cream DAB	13038201	1
Caelo	Anionic hydrophilic cream DAB	13165701	7
Phönix	Anionic hydrophilic cream DAB	279056	1
Bombastus	Anionic hydrophilic cream DAB	278852	2
Caelo	Anionic hydrophilic cream DAB	13168901	6
Gehe	Anionic hydrophilic cream DAB	279057	1
Caelo	Anionic hydrophilic cream DAB	13168001	5
Caelo	Anionic hydrophilic cream DAB	13169101	4
Caelo	Anionic hydrophilic cream DAB	13165101	3
Caelo	Anionic hydrophilic cream DAB	13169001	6
Caelo	Anionic hydrophilic cream DAB	276409	1
Phönix	Anionic hydrophilic cream DAB	13036001	1
Caelo	Anionic hydrophilic cream DAB	13168401	9
Bombastus	Anionic hydrophilic cream DAB	280294	1
Caelo	Anionic hydrophilic cream DAB	12081301	1
Bombastus	Anionic hydrophilic cream DAB	279056	2
Caelo	Anionic hydrophilic cream DAB	278851	1
Noweda	Anionic hydrophilic cream DAB	13168601	1
Caelo	Anionic hydrophilic cream DAB	13168201	2
Caelo	Anionic hydrophilic cream DAB	3313U-02540	1
Bombastus	Anionic hydrophilic cream DAB	277295	1
Caelo	Anionic hydrophilic cream DAB	13154401	1
Caelo	Anionic hydrophilic cream DAB	277461	1
Caelo	Anionic hydrophilic cream DAB	13165601	1
Caelo	Anionic hydrophilic cream DAB	3413M-02540	1

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Supplier	Substance	Batch	Spectra
Noweda	Anionic hydrophilic cream DAB	13167401	1
Caelo	Anionic hydrophilic cream DAB	13168701	5
Caelo	Anionic hydrophilic cream DAB	13167401	2
Caelo	Anionic hydrophilic cream DAB	30081303	1
Caelo	Anionic hydrophilic cream DAB	13168601	13
Sanacorp	Anionic hydrophilic cream DAB	13168701	1
Caelo	Anionic hydrophilic cream DAB	13154201	2
Caelo	Anionic hydrophilic cream DAB	13265301	7
Caelo	Anionic hydrophilic cream DAB	3713A02540	1
Caelo	Anionic hydrophilic cream DAB	13167601	2
Caelo	Anionic hydrophilic cream DAB	10092013A	1
Bombastus	Anionic hydrophilic cream DAB	277458	2
Caelo	Anionic hydrophilic cream DAB	13271001	3
Caelo	Anionic hydrophilic cream DAB	13169201	5
Caelo	Anionic hydrophilic cream DAB	13167501	12
Gehe	Anionic hydrophilic cream DAB	13154201	2
Caelo	Anionic hydrophilic cream DAB	13265401	6
Caelo	Anionic hydrophilic cream DAB	3960/V07/15	1
Gehe	Anionic hydrophilic cream DAB	13165701	1
Caelo	Anionic hydrophilic cream DAB	3965/V07/15	1
Bomba/AHD	Anionic hydrophilic cream DAB	280410	1
Caelo	Anionic hydrophilic cream DAB	13169301	7
Bombastus	Anionic hydrophilic cream DAB	279057	1
Caelo	Anionic hydrophilic cream DAB	13270701	4
Caelo	Anionic hydrophilic cream DAB	27091305	1
Caelo	Anionic hydrophilic cream DAB	13167801	2
Caelo	Anionic hydrophilic cream DAB	13167701	2
Bombastus	Anionic hydrophilic cream DAB	280290	1
Caelo	Anionic hydrophilic cream DAB	13265501	7
Sanacorp	Anionic hydrophilic cream DAB	13168001	1
Caelo	Anionic hydrophilic cream DAB	13265701	1
Caelo	Anionic hydrophilic cream DAB	13280101	19
Caelo	Anionic hydrophilic cream DAB	113313001	1
Caelo	Anionic hydrophilic cream DAB	19101301	1
Caelo/Sanacorp	Anionic hydrophilic cream DAB	13275501	1
Bombastus	Anionic hydrophilic cream DAB	280288	2
Bombastus	Anionic hydrophilic cream DAB	280416	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	13312901	4
Caelo	Anionic hydrophilic cream DAB	4313I-02540	1
Caelo	Anionic hydrophilic cream DAB	13313101	3
Caelo	Anionic hydrophilic cream DAB	13265602	4
Caelo	Anionic hydrophilic cream DAB	13280001	3
Caelo	Anionic hydrophilic cream DAB	4513E2540	1
Bombastus	Anionic hydrophilic cream DAB	278849	1
Caelo	Anionic hydrophilic cream DAB	13167501-3423310192	1
AHD, 31.10.2013	Anionic hydrophilic cream DAB	13313201	1
Caelo	Anionic hydrophilic cream DAB	8111301	1
Caelo	Anionic hydrophilic cream DAB	13313301	4
Caelo	Anionic hydrophilic cream DAB	13275601	2
Caelo	Anionic hydrophilic cream DAB	4513U2540	1
Bombastus	Anionic hydrophilic cream DAB	281999	1
Caelo	Anionic hydrophilic cream DAB	13280201	12
Sanacorp	Anionic hydrophilic cream DAB	13313201	1
Phönix	Anionic hydrophilic cream DAB	13265602	1
Bombastus	Anionic hydrophilic cream DAB	279059	1
Caelo	Anionic hydrophilic cream DAB	13168101	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	13128701	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	13167501-3439311151	1
Gehe	Anionic hydrophilic cream DAB	282001	1
Sanacorp	Anionic hydrophilic cream DAB	13313101	1
Caelo	Anionic hydrophilic cream DAB	13277401	9
Caesar & Loretz	Anionic hydrophilic cream DAB	13313301	1
Caelo	Anionic hydrophilic cream DAB	13313401	5
Caelo	Anionic hydrophilic cream DAB	1331402	1
Caelo	Anionic hydrophilic cream DAB	1331401	1
Noweda	Anionic hydrophilic cream DAB	13280101	1
Caelo	Anionic hydrophilic cream DAB	13313601	5
Caelo	Anionic hydrophilic cream DAB	13313701	6
Caelo	Anionic hydrophilic cream DAB	13277501	1
Gehe	Anionic hydrophilic cream DAB	280418	1
Bombastus	Anionic hydrophilic cream DAB	282004	3
Caelo	Anionic hydrophilic cream DAB	13313901	10
Caelo	Anionic hydrophilic cream DAB	6121304	1
Caelo	Anionic hydrophilic cream DAB	13313501	4
Caelo	Anionic hydrophilic cream DAB	13312801	4
Phoenix 26.11.13	Anionic hydrophilic cream DAB	13265501	1
Bombastus	Anionic hydrophilic cream DAB	282001	1
Bombastus	Anionic hydrophilic cream DAB	281998	1
Caelo	Anionic hydrophilic cream DAB	13314302	3
Bombastus	Anionic hydrophilic cream DAB	282006	5
Sanacorp	Anionic hydrophilic cream DAB	13167501	1
Caelo	Anionic hydrophilic cream DAB	13314001	7
Caelo	Anionic hydrophilic cream DAB	CH13314001	1
Caelo	Anionic hydrophilic cream DAB	13280201-3452311172	1
Caelo	Anionic hydrophilic cream DAB	13314101	9
Caelo	Anionic hydrophilic cream DAB	282005	1
Caelo	Anionic hydrophilic cream DAB	13346001	4
Caelo	Anionic hydrophilic cream DAB	13314601	2
Bombastus	Anionic hydrophilic cream DAB	282002	1
Bombastus	Anionic hydrophilic cream DAB	280417	2
Bombastus	Anionic hydrophilic cream DAB	282110	5
Phönix	Anionic hydrophilic cream DAB	282005	2
Gehe	Anionic hydrophilic cream DAB	282111	2
Gehe	Anionic hydrophilic cream DAB	13280201	1
Caelo	Anionic hydrophilic cream DAB	13346701	1
Caelo	Anionic hydrophilic cream DAB	13346101	4
Wolff/AHD	Anionic hydrophilic cream DAB	282107	1
Caelo	Anionic hydrophilic cream DAB	13271101	3
Caelo	Anionic hydrophilic cream DAB	pzn01119720	1
Phoenix 09.01.2014	Anionic hydrophilic cream DAB	13313501	1
Caelo	Anionic hydrophilic cream DAB	13314401	9
Phönix	Anionic hydrophilic cream DAB	13346301	1
Bombastus	Anionic hydrophilic cream DAB	282107	1
Caelo	Anionic hydrophilic cream DAB	13346301	10
Caesar&loretz,Phoenix	Anionic hydrophilic cream DAB	13363601	1
Caelo	Anionic hydrophilic cream DAB	314Q2540	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	13346401	1
Sanacorp	Anionic hydrophilic cream DAB	13280201	1
Caelo	Anionic hydrophilic cream DAB	13346501	5
Caelo	Anionic hydrophilic cream DAB	13346601	8
Caelo	Anionic hydrophilic cream DAB	13363601	13
eigene Herstellung	Anionic hydrophilic cream DAB	2/270114	1
Phoenix 24.01.2014	Anionic hydrophilic cream DAB	13346101	1
Bombastus	Anionic hydrophilic cream DAB	282111	2
Caelo	Anionic hydrophilic cream DAB	142/AKD51	1
Caelo	Anionic hydrophilic cream DAB	13363301	6
Bombastus	Anionic hydrophilic cream DAB	282005	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	282113	2
Caelo	Anionic hydrophilic cream DAB	13346201	2
Caelo	Anionic hydrophilic cream DAB	6021405	1
Caelo	Anionic hydrophilic cream DAB	6021406	1
Bombastus	Anionic hydrophilic cream DAB	282112	1
Caelo	Anionic hydrophilic cream DAB	13315001	7
Caelo	Anionic hydrophilic cream DAB	13363401	2
Caelo	Anionic hydrophilic cream DAB	714M2540	1
eigene Herstellung	Anionic hydrophilic cream DAB	100214-4	1
Bombastus	Anionic hydrophilic cream DAB	283411	4
Bombastus	Anionic hydrophilic cream DAB	283410	3
Phoenix	Anionic hydrophilic cream DAB	13314901	1
Bombastus	Anionic hydrophilic cream DAB	283412	1
Caelo	Anionic hydrophilic cream DAB	13068504	1
Caelo	Anionic hydrophilic cream DAB	13364001	13
Caelo	Anionic hydrophilic cream DAB	13244402	2
Caelo	Anionic hydrophilic cream DAB	1331501	1
Bombastus	Anionic hydrophilic cream DAB	280418	2
Bombastus	Anionic hydrophilic cream DAB	283476	1
Caelo	Anionic hydrophilic cream DAB	13363201	10
Phoenix	Anionic hydrophilic cream DAB	13364201	1
Caelo	Anionic hydrophilic cream DAB	24021401	1
Bombastus	Anionic hydrophilic cream DAB	282115	1
Caelo	Anionic hydrophilic cream DAB	13310001	1
Caelo	Anionic hydrophilic cream DAB	13314801	1
Sanacorp 25.02.2014 Ek ...	Anionic hydrophilic cream DAB	13364201	2
Caelo	Anionic hydrophilic cream DAB	13275501	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14016901	2
Noweda	Anionic hydrophilic cream DAB	13270801	1
Caelo	Anionic hydrophilic cream DAB	13314901	1
Caelo	Anionic hydrophilic cream DAB	13364401	5
Bombastus	Anionic hydrophilic cream DAB	283413	2
Caelo	Anionic hydrophilic cream DAB	1119720	1
Gehe am 21.02.14	Anionic hydrophilic cream DAB	13364401	1
Caelo	Anionic hydrophilic cream DAB	281999	1
Bombastus	Anionic hydrophilic cream DAB	283477	2
Bombastus	Anionic hydrophilic cream DAB	283474	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	13364301	1
Caelo	Anionic hydrophilic cream DAB	1114U2540	1
Caelo	Anionic hydrophilic cream DAB	13364301	4
Noweda	Anionic hydrophilic cream DAB	13364001	2
Bombastus	Anionic hydrophilic cream DAB	282114	4
Caelo	Anionic hydrophilic cream DAB	14042501	2
Caelo	Anionic hydrophilic cream DAB	14016602	2
Bombastus	Anionic hydrophilic cream DAB	280291	1
GEHE 22.03.2014	Anionic hydrophilic cream DAB	14062301	1
Bombastus	Anionic hydrophilic cream DAB	283478	1
Caelo	Anionic hydrophilic cream DAB	13364101	4
Caelo	Anionic hydrophilic cream DAB	14062301	8
Caelo	Anionic hydrophilic cream DAB	14042401	1
Caelo/Sanacorp	Anionic hydrophilic cream DAB	13364201	1
Caelo	Anionic hydrophilic cream DAB	1313314401	1
Bombastus	Anionic hydrophilic cream DAB	282003	1
Bombastus	Anionic hydrophilic cream DAB	283481	5
Caelo	Anionic hydrophilic cream DAB	14017001	2
Bombastus	Anionic hydrophilic cream DAB	285593	1
Caelo	Anionic hydrophilic cream DAB	13314201	10
Caelo	Anionic hydrophilic cream DAB	13364201	5
Caelo	Anionic hydrophilic cream DAB	14042601	1
Caelo	Anionic hydrophilic cream DAB	14062101	6

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	280291	1
Caelo	Anionic hydrophilic cream DAB	14061801	9
Caelo	Anionic hydrophilic cream DAB	133312901	1
Caelo	Anionic hydrophilic cream DAB	14016701	9
Bombastus	Anionic hydrophilic cream DAB	283482	2
Caelo	Anionic hydrophilic cream DAB	14062201	8
Caelo	Anionic hydrophilic cream DAB	14062601	10
Caelo	Anionic hydrophilic cream DAB	13314701	2
Bombastus	Anionic hydrophilic cream DAB	285589	1
Gehe	Anionic hydrophilic cream DAB	14042201	1
Bombastus	Anionic hydrophilic cream DAB	285594	2
Caelo	Anionic hydrophilic cream DAB	1814E2540	1
Caelo	Anionic hydrophilic cream DAB	14062401	4
Bombastus	Anionic hydrophilic cream DAB	285592	1
Caelo	Anionic hydrophilic cream DAB	13409501	2
Bombastus	Anionic hydrophilic cream DAB	282109	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	13409401	1
Bombastus	Anionic hydrophilic cream DAB	283480	3
Bombastus	Anionic hydrophilic cream DAB	285595	1
Caelo	Anionic hydrophilic cream DAB	14062901	9
AHD 12.5.14, Preis 6,00	Anionic hydrophilic cream DAB		1
Alliance Healthcare	Anionic hydrophilic cream DAB	13363401	1
Sanacorp	Anionic hydrophilic cream DAB	142/AKD52	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14118201	1
Bombastus	Anionic hydrophilic cream DAB	286502	3
Bomba	Anionic hydrophilic cream DAB	283478	1
Phoenix	Anionic hydrophilic cream DAB	14016602	1
Caelo	Anionic hydrophilic cream DAB	14062501	6
Caelo	Anionic hydrophilic cream DAB	14118401	11
Caelo	Anionic hydrophilic cream DAB	14016801	4
	Anionic hydrophilic cream DAB	285597	1
Caelo	Anionic hydrophilic cream DAB	14042201	1
Caelo	Anionic hydrophilic cream DAB	14118101	16
Bombastus	Anionic hydrophilic cream DAB	285596	2
Caelo	Anionic hydrophilic cream DAB	1418101	2
Bombastus	Anionic hydrophilic cream DAB	277463	1
Caelo	Anionic hydrophilic cream DAB	14138902	5
Phoenix	Anionic hydrophilic cream DAB	286498	1
Caelo	Anionic hydrophilic cream DAB	2414E2540	1
PHOENIX 22.05.2014	Anionic hydrophilic cream DAB	14061801	1
Caelo	Anionic hydrophilic cream DAB	14118201	10
Caelo	Anionic hydrophilic cream DAB	14016601	1
Caelo	Anionic hydrophilic cream DAB	14118301	5
Phoenix	Anionic hydrophilic cream DAB	14118201	1
ahd/lamotte	Anionic hydrophilic cream DAB	14118401	1
Caelo	Anionic hydrophilic cream DAB	14062701	2
Bombastus	Anionic hydrophilic cream DAB	286495	2
Fagron	Anionic hydrophilic cream DAB	14016602	1
Bombastus	Anionic hydrophilic cream DAB	280413	1
Caelo	Anionic hydrophilic cream DAB	14118501	9
Bombastus	Anionic hydrophilic cream DAB	283483	1
Bombastus	Anionic hydrophilic cream DAB	286498	2
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14062401	1
Caelo	Anionic hydrophilic cream DAB	14138801	5
Gehe	Anionic hydrophilic cream DAB	14062501	1
Bombastus	Anionic hydrophilic cream DAB	285597	1
VDL;2.7.14	Anionic hydrophilic cream DAB	14118401	1
Bombastus	Anionic hydrophilic cream DAB	287557	6
Caelo	Anionic hydrophilic cream DAB	14070801	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14139001	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14146301	3
Caelo	Anionic hydrophilic cream DAB	14062801	2
Caelo	Anionic hydrophilic cream DAB	14144401	6
Caelo	Anionic hydrophilic cream DAB	14016901	1
Phoenix 11.07.2014	Anionic hydrophilic cream DAB	14139001	2
Caelo	Anionic hydrophilic cream DAB	13363701	1
Noweda	Anionic hydrophilic cream DAB	14062701	1
Caelo	Anionic hydrophilic cream DAB	14144601	1
Caelo	Anionic hydrophilic cream DAB	14146201	5
Caelo	Anionic hydrophilic cream DAB	14146401	3
Sanacorp 11.07.14 EK 5,76	Anionic hydrophilic cream DAB	141118401	1
Bombastus	Anionic hydrophilic cream DAB	287560	1
Bombastus	Anionic hydrophilic cream DAB	286499	3
Caelo	Anionic hydrophilic cream DAB	14144501	4
Caelo	Anionic hydrophilic cream DAB	14185301	9
Bombastus	Anionic hydrophilic cream DAB	286505	2
Caelo	Anionic hydrophilic cream DAB	14138701	3
Caelo	Anionic hydrophilic cream DAB	14139001	2
Bombastus	Anionic hydrophilic cream DAB	287562	4
Caelo	Anionic hydrophilic cream DAB	1485401	1
Caelo	Anionic hydrophilic cream DAB	12081405	1
Caelo	Anionic hydrophilic cream DAB	14144701	3
Caelo	Anionic hydrophilic cream DAB	14185501	5
Caelo	Anionic hydrophilic cream DAB	14186702	6
Caelo	Anionic hydrophilic cream DAB	14146501	2
Raben-Apotheke Mildena	Anionic hydrophilic cream DAB	283410	1
Caelo	Anionic hydrophilic cream DAB	14024901	1
Caelo	Anionic hydrophilic cream DAB	14144301	12
Bombastus	Anionic hydrophilic cream DAB	287559	2
Caelo	Anionic hydrophilic cream DAB	14185401	5
Bombastus	Anionic hydrophilic cream DAB	287563	1
Caelo	Anionic hydrophilic cream DAB	14186601	8
Caelo	Anionic hydrophilic cream DAB	14185601	7
Bombastus	Anionic hydrophilic cream DAB	287432	2
Gehe 01.08.14	Anionic hydrophilic cream DAB	14062501	1
Bombastus	Anionic hydrophilic cream DAB	287564	2
Caelo	Anionic hydrophilic cream DAB	14186501	16
Caelo	Anionic hydrophilic cream DAB	287562	1
Caelo	Anionic hydrophilic cream DAB	141460201	1
Sanacorp	Anionic hydrophilic cream DAB	14186702	1
Bombastus	Anionic hydrophilic cream DAB	288652	1
sanacorp	Anionic hydrophilic cream DAB	286501	1
Caelo	Anionic hydrophilic cream DAB	1336301	1
Phoenix	Anionic hydrophilic cream DAB	14139001	1
Fagron	Anionic hydrophilic cream DAB	14186601	1
Caelo	Anionic hydrophilic cream DAB	1418601	1
AHDE 12.09.2014	Anionic hydrophilic cream DAB	14144301	1
Caelo	Anionic hydrophilic cream DAB	30091403	1
Caesar&lorenz,phönix	Anionic hydrophilic cream DAB	14186702	1
Bombastus	Anionic hydrophilic cream DAB	287435	1
Bombastus	Anionic hydrophilic cream DAB	287436	2
Caelo	Anionic hydrophilic cream DAB	14185201	3
Caelo	Anionic hydrophilic cream DAB	14233202	9
Caelo	Anionic hydrophilic cream DAB	14185801	5
Caelo	Anionic hydrophilic cream DAB	14233101	11
Caelo	Anionic hydrophilic cream DAB	14068601	1
Caelo	Anionic hydrophilic cream DAB	14185702	1
Gehe	Anionic hydrophilic cream DAB	14232901	1
Bombastus	Anionic hydrophilic cream DAB	285591	1
Bombastus	Anionic hydrophilic cream DAB	287565	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14233601	6
Caelo	Anionic hydrophilic cream DAB	14232901	5
Gehe	Anionic hydrophilic cream DAB	288653	1
Caelo	Anionic hydrophilic cream DAB	14233301	5
Bombastus	Anionic hydrophilic cream DAB	288656	2
Bombastus	Anionic hydrophilic cream DAB	288570	1
Caelo	Anionic hydrophilic cream DAB	14186801	6
Caelo	Anionic hydrophilic cream DAB	14185901	4
sanacorp	Anionic hydrophilic cream DAB	288655	1
Bombastus	Anionic hydrophilic cream DAB	288720	1
Phönix	Anionic hydrophilic cream DAB	288572	1
Bombastus	Anionic hydrophilic cream DAB	288575	1
Caelo	Anionic hydrophilic cream DAB	14263901	5
Bombastus	Anionic hydrophilic cream DAB	288655	2
Caelo	Anionic hydrophilic cream DAB	14186001	1
sanacorp	Anionic hydrophilic cream DAB	14233101	1
Caelo	Anionic hydrophilic cream DAB	17112014B	1
Bombastus	Anionic hydrophilic cream DAB	288657	1
Sana 20.11.14 EK 5,76	Anionic hydrophilic cream DAB	14233101	1
Bombastus	Anionic hydrophilic cream DAB	288659	3
Caelo	Anionic hydrophilic cream DAB	2111401	1
Bombastus	Anionic hydrophilic cream DAB	288721	2
Phönix	Anionic hydrophilic cream DAB	14233401	1
Phoenix 29.08.2014 5,78	Anionic hydrophilic cream DAB	14186601	1
Caelo	Anionic hydrophilic cream DAB	14233001	4
Bombastus	Anionic hydrophilic cream DAB	290079	1
Caelo	Anionic hydrophilic cream DAB	1423901	1
Bombastus	Anionic hydrophilic cream DAB	290144	2
Caelo	Anionic hydrophilic cream DAB	14233401	10
Euro OTC	Anionic hydrophilic cream DAB	288658	1
Caelo	Anionic hydrophilic cream DAB	14185701	1
Caelo	Anionic hydrophilic cream DAB	14138901	5
Caelo	Anionic hydrophilic cream DAB	14233501	2
Caelo	Anionic hydrophilic cream DAB	290145	1
Gehe	Anionic hydrophilic cream DAB	290080	1
Caelo	Anionic hydrophilic cream DAB	14264201	7
Caelo	Anionic hydrophilic cream DAB	104/AKD2	1
Bombastus	Anionic hydrophilic cream DAB	288574	3
Bombastus	Anionic hydrophilic cream DAB	290150	1
Caelo	Anionic hydrophilic cream DAB	14285801	5
Caelo	Anionic hydrophilic cream DAB	14285601	6
Bombastus	Anionic hydrophilic cream DAB	290149	2
Sanacorp 19.12.14 EK 5,76	Anionic hydrophilic cream DAB	14285601	1
Sanacorp	Anionic hydrophilic cream DAB	14285601	1
Caelo	Anionic hydrophilic cream DAB	14186101	5
Caelo	Anionic hydrophilic cream DAB	14264001	9
Caelo	Anionic hydrophilic cream DAB	14264302	1
Caelo	Anionic hydrophilic cream DAB	14295001	8
Phoenix 14.01.2015 Ek: ...	Anionic hydrophilic cream DAB	14295101	1
Bombastus	Anionic hydrophilic cream DAB	290146	4
Caelo	Anionic hydrophilic cream DAB	14286001	3
Caelo	Anionic hydrophilic cream DAB	14255401	1
Caelo	Anionic hydrophilic cream DAB	14286101	6
Caesar&loretz,Phoenix	Anionic hydrophilic cream DAB	14285601	1
Caelo	Anionic hydrophilic cream DAB	14286201	9
Bombastus	Anionic hydrophilic cream DAB	291658	4
Caelo	Anionic hydrophilic cream DAB	14366301	5
Caelo	Anionic hydrophilic cream DAB	14264101	4
DAB 2008	Anionic hydrophilic cream DAB	14264001	1
Caelo	Anionic hydrophilic cream DAB	14264301	5

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14294902	2
Alliance21.01.15	Anionic hydrophilic cream DAB	14233101	1
Bombastus	Anionic hydrophilic cream DAB	291657	1
Bombastus	Anionic hydrophilic cream DAB	291659	2
Bombastus	Anionic hydrophilic cream DAB	290080	2
Caelo	Anionic hydrophilic cream DAB	14285501	3
Bombastus	Anionic hydrophilic cream DAB	290218	2
Sana 11.02.15 EK 5,75	Anionic hydrophilic cream DAB	14294902	1
Phönix	Anionic hydrophilic cream DAB	14264301	1
Rabenapotheke	Anionic hydrophilic cream DAB	290146	1
Bombastus	Anionic hydrophilic cream DAB	291655	1
Bombastus	Anionic hydrophilic cream DAB	291650	1
Bombastus	Anionic hydrophilic cream DAB	290075	1
Caelo	Anionic hydrophilic cream DAB	14295101	3
Bombastus	Anionic hydrophilic cream DAB	290145	2
Bombastus	Anionic hydrophilic cream DAB	291823	6
Caelo	Anionic hydrophilic cream DAB	1423301	2
Caelo	Anionic hydrophilic cream DAB	14233201	7
Bombastus	Anionic hydrophilic cream DAB	287433	1
Alliance health	Anionic hydrophilic cream DAB	14233001	1
Caelo	Anionic hydrophilic cream DAB	14294801	2
Caelo	Anionic hydrophilic cream DAB	14146601	1
Sanacorp	Anionic hydrophilic cream DAB	104/AKD3	1
Caelo	Anionic hydrophilic cream DAB	14341501	5
Fagron	Anionic hydrophilic cream DAB	14232801	1
Caelo	Anionic hydrophilic cream DAB	14294701	5
Bombastus	Anionic hydrophilic cream DAB	290220	2
Caelo	Anionic hydrophilic cream DAB	5031508	1
Bombastus	Anionic hydrophilic cream DAB	288658	2
Bombastus	Anionic hydrophilic cream DAB	291656	4
Caelo	Anionic hydrophilic cream DAB	14295201	3
AHD 05.03.15 3,33	Anionic hydrophilic cream DAB	14264001	1
Caelo	Anionic hydrophilic cream DAB	14341601	7
Caelo	Anionic hydrophilic cream DAB	14342901	2
Caelo	Anionic hydrophilic cream DAB	14342101	8
Caelo	Anionic hydrophilic cream DAB	14341701	8
Euro OTC	Anionic hydrophilic cream DAB	237563	1
Caelo	Anionic hydrophilic cream DAB	14342201	5
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14185801	1
Caelo	Anionic hydrophilic cream DAB	14366802	1
Noweda	Anionic hydrophilic cream DAB	290147	2
Bombastus	Anionic hydrophilic cream DAB	291824	6
Caelo	Anionic hydrophilic cream DAB	14294601	2
Caelo	Anionic hydrophilic cream DAB	14342002	2
Caelo	Anionic hydrophilic cream DAB	14232801	1
Caesar&loretz,Phoenix	Anionic hydrophilic cream DAB	14294801	1
Bombastus	Anionic hydrophilic cream DAB	291825	3
Caelo	Anionic hydrophilic cream DAB	1434301	1
Caelo	Anionic hydrophilic cream DAB	14294301	3
Caelo	Anionic hydrophilic cream DAB	9041505	1
Bombastus	Anionic hydrophilic cream DAB	291729	1
	Anionic hydrophilic cream DAB	293437	1
Caelo	Anionic hydrophilic cream DAB	14294201	15
Caelo	Anionic hydrophilic cream DAB	14342501	5
Caelo	Anionic hydrophilic cream DAB	14342601	5
Bombastus	Anionic hydrophilic cream DAB	14342501	2
Caelo	Anionic hydrophilic cream DAB	291732	2
Anzag 27.03.2015	Anionic hydrophilic cream DAB	14264301	1
sanacorp	Anionic hydrophilic cream DAB	14341601	1
Caelo	Anionic hydrophilic cream DAB	14294501	2

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	14367001	12
Caelo	Anionic hydrophilic cream DAB	14367401	12
Caelo	Anionic hydrophilic cream DAB	14342301	2
Bombastus	Anionic hydrophilic cream DAB	290078	1
Bombastus	Anionic hydrophilic cream DAB	293357	1
Bombastus	Anionic hydrophilic cream DAB	291731	1
Caelo	Anionic hydrophilic cream DAB	27041512	1
Bombastus	Anionic hydrophilic cream DAB	288573	1
Phoenix Goettin	Anionic hydrophilic cream DAB	293439	1
Caelo	Anionic hydrophilic cream DAB	15001201	9
Bombastus	Anionic hydrophilic cream DAB	293358	1
Bombastus	Anionic hydrophilic cream DAB	291832	2
Bombastus	Anionic hydrophilic cream DAB	293440	5
Bombastus	Anionic hydrophilic cream DAB	293445	1
Caelo	Anionic hydrophilic cream DAB	15026901	4
Caelo	Anionic hydrophilic cream DAB	15001101	6
Bombastus	Anionic hydrophilic cream DAB	60080602	2
Gehe	Anionic hydrophilic cream DAB	14341901	1
Caelo	Anionic hydrophilic cream DAB	14374801	3
Caelo	Anionic hydrophilic cream DAB	4051506	1
Caelo	Anionic hydrophilic cream DAB	293437	1
Caelo	Anionic hydrophilic cream DAB	1315Q-02540	1
Bombastus	Anionic hydrophilic cream DAB	293441	5
Caelo	Anionic hydrophilic cream DAB	15001301	10
Caelo	Anionic hydrophilic cream DAB	14342801	12
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14232801	1
Caelo	Anionic hydrophilic cream DAB	14341901	1
Caelo	Anionic hydrophilic cream DAB	14342701	3
Bombastus	Anionic hydrophilic cream DAB	291822	2
Caelo	Anionic hydrophilic cream DAB	14366801	18
Caelo	Anionic hydrophilic cream DAB	6061501	1
Bombastus	Anionic hydrophilic cream DAB	294545	4
Bombastus	Anionic hydrophilic cream DAB	294546	2
Henry Lamotte Oils GmbH	Anionic hydrophilic cream DAB	14341901	1
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	14294201	1
AHDE 22.05.2015	Anionic hydrophilic cream DAB	14366801	5
Caelo	Anionic hydrophilic cream DAB	15001401	8
Caelo	Anionic hydrophilic cream DAB	15027201	4
Sanacorp	Anionic hydrophilic cream DAB	104/AKD4	1
Caelo	Anionic hydrophilic cream DAB	15034401	5
Bombastus	Anionic hydrophilic cream DAB	293446	1
Gehe	Anionic hydrophilic cream DAB	15027301	1
Bobmastus	Anionic hydrophilic cream DAB	291657	1
Caelo	Anionic hydrophilic cream DAB	15027002	2
Sanacorp	Anionic hydrophilic cream DAB	288573	1
Caelo	Anionic hydrophilic cream DAB	14342001	1
Caelo	Anionic hydrophilic cream DAB	14285701	1
Bombastus	Anionic hydrophilic cream DAB	294649	5
Caelo	Anionic hydrophilic cream DAB	294649	2
Sanacorp	Anionic hydrophilic cream DAB	15034401	1
Caesar&lorenz,Phoenix	Anionic hydrophilic cream DAB	14233601	1
Bombastus	Anionic hydrophilic cream DAB	294642	1
Caelo	Anionic hydrophilic cream DAB	14267401	1
Caelo	Anionic hydrophilic cream DAB	15034301	8
Caelo	Anionic hydrophilic cream DAB	15034601	4
Bombastus	Anionic hydrophilic cream DAB	293359	4
Caelo	Anionic hydrophilic cream DAB	1415034401	1
Caelo	Anionic hydrophilic cream DAB	15200001	5
Bombastus	Anionic hydrophilic cream DAB	293447	3
Caelo	Anionic hydrophilic cream DAB	15027101	6

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	16071506	1
Bombastus	Anionic hydrophilic cream DAB	293437	2
lamotte/gehe	Anionic hydrophilic cream DAB	15200001	1
Caelo	Anionic hydrophilic cream DAB	15199801	3
Caelo	Anionic hydrophilic cream DAB	15200101	8
Caelo	Anionic hydrophilic cream DAB	15027301	3
Caelo	Anionic hydrophilic cream DAB	15027001	29
Caelo	Anionic hydrophilic cream DAB	15199901	6
Caelo	Anionic hydrophilic cream DAB	15034501	2
Bombastus	Anionic hydrophilic cream DAB	294650	8
Bombastus	Anionic hydrophilic cream DAB	293448	3
Sanacorp	Anionic hydrophilic cream DAB	15199901	1
Caelo	Anionic hydrophilic cream DAB	15200501	3
Caelo	Anionic hydrophilic cream DAB	15039001	2
Bombastus	Anionic hydrophilic cream DAB	294549	2
Caelo	Anionic hydrophilic cream DAB	15200301	6
Bombastus	Anionic hydrophilic cream DAB	293361	1
Caelo	Anionic hydrophilic cream DAB	15267201	7
Caelo/Anzag	Anionic hydrophilic cream DAB	15200401	1
Bombastus	Anionic hydrophilic cream DAB	295396	1
Caelo	Anionic hydrophilic cream DAB	15259301	1
Caelo	Anionic hydrophilic cream DAB	15267101	3
Bombastus	Anionic hydrophilic cream DAB	294647	3
Caelo	Anionic hydrophilic cream DAB	15200401	2
Caelo	Anionic hydrophilic cream DAB	15267001	3
Caelo	Anionic hydrophilic cream DAB	15200601	4
Caelo	Anionic hydrophilic cream DAB	1500141	3
Caelo	Anionic hydrophilic cream DAB	15259001	7
caesar&loretz,Phönix	Anionic hydrophilic cream DAB	15034301	1
Bombastus	Anionic hydrophilic cream DAB	295403	1
Caelo	Anionic hydrophilic cream DAB	15267301	6
Bombastus	Anionic hydrophilic cream DAB	295514	2
Caelo	Anionic hydrophilic cream DAB	15266901	3
Caelo	Anionic hydrophilic cream DAB	15258901	5
Caelo	Anionic hydrophilic cream DAB	15259101	6
Bombastus	Anionic hydrophilic cream DAB	294646	2
Bombastus	Anionic hydrophilic cream DAB	294648	1
Caelo	Anionic hydrophilic cream DAB	15267801	9
Caelo	Anionic hydrophilic cream DAB	15267601	3
Caesar&loretz,Anzag	Anionic hydrophilic cream DAB	15258901	1
Bombastus	Anionic hydrophilic cream DAB	295518	7
Caelo	Anionic hydrophilic cream DAB	15034201	9
Caelo	Anionic hydrophilic cream DAB	15267401	14
Caelo	Anionic hydrophilic cream DAB	15200202	1
Bombastus	Anionic hydrophilic cream DAB	295399	2
Bombastus	Anionic hydrophilic cream DAB	294643	5
Caelo	Anionic hydrophilic cream DAB	15267701	3
Bombastus	Anionic hydrophilic cream DAB	295397	2
Bombastus	Anionic hydrophilic cream DAB	296699	3
Bombastus	Anionic hydrophilic cream DAB	294641	1
Bombastus	Anionic hydrophilic cream DAB	295511	5
Bombastus	Anionic hydrophilic cream DAB	295515	2
Caelo	Anionic hydrophilic cream DAB	15315801	2
Bombastus	Anionic hydrophilic cream DAB	294547	2
Caelo	Anionic hydrophilic cream DAB	15315701	7
Caelo	Anionic hydrophilic cream DAB	15319301	6
Caelo	Anionic hydrophilic cream DAB	15319201	5
Bombastus	Anionic hydrophilic cream DAB	296705	5
Fischer/Gehe	Anionic hydrophilic cream DAB	15315601	1
Bombastus	Anionic hydrophilic cream DAB	296706	2

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	15200201	4
Bombastus	Anionic hydrophilic cream DAB	295512	7
Bombastus	Anionic hydrophilic cream DAB	295516	5
Bombastus	Anionic hydrophilic cream DAB	295401	2
Caelo	Anionic hydrophilic cream DAB	15315601	3
Caelo	Anionic hydrophilic cream DAB	Testmessung	1
Bombastus	Anionic hydrophilic cream DAB	2946450	1
Caelo	Anionic hydrophilic cream DAB	14341801	1
Caelo	Anionic hydrophilic cream DAB	1423201	1
Caelo	Anionic hydrophilic cream DAB	15315901	3
Caelo	Anionic hydrophilic cream DAB	1535101	1
Caelo	Anionic hydrophilic cream DAB	15319101	3
Bombastus	Anionic hydrophilic cream DAB	294551	1
Caelo	Anionic hydrophilic cream DAB	15315501	3
Caelo	Anionic hydrophilic cream DAB	153552901	1
phoenix/noveda	Anionic hydrophilic cream DAB	15267501	1
Caelo	Anionic hydrophilic cream DAB	15352901	9
Bombastus	Anionic hydrophilic cream DAB	294644	5
Caelo	Anionic hydrophilic cream DAB	15397201	5
Caelo	Anionic hydrophilic cream DAB	15353201	4
Bombastus	Anionic hydrophilic cream DAB	295404	2
Caelo	Anionic hydrophilic cream DAB	15357301	3
Caelo	Anionic hydrophilic cream DAB	AKD10	1
Caelo	Anionic hydrophilic cream DAB	15357401	9
Bombastus	Anionic hydrophilic cream DAB	296783	4
Bombastus	Anionic hydrophilic cream DAB	296708	3
Bombastus	Anionic hydrophilic cream DAB	296707	3
Bombastus	Anionic hydrophilic cream DAB	296700	4
Bombastus	Anionic hydrophilic cream DAB	296702	6
Caelo	Anionic hydrophilic cream DAB	15397301	10
Bombastus	Anionic hydrophilic cream DAB	296787	6
Caelo	Anionic hydrophilic cream DAB	15357501	1
Caelo	Anionic hydrophilic cream DAB	15400701	7
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	15027301	1
Caelo	Anionic hydrophilic cream DAB	15319501	7
Bombastus	Anionic hydrophilic cream DAB	296786	2
Gehe	Anionic hydrophilic cream DAB	14342201	1
Caelo	Anionic hydrophilic cream DAB	15400901	6
Caelo	Anionic hydrophilic cream DAB	15396801	3
Caelo	Anionic hydrophilic cream DAB	15401201	4
Bambustus/Noweda	Anionic hydrophilic cream DAB	297662	5
Bombastus	Anionic hydrophilic cream DAB	296704	1
Caelo	Anionic hydrophilic cream DAB	15400501	2
Bombastus	Anionic hydrophilic cream DAB	296781	1
Bombastus	Anionic hydrophilic cream DAB	295400	7
Caelo	Anionic hydrophilic cream DAB	15397101	4
Caelo	Anionic hydrophilic cream DAB	15401701	6
Sanacorp	Anionic hydrophilic cream DAB	15401201	1
Caelo	Anionic hydrophilic cream DAB	15401001	5
Caesar & Loretz/AHD	Anionic hydrophilic cream DAB	15319101	1
Caelo	Anionic hydrophilic cream DAB	15401101	7
Caelo	Anionic hydrophilic cream DAB	294645	1
Caelo	Anionic hydrophilic cream DAB	15357201	3
Euro OTC	Anionic hydrophilic cream DAB	15401302	1
Caelo	Anionic hydrophilic cream DAB	15400601	1
Caelo	Anionic hydrophilic cream DAB	15401302	4
Anzag	Anionic hydrophilic cream DAB	15352901	1
Caelo	Anionic hydrophilic cream DAB	15428102	4
Bombastus	Anionic hydrophilic cream DAB	297672	2
Bombastus	Anionic hydrophilic cream DAB	297679	6

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Supplier	Substance	Batch	Spectra
Sanacorp 21.01.16	Anionic hydrophilic cream DAB	15400901	1
Noweda	Anionic hydrophilic cream DAB	15400501	1
Bombastus	Anionic hydrophilic cream DAB	296785	1
Caelo	Anionic hydrophilic cream DAB	15353101	1
Caelo	Anionic hydrophilic cream DAB	15428401	4
Caelo	Anionic hydrophilic cream DAB	15428201	8
Caelo	Anionic hydrophilic cream DAB	295400	1
Bombastus	Anionic hydrophilic cream DAB	296703	8
Caesar&Loretz GmbH	Anionic hydrophilic cream DAB	15357401	1
Caelo	Anionic hydrophilic cream DAB	154009	1
Caelo	Anionic hydrophilic cream DAB	15400401	5
Bombastus	Anionic hydrophilic cream DAB	297671	3
Caelo	Anionic hydrophilic cream DAB	15431702	12
Bombastus	Anionic hydrophilic cream DAB	295517	8
Caelo	Anionic hydrophilic cream DAB	15396901	1
Bombastus	Anionic hydrophilic cream DAB	297680	5
Caelo	Anionic hydrophilic cream DAB	15428501	5
Caelo	Anionic hydrophilic cream DAB	15357101	1
Caelo	Anionic hydrophilic cream DAB	15432001	6
Caelo	Anionic hydrophilic cream DAB	15428301	7
Bombastus	Anionic hydrophilic cream DAB	297666	1
Sanacorp	Anionic hydrophilic cream DAB	AKD11	1
Bombastus	Anionic hydrophilic cream DAB	296782	1
Caelo	Anionic hydrophilic cream DAB	1260216	1
Caelo	Anionic hydrophilic cream DAB	15432101	6
Noweda	Anionic hydrophilic cream DAB	15428401	1
Caelo	Anionic hydrophilic cream DAB	15401501	2
Caelo	Anionic hydrophilic cream DAB	16046201	8
Bombastus	Anionic hydrophilic cream DAB	297669	5
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	15400601	1
Caelo	Anionic hydrophilic cream DAB	16046801	3
Caelo	Anionic hydrophilic cream DAB	16046301	3
Bombastus	Anionic hydrophilic cream DAB	297663	1
Caelo	Anionic hydrophilic cream DAB	16046501	3
Sana 23.03.16 Ek 5,73	Anionic hydrophilic cream DAB	15428401	1
Caelo	Anionic hydrophilic cream DAB	16046601	6
Bombastus	Anionic hydrophilic cream DAB	300349	2
Gehe	Anionic hydrophilic cream DAB	15431801	1
Caelo	Anionic hydrophilic cream DAB	297672	1
Bombastus	Anionic hydrophilic cream DAB	300356	3
Bombastus	Anionic hydrophilic cream DAB	297668	6
Caelo	Anionic hydrophilic cream DAB	16046901	11
WE:16.04.2016 Sanacor...	Anionic hydrophilic cream DAB	14342901	1
Bombastus	Anionic hydrophilic cream DAB	297673	1
Caelo	Anionic hydrophilic cream DAB	16047001	11
Bombastus	Anionic hydrophilic cream DAB	297677	2
Caelo	Anionic hydrophilic cream DAB	16057501	7
Bombastus	Anionic hydrophilic cream DAB	300350	3
Bombastus	Anionic hydrophilic cream DAB	300358	6
Bombastus	Anionic hydrophilic cream DAB	297676	2
Caelo	Anionic hydrophilic cream DAB	16058001	7
Bombastus	Anionic hydrophilic cream DAB	2955126	1
Euro OTC	Anionic hydrophilic cream DAB	260416v2	1
Caelo	Anionic hydrophilic cream DAB	16057601	5
Caelo	Anionic hydrophilic cream DAB	16057701	7
Bombastus	Anionic hydrophilic cream DAB	300352	1
Bombastus	Anionic hydrophilic cream DAB	300353	3
Caelo	Anionic hydrophilic cream DAB	15431801	3
Caelo	Anionic hydrophilic cream DAB	16103501	3
Fagron	Anionic hydrophilic cream DAB	16047301	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	15431901	2
Bombastus	Anionic hydrophilic cream DAB	299256	1
Caelo	Anionic hydrophilic cream DAB	16103101	8
Bombastus	Anionic hydrophilic cream DAB	300365	6
Caelo	Anionic hydrophilic cream DAB	15401301	2
Fagron	Anionic hydrophilic cream DAB	16046701	1
Sanacorp	Anionic hydrophilic cream DAB	106/AKD12	1
Caelo	Anionic hydrophilic cream DAB	297669	1
Caelo	Anionic hydrophilic cream DAB	16046701	2
Caelo	Anionic hydrophilic cream DAB	300353	1
Bombastus	Anionic hydrophilic cream DAB	300351	4
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream DAB	15432001	2
Caelo	Anionic hydrophilic cream DAB	12345	1
Bombastus	Anionic hydrophilic cream DAB	301269	6
Caelo	Anionic hydrophilic cream DAB	16103201	1
Caelo	Anionic hydrophilic cream DAB	14285902	1
Caelo	Anionic hydrophilic cream DAB	160470001	1
Caelo	Anionic hydrophilic cream DAB	12886	1
Bombastus	Anionic hydrophilic cream DAB	297667	1
Fagron	Anionic hydrophilic cream DAB	16103501	1
Euro OTC	Anionic hydrophilic cream DAB	16046701	1
Caelo	Anionic hydrophilic cream DAB	16047101	2
Anzag	Anionic hydrophilic cream DAB	297911	2
Caelo	Anionic hydrophilic cream DAB	1259487	1
Caelo	Anionic hydrophilic cream DAB	16057901	2
Bombastus	Anionic hydrophilic cream DAB	297675	6
Caelo	Anionic hydrophilic cream DAB	16103301	10
Caelo	Anionic hydrophilic cream DAB	16103401	10
Bombastus	Anionic hydrophilic cream DAB	300360	3
Bombastus	Anionic hydrophilic cream DAB	300362	1
Phönix	Anionic hydrophilic cream DAB	16103301	1
Bombastus	Anionic hydrophilic cream DAB	300348	3
Caelo	Anionic hydrophilic cream DAB	1541702	1
Caelo	Anionic hydrophilic cream DAB	16057201	5
Caelo	Anionic hydrophilic cream DAB	16152701	11
Bombastus	Anionic hydrophilic cream DAB	300363	1
Caelo	Anionic hydrophilic cream DAB	16150801	13
Bombastus	Anionic hydrophilic cream DAB	301270	2
wepa/Sanaco	Anionic hydrophilic cream DAB	16103301	1
Caelo	Anionic hydrophilic cream DAB	16150901	9
Caelo	Anionic hydrophilic cream DAB	161431	1
Bombastus	Anionic hydrophilic cream DAB	301353	4
Bombastus	Anionic hydrophilic cream DAB	300364	2
Bombastus	Anionic hydrophilic cream DAB	300357	2
Caelo	Anionic hydrophilic cream DAB	Mh090716Lo1	1
Bombastus	Anionic hydrophilic cream DAB	301356	2
Caelo	Anionic hydrophilic cream DAB	16150703	1
Bombastus	Anionic hydrophilic cream DAB	301349	3
Bombastus	Anionic hydrophilic cream DAB	301350	6
Caelo	Anionic hydrophilic cream DAB	16057401	7
Caelo	Anionic hydrophilic cream DAB	16152501	3
Caelo	Anionic hydrophilic cream DAB	300365	1
phönix	Anionic hydrophilic cream DAB	15267401	1
Bombastus	Anionic hydrophilic cream DAB	300355	2
Caelo	Anionic hydrophilic cream DAB	1610341	1
Bombastus	Anionic hydrophilic cream DAB	301271	4
Bombastus	Anionic hydrophilic cream DAB	301351	4
Caelo	Anionic hydrophilic cream DAB	16058101	2
Fagron	Anionic hydrophilic cream DAB	300358	1
Euro OTC	Anionic hydrophilic cream DAB	16150801	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	16152801	8
Klenk	Anionic hydrophilic cream DAB	16103301	2
Caelo	Anionic hydrophilic cream DAB	16057301	14
Bombastus	Anionic hydrophilic cream DAB	301358	1
Bombastus	Anionic hydrophilic cream DAB	302464	3
Bombastus	Anionic hydrophilic cream DAB	296784	2
Bombastus	Anionic hydrophilic cream DAB	300361	1
Fagron	Anionic hydrophilic cream DAB	300353	1
Sanacorp	Anionic hydrophilic cream DAB	16152701	1
Caelo	Anionic hydrophilic cream DAB	9/AKD13	1
Bombastus	Anionic hydrophilic cream DAB	301266	1
Bombastus	Anionic hydrophilic cream DAB	302452	3
Caelo	Anionic hydrophilic cream DAB	16156401	16
Caelo	Anionic hydrophilic cream DAB	16156101	9
Caelo	Anionic hydrophilic cream DAB	16156001	9
Caelo	Anionic hydrophilic cream DAB	16179601	12
Bombastus	Anionic hydrophilic cream DAB	301357	2
Caelo	Anionic hydrophilic cream DAB	16150601	2
Fishar	Anionic hydrophilic cream DAB	16057201	1
Bombastus	Anionic hydrophilic cream DAB	302463	5
Bombastus	Anionic hydrophilic cream DAB	302465	1
Noweda	Anionic hydrophilic cream DAB	16156401	2
Caelo	Anionic hydrophilic cream DAB	16158701	17
Caelo	Anionic hydrophilic cream DAB	16156201	2
Bombastus	Anionic hydrophilic cream DAB	301272	2
Caelo	Anionic hydrophilic cream DAB	16180001	11
Bombastus	Anionic hydrophilic cream DAB	302469	1
Caelo	Anionic hydrophilic cream DAB	16179302	1
Caelo	Anionic hydrophilic cream DAB	16158803	5
Fagron	Anionic hydrophilic cream DAB	16158803	2
Caelo	Anionic hydrophilic cream DAB	302461	2
Euro OTC	Anionic hydrophilic cream DAB	300352	1
Ichthyl/Phönix	Anionic hydrophilic cream DAB	16150702	1
Caelo	Anionic hydrophilic cream DAB	16158901	12
Caelo	Anionic hydrophilic cream DAB	16150702	8
Caesar & Loretz/Noweda	Anionic hydrophilic cream DAB	16158901	1
Caelo	Anionic hydrophilic cream DAB	160914UEA	1
Bombastus	Anionic hydrophilic cream DAB	302453	4
Bombastus	Anionic hydrophilic cream DAB	302454	4
Bombastus	Anionic hydrophilic cream DAB	302470	1
Caelo	Anionic hydrophilic cream DAB	15401601	1
Caelo	Anionic hydrophilic cream DAB	16152901	3
Anzag	Anionic hydrophilic cream DAB	16158701	4
Caelo	Anionic hydrophilic cream DAB	1542801	1
Caelo	Anionic hydrophilic cream DAB	16179801	11
Caelo	Anionic hydrophilic cream DAB	16179702	6
Caelo	Anionic hydrophilic cream DAB	161101UEA/16156401	1
Caelo	Anionic hydrophilic cream DAB	1615640	1
Caelo	Anionic hydrophilic cream DAB	9/AKD15	1
Bombastus	Anionic hydrophilic cream DAB	302466	3
Bombastus	Anionic hydrophilic cream DAB	304098	13
Bombastus	Anionic hydrophilic cream DAB	302459	1
Bombastus	Anionic hydrophilic cream DAB	302467	2
Euro OTC	Anionic hydrophilic cream DAB	16158901	1
Bombastus	Anionic hydrophilic cream DAB	301268	1
Gehe	Anionic hydrophilic cream DAB	16179601	1
Bombastus	Anionic hydrophilic cream DAB	302456	3
Caelo	Anionic hydrophilic cream DAB	16179901	3
Caelo	Anionic hydrophilic cream DAB	16158501	1
Bombastus	Anionic hydrophilic cream DAB	301354	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream DAB	301352	3
Bombastus	Anionic hydrophilic cream DAB	301267	5
Bombastus	Anionic hydrophilic cream DAB	320461	1
Caelo	Anionic hydrophilic cream DAB	16250201	10
Caelo	Anionic hydrophilic cream DAB	304098	2
Caelo	Anionic hydrophilic cream DAB	302456	1
Celo	Anionic hydrophilic cream DAB	16250001	4
Sanacorp 28.11 Ek.5,85	Anionic hydrophilic cream DAB	16180001	1
Caelo	Anionic hydrophilic cream DAB	1211116	1
Caelo	Anionic hydrophilic cream DAB	162500001	1
Caelo	Anionic hydrophilic cream DAB	16249902	2
apomix/ Noweda	Anionic hydrophilic cream DAB	12B141116	1
Caelo	Anionic hydrophilic cream DAB	16220201	1
Bombastus	Anionic hydrophilic cream DAB	304099	3
Gehe	Anionic hydrophilic cream DAB	16150702	1
Bombastus	Anionic hydrophilic cream DAB	302461	3
Caelo	Anionic hydrophilic cream DAB	16057801	1
Caelo	Anionic hydrophilic cream DAB	16250001	16
Pharmachem	Anionic hydrophilic cream DAB	304104	1
Gehe	Anionic hydrophilic cream DAB	15431702	1
Bombastus	Anionic hydrophilic cream DAB	16250001	1
Caelo	Anionic hydrophilic cream DAB	15250201	1
Caelo	Anionic hydrophilic cream DAB	16259401	10
Caelo	Anionic hydrophilic cream DAB	16259302	4
Caelo	Anionic hydrophilic cream DAB	16150701	4
Bombastus	Anionic hydrophilic cream DAB	302468	1
Caelo	Anionic hydrophilic cream DAB	16258601	2
Alte Apotheke	Anionic hydrophilic cream DAB	16158501	1
Bombastus	Anionic hydrophilic cream DAB	302471	1
Caelo	Anionic hydrophilic cream DAB	16259601	6
Caelo	Anionic hydrophilic cream DAB	16259701	12
Caelo	Anionic hydrophilic cream DAB	16180101	3
20.12.2016 Sanacorp 6,00EUR	Anionic hydrophilic cream DAB	16259701	1
Bombastus	Anionic hydrophilic cream DAB	304097	4
Bombastus	Anionic hydrophilic cream DAB	304089	6
Calo/Sanacorp	Anionic hydrophilic cream DAB	16259302	1
Bombastus	Anionic hydrophilic cream DAB	305379	4
Caelo	Anionic hydrophilic cream DAB	16259001	5
Caelo	Anionic hydrophilic cream DAB	16264401	4
Caelo	Anionic hydrophilic cream DAB	16259901	10
Bombastus	Anionic hydrophilic cream DAB	302462	4
Caelo	Anionic hydrophilic cream DAB	16264301	9
Bombastus	Anionic hydrophilic cream DAB	304100	2
Caelo	Anionic hydrophilic cream DAB	16250102	1
Caelo	Anionic hydrophilic cream DAB	304096	1
Caelo	Anionic hydrophilic cream DAB	16259801	10
Bombastus	Anionic hydrophilic cream DAB	304090	1
Bombastus	Anionic hydrophilic cream DAB	305376	1
Bombastus	Anionic hydrophilic cream DAB	305067	1
Hochhaus-Apotheke	Anionic hydrophilic cream DAB	16250001	2
Caelo	Anionic hydrophilic cream DAB	16200201	1
Bombastus	Anionic hydrophilic cream DAB	304094	1
Caelo	Anionic hydrophilic cream DAB	16158601	1
Bombastus	Anionic hydrophilic cream DAB	305380	1
Caelo	Anionic hydrophilic cream DAB	16259901/1200117	1
Caelo	Anionic hydrophilic cream DAB	16259301	15
Bombastus	Anionic hydrophilic cream DAB	305371	1
Caelo	Anionic hydrophilic cream DAB	302453	1
Caelo	Anionic hydrophilic cream DAB	17045101	5
Caelo	Anionic hydrophilic cream DAB	16264501	8

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Supplier	Substance	Batch	Spectra
AlH	Anionic hydrophilic cream DAB	16258901	1
Caelo	Anionic hydrophilic cream DAB	16317201	7
Caelo	Anionic hydrophilic cream DAB	16264601	7
Bombastus	Anionic hydrophilic cream DAB	304105	1
Anzag	Anionic hydrophilic cream DAB	16259801	1
Bombastus	Anionic hydrophilic cream DAB	302460	1
Caelo	Anionic hydrophilic cream DAB	1659801	1
Bombastus	Anionic hydrophilic cream DAB	305375	2
Caelo	Anionic hydrophilic cream DAB	16260001	7
Caelo	Anionic hydrophilic cream DAB	16322801	15
Gehe	Anionic hydrophilic cream DAB	16250001	1
Caelo	Anionic hydrophilic cream DAB	16359901	1
Bombastus	Anionic hydrophilic cream DAB	305368	5
Bombastus	Anionic hydrophilic cream DAB	305370	5
Bombastus	Anionic hydrophilic cream DAB	305638	1
Caelo	Anionic hydrophilic cream DAB	123test	1
Caelo	Anionic hydrophilic cream DAB	1625901	1
Caelo	Anionic hydrophilic cream DAB	16259201	3
AHD	Anionic hydrophilic cream DAB	16180101	1
Caelo	Anionic hydrophilic cream DAB	16328001	5
Caelo	Anionic hydrophilic cream DAB	16322701	2
Bombastus	Anionic hydrophilic cream DAB	304093	1
Bombastus	Anionic hydrophilic cream DAB	304102	2
Bombastus	Anionic hydrophilic cream DAB	305386	3
AHD 09.03.2017 EK: 5,94	Anionic hydrophilic cream DAB	16328001	1
Caelo	Anionic hydrophilic cream DAB	16264701	8
Sanacorp	Anionic hydrophilic cream DAB	16264501	1
Caelo	Anionic hydrophilic cream DAB	304105	1
Caelo	Anionic hydrophilic cream DAB	16328101	7
Bombastus	Anionic hydrophilic cream DAB	304101	2
Bombastus	Anionic hydrophilic cream DAB	307028	3
Euro OTC	Anionic hydrophilic cream DAB	305372	1
Caelo	Anionic hydrophilic cream DAB	16249901	2
Bombastus	Anionic hydrophilic cream DAB	307027	5
Bombastus	Anionic hydrophilic cream DAB	307034	1
Noweda/ Infecto Pharm	Anionic hydrophilic cream DAB	16264701	1
Sanacorp, 16.03.17, 6,00EUR	Anionic hydrophilic cream DAB	16264501	1
Bombastus	Anionic hydrophilic cream DAB	403099	1
Caelo	Anionic hydrophilic cream DAB	16328201	11
Bombastus	Anionic hydrophilic cream DAB	307032	1
AHD	Anionic hydrophilic cream DAB	16259201	1
Bombastus	Anionic hydrophilic cream DAB	307035	1
Caelo	Anionic hydrophilic cream DAB	16258901	2
Bombastus	Anionic hydrophilic cream DAB	307029	8
Caelo	Anionic hydrophilic cream DAB	170411AHC/16264501	1
Bombastus	Anionic hydrophilic cream DAB	305374	2
Bombastus	Anionic hydrophilic cream DAB	305369	1
Bombastus	Anionic hydrophilic cream DAB	305373	2
Caelo	Anionic hydrophilic cream DAB	16317001	4
Caelo	Anionic hydrophilic cream DAB	163170001	1
Gehe	Anionic hydrophilic cream DAB	16250201	1
Gehe	Anionic hydrophilic cream DAB	16249902	1
Caelo	Anionic hydrophilic cream DAB	16328401	10
Bombastus	Anionic hydrophilic cream DAB	307031	3
Bombastus	Anionic hydrophilic cream DAB	305377	1
Caelo	Anionic hydrophilic cream DAB	1234	2
Caelo	Anionic hydrophilic cream DAB	1270417	1
Caelo	Anionic hydrophilic cream DAB	170503AHC/16264501	1
Caelo	Anionic hydrophilic cream DAB	305378	2
Caelo	Anionic hydrophilic cream DAB	6051701	1

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Supplier	Substance	Batch	Spectra
Allianz Healthcare	Anionic hydrophilic cream DAB	16328001	1
Caelo	Anionic hydrophilic cream DAB	1624701	1
Allianz Healthcare	Anionic hydrophilic cream DAB	16328401	1
Phoenix	Anionic hydrophilic cream DAB	16322801	1
Bombastus	Anionic hydrophilic cream DAB	305383	1
Bombastus	Anionic hydrophilic cream DAB	301355	1
Caelo	Anionic hydrophilic cream DAB	16259101	2
Caelo	Anionic hydrophilic cream DAB	17045301/5268	1
Noweda	Anionic hydrophilic cream DAB	16259001	1
Caelo	Anionic hydrophilic cream DAB	16322501	3
Bombastus	Anionic hydrophilic cream DAB	307037	2
Caelo	Anionic hydrophilic cream DAB	16322401	7
Bombastus	Anionic hydrophilic cream DAB	307024	1
Bombastus	Anionic hydrophilic cream DAB	307025	2
Bombastus	Anionic hydrophilic cream DAB	60080601	1
Phoenix	Anionic hydrophilic cream DAB	17054201	1
Bombastus	Anionic hydrophilic cream DAB	305378	3
GEpepharm GmbH	Anionic hydrophilic cream DAB	17045101	1
Caelo	Anionic hydrophilic cream DAB	3061702	1
Kehr	Anionic hydrophilic cream DAB	17045101	1
Bombastus	Anionic hydrophilic cream DAB	6080602	1
gepepharm/Gehe	Anionic hydrophilic cream DAB	16250001	1
Caelo	Anionic hydrophilic cream DAB	17045301	8
Bombastus	Anionic hydrophilic cream DAB	307030	4
Caelo	Anionic hydrophilic cream DAB	17030001	2
Caelo	Anionic hydrophilic cream DAB	170453015285	1
Bombastus	Anionic hydrophilic cream DAB	308401	1
Caelo	Anionic hydrophilic cream DAB	17045401	10
Caelo	Anionic hydrophilic cream DAB	17045501	9
Caelo	Anionic hydrophilic cream DAB	170612UEA/16264501	1
Bombastus	Anionic hydrophilic cream DAB	307038	1
Sanacorp	Anionic hydrophilic cream DAB	16258901	1
Caelo	Anionic hydrophilic cream DAB	17084101	21
Caelo	Anionic hydrophilic cream DAB	17045201	2
Bombstus/San	Anionic hydrophilic cream DAB	308403	1
Bombastus	Anionic hydrophilic cream DAB	308403	1
Bombastus	Anionic hydrophilic cream DAB	308402	5
Ebert-Jacobi	Anionic hydrophilic cream DAB	16259201	1
Caelo	Anionic hydrophilic cream DAB	17061703	1
Caelo	Anionic hydrophilic cream DAB	16322601	1
Anzag	Anionic hydrophilic cream DAB	17083802	2
Caelo	Anionic hydrophilic cream DAB	17083801	2
Caelo	Anionic hydrophilic cream DAB	17084201	7
Fagron	Anionic hydrophilic cream DAB	17045501	1
Caelo	Anionic hydrophilic cream DAB	16259301-20170704Ma2	1
Caelo	Anionic hydrophilic cream DAB	17083802	4
Phönix	Anionic hydrophilic cream DAB	16328001	1
Kurpark Apo Defektur	Anionic hydrophilic cream DAB	17045301	1
Bombastus	Anionic hydrophilic cream DAB	308396	3
Bombastus	Anionic hydrophilic cream DAB	308392	1
Caelo	Anionic hydrophilic cream DAB	10071706	1
Kehr	Anionic hydrophilic cream DAB	17045501	1
Anzag	Anionic hydrophilic cream DAB	17084201	2
Bombastus	Anionic hydrophilic cream DAB	307039	2
Caelo	Anionic hydrophilic cream DAB	11170717	1
Bombastus	Anionic hydrophilic cream DAB	308406	1
Bombastus	Anionic hydrophilic cream DAB	305385	3
Caelo	Anionic hydrophilic cream DAB	297674	1
Caelo	Anionic hydrophilic cream DAB	17088701	5
Noweda	Anionic hydrophilic cream DAB	17088901	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	17101501	1
Caelo	Anionic hydrophilic cream DAB	1200717/17084201	1
Sanacorp	Anionic hydrophilic cream DAB	17084201	1
Kehr	Anionic hydrophilic cream DAB	17084201	1
THC Rezeptur-Set	Anionic hydrophilic cream DAB	17084101	2
Caelo	Anionic hydrophilic cream DAB	170838025326	1
Caelo	Anionic hydrophilic cream DAB	17088801	3
Caelo	Anionic hydrophilic cream DAB	17088501	3
Finteler Apotheke	Anionic hydrophilic cream DAB	16322402	1
Caelo	Anionic hydrophilic cream DAB	108/AKD16	1
apomix/Noweda	Anionic hydrophilic cream DAB	170841901	1
Bombastus	Anionic hydrophilic cream DAB	307330	1
Caelo	Anionic hydrophilic cream DAB	17142501	6
Eimermacher	Anionic hydrophilic cream DAB	308406	1
Caelo	Anionic hydrophilic cream DAB	305372	1
Bombastuts/Noweda	Anionic hydrophilic cream DAB	307023	2
Bombastuts/Gehe	Anionic hydrophilic cream DAB	308397	4
Caelo	Anionic hydrophilic cream DAB	171420101	1
Caelo	Anionic hydrophilic cream DAB	17088901	7
Bombastus	Anionic hydrophilic cream DAB	310222	3
Caesar & Loretz/Noweda	Anionic hydrophilic cream DAB	17088901	1
Bombastus	Anionic hydrophilic cream DAB	308398	3
Caelo	Anionic hydrophilic cream DAB	17142601	11
Caelo	Anionic hydrophilic cream DAB	170817UEA/17088801	1
Caelo	Anionic hydrophilic cream DAB	17143101	3
Caelo	Anionic hydrophilic cream DAB	17084001	2
Anzag	Anionic hydrophilic cream DAB	17142501	1
Bombastus	Anionic hydrophilic cream DAB	310265	1
Bombastus	Anionic hydrophilic cream DAB	307036	5
Bombastus	Anionic hydrophilic cream DAB	308393	1
Caelo	Anionic hydrophilic cream DAB	17142002	1
Kehr	Anionic hydrophilic cream DAB	17088801	1
Bombastus	Anionic hydrophilic cream DAB	17088901	1
Caelo	Anionic hydrophilic cream DAB	17143001	11
Bombastus	Anionic hydrophilic cream DAB	308400	1
Caelo	Anionic hydrophilic cream DAB	171426015334	1
Anzag	Anionic hydrophilic cream DAB	17142601	1
Noweda	Anionic hydrophilic cream DAB	17084101	2
Caelo	Anionic hydrophilic cream DAB	170919UEA/17143001	1
Noweda	Anionic hydrophilic cream DAB	17143101	1
Finteler Apotheke	Anionic hydrophilic cream DAB	17088901	1
Caelo	Anionic hydrophilic cream DAB	17143802	12
Bombastus	Anionic hydrophilic cream DAB	310271	3
Bombastus	Anionic hydrophilic cream DAB	310221	9
Caelo	Anionic hydrophilic cream DAB	17143401	5
Caelo	Anionic hydrophilic cream DAB	17143701	3
Caelo	Anionic hydrophilic cream DAB	17142201	5
Sanacorp	Anionic hydrophilic cream DAB	17143101	1
Caelo	Anionic hydrophilic cream DAB	17142901	5
Bombastus	Anionic hydrophilic cream DAB	17045101	1
Anzag	Anionic hydrophilic cream DAB	17142901	1
Noweda	Anionic hydrophilic cream DAB	16317201	1
Caelo	Anionic hydrophilic cream DAB	171426015363	1
Bombastus	Anionic hydrophilic cream DAB	308405	1
Bombastus	Anionic hydrophilic cream DAB	310270	2
Noweda	Anionic hydrophilic cream DAB	17143001	3
Bombastus	Anionic hydrophilic cream DAB	310267	1
Caelo	Anionic hydrophilic cream DAB	106102017/17142701	1
Bombastus	Anionic hydrophilic cream DAB	308408	2
Bombastus	Anionic hydrophilic cream DAB	305384	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	17142701	3
Caelo	Anionic hydrophilic cream DAB	17142801	4
Noweda	Anionic hydrophilic cream DAB	17143401	1
Bombastus	Anionic hydrophilic cream DAB	310273	2
Caelo	Anionic hydrophilic cream DAB	171107UEA/17143001	1
Bombastus	Anionic hydrophilic cream DAB	311054	1
Caelo	Anionic hydrophilic cream DAB	17141901	14
Caelo	Anionic hydrophilic cream DAB	17142102	2
Klenk	Anionic hydrophilic cream DAB	311124	1
Caelo	Anionic hydrophilic cream DAB	17125802	1
Caelo	Anionic hydrophilic cream DAB	17143801	3
Bombastus	Anionic hydrophilic cream DAB	311118	4
Bomba/Phönix	Anionic hydrophilic cream DAB	308408	1
Bombastus	Anionic hydrophilic cream DAB	310217	2
Bombastus	Anionic hydrophilic cream DAB	308480	1
Caelo	Anionic hydrophilic cream DAB	17143201	3
Caelo	Anionic hydrophilic cream DAB	17143301	5
Sanacorp	Anionic hydrophilic cream DAB	17143501	1
Bombastus	Anionic hydrophilic cream DAB	308407	1
Caelo	Anionic hydrophilic cream DAB	17143501	3
Caelo	Anionic hydrophilic cream DAB	17142101	1
Bombastus	Anionic hydrophilic cream DAB	311121	5
Bombastus	Anionic hydrophilic cream DAB	311122	6
Caelo	Anionic hydrophilic cream DAB	171428015414	1
Bombastus	Anionic hydrophilic cream DAB	310218	1
Sanacorp	Anionic hydrophilic cream DAB	17143201	1
Bombastus	Anionic hydrophilic cream DAB	311127	2
Caelo	Anionic hydrophilic cream DAB	13121718	1
Anzag	Anionic hydrophilic cream DAB	17142102	1
Caelo	Anionic hydrophilic cream DAB	17143301/1271117	1
Caelo	Anionic hydrophilic cream DAB	17143802/2220917	1
Caelo	Anionic hydrophilic cream DAB	17201102	5
Gehe	Anionic hydrophilic cream DAB	17143301	1
Caelo	Anionic hydrophilic cream DAB	17201401	8
Bombastus	Anionic hydrophilic cream DAB	311134	8
Bombastus	Anionic hydrophilic cream DAB	311124	2
Caecolo/Krieger	Anionic hydrophilic cream DAB	17143501	2
Phönix	Anionic hydrophilic cream DAB	17143601	1
Bombastus	Anionic hydrophilic cream DAB	17001305	2
Caelo	Anionic hydrophilic cream DAB	17200801	1
Caelo	Anionic hydrophilic cream DAB	171229UEA/17123001	1
Caelo	Anionic hydrophilic cream DAB	17200702	1
Caelo	Anionic hydrophilic cream DAB	17143601	3
Caelo	Anionic hydrophilic cream DAB	17201001	3
Caelo	Anionic hydrophilic cream DAB	17200703	3
Bombastus	Anionic hydrophilic cream DAB	311128	3
Caelo	Anionic hydrophilic cream DAB	17142301	1
Bombastus	Anionic hydrophilic cream DAB	311133	4
Caelo	Anionic hydrophilic cream DAB	17141901-20180112Ma5	1
Bombastus	Anionic hydrophilic cream DAB	311132	1
Caelo	Anionic hydrophilic cream DAB	17201201	6
Caelo	Anionic hydrophilic cream DAB	17201501	4
Caelo	Anionic hydrophilic cream DAB	17201601	6
GEHE	Anionic hydrophilic cream DAB	311134	1
AHD	Anionic hydrophilic cream DAB	17143801	1
Caelo	Anionic hydrophilic cream DAB	17201701	6
Caelo	Anionic hydrophilic cream DAB	17142401	2
Bombastus	Anionic hydrophilic cream DAB	17001310	1
AHD	Anionic hydrophilic cream DAB	17200701	2
Caelo	Anionic hydrophilic cream DAB	123456	1

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Supplier	Substance	Batch	Spectra
Otto Fische GmbH	Anionic hydrophilic cream DAB	17201601	2
Caelo	Anionic hydrophilic cream DAB	17001310	1
Caelo	Anionic hydrophilic cream DAB	17200901	1
Bombastus	Anionic hydrophilic cream DAB	17001316	4
Bombastus	Anionic hydrophilic cream DAB	310269	1
Bombastus	Anionic hydrophilic cream DAB	310272	1
Caelo	Anionic hydrophilic cream DAB	17001312	1
Bombastus	Anionic hydrophilic cream DAB	311131	2
Sanacorp	Anionic hydrophilic cream DAB	17201102	1
Caelo	Anionic hydrophilic cream DAB	19021812	1
Caelo	Anionic hydrophilic cream DAB	180220UEA/17200801	1
Caelo	Anionic hydrophilic cream DAB	17270301	8
Caelo	Anionic hydrophilic cream DAB	17201801	6
Noweda	Anionic hydrophilic cream DAB	17201501	1
Caelo	Anionic hydrophilic cream DAB	172031301	1
Phoenix	Anionic hydrophilic cream DAB	17201102	1
Sanacorp	Anionic hydrophilic cream DAB	17201801	1
AHD	Anionic hydrophilic cream DAB	17270301	2
Bombastus	Anionic hydrophilic cream DAB	17001302	4
Bombastus	Anionic hydrophilic cream DAB	310266	4
Caelo	Anionic hydrophilic cream DAB	17201901	5
Caelo	Anionic hydrophilic cream DAB	17201301	5
Caelo	Anionic hydrophilic cream DAB	172015015495	1
Caelo	Anionic hydrophilic cream DAB	17208001	1
Caelo	Anionic hydrophilic cream DAB	2220218/17319502	1
Noweda	Anionic hydrophilic cream DAB	17270302	1
Caelo	Anionic hydrophilic cream DAB	17200701	3
Noweda	Anionic hydrophilic cream DAB	17202101	1
Caelo	Anionic hydrophilic cream DAB	17270001	12
Euro OTC	Anionic hydrophilic cream DAB	17001311	1
Kehr	Anionic hydrophilic cream DAB	311121	1
Caelo	Anionic hydrophilic cream DAB	18000257	1
Caelo	Anionic hydrophilic cream DAB	17202101	6
Bombastus	Anionic hydrophilic cream DAB	18000257	5
Caelo	Anionic hydrophilic cream DAB	17202001	7
Caesar & Loretz/AHD	Anionic hydrophilic cream DAB	17202001	1
Bombastus	Anionic hydrophilic cream DAB	18000248	2
Bombastus	Anionic hydrophilic cream DAB	17001312	1
Sanacorp	Anionic hydrophilic cream DAB	17202101	2
Bombastus	Anionic hydrophilic cream DAB	18000253	2
Phoenix	Anionic hydrophilic cream DAB	17202301	1
Fiebig	Anionic hydrophilic cream DAB	17201801	1
Caelo	Anionic hydrophilic cream DAB	17202301	6
Caelo	Anionic hydrophilic cream DAB	172016015530	1
Caelo	Anionic hydrophilic cream DAB	17200701-20180404Ma7	1
Sanacorp	Anionic hydrophilic cream DAB	17270001	1
Euro OTC	Anionic hydrophilic cream DAB	17202101	1
Euro OTC	Anionic hydrophilic cream DAB	310266	1
Euro OTC	Anionic hydrophilic cream DAB	311124	1
Bombastus	Anionic hydrophilic cream DAB	311123	3
Bombastus	Anionic hydrophilic cream DAB	17001307	5
Fagron	Anionic hydrophilic cream DAB	17269801	1
Caelo	Anionic hydrophilic cream DAB	17248601	4
Caelo	Anionic hydrophilic cream DAB	17201909	1
Bombastus	Anionic hydrophilic cream DAB	18000252	7
Noweda	Anionic hydrophilic cream DAB	17269801	1
Euro OTC	Anionic hydrophilic cream DAB	17001307	1
Caelo	Anionic hydrophilic cream DAB	17248501	3
Fargon/Gehe	Anionic hydrophilic cream DAB	17270102	1
Sanacorp	Anionic hydrophilic cream DAB	17270102	1

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Supplier	Substance	Batch	Spectra
GEHE	Anionic hydrophilic cream DAB	17270001	1
Bombastus	Anionic hydrophilic cream DAB	308404	1
Caelo	Anionic hydrophilic cream DAB	17298802	3
Caelo	Anionic hydrophilic cream DAB	17201701/5578	1
Caelo	Anionic hydrophilic cream DAB	17270401	4
Caelo	Anionic hydrophilic cream DAB	17270501	8
Noweda	Anionic hydrophilic cream DAB	17270401	1
Caelo	Anionic hydrophilic cream DAB	18066701	15
calo	Anionic hydrophilic cream DAB	17269701	1
Caelo	Anionic hydrophilic cream DAB	17248701	3
Caelo	Anionic hydrophilic cream DAB	18010402	1
Krieger	Anionic hydrophilic cream DAB	17270401	2
Bombastus	Anionic hydrophilic cream DAB	18001551	3
Caelo	Anionic hydrophilic cream DAB	23051810	1
Caelo	Anionic hydrophilic cream DAB	23051808	1
Caelo	Anionic hydrophilic cream DAB	17269701	1
Bombastus	Anionic hydrophilic cream DAB	18001562	2
Bombastus	Anionic hydrophilic cream DAB	18001552	2
Lamotte	Anionic hydrophilic cream DAB	17299101	1
Caelo	Anionic hydrophilic cream DAB	17299201	10
Caelo	Anionic hydrophilic cream DAB	17299101	6
Caelo	Anionic hydrophilic cream DAB	172991015608	1
Bombastus	Anionic hydrophilic cream DAB	17001308	2
Caelo	Anionic hydrophilic cream DAB	17298901	3
Caelo	Anionic hydrophilic cream DAB	6061805	1
Caelo	Anionic hydrophilic cream DAB	17269601	2
Euro OTC	Anionic hydrophilic cream DAB	17270401	1
Caelo	Anionic hydrophilic cream DAB	1724601	1
Bombastus	Anionic hydrophilic cream DAB	17001313	1
Fagron	Anionic hydrophilic cream DAB	17299201	1
Bombastus	Anionic hydrophilic cream DAB	18002356	1
Bombastus	Anionic hydrophilic cream DAB	18001554	4
Bombastus	Anionic hydrophilic cream DAB	18001549	1
Caesar & Loretz/ Noweda	Anionic hydrophilic cream DAB	17299201	1
Caelo	Anionic hydrophilic cream DAB	23061814	1
Bombastus	Anionic hydrophilic cream DAB	18001555	3
Fagron	Anionic hydrophilic cream DAB	17335701	1
Caelo	Anionic hydrophilic cream DAB	17299501	6
Caelo	Anionic hydrophilic cream DAB	17299401	2
Caelo	Anionic hydrophilic cream DAB	17298801	4
Bombastus	Anionic hydrophilic cream DAB	18001553	1
Caelo	Anionic hydrophilic cream DAB	17299301	7
Caelo	Anionic hydrophilic cream DAB	17299601	9
Bombastus	Anionic hydrophilic cream DAB	18001558	1
Caelo	Anionic hydrophilic cream DAB	17269901	2
GEHE	Anionic hydrophilic cream DAB	18066901	1
Allianz	Anionic hydrophilic cream DAB	17299601	1
Caelo	Anionic hydrophilic cream DAB	17299701	5
Bombastus	Anionic hydrophilic cream DAB	18001557	2
Caelo	Anionic hydrophilic cream DAB	18066901	1
Caelo	Anionic hydrophilic cream DAB	17299801	7
Caelo	Anionic hydrophilic cream DAB	18010401	12
Bombastus	Anionic hydrophilic cream DAB	17001315	1
Caelo	Anionic hydrophilic cream DAB	17001315	1
Caelo	Anionic hydrophilic cream DAB	18010501	2
Allianz	Anionic hydrophilic cream DAB	17299801	1
Caelo	Anionic hydrophilic cream DAB	172993015638	1
Bombastus	Anionic hydrophilic cream DAB	18002357	1
Bionorica ethics/Phoenix	Anionic hydrophilic cream DAB	18010702	1
Gehe/Bombasus	Anionic hydrophilic cream DAB	18002364	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream DAB	18010702	1
Bombastus	Anionic hydrophilic cream DAB	18002359	1
Allianz	Anionic hydrophilic cream DAB	17299401	1
Fagron	Anionic hydrophilic cream DAB	18002357	1
Caelo	Anionic hydrophilic cream DAB	18010801	2
Caelo	Anionic hydrophilic cream DAB	18011001	7
Caelo	Anionic hydrophilic cream DAB	18066601	1
Caelo	Anionic hydrophilic cream DAB	18010901	3
Caelo	Anionic hydrophilic cream DAB	18010302	2
Caelo	Anionic hydrophilic cream DAB	180107025721	1
Caelo	Anionic hydrophilic cream DAB	18040401	1
Sanacorp	Anionic hydrophilic cream DAB	18117201	1
Jenne	Anionic hydrophilic cream DAB	18010901	1
Kehr	Anionic hydrophilic cream DAB	18001559	1
Caelo	Anionic hydrophilic cream DAB	18117201	3
Sanacorp	Anionic hydrophilic cream DAB	18116801	1
Caelo	Anionic hydrophilic cream DAB	18210702	1
Caelo	Anionic hydrophilic cream DAB	180107025746	1
Caelo	Anionic hydrophilic cream DAB	18117102	1
Bombastus	Anionic hydrophilic cream DAB	18001561	1
Bombastus	Anionic hydrophilic cream DAB	18003583	1
Caelo	Anionic hydrophilic cream DAB	180111015761	1
Caelo	Anionic hydrophilic cream DAB	180110001	1
Bombastus	Anionic hydrophilic cream DAB	18003585	1
Caelo	Anionic hydrophilic cream DAB	18139501	4
Bombastus	Anionic hydrophilic cream DAB	18002360	2
Caelo	Anionic hydrophilic cream DAB	18116801	5
Bombastus	Anionic hydrophilic cream DAB	18002358	1
Bombastus	Anionic hydrophilic cream DAB	18002364	2
Bombastus	Anionic hydrophilic cream DAB	18002361	3
Caelo	Anionic hydrophilic cream DAB	18116901	1
Caelo	Anionic hydrophilic cream DAB	18168601	4
Caelo	Anionic hydrophilic cream DAB	18011201	1
Caelo	Anionic hydrophilic cream DAB	18168501	2
Caelo	Anionic hydrophilic cream DAB	18010601	1
Euro OTC	Anionic hydrophilic cream DAB	18168501	1
Kehr	Anionic hydrophilic cream DAB	18003576	1
Caelo	Anionic hydrophilic cream DAB	18168701	1
Gehe 07.12.18	Anionic hydrophilic cream DAB	18169001	1
Caelo	Anionic hydrophilic cream DAB	18168801	2
Bombastus	Anionic hydrophilic cream DAB	18004842	1
Caelo	Anionic hydrophilic cream DAB	18169001	3
Caelo	Anionic hydrophilic cream DAB	18011101	3
Caelo	Anionic hydrophilic cream DAB	18117001	1
Caelo	Anionic hydrophilic cream DAB	18169101	4
Gehe	Anionic hydrophilic cream DAB	18004837	2
Bombastus	Anionic hydrophilic cream DAB	18004835	1
Caelo	Anionic hydrophilic cream DAB	18169301	4
Bombastus	Anionic hydrophilic cream DAB	18003580	1
Bombastus	Anionic hydrophilic cream DAB	18003582	1
Sanacorp	Anionic hydrophilic cream DAB	18169501	1
Caelo	Anionic hydrophilic cream DAB	18169501	1
Caelo	Anionic hydrophilic cream DAB	18160101	3
Bombastus	Anionic hydrophilic cream DAB	18004836	1
Bombastus	Anionic hydrophilic cream DAB	18006017	1
Caelo	Anionic hydrophilic cream DAB	18139901	1
Sanacorp	Anionic hydrophilic cream DAB	18242901	1
Caelo	Anionic hydrophilic cream DAB	18243501	1
Caelo	Anionic hydrophilic cream DAB	1824340202	1
Caelo	Anionic hydrophilic cream DAB	18298601	3

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Anionic hydrophilic cream DAB	18243501	1
Caelo	Anionic hydrophilic cream DAB	18243001	1
Caelo	Anionic hydrophilic cream DAB	18243402	1
Caelo	Anionic hydrophilic cream DAB	18298901	2
Phönix Gotha	Hydrophilic cream, non-ionic...	20B260612	1
Anzag/AMH/16.05.2012	Hydrophilic cream, non-ionic...	14B020212	1
Apomix	Hydrophilic cream, non-ionic...	18B190612	1
Apomix	Hydrophilic cream, non-ionic...	24B180912	1
apomix	Hydrophilic cream, non-ionic...	22B060812	1
Apomix	Hydrophilic cream, non-ionic...	19B260612	1
Apomix	Hydrophilic cream, non-ionic...	30B261112	1
Apomix	Hydrophilic cream, non-ionic...	27B221012	1
apomix	Hydrophilic cream, non-ionic...	2B140113	1
Apomix	Hydrophilic cream, non-ionic...	26B151012	1
Apomix	Hydrophilic cream, non-ionic...	33B271212	1
Apomix	Hydrophilic cream, non-ionic...	4B070213	1
Holdermann	Hydrophilic cream, non-ionic...	1B140113	1
Phönix Gotha	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
apo	Hydrophilic cream, non-ionic...	4807013	1
Phönix/ Apomix	Hydrophilic cream, non-ionic...	2B140113	1
AMH Niemann	Hydrophilic cream, non-ionic...	7B020413	2
Gehe	Hydrophilic cream, non-ionic...	5B250213	1
apomix GmbH/Phönix	Hydrophilic cream, non-ionic...	7B020413	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/Gehe GUC	Hydrophilic cream, non-ionic...	11B220513	1
AMH Niemann GmbH& Co. K...	Hydrophilic cream, non-ionic...	12B030613	1
apomix/Phönix	Hydrophilic cream, non-ionic...	15B090713	2
Apomix	Hydrophilic cream, non-ionic...	13B180613	1
Apomix	Hydrophilic cream, non-ionic...	21B141013	1
Apomix	Hydrophilic cream, non-ionic...	19B100913	1
Apomix	Hydrophilic cream, non-ionic...	16B290713	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	21B141013	1
Phönix Gotha	Hydrophilic cream, non-ionic...	20B230913	2
Apomix/Phönix	Hydrophilic cream, non-ionic...	25B161213	1
APOMIX /11	Hydrophilic cream, non-ionic...	1B070114	1
Henry Lamotte	Hydrophilic cream, non-ionic...	22B281013	1
Apomix	Hydrophilic cream, non-ionic...	23B141113	1
Apomix /Alliance	Hydrophilic cream, non-ionic...	22B281013	1
Apomix	Hydrophilic cream, non-ionic...	8B070414	1
Apomix	Hydrophilic cream, non-ionic...	6B100314	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	12B210514	1
Apomix / 11	Hydrophilic cream, non-ionic...	10B060514	1
Raben-Apotheke Mildenau	Hydrophilic cream, non-ionic...	4B100214	1
AMH Niemann GmbH&Co KG	Hydrophilic cream, non-ionic...	2B130114	1
Apomix/ Phönix	Hydrophilic cream, non-ionic...	15B090713	1
Raben-Apotheke Mildenau	Hydrophilic cream, non-ionic...	12B210514	1
Apomix	Hydrophilic cream, non-ionic...	12B210514	1
apomix/Phönix	Hydrophilic cream, non-ionic...	8B070414	1
Caelo	Hydrophilic cream, non-ionic...	14063003	1
Raben-Apotheke Mildenau	Hydrophilic cream, non-ionic...	18B020914	2
Apomix	Hydrophilic cream, non-ionic...	17B120814	2
Apomix/ Phönix	Hydrophilic cream, non-ionic...	15B070714	1
apomix	Hydrophilic cream, non-ionic...	10B060514	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Hydrophilic cream, non-ionic...	21B141014	1
Rabenapotheke	Hydrophilic cream, non-ionic...	20B290914	2
apomix/Phönix	Hydrophilic cream, non-ionic...	22B061114	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	3B020215	1
Apomix/ Noweda	Hydrophilic cream, non-ionic...	3B020215	1
Caelo	Hydrophilic cream, non-ionic...	15039001	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	3B020215	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	6B020315	1
Apomix	Hydrophilic cream, non-ionic...	6B020315	1
apomix	Hydrophilic cream, non-ionic...	3B020215	1
Apomix	Hydrophilic cream, non-ionic...	1B120115	1
Apomix	Hydrophilic cream, non-ionic...	11B110515	1
PKH GmbH/ NOWEDA	Hydrophilic cream, non-ionic...	10B200415	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	9B200415	1
Phönix Gotha	Hydrophilic cream, non-ionic...	10B200415	1
Apomix	Hydrophilic cream, non-ionic...	13B080615	2
Apomix/Noweda	Hydrophilic cream, non-ionic...	10B200415	1
apomix/Holdermann	Hydrophilic cream, non-ionic...	15B290615	1
Caelo	Hydrophilic cream, non-ionic...	15155904	1
apomix	Hydrophilic cream, non-ionic...	13B080615	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	18B240815	1
Apomix	Hydrophilic cream, non-ionic...	18B240815	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	17b040815	1
Apomix / Sanacorp	Hydrophilic cream, non-ionic...	17B040815	3
Fagron	Hydrophilic cream, non-ionic...	15C04-M06	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	20B210915	1
apomix noweder 23.10.2015	Hydrophilic cream, non-ionic...	18B240815	1
Apomix	Hydrophilic cream, non-ionic...	20B210915	1
Phönix Gotha	Hydrophilic cream, non-ionic...	12B211015	1
Apomix/Sana	Hydrophilic cream, non-ionic...	25B081215	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	23B101115	1
apomix	Hydrophilic cream, non-ionic...	25B081215	1
apomix	Hydrophilic cream, non-ionic...	24B241115	1
Apomix	Hydrophilic cream, non-ionic...	1B070116	3
Apomix	Hydrophilic cream, non-ionic...	25B081215	1
Noweda	Hydrophilic cream, non-ionic...	1B070116	1
Apomix/ Gehe	Hydrophilic cream, non-ionic...	5B290216	1
Apomix	Hydrophilic cream, non-ionic...	4B170216	1
apomix	Hydrophilic cream, non-ionic...	10B190516	1
Pharmachem	Hydrophilic cream, non-ionic...	6B150316	1
apomix	Hydrophilic cream, non-ionic...	9B020516	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	8B060416	1
Bombastus	Hydrophilic cream, non-ionic...	12B130626	1
Apomix	Hydrophilic cream, non-ionic...	9B020516	3
PKH GmbH	Hydrophilic cream, non-ionic...	12B1306161	1
Apomix	Hydrophilic cream, non-ionic...	10B190516	1
apomix	Hydrophilic cream, non-ionic...	13B280616	2
Apomix	Hydrophilic cream, non-ionic...	5B01816	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	14B120716	1
PKH Halle	Hydrophilic cream, non-ionic...	15B080816	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	21b141116	1
Apomix	Hydrophilic cream, non-ionic...	18B270916	2
PKH GmbH	Hydrophilic cream, non-ionic...	21B141116	2
apomix	Hydrophilic cream, non-ionic...	21B14116	1
Caelo	Hydrophilic cream, non-ionic...	21B141116	1
Apomix	Hydrophilic cream, non-ionic...	16B290816	2
Apomix	Hydrophilic cream, non-ionic...	24B121216	2
Apomix	Hydrophilic cream, non-ionic...	22B281116	1
Apomix	Hydrophilic cream, non-ionic...	2B300117	2
apomix/Gehe	Hydrophilic cream, non-ionic...	2B300117	1

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Supplier	Substance	Batch	Spectra
Apomix	Hydrophilic cream, non-ionic...	4B210217	1
apomix/Gehe	Hydrophilic cream, non-ionic...	5B150317	1
PKH GmbH/Noweda	Hydrophilic cream, non-ionic...	7B030417	1
PKH GmbH	Hydrophilic cream, non-ionic...	7B030417	1
Apomix/Anzag	Hydrophilic cream, non-ionic...	24B121216	1
Apomix/ Sanacorp	Hydrophilic cream, non-ionic...	8B030417	1
Bombastus	Hydrophilic cream, non-ionic...	307525	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	5B150317	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	13B280617	2
Apomix / Noweda	Hydrophilic cream, non-ionic...	11B310517	1
PKH Halle	Hydrophilic cream, non-ionic...	11B310517	1
AMH-NiemannGmbH&CO,15.0...	Hydrophilic cream, non-ionic...	15B010817	1
Apomix	Hydrophilic cream, non-ionic...	9B020517	1
Apomix	Hydrophilic cream, non-ionic...	18B060917	2
Sanacorp/ apomix	Hydrophilic cream, non-ionic...	19B021017	1
Euro OTC	Hydrophilic cream, non-ionic...	21B081117	1
Apomix	Hydrophilic cream, non-ionic...	22B201117	1
apomix	Hydrophilic cream, non-ionic...	23B291117	1
Apomix	Hydrophilic cream, non-ionic...	23B291117	1
Apomix	Hydrophilic cream, non-ionic...	21B08117	1
Caelo	Hydrophilic cream, non-ionic...	2B310118	1
Apomix	Hydrophilic cream, non-ionic...	1B090118	1
PKH Halle/ Alliance Hea...	Hydrophilic cream, non-ionic...	4B120318	1
Apomix	Hydrophilic cream, non-ionic...	5B280318	1
Caelo	Hydrophilic cream, non-ionic...	18002063	1
Caelo	Hydrophilic cream, non-ionic...	18050401	1
Apomix/AHD	Hydrophilic cream, non-ionic...	12B100718	1
Apomix	Hydrophilic cream, non-ionic...	12B100718	2
Apomix	Hydrophilic cream, non-ionic...	17B011018	1
apomix	Hydrophilic cream, non-ionic...	17B011018	1
Caeol/AHD	Anionic hydrophilic cream wi...	15405301	1
Caelo	Anionic hydrophilic cream wi...	12221003	3
Caelo	Anionic hydrophilic cream wi...	12283001	1
Caelo	Anionic hydrophilic cream wi...	112210016	1
Caelo	Anionic hydrophilic cream wi...	12352701	5
Caelo	Anionic hydrophilic cream wi...	12216501	1
Caelo	Anionic hydrophilic cream wi...	12221002	5
Caelo	Anionic hydrophilic cream wi...	12301301	2
GEHE	Anionic hydrophilic cream wi...	12301302	1
Caelo	Anionic hydrophilic cream wi...	1213M-07009	1
Caelo	Anionic hydrophilic cream wi...	1222102	1
Caelo	Anionic hydrophilic cream wi...	12352703	2
Caelo	Anionic hydrophilic cream wi...	12301302	5
Caelo	Anionic hydrophilic cream wi...	12352702	4
vdl	Anionic hydrophilic cream wi...	12221002	1
Caelo	Anionic hydrophilic cream wi...	13072302	8
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13072302	3
Caelo	Anionic hydrophilic cream wi...	13072401	5
Caelo	Anionic hydrophilic cream wi...	13072303	2
Caelo	Anionic hydrophilic cream wi...	13072301	2
Noweda	Anionic hydrophilic cream wi...	13072302	1
GEHE	Anionic hydrophilic cream wi...	13072303	1
Gehe	Anionic hydrophilic cream wi...	1307302	1
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	12352702	1
Caelo	Anionic hydrophilic cream wi...	13125903	1
Noweda	Anionic hydrophilic cream wi...	13072401	1
Phönix	Anionic hydrophilic cream wi...	13172203	1
Caelo	Anionic hydrophilic cream wi...	13125901	10
Caelo	Anionic hydrophilic cream wi...	13125902	3
Phönix	Anionic hydrophilic cream wi...	13072302	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13125901	2
Cealo	Anionic hydrophilic cream wi...	13165001	1
Cealo	Anionic hydrophilic cream wi...	130723301	1
Cealo	Anionic hydrophilic cream wi...	2913M25401	1
Noweda	Anionic hydrophilic cream wi...	13172203	1
Cealo	Anionic hydrophilic cream wi...	13172203	4
Cealo	Anionic hydrophilic cream wi...	13172201	1
Cealo	Anionic hydrophilic cream wi...	3125902	1
Cealo	Anionic hydrophilic cream wi...	13172202	7
Cealo	Anionic hydrophilic cream wi...	13244301	4
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13244401	1
Phönix/gepepharm	Anionic hydrophilic cream wi...	13244201	2
Cealo	Anionic hydrophilic cream wi...	13244401	13
Cealo	Anionic hydrophilic cream wi...	13244201	9
Caesar & Loretz GmbH, 4...	Anionic hydrophilic cream wi...	13244201	1
Cealo	Anionic hydrophilic cream wi...	9771644	3
Cealo	Anionic hydrophilic cream wi...	1324401	1
Cealo	Anionic hydrophilic cream wi...	13343501	9
Cealo	Anionic hydrophilic cream wi...	13244302	2
Cealo	Anionic hydrophilic cream wi...	13244402	7
Cealo	Anionic hydrophilic cream wi...	13244401-3471312131	1
Cealo	Anionic hydrophilic cream wi...	13343401	21
Cealo	Anionic hydrophilic cream wi...	13344301	1
Cealo	Anionic hydrophilic cream wi...	12344401	1
Cealo	Anionic hydrophilic cream wi...	7011403	1
Cealo	Anionic hydrophilic cream wi...	13343301	11
Cealo	Anionic hydrophilic cream wi...	18/AKD1511	1
Gehe	Anionic hydrophilic cream wi...	13244401	1
Cealo	Anionic hydrophilic cream wi...	13343402	7
Cealo	Anionic hydrophilic cream wi...	14030401	9
Cealo	Anionic hydrophilic cream wi...	14030601	5
Noweda	Anionic hydrophilic cream wi...	13343301	1
Cealo	Anionic hydrophilic cream wi...	CHB13343401	1
Cealo	Anionic hydrophilic cream wi...	1334302	1
Cealo	Anionic hydrophilic cream wi...	1324402	1
Caesar & Loretz GmbH Hi...	Anionic hydrophilic cream wi...	B1334301	1
Cealo	Anionic hydrophilic cream wi...	14030701	27
Cealo	Anionic hydrophilic cream wi...	14030501	8
Noweda	Anionic hydrophilic cream wi...	13343402	1
Cealo	Anionic hydrophilic cream wi...	2114M25401	1
Sanacorp	Anionic hydrophilic cream wi...	24AKD1	1
Cealo	Anionic hydrophilic cream wi...	14146003	6
Cealo	Anionic hydrophilic cream wi...	2514U25401	1
Cealo	Anionic hydrophilic cream wi...	14030702	4
Euro OTC	Anionic hydrophilic cream wi...	14030701	1
Cealo	Anionic hydrophilic cream wi...	14146101	12
Cealo	Anionic hydrophilic cream wi...	141146101	1
Bombastus	Anionic hydrophilic cream wi...	14030701	1
Phoenix	Anionic hydrophilic cream wi...	14146001	2
Cealo	Anionic hydrophilic cream wi...	14146002	15
Cealo	Anionic hydrophilic cream wi...	1416101	1
Sanacorp	Anionic hydrophilic cream wi...	14214301	7
Sanacorp	Anionic hydrophilic cream wi...		1
Cealo	Anionic hydrophilic cream wi...	14214101	8
Cealo	Anionic hydrophilic cream wi...	14214001	4
Cealo	Anionic hydrophilic cream wi...	14214201	32
Caesar&loretz,Phoenix	Anionic hydrophilic cream wi...	14030701	1
Cealo	Anionic hydrophilic cream wi...	14214202	6
Phoenix	Anionic hydrophilic cream wi...	14030702	1
Cealo	Anionic hydrophilic cream wi...	14214301	2

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream wi...	14334301	25
aelo	Anionic hydrophilic cream wi...	14214101	1
Caelo	Anionic hydrophilic cream wi...	32/AKD2	1
Caelo	Anionic hydrophilic cream wi...	14334201	12
Cealo	Anionic hydrophilic cream wi...	14214201	1
Caelo	Anionic hydrophilic cream wi...	14334502	6
Caelo	Anionic hydrophilic cream wi...	14334501	17
Sanacorp	Anionic hydrophilic cream wi...	14334401	1
Caelo	Anionic hydrophilic cream wi...	15048502	12
Caelo	Anionic hydrophilic cream wi...	27031504	1
Caelo	Anionic hydrophilic cream wi...	15048401	6
Caelo	Anionic hydrophilic cream wi...	15048301	15
Caelo	Anionic hydrophilic cream wi...	15048501	15
Caelo	Anionic hydrophilic cream wi...	15132801	8
Caelo	Anionic hydrophilic cream wi...	1548301	2
Sanacorp	Anionic hydrophilic cream wi...	39/AKD4	1
Caelo	Anionic hydrophilic cream wi...	15132902	14
Caelo	Anionic hydrophilic cream wi...	15133001	13
Caelo	Anionic hydrophilic cream wi...	20071504	1
Euro OTC	Anionic hydrophilic cream wi...	14334501	1
Sanacorp	Anionic hydrophilic cream wi...	41/AKD6	1
Caelo	Anionic hydrophilic cream wi...	15132701	5
Caelo	Anionic hydrophilic cream wi...	1513301	3
Caelo	Anionic hydrophilic cream wi...	15132901	3
Caelo	Anionic hydrophilic cream wi...	1512901	1
Caelo	Anionic hydrophilic cream wi...	15273001	25
Caelo	Anionic hydrophilic cream wi...	15273301	13
Caelo	Anionic hydrophilic cream wi...	15272902	6
Rondell Apotheke	Anionic hydrophilic cream wi...	15273301	1
Caelo	Anionic hydrophilic cream wi...	15272901	3
Caelo	Anionic hydrophilic cream wi...	15273101	14
Caelo	Anionic hydrophilic cream wi...	45/AKD7	1
Caelo	Anionic hydrophilic cream wi...	15273201	15
Caelo	Anionic hydrophilic cream wi...	15405201	6
Euro OTC	Anionic hydrophilic cream wi...	15273101	1
Caelo	Anionic hydrophilic cream wi...	15405401	21
Caelo	Anionic hydrophilic cream wi...	15405301	9
Caelo	Anionic hydrophilic cream wi...	1527301	1
Caelo	Anionic hydrophilic cream wi...	1545401	1
Caelo	Anionic hydrophilic cream wi...	1180216	1
Caelo	Anionic hydrophilic cream wi...	15405302	6
Gehe	Anionic hydrophilic cream wi...	15405301	1
Caelo	Anionic hydrophilic cream wi...	16067701	15
Caelo	Anionic hydrophilic cream wi...	1540521	1
Caelo	Anionic hydrophilic cream wi...	16067601	29
Caelo	Anionic hydrophilic cream wi...	16067301	5
Gehe	Anionic hydrophilic cream wi...	16067301	1
Sanacorp	Anionic hydrophilic cream wi...	50/AKD12	1
Caelo	Anionic hydrophilic cream wi...	16067401	9
Caelo	Anionic hydrophilic cream wi...	13067601	1
Caelo	Anionic hydrophilic cream wi...	16067501	8
Gehe	Anionic hydrophilic cream wi...	16067401	1
Caelo	Anionic hydrophilic cream wi...		1
Caelo	Anionic hydrophilic cream wi...	16067801	8
Martinus-Apotheke	Anionic hydrophilic cream wi...	16067801	1
Caelo	Anionic hydrophilic cream wi...	16067901	4
Caelo	Anionic hydrophilic cream wi...	54/AKD12	1
Sanacorp	Anionic hydrophilic cream wi...	16067901	1
Caeol/Phoenix	Anionic hydrophilic cream wi...	16067601	1
Caelo	Anionic hydrophilic cream wi...	16191501	3

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream wi...	16191701	8
sanacorp, 5,75EUR, 12.09...	Anionic hydrophilic cream wi...	16191601	2
Caelo	Anionic hydrophilic cream wi...	16191601	27
Gehe	Anionic hydrophilic cream wi...	16191501	1
Caelo	Anionic hydrophilic cream wi...	16191801	5
Caelo	Anionic hydrophilic cream wi...	56/AKD15	1
Euro OTC	Anionic hydrophilic cream wi...	16191601	1
Caelo	Anionic hydrophilic cream wi...	16290101	10
Caelo	Anionic hydrophilic cream wi...	16191901	7
Caelo	Anionic hydrophilic cream wi...	16290401	11
Caeanlo	Anionic hydrophilic cream wi...	16067601	1
Caelo	Anionic hydrophilic cream wi...	16290302	4
Caelo	Anionic hydrophilic cream wi...	16290301	25
Caelo	Anionic hydrophilic cream wi...	16290501	8
Euro OTC	Anionic hydrophilic cream wi...	16290301	1
Caelo	Anionic hydrophilic cream wi...	1625961	1
Caelo	Anionic hydrophilic cream wi...	16290201	3
Caelo	Anionic hydrophilic cream wi...	17029902	5
Caelo	Anionic hydrophilic cream wi...	17030301	31
Caelo	Anionic hydrophilic cream wi...	16322801	1
Caelo	Anionic hydrophilic cream wi...	17030310	1
Sanacorp WE 23.02.17 -1...	Anionic hydrophilic cream wi...	16290501	1
Caelo	Anionic hydrophilic cream wi...	17030001	6
Caelo	Anionic hydrophilic cream wi...	162906301	1
Caelo	Anionic hydrophilic cream wi...	16260001	1
Caelo	Anionic hydrophilic cream wi...	17029901	15
Caelo	Anionic hydrophilic cream wi...	17030101	13
Noweda	Anionic hydrophilic cream wi...	16290501	1
Caelo	Anionic hydrophilic cream wi...	17030202	5
Allianz Healthcare	Anionic hydrophilic cream wi...	17030301	1
Caelo	Anionic hydrophilic cream wi...	16332001	2
Sanacorp	Anionic hydrophilic cream wi...	17030301	1
Phoenix	Anionic hydrophilic cream wi...	17029901	1
Caelo	Anionic hydrophilic cream wi...	1120617/17102101	1
Caelo	Anionic hydrophilic cream wi...	17102101	6
Caelo	Anionic hydrophilic cream wi...	16158501	1
Caelo	Anionic hydrophilic cream wi...	15071702	1
Caelo	Anionic hydrophilic cream wi...	170299015309	1
Caelo	Anionic hydrophilic cream wi...	17102401	7
THC Rezeptur-Set	Anionic hydrophilic cream wi...	17102101	1
Caelo	Anionic hydrophilic cream wi...	17088901	1
Caelo	Anionic hydrophilic cream wi...	64/AKD16	1
Noweda	Anionic hydrophilic cream wi...	17102101	1
Caelo	Anionic hydrophilic cream wi...	17102001	5
Noweda	Anionic hydrophilic cream wi...	16191601	1
Caelo	Anionic hydrophilic cream wi...	17102201	10
Caelo	Anionic hydrophilic cream wi...	1703031	1
Kehr	Anionic hydrophilic cream wi...	17030301	1
Euro OTC	Anionic hydrophilic cream wi...	17102301	3
Caelo	Anionic hydrophilic cream wi...	17102301	8
Caelo	Anionic hydrophilic cream wi...	17156501	3
Caelo	Anionic hydrophilic cream wi...	17156601	5
Caelo	Anionic hydrophilic cream wi...	17185401	4
Caelo	Anionic hydrophilic cream wi...	17262002	4
Caelo	Anionic hydrophilic cream wi...	17262101	24
Noweda	Anionic hydrophilic cream wi...	17156601	1
Noweda	Anionic hydrophilic cream wi...	17262101	1
Caelo	Anionic hydrophilic cream wi...	17156602	4
Caelo	Anionic hydrophilic cream wi...	17262102	1
Caelo	Anionic hydrophilic cream wi...	17232101	1

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Supplier	Substance	Batch	Spectra
Cealo	Anionic hydrophilic cream wi...	1726202	1
Caelo	Anionic hydrophilic cream wi...	17262201	6
Caelo	Anionic hydrophilic cream wi...	17261901	5
Caelo	Anionic hydrophilic cream wi...	19021814	1
Caelo	Anionic hydrophilic cream wi...	17335401	14
Fagron	Anionic hydrophilic cream wi...	17262101	1
Caelo	Anionic hydrophilic cream wi...	17335501	5
Ichthyol / Gehe	Anionic hydrophilic cream wi...	17335601	2
Kehr	Anionic hydrophilic cream wi...	17156601	1
Euro OTC	Anionic hydrophilic cream wi...	17262201	1
Caelo	Anionic hydrophilic cream wi...	17270501	1
Caelo	Anionic hydrophilic cream wi...	17335301	1
Caelo	Anionic hydrophilic cream wi...	17335601	4
Caelo	Anionic hydrophilic cream wi...	23051807	1
Caelo	Anionic hydrophilic cream wi...	17335701	10
Caelo	Anionic hydrophilic cream wi...	18041401	10
Caelo	Anionic hydrophilic cream wi...	18041501	2
Fagron	Anionic hydrophilic cream wi...	18041401	1
Caelo	Anionic hydrophilic cream wi...	18041402	2
Caelo	Anionic hydrophilic cream wi...	17262001	2
Caelo	Anionic hydrophilic cream wi...	18041601	9
Caelo	Anionic hydrophilic cream wi...	18109801	16
Caelo	Anionic hydrophilic cream wi...	18109702	3
Caelo	Anionic hydrophilic cream wi...	18109901	2
Caelo	Anionic hydrophilic cream wi...	13101803	1
Caelo	Anionic hydrophilic cream wi...	18180802	4
Apo Ident/ Noweda	Anionic hydrophilic cream wi...	18109801	3
Caelo	Anionic hydrophilic cream wi...	18180901	3
Caelo	Anionic hydrophilic cream wi...	18181001	6
Caelo	Anionic hydrophilic cream wi...	18248102	1
Caelo	Anionic hydrophilic cream wi...	18189901	1
Caelo	Anionic hydrophilic cream wi...	18248301	1
Caelo	Anionic hydrophilic cream wi...	18180902	1
Caelo	Anionic hydrophilic cream wi...	26011908	1
Caelo	Anionic hydrophilic cream wi...	18248101	1
euro//Noweda	Anionic hydrophilic cream wi...	18041501	1
Fagron	Wolff® base half-fat cream	236320	3
Dr.August Wolff	Wolff® base half-fat cream	38800	1
Spirig/Anzag	Wolff® base half-fat cream	234791	1
Löwen City-Apotheke Bar...	Wolff® base half-fat cream	230200	1
Dr.Wolff/Gehe	Wolff® base half-fat cream	238660	1
Sanacorp	Wolff® base half-fat cream	235200	2
Dr.Wolff/Noweda	Wolff® base half-fat cream	234791	2
Dr.Wolff/ Anzag	Wolff® base half-fat cream	235200	1
Fagron	Wolff® base half-fat cream	238560	2
Dr.Wolff	Wolff® base half-fat cream	236320	1
Phönix Gotha	Wolff® base half-fat cream	134990	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	238560	3
Dr. Wolff	Wolff® base half-fat cream	238490	2
Dr.Wolff/Noweda	Wolff® base half-fat cream	238660	1
Wolff/AHD	Wolff® base half-fat cream	331551	8
Wolff GmbH	Wolff® base half-fat cream	238560	1
Dr. Wolff /Anzag	Wolff® base half-fat cream	232593	1
Caelo	Wolff® base half-fat cream	238560	1
Dr.Wolff	Wolff® base half-fat cream	332040	11
Dr. Wolf	Wolff® base half-fat cream	331551	1
Dr. Wolff/AHD	Wolff® base half-fat cream	332040	4
Wolff/Sanacorp	Wolff® base half-fat cream	238560	1

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Supplier	Substance	Batch	Spectra
Phönix	Wolff® base half-fat cream	238560	1
DR. August Wolff GmbH	Wolff® base half-fat cream	235200	1
Phönix	Wolff® base half-fat cream	333620	2
Dr. Wolff/Sanacorp	Wolff® base half-fat cream	333620	4
Gehe	Wolff® base half-fat cream	331551	2
Dr. August Wolff	Wolff® base half-fat cream	333620	1
Dr. Wolff/Noweda	Wolff® base half-fat cream	332040	6
Dr. August Wolff	Wolff® base half-fat cream	332040	5
Dr. Wolff	Wolff® base half-fat cream	333620	5
Caelo	Wolff® base half-fat cream	333620	3
Wolff/AHD	Wolff® base half-fat cream	332040	5
Wolff	Wolff® base half-fat cream	238660	1
Dr. August Wolff/Sanaco...	Wolff® base half-fat cream	337260	1
Dr. Wolff	Wolff® base half-fat cream	337260	3
Dr. Wolff/Noweda	Wolff® base half-fat cream	333930	2
Dr. Wolff	Wolff® base half-fat cream	333930	2
Dr. August Wolff	Wolff® base half-fat cream	333930	2
Wolff GmbH	Wolff® base half-fat cream	230870	1
Caelo	Wolff® base half-fat cream	235200	1
Phönix Gotha	Wolff® base half-fat cream	332040	2
Phoenix/Wolff	Wolff® base half-fat cream	333930	1
Dr. Wolff	Wolff® base half-fat cream	331551	2
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	Wolff® base half-fat cream	339140	1
VDL 05.05.14 Fa.Wolff	Wolff® base half-fat cream	339140	1
VDL 28.04.2014;Preis:45...	Wolff® base half-fat cream		1
Wolff GmbH/Sanacorp	Wolff® base half-fat cream	339140	1
Wolff/Alliance	Wolff® base half-fat cream	430880	1
Caelo	Wolff® base half-fat cream	333930	1
Dr. Wolff/Sanacorp	Wolff® base half-fat cream	333620	1
Wolff/Gehe	Wolff® base half-fat cream	236420	1
Wolf/Phönix	Wolff® base half-fat cream	430880	2
Dr. Wolff	Wolff® base half-fat cream	337260	1
DR. WOLFF	Wolff® base half-fat cream	337260	1
Dr. Wolff/V.d.L.	Wolff® base half-fat cream	430880	4
Hedinger/Noweda	Wolff® base half-fat cream	430880	2
VDL;2.7.14	Wolff® base half-fat cream	430880	3
Wolff	Wolff® base half-fat cream	430880	1
Wolff/ Phönix	Wolff® base half-fat cream	430880	2
Dr. Wolff	Wolff® base half-fat cream	333930	1
Dr. August Wolff	Wolff® base half-fat cream	430880	1
Cealo/Phönix	Wolff® base half-fat cream	339140	1
Dr. Wolff /Anzag	Wolff® base half-fat cream	432611	1
Euro/Gehe	Wolff® base half-fat cream	431050	1
Dr. Wolff/ Gehe	Wolff® base half-fat cream	430880	1
Dr. Wolff	Wolff® base half-fat cream	432611	1
Dr. Wolff	Wolff® base half-fat cream	431240	2
Dr. wolff	Wolff® base half-fat cream	432611	1
Caelo	Wolff® base half-fat cream	431240	2
Caelo	Wolff® base half-fat cream	434360	3
Dr. Wolff	Wolff® base half-fat cream	10112014F	1
Gehe	Wolff® base half-fat cream	431050	1
Anzag/ Dr. Wolff	Wolff® base half-fat cream	339140	1
Wolff	Wolff® base half-fat cream	431240	2
Wolff GmbH / Noweda	Wolff® base half-fat cream	434360	3
wolff	Wolff® base half-fat cream	431050	1
wolff/AHD	Wolff® base half-fat cream	431240	1
Wolff vdl 09.01.15	Wolff® base half-fat cream	434360	2

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Supplier	Substance	Batch	Spectra
Dr. Wolff/ Sanacorp	Wolff [®] base half-fat cream	434360	1
Dr. Wolff	Wolff [®] base half-fat cream	431240	1
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	432611	1
Dr.Wolff/NOW	Wolff [®] base half-fat cream	432611	1
Dr.Wolff/NOW	Wolff [®] base half-fat cream	434581	1
Wolff	Wolff [®] base half-fat cream	436750	3
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	434581	1
Phoenix	Wolff [®] base half-fat cream	434360	1
wolff	Wolff [®] base half-fat cream	431240	1
Dr.Wolff/Noweda	Wolff [®] base half-fat cream	434360	1
Dr.Wolff/Sanacorp	Wolff [®] base half-fat cream	434360	1
Dr. Wolff	Wolff [®] base half-fat cream	501470	4
Dr.Wolff	Wolff [®] base half-fat cream	438160	1
Caelo	Wolff [®] base half-fat cream	501470	6
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	438160	1
Dr.August Wolff	Wolff [®] base half-fat cream	434360	1
Wolff/Phönix	Wolff [®] base half-fat cream	501470	1
Wolff/Phönix	Wolff [®] base half-fat cream	438160	1
Dr.Wolff/ Phoenix	Wolff [®] base half-fat cream	501470	2
Wolff/Alliance	Wolff [®] base half-fat cream	436750	1
Dr.Wolff GmbH & Co.KG A...	Wolff [®] base half-fat cream	438160	1
Dr.Wolff	Wolff [®] base half-fat cream	12081508	1
Wolff GmbH / Noweda	Wolff [®] base half-fat cream	501470	1
Wolff	Wolff [®] base half-fat cream	501080	3
Dr. A. Wolff/Kehr	Wolff [®] base half-fat cream	438340	2
wolff GmbH/AHD 21.09.2015	Wolff [®] base half-fat cream	438340	1
Wolff/ Gehe	Wolff [®] base half-fat cream	434360	1
Wolff GmbH	Wolff [®] base half-fat cream	501080	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	438340	1
Wolff/Phoenix	Wolff [®] base half-fat cream	4715E-03719	1
Wolff/ Anzag	Wolff [®] base half-fat cream	501470	1
Sanacorp/Dr.Wolff	Wolff [®] base half-fat cream	501082	1
Wolff/Sanacorp	Wolff [®] base half-fat cream	501470	1
Dr. August Wolff GmbH/S...	Wolff [®] base half-fat cream	506361	1
Dr. Wolff	Wolff [®] base half-fat cream	501082	1
Dr.Wolff	Wolff [®] base half-fat cream	501080	1
Dr. Wolff GmbH	Wolff [®] base half-fat cream	501080	1
Wolf	Wolff [®] base half-fat cream	511420	1
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	506360	2
Caelo	Wolff [®] base half-fat cream	506361	1
Dr Wolff/Noweda	Wolff [®] base half-fat cream	511420	3
Wolff	Wolff [®] base half-fat cream	501870	2
Caelo	Wolff [®] base half-fat cream	511420	3
Dr.Wolff	Wolff [®] base half-fat cream	510400	1
Wolff,Gehe	Wolff [®] base half-fat cream		2
Dr Wolff	Wolff [®] base half-fat cream	501080	1
Dr.August Wolff	Wolff [®] base half-fat cream	511420	1
Dr.Wolff /Gehe	Wolff [®] base half-fat cream	501870	1
Dr.A. Wolff, Sanacorp	Wolff [®] base half-fat cream	511420	2
Wolff	Wolff [®] base half-fat cream	506360	1
Euro OTC	Wolff [®] base half-fat cream	510400	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	511420	2
DR. Wolff;VDL;20.4.16;4...	Wolff [®] base half-fat cream	511420	3
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	506360	1
Dr. Wolff	Wolff [®] base half-fat cream	501080	1
Dr.Wolff	Wolff [®] base half-fat cream	506360	1
Wolff/AHD	Wolff [®] base half-fat cream	510621	1
Dr Wolff	Wolff [®] base half-fat cream	48882171377	1
Phoenix	Wolff [®] base half-fat cream	511420	1
Dr. Wolff/Phönix	Wolff [®] base half-fat cream	510621	1

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Supplier	Substance	Batch	Spectra
Gehe Chiesi	Wolff [®] base half-fat cream	506360-20160615Ma6	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	510400	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	506360	1
Gehe,Wolff Pharma	Wolff [®] base half-fat cream	506360-20160615Ma8	1
Chiesi / Sanacorp/EK: 6...	Wolff [®] base half-fat cream	506360	1
Dr Wolff	Wolff [®] base half-fat cream	410400	1
Dr. Wollff	Wolff [®] base half-fat cream	510400	1
Caelo	Wolff [®] base half-fat cream	602050	1
Gehe/ Wolff	Wolff [®] base half-fat cream	510400	1
Caelo	Wolff [®] base half-fat cream	602290	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	510621	1
Wolff	Wolff [®] base half-fat cream	601880	1
AHD	Wolff [®] base half-fat cream	602290	1
Wolff	Wolff [®] base half-fat cream	602290	2
Wolff/Sanacorp	Wolff [®] base half-fat cream	602050	3
Dr Wolff	Wolff [®] base half-fat cream	510400	1
Dr Wolff	Wolff [®] base half-fat cream	606050	3
sanacorp, 43,56EUR , 10.0...	Wolff [®] base half-fat cream	602050	4
Dr. Wolff	Wolff [®] base half-fat cream	602050	2
Wolff/Alliance	Wolff [®] base half-fat cream	511420	1
Phoenix	Wolff [®] base half-fat cream	602050	3
Dr. Wolff	Wolff [®] base half-fat cream	510400	1
Dr.A.Wolff	Wolff [®] base half-fat cream	601880	1
Dr.A.Wolff/Gehe	Wolff [®] base half-fat cream	602290	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	602290	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	602050	2
Dr. Wolff / Anzag	Wolff [®] base half-fat cream	601880	1
WE: Sanacorp 18.10.2016...	Wolff [®] base half-fat cream	601880	1
Chiesi	Wolff [®] base half-fat cream	601880	1
Dr.Wolff/Gehe	Wolff [®] base half-fat cream	602050	3
Caelo	Wolff [®] base half-fat cream	601880	1
Dr.Wolff	Wolff [®] base half-fat cream	606050	3
Dr.Wolff/AHD	Wolff [®] base half-fat cream	606050	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	606050	1
Dr.Wolff/Gehe	Wolff [®] base half-fat cream		1
Caelo	Wolff [®] base half-fat cream	606050	1
Dr. Wolff / Kehr	Wolff [®] base half-fat cream	605700	3
Taoasis	Wolff [®] base half-fat cream	602050	1
Dr. August Wolff	Wolff [®] base half-fat cream	602050	3
Dr.August Wolff	Wolff [®] base half-fat cream	605700	1
Wolff	Wolff [®] base half-fat cream	606050	3
Dr.Wolff/Sanacorp	Wolff [®] base half-fat cream	608180	3
Noweda/Dr. Wolff	Wolff [®] base half-fat cream	605700	1
Noweda/Wolff GmbH	Wolff [®] base half-fat cream	602290	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	703031	1
Dr Wolff	Wolff [®] base half-fat cream	610991	1
ALH	Wolff [®] base half-fat cream	602050	1
Dr. Wolff	Wolff [®] base half-fat cream	605551	2
Wolff/Phönix	Wolff [®] base half-fat cream	608180	5
Dr. Wolff	Wolff [®] base half-fat cream	605700	1
Sanacorp,	Wolff [®] base half-fat cream	608180	2
Chiesi GmbH	Wolff [®] base half-fat cream	703031	1
Dr. Wolff / OG	Wolff [®] base half-fat cream	608180	1
Dr. Wolff GmbH/ Allianc...	Wolff [®] base half-fat cream	506360	1
Dr.Wolff/Noweda	Wolff [®] base half-fat cream	170420WBC/605551	1
Dr.Wolff	Wolff [®] base half-fat cream	610991	2
Dr.Wolff	Wolff [®] base half-fat cream		1
Wolff/Noweda	Wolff [®] base half-fat cream	511420	1
Dr. Wolff	Wolff [®] base half-fat cream	4051701	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream		1

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Supplier	Substance	Batch	Spectra
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	170519WBC/610991	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	609950	1
Dr. Wolff	Wolff [®] base half-fat cream	10061711	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	170616WBC/610991	1
Dr. Wolff	Wolff [®] base half-fat cream	608180	1
DR. WOLFF	Wolff [®] base half-fat cream	609950	1
Dr. August Wolff	Wolff [®] base half-fat cream	609950	1
Dr. Wolff	Wolff [®] base half-fat cream	701451	2
Euro OTC	Wolff [®] base half-fat cream	703031	3
Dr. Wolff	Wolff [®] base half-fat cream	609950-20170704Ma5	1
AHL	Wolff [®] base half-fat cream	608180	1
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	609950	2
Dr. August Wolff	Wolff [®] base half-fat cream	7091713	1
Wolff/Noweda	Wolff [®] base half-fat cream	702500	1
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	170920WBC/610991	1
Dr. Wolff	Wolff [®] base half-fat cream	701080	6
Sanacorp	Wolff [®] base half-fat cream	701080	1
Dr. Wolff	Wolff [®] base half-fat cream	701451	1
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	702500	3
Dr. Wolff/Sanacorp	Wolff [®] base half-fat cream	704050	3
Phönix WE: 22.09.17 EK...	Wolff [®] base half-fat cream	702500	1
Bombastus	Wolff [®] base half-fat cream	701080	2
Sanacorp	Wolff [®] base half-fat cream	609950	1
Dr. Wolff	Wolff [®] base half-fat cream	23101701	1
Wolff/Gehe	Wolff [®] base half-fat cream	609950-20171106Ma8	1
Sanacorp	Wolff [®] base half-fat cream	702500	2
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	171113WBC/701451	1
PPL	Wolff [®] base half-fat cream	701451	1
Wolff/Gehe	Wolff [®] base half-fat cream	609950-20171127Ma9	1
Wolff/Gehe	Wolff [®] base half-fat cream	705760-20171127Ma10	1
Dr. Wolff/Phoenix	Wolff [®] base half-fat cream	702500	1
Caelo	Wolff [®] base half-fat cream	702500	3
Dr. A. Wolff GmbH/Noweda	Wolff [®] base half-fat cream	608180	1
Dr. Wolff	Wolff [®] base half-fat cream	11121703	1
Wolff Basiscreme	Wolff [®] base half-fat cream	707370	1
PPL	Wolff [®] base half-fat cream	601880	1
PPL	Wolff [®] base half-fat cream	705760	7
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream		1
Dr. August Wolff	Wolff [®] base half-fat cream	704050	1
Gehe/Dr. Wolff	Wolff [®] base half-fat cream	704050	1
Euro OTC	Wolff [®] base half-fat cream		1
Krieger	Wolff [®] base half-fat cream	705760	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	705760	2
Dr. August Wolff/Gehe	Wolff [®] base half-fat cream	704050	2
Dr. Wolff/Noweda	Wolff [®] base half-fat cream	705760	1
Dr. Wolff / Gehe	Wolff [®] base half-fat cream	705760	2
Wolff	Wolff [®] base half-fat cream	707500	4
Dr. Wolff/Kehr	Wolff [®] base half-fat cream	707370	2
Caelo	Wolff [®] base half-fat cream	704050	3
Phoenix	Wolff [®] base half-fat cream	702500	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	606050	1
Dr. Wolff	Wolff [®] base half-fat cream	704220	1
Dr. August Wolff GmbH &...	Wolff [®] base half-fat cream	180312WB/705760	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	707500	1
Sanacorp	Wolff [®] base half-fat cream	707370	4
Dr. Wolff	Wolff [®] base half-fat cream	704220	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	707370	1
Sanacorp	Wolff [®] base half-fat cream	705760	2
wolff	Wolff [®] base half-fat cream	801140	2
Dr. Wolff	Wolff [®] base half-fat cream	12051807	1

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Supplier	Substance	Batch	Spectra
Wolff	Wolff [®] base half-fat cream	801140	1
Gehe/Dr. Wolff	Wolff [®] base half-fat cream	801140	1
Dr. Wolff	Wolff [®] base half-fat cream	1061803	1
Caelo	Wolff [®] base half-fat cream	707370	1
Dr. Wolff	Wolff [®] base half-fat cream	711240	1
Wolff/Gehe 8.11.17	Wolff [®] base half-fat cream	702500-20180619Ma9	1
Kehr/Dr. August Wolff	Wolff [®] base half-fat cream	705760	3
Dr. Wolff GmbH/Phönix	Wolff [®] base half-fat cream	711250	1
Euro OTC	Wolff [®] base half-fat cream	711240	1
Wolff	Wolff [®] base half-fat cream	704050	1
Sanacorp	Wolff [®] base half-fat cream	711250	11
Wolff	Wolff [®] base half-fat cream	711240	2
Caelo	Wolff [®] base half-fat cream	71120	1
Dr. Wolff	Wolff [®] base half-fat cream	23071801	1
Dr. Wolff / Gehe	Wolff [®] base half-fat cream	801140	1
Wolff/Gehe 707370-20180...	Wolff [®] base half-fat cream	707370-20180830Ma9	1
Dr. Wolff	Wolff [®] base half-fat cream	1091802	2
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	601140	1
Wolff/Spangro	Wolff [®] base half-fat cream	801140	1
Jenne	Wolff [®] base half-fat cream	801470	4
Caelo	Wolff [®] base half-fat cream	31101811	1
Wolff/Gehe	Wolff [®] base half-fat cream		1
Sanacorp	Wolff [®] base half-fat cream	805720	7
Caelo	Wolff [®] base half-fat cream	15121805	1
Sanacorp	Wolff [®] base half-fat cream	801470	1
gehe	Wolff [®] base half-fat cream	807640	1
Wolff/Gehe	Wolff [®] base half-fat cream	711250-W20190115Ma12	1
Dr. Wolff	Wolff [®] base half-fat cream	19011903	1
Dr. Wolff	Wolff [®] base half-fat cream	19011904	1
Dr. Wolff/Spangro	Wolff [®] base half-fat cream	807640	1
Kehr/Dr. August Wolff	Wolff [®] base half-fat cream	801470	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	810201	1
Dr. Wolff/Gehe	Wolff [®] base half-fat cream	805720	1
Dr. August Wolff GmbH	Wolff [®] base half-fat cream	805720	1
Apomix	Hydrophilic cream, non-ionic...	1A030112	1
Apomix	Hydrophilic cream, non-ionic...	33A051211	1
Gehe	Hydrophilic cream, non-ionic...	114761	1
Pharmachem	Hydrophilic cream, non-ionic...	80611	1
Anzag	Hydrophilic cream, non-ionic...	114761	1
Bombastus	Hydrophilic cream, non-ionic...	265335	1
Gehe	Hydrophilic cream, non-ionic...	120211	1
Bombastus	Hydrophilic cream, non-ionic...	269711	1
Bombastus	Hydrophilic cream, non-ionic...	269716	1
AMH Niemann/K	Hydrophilic cream, non-ionic...	10A190312	1
Gehe	Hydrophilic cream, non-ionic...	121431	1
GEHE/apomix/22.05.2012	Hydrophilic cream, non-ionic...	3A130212	1
AMH Niemann/G	Hydrophilic cream, non-ionic...	15A140512	1
Bombastus	Hydrophilic cream, non-ionic...	269715	1
Bombastus	Hydrophilic cream, non-ionic...	268349	1
Bombastus	Hydrophilic cream, non-ionic...	271473	1
Bombastus	Hydrophilic cream, non-ionic...	267185	2
Gehe	Hydrophilic cream, non-ionic...	122131	1
Bombastus	Hydrophilic cream, non-ionic...	268354	1
Phönix Gotha	Hydrophilic cream, non-ionic...	122131	2
Phönix Gotha	Hydrophilic cream, non-ionic...	122841	4
Bombastus	Hydrophilic cream, non-ionic...	271397	1
Apomix	Hydrophilic cream, non-ionic...	16A300512	2
Bombastus	Hydrophilic cream, non-ionic...	272472	1
Euro OTC	Hydrophilic cream, non-ionic...	25A120712	3
Bombastus	Hydrophilic cream, non-ionic...	271521	2

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	96914	1
Apomix	Hydrophilic cream, non-ionic...	18A070612	1
Bombastus	Hydrophilic cream, non-ionic...	273130	4
Phönix Gotha	Hydrophilic cream, non-ionic...	123711	1
Bombastus	Hydrophilic cream, non-ionic...	271522	1
Gehe	Hydrophilic cream, non-ionic...	271521	1
Fagron	Hydrophilic cream, non-ionic...	24A110712	1
Bombastus	Hydrophilic cream, non-ionic...	269712	1
Bombastus	Hydrophilic cream, non-ionic...	273128	1
Phönix Gotha	Hydrophilic cream, non-ionic...	124511	5
Bombastus	Hydrophilic cream, non-ionic...	273132	1
Fagron	Hydrophilic cream, non-ionic...	12J04-M06	1
apomix	Hydrophilic cream, non-ionic...	30A170912	1
Caelo	Hydrophilic cream, non-ionic...	274223	1
Bombastus	Hydrophilic cream, non-ionic...	273134	1
Bombastus	Hydrophilic cream, non-ionic...	274217	1
Bombastus	Hydrophilic cream, non-ionic...	268347	1
Bombastus	Hydrophilic cream, non-ionic...	274212	2
Bombastus	Hydrophilic cream, non-ionic...	274223	4
Phönix	Hydrophilic cream, non-ionic...	124511	1
Apomix	Hydrophilic cream, non-ionic...	38A051112	1
Bombastus	Hydrophilic cream, non-ionic...	274211	2
Bombastus	Hydrophilic cream, non-ionic...	273126	1
Apomix	Hydrophilic cream, non-ionic...	42A191212	1
Apomix	Hydrophilic cream, non-ionic...	31A170912	1
Phönix Gotha	Hydrophilic cream, non-ionic...	125011	3
Gehe	Hydrophilic cream, non-ionic...	274216	1
Bombastus	Hydrophilic cream, non-ionic...	274103	2
Gehe	Hydrophilic cream, non-ionic...	274215	1
Bombastus	Hydrophilic cream, non-ionic...	276252	5
Fagron	Hydrophilic cream, non-ionic...	13A30-M01	1
Bombastus	Hydrophilic cream, non-ionic...	274216	3
Caelo	Hydrophilic cream, non-ionic...	267186	1
apomix	Hydrophilic cream, non-ionic...	2A140113	1
Bombastus	Hydrophilic cream, non-ionic...	274102	1
Phönix Gotha	Hydrophilic cream, non-ionic...	130651	3
Pharmachem	Hydrophilic cream, non-ionic...	170412	2
Pharmachem/Phönix	Hydrophilic cream, non-ionic...	170412	1
Bombastus	Hydrophilic cream, non-ionic...	276598	2
Bombastus	Hydrophilic cream, non-ionic...	274219	1
Apomix	Hydrophilic cream, non-ionic...	2A140113	1
Apomix	Hydrophilic cream, non-ionic...	1A030113	1
Bombastus	Hydrophilic cream, non-ionic...	276595	1
Bombastus	Hydrophilic cream, non-ionic...	276599	2
Apomix	Hydrophilic cream, non-ionic...	39A131112	1
Alliance Healthcare	Hydrophilic cream, non-ionic...	1A030113	2
apomix	Hydrophilic cream, non-ionic...	9A060213	1
Gehe	Hydrophilic cream, non-ionic...	125011	1
Caelo	Hydrophilic cream, non-ionic...	276596	1
Bombastus	Hydrophilic cream, non-ionic...	271520	1
Phönix Gotha	Hydrophilic cream, non-ionic...	13065	1
Apomix / Phönix	Hydrophilic cream, non-ionic...	11A040313	1
EUro/AHD	Hydrophilic cream, non-ionic...	277577	1
Bombastus	Hydrophilic cream, non-ionic...	277878	9
Bombastus	Hydrophilic cream, non-ionic...	277871	1
Bombastus	Hydrophilic cream, non-ionic...	274222	1
Fagron	Hydrophilic cream, non-ionic...	13B06-M08	1
Eigene	Hydrophilic cream, non-ionic...	R12/0313	1
apomix	Hydrophilic cream, non-ionic...	3A240413	1
Bombastus	Hydrophilic cream, non-ionic...	278025	4

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Supplier	Substance	Batch	Spectra
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	27A150513	1
Phönix Gotha	Hydrophilic cream, non-ionic...	131451	2
Bombastus	Hydrophilic cream, non-ionic...	277637	1
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	50912	4
Bombastus	Hydrophilic cream, non-ionic...	277881	1
Bombastus	Hydrophilic cream, non-ionic...	277877	1
Bombastus	Hydrophilic cream, non-ionic...	277873	4
Caesar &Loretz GmbH	Hydrophilic cream, non-ionic...		1
Apomix	Hydrophilic cream, non-ionic...	12A040313	2
Caelo	Hydrophilic cream, non-ionic...	277877	1
apomix	Hydrophilic cream, non-ionic...	27A150513	1
Bombastus	Hydrophilic cream, non-ionic...	276725	2
Bombastus	Hydrophilic cream, non-ionic...	278027	3
Fagron	Hydrophilic cream, non-ionic...	13D05-M07	2
apomix/GEHE/22.05.2013	Hydrophilic cream, non-ionic...	2A140113	1
apomix/GEHE/02.07.2013	Hydrophilic cream, non-ionic...	40A261112	1
AMH Niemann/G	Hydrophilic cream, non-ionic...	20A090413	1
Gehe	Hydrophilic cream, non-ionic...	131451	1
Bombastus	Hydrophilic cream, non-ionic...	278026	2
Apomix	Hydrophilic cream, non-ionic...	11A040313	1
Bombastus	Hydrophilic cream, non-ionic...	279661	9
Caelo	Hydrophilic cream, non-ionic...	277878	1
Pharmachem GmbH	Hydrophilic cream, non-ionic...	50912	1
Fagron	Hydrophilic cream, non-ionic...	13D05M08	1
Bombastus	Hydrophilic cream, non-ionic...	278029	1
Phönix	Hydrophilic cream, non-ionic...	278025	1
Bombastus	Hydrophilic cream, non-ionic...	280993	3
Apomix	Hydrophilic cream, non-ionic...	36B270513	1
Bombastus	Hydrophilic cream, non-ionic...	279655	2
Fagron	Hydrophilic cream, non-ionic...	13D18-M09	2
Phönix Gotha	Hydrophilic cream, non-ionic...	132331	2
Apomix/Alliance Healthc...	Hydrophilic cream, non-ionic...	12A040313	1
Fagron	Hydrophilic cream, non-ionic...	13D05-M12	1
Phönix	Hydrophilic cream, non-ionic...	132331	1
Apomix	Hydrophilic cream, non-ionic...	32A090713	2
All..Healthc./Apomix	Hydrophilic cream, non-ionic...	12A040313	1
Fagron	Hydrophilic cream, non-ionic...	13D18-M06	2
Phönix Gotha	Hydrophilic cream, non-ionic...	133121	3
Fagron	Hydrophilic cream, non-ionic...	12/26-M06	1
Gehe	Hydrophilic cream, non-ionic...	133121	1
Gehe	Hydrophilic cream, non-ionic...	132331	1
Apomix Anzag	Hydrophilic cream, non-ionic...	33A240713	1
Bombastus	Hydrophilic cream, non-ionic...	278028	3
Gehe	Hydrophilic cream, non-ionic...	280988	1
Fagron	Hydrophilic cream, non-ionic...	5A230113	1
PKH Halle/ Alliance H.	Hydrophilic cream, non-ionic...	33a240713	1
Fagron	Hydrophilic cream, non-ionic...	13D18-M10	2
Bombastus	Hydrophilic cream, non-ionic...	280986	2
Bombastus	Hydrophilic cream, non-ionic...	279991	1
Pharmachem/Phönix	Hydrophilic cream, non-ionic...	220713	12
Bombastus	Hydrophilic cream, non-ionic...	280987	2
Apomix / Phönix	Hydrophilic cream, non-ionic...	32A090713	1
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	35A070813	1
ANZAG/apomix/22.10.2013	Hydrophilic cream, non-ionic...	30A030613	2
Fagron	Hydrophilic cream, non-ionic...	19A280313	1
Bombastus	Hydrophilic cream, non-ionic...	276597	2
Bombastus	Hydrophilic cream, non-ionic...	274213	1
PKH Halle/ Alliance H.	Hydrophilic cream, non-ionic...	33A240713	2
Bombastus	Hydrophilic cream, non-ionic...	282212	3
Gehe	Hydrophilic cream, non-ionic...	276599	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Hydrophilic cream, non-ionic...	13227701	1
Bombastus	Hydrophilic cream, non-ionic...	281774	1
Apomix	Hydrophilic cream, non-ionic...	30A030613	1
Caelo	Hydrophilic cream, non-ionic...	280991	1
Bombastus	Hydrophilic cream, non-ionic...	282216	8
Fagron	Hydrophilic cream, non-ionic...	13D05-M08	1
Pharmachem GmbH	Hydrophilic cream, non-ionic...	220713	2
Bombastus	Hydrophilic cream, non-ionic...	279656	1
Gehe	Hydrophilic cream, non-ionic...	280989	1
Fagron	Hydrophilic cream, non-ionic...	33A180912	2
Phönix Gotha	Hydrophilic cream, non-ionic...	133911	2
Fagron	Hydrophilic cream, non-ionic...	13D05-M09	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	133911	2
Bombastus	Hydrophilic cream, non-ionic...	282213	3
Fagron	Hydrophilic cream, non-ionic...	13K12-M05	1
Fagron	Hydrophilic cream, non-ionic...	13K12-M04	1
Leyh Pharma GmbH/Anzag	Hydrophilic cream, non-ionic...	133121	1
Pharmachem / Anzag	Hydrophilic cream, non-ionic...	282212	2
apomix/Anzag	Hydrophilic cream, non-ionic...	40A281013	2
Apomix / Phönix	Hydrophilic cream, non-ionic...	35A070813	1
Gehe	Hydrophilic cream, non-ionic...	280992	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	33A240713	1
Gehe	Hydrophilic cream, non-ionic...	282214	1
Sanacorp	Hydrophilic cream, non-ionic...	220713	4
Bombastus	Hydrophilic cream, non-ionic...	283638	2
Bombastus	Hydrophilic cream, non-ionic...	283635	2
Bombastus	Hydrophilic cream, non-ionic...	82216	1
Apomix/Alliance Healthc...	Hydrophilic cream, non-ionic...	8/14	1
Bombastus	Hydrophilic cream, non-ionic...	281737	3
Bombastus	Hydrophilic cream, non-ionic...	283636	5
Apomix	Hydrophilic cream, non-ionic...	54A021213	1
Phönix Gotha	Hydrophilic cream, non-ionic...	134841	2
Bombastus	Hydrophilic cream, non-ionic...	283637	2
Fagron	Hydrophilic cream, non-ionic...	13K15-M07	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	55A181213	1
Fagron	Hydrophilic cream, non-ionic...	55A181213	1
Bombastus	Hydrophilic cream, non-ionic...	280984	1
Caelo	Hydrophilic cream, non-ionic...	13k15-m09	1
Apomix	Hydrophilic cream, non-ionic...	40A281013	1
EUro/AHD	Hydrophilic cream, non-ionic...	34A240713	1
Bombastus	Hydrophilic cream, non-ionic...	282215	2
Fagron	Hydrophilic cream, non-ionic...	412062-3-P	1
Apomix / Noweda	Hydrophilic cream, non-ionic...	33A240713	1
Pharmachem	Hydrophilic cream, non-ionic...	220713	3
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	53A191113	1
Gehe	Hydrophilic cream, non-ionic...	283637	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	54A021213	1
Gehe/Apomix	Hydrophilic cream, non-ionic...	2A140114	2
Leyh Pharma	Hydrophilic cream, non-ionic...	134841	1
Caelo	Hydrophilic cream, non-ionic...	50A111113	1
Bombastus	Hydrophilic cream, non-ionic...	284899	6
Fagron	Hydrophilic cream, non-ionic...	13K20-M09	1
Bombastus	Hydrophilic cream, non-ionic...	276593	1
Fagron	Hydrophilic cream, non-ionic...	13K15-M09	1
Bombastus	Hydrophilic cream, non-ionic...	283692	2
Anzag/apomix/26.03.14	Hydrophilic cream, non-ionic...	40A281013	1
Caelo	Hydrophilic cream, non-ionic...	283634	1
Phönix Gotha	Hydrophilic cream, non-ionic...	140551	4
Fagron	Hydrophilic cream, non-ionic...	2A140114	2
Caesar & Loretz GmbH Hi...	Hydrophilic cream, non-ionic...	282216	1

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Supplier	Substance	Batch	Spectra
Apomix / Phönix	Hydrophilic cream, non-ionic...	4A250214	2
Fagron	Hydrophilic cream, non-ionic...	13K20-M10	1
GEHE/Apomix/25.03.2014	Hydrophilic cream, non-ionic...	1A140114	1
Fagron	Hydrophilic cream, non-ionic...	48A071113	1
Apomix	Hydrophilic cream, non-ionic...	1A080113	2
Bombastus	Hydrophilic cream, non-ionic...	283639	1
Bombastus	Hydrophilic cream, non-ionic...	283634	1
Bombastus	Hydrophilic cream, non-ionic...	284893	2
Fagron	Hydrophilic cream, non-ionic...	51A121113	2
Bombastus	Hydrophilic cream, non-ionic...	284895	5
Apomix	Hydrophilic cream, non-ionic...	7A020414	1
Caelo	Hydrophilic cream, non-ionic...	14063001	2
Phönix Gotha	Hydrophilic cream, non-ionic...	141521	2
Leyh Pharma/Gehe	Hydrophilic cream, non-ionic...	140551	1
Bombastus	Hydrophilic cream, non-ionic...	279660	1
Bombastus	Hydrophilic cream, non-ionic...	283695	6
Apomix / Phönix	Hydrophilic cream, non-ionic...	7A020414	1
Herbasinica	Hydrophilic cream, non-ionic...	284899	1
Phönix	Hydrophilic cream, non-ionic...		1
Bombastus	Hydrophilic cream, non-ionic...	286328	3
Apomix/Noweda	Hydrophilic cream, non-ionic...	7A020414	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M02	1
PKH Halle/Sanacorp	Hydrophilic cream, non-ionic...	8A030414	1
Bombastus	Hydrophilic cream, non-ionic...	284896	2
Bombastus	Hydrophilic cream, non-ionic...	286326	7
Bombastus	Hydrophilic cream, non-ionic...	284898	2
Caelo	Hydrophilic cream, non-ionic...	14137002	5
Fagron	Hydrophilic cream, non-ionic...	13K20-M11	1
Hedinger	Hydrophilic cream, non-ionic...	286326	1
Bombastus	Hydrophilic cream, non-ionic...	286330	2
Bombastus	Hydrophilic cream, non-ionic...	283694	4
Bombastus	Hydrophilic cream, non-ionic...	287711	9
Apomix/AHD/24.06.14	Hydrophilic cream, non-ionic...	32A250414	1
Bombastus	Hydrophilic cream, non-ionic...	284891	3
apomix/Holdermann	Hydrophilic cream, non-ionic...	32A250414	2
Apomix	Hydrophilic cream, non-ionic...	53A191113	1
Fagron	Hydrophilic cream, non-ionic...	13A250313	1
Anzag	Hydrophilic cream, non-ionic...	286330	2
Bombastus	Hydrophilic cream, non-ionic...	284897	1
Apomix / AHD	Hydrophilic cream, non-ionic...	53A021213	1
Fagron	Hydrophilic cream, non-ionic...	14D28-Mo2	1
Raben-Apotheke Mildena	Hydrophilic cream, non-ionic...	37A270514	1
Bombastus	Hydrophilic cream, non-ionic...	286329	1
APOMIX/AHD	Hydrophilic cream, non-ionic...	35A130514	1
Fagron	Hydrophilic cream, non-ionic...	46A061113	1
Fagron	Hydrophilic cream, non-ionic...	14D28-Mo9	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M03	1
Phönix/Leyh Pharma	Hydrophilic cream, non-ionic...	142311	1
Bombastus	Hydrophilic cream, non-ionic...	287715	3
Fagron	Hydrophilic cream, non-ionic...	14D28-M01	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	36A140514	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	142311	1
apomix / Anzag	Hydrophilic cream, non-ionic...	32A250414	1
Apomix	Hydrophilic cream, non-ionic...	36A140514a	1
Bombastus	Hydrophilic cream, non-ionic...	287716	1
Apomix	Hydrophilic cream, non-ionic...	38A050614	1
Phönix Gotha	Hydrophilic cream, non-ionic...	142311	2
Fagron	Hydrophilic cream, non-ionic...	14D28-M05	2
Bombastus	Hydrophilic cream, non-ionic...	274214	1
Caelo	Hydrophilic cream, non-ionic...	36A140514	1

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Supplier	Substance	Batch	Spectra
Fagron	Hydrophilic cream, non-ionic...	14D28-M04	1
Gehe 02.09.14	Hydrophilic cream, non-ionic...	287709	1
Bombastus	Hydrophilic cream, non-ionic...	286325	1
Caelo	Hydrophilic cream, non-ionic...	286327	1
Bombastus	Hydrophilic cream, non-ionic...	287713	6
Bombastus	Hydrophilic cream, non-ionic...	287712	2
AHD 08.09.14 EK 5,31	Hydrophilic cream, non-ionic...	287711	1
Leyh Pharma/Phönix	Hydrophilic cream, non-ionic...	143011	1
AHD/apomix/23.07.14	Hydrophilic cream, non-ionic...	36A140514	1
Bombastus	Hydrophilic cream, non-ionic...	286838	4
Bombastus	Hydrophilic cream, non-ionic...	288795	4
Apomix	Hydrophilic cream, non-ionic...	40A160614	1
Leyh/Gehe	Hydrophilic cream, non-ionic...	143011	2
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	40A160614	1
Fagron	Hydrophilic cream, non-ionic...	14D28-M05	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	38A050614	1
Gehe/apomix/09.10.14	Hydrophilic cream, non-ionic...	7A020414	1
Bombastus	Hydrophilic cream, non-ionic...	287763	3
Bombastus	Hydrophilic cream, non-ionic...	287761	4
Pharmachem / Phönix	Hydrophilic cream, non-ionic...	220713	1
Bombastus	Hydrophilic cream, non-ionic...	289937	1
Bombastus	Hydrophilic cream, non-ionic...	286323	1
Fagron	Hydrophilic cream, non-ionic...	14E07	1
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	142311	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	39A160614	1
Bombastus	Hydrophilic cream, non-ionic...	288882	4
apomix / Anzag	Hydrophilic cream, non-ionic...	36A140514	1
Bombastus	Hydrophilic cream, non-ionic...	287762	2
Phönix Gotha	Hydrophilic cream, non-ionic...	143011	3
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	144021	1
Caelo	Hydrophilic cream, non-ionic...	14221101	2
Fagron	Hydrophilic cream, non-ionic...	14E07-M10	1
Gehe/Apomix/11.11.14	Hydrophilic cream, non-ionic...	4A250214	1
Bombastus	Hydrophilic cream, non-ionic...	2886797	1
Bombastus	Hydrophilic cream, non-ionic...	288797	1
Pharmachem	Hydrophilic cream, non-ionic...	90714	5
Bombastus	Hydrophilic cream, non-ionic...	288793	1
apomix/Holdermann	Hydrophilic cream, non-ionic...	43A140714	1
Apomix	Hydrophilic cream, non-ionic...	48A081014	1
Bombastus	Hydrophilic cream, non-ionic...	288796	1
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	90714	1
Fagron	Hydrophilic cream, non-ionic...	14E14-M06	1
Bombastus	Hydrophilic cream, non-ionic...	287717	1
Bombastus	Hydrophilic cream, non-ionic...	289943	4
Gehe	Hydrophilic cream, non-ionic...	288882	1
Bombastus	Hydrophilic cream, non-ionic...	289940	2
Gehe/apomix/11.12.14	Hydrophilic cream, non-ionic...	48A081014	1
Bombastus	Hydrophilic cream, non-ionic...	287710	2
Bombastus	Hydrophilic cream, non-ionic...	289326	1
Fagron	Hydrophilic cream, non-ionic...	3713U-03195	1
Bombastus	Hydrophilic cream, non-ionic...	288798	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	143011	1
Bombastus	Hydrophilic cream, non-ionic...	289942	5
Phönix Gotha	Hydrophilic cream, non-ionic...	144811	5
Caelo	Hydrophilic cream, non-ionic...	14304902	7
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	50A101114	1
Caelo	Hydrophilic cream, non-ionic...	47A071014	1
apomix / Anzag	Hydrophilic cream, non-ionic...	51A261114	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	48A081014	1
Pharmachem GmbH&Co.KG	Hydrophilic cream, non-ionic...	90714	1

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Supplier	Substance	Batch	Spectra
Apomix	Hydrophilic cream, non-ionic...	51A261114	1
Bombastus	Hydrophilic cream, non-ionic...	291382	1
Apomix	Hydrophilic cream, non-ionic...	50A101114	1
apomix/Gehe	Hydrophilic cream, non-ionic...	51A261114	1
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	150341	1
AMH Niemann / apomix	Hydrophilic cream, non-ionic...	43a140714	1
Bombastus	Hydrophilic cream, non-ionic...	291385	4
Pharmachem / Gehe	Hydrophilic cream, non-ionic...	90714	1
Caelo	Hydrophilic cream, non-ionic...	289944	1
Bombastus	Hydrophilic cream, non-ionic...	291386	4
apomix/Noweda	Hydrophilic cream, non-ionic...	1A210115	1
Holdermann	Hydrophilic cream, non-ionic...	287712	1
Alliance Healthcare/Apo...	Hydrophilic cream, non-ionic...	42A070714	1
Bombastus	Hydrophilic cream, non-ionic...	291384	3
Apomix/Anzag	Hydrophilic cream, non-ionic...	3A090215	1
Bombastus	Hydrophilic cream, non-ionic...	289944	1
Bombastus	Hydrophilic cream, non-ionic...	292804	6
Bombastus	Hydrophilic cream, non-ionic...	291388	9
Euro OTC	Hydrophilic cream, non-ionic...	291388	1
Caelo	Hydrophilic cream, non-ionic...	15039001	6
apomix	Hydrophilic cream, non-ionic...	52a081214	1
apomix/Phönix	Hydrophilic cream, non-ionic...	3A090215	1
Caelo	Hydrophilic cream, non-ionic...	291388	1
Bombastus	Hydrophilic cream, non-ionic...	292452	2
Apomix/Noweda	Hydrophilic cream, non-ionic...	2A090215	1
Gehe/Leyh	Hydrophilic cream, non-ionic...	150341	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	52A081214	1
Bombastus	Hydrophilic cream, non-ionic...	292807	6
Bombastus	Hydrophilic cream, non-ionic...	292809	2
Apomix	Hydrophilic cream, non-ionic...	1A210115	1
Caelo	Hydrophilic cream, non-ionic...	15037703	8
apomix	Hydrophilic cream, non-ionic...	2A090215	1
Bombastus	Hydrophilic cream, non-ionic...	292806	3
Noweda	Hydrophilic cream, non-ionic...	291385	1
Caelo	Hydrophilic cream, non-ionic...	289942	1
Caelo	Hydrophilic cream, non-ionic...	292814	3
Sanacorp	Hydrophilic cream, non-ionic...	15039001	1
Bombastus	Hydrophilic cream, non-ionic...	292739	2
apomix	Hydrophilic cream, non-ionic...	17A100315	1
Bombastus	Hydrophilic cream, non-ionic...	292814	8
Bombastus	Hydrophilic cream, non-ionic...	289941	1
Bombastus	Hydrophilic cream, non-ionic...	292736	1
Phönix Gotha	Hydrophilic cream, non-ionic...	150341	1
Bombastus	Hydrophilic cream, non-ionic...	291387	1
Caelo	Hydrophilic cream, non-ionic...	14336001	2
Bombastus	Hydrophilic cream, non-ionic...	292738	1
Bombastus	Hydrophilic cream, non-ionic...	283693	1
Bombastus	Hydrophilic cream, non-ionic...	292970	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	2A090215	1
Caelo	Hydrophilic cream, non-ionic...	10A140414	1
Gehe/Apomix	Hydrophilic cream, non-ionic...	18A190315	1
Bombastus	Hydrophilic cream, non-ionic...	292737	1
Phönix Gotha	Hydrophilic cream, non-ionic...	150751	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	19A300315	2
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	150751	1
Bombastus	Hydrophilic cream, non-ionic...	294311	3
apomix	Hydrophilic cream, non-ionic...	19A300315	1
Bombastus	Hydrophilic cream, non-ionic...	292812	3
Bombastus	Hydrophilic cream, non-ionic...	292811	5
Phönix Gotha	Hydrophilic cream, non-ionic...	151711	2

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Supplier	Substance	Batch	Spectra
Fagron	Hydrophilic cream, non-ionic...	14d28-m01	1
Euro OTC	Hydrophilic cream, non-ionic...	292737	1
Bombastus	Hydrophilic cream, non-ionic...	292810	1
Noweda	Hydrophilic cream, non-ionic...	292805	1
apomix	Hydrophilic cream, non-ionic...	20A280415	1
apomix/Phönix	Hydrophilic cream, non-ionic...	19A300315	1
Alliance	Hydrophilic cream, non-ionic...	90714	1
Bombastus	Hydrophilic cream, non-ionic...	294407	5
Caelo	Hydrophilic cream, non-ionic...	15155904	4
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	19A300315	1
apomix/Phönix	Hydrophilic cream, non-ionic...	23A100615	1
Bombastus	Hydrophilic cream, non-ionic...	294408	3
apomix/Anzag	Hydrophilic cream, non-ionic...	4A240215	1
Bombastus	Hydrophilic cream, non-ionic...	294310	2
Bombastus	Hydrophilic cream, non-ionic...	294340	1
Anzag	Hydrophilic cream, non-ionic...	294311	1
PKH Halle/Noweda	Hydrophilic cream, non-ionic...	20A280415	1
Bombastus	Hydrophilic cream, non-ionic...	295648	3
Bombastus	Hydrophilic cream, non-ionic...	294313	1
Phönix Gotha	Hydrophilic cream, non-ionic...	153041	4
Noweda	Hydrophilic cream, non-ionic...	294408	1
Caelo	Hydrophilic cream, non-ionic...	294310	1
Bombastus	Hydrophilic cream, non-ionic...	294406	7
Bombastus	Hydrophilic cream, non-ionic...	292740	1
Noweda	Hydrophilic cream, non-ionic...	90714	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	26A080715	1
GEHE/Apomix	Hydrophilic cream, non-ionic...	27A220715	2
Bombastus	Hydrophilic cream, non-ionic...	295649	3
Bombastus	Hydrophilic cream, non-ionic...	295657	10
Caelo	Hydrophilic cream, non-ionic...	15210303	6
Apomix/Kehr	Hydrophilic cream, non-ionic...	2A090215	1
Bombastus	Hydrophilic cream, non-ionic...	60089512	1
Bombastus	Hydrophilic cream, non-ionic...	294305	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	4A240215	1
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	151711	1
apomix/ Phoenix Leipzig	Hydrophilic cream, non-ionic...	27A220715	1
Leyh Pharma	Hydrophilic cream, non-ionic...	153041	2
Bombastus	Hydrophilic cream, non-ionic...	292808	1
Bombastus	Hydrophilic cream, non-ionic...	295650	2
Apomix/NOWEDA	Hydrophilic cream, non-ionic...	19A300315	1
Bombastus	Hydrophilic cream, non-ionic...	295644	1
Fagron	Hydrophilic cream, non-ionic...	12A020315	1
Caelo	Hydrophilic cream, non-ionic...	15325702	3
Fagron	Hydrophilic cream, non-ionic...	5214I-03195	1
Bombastus	Hydrophilic cream, non-ionic...	295652	2
Bombastus	Hydrophilic cream, non-ionic...	295654	4
LEYH PHARMA / Phönix Le...	Hydrophilic cream, non-ionic...	153621	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	29A110815	1
apomix	Hydrophilic cream, non-ionic...	32A220915	1
Bombastus	Hydrophilic cream, non-ionic...	294390	2
Bombastus	Hydrophilic cream, non-ionic...	297298	1
Phönix Gotha	Hydrophilic cream, non-ionic...	153621	1
apomix	Hydrophilic cream, non-ionic...	28A060815	1
Caelo	Hydrophilic cream, non-ionic...	15325801	13
Gehe	Hydrophilic cream, non-ionic...	295653	1
Bombastus	Hydrophilic cream, non-ionic...	295655	8
Bombstus	Hydrophilic cream, non-ionic...	295654	1
Noweda	Hydrophilic cream, non-ionic...	294390	2
Noweda	Hydrophilic cream, non-ionic...	294311	1
Apomix/Anzag	Hydrophilic cream, non-ionic...	26A080715	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	297308	11
PKH GmbH	Hydrophilic cream, non-ionic...	21A110515	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	41a141015	2
Caelo	Hydrophilic cream, non-ionic...	2115E-03195NP	1
Bombastus	Hydrophilic cream, non-ionic...	297304	3
Bombastus	Hydrophilic cream, non-ionic...	297299	1
Bombastus	Hydrophilic cream, non-ionic...	297305	7
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	28A060815	1
Caelo	Hydrophilic cream, non-ionic...	15325802	1
Bombastus	Hydrophilic cream, non-ionic...	99320	2
Bombastus	Hydrophilic cream, non-ionic...	295656	2
Apomix/Anzag	Hydrophilic cream, non-ionic...	47A281015	1
apomix/Phönix	Hydrophilic cream, non-ionic...	47A281015	1
Bombastus	Hydrophilic cream, non-ionic...	297303	2
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	155221	1
Apomix/Noweda	Hydrophilic cream, non-ionic...	50A161215	1
Bombastus	Hydrophilic cream, non-ionic...	295651	2
Bombastus	Hydrophilic cream, non-ionic...	297302	1
LEYH PHARMA / Phönix Le...	Hydrophilic cream, non-ionic...	155221	1
Bombastus	Hydrophilic cream, non-ionic...	297309	10
Caelo	Hydrophilic cream, non-ionic...	15365601	2
Bombastus	Hydrophilic cream, non-ionic...	295653	1
Caesar & Loretz/Noweda	Hydrophilic cream, non-ionic...	295648	1
Bombastus	Hydrophilic cream, non-ionic...	297371	3
Bombastus	Hydrophilic cream, non-ionic...	297372	7
Bombastus	Hydrophilic cream, non-ionic...	2x295649	1
Apomix	Hydrophilic cream, non-ionic...	49A241115	1
Bombastus	Hydrophilic cream, non-ionic...	3x297305	1
Allianc. Health. / Apomix	Hydrophilic cream, non-ionic...	48A181115	1
Caelo	Hydrophilic cream, non-ionic...	16017501	7
Noweda	Hydrophilic cream, non-ionic...	297309	1
Bombostus / Noweda	Hydrophilic cream, non-ionic...	295647	1
Bombastus	Hydrophilic cream, non-ionic...	297310	2
Apomix	Hydrophilic cream, non-ionic...	1A200116	2
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	1a200116	1
Bombastus	Hydrophilic cream, non-ionic...	297374	3
Noweda	Hydrophilic cream, non-ionic...	295648	1
Bombastus	Hydrophilic cream, non-ionic...	297370	1
Bombastus	Hydrophilic cream, non-ionic...	298978	1
Bombastus	Hydrophilic cream, non-ionic...	297911	1
Bombastus	Hydrophilic cream, non-ionic...	300035	4
Bombastus	Hydrophilic cream, non-ionic...	298981	8
apomix/Anzag	Hydrophilic cream, non-ionic...	1a200116	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	32A220915	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	48A181115	1
Bombastus	Hydrophilic cream, non-ionic...	300760	1
Caelo	Hydrophilic cream, non-ionic...	16054101	4
Apomix	Hydrophilic cream, non-ionic...	5A080316	1
Caelo	Hydrophilic cream, non-ionic...	201015	2
apomix	Hydrophilic cream, non-ionic...	3A030216	1
Leyh Pharma / Alliance ...	Hydrophilic cream, non-ionic...	155221	1
APOMIX/Noweda	Hydrophilic cream, non-ionic...	4a230216	1
Bombastus	Hydrophilic cream, non-ionic...	297373	4
Bombastus	Hydrophilic cream, non-ionic...	298983	4
Leyh Pharma/ Phönix	Hydrophilic cream, non-ionic...	160651	1
apomix / Phoenix / 02.0...	Hydrophilic cream, non-ionic...	50a161215	1
Bombastus	Hydrophilic cream, non-ionic...	300766	10
PKH/Noweda	Hydrophilic cream, non-ionic...	27A220715	1
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	47A281015	1
apomix/Phönix	Hydrophilic cream, non-ionic...	5A080316	3

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic cream, non-ionic...	295649	1
Bombastus	Hydrophilic cream, non-ionic...	298984	2
Bombastus	Hydrophilic cream, non-ionic...	300762	2
Bombastus	Hydrophilic cream, non-ionic...	300764	4
Caelo	Hydrophilic cream, non-ionic...	297374	2
Bombastus	Hydrophilic cream, non-ionic...	300763	5
Caelo	Hydrophilic cream, non-ionic...	16114201	8
Apomix /Noweda	Hydrophilic cream, non-ionic...	7a310316	1
Phoenix	Hydrophilic cream, non-ionic...	300035	1
Bombastus	Hydrophilic cream, non-ionic...	297300	1
Apomix	Hydrophilic cream, non-ionic...	23A280416	2
Bombastus	Hydrophilic cream, non-ionic...	300756	3
Bombastus	Hydrophilic cream, non-ionic...	298982	3
Bombastus	Hydrophilic cream, non-ionic...	301627	11
Bombastus	Hydrophilic cream, non-ionic...	300761	4
apomix / Anzag	Hydrophilic cream, non-ionic...	3A030216	1
Beiersdorf/Kehr	Hydrophilic cream, non-ionic...	294407	1
Leyh Pharma/Kehr	Hydrophilic cream, non-ionic...	16017501	1
Bombastus	Hydrophilic cream, non-ionic...	29739	1
Bombastus	Hydrophilic cream, non-ionic...	301622	5
Apomix/Kehr	Hydrophilic cream, non-ionic...	8A120416	1
Bombastus	Hydrophilic cream, non-ionic...	300765	1
Fagron	Hydrophilic cream, non-ionic...	12A180416	2
Pharmachem/Phoenix	Hydrophilic cream, non-ionic...	201015	3
Bombastus	Hydrophilic cream, non-ionic...	300764x2	1
Caelo	Hydrophilic cream, non-ionic...	16114102	5
Caelo	Hydrophilic cream, non-ionic...	300762	1
Caelo	Hydrophilic cream, non-ionic...	301627	3
Bombastus	Hydrophilic cream, non-ionic...	298979	1
Fagron	Hydrophilic cream, non-ionic...	297372	1
Bombastus	Hydrophilic cream, non-ionic...	295591	1
Allianc. Health. /Apomix	Hydrophilic cream, non-ionic...	25A300516	1
Bombastus	Hydrophilic cream, non-ionic...	300759	3
Leyh Pharma/Anzag	Hydrophilic cream, non-ionic...	160651	1
Bombastus	Hydrophilic cream, non-ionic...	301623	6
Caelo	Hydrophilic cream, non-ionic...	16169501	3
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	47A2801015	1
apomix/ Phoenix / 30.08...	Hydrophilic cream, non-ionic...	8a120416	1
Caelo	Hydrophilic cream, non-ionic...	16222001	8
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	162241	1
Caelo	Hydrophilic cream, non-ionic...	16150901	2
Apomix /Noweda	Hydrophilic cream, non-ionic...	8A120416	1
Bombastus	Hydrophilic cream, non-ionic...	302687	4
Noweda	Hydrophilic cream, non-ionic...	300760	1
apomix/Noweda	Hydrophilic cream, non-ionic...	7A310316	1
Bombastus	Hydrophilic cream, non-ionic...	302688	7
Bombastus	Hydrophilic cream, non-ionic...	300758	1
Bombastus	Hydrophilic cream, non-ionic...	302691	7
Allianc. Health. /Apomix	Hydrophilic cream, non-ionic...	7A310316	1
Fagron	Hydrophilic cream, non-ionic...	11A180416	1
apomix / Anzag	Hydrophilic cream, non-ionic...	26A210616	1
apomix	Hydrophilic cream, non-ionic...	30A020816	1
Bombastus	Hydrophilic cream, non-ionic...	30162	1
Fagron	Hydrophilic cream, non-ionic...	4315A-03195	1
Bombastus	Hydrophilic cream, non-ionic...	160824UEASR	1
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	162241	1
apomix/Phönix	Hydrophilic cream, non-ionic...	26A210616	1
Bombastus	Hydrophilic cream, non-ionic...	301624	2
apomix/ Phoenix / 26.10...	Hydrophilic cream, non-ionic...	32a010916	1
Bombastus	Hydrophilic cream, non-ionic...	302690	6

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	229352	2
apomix/ Phoenix / 09.11...	Hydrophilic cream, non-ionic...	30a020816	2
Bombastus	Hydrophilic cream, non-ionic...	302686	3
Alliance Healthcare	Hydrophilic cream, non-ionic...	301627	1
Bombastus	Hydrophilic cream, non-ionic...	301625	1
Bombastus	Hydrophilic cream, non-ionic...	301621	2
Bombastus	Hydrophilic cream, non-ionic...	304774	8
Bombastus	Hydrophilic cream, non-ionic...	304775	7
Bombastus	Hydrophilic cream, non-ionic...	302683	1
apomix / Anzag	Hydrophilic cream, non-ionic...	29A020816	2
Bombastus	Hydrophilic cream, non-ionic...	30683	1
Bombastus	Hydrophilic cream, non-ionic...	302689	1
Bombastus	Hydrophilic cream, non-ionic...	301626	6
Fagron	Hydrophilic cream, non-ionic...	14A190416	1
Fagron	Hydrophilic cream, non-ionic...	13A180416	1
Bombastus	Hydrophilic cream, non-ionic...	304776	5
Leyh Pharma / Phönix	Hydrophilic cream, non-ionic...	164441	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	32A210916	1
AMH Niemann GmbH & Co. KG	Hydrophilic cream, non-ionic...	34A210916	1
Bombastus	Hydrophilic cream, non-ionic...	304777	4
Bombastus	Hydrophilic cream, non-ionic...	304778	4
Bombastus	Hydrophilic cream, non-ionic...	303764	3
Caelo	Hydrophilic cream, non-ionic...	16222102	2
Apomix /Noweda	Hydrophilic cream, non-ionic...	28A220616	1
Bombastus	Hydrophilic cream, non-ionic...	302684	3
Fagron	Hydrophilic cream, non-ionic...	15A-200416	1
Caelo	Hydrophilic cream, non-ionic...	16257902	6
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	163611	1
Bombastus	Hydrophilic cream, non-ionic...	302685	2
Bombastus	Hydrophilic cream, non-ionic...	304773	6
Fagron	Hydrophilic cream, non-ionic...	15A200416	1
Bombastus	Hydrophilic cream, non-ionic...	60089511	1
Caelo	Hydrophilic cream, non-ionic...	16321701	13
GEHE	Hydrophilic cream, non-ionic...	302685	1
AMH Niemann GmbH & Co. ...	Hydrophilic cream, non-ionic...	35A251016	4
Bombastus	Hydrophilic cream, non-ionic...	303735	1
Bombastus	Hydrophilic cream, non-ionic...	2293552	1
Apomix	Hydrophilic cream, non-ionic...	32A010916	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	36A261016	1
Allianc. Health. / Apomix	Hydrophilic cream, non-ionic...	36A261016	1
Bombastus	Hydrophilic cream, non-ionic...	306127	4
SanacorpWE:01.12.2016 ...	Hydrophilic cream, non-ionic...	16222001	1
Apomix	Hydrophilic cream, non-ionic...	17009601	2
Apomix	Hydrophilic cream, non-ionic...	8A120416	1
PKH GmbH	Hydrophilic cream, non-ionic...	36A261016	1
Bombastus	Hydrophilic cream, non-ionic...	306131	12
Bombastus	Hydrophilic cream, non-ionic...	305143	3
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	201015	5
Bombastus	Hydrophilic cream, non-ionic...	306124	5
Bombastus	Hydrophilic cream, non-ionic...	306129	3
Bombastus	Hydrophilic cream, non-ionic...	304771	1
Bombastus	Hydrophilic cream, non-ionic...	307531	12
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	37A071216	1
Bombastus	Hydrophilic cream, non-ionic...	306128	3
Gehe	Hydrophilic cream, non-ionic...	306131	1
Apomix /Noweda	Hydrophilic cream, non-ionic...	36A261016	1
Fagron	Hydrophilic cream, non-ionic...	38A121216	1
Bombastus	Hydrophilic cream, non-ionic...	306130	4
Apomix/Kehr	Hydrophilic cream, non-ionic...	36A261016	1
Fagron	Hydrophilic cream, non-ionic...	39131216	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	306126	6
Bombastus	Hydrophilic cream, non-ionic...	307525	4
apomix/ Phoenix Leipzig...	Hydrophilic cream, non-ionic...	2a160117	1
Caelo	Hydrophilic cream, non-ionic...	170427NHCSR	1
Caelo	Hydrophilic cream, non-ionic...	17009601	2
GEHE	Hydrophilic cream, non-ionic...	306124	1
apomix / Anzag	Hydrophilic cream, non-ionic...	35A251016	1
Euro OTC	Hydrophilic cream, non-ionic...	306131	1
apomix/Phönix	Hydrophilic cream, non-ionic...	7A140217	1
Caelo	Hydrophilic cream, non-ionic...	1700971	1
Apomix	Hydrophilic cream, non-ionic...	7A140217	1
Bombstus/San	Hydrophilic cream, non-ionic...	306131	1
Noweda	Hydrophilic cream, non-ionic...	16321701	1
Apomix/ Sanacorp	Hydrophilic cream, non-ionic...	9A210317	1
Fagron	Hydrophilic cream, non-ionic...	43A191216	1
apomix/ Phoenix Leipzig...	Hydrophilic cream, non-ionic...	7A140217	1
apomix / Phoenix Leipzi...	Hydrophilic cream, non-ionic...	7-A140217	1
Caelo	Hydrophilic cream, non-ionic...	16231701	1
Fagron	Hydrophilic cream, non-ionic...	6061701	1
apomix/Anzag	Hydrophilic cream, non-ionic...	9a210317	1
Apomix/ AHD	Hydrophilic cream, non-ionic...	12A2500417	1
Caelo	Hydrophilic cream, non-ionic...	306128	1
Bombastus	Hydrophilic cream, non-ionic...	307530	4
Frago/Noweda	Hydrophilic cream, non-ionic...	46A201216	1
Bombastus	Hydrophilic cream, non-ionic...	306123	1
Apomix/Kehr	Hydrophilic cream, non-ionic...	7A140217	1
Caelo	Hydrophilic cream, non-ionic...	17113403	5
Caelo	Hydrophilic cream, non-ionic...	1744001	1
Ebert-Jacobi	Hydrophilic cream, non-ionic...	309904	1
Bombastus	Hydrophilic cream, non-ionic...	309908	11
Bombastus	Hydrophilic cream, non-ionic...	307526	2
Leyh Pharma/Noweda	Hydrophilic cream, non-ionic...	170951	1
Caelo	Hydrophilic cream, non-ionic...	17144001	3
Kehr	Hydrophilic cream, non-ionic...	309908	1
Caelo	Hydrophilic cream, non-ionic...	10B280317	1
Bombastus	Hydrophilic cream, non-ionic...	307529	2
Bombastus	Hydrophilic cream, non-ionic...	309903	2
Leyh Pharma/Sanacorp	Hydrophilic cream, non-ionic...	172051	1
Caelo	Hydrophilic cream, non-ionic...	171015015313	1
Bombastus	Hydrophilic cream, non-ionic...	309907	4
Apomix/Sanacorp	Hydrophilic cream, non-ionic...	14A220517	1
Bombastus	Hydrophilic cream, non-ionic...	309905	1
Bombastus	Hydrophilic cream, non-ionic...	309904	7
Noweda	Hydrophilic cream, non-ionic...	309908	1
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	240217	8
Caelo	Hydrophilic cream, non-ionic...	17009701	1
Apomix	Hydrophilic cream, non-ionic...	9A210317	1
Apomix/Phoenix Leipzig ...	Hydrophilic cream, non-ionic...	12A250417	1
Bombastus	Hydrophilic cream, non-ionic...	307524	1
Fagron	Hydrophilic cream, non-ionic...	41A141216	1
Caelo	Hydrophilic cream, non-ionic...	309903	1
Fagron	Hydrophilic cream, non-ionic...	45A201216	1
GEHE	Hydrophilic cream, non-ionic...	307521	1
apomix/Phoenix Leipzig ...	Hydrophilic cream, non-ionic...	12a250417	1
Bombastus	Hydrophilic cream, non-ionic...	307523	1
Bombastus	Hydrophilic cream, non-ionic...	309906	1
Apomix / Gehe	Hydrophilic cream, non-ionic...	5B310817	1
Bombastus	Hydrophilic cream, non-ionic...	310520	8
Bombastus	Hydrophilic cream, non-ionic...	307527	1
Bombastus	Hydrophilic cream, non-ionic...	310516	3

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Supplier	Substance	Batch	Spectra
Leyh Pharma	Hydrophilic cream, non-ionic...	172831	1
Caelo	Hydrophilic cream, non-ionic...	17168502	3
Fagron	Hydrophilic cream, non-ionic...	3A170117	1
Bombastus	Hydrophilic cream, non-ionic...	307528	2
Caelo	Hydrophilic cream, non-ionic...	310515	1
Bombastus	Hydrophilic cream, non-ionic...	310515	3
Bombastus	Hydrophilic cream, non-ionic...	310518	4
Bombastus	Hydrophilic cream, non-ionic...	310519	1
Caelo	Hydrophilic cream, non-ionic...	17212602	2
GEHE	Hydrophilic cream, non-ionic...	17000738	1
Apomix/AHD	Hydrophilic cream, non-ionic...	18A100717	1
Bombastus	Hydrophilic cream, non-ionic...	310514	1
Fagron	Hydrophilic cream, non-ionic...	40A131216	1
Caelo	Hydrophilic cream, non-ionic...	17212601	3
apomix,Phönix, 07.12.2017	Hydrophilic cream, non-ionic...	35a270917	1
Kehr	Hydrophilic cream, non-ionic...	309904	1
Caelo	Hydrophilic cream, non-ionic...	22A050917	1
Caelo	Hydrophilic cream, non-ionic...	1212601	1
Bombastus	Hydrophilic cream, non-ionic...	17000750	10
Bombastus	Hydrophilic cream, non-ionic...	17000741	2
Hedinger	Hydrophilic cream, non-ionic...	17000742	1
Caelo	Hydrophilic cream, non-ionic...	17294002	2
Apomix	Hydrophilic cream, non-ionic...	18A100717	1
Bombastus	Hydrophilic cream, non-ionic...	17000743	6
Noweda	Hydrophilic cream, non-ionic...	17294002	1
Fagron	Hydrophilic cream, non-ionic...	27A130917	1
Bombastus	Hydrophilic cream, non-ionic...	17000744	2
Bombastus	Hydrophilic cream, non-ionic...	170000744	1
Bombastus	Hydrophilic cream, non-ionic...	311132	1
Bombastus	Hydrophilic cream, non-ionic...	311133	1
Bombastus	Hydrophilic cream, non-ionic...	17000749	5
Bombastus	Hydrophilic cream, non-ionic...	17000745	4
apomix/ Phoenix 07.02.2...	Hydrophilic cream, non-ionic...	37a241017	1
Gehe	Hydrophilic cream, non-ionic...	17000737	1
apomix / Phoenix 19.02...	Hydrophilic cream, non-ionic...	40a071217	1
Bombastus	Hydrophilic cream, non-ionic...	17000746	3
Caelo	Hydrophilic cream, non-ionic...	180306UEN/17313902	1
Caelo	Hydrophilic cream, non-ionic...	17313903	1
Caelo	Hydrophilic cream, non-ionic...	17261001	1
Caelo	Hydrophilic cream, non-ionic...	17261002	1
Bombastus	Hydrophilic cream, non-ionic...	304779	1
Caelo	Hydrophilic cream, non-ionic...	17313902	3
Fagron	Hydrophilic cream, non-ionic...	28A130917	1
PKH GmbH	Hydrophilic cream, non-ionic...	18A100717	1
Tsiripidou	Hydrophilic cream, non-ionic...	17000748	1
Bombastus	Hydrophilic cream, non-ionic...	119400	1
Bombastus	Hydrophilic cream, non-ionic...	310517	3
Bombastus	Hydrophilic cream, non-ionic...	17002159	3
Caelo	Hydrophilic cream, non-ionic...	18050303	3
Caelo	Hydrophilic cream, non-ionic...	18050401	4
Bombastus	Hydrophilic cream, non-ionic...	18001328	4
Pharmachem/Noweda	Hydrophilic cream, non-ionic...	240217	1
Bombastus	Hydrophilic cream, non-ionic...	1700750	1
Bombastus	Hydrophilic cream, non-ionic...	18001334	4
apomix	Hydrophilic cream, non-ionic...	5B190218	1
Caelo	Hydrophilic cream, non-ionic...	22011801	1
Bombastus	Hydrophilic cream, non-ionic...	18002063	6
Bombastus	Hydrophilic cream, non-ionic...	17002160	2
Apomix	Hydrophilic cream, non-ionic...	2A040118	1
Caelo	Hydrophilic cream, non-ionic...	1700750	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic cream, non-ionic...	18001330	1
Caelo	Hydrophilic cream, non-ionic...	18050304	1
PKH Halle	Hydrophilic cream, non-ionic...	4A250118	1
Leyh Pharma GmbH	Hydrophilic cream, non-ionic...	180611	1
Caelo	Hydrophilic cream, non-ionic...	18001330	1
apomix, phoenix 28.05.2...	Hydrophilic cream, non-ionic...	6a130318	1
Bombastus	Hydrophilic cream, non-ionic...	18001332	4
Caelo	Hydrophilic cream, non-ionic...	18106801	4
Caelo	Hydrophilic cream, non-ionic...	23061812	1
apomix/ AHD 18.06.2018	Hydrophilic cream, non-ionic...	3A240118	1
Bombastus	Hydrophilic cream, non-ionic...	17000747	2
Caelo	Hydrophilic cream, non-ionic...	18001332	1
Apomix	Hydrophilic cream, non-ionic...	17A030518	1
Bombastus	Hydrophilic cream, non-ionic...	2A040118	1
Apomix/Gehe	Hydrophilic cream, non-ionic...	18A220518	1
Caelo	Hydrophilic cream, non-ionic...	1805401	1
Caelo	Hydrophilic cream, non-ionic...	181069015670	1
Apomix/AHD	Hydrophilic cream, non-ionic...	8A230418	1
Caelo	Hydrophilic cream, non-ionic...	18050501	1
Kehr	Hydrophilic cream, non-ionic...	18106901	1
Leyh Pharma GmbH	Hydrophilic cream, non-ionic...	181721	1
Caelo	Hydrophilic cream, non-ionic...	18106901	1
Bombastus	Hydrophilic cream, non-ionic...	18001327	1
Bombastus	Hydrophilic cream, non-ionic...	18002061	4
PKH Halle	Hydrophilic cream, non-ionic...	17A030518	1
apomix/Gehe	Hydrophilic cream, non-ionic...	24A270618	1
Caelo	Hydrophilic cream, non-ionic...	18106903	1
Bombastus	Hydrophilic cream, non-ionic...	1901327	1
Bombastus	Hydrophilic cream, non-ionic...	18001324	1
Bombastus	Hydrophilic cream, non-ionic...	18001333	2
apomix/ Phoenix	Hydrophilic cream, non-ionic...	25A270618	1
Bombastus	Hydrophilic cream, non-ionic...	18002064	1
Caelo/GEHE	Hydrophilic cream, non-ionic...	181775301	1
Apomix	Hydrophilic cream, non-ionic...	25A270618	2
Caelo	Hydrophilic cream, non-ionic...	18175301	4
Bombastus	Hydrophilic cream, non-ionic...	18004208	2
Bombastus	Hydrophilic cream, non-ionic...	18004210	3
Euro OTC	Hydrophilic cream, non-ionic...	18002063	1
Bombastus	Hydrophilic cream, non-ionic...	18002062	1
Caelo	Hydrophilic cream, non-ionic...	18004212	1
Bombastus	Hydrophilic cream, non-ionic...	18002059	2
Bombastus	Hydrophilic cream, non-ionic...	18004207	2
Euro OTC	Hydrophilic cream, non-ionic...	18175301	1
Bombastus	Hydrophilic cream, non-ionic...	18004209	1
Kehr	Hydrophilic cream, non-ionic...	18175201	1
apomix/ AHD 22.10.2018	Hydrophilic cream, non-ionic...	8A230418	1
Apomix / Phoenix	Hydrophilic cream, non-ionic...	26A270618	1
Bombastus	Hydrophilic cream, non-ionic...	18004211	3
Caelo	Hydrophilic cream, non-ionic...	18218001	1
Caelo	Hydrophilic cream, non-ionic...	10A240418	1
Caelo	Hydrophilic cream, non-ionic...	18175201	1
Bombastus	Hydrophilic cream, non-ionic...	18004212	1
Bombastus	Hydrophilic cream, non-ionic...	18005876	1
Bombastus	Hydrophilic cream, non-ionic...	18005878	1
Pharmachem GmbH & Co.KG	Hydrophilic cream, non-ionic...	190918	1
Caelo	Hydrophilic cream, non-ionic...	18004207	1
Caelo	Anionic hydrophilic cream SR...	15069501	2
apomix	Anionic hydrophilic cream SR...	8A290311	1
Bombastus	Anionic hydrophilic cream SR...	258517	1
Caelo	Anionic hydrophilic cream SR...	1101212540	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	266051	2
Caelo	Anionic hydrophilic cream SR...	3101212540	1
Bombastus	Anionic hydrophilic cream SR...	264644	1
Bombastus	Anionic hydrophilic cream SR...	261009	1
Bombastus	Anionic hydrophilic cream SR...	263823	1
Apomix	Anionic hydrophilic cream SR...	27A210911	1
Apomix	Anionic hydrophilic cream SR...	16A060611	1
Bombastus	Anionic hydrophilic cream SR...	264643	1
Bombastus	Anionic hydrophilic cream SR...	264751	3
Caelo	Anionic hydrophilic cream SR...	1603212540	1
Bombastus	Anionic hydrophilic cream SR...	267642	2
GEHE/apomix/01.03.2012	Anionic hydrophilic cream SR...	33A291111	1
Bombastus	Anionic hydrophilic cream SR...	261013	2
Apomix	Anionic hydrophilic cream SR...	5A200212	1
Gehe	Anionic hydrophilic cream SR...	267647	1
Bombastus	Anionic hydrophilic cream SR...	269227	2
Bombastus	Anionic hydrophilic cream SR...	269225	1
Bombastus	Anionic hydrophilic cream SR...	269231	1
GEHE/AMH/22.05.2012	Anionic hydrophilic cream SR...	5A200212	1
Bombastus	Anionic hydrophilic cream SR...	269230	1
Caelo	Anionic hydrophilic cream SR...	8061203	1
Bombastus	Anionic hydrophilic cream SR...	269234	1
Caelo	Anionic hydrophilic cream SR...	20061205	1
Gehe	Anionic hydrophilic cream SR...	271701	1
Caelo	Anionic hydrophilic cream SR...	22061205	1
Bombastus	Anionic hydrophilic cream SR...	269235	1
Bombastus	Anionic hydrophilic cream SR...	269236	2
Caelo	Anionic hydrophilic cream SR...	2906212540	1
Gehe	Anionic hydrophilic cream SR...	269235	1
Bombastus	Anionic hydrophilic cream SR...	271699	1
GEHE/apomix/05.07.2012	Anionic hydrophilic cream SR...	16A050612	1
AMH Niemann/G	Anionic hydrophilic cream SR...	18A180612	1
Defektur	Anionic hydrophilic cream SR...	271711	1
Caelo	Anionic hydrophilic cream SR...	21081201	1
Caelo	Anionic hydrophilic cream SR...	13071202	1
Phönix Gotha	Anionic hydrophilic cream SR...	241111	1
Apomix	Anionic hydrophilic cream SR...	18A180612	1
Bombastus	Anionic hydrophilic cream SR...	272510	1
Bombastus	Anionic hydrophilic cream SR...	271702	1
apomix	Anionic hydrophilic cream SR...	18A180612	1
Bombastus	Anionic hydrophilic cream SR...	271837	1
Gehe	Anionic hydrophilic cream SR...	271838	1
Caelo	Anionic hydrophilic cream SR...	1109212540	1
AMH Niemann/G	Anionic hydrophilic cream SR...	24A070812	1
Bombastus	Anionic hydrophilic cream SR...	272511	2
Eigenherstellung	Anionic hydrophilic cream SR...	3812E-07664	1
Bombastus	Anionic hydrophilic cream SR...	271701	2
Eigenherstellung	Anionic hydrophilic cream SR...	4012Q-07664	1
Caelo	Anionic hydrophilic cream SR...	9101202	1
Apomix	Anionic hydrophilic cream SR...	4546279	1
Caelo	Anionic hydrophilic cream SR...	1310212540	1
Bombastus	Anionic hydrophilic cream SR...	273695	2
Phoenix (PKH Halle)	Anionic hydrophilic cream SR...	30A021012	1
Caelo	Anionic hydrophilic cream SR...	21111202	1
Phoenix (PKH Halle)	Anionic hydrophilic cream SR...	33A151012	1
Fiebi 23.11.12 ek:4,70	Anionic hydrophilic cream SR...	274504	2
Sanacorp	Anionic hydrophilic cream SR...	273693	1
AMH Niemann/E	Anionic hydrophilic cream SR...	31A091012	1
Bombastus	Anionic hydrophilic cream SR...	272516	1
Caelo	Anionic hydrophilic cream SR...	274377	2

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	272513	1
Caelo	Anionic hydrophilic cream SR...	18121202	1
Sanacorp	Anionic hydrophilic cream SR...	274376	1
Noweda	Anionic hydrophilic cream SR...	273695	1
Bombastus	Anionic hydrophilic cream SR...	274381	4
Bombastus	Anionic hydrophilic cream SR...	5012E-03327	1
Bombastus	Anionic hydrophilic cream SR...	273693	1
Bombastus	Anionic hydrophilic cream SR...	272514	1
Caelo	Anionic hydrophilic cream SR...	9011304	1
Bombastus	Anionic hydrophilic cream SR...	273694	1
Gehe	Anionic hydrophilic cream SR...	273694	1
Phönix	Anionic hydrophilic cream SR...	272515	3
Bombastus	Anionic hydrophilic cream SR...	274378	3
Bombastus	Anionic hydrophilic cream SR...	244379	1
AMH Niemann/G	Anionic hydrophilic cream SR...	38A271112	1
Apomix	Anionic hydrophilic cream SR...	29A240912	1
Bombastus	Anionic hydrophilic cream SR...	275926	2
Bombastus	Anionic hydrophilic cream SR...	274377	1
Bombastus	Anionic hydrophilic cream SR...	276074	7
Bombastus	Anionic hydrophilic cream SR...	275927	3
Bombastus	Anionic hydrophilic cream SR...	276075	2
Noweda	Anionic hydrophilic cream SR...	276074	1
Bombastus	Anionic hydrophilic cream SR...	276073	5
apomix	Anionic hydrophilic cream SR...	35A081112	1
Sanacorp	Anionic hydrophilic cream SR...	274505	1
Caelo	Anionic hydrophilic cream SR...	276077	1
Bombastus	Anionic hydrophilic cream SR...	274505	1
Euro OTC	Anionic hydrophilic cream SR...	276074	1
Bombastus	Anionic hydrophilic cream SR...	274504	2
AMH Niemann/E	Anionic hydrophilic cream SR...	1A080113	3
Bombastus	Anionic hydrophilic cream SR...	277565	3
Bombastus	Anionic hydrophilic cream SR...	277560	2
apomix	Anionic hydrophilic cream SR...	5A300113	1
Caelo	Anionic hydrophilic cream SR...	7A2702213	1
Bombastus	Anionic hydrophilic cream SR...	277569	3
Sanacorp	Anionic hydrophilic cream SR...	277566	1
Anzag ek: 5,17EUR 08.04.13	Anionic hydrophilic cream SR...	277636	3
Apomix	Anionic hydrophilic cream SR...	3A150113	1
Bombastus	Anionic hydrophilic cream SR...	277636	3
Bombastus	Anionic hydrophilic cream SR...	274379	1
Bombastus	Anionic hydrophilic cream SR...	277568	3
Caelo	Anionic hydrophilic cream SR...	277565	1
Caelo	Anionic hydrophilic cream SR...	23041307	1
Bombastus	Anionic hydrophilic cream SR...	277566	2
Bombastus	Anionic hydrophilic cream SR...	274373	1
ApoMix	Anionic hydrophilic cream SR...	25A210812	1
Bombastus	Anionic hydrophilic cream SR...	279199	3
AMH Niemann GmbH & Co K...	Anionic hydrophilic cream SR...	7A270213	2
Apomix	Anionic hydrophilic cream SR...	26A220812	1
Bombastus	Anionic hydrophilic cream SR...	277637	5
	Anionic hydrophilic cream SR...	277637	2
Apomix	Anionic hydrophilic cream SR...	15A040413	1
Bombastus	Anionic hydrophilic cream SR...	279198	2
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	16A240413	2
Apomix	Anionic hydrophilic cream SR...	17A240413	1
Apomix/Alliance Healthc...	Anionic hydrophilic cream SR...	15A040413	1
Bombastus	Anionic hydrophilic cream SR...	279326	10
Bombastus	Anionic hydrophilic cream SR...	279323	3
Caelo	Anionic hydrophilic cream SR...	13128701	1
Bombastus	Anionic hydrophilic cream SR...	279325	10

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Supplier	Substance	Batch	Spectra
PKH GmbH/ Phönix	Anionic hydrophilic cream SR...	14A030413	1
Bombastus	Anionic hydrophilic cream SR...	279195	2
Bombastus	Anionic hydrophilic cream SR...	279200	2
apomix	Anionic hydrophilic cream SR...	16A240413	3
Sanacorp	Anionic hydrophilic cream SR...	277569	1
Pönix/AMH	Anionic hydrophilic cream SR...	11A070313	1
Caelo	Anionic hydrophilic cream SR...	277637	1
Bombastus	Anionic hydrophilic cream SR...	277567	2
Apomix	Anionic hydrophilic cream SR...	19A070513	1
apomix/GEHE/17.04.2013	Anionic hydrophilic cream SR...	8A270213	1
Sanacorp	Anionic hydrophilic cream SR...	277637	2
AMH Niemann GmbH&Co.KG	Anionic hydrophilic cream SR...	15A040413	1
Gehe	Anionic hydrophilic cream SR...	277565	1
Pharmachem GmbH/Phönix	Anionic hydrophilic cream SR...	260712	3
apomix/GEHE/10.07.2013	Anionic hydrophilic cream SR...	15A040413	1
Caelo	Anionic hydrophilic cream SR...	277636	1
Sanacorp	Anionic hydrophilic cream SR...	279202	1
Caelo	Anionic hydrophilic cream SR...	31071301	1
apomix/E	Anionic hydrophilic cream SR...	13A190313	1
Bombastus	Anionic hydrophilic cream SR...	280576	8
Bombastus	Anionic hydrophilic cream SR...	279201	2
Bombastus	Anionic hydrophilic cream SR...	60089211	3
Bombastus	Anionic hydrophilic cream SR...	280575	1
Bombastus	Anionic hydrophilic cream SR...	279202	1
Noweda	Anionic hydrophilic cream SR...	279326	1
Caelo	Anionic hydrophilic cream SR...	20A080513	1
apomix.de	Anionic hydrophilic cream SR...	8A270213	1
Bombastus	Anionic hydrophilic cream SR...	279324	3
Apomix	Anionic hydrophilic cream SR...	32A160713	1
Bombastus	Anionic hydrophilic cream SR...	280570	2
Bombastus	Anionic hydrophilic cream SR...	280574	4
All..Healthc./Apomix	Anionic hydrophilic cream SR...	30A020713	1
Bombastus	Anionic hydrophilic cream SR...	281738	5
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	28A250613	2
Gehe/apomix/18.09.13	Anionic hydrophilic cream SR...	30A020713	2
AMH Niemann GmbH & Co. KG	Anionic hydrophilic cream SR...	30A0207123	1
Caelo	Anionic hydrophilic cream SR...	281738	2
Caelo	Anionic hydrophilic cream SR...	281739	3
Bombastus	Anionic hydrophilic cream SR...	278026	1
Bombastus	Anionic hydrophilic cream SR...	277563	2
Caelo	Anionic hydrophilic cream SR...	11101301	1
Bombastus	Anionic hydrophilic cream SR...	281739	6
Apomix	Anionic hydrophilic cream SR...	25A050613	1
Bombastus	Anionic hydrophilic cream SR...	280571	1
Caelo	Anionic hydrophilic cream SR...	34A060813	2
Bombastus	Anionic hydrophilic cream SR...	281742	4
Sanacorp	Anionic hydrophilic cream SR...	281742	1
Apomix	Anionic hydrophilic cream SR...	31A030713	1
Bombastus	Anionic hydrophilic cream SR...	281743	2
Gehe	Anionic hydrophilic cream SR...	280575	1
Bombastus	Anionic hydrophilic cream SR...	281744	5
Gehe	Anionic hydrophilic cream SR...	280574	1
AMH Niemann/K	Anionic hydrophilic cream SR...	36A270813	1
Caelo	Anionic hydrophilic cream SR...	15111306	1
Bombastus	Anionic hydrophilic cream SR...	281740	5
Bombastus	Anionic hydrophilic cream SR...	281745	1
AMH Niemann/E	Anionic hydrophilic cream SR...	42A141013	1
Bombastus	Anionic hydrophilic cream SR...	281809	4
Bombastus	Anionic hydrophilic cream SR...	281767	6
Apomix	Anionic hydrophilic cream SR...	34A060813	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Anionic hydrophilic cream SR...	281809	1
Apomix	Anionic hydrophilic cream SR...	33A220713	1
Caelo	Anionic hydrophilic cream SR...	2013111213	1
apomix	Anionic hydrophilic cream SR...	31A030713	1
Bombastus	Anionic hydrophilic cream SR...	12121201	1
Pharmachem/Phönix	Anionic hydrophilic cream SR...	290413	1
Bombastus	Anionic hydrophilic cream SR...	280741	7
Bombastus	Anionic hydrophilic cream SR...	229317	1
Bombastus	Anionic hydrophilic cream SR...	283282	3
Bombastus	Anionic hydrophilic cream SR...	280572	1
Bombastus	Anionic hydrophilic cream SR...	283279	2
Noweda	Anionic hydrophilic cream SR...	280572	1
Bombastus	Anionic hydrophilic cream SR...	281866	9
Sanacorp	Anionic hydrophilic cream SR...	283284	1
Sanacorp	Anionic hydrophilic cream SR...	283283	1
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	281866	2
Caelo	Anionic hydrophilic cream SR...	15011413	1
Bombastus	Anionic hydrophilic cream SR...	283281	3
Apomix	Anionic hydrophilic cream SR...	41A021013	1
Bombastus	Anionic hydrophilic cream SR...	283283	3
Sanacorp	Anionic hydrophilic cream SR...	290413	2
Bombastus	Anionic hydrophilic cream SR...	284077	1
Apomix/Phoenix	Anionic hydrophilic cream SR...	33A220713	1
Noweda	Anionic hydrophilic cream SR...	280741	2
AMH Niemann/G	Anionic hydrophilic cream SR...	44A051113	1
Eigene Herstellung	Anionic hydrophilic cream SR...	2014030214	1
Bombastus	Anionic hydrophilic cream SR...	15121201	1
Bombastus	Anionic hydrophilic cream SR...	18A070513	1
Bombastus	Anionic hydrophilic cream SR...	283285	4
Apomix	Anionic hydrophilic cream SR...	44A051113	1
Anzag/apomix/31.01.2014	Anionic hydrophilic cream SR...	51A171213	1
Caelo	Anionic hydrophilic cream SR...	25021413	1
Bombastus	Anionic hydrophilic cream SR...	284081	5
Apomix / Phönix	Anionic hydrophilic cream SR...	3A280114	1
Apomix	Anionic hydrophilic cream SR...	48A031213	1
Bombastus	Anionic hydrophilic cream SR...	284078	1
AMH Niemann/E	Anionic hydrophilic cream SR...	45A141113	1
Bombastus	Anionic hydrophilic cream SR...	284080	3
Gehe/Apomix	Anionic hydrophilic cream SR...	48A031213	1
Bombastus	Anionic hydrophilic cream SR...	283286	2
Gehe/Apomix	Anionic hydrophilic cream SR...	4A030214	2
Bombastus	Anionic hydrophilic cream SR...	280568	2
Bombastus	Anionic hydrophilic cream SR...	82440	1
Bombastus	Anionic hydrophilic cream SR...	284082	4
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	5A170214	1
Bombastus	Anionic hydrophilic cream SR...	284083	4
Gutenberg-Apotheke	Anionic hydrophilic cream SR...	285890	1
Caelo	Anionic hydrophilic cream SR...	14041403	1
Bombastus	Anionic hydrophilic cream SR...	285894	2
AHD	Anionic hydrophilic cream SR...	281866	1
Bombastus	Anionic hydrophilic cream SR...	284079	1
Caelo	Anionic hydrophilic cream SR...	13270103	2
Phönix	Anionic hydrophilic cream SR...	284083	1
anzag	Anionic hydrophilic cream SR...	285899	1
Bombastus	Anionic hydrophilic cream SR...	285898	10
Bombastus	Anionic hydrophilic cream SR...	285890	2
Apomix/Noweda	Anionic hydrophilic cream SR...	8A260314	1
Bombastus	Anionic hydrophilic cream SR...	285899	4
Bombastus	Anionic hydrophilic cream SR...	285895	3
Bombastus	Anionic hydrophilic cream SR...	285897	3

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Supplier	Substance	Batch	Spectra
Apomix	Anionic hydrophilic cream SR...	12A080414	1
AMH Niemann / G	Anionic hydrophilic cream SR...	2A130114	1
Bombastus	Anionic hydrophilic cream SR...	285892	1
Caelo	Anionic hydrophilic cream SR...	14063303	2
Bombastus	Anionic hydrophilic cream SR...	285896	3
Caelo	Anionic hydrophilic cream SR...	4061406	1
Cealo	Anionic hydrophilic cream SR...	285899	1
Caelo	Anionic hydrophilic cream SR...	11A010414	1
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	283286	1
Euro OTC	Anionic hydrophilic cream SR...	286975	1
Bombastus	Anionic hydrophilic cream SR...	286972	1
Apomix	Anionic hydrophilic cream SR...	10A010414	1
apomix/GEHE/28.05.14	Anionic hydrophilic cream SR...	11A010414	1
Anzag	Anionic hydrophilic cream SR...	286979	1
Bombastus	Anionic hydrophilic cream SR...	286975	3
Apomix/Noweda	Anionic hydrophilic cream SR...	13A080414	1
Apomix	Anionic hydrophilic cream SR...	14A070514	3
Bombastus	Anionic hydrophilic cream SR...	286978	1
AMH Niemann / E	Anionic hydrophilic cream SR...	4A030214	1
Gehe/Apomix	Anionic hydrophilic cream SR...	16A130514	1
Bombastus	Anionic hydrophilic cream SR...	285893	2
Bombastus	Anionic hydrophilic cream SR...	286979	12
Caelo	Anionic hydrophilic cream SR...	288310	3
	Anionic hydrophilic cream SR...	110913	1
apomix/Gehe	Anionic hydrophilic cream SR...	18A260514	2
Bombastus	Anionic hydrophilic cream SR...	288230	2
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	17A200514	1
Phoenix	Anionic hydrophilic cream SR...	18A260514	1
Bombastus	Anionic hydrophilic cream SR...	286977	2
Bombastus	Anionic hydrophilic cream SR...	286973	1
Raben-Apotheke Mildenau	Anionic hydrophilic cream SR...	11A010414	1
Bombastus	Anionic hydrophilic cream SR...	286980	7
Caelo	Anionic hydrophilic cream SR...	28072014A	1
Apomix/Noweda	Anionic hydrophilic cream SR...	15A120514	1
Apomix/Noweda	Anionic hydrophilic cream SR...	18A260514	1
Bombastus	Anionic hydrophilic cream SR...	286974	1
AMH Niemann / G	Anionic hydrophilic cream SR...	11A010414	1
Bombastus	Anionic hydrophilic cream SR...	288307	4
Apomix/Phönix	Anionic hydrophilic cream SR...	21A180614	1
All..Healthc./Apomix	Anionic hydrophilic cream SR...	18A260514	1
Caelo	Anionic hydrophilic cream SR...	14182101	2
Bombastus	Anionic hydrophilic cream SR...	288227	1
Bombastus	Anionic hydrophilic cream SR...	288231	4
Bombastus	Anionic hydrophilic cream SR...	286971	1
	Anionic hydrophilic cream SR...	14182102	1
cae	Anionic hydrophilic cream SR...	14182101	1
Caelo	Anionic hydrophilic cream SR...	2091403	1
Bombastus	Anionic hydrophilic cream SR...	288233	3
Gehe/02.09.14/apomix	Anionic hydrophilic cream SR...	23A240614	1
Bombastu-Werke AG/Gehe	Anionic hydrophilic cream SR...	286979	1
Apomix/Noweda	Anionic hydrophilic cream SR...	21A180614	1
AHD	Anionic hydrophilic cream SR...	14244702	1
Caelo	Anionic hydrophilic cream SR...	288307	2
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	19A030614	1
Gehe/apomix/23.09.14	Anionic hydrophilic cream SR...	19A030614	1
Bombastus	Anionic hydrophilic cream SR...	288310	3
Raben-Apotheke Mildenau	Anionic hydrophilic cream SR...	19A030614	1
Bombastus	Anionic hydrophilic cream SR...	288308	5
Bombastus	Anionic hydrophilic cream SR...	288235	3
Caelo	Anionic hydrophilic cream SR...	14244701	6

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Supplier	Substance	Batch	Spectra
Pharmachem/Phönix	Anionic hydrophilic cream SR...	110913	1
apomix/Gehe	Anionic hydrophilic cream SR...	19A030614	1
Neidhardt	Anionic hydrophilic cream SR...	25A140714	1
Bombastus	Anionic hydrophilic cream SR...	289327	4
Bombastus	Anionic hydrophilic cream SR...	289322	1
Apomix	Anionic hydrophilic cream SR...	28A190814	1
Bombastus	Anionic hydrophilic cream SR...	288234	2
Caelo	Anionic hydrophilic cream SR...	286979	1
AHD	Anionic hydrophilic cream SR...	14301501	2
Bombastus	Anionic hydrophilic cream SR...	289332	5
apomix/Gehe	Anionic hydrophilic cream SR...	31A230914	2
apomix	Anionic hydrophilic cream SR...	28A190814	1
AMH Niemann / G	Anionic hydrophilic cream SR...	31A230914	1
Bombastus	Anionic hydrophilic cream SR...	289330	2
Bombastus	Anionic hydrophilic cream SR...	289325	2
Apomix	Anionic hydrophilic cream SR...	29A020914	1
Caelo	Anionic hydrophilic cream SR...	31A230914	1
Caesar & Loretz GmbH	Anionic hydrophilic cream SR...	289329	1
Caelo	Anionic hydrophilic cream SR...	14182104	1
Caelo	Anionic hydrophilic cream SR...	14301501	4
Bomastus	Anionic hydrophilic cream SR...	288308	1
Bombastus	Anionic hydrophilic cream SR...	290527	3
Bombastus	Anionic hydrophilic cream SR...	288882	1
Bombastus	Anionic hydrophilic cream SR...	288228	1
Bombastus	Anionic hydrophilic cream SR...	289323	1
Gehe/apomix/17.12.2014	Anionic hydrophilic cream SR...	26A060814	1
Bombastus	Anionic hydrophilic cream SR...	289331	2
VDL;02.12.14;5,32EUR	Anionic hydrophilic cream SR...	288310	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	31A230914	1
AMH Niemann / G	Anionic hydrophilic cream SR...	29A020914	1
Caelo	Anionic hydrophilic cream SR...	23121411	1
Caelo	Anionic hydrophilic cream SR...	289332	1
Caelo	Anionic hydrophilic cream SR...	289331	1
Bombastus	Anionic hydrophilic cream SR...	289326	2
Bombastus	Anionic hydrophilic cream SR...	290528	2
Bombastus	Anionic hydrophilic cream SR...	290522	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	35A031114	1
Anzag/apomix/07.01.15	Anionic hydrophilic cream SR...	35A031114	1
Caelo	Anionic hydrophilic cream SR...	288235	1
Bombastus	Anionic hydrophilic cream SR...	289328	2
Apomix/Noweda	Anionic hydrophilic cream SR...	33A141014	1
Caelo	Anionic hydrophilic cream SR...	14336203	3
Apomix	Anionic hydrophilic cream SR...	39A011214	2
Caelo	Anionic hydrophilic cream SR...	30011503	1
Caelo	Anionic hydrophilic cream SR...	14336201	1
Bombastus	Anionic hydrophilic cream SR...	289324	1
Bombastus	Anionic hydrophilic cream SR...	291523	7
Bombastus	Anionic hydrophilic cream SR...	291522	3
apomix/Gehe	Anionic hydrophilic cream SR...	41A101214	1
Caelo	Anionic hydrophilic cream SR...	286976	1
AMH Niemann / G	Anionic hydrophilic cream SR...	41A101214	1
Dr. Wolff	Anionic hydrophilic cream SR...	290528	1
Alliance Healthcare/Apo...	Anionic hydrophilic cream SR...	41A101214	1
Rabenapotheke	Anionic hydrophilic cream SR...	39A011214	1
Bombastus	Anionic hydrophilic cream SR...	91770	1
Bombastus	Anionic hydrophilic cream SR...	291529	6
Bombastus	Anionic hydrophilic cream SR...	290530	7
Bombastus	Anionic hydrophilic cream SR...	291524	3
PKH Halle / Phoenix	Anionic hydrophilic cream SR...	40A091214	1
Gehe 10.03.15	Anionic hydrophilic cream SR...	42A171214	1

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Supplier	Substance	Batch	Spectra
Apomix/Noweda	Anionic hydrophilic cream SR...	42A171214	1
Bombastus	Anionic hydrophilic cream SR...	290526	1
Bombastus	Anionic hydrophilic cream SR...	290523	2
Fagron	Anionic hydrophilic cream SR...	291529	1
Noweda/Apomix	Anionic hydrophilic cream SR...	31A14014	1
Bombastus	Anionic hydrophilic cream SR...	291527	3
Caelo	Anionic hydrophilic cream SR...	15014804	1
AMH Niemann / G	Anionic hydrophilic cream SR...	3A200115	1
apomix	Anionic hydrophilic cream SR...	29A020914	1
Bombastus	Anionic hydrophilic cream SR...	291525	3
Gehe	Anionic hydrophilic cream SR...	15014804	1
Apomix/Noweda	Anionic hydrophilic cream SR...	4A270115	1
Caelo	Anionic hydrophilic cream SR...	293103	1
Bombastus	Anionic hydrophilic cream SR...	290524	1
Apomix	Anionic hydrophilic cream SR...	42A171214	2
Bombastus	Anionic hydrophilic cream SR...	291528	4
Caelo	Anionic hydrophilic cream SR...	15014801	4
Bombastus	Anionic hydrophilic cream SR...	292976	5
Bombastus	Anionic hydrophilic cream SR...	292971	1
Bombastus	Anionic hydrophilic cream SR...	291526	2
AHD	Anionic hydrophilic cream SR...	292976	1
Bombastus	Anionic hydrophilic cream SR...	292977	5
Sanacorp;21.04.15;9,31EUR	Anionic hydrophilic cream SR...	292977	1
Bombastus	Anionic hydrophilic cream SR...	292978	4
AHD	Anionic hydrophilic cream SR...	292977	1
Bombastus	Anionic hydrophilic cream SR...	293134	2
Bombastus	Anionic hydrophilic cream SR...	292979	3
AMH Niemann / G	Anionic hydrophilic cream SR...	10A050315	1
Bombastus	Anionic hydrophilic cream SR...	290525	1
Bombastus	Anionic hydrophilic cream SR...	3213I-03327	1
Bombastus	Anionic hydrophilic cream SR...	292975	2
Bombastus	Anionic hydrophilic cream SR...	293102	2
Apomix/Noweda	Anionic hydrophilic cream SR...	12A310315	1
Caelo	Anionic hydrophilic cream SR...	6061502	1
Bombastus	Anionic hydrophilic cream SR...	293133	3
Caelo	Anionic hydrophilic cream SR...	15069404	1
AMH Niemann / G	Anionic hydrophilic cream SR...	12A310315	1
Bombastus	Anionic hydrophilic cream SR...	293104	5
apomix/Phönix	Anionic hydrophilic cream SR...	12A3103215	1
Caelo	Anionic hydrophilic cream SR...	293104	2
All.Healthc. /Apomix	Anionic hydrophilic cream SR...	6A050215	1
Bombastus	Anionic hydrophilic cream SR...	292973	1
Bombast/Phoenix	Anionic hydrophilic cream SR...	293104	1
Caelo	Anionic hydrophilic cream SR...	15134602	2
Bombastus	Anionic hydrophilic cream SR...	295166	6
Bombastus	Anionic hydrophilic cream SR...	293103	2
apomix/Phönix	Anionic hydrophilic cream SR...	12A310315	1
Caelo	Anionic hydrophilic cream SR...	15069403	1
Bombastus	Anionic hydrophilic cream SR...	292980	2
Fagron	Anionic hydrophilic cream SR...	15172901	1
Bombastus	Anionic hydrophilic cream SR...	293135	7
AMH Niemann / E	Anionic hydrophilic cream SR...	20A020615	1
AMH Niemann / E	Anionic hydrophilic cream SR...	16A050515	1
Bombastus	Anionic hydrophilic cream SR...	295167	5
Noweda	Anionic hydrophilic cream SR...	17A120515	1
Apomix/Gehe	Anionic hydrophilic cream SR...	19A260515	2
Anzag	Anionic hydrophilic cream SR...	295232	1
Apomix/Noweda	Anionic hydrophilic cream SR...	20A020615	2
Bombastus	Anionic hydrophilic cream SR...	295232	9
Bombastus	Anionic hydrophilic cream SR...	295169	4

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	295233	3
Caelo	Anionic hydrophilic cream SR...	15172901	5
Caelo	Anionic hydrophilic cream SR...	293135	1
PKH / Phoenix	Anionic hydrophilic cream SR...	15A210415	1
Caelo	Anionic hydrophilic cream SR...	22A160615	2
Caelo	Anionic hydrophilic cream SR...	15268001	1
PKH Halle	Anionic hydrophilic cream SR...	13A010415	1
Apomix/Phönix	Anionic hydrophilic cream SR...	28A040815	1
All. Healthc. / Apomix	Anionic hydrophilic cream SR...	6050215	1
Apomix/Kehr	Anionic hydrophilic cream SR...	5A050215	1
Caelo	Anionic hydrophilic cream SR...	15205502	2
Bombastus	Anionic hydrophilic cream SR...	295171	3
Caelo	Anionic hydrophilic cream SR...	15205501	3
AHD	Anionic hydrophilic cream SR...	296409	1
Sanacorp	Anionic hydrophilic cream SR...	290530	1
Caelo	Anionic hydrophilic cream SR...	15329601	8
apomix/Phönix	Anionic hydrophilic cream SR...	28A040815	2
Bombastus	Anionic hydrophilic cream SR...	296411	2
sanacorp	Anionic hydrophilic cream SR...	15319101	1
Bombastus	Anionic hydrophilic cream SR...	295172	1
Caelo	Anionic hydrophilic cream SR...	15329501	10
Bombastus	Anionic hydrophilic cream SR...	295170	2
Bombastus	Anionic hydrophilic cream SR...	296410	3
Bombastus	Anionic hydrophilic cream SR...	296414	8
Apomix	Anionic hydrophilic cream SR...	33A230915	1
Bombastus	Anionic hydrophilic cream SR...	296409	2
Bombastus	Anionic hydrophilic cream SR...	297912	3
Allianc. Healthc. /Apomix	Anionic hydrophilic cream SR...	34A131015	2
Pharmachem/Phönix	Anionic hydrophilic cream SR...	130814	1
Fagron	Anionic hydrophilic cream SR...	32A150915	1
AMH Niemann / G	Anionic hydrophilic cream SR...	33A230915	1
apomix / Phoenix Leipzi...	Anionic hydrophilic cream SR...	34a061015	1
Bombastus	Anionic hydrophilic cream SR...	98245	1
Caelo	Anionic hydrophilic cream SR...	297912	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	39A231115	1
Bombastus	Anionic hydrophilic cream SR...	296412	3
Caelo	Anionic hydrophilic cream SR...	295232	1
Noweda/apomix	Anionic hydrophilic cream SR...	21A090615	1
Bombastus	Anionic hydrophilic cream SR...	297823	4
Bombastus	Anionic hydrophilic cream SR...	297820	2
Apomix/Phönix	Anionic hydrophilic cream SR...	38A171115	1
Noweda	Anionic hydrophilic cream SR...	15329601	1
Apomix/Gehe	Anionic hydrophilic cream SR...	28A040815	1
Caelo	Anionic hydrophilic cream SR...	296408	1
Caelo	Anionic hydrophilic cream SR...	15268002	1
Bombastus	Anionic hydrophilic cream SR...	296406	1
PKH Apomix/Anzag	Anionic hydrophilic cream SR...	38A171115	1
apomix/AHD	Anionic hydrophilic cream SR...	32A150915	1
apomix / Phoenix Leipzi...	Anionic hydrophilic cream SR...	30A250815	1
Apomix/Noweda	Anionic hydrophilic cream SR...	37A17115	1
Bombastus	Anionic hydrophilic cream SR...	296415	3
Bombastus	Anionic hydrophilic cream SR...	297822	4
Bombastus	Anionic hydrophilic cream SR...	295165	1
Bombastus	Anionic hydrophilic cream SR...	297909	1
Bombastus	Anionic hydrophilic cream SR...	297913	8
Caelo	Anionic hydrophilic cream SR...	15386502	4
Bombastus	Anionic hydrophilic cream SR...	297911	3
Bombastus	Anionic hydrophilic cream SR...		1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	41A151215	1
Noweda	Anionic hydrophilic cream SR...	15386502	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	297908	2
AMH Niemann/G	Anionic hydrophilic cream SR...	36A031115	1
Bombastus	Anionic hydrophilic cream SR...	296413	2
Bombastus	Anionic hydrophilic cream SR...	2x297819	1
Bombastus	Anionic hydrophilic cream SR...	297821	7
Bombastus	Anionic hydrophilic cream SR...	297817	1
Caelo	Anionic hydrophilic cream SR...	15386602	2
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	41A151215a	1
Caelo	Anionic hydrophilic cream SR...	1291015	1
Noweda	Anionic hydrophilic cream SR...	38A171115	1
Bombastus	Anionic hydrophilic cream SR...	300564	16
Bombastus	Anionic hydrophilic cream SR...	297910	3
Bombastus	Anionic hydrophilic cream SR...	297309	1
Bombastus	Anionic hydrophilic cream SR...	299253	4
Caelo	Anionic hydrophilic cream SR...	16019601	4
Caesar&Loretz GmbH,Phön...	Anionic hydrophilic cream SR...	16046501	1
Bombastus	Anionic hydrophilic cream SR...	299255	4
Bombastus	Anionic hydrophilic cream SR...	29926	1
AMH Niemann / E	Anionic hydrophilic cream SR...	1A050116	1
Bombastus	Anionic hydrophilic cream SR...	299256	3
Caelo	Anionic hydrophilic cream SR...	16019801	5
Bombastus	Anionic hydrophilic cream SR...	300561	3
Gehe	Anionic hydrophilic cream SR...	3A120116	2
apomix/Phönix	Anionic hydrophilic cream SR...	37A171115	1
Anzag	Anionic hydrophilic cream SR...	6A260116	1
Fagron	Anionic hydrophilic cream SR...	291528	1
Bombastus	Anionic hydrophilic cream SR...	2215M-03327	1
Caelo	Anionic hydrophilic cream SR...	16047101	1
Bombastus	Anionic hydrophilic cream SR...	299254	3
APOMIX/Noweda	Anionic hydrophilic cream SR...	7a090216	1
Bombastus	Anionic hydrophilic cream SR...	300563	3
PKH Halle/Kehr	Anionic hydrophilic cream SR...	9A170216	1
AMH Niemann / K	Anionic hydrophilic cream SR...	13A220316	1
Caesar&loretz,phönix,11...	Anionic hydrophilic cream SR...	16103101	3
phönix	Anionic hydrophilic cream SR...	7a090216	1
Caelo	Anionic hydrophilic cream SR...	16107502	8
Caelo	Anionic hydrophilic cream SR...	300956	1
Cealo/AHD	Anionic hydrophilic cream SR...	16107501	1
Bombastus	Anionic hydrophilic cream SR...	300947	1
Bombastus	Anionic hydrophilic cream SR...	300956	13
apomix/ Noweda	Anionic hydrophilic cream SR...	5A200116	1
Bombastus	Anionic hydrophilic cream SR...	300957	8
apomix/ Noweda	Anionic hydrophilic cream SR...	16A060416	1
Bombastus	Anionic hydrophilic cream SR...	300950	4
apomix/Phönix	Anionic hydrophilic cream SR...	11A010316	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	15386602	1
Bombastus	Anionic hydrophilic cream SR...	300562	2
Bombastus	Anionic hydrophilic cream SR...	297819	1
Bombastus	Anionic hydrophilic cream SR...	300953	3
Caelo	Anionic hydrophilic cream SR...	16046201	1
Bombastus	Anionic hydrophilic cream SR...	80616-09	1
Apomix	Anionic hydrophilic cream SR...	11A010316	2
Bombastus	Anionic hydrophilic cream SR...	300956-20160615Ma4	1
Apomix	Anionic hydrophilic cream SR...	1A050116	1
Bombastus	Anionic hydrophilic cream SR...	300353	1
Apomix	Anionic hydrophilic cream SR...	8A090216	1
Caelo	Anionic hydrophilic cream SR...	16107503	2
apomix / Phoenix / 14.0...	Anionic hydrophilic cream SR...	19a180516	1
Bombastus	Anionic hydrophilic cream SR...	300560	1
Apomix/Noweda	Anionic hydrophilic cream SR...	3A120116	2

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	300364	1
Bombastus	Anionic hydrophilic cream SR...	300951	5
Caelo	Anionic hydrophilic cream SR...	16150901	1
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	16019601	1
AMH Niemann / G	Anionic hydrophilic cream SR...	14A300316	3
Bombastus	Anionic hydrophilic cream SR...	301352	2
apomix / Phoenix / 29.0...	Anionic hydrophilic cream SR...	15A050416	1
Allianc. Healthc. /Apomix	Anionic hydrophilic cream SR...	18A040516	2
Apomix/Kehr	Anionic hydrophilic cream SR...	19A180516	1
Apomix	Anionic hydrophilic cream SR...	18A040516	1
Bombastus	Anionic hydrophilic cream SR...	300955	2
apomix/Phönix	Anionic hydrophilic cream SR...	25A290616	1
Caelo	Anionic hydrophilic cream SR...	16107501	16
Apomix/Phoenix	Anionic hydrophilic cream SR...	17A030516	1
PKH/Gehe	Anionic hydrophilic cream SR...	16A060416	1
Caelo	Anionic hydrophilic cream SR...	16126701	1
Caelo	Anionic hydrophilic cream SR...	18A040516	1
Euro OTC	Anionic hydrophilic cream SR...	302199	1
Caelo	Anionic hydrophilic cream SR...	299255	1
Caelo	Anionic hydrophilic cream SR...	160107502	1
Apomix	Anionic hydrophilic cream SR...	13A220316	1
Bombastus	Anionic hydrophilic cream SR...	301357	2
apomix/AHD	Anionic hydrophilic cream SR...	24A280616	1
Apomix/Noweda	Anionic hydrophilic cream SR...	18A040516	1
Apomix/Noweda	Anionic hydrophilic cream SR...	15A060416	1
Euro OTC	Anionic hydrophilic cream SR...	296410	2
Bombastus	Anionic hydrophilic cream SR...	302190	1
Apomix	Anionic hydrophilic cream SR...	23A130616	2
Caesar&Loretz GmbH	Anionic hydrophilic cream SR...	16107502	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	17A030516	1
AMH Niemann / K	Anionic hydrophilic cream SR...	22A090616	1
Bombastus	Anionic hydrophilic cream SR...	300946	1
Caelo	Anionic hydrophilic cream SR...	16215501	10
Bombastus	Anionic hydrophilic cream SR...	302195	3
Apomix/AHD	Anionic hydrophilic cream SR...	17A030516	1
Gehe, 9,99EUR, 29.08.2016	Anionic hydrophilic cream SR...	299255	1
Anzag	Anionic hydrophilic cream SR...	300563	1
Caelo	Anionic hydrophilic cream SR...	16047301	1
Fagron	Anionic hydrophilic cream SR...	302382	1
Bombastus	Anionic hydrophilic cream SR...	302192	1
apomix/Holdermann	Anionic hydrophilic cream SR...	26A130716	1
apomix	Anionic hydrophilic cream SR...	23A130616	1
apomix/ Phoenix / 15.09...	Anionic hydrophilic cream SR...	11a010316	1
Bombastus	Anionic hydrophilic cream SR...	300954	1
Bombastus	Anionic hydrophilic cream SR...	302199	4
Bombastus	Anionic hydrophilic cream SR...	302194	4
PKH Halle/Kehr	Anionic hydrophilic cream SR...	24A280616	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	23A130616	2
Euro OTC	Anionic hydrophilic cream SR...	300563	1
apomix	Anionic hydrophilic cream SR...	16A060416	1
Apomix /Noweda	Anionic hydrophilic cream SR...	29a160816	1
Apomix	Anionic hydrophilic cream SR...	28A260716	2
Noweda/Apomix	Anionic hydrophilic cream SR...	25A290616	1
Caelo	Anionic hydrophilic cream SR...	16215701	1
Bombastus	Anionic hydrophilic cream SR...	150820UEA	1
Caelo	Anionic hydrophilic cream SR...	302199	1
Caelo	Anionic hydrophilic cream SR...	302200	2
Bombastus	Anionic hydrophilic cream SR...	303729	1
Caelo	Anionic hydrophilic cream SR...	16114102	1
Caelo	Anionic hydrophilic cream SR...	16215601	5

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	302196	2
Apomix	Anionic hydrophilic cream SR...	21A080616	1
Phoenix	Anionic hydrophilic cream SR...	16188903	1
apomix/ Phoenix / 02.11...	Anionic hydrophilic cream SR...	12a080316	2
Apomix	Anionic hydrophilic cream SR...	22A090616	1
Caelo	Anionic hydrophilic cream SR...	16258701	11
Alliance Healthcare	Anionic hydrophilic cream SR...	302199	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	22A090616	2
Bombastus	Anionic hydrophilic cream SR...	302191	1
Caelo	Anionic hydrophilic cream SR...	162115501	1
Bombastus	Anionic hydrophilic cream SR...	303735	8
Bombastus	Anionic hydrophilic cream SR...	303728	4
hochhaus-Apotheke	Anionic hydrophilic cream SR...	3016E-03195	1
Caelo	Anionic hydrophilic cream SR...	16158901	1
apomix	Anionic hydrophilic cream SR...	36A140916	1
Bombastus	Anionic hydrophilic cream SR...	303732	4
Caelo	Anionic hydrophilic cream SR...	302196	2
Bombastus	Anionic hydrophilic cream SR...	302200	4
Caelo	Anionic hydrophilic cream SR...	1290916	1
Bombastus	Anionic hydrophilic cream SR...	303731	6
Caelo	Anionic hydrophilic cream SR...	16179601	2
Alte Apotheke	Anionic hydrophilic cream SR...	303735	1
apomix/Phönix	Anionic hydrophilic cream SR...	34A130916	1
Allianc. Health. /Apomix	Anionic hydrophilic cream SR...	38A111016	2
Bombastus	Anionic hydrophilic cream SR...	302463	1
Apomix	Anionic hydrophilic cream SR...	35A140916	1
Caelo	Anionic hydrophilic cream SR...	16258601	8
Bombastus	Anionic hydrophilic cream SR...	300952	1
Apomix/Phönix	Anionic hydrophilic cream SR...	26A130716	2
Apomix/Phoenix	Anionic hydrophilic cream SR...	36A140916	1
Bombastus	Anionic hydrophilic cream SR...	303733	2
apomix	Anionic hydrophilic cream SR...	30A160816	1
Bombastus	Anionic hydrophilic cream SR...	305064	5
Phönix	Anionic hydrophilic cream SR...	36a140916	1
Bombastus	Anionic hydrophilic cream SR...	303734	3
Apomix/Noweda	Anionic hydrophilic cream SR...	35A140916	1
Bombastus	Anionic hydrophilic cream SR...	170103CAH/303735	1
Bombastus	Anionic hydrophilic cream SR...	305065	3
apomix/Phoenix/12.01.2017	Anionic hydrophilic cream SR...	33a060916	1
Fagron	Anionic hydrophilic cream SR...	305069	1
Caeanlo	Anionic hydrophilic cream SR...	16215501	2
Bombastus	Anionic hydrophilic cream SR...	303736	6
AMH Niemann / G	Anionic hydrophilic cream SR...	13A111016	1
Phönix	Anionic hydrophilic cream SR...	38a111016	1
apomix	Anionic hydrophilic cream SR...	36A140616	1
Bombastus	Anionic hydrophilic cream SR...	305375	1
Bombastus	Anionic hydrophilic cream SR...	305067	1
apomix/Phoenix/27.01.2017	Anionic hydrophilic cream SR...	37a270916	2
Apomix/Gehe	Anionic hydrophilic cream SR...	33A060916	2
Caelo	Anionic hydrophilic cream SR...	16289402	5
Bombastus	Anionic hydrophilic cream SR...	302193	1
Bombastus	Anionic hydrophilic cream SR...	305069	9
Apomix	Anionic hydrophilic cream SR...	33A060916	1
Anzag	Anionic hydrophilic cream SR...	305067	1
Pharmachemie	Anionic hydrophilic cream SR...	240915	1
Apomix/Gehe	Anionic hydrophilic cream SR...	2A030117	3
Caelo	Anionic hydrophilic cream SR...	16332001	9
Henry Lamotte / Noweda	Anionic hydrophilic cream SR...	303735	2
Apomix	Anionic hydrophilic cream SR...	41A281116	2
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	34A130916	1

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Supplier	Substance	Batch	Spectra
Caelo	Anionic hydrophilic cream SR...	23021706	1
Bombastus	Anionic hydrophilic cream SR...	305066	3
Bombastus	Anionic hydrophilic cream SR...	305063	1
Apomix	Anionic hydrophilic cream SR...	40A151116	2
Bombastus	Anionic hydrophilic cream SR...	305068	10
Bombastus	Anionic hydrophilic cream SR...	303726	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	41A281116	1
Caelo	Anionic hydrophilic cream SR...	16332101	6
PKH GmbH	Anionic hydrophilic cream SR...	2A030117	1
Caesar&LoretzGmbH,11,03...	Anionic hydrophilic cream SR...	16322701	1
Gehe	Anionic hydrophilic cream SR...	306440	1
Bombastus	Anionic hydrophilic cream SR...	170313CAH/303736	1
Apomix	Anionic hydrophilic cream SR...	1A020117	1
Caelo	Anionic hydrophilic cream SR...	305069	1
Bombastus	Anionic hydrophilic cream SR...	306435	7
Phönix	Anionic hydrophilic cream SR...	305066	1
apomix/ AHD 09.03.17	Anionic hydrophilic cream SR...	2A030117	1
Gehe	Anionic hydrophilic cream SR...	303736	1
Bombastus	Anionic hydrophilic cream SR...	306439	1
Bombastus	Anionic hydrophilic cream SR...	307324	1
apomix/Phönix	Anionic hydrophilic cream SR...	40A151116	1
apomix/ Phoenix Leipzig...	Anionic hydrophilic cream SR...	2a030117	1
Bombastus	Anionic hydrophilic cream SR...	306440	7
Caelo	Anionic hydrophilic cream SR...	17041902	5
Caelo	Anionic hydrophilic cream SR...	17041901	4
Bombastus	Anionic hydrophilic cream SR...	306436	2
Apomix/Kehr	Anionic hydrophilic cream SR...	6A280217	1
Caelo	Anionic hydrophilic cream SR...	306439	1
Apomix	Anionic hydrophilic cream SR...	26A130716	1
Caelo	Anionic hydrophilic cream SR...	307328	1
Bombastus	Anionic hydrophilic cream SR...	307329	5
apomix/Phönix	Anionic hydrophilic cream SR...	3A310117	1
Apomix/Gehe	Anionic hydrophilic cream SR...	2A280217	1
Allianc. Health. / Apomix	Anionic hydrophilic cream SR...	5A200217	3
Bombastus	Anionic hydrophilic cream SR...	306434	1
AMH Niemann / K	Anionic hydrophilic cream SR...	3A310117	1
Bombastus	Anionic hydrophilic cream SR...	307333	4
phönix	Anionic hydrophilic cream SR...	16158802	1
phönix	Anionic hydrophilic cream SR...	3a310117	1
Caelo	Anionic hydrophilic cream SR...	17008901	5
Phönix	Anionic hydrophilic cream SR...	305064	1
Caelo	Anionic hydrophilic cream SR...	21041720	1
Phönix	Anionic hydrophilic cream SR...	305069	1
Caelo	Anionic hydrophilic cream SR...	300957	1
Bombastus	Anionic hydrophilic cream SR...	307330	3
Euro OTC	Anionic hydrophilic cream SR...	16332001	2
Bombastus	Anionic hydrophilic cream SR...	307322	1
Apomix/Gehe	Anionic hydrophilic cream SR...	4A130217	1
AMH Niemann / G	Anionic hydrophilic cream SR...	9A210317	1
Caelo	Anionic hydrophilic cream SR...	16259801	1
Apomix /Noweda	Anionic hydrophilic cream SR...	4A130217	1
apomix	Anionic hydrophilic cream SR...	3A310117	1
Pharmachemie Pößneck	Anionic hydrophilic cream SR...	150716	2
phönix	Anionic hydrophilic cream SR...	4a130217	1
Caelo	Anionic hydrophilic cream SR...	170419015272	1
Bombastus	Anionic hydrophilic cream SR...	306438	1
Bombastus	Anionic hydrophilic cream SR...	307323	1
Bombastus	Anionic hydrophilic cream SR...	307334	6
Gehe	Anionic hydrophilic cream SR...	307334	3
Caesar&Loretz GmbH,26.0...	Anionic hydrophilic cream SR...	17045401	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	3073333	1
Apomix	Anionic hydrophilic cream SR...	7A140317	1
Caelo	Anionic hydrophilic cream SR...	17041701	1
Caelo	Anionic hydrophilic cream SR...	8A140317	1
apomix/ AHD 06.06.17	Anionic hydrophilic cream SR...	4A130217	1
Aallianc. Healthc. / Ap...	Anionic hydrophilic cream SR...	12A030517	1
Bombastus	Anionic hydrophilic cream SR...	308217	3
Bombastus	Anionic hydrophilic cream SR...	307331	3
Fagron	Anionic hydrophilic cream SR...	6A280217	1
phönix	Anionic hydrophilic cream SR...	10a280317	1
Apomix	Anionic hydrophilic cream SR...	2A030117	1
Apomix	Anionic hydrophilic cream SR...	11A190417	1
apomix/Phönix	Anionic hydrophilic cream SR...	9A210317	1
Caelo	Anionic hydrophilic cream SR...	17101501	11
Caelo	Anionic hydrophilic cream SR...	17101502	8
Apomix/Phoenix Leipzig ...	Anionic hydrophilic cream SR...	11A190417	1
Bombastus	Anionic hydrophilic cream SR...	305062	1
Bombastus	Anionic hydrophilic cream SR...	17101502	1
Bombastus	Anionic hydrophilic cream SR...	306437	1
Kehr	Anionic hydrophilic cream SR...	308218	1
Anzag	Anionic hydrophilic cream SR...	308217	1
Apomix/Phönix	Anionic hydrophilic cream SR...	10A280317	1
Bombastus	Anionic hydrophilic cream SR...	307332/2(intern)	1
Caelo	Anionic hydrophilic cream SR...	1070717/17101501	1
Bombastus	Anionic hydrophilic cream SR...	307332/1(intern)	1
Caesar&Loretz GmbH,PHön...	Anionic hydrophilic cream SR...	17088801	1
Caelo	Anionic hydrophilic cream SR...	17101504	1
Caelo	Anionic hydrophilic cream SR...	17084201	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	11A190417	1
Phönix	Anionic hydrophilic cream SR...	18A140617	1
apomix/ AHD 04.08.17	Anionic hydrophilic cream SR...	16A310517	1
Apomix	Anionic hydrophilic cream SR...	42A291116	1
Caelo	Anionic hydrophilic cream SR...	309912	1
Phoenix Leipzig 14.08.17	Anionic hydrophilic cream SR...	19A200617	1
Fagron	Anionic hydrophilic cream SR...	307334	1
Bombastus	Anionic hydrophilic cream SR...	309911	1
Bombastus	Anionic hydrophilic cream SR...	307328	1
phönix	Anionic hydrophilic cream SR...	14a150517	1
Apomix	Anionic hydrophilic cream SR...	13A030517	1
Bombastus	Anionic hydrophilic cream SR...	308214	1
Apomix/Phönix	Anionic hydrophilic cream SR...	22A040717	1
Bombastus	Anionic hydrophilic cream SR...	308220	2
Bombastus	Anionic hydrophilic cream SR...	309912	2
Apomix	Anionic hydrophilic cream SR...	18A140617	1
apomix/Holdermann	Anionic hydrophilic cream SR...	10A280317	1
Apomix	Anionic hydrophilic cream SR...	22A040717	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	19A200617	1
Caelo	Anionic hydrophilic cream SR...	17169301	8
Caelo	Anionic hydrophilic cream SR...	17184201	5
apomix/Phoenix Leipzig ...	Anionic hydrophilic cream SR...	19a200617	1
Apomix/Gehe	Anionic hydrophilic cream SR...	16A310517	1
Bombastus	Anionic hydrophilic cream SR...	307327	3
Apomix	Anionic hydrophilic cream SR...	9A210317	1
Bombastus	Anionic hydrophilic cream SR...	308219	2
Bombastus	Anionic hydrophilic cream SR...	308218	1
Caelo	Anionic hydrophilic cream SR...	17153802	1
Apomix	Anionic hydrophilic cream SR...	21A220617	1
Caelo	Anionic hydrophilic cream SR...	17125802	3
Pharmachem	Anionic hydrophilic cream SR...	150716	1
Apomix, Phoenix 20.10.2...	Anionic hydrophilic cream SR...	26A020817	1

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Supplier	Substance	Batch	Spectra
apomix, Phoenix 26.10.2...	Anionic hydrophilic cream SR...	26a020817	1
Caesar & Loretz GmbH, P...	Anionic hydrophilic cream SR...	17142801	1
Bombastus	Anionic hydrophilic cream SR...	311055	4
Bombastus	Anionic hydrophilic cream SR...	308221	3
Noweda	Anionic hydrophilic cream SR...	22A040717	1
Caelo	Anionic hydrophilic cream SR...	17211702	6
Bombastus	Anionic hydrophilic cream SR...	311053	1
Bombastus	Anionic hydrophilic cream SR...	310873	2
Gehe	Anionic hydrophilic cream SR...	17000163	1
Bombastus	Anionic hydrophilic cream SR...	307326	2
Caelo	Anionic hydrophilic cream SR...	17211701	3
Caelo	Anionic hydrophilic cream SR...	17143201	1
Bombastus	Anionic hydrophilic cream SR...	311054	3
Bombastus	Anionic hydrophilic cream SR...	311052	2
Bombastus	Anionic hydrophilic cream SR...	17000162	5
Bombastus	Anionic hydrophilic cream SR...	17000163	2
Caelo	Anionic hydrophilic cream SR...	311055	1
apomix, Phönix, 23.11.2...	Anionic hydrophilic cream SR...	17a10617	1
Taoasis/Sanacorp	Anionic hydrophilic cream SR...	311127	2
apomix/Sanacorp	Anionic hydrophilic cream SR...	33A171017	1
Bombastus	Anionic hydrophilic cream SR...	17000166	4
Caelo	Anionic hydrophilic cream SR...	17256901	9
apomix, Phönix, 09.01.2...	Anionic hydrophilic cream SR...	29a070917	1
Bombastus	Anionic hydrophilic cream SR...	311050	1
Bombastus	Anionic hydrophilic cream SR...	311132	1
Bombastus	Anionic hydrophilic cream SR...	17000164	2
Caelo	Anionic hydrophilic cream SR...	17143301	1
Caelo	Anionic hydrophilic cream SR...	171015015466	1
Pharmachemie Pöckneck	Anionic hydrophilic cream SR...	303017	1
Apomix	Anionic hydrophilic cream SR...	34A201117	1
PKH Halle (apomix) / AH...	Anionic hydrophilic cream SR...	32A101017	1
Bombastus	Anionic hydrophilic cream SR...	17001707	3
apomix/Noweda	Anionic hydrophilic cream SR...	29A070917	1
Kehr	Anionic hydrophilic cream SR...	311053	1
Caelo	Anionic hydrophilic cream SR...	17294401	3
Bombastus	Anionic hydrophilic cream SR...	17001704	3
Apomix/Phönix	Anionic hydrophilic cream SR...	22A020817	1
Apomix/Noweda	Anionic hydrophilic cream SR...	27A220817	3
Apomix/Phönix	Anionic hydrophilic cream SR...	28A230817	1
Anzag	Anionic hydrophilic cream SR...	17000164	1
Bombastus	Anionic hydrophilic cream SR...	311133	1
Bombastus	Anionic hydrophilic cream SR...	311051	1
Bombastus	Anionic hydrophilic cream SR...	17006166	1
Ichthyol Gesellschaft	Anionic hydrophilic cream SR...	17294501	1
Bombastus	Anionic hydrophilic cream SR...	17001702	2
Apomix/Noweda	Anionic hydrophilic cream SR...	29A070917	1
Bombastus	Anionic hydrophilic cream SR...	17001699	4
apomix / Phoenix 19.02...	Anionic hydrophilic cream SR...	32a101017	1
Caelo	Anionic hydrophilic cream SR...	17201201	1
Apomix/Gehe	Anionic hydrophilic cream SR...	36A051217	2
Caelo	Anionic hydrophilic cream SR...	17294501	3
Caelo	Anionic hydrophilic cream SR...	17201701	1
Caelo	Anionic hydrophilic cream SR...	17319503	1
Caelo	Anionic hydrophilic cream SR...	17294402	1
Apomix	Anionic hydrophilic cream SR...	33A171017	1
Caelo	Anionic hydrophilic cream SR...	33A171017	1
Sanacorp	Anionic hydrophilic cream SR...	17001708	6
apomix / Noweda	Anionic hydrophilic cream SR...	36A051217	1
Caelo	Anionic hydrophilic cream SR...	18041104	21
Caelo	Anionic hydrophilic cream SR...	18041105	1

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	17000160	1
Bombastus	Anionic hydrophilic cream SR...	17001708	1
Bombastus	Anionic hydrophilic cream SR...	17001700	2
Kehr	Anionic hydrophilic cream SR...	17000165	1
Caelo	Anionic hydrophilic cream SR...	172944015562	1
Bombastus	Anionic hydrophilic cream SR...	17001706	2
Apomix	Anionic hydrophilic cream SR...	37A061217	1
apomix / Phoenix 13.04.18	Anionic hydrophilic cream SR...	36a051217	1
Apomix	Anionic hydrophilic cream SR...	7A280218	1
Caelo	Anionic hydrophilic cream SR...	17001705	1
Caelo	Anionic hydrophilic cream SR...	18067801	16
Bombastus	Anionic hydrophilic cream SR...	18000255	1
Caelo	Anionic hydrophilic cream SR...	18001475	1
Apomix/Gehe	Anionic hydrophilic cream SR...	33A171017	1
Bombastus	Anionic hydrophilic cream SR...	18001474	4
Bombastus	Anionic hydrophilic cream SR...	17001703	1
Bombastus	Anionic hydrophilic cream SR...	18001476	3
Caelo	Anionic hydrophilic cream SR...	14051805	1
Bombastus	Anionic hydrophilic cream SR...	17001696	2
Caelo	Anionic hydrophilic cream SR...	18041106	1
Caelo	Anionic hydrophilic cream SR...	17319502	1
Bombastus	Anionic hydrophilic cream SR...	18001482	3
Apomix/Phönix	Anionic hydrophilic cream SR...	7A200318	1
Bombastus	Anionic hydrophilic cream SR...	18001475	4
Allianz	Anionic hydrophilic cream SR...	18001478	1
Apomix/Noweda	Anionic hydrophilic cream SR...	10A260318	1
Caelo	Anionic hydrophilic cream SR...	180678015614	1
Pharmachem	Anionic hydrophilic cream SR...	300317	2
Fagron	Anionic hydrophilic cream SR...	18041104	2
apomix, phoenix 28.05.2...	Anionic hydrophilic cream SR...	8a200318	1
Apomix/Gehe	Anionic hydrophilic cream SR...	11A110418	1
Bombastus	Anionic hydrophilic cream SR...	18001483	1
Apomix	Anionic hydrophilic cream SR...	9A210318	1
EuRho/Noweda	Anionic hydrophilic cream SR...	18001681	1
Pharmachemie Pößneck	Anionic hydrophilic cream SR...	300317	1
Bombastus	Anionic hydrophilic cream SR...	18001479	2
apomix/ AHD 25.06.2018	Anionic hydrophilic cream SR...	7A280218	1
Bombastus	Anionic hydrophilic cream SR...	18001472	1
Bombastus	Anionic hydrophilic cream SR...	18001559	1
Bombastus	Anionic hydrophilic cream SR...	18002226	5
Apomix	Anionic hydrophilic cream SR...	19A200618	2
Krieger	Anionic hydrophilic cream SR...	17299701	1
Apomix/Sanacorp	Anionic hydrophilic cream SR...	14A290518	1
Caelo	Anionic hydrophilic cream SR...	17299701	1
Bombastus	Anionic hydrophilic cream SR...	18002224	1
Caelo	Anionic hydrophilic cream SR...	18147502	8
Bombastus	Anionic hydrophilic cream SR...	17001701	1
Caelo	Anionic hydrophilic cream SR...	180678015671	1
apomix / Phoenix Leipzig	Anionic hydrophilic cream SR...	15A300518	1
apomix/AHD	Anionic hydrophilic cream SR...	23A040718	1
Bombastus	Anionic hydrophilic cream SR...	18001471	1
Bombastus	Anionic hydrophilic cream SR...	18001481	2
Caelo	Anionic hydrophilic cream SR...	18001483	1
Kehr	Anionic hydrophilic cream SR...	18002223	1
Caelo	Anionic hydrophilic cream SR...	18002226	2
Caelo	Anionic hydrophilic cream SR...	18001482	1
Sanacorp	Anionic hydrophilic cream SR...	18001483	1
Apomix	Anionic hydrophilic cream SR...	23A040718	1
apomix	Anionic hydrophilic cream SR...	21A030718	1
apomix / Phoenix 20.08...	Anionic hydrophilic cream SR...	23A040718	4

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Supplier	Substance	Batch	Spectra
Bombastus	Anionic hydrophilic cream SR...	18003781	1
Bombastus	Anionic hydrophilic cream SR...	18001473	1
Apomix/Gehe	Anionic hydrophilic cream SR...	9A210318	1
Bombastus	Anionic hydrophilic cream SR...	18002223	1
Bombastus	Anionic hydrophilic cream SR...	18003782	1
apomix/ Phoenix	Anionic hydrophilic cream SR...	20A200618	3
Bombastus	Anionic hydrophilic cream SR...	18003783	2
PKH GmbH Halle / Gehe	Anionic hydrophilic cream SR...	30A140818	1
Caelo	Anionic hydrophilic cream SR...	18147501	2
Caelo	Anionic hydrophilic cream SR...	18003781	1
Bombastus	Anionic hydrophilic cream SR...	18002227	2
Bombastus	Anionic hydrophilic cream SR...	18003788	3
Bombastus	Anionic hydrophilic cream SR...	18005157	1
Bombastus	Anionic hydrophilic cream SR...	18003582	1
Bombastus	Anionic hydrophilic cream SR...	18005159	3
Apomix/Gehe	Anionic hydrophilic cream SR...	29A140818	1
Sanacorp	Anionic hydrophilic cream SR...	18002227	2
Kehr	Anionic hydrophilic cream SR...	18003785	1
Bombastus	Anionic hydrophilic cream SR...	18005153	1
apomix/ AHD 17.11.2018	Anionic hydrophilic cream SR...	27A310718	1
Bombastus	Anionic hydrophilic cream SR...	18003786	1
Bombastus	Anionic hydrophilic cream SR...	18003784	1
apomix	Anionic hydrophilic cream SR...	17A190618	1
Caelo	Anionic hydrophilic cream SR...	18218103	1
Caelo	Anionic hydrophilic cream SR...	18176103	2
apomix	Anionic hydrophilic cream SR...	34A191118	1
Caelo	Anionic hydrophilic cream SR...	18243402	2
Bombastus	Anionic hydrophilic cream SR...	18006279	1
Kehr	Anionic hydrophilic cream SR...	18005157	1
Bombastus	Anionic hydrophilic cream SR...	18006280	1
apomix/ GEHE 29.01.2019	Anionic hydrophilic cream SR...	21A030718	1
Apomix	Anionic hydrophilic cream SR...	14A290518	1
Caelo	Anionic hydrophilic cream SR...	18218102	1
Caelo	Anionic hydrophilic cream SR...	18302501	1
Sanacorp	Anionic hydrophilic cream SR...	18005159	1
Bombastus	Anionic hydrophilic cream SR...	18006281	1
Fagron	Transdermal base cream	12H17-T02-005161	2
Fagron	Transdermal base cream	12F19-U15-273303	1
Fagron	Transdermal base cream	12H17-T02-000281	1
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-T03-011060	1
Fagron	Transdermal base cream	14C14-T03	1
Fagron	Transdermal base cream	14H19-T07-014889	1
Fagron	Transdermal base cream	14K21-T03-017364	1
Fagro	Transdermal base cream	14J08-T12-016301	2
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	15A28-T10-018922	3
Fagron	Transdermal base cream	14B27-T010612	1
Fagron	Transdermal base cream	1504065	6
Fagron	Transdermal base cream	4315I-07039	1
Fagron	Transdermal base cream	1602049	1
Fagron	Transdermal base cream	1507997	4
Fagron	Transdermal base cream	247191-0003	1
Euro OTC	Transdermal base cream	1507997	1
Fagron	Transdermal base cream	1607076	4

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Supplier	Substance	Batch	Spectra
Caelo	Transdermal base cream	1609813	1
Fagron	Transdermal base cream	1709950/2	1
Fagron	Transdermal base cream	1802648/2	1
apomix/ Anzag	Skin care ointment W/L SR (w...	63B230916	1
pkh gmbh	Skin care ointment W/L SR (w...	49b171014	1
Apomix/ Sanacorp	Skin care ointment W/L SR (w...	41B200715	1
Apomix/ Sanacorp	Skin care ointment W/L SR (w...	15B220216	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...	15A080518	1
Apomix	Skin care ointment W/L SR (w...	8A280218	1
Apomix	Skin care ointment W/L SR (w...	9A0103318	1
Apomix	Skin care ointment W/L SR (w...	16A080518	1
apomix	Skin care ointment W/L SR (w...	31B130917	1
Pharmachem/Gehe	Skin care ointment W/L SR	100712	1
Apomix	Skin care ointment W/L SR	1A080114	1
Apomix	Skin care ointment W/L SR	2111112	1
Apomix	Skin care ointment W/L SR	2A090114	1
Apomix	Skin care ointment W/L SR	9A260213	1
Apomix	Skin care ointment W/L SR	11A190214	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
Pharmachem/ Noweda	Skin care ointment W/L SR	260814	1
Pharmachem/ Noweda	Skin care ointment W/L SR	180914	1
Caelo	Skin care ointment W/L SR	80115	1
Pharmachem/ Sanacorp	Skin care ointment W/L SR	141015	1
Pharmachem / Noweda	Skin care ointment W/L SR	170815	1
Noweda/Pharmachem	Skin care ointment W/L SR	270715	1
Pharmachem	Skin care ointment W/L SR	90216	1
Euro OTC	Skin care ointment W/L SR	300316	1
Pharmachem	Skin care ointment W/L SR	20316	1
Pharmachem/Noweda	Skin care ointment W/L SR	110416	1
Pharmachem/ Sanacorp	Skin care ointment W/L SR	170117	1
Pharmachem Pößneck	Skin care ointment W/L SR	100516	1
Noweda/Pharmachem	Skin care ointment W/L SR	120416	1
apomix/ Anzag	Skin care ointment W/L SR	3B020217	1
apomix / Phönix	Skin care ointment W/L SR	11B270317	1
Pharmachem GmbH Pößneck	Skin care ointment W/L SR	81117	1
Pharmachem Pößneck/Noweda	Skin care ointment W/L SR	111016	1
Sanacorp	Skin care ointment W/L SR	39B191218	1
Sanacorp	Skin care ointment W/L SR	27C220818	1
Pharmachem GmbH	Skin care ointment W/L SR	220118	1
AMH Niemann/G	Anionic hydrophlic cream wit...	10B160712	1
Bombastus	Anionic hydrophlic cream wit...	277637	1
Apomix	Anionic hydrophlic cream wit...	12B040912	1
Apomix	Anionic hydrophlic cream wit...	2B250213	1
AMH Niemann/K	Anionic hydrophlic cream wit...	17B271212	1
Apomix	Anionic hydrophlic cream wit...	6B220513	1
Apomix	Anionic hydrophlic cream wit...	7B180613	1
AMH Niemann/K	Anionic hydrophlic cream wit...	14B161213	1
Gehe	Anionic hydrophlic cream wit...	2B100214	1
AMH Niemann/G	Anionic hydrophlic cream wit...	1B070114	1
Apomix/Noweda	Anionic hydrophlic cream wit...	5B070414	1
AMH Niemann / G	Anionic hydrophlic cream wit...	4B100314	1
Apomix/Noweda	Anionic hydrophlic cream wit...	3B240214	1
AMH Niemann / G	Anionic hydrophlic cream wit...	6B060514	1
Bombastus	Anionic hydrophlic cream wit...	285829	1
apomix/Noweda	Anionic hydrophlic cream wit...	6B060514	1
AMH Niemann / G	Anionic hydrophlic cream wit...	10B060814	1

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Supplier	Substance	Batch	Spectra
Apomix	Anionic hydrophlic cream wit...	8B100614	1
Apomix/Noweda	Anionic hydrophlic cream wit...	9B220714	1
Apomix	Anionic hydrophlic cream wit...	12B220914	2
apomix/Phönix	Anionic hydrophlic cream wit...	4B250315	1
Apomix/Noweda	Anionic hydrophlic cream wit...	15B291214	1
Apomix	Anionic hydrophlic cream wit...	6B04515	1
Apomix	Anionic hydrophlic cream wit...	6B040515	1
AMH Niemann GmbH&Co.KG	Anionic hydrophlic cream wit...	3B020315	1
AMH Niemann / G	Anionic hydrophlic cream wit...	7B080615	1
Noweda	Anionic hydrophlic cream wit...	6B040515	1
Apomix	Anionic hydrophlic cream wit...	8B170615	1
Apomix/Noweda	Anionic hydrophlic cream wit...	12B212015	1
Apomix/Noweda	Anionic hydrophlic cream wit...	9B130715	1
apomix/Phönix	Anionic hydrophlic cream wit...	13B161115	1
Caelo	Anionic hydrophlic cream wit...	16058001	2
apomix/Noweda	Anionic hydrophlic cream wit...	2B250116	1
APOMIX/Noweda	Anionic hydrophlic cream wit...	4B210316	1
PKH Halle	Anionic hydrophlic cream wit...	4B210316	1
Caelo	Anionic hydrophlic cream wit...	16047001	1
Apomix/AHD	Anionic hydrophlic cream wit...	3B170216	1
apomix	Anionic hydrophlic cream wit...	7B210616	1
Apomix	Anionic hydrophlic cream wit...	10B060916	1
Caelo	Anionic hydrophlic cream wit...	16215501	1
AMH Niemann / G	Anionic hydrophlic cream wit...	6B190516	1
Caelo	Anionic hydrophlic cream wit...		1
PKH Halle	Anionic hydrophlic cream wit...	13B141216	1
Apomix	Anionic hydrophlic cream wit...	13B141216	2
Apomix	Anionic hydrophlic cream wit...	12B141116	1
AMW Niemann GmbH & Co. KG	Anionic hydrophlic cream wit...	9B150816	1
apomix/Phönix	Anionic hydrophlic cream wit...	1B160117	1
Caelo	Anionic hydrophlic cream wit...	16328101	1
PKH Halle	Anionic hydrophlic cream wit...	2B060317	2
Apomix	Anionic hydrophlic cream wit...	1B160117	1
Caelo	Anionic hydrophlic cream wit...	16328201	1
Apomix	Anionic hydrophlic cream wit...	4B020517	1
Caelo	Anionic hydrophlic cream wit...	17143802	1
Apomix	Anionic hydrophlic cream wit...	9B181017	1
PKH Halle/AHD	Anionic hydrophlic cream wit...	4B220518	2
Apomix/AHD	Anionic hydrophlic cream wit...	1B080118	1
apomix	Anionic hydrophlic cream wit...	1B080118	1
Apomix/AHD	Anionic hydrophlic cream wit...	7B040918	1
Apomix/AHD	Anionic hydrophlic cream wit...	8B121118	1

- 95 987 spectra from 581 *Apo-Ident* customers from a total of 27 287 batches from a further 327 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	2290	0	33 545
Type B	0	13 443	0	65 435
Type C	0	11 651	321	95 855

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 % (> 99.9704 %)	100.0000 % (> 99.7380 %)
Type B	100.0000 % (> 99.9692 %)	100.0000 % (> 99.9554 %)
Type C	100.0000 % (> 99.6593 %)	97.3187 % (> 97.2937 %)

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.

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
31241	31741	3.83	23.00
31440	31440	0.00	26.74
32022	32022	0.00	28.63
31470	31741	3.13	25.76
30631	30837	10.02	33.41
32039	32039	0.00	22.14
31741	31741	0.00	26.53
30837	30837	0.00	32.14
32052	32052	0.00	28.21
32132	32132	0.00	27.89
32435	32435	0.00	27.18
32142	32142	0.00	20.48
31008	31008	0.00	20.62
31042	31008	9.08	22.81
32346	31008	5.30	21.41
31487	30837	18.08	29.80
30758	31907	6.61	35.63
30931	31478	11.12	31.08
31002	31907	3.06	34.34
31478	31478	0.00	26.34
31644	31799	3.43	35.97
31799	31799	0.00	35.73

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31906	31906	0.00	32.81
31907	31907	0.00	33.97
32303	31799	2.54	33.47
33595	33595	0.00	35.52
33964	31799	8.57	37.79
30769	30769	0.00	25.60
31477	31188	3.28	24.53
31593	31996	3.33	25.99
31996	31996	0.00	26.31
30895	31054	6.85	32.42
31054	31054	0.00	30.48
31450	32123	5.90	24.70
32123	32123	0.00	26.85
31537	31537	0.00	33.94
31661	31537	8.73	34.50
31568	30769	5.05	25.84
31039	31039	0.00	28.14
31600	31039	6.98	29.80
33641	31906	12.88	30.18
31040	31503	6.73	27.52
31503	31503	0.00	28.43
32620	32620	0.00	19.87
33295	31503	6.32	26.57
32621	32621	0.00	21.71
31591	31996	6.30	24.80
32882	32882	0.00	17.91
30880	31741	6.41	29.92
31231	31231	0.00	26.49
31188	31188	0.00	25.69
31500	31500	0.00	27.46
31565	31996	8.82	29.04
31599	31188	2.31	25.57
31962	31996	12.95	32.49
31086	30837	13.86	30.49
33354	33354	0.00	24.97

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Hydroxyethyl salicylate
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30638-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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

Validation samples

A total of 222 872 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 *Hydroxyethyl salicylate*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Hydroxyethyl salicylate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Hydroxyethyl salicylate	16131002	32588	40
Caelo	Hydroxyethyl salicylate	16131009	33241	40
Caelo	Hydroxyethyl salicylate	172740	34226	40

- 78 958 spectra from a total of 1827 batches from further 350 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*.

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

- 107 953 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *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	80	0	35 755
Type B	0	120	0	78 958
Type C	0	6	0	107 953

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
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.

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	211.58
31339	30638	8.72	224.18

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Isopropyl alcohol 100%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30759-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Isopropyl alcoho...	12321002	30759	40	20121102
Caelo	Isopropyl alcoho...	13249425	31232	40	20130726
Caelo	Isopropyl alcoho...	14051031	31386	40	20140214
apomix	Isopropyl alcoho...	4103112	31517	40	1505476
Hedinger	Isopropyl alcoho...	070835B	32817	40	20160712

Validation samples

A total of 222 872 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 alcohol 100%*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Isopropyl alcohol 100%*.

Supplier	Substance	Batch	Sample ID	Spectra
apomix	Isopropyl alcohol 100%	4103112	31517 [†]	20
Hedinger	Isopropyl alcohol 100%	070922B	33256	40
Caelo	Isopropyl alcohol 100%	17300401	33938	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 1874 spectra from 385 *Apo-Ident* customers from 853 batches from the substance/substance group *Isopropyl alcohol 100%*.

[†]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*.

Supplier	Substance	Batch	Spectra
Noweda/Hedinger	Isopropyl alcohol 100%	70693B	2
Fischar	Isopropyl alcohol 100%	4100111	1
Hedinger	Isopropyl alcohol 100%	402211079	1
Hedinger/AHD	Isopropyl alcohol 100%	70788B	1
Noweda	Isopropyl alcohol 100%	11371222	1
Hedinger	Isopropyl alcohol 100%	70439B	1
Caelo	Isopropyl alcohol 100%	11371204	1
Hedinger über Noweda	Isopropyl alcohol 100%	70439B	1
Caelo	Isopropyl alcohol 100%	11311602	1
Hedinger	Isopropyl alcohol 100%	70447B	2
Caelo	Isopropyl alcohol 100%		6
Gehe	Isopropyl alcohol 100%	70382B	1
Hedinger/Holdermann 30...	Isopropyl alcohol 100%	70444B	1
Caelo	Isopropyl alcohol 100%	70439B	1
Caelo	Isopropyl alcohol 100%	12112206	1
Caelo	Isopropyl alcohol 100%	12031106	1
Caelo	Isopropyl alcohol 100%	29051202	1
Hedinger	Isopropyl alcohol 100%	406211079	1
Hedinger/Anzag 27.02.2012	Isopropyl alcohol 100%	70417B	1
Hedinger / Sanacorp	Isopropyl alcohol 100%	707446B	1
Hedinger	Isopropyl alcohol 100%	70444B	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	70430B	1
Gehe	Isopropyl alcohol 100%	70448B	1
Noweda	Isopropyl alcohol 100%	70409B	1
Caelo	Isopropyl alcohol 100%	25061201	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70444B	1
Hedinger	Isopropyl alcohol 100%	1207211079	1
Hedinger	Isopropyl alcohol 100%	70457B	1
Caelo	Isopropyl alcohol 100%	6071201	1
Caelo	Isopropyl alcohol 100%	24071201	1
Hedinger	Isopropyl alcohol 100%	70461B	3
Caelo	Isopropyl alcohol 100%	12112224	3
Caelo	Isopropyl alcohol 100%	12112220	1
Caelo	Isopropyl alcohol 100%	12179307	3
Hedinger	Isopropyl alcohol 100%	70463B	1
Caelo	Isopropyl alcohol 100%	6081204	1
Caelo	Isopropyl alcohol 100%	11371212	1
Gehe	Isopropyl alcohol 100%	704098	1
Gehe	Isopropyl alcohol 100%	12031105	1
Caelo	Isopropyl alcohol 100%	20081204	1
Caelo	Isopropyl alcohol 100%	4091201	1
spinnenrad	Isopropyl alcohol 100%	611410093	1
Caelo	Isopropyl alcohol 100%	12179316	1
Hedinger, Heiligenwiese...	Isopropyl alcohol 100%	70471B	1
Hedinger	Isopropyl alcohol 100%	70471B	2
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70461B	1
Hedinger / Apotheke E.B...	Isopropyl alcohol 100%	70448B	1
Hedinger	Isopropyl alcohol 100%	704638	1
Caelo	Isopropyl alcohol 100%	12179328	1
Anzag	Isopropyl alcohol 100%	70471B	1
Caelo	Isopropyl alcohol 100%	12179317	2
Hedinger , Stuttgart	Isopropyl alcohol 100%	70565B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70457B	1
Caelo	Isopropyl alcohol 100%	22091203	1
Caelo	Isopropyl alcohol 100%	12179326	1
Noweda	Isopropyl alcohol 100%	12112218	1
Caelo	Isopropyl alcohol 100%	12179311	1
GEHE	Isopropyl alcohol 100%	70461B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70465B	1
Hedinger	Isopropyl alcohol 100%	70478B	5

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	12254709	2
Hedinger	Isopropyl alcohol 100%	2x070461B	1
Hedinger	Isopropyl alcohol 100%	70465B	1
Noweda	Isopropyl alcohol 100%	70459B	1
Anzag	Isopropyl alcohol 100%	70459B	1
Hedinger	Isopropyl alcohol 100%	2310211079	1
Noweda	Isopropyl alcohol 100%	70475B	2
Noweda	Isopropyl alcohol 100%	12254715	1
Hedinger/Gehe	Isopropyl alcohol 100%	70478B	1
Caelo	Isopropyl alcohol 100%	12254708/129	1
Caelo	Isopropyl alcohol 100%	31101204	1
sanacorp	Isopropyl alcohol 100%	70481B	1
Caelo	Isopropyl alcohol 100%	70481B	2
Hedinger/VDL	Isopropyl alcohol 100%	704788	1
Caelo	Isopropyl alcohol 100%	70478B	1
Caelo	Isopropyl alcohol 100%	22111204	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70475B	1
Caelo	Isopropyl alcohol 100%	12254708	1
Caelo	Isopropyl alcohol 100%	12321008	1
Hedinger	Isopropyl alcohol 100%	7474942	1
Klenk	Isopropyl alcohol 100%	70475b	1
Jenne, Hedinger	Isopropyl alcohol 100%	70475B	1
Caelo	Isopropyl alcohol 100%	12254727	2
Hedinger	Isopropyl alcohol 100%	704888	1
Hedinger	Isopropyl alcohol 100%	1512211079	1
Caelo	Isopropyl alcohol 100%	12254714	1
Caelo	Isopropyl alcohol 100%	70492B	2
Caelo	Isopropyl alcohol 100%	12179310	1
Fagron	Isopropyl alcohol 100%		1
Caelo	Isopropyl alcohol 100%	12254703	1
Hedinger/Gehe	Isopropyl alcohol 100%	70492B	1
Hedinger/ Anzag	Isopropyl alcohol 100%	70492B	1
Caelo	Isopropyl alcohol 100%	22121201	1
Caelo	Isopropyl alcohol 100%	12321016	1
Hedinger Jenne	Isopropyl alcohol 100%	70478B	1
Caelo	Isopropyl alcohol 100%	12254722	1
Gehe	Isopropyl alcohol 100%	12254718	1
Caelo	Isopropyl alcohol 100%	20060912-4	1
Caelo	Isopropyl alcohol 100%	12254729	1
Caelo	Isopropyl alcohol 100%	12321023	3
Hedinger/Gehe	Isopropyl alcohol 100%	70481B	1
Hedinger	Isopropyl alcohol 100%	1601311079	1
Anzag	Isopropyl alcohol 100%	70495B	1
Caelo	Isopropyl alcohol 100%	7411	1
Caelo	Isopropyl alcohol 100%	7776	1
Caelo	Isopropyl alcohol 100%	543892	1
Caelo	Isopropyl alcohol 100%	22011302	1
Caelo	Isopropyl alcohol 100%	12112209	1
Caelo	Isopropyl alcohol 100%	12321030	2
Caelo	Isopropyl alcohol 100%	12254702	1
Caelo	Isopropyl alcohol 100%	2201201301	1
Caelo	Isopropyl alcohol 100%	11371217	1
Noweda	Isopropyl alcohol 100%	70490B	1
Caelo	Isopropyl alcohol 100%	12321031	1
Hedinger	Isopropyl alcohol 100%	70498B	1
Hedinger	Isopropyl alcohol 100%	50700B	1
Sanacorp	Isopropyl alcohol 100%	12321028	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	704958	1
Caelo	Isopropyl alcohol 100%	12321012	1
Phönix	Isopropyl alcohol 100%	12321002	1

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Supplier	Substance	Batch	Spectra
Anzag/Hedinger	Isopropyl alcohol 100%	70495B	1
Hedinger	Isopropyl alcohol 100%	70497B	1
Caelo	Isopropyl alcohol 100%	12379522	1
Hedinger /Sana	Isopropyl alcohol 100%	70488B	1
Caelo	Isopropyl alcohol 100%	12254724	1
Caelo	Isopropyl alcohol 100%	713Q-01079	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	704978	1
Caelo	Isopropyl alcohol 100%	12254719	1
Caelo	Isopropyl alcohol 100%	12379526	2
Hedinger/Otto	Isopropyl alcohol 100%		1
Caelo	Isopropyl alcohol 100%	21021311	1
Caelo	Isopropyl alcohol 100%	12379504	1
Hedinger	Isopropyl alcohol 100%	70501B	4
Caelo	Isopropyl alcohol 100%	12379525	2
Noweda	Isopropyl alcohol 100%	12379515	1
Caelo	Isopropyl alcohol 100%	12379515	2
Anzag 08.02.2013	Isopropyl alcohol 100%	70500B	1
Caelo	Isopropyl alcohol 100%	5031303	1
Caelo	Isopropyl alcohol 100%	28021316	1
Caelo	Isopropyl alcohol 100%	12379521	2
Caelo	Isopropyl alcohol 100%	12379517	1
Hedinger	Isopropyl alcohol 100%	70507B	6
Hedinger	Isopropyl alcohol 100%	70500B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70471B	1
Caelo	Isopropyl alcohol 100%	12379520	2
Caelo	Isopropyl alcohol 100%	12379502	2
Hedinger	Isopropyl alcohol 100%	70511B	3
Jenne, Hedinger	Isopropyl alcohol 100%	70501B	1
Hedinger , Noweda	Isopropyl alcohol 100%	70490B	1
Hedinger	Isopropyl alcohol 100%	70495B	1
Hedinger	Isopropyl alcohol 100%	70488B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70501B	1
Caesar &Loretz GmbH	Isopropyl alcohol 100%	70503B	1
Caelo	Isopropyl alcohol 100%	13050916	3
Caelo	Isopropyl alcohol 100%	13050904	1
Caelo	Isopropyl alcohol 100%	13050902	1
Kassner & Sasse	Isopropyl alcohol 100%	383316	2
Hedinger/Gehe	Isopropyl alcohol 100%	704988	1
Caelo	Isopropyl alcohol 100%	18041306	1
Caelo	Isopropyl alcohol 100%	12379508	2
Hedinger, Heiligenwiese...	Isopropyl alcohol 100%	70519B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70507B	1
Sanacorp	Isopropyl alcohol 100%	13050904	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70519B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70507B	2
Caelo	Isopropyl alcohol 100%	13050901	1
Caelo	Isopropyl alcohol 100%	12379518	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70476B	2
Caelo	Isopropyl alcohol 100%	12379501	1
Caelo	Isopropyl alcohol 100%	13050907	1
Jenne, Hedinger	Isopropyl alcohol 100%	70519B	1
Caelo	Isopropyl alcohol 100%	12321022	1
Aug.Hedinger/Noweda	Isopropyl alcohol 100%	70488B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70519B	1
Caelo	Isopropyl alcohol 100%	10051302	1
Caelo	Isopropyl alcohol 100%	12321020	1
Hedinger/Anzag	Isopropyl alcohol 100%	705198	1
Hedinger/Anzag	Isopropyl alcohol 100%	70519B	1
Noweda	Isopropyl alcohol 100%	70519B	1
Caelo	Isopropyl alcohol 100%	13050914	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	13050913	2
Hedinger/Gehe	Isopropyl alcohol 100%	70505B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70519B	1
Caelo	Isopropyl alcohol 100%	13050925	2
Caelo	Isopropyl alcohol 100%	12379510	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70503B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70520B	1
Caelo	Isopropyl alcohol 100%	6061320	1
Stumpf/Hedinger	Isopropyl alcohol 100%	70527B	2
Caelo	Isopropyl alcohol 100%	108073	1
Anzag	Isopropyl alcohol 100%	7059B	1
Gehe	Isopropyl alcohol 100%	13050927	1
HEDINGER/N/1.06.13/PZN...	Isopropyl alcohol 100%	70527b	1
Hedinger	Isopropyl alcohol 100%	70527B	5
Dr.Seeger GmbH	Isopropyl alcohol 100%	70527B	1
Caelo	Isopropyl alcohol 100%	750520B	1
hedinger	Isopropyl alcohol 100%	105208	1
Caelo	Isopropyl alcohol 100%	12321032	1
Hedinger/Jenne	Isopropyl alcohol 100%	70525B	1
Hedinger	Isopropyl alcohol 100%	70530B	2
Hedinger	Isopropyl alcohol 100%	705258	1
Caelo	Isopropyl alcohol 100%	13050928	1
Hedinger/AHD	Isopropyl alcohol 100%	70527B	1
Caelo	Isopropyl alcohol 100%	1071301	1
Hedinger/Gehe	Isopropyl alcohol 100%	70532B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70520B	1
Caelo	Isopropyl alcohol 100%	13148019	3
Caelo	Isopropyl alcohol 100%	13050917	2
Hedinger	Isopropyl alcohol 100%	70532B	3
Caelo	Isopropyl alcohol 100%	705408	1
HedingerStuttgart/GEHE	Isopropyl alcohol 100%	70527B	1
Fiebig 09.11.12 EK28,33	Isopropyl alcohol 100%	704758	1
Anzag/Seeger	Isopropyl alcohol 100%	70527B	1
Hedinger	Isopropyl alcohol 100%	705540B	1
Caelo	Isopropyl alcohol 100%	13071304	1
Noweda	Isopropyl alcohol 100%	12379510	1
Caelo	Isopropyl alcohol 100%	13050922	1
Caelo	Isopropyl alcohol 100%	13050927	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70520B	1
Hedinger	Isopropyl alcohol 100%	231307	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70517B	1
Hedinger/AHD	Isopropyl alcohol 100%	70532B	1
Klenk	Isopropyl alcohol 100%	70527B	1
Hedinger	Isopropyl alcohol 100%	3013E1079	1
Hedinger	Isopropyl alcohol 100%	70536B	2
Gehe	Isopropyl alcohol 100%	70507B	1
Caelo	Isopropyl alcohol 100%	13050929	1
Caelo	Isopropyl alcohol 100%	13148001	2
Caelo	Isopropyl alcohol 100%	13050920	1
Caelo	Isopropyl alcohol 100%	13148004	1
Stumpf	Isopropyl alcohol 100%	70540B	1
Caelo	Isopropyl alcohol 100%	13148028	1
Hedinger/Gehe	Isopropyl alcohol 100%	70540B	1
Caelo	Isopropyl alcohol 100%	13148015	3
Caelo	Isopropyl alcohol 100%	6081303	1
Gehe/Hedinger	Isopropyl alcohol 100%	70540B	1
Hedinger/AHD	Isopropyl alcohol 100%	70507B	1
Fischar	Isopropyl alcohol 100%	4102084	2
SHELL	Isopropyl alcohol 100%	70540b	1
Hedinger/Noweda	Isopropyl alcohol 100%	70540B	1

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Supplier	Substance	Batch	Spectra
Hedinger/Sanacorp	Isopropyl alcohol 100%	70540B	1
Caelo	Isopropyl alcohol 100%	13148012	1
Hedinger/AHD	Isopropyl alcohol 100%	705408	1
Hedinger / Apotheke E.B. ...	Isopropyl alcohol 100%	70541B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70527B	1
Phönix	Isopropyl alcohol 100%	70536B	1
Caelo	Isopropyl alcohol 100%	70541b	1
Caelo	Isopropyl alcohol 100%	12179321	1
Caelo	Isopropyl alcohol 100%	705368	1
Caelo	Isopropyl alcohol 100%	70541B	2
Caelo	Isopropyl alcohol 100%	28081302	1
Hedinger	Isopropyl alcohol 100%	70540B	1
Gehe	Isopropyl alcohol 100%	70541B	1
Caelo	Isopropyl alcohol 100%	13249414	2
Caelo	Isopropyl alcohol 100%	13249401	1
Caelo	Isopropyl alcohol 100%	13249415	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70541B	1
Caelo	Isopropyl alcohol 100%	13249413	2
Euro OTC	Isopropyl alcohol 100%	70536B	1
Hedinger Phönix	Isopropyl alcohol 100%	70536B	1
Sanacorp	Isopropyl alcohol 100%	13249416	1
Caelo	Isopropyl alcohol 100%	13249412	2
Caelo	Isopropyl alcohol 100%	13148021	1
Hedinger/Noweda	Isopropyl alcohol 100%	7054907	1
Caelo	Isopropyl alcohol 100%	12091305	1
Caelo	Isopropyl alcohol 100%	13249403	1
Gehe	Isopropyl alcohol 100%	13249403	1
Caelo	Isopropyl alcohol 100%	13148003	1
Fagron	Isopropyl alcohol 100%	70541	1
Hedinger	Isopropyl alcohol 100%	70545B	4
Caelo	Isopropyl alcohol 100%	1329423	1
Caelo	Isopropyl alcohol 100%	13249407	1
Caelo	Isopropyl alcohol 100%	70545B	1
Caelo	Isopropyl alcohol 100%	13249406	1
Caelo	Isopropyl alcohol 100%	13249429	2
Caelo	Isopropyl alcohol 100%	1329421	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70545B	2
Hedinger/Anzag	Isopropyl alcohol 100%	70545B	1
Hedinger	Isopropyl alcohol 100%	70541B	4
Hedinger Jenne	Isopropyl alcohol 100%	70545B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70553BH	1
Hedinger/Noweda	Isopropyl alcohol 100%	70545B	1
Caelo	Isopropyl alcohol 100%	9101314	1
Caelo	Isopropyl alcohol 100%	13249404	1
Alliance Healthcare/Hed. ...	Isopropyl alcohol 100%	70536B	1
Hedinger	Isopropyl alcohol 100%	70422B	1
Caelo	Isopropyl alcohol 100%	13249435	3
Caelo	Isopropyl alcohol 100%	13249420	1
Caelo	Isopropyl alcohol 100%	13050911	1
Caelo	Isopropyl alcohol 100%	13249430	1
Euro OTC	Isopropyl alcohol 100%	13249405	1
Caelo	Isopropyl alcohol 100%	13249423	1
Hedinger/ jenne	Isopropyl alcohol 100%	70541B	1
Dr.Seeger GmbH	Isopropyl alcohol 100%	70553B	2
Hedinger/N/PZN:07474942	Isopropyl alcohol 100%	70559B	1
Caelo	Isopropyl alcohol 100%	13249427	1
Caelo	Isopropyl alcohol 100%	705538	2
Caelo	Isopropyl alcohol 100%	29101304	1
Caelo	Isopropyl alcohol 100%	7272262	1
Caelo	Isopropyl alcohol 100%	13249416	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	70553B	1
Sanacorp	Isopropyl alcohol 100%	1324919	2
Caelo	Isopropyl alcohol 100%	13148024	1
Caelo	Isopropyl alcohol 100%	13148029	1
kost	Isopropyl alcohol 100%	310120913059	2
Hedinger/Gehe	Isopropyl alcohol 100%	70553B	1
Caelo	Isopropyl alcohol 100%	13249405	1
Sanacorp	Isopropyl alcohol 100%	13249410	1
Hedinger	Isopropyl alcohol 100%	70559B	1
Fischar	Isopropyl alcohol 100%	70553B	1
Hedinger	Isopropyl alcohol 100%	705728	2
Caelo	Isopropyl alcohol 100%	13336922	1
Hedinger	Isopropyl alcohol 100%	70572B	5
Caelo	Isopropyl alcohol 100%	13336911	1
Hedinger / Noweda	Isopropyl alcohol 100%	70525B	1
Hedinger	Isopropyl alcohol 100%	70553B	5
Caelo	Isopropyl alcohol 100%	13336924	1
Hedinger/Anzag	Isopropyl alcohol 100%	70553B	1
Caelo	Isopropyl alcohol 100%	13249437	1
Caelo	Isopropyl alcohol 100%	70555B	1
Caelo	Isopropyl alcohol 100%	13336930	1
Caelo	Isopropyl alcohol 100%	30111303	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70564B	1
Caelo	Isopropyl alcohol 100%	13336915	1
Noweda/ Dr. Seeger	Isopropyl alcohol 100%	70540B	1
Caelo	Isopropyl alcohol 100%	13336931	1
Caelo	Isopropyl alcohol 100%	13336936	1
Hedinger	Isopropyl alcohol 100%	70578	1
Noweda/Hedinger	Isopropyl alcohol 100%	70565B	1
Hedinger/AHD	Isopropyl alcohol 100%	70574B	1
Caelo	Isopropyl alcohol 100%	10121304	1
Caelo	Isopropyl alcohol 100%	70564B	1
Caelo	Isopropyl alcohol 100%	13249424	1
Hedinger	Isopropyl alcohol 100%	70574B	3
Hedinger	Isopropyl alcohol 100%	70555B	4
Hedinger/Phönix	Isopropyl alcohol 100%	70565B	3
Hedinger/Anzag	Isopropyl alcohol 100%	705728	1
Kost/ - /16.09.13	Isopropyl alcohol 100%	310120913059	1
Hedinger/ Sanacorp	Isopropyl alcohol 100%	70545B	1
Caelo	Isopropyl alcohol 100%	132494	1
Caelo	Isopropyl alcohol 100%	13336938	3
Anzag	Isopropyl alcohol 100%	70578B	2
Caelo	Isopropyl alcohol 100%	13336939	2
Hedinger/Noweda	Isopropyl alcohol 100%	70565B	1
Hedinger	Isopropyl alcohol 100%	70564B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70578B	2
Hedinger	Isopropyl alcohol 100%	70573B	1
Hedinger	Isopropyl alcohol 100%	705738	2
Caelo	Isopropyl alcohol 100%	2011403	1
Caelo	Isopropyl alcohol 100%	70565B	1
Noweda	Isopropyl alcohol 100%	13397303	1
Phönix	Isopropyl alcohol 100%	13249432	1
Caelo	Isopropyl alcohol 100%	13397304	2
Caelo	Isopropyl alcohol 100%	13336912	2
Hedinger/ Noweda	Isopropyl alcohol 100%	70555B	1
Caelo	Isopropyl alcohol 100%	13249434	1
Caelo	Isopropyl alcohol 100%	8012014E	1
Caelo	Isopropyl alcohol 100%	13336942	1
Noweda/Hedinger	Isopropyl alcohol 100%	70574B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70577B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70219B	1
Hedinger/Jenne	Isopropyl alcohol 100%	70559B	1
Apoth.E.Bartel	Isopropyl alcohol 100%	70545B	2
cealo	Isopropyl alcohol 100%	13336936	1
Hedinger	Isopropyl alcohol 100%	70577B	1
Caelo	Isopropyl alcohol 100%	13336941	2
Caelo	Isopropyl alcohol 100%	16011406	1
Anzag/Hedinger	Isopropyl alcohol 100%	70562B	1
Caelo	Isopropyl alcohol 100%	13336945	1
Aug. Hedinger GmbH & Co...	Isopropyl alcohol 100%	501114B	1
Fischer/Phönix	Isopropyl alcohol 100%	4103014	1
Noweda/Hedinger	Isopropyl alcohol 100%	70555B	1
Kost/kost/sophien	Isopropyl alcohol 100%	310261113062	1
Dr. Seeger GmbH /Noweda	Isopropyl alcohol 100%	70577B	2
Caelo	Isopropyl alcohol 100%	13336933	1
Hedinger	Isopropyl alcohol 100%	70581B	1
HEDINGER / 20	Isopropyl alcohol 100%	70573B	1
Caelo	Isopropyl alcohol 100%	30011401	1
Euro OTC	Isopropyl alcohol 100%	70578B	1
Caelo	Isopropyl alcohol 100%	132/AKD54	1
Caelo	Isopropyl alcohol 100%	13336943	2
Noweda/Hedinger	Isopropyl alcohol 100%	70572B	1
Caelo	Isopropyl alcohol 100%	13397305	1
Caelo	Isopropyl alcohol 100%	13397311	1
Caelo	Isopropyl alcohol 100%	13021409	1
Caelo	Isopropyl alcohol 100%	13397316	2
Caelo	Isopropyl alcohol 100%	13336913	1
Hedinger/Otto	Isopropyl alcohol 100%	70581B	1
Hedinger Gehe	Isopropyl alcohol 100%	70562B	1
Caelo	Isopropyl alcohol 100%	13397312	2
Anzag	Isopropyl alcohol 100%	14717	1
Hedinger	Isopropyl alcohol 100%	70578B	2
Anzag	Isopropyl alcohol 100%	14716	1
Hedinger/Noweda	Isopropyl alcohol 100%	70584B	1
Caelo	Isopropyl alcohol 100%	13336944	1
Caelo	Isopropyl alcohol 100%	70593B	1
Hedinger	Isopropyl alcohol 100%	70584B	3
Caelo	Isopropyl alcohol 100%	4031405	1
Caelo	Isopropyl alcohol 100%	13397323	1
Caelo	Isopropyl alcohol 100%	13336934	1
Hedinger / Noweda	Isopropyl alcohol 100%	70587B	1
Sanacorp	Isopropyl alcohol 100%	70593B	1
Caelo	Isopropyl alcohol 100%	13397327	2
Caelo	Isopropyl alcohol 100%	13397330	6
Gehe am 17.12.2013	Isopropyl alcohol 100%	70578B	1
Gehe am 07.03.14	Isopropyl alcohol 100%	70573B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70581B	1
Hedinger	Isopropyl alcohol 100%	70587B	2
Hedinger	Isopropyl alcohol 100%	70592B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70584B	1
Hedinger , Stuttgart	Isopropyl alcohol 100%	70545B	1
Hedinger(Gehe)	Isopropyl alcohol 100%	70573B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70598B	3
Hedinger	Isopropyl alcohol 100%	70595B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70562B	1
Caelo	Isopropyl alcohol 100%	13397332	2
Caelo	Isopropyl alcohol 100%	13397303	1
Caelo	Isopropyl alcohol 100%	13397326	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70593B	1
Caelo	Isopropyl alcohol 100%	14051009	2

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70562B	3
Caelo	Isopropyl alcohol 100%	13397318	2
Caelo	Isopropyl alcohol 100%	13336921	1
Hedinger	Isopropyl alcohol 100%	70598B	9
Hedinger/ Jenne	Isopropyl alcohol 100%	70595B	1
Sanacorp	Isopropyl alcohol 100%	14051017	1
Hedinger / Gehe	Isopropyl alcohol 100%	70581B	1
Caelo	Isopropyl alcohol 100%	70584B	1
Ichthyol/Noweda	Isopropyl alcohol 100%	70587B	1
Hedinger	Isopropyl alcohol 100%	70593B	3
Hedinger/Phoenix	Isopropyl alcohol 100%	70578B	1
Hedinger/GEHE	Isopropyl alcohol 100%	1514Q1079	1
Noweda / Hedinger	Isopropyl alcohol 100%	70598B	1
hedinger/anzag	Isopropyl alcohol 100%	705838	1
Caelo	Isopropyl alcohol 100%	12041402	1
Hedinger	Isopropyl alcohol 100%	7060B	1
Caelo	Isopropyl alcohol 100%	14051017	1
Caelo	Isopropyl alcohol 100%	70598b	1
Hedinger / Apotheke E.B. . .	Isopropyl alcohol 100%	70587B	1
VDL	Isopropyl alcohol 100%	14051020	1
Caelo	Isopropyl alcohol 100%	14051018	1
Hedinger	Isopropyl alcohol 100%	70603B	6
Caelo	Isopropyl alcohol 100%	70598B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70610B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70587B	1
Anzag/Hedinger	Isopropyl alcohol 100%	70592B	1
Sanacorp	Isopropyl alcohol 100%	705988	1
hedinger	Isopropyl alcohol 100%	70584B	1
Caelo	Isopropyl alcohol 100%	7051401	1
Caelo	Isopropyl alcohol 100%	14051015	1
Hedinger/Noweda	Isopropyl alcohol 100%	70603B	3
Hedinger/Sanacorp6.5.2014	Isopropyl alcohol 100%	70603B	1
Caelo	Isopropyl alcohol 100%	13397317	1
Caelo	Isopropyl alcohol 100%	13336927	1
Caelo	Isopropyl alcohol 100%	19051405	1
Hedinger	Isopropyl alcohol 100%	70607B	3
Caelo	Isopropyl alcohol 100%	14051022	1
Caelo	Isopropyl alcohol 100%	14051012	2
Caelo	Isopropyl alcohol 100%	14051026	1
	Isopropyl alcohol 100%	70603B	1
Caelo	Isopropyl alcohol 100%	705988	1
Hedinger/Gehe	Isopropyl alcohol 100%	70598B	2
Fischar	Isopropyl alcohol 100%		1
Hedinger/Gehe	Isopropyl alcohol 100%	7087B	1
Caelo	Isopropyl alcohol 100%	4061401	1
Hedinger/ N/ PZN:07474942	Isopropyl alcohol 100%	70598B	1
Isopropylalkohol GMP/Gehe	Isopropyl alcohol 100%	70598B	1
Caelo	Isopropyl alcohol 100%	5061415	1
Hedinger	Isopropyl alcohol 100%	70614B	1
Caelo	Isopropyl alcohol 100%	6061402	1
Noweda	Isopropyl alcohol 100%	14051027	1
sophien-arzneimittel	Isopropyl alcohol 100%	310190514069	1
Alliance Healthcare/Hed. . .	Isopropyl alcohol 100%	70578B	1
Hedinger/ Jenne	Isopropyl alcohol 100%	70608B	1
Caelo	Isopropyl alcohol 100%	14051016	1
Caelo	Isopropyl alcohol 100%	13336916	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70614B	3
Caelo	Isopropyl alcohol 100%	14051031	3
Hedinger/Phönix	Isopropyl alcohol 100%	70536B	1
GEHE 08.05.2014	Isopropyl alcohol 100%	70598B	1

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Supplier	Substance	Batch	Spectra
Hedinger/Gehe	Isopropyl alcohol 100%	70603B	1
Gutenberg-Apotheke	Isopropyl alcohol 100%	70607B	1
Chem.Pharm.Labor.Dr.See. . .	Isopropyl alcohol 100%	70577B	1
Caelo	Isopropyl alcohol 100%	14134710	1
Otto Fischar	Isopropyl alcohol 100%	ohne	1
Noweda/Hedinger	Isopropyl alcohol 100%	706148	1
AHD	Isopropyl alcohol 100%	70614B	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70607B	1
Hedinger1	Isopropyl alcohol 100%	70607B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70620B	1
HEDINGER / 20	Isopropyl alcohol 100%	70614B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70608B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70607B	1
Caelo	Isopropyl alcohol 100%	14134705	2
Caelo	Isopropyl alcohol 100%	14134706	1
Hedinger	Isopropyl alcohol 100%	70620B	6
Rondell Apotheke	Isopropyl alcohol 100%	70607B	2
Caelo	Isopropyl alcohol 100%	14051021	1
Caelo	Isopropyl alcohol 100%	140510265	1
Sanacorp	Isopropyl alcohol 100%	14134709	1
Bergchemie	Isopropyl alcohol 100%	14134711	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	70614B	1
Phonix	Isopropyl alcohol 100%	14134715	1
Hedinger/Noweda	Isopropyl alcohol 100%	70620B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70614B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70627B	2
Hedinger/Phönix	Isopropyl alcohol 100%	70598B	1
Fischar/Phönix	Isopropyl alcohol 100%	4103112	1
Hedinger/Phönix	Isopropyl alcohol 100%	70607B	2
Caelo	Isopropyl alcohol 100%	29071401	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70627B	3
Hedinger/ Noweda	Isopropyl alcohol 100%	70627B	2
Sanacorp	Isopropyl alcohol 100%	14134725	1
Sanacorp	Isopropyl alcohol 100%	14051035	1
Caelo	Isopropyl alcohol 100%	14051036	1
Caelo	Isopropyl alcohol 100%	14051028	1
Caelo	Isopropyl alcohol 100%	8082014C	1
Caelo	Isopropyl alcohol 100%	14134716	3
Hedinger , Stuttgart	Isopropyl alcohol 100%	70620B	1
Hedinger	Isopropyl alcohol 100%	70627B	5
Caelo	Isopropyl alcohol 100%	14219202	1
Hedinger / Noweda	Isopropyl alcohol 100%	70620B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70627B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70627B	1
Caelo	Isopropyl alcohol 100%	14219204	2
Caelo	Isopropyl alcohol 100%	14219213	3
Hedinger/ Jenne	Isopropyl alcohol 100%	70620B	1
Caelo	Isopropyl alcohol 100%	14219205	1
Hedinger/Phönix	Isopropyl alcohol 100%	70627B	1
Caelo	Isopropyl alcohol 100%	11091401	1
Herdinger	Isopropyl alcohol 100%	70592B	1
Caelo	Isopropyl alcohol 100%	14219212	2
Caelo	Isopropyl alcohol 100%	14134720	2
Caelo	Isopropyl alcohol 100%	14051013	1
Noweda	Isopropyl alcohol 100%	70638B	1
Alliance Healthcare/Hed. . .	Isopropyl alcohol 100%	70627B	1
Caelo	Isopropyl alcohol 100%	14219211	1
Caelo	Isopropyl alcohol 100%	14134724	1
Caelo	Isopropyl alcohol 100%	27091401	1
Noweda	Isopropyl alcohol 100%	70627B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70638B	3
Hedinger/Geilenkirchen	Isopropyl alcohol 100%	706388	1
Hedinger	Isopropyl alcohol 100%	70643B	9
Jenne/Hedinger	Isopropyl alcohol 100%	70643B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70638B	1
Caelo	Isopropyl alcohol 100%	14219209	1
Caelo	Isopropyl alcohol 100%	10101403	1
noweda	Isopropyl alcohol 100%	14278905	1
Hedinger	Isopropyl alcohol 100%	70636B	2
Hedinger / Noweda	Isopropyl alcohol 100%	70627B	1
Noweda / Hedinger	Isopropyl alcohol 100%	70638B	1
Caelo	Isopropyl alcohol 100%	14219227	3
Stumpf/Hedinger	Isopropyl alcohol 100%	70627B	1
Hedinger/ Anzag	Isopropyl alcohol 100%	706388	1
Caelo	Isopropyl alcohol 100%	70573B	1
Caelo	Isopropyl alcohol 100%	14219220	1
Hedinger/Noweda	Isopropyl alcohol 100%	706388	1
Hedinger	Isopropyl alcohol 100%	70623B	1
Caelo	Isopropyl alcohol 100%	70643B	2
Hedinger/Noweda	Isopropyl alcohol 100%	70627B	3
Hedinger	Isopropyl alcohol 100%	7638B	1
Caelo	Isopropyl alcohol 100%	14278901	3
Caelo	Isopropyl alcohol 100%	14134719	1
Gehe - Hedinger	Isopropyl alcohol 100%	70607B	1
Caelo	Isopropyl alcohol 100%	14219224	1
Hedinger/Jenne 31.10.2014	Isopropyl alcohol 100%	706388	1
Caelo	Isopropyl alcohol 100%	70656B	1
Caelo	Isopropyl alcohol 100%	14219215	2
Caelo	Isopropyl alcohol 100%	14219214	2
Otto Fischar GmbH	Isopropyl alcohol 100%	4104072	1
VDL	Isopropyl alcohol 100%	14219213	1
Caelo	Isopropyl alcohol 100%	14278904	4
Caelo	Isopropyl alcohol 100%	14219228	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70650B	1
Caelo	Isopropyl alcohol 100%	14278907	1
Caelo	Isopropyl alcohol 100%	15111401	1
Hedinger	Isopropyl alcohol 100%	70650B	5
Caelo	Isopropyl alcohol 100%	14278914	1
Noweda/Hedinger	Isopropyl alcohol 100%	70650B	1
Caelo	Isopropyl alcohol 100%	14219229	1
Hedinger	Isopropyl alcohol 100%	70659B	4
Sanacorp	Isopropyl alcohol 100%	14278913	1
Caelo	Isopropyl alcohol 100%	21111402	1
Caelo	Isopropyl alcohol 100%	14278911	2
Phoenix	Isopropyl alcohol 100%	14219204	1
Caelo	Isopropyl alcohol 100%	14219222	2
Hedinger / Apotheke E.B. ...	Isopropyl alcohol 100%	70643B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70659B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70643B	1
Caelo	Isopropyl alcohol 100%	14219218	1
Aug. hedinger/N/PZN:074. ...	Isopropyl alcohol 100%	70659B	1
Caelo	Isopropyl alcohol 100%	6324064	1
AHD	Isopropyl alcohol 100%	70643B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70659B	1
Caelo	Isopropyl alcohol 100%	14278921	1
Caelo	Isopropyl alcohol 100%	14278926	4
Caelo	Isopropyl alcohol 100%	14278923	4
Hedinger/Gehe	Isopropyl alcohol 100%	70659B	2
Hedinger / Noweda	Isopropyl alcohol 100%	70659B	1
Caelo	Isopropyl alcohol 100%	13148006	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	13121401	1
A.Hedinger / Kehr	Isopropyl alcohol 100%	70659B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70638B	1
Caelo	Isopropyl alcohol 100%	13407304	1
Hedinger	Isopropyl alcohol 100%	70668B	1
Caelo	Isopropyl alcohol 100%	14278905	2
Noweda/Henry Lamotte	Isopropyl alcohol 100%	70663B	1
Phoenix 22.10.14	Isopropyl alcohol 100%	70607B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70663B	1
Caelo	Isopropyl alcohol 100%	14278927	2
Phönix 07.01.15	Isopropyl alcohol 100%	70650B	1
Caelo	Isopropyl alcohol 100%	10011502	1
Hedinger	Isopropyl alcohol 100%	70656B	1
Caelo	Isopropyl alcohol 100%	14278909	1
Caelo	Isopropyl alcohol 100%	14278925	2
Hedinger	Isopropyl alcohol 100%	70663B	3
hedinger	Isopropyl alcohol 100%	70643B	1
Hedinger	Isopropyl alcohol 100%	70666B	1
hedinger	Isopropyl alcohol 100%	70663B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70663B	1
Caelo	Isopropyl alcohol 100%	14369302	5
Hedinger/Phönix	Isopropyl alcohol 100%	70643B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70668B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70659B	2
Caelo	Isopropyl alcohol 100%	14219206	1
Hedinger/Kehr	Isopropyl alcohol 100%	70675B	1
Caelo	Isopropyl alcohol 100%	70668B	1
Caelo	Isopropyl alcohol 100%	29011505	1
Caelo	Isopropyl alcohol 100%	14369307	3
Hedinger	Isopropyl alcohol 100%	2022015D	1
Stumpf/Hedinger	Isopropyl alcohol 100%	70673B	1
Noweda/ Hedinger GmbH	Isopropyl alcohol 100%	70663B	1
HEDINGER / 20	Isopropyl alcohol 100%	70638B	1
Caelo	Isopropyl alcohol 100%	14369311	1
Caelo	Isopropyl alcohol 100%	14219233	1
Caelo	Isopropyl alcohol 100%	14369303	1
Caelo	Isopropyl alcohol 100%	14369312	2
A. Hedinger / Noweda	Isopropyl alcohol 100%	70659B	2
Hedinger/ GEHE	Isopropyl alcohol 100%	70638B	1
Hedinger	Isopropyl alcohol 100%	70675B	3
Hedinger/Gehe	Isopropyl alcohol 100%	70666B	1
Hedinger	Isopropyl alcohol 100%	70671B	2
Hedinger Gehe	Isopropyl alcohol 100%	70673B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70675B	1
Hedinger	Isopropyl alcohol 100%	70680B	1
Caelo	Isopropyl alcohol 100%	70663B	1
Caelo	Isopropyl alcohol 100%	14369313	3
Caelo	Isopropyl alcohol 100%	14369301	5
Caelo	Isopropyl alcohol 100%	25021501	1
Caelo	Isopropyl alcohol 100%	70650B	1
Caelo	Isopropyl alcohol 100%	14369325	1
Euro OTC	Isopropyl alcohol 100%	70638	1
Caelo	Isopropyl alcohol 100%	14369317	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70656B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70675B	1
Gehe-Hedinger	Isopropyl alcohol 100%	70675B	1
Caelo	Isopropyl alcohol 100%	14031501	1
Hedinger, Noweda	Isopropyl alcohol 100%	7474907	1
Caelo	Isopropyl alcohol 100%	14278929	1
Caelo	Isopropyl alcohol 100%	70685B	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	14369316	2
Hedinger	Isopropyl alcohol 100%	70685B	6
Caelo	Isopropyl alcohol 100%	14369326	2
Caelo	Isopropyl alcohol 100%	14369333	1
Caelo	Isopropyl alcohol 100%	1469323	1
Caelo	Isopropyl alcohol 100%	27031502	1
Hedinger	Isopropyl alcohol 100%	70693B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70685B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70690B	2
Caelo	Isopropyl alcohol 100%	14369310	1
Caelo	Isopropyl alcohol 100%	14369337	1
Hediger/ Noweda	Isopropyl alcohol 100%	70675B	1
Gehe	Isopropyl alcohol 100%	70680B	1
hedinger	Isopropyl alcohol 100%	70675B	1
Alliance Healthcare/Hed...	Isopropyl alcohol 100%	70680B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70675B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70675B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70680B	1
Hedinger	Isopropyl alcohol 100%	70690B	3
Hedinger/ Noweda	Isopropyl alcohol 100%	70693B	1
Caelo	Isopropyl alcohol 100%	15057511	2
Hedinger/Gehe	Isopropyl alcohol 100%	70693B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70685B	1
Hedinger/N	Isopropyl alcohol 100%	70675B	1
Caelo	Isopropyl alcohol 100%	15057502	1
Caelo	Isopropyl alcohol 100%	30041508	1
Caelo	Isopropyl alcohol 100%	14369319	1
Caelo	Isopropyl alcohol 100%	15057505	2
Caelo	Isopropyl alcohol 100%	14369329	1
Hedinger / AHD 21.4.15	Isopropyl alcohol 100%	70693B	1
Hedinger	Isopropyl alcohol 100%	70703B	3
Caelo	Isopropyl alcohol 100%	15057524	1
Caelo	Isopropyl alcohol 100%	14369370	1
Caelo	Isopropyl alcohol 100%	15057508	1
Hedinger/Noweda	Isopropyl alcohol 100%	70685B	3
Caelo	Isopropyl alcohol 100%	70701B	1
Phoenix goettin	Isopropyl alcohol 100%	70685B	1
Spinnrad	Isopropyl alcohol 100%	1114410092	1
Caelo	Isopropyl alcohol 100%	15057501	2
Sanacorp	Isopropyl alcohol 100%	70701B	1
Hedinger	Isopropyl alcohol 100%	70695B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70701B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70696B	1
Caelo	Isopropyl alcohol 100%	15057506	1
Caelo	Isopropyl alcohol 100%	19051503	1
Hedinger/Phönix	Isopropyl alcohol 100%	70680B	1
AHD /Hedinger	Isopropyl alcohol 100%	70666B	1
Caelo	Isopropyl alcohol 100%	10061507	1
Hedinger / Noweda	Isopropyl alcohol 100%	70703B	1
Shell Chemicals	Isopropyl alcohol 100%	70703B	1
Caelo	Isopropyl alcohol 100%	15057528	2
Fagron	Isopropyl alcohol 100%	70685B	1
Hedinger/ Kehr	Isopropyl alcohol 100%	70703B	1
Hedinger	Isopropyl alcohol 100%	70707B	6
Hedinger	Isopropyl alcohol 100%	70704B	1
Caelo	Isopropyl alcohol 100%	15057503	1
Hedinger/Gehe	Isopropyl alcohol 100%	70703B	1
Hedinger Jenne	Isopropyl alcohol 100%	706938	1
Caelo	Isopropyl alcohol 100%	15057510	1
Caelo	Isopropyl alcohol 100%	15057507	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	2072015A	1
Caelo	Isopropyl alcohol 100%	14369306	1
Hedinger	Isopropyl alcohol 100%	70701B	2
Caelo	Isopropyl alcohol 100%	15057526	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70696B	1
Caelo	Isopropyl alcohol 100%	14369334	1
Caelo	Isopropyl alcohol 100%	15057515	1
Caelo	Isopropyl alcohol 100%	15057518	1
Caelo	Isopropyl alcohol 100%	70690B	1
Caelo	Isopropyl alcohol 100%	15171306	1
Caelo	Isopropyl alcohol 100%	15171304	2
Caelo	Isopropyl alcohol 100%	15057520	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	707158	1
Hedinger	Isopropyl alcohol 100%	70715B	5
Hedinger/Sanacorp	Isopropyl alcohol 100%	70703B	1
Hedinger	Isopropyl alcohol 100%	70630B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70703B	1
Caelo	Isopropyl alcohol 100%	15171314	2
Hedinger/Gehe	Isopropyl alcohol 100%	70715B	1
Hedinger	Isopropyl alcohol 100%	70708B	2
Hedinger	Isopropyl alcohol 100%	70722B	3
Caelo	Isopropyl alcohol 100%	15057514	1
Hedinger	Isopropyl alcohol 100%	707158	1
Caelo	Isopropyl alcohol 100%	15171327	1
Caelo	Isopropyl alcohol 100%	15171329	2
Caelo	Isopropyl alcohol 100%	12081505	1
Caelo	Isopropyl alcohol 100%	15171315	1
Noweda/Hedinger	Isopropyl alcohol 100%	70722B	1
Audor Pharma	Isopropyl alcohol 100%	70720B	2
Hedinger	Isopropyl alcohol 100%	70720B	3
Hedinger/Sanacorp	Isopropyl alcohol 100%	70720B	1
Caelo	Isopropyl alcohol 100%	15171303	6
Hedinger/Noweda	Isopropyl alcohol 100%	70720B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70708B	2
Sanacorp	Isopropyl alcohol 100%	15171302	1
Caelo	Isopropyl alcohol 100%	70707B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70715B	2
Noweda/Hedinger	Isopropyl alcohol 100%	70685	1
Caelo	Isopropyl alcohol 100%	15171335	1
Eigen	Isopropyl alcohol 100%	70701B	1
Caelo	Isopropyl alcohol 100%	31081501	1
Anzag	Isopropyl alcohol 100%	70720B	1
Caelo	Isopropyl alcohol 100%	1517308	1
Caelo	Isopropyl alcohol 100%	15171328	2
Caelo	Isopropyl alcohol 100%	15171342	2
Noweda/Hedin	Isopropyl alcohol 100%	70726B	1
Caelo	Isopropyl alcohol 100%	15171337	1
Caelo	Isopropyl alcohol 100%	15171341	3
Caelo	Isopropyl alcohol 100%	15171333	2
Sanacorp / Hedinger	Isopropyl alcohol 100%	70573B	1
Caelo	Isopropyl alcohol 100%	15171305	1
Hedinger/Gehe	Isopropyl alcohol 100%	70730B	5
Hedinger/Kehr	Isopropyl alcohol 100%	7073B	1
Hedinger vdL	Isopropyl alcohol 100%	70715B	1
HEDINGER / 20	Isopropyl alcohol 100%	70726B	1
fischar	Isopropyl alcohol 100%	3346271	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70734B	2
Caelo	Isopropyl alcohol 100%	15171311	2
Hedinger/Gehe	Isopropyl alcohol 100%	70723B	2
Caelo	Isopropyl alcohol 100%	14219216	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 100%	70723B	1
Hedinger	Isopropyl alcohol 100%	70730B	2
Heinger/G	Isopropyl alcohol 100%	70730B	1
Caelo	Isopropyl alcohol 100%	15171331	1
Allianc. Healthc. / Hed...	Isopropyl alcohol 100%	70730B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70737B	1
Caelo	Isopropyl alcohol 100%	15171307	1
Hediger/Sanacorp	Isopropyl alcohol 100%	70736B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70734B	1
Hedinger / Phoenix Leip...	Isopropyl alcohol 100%	70722B	1
Caelo	Isopropyl alcohol 100%	15300904	2
Caelo	Isopropyl alcohol 100%	15300910	1
Hedinger/Anzag	Isopropyl alcohol 100%	70737B	2
Hedinger/AHD	Isopropyl alcohol 100%	70737B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70685B	1
Phönix 13.10.15 ...	Isopropyl alcohol 100%	70734B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70723B	1
Caelo	Isopropyl alcohol 100%	15171301	1
Hedinger/Noweda	Isopropyl alcohol 100%	70736B	1
Hedinger	Isopropyl alcohol 100%	31115-88	1
Hedinger/Noweda	Isopropyl alcohol 100%	70726B	1
Hedinger	Isopropyl alcohol 100%	70736B	2
Caelo	Isopropyl alcohol 100%	15300918	1
Caelo	Isopropyl alcohol 100%	15300921	1
Noweda / Hedinger	Isopropyl alcohol 100%	70742B	2
Caelo	Isopropyl alcohol 100%	15171340	1
Hedinger/sanacorp	Isopropyl alcohol 100%	70739B	3
Hedinger	Isopropyl alcohol 100%	70742B	2
Caelo	Isopropyl alcohol 100%	70742B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70737B	1
Hedinger	Isopropyl alcohol 100%	70737B	2
Hedinger / Noweda Münster	Isopropyl alcohol 100%	70734B	1
Caelo	Isopropyl alcohol 100%	15057513	1
Caelo	Isopropyl alcohol 100%	15300913	1
Hedinger/Anzag	Isopropyl alcohol 100%	70736B	1
Caelo	Isopropyl alcohol 100%	15300902	1
Hedinger	Isopropyl alcohol 100%	70748B	5
Caelo	Isopropyl alcohol 100%	70739B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70671b	1
Hedinger	Isopropyl alcohol 100%	70715b	1
Hedinger	Isopropyl alcohol 100%	70755B	2
Caelo	Isopropyl alcohol 100%	15300926	1
Hedinger / Sanacorp	Isopropyl alcohol 100%	70737B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70730B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70737B	1
Caelo	Isopropyl alcohol 100%	15300915	1
Hedinger/Gehe	Isopropyl alcohol 100%	707308	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70737B	1
Hedinger GmbH	Isopropyl alcohol 100%	70729B	1
Caelo	Isopropyl alcohol 100%	15398814	2
Heidinger	Isopropyl alcohol 100%	70748B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70742B	1
Sanacorp	Isopropyl alcohol 100%	15300902	1
Caelo	Isopropyl alcohol 100%	15398803	2
Caelo	Isopropyl alcohol 100%	70748B	2
Caelo	Isopropyl alcohol 100%	70726B	1
Caelo	Isopropyl alcohol 100%	15300930	1
Hedinger / Noweda	Isopropyl alcohol 100%	70737B	1
Caelo	Isopropyl alcohol 100%	15171332	1
Caelo	Isopropyl alcohol 100%	15398813	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	15398816	4
Caesar&Loretz/Noweda	Isopropyl alcohol 100%	15398808	1
Sanacorp/Hedinger WE:15...	Isopropyl alcohol 100%	70748B	1
Noweda	Isopropyl alcohol 100%	70755B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70739B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70767B	5
Caelo	Isopropyl alcohol 100%	15300927	2
Caelo	Isopropyl alcohol 100%	15300931	1
Hedinger/Gehe	Isopropyl alcohol 100%	70755B	2
Caelo	Isopropyl alcohol 100%	15300903	2
Hedinger/Gehe	Isopropyl alcohol 100%	70767B	2
Caelo	Isopropyl alcohol 100%	15300923	1
Hedinger / Sana	Isopropyl alcohol 100%	70748B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70748B	2
Caelo	Isopropyl alcohol 100%	15398819	1
Hedinger/Phönix	Isopropyl alcohol 100%	70748B	1
Caelo	Isopropyl alcohol 100%	15171312	2
Hedinger vdL	Isopropyl alcohol 100%	70748B	1
Caelo	Isopropyl alcohol 100%	15300917	1
Hedinger	Isopropyl alcohol 100%	70767B	3
Hedinger Jenne	Isopropyl alcohol 100%	70720B	1
Hedinger	Isopropyl alcohol 100%	4103014	1
Hedinger / Noweda	Isopropyl alcohol 100%	70748B	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	70768B	1
Allianc. Health. / Hedi...	Isopropyl alcohol 100%	70762B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70762B	1
Caelo	Isopropyl alcohol 100%	15300929	1
Caelo	Isopropyl alcohol 100%	70755B	2
Hedinger/ Noweda	Isopropyl alcohol 100%	70771B	1
Bombastus	Isopropyl alcohol 100%	70767B	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70771B	1
Noweda/Hedinger	Isopropyl alcohol 100%	70734B	1
Hedinger/phoenix	Isopropyl alcohol 100%	707488	1
Sanacorp	Isopropyl alcohol 100%		1
Caelo	Isopropyl alcohol 100%	16039901	3
Hedinger	Isopropyl alcohol 100%	70768B	4
Caelo	Isopropyl alcohol 100%	15398831	2
Caelo	Isopropyl alcohol 100%	15300912	1
Hedinger	Isopropyl alcohol 100%	70771B	5
AHD/Hedinger	Isopropyl alcohol 100%	70763B	1
Hedinger	Isopropyl alcohol 100%	70739B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70768B	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70763B	2
Hedinger / Kehr	Isopropyl alcohol 100%	70755B	1
Caelo	Isopropyl alcohol 100%	15398808	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70777B	1
sittig	Isopropyl alcohol 100%	70788B	1
Caelo	Isopropyl alcohol 100%	15398806	3
Fischar	Isopropyl alcohol 100%	1005101	1
Hedinger/ AHD	Isopropyl alcohol 100%	70788B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70763B	1
Caelo	Isopropyl alcohol 100%	15398828	1
Caelo	Isopropyl alcohol 100%	15398820	1
Hedinger/Gehe	Isopropyl alcohol 100%	7076B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70748b	1
Caelo	Isopropyl alcohol 100%	16039921	1
Caelo	Isopropyl alcohol 100%	70788B	1
Hedinger	Isopropyl alcohol 100%	70763B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70788B	2
Caelo	Isopropyl alcohol 100%	16039912	1

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Supplier	Substance	Batch	Spectra
Hedinger/Anzag	Isopropyl alcohol 100%	70768B	1
Caelo	Isopropyl alcohol 100%	16039915	1
Caelo	Isopropyl alcohol 100%	15398804	1
Caelo	Isopropyl alcohol 100%	16039904	2
phönix	Isopropyl alcohol 100%	70783b	1
Caelo	Isopropyl alcohol 100%	15398826	1
Hedinger / 30	Isopropyl alcohol 100%	70768B	1
Caelo	Isopropyl alcohol 100%	16039903	1
Bartel/Gehe	Isopropyl alcohol 100%	70788B	2
Caelo	Isopropyl alcohol 100%	15398827	2
Caelo	Isopropyl alcohol 100%	16039913	1
Hedinger	Isopropyl alcohol 100%	70783B	3
Hedinger/Noweda	Isopropyl alcohol 100%	70788B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70799B	1
Caelo	Isopropyl alcohol 100%	707998	1
Caelo	Isopropyl alcohol 100%	70768b	1
Hedinger	Isopropyl alcohol 100%	70802B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70783B	1
Caelo	Isopropyl alcohol 100%	16039922	2
Caelo	Isopropyl alcohol 100%	16039905	1
Kassner & Sasse	Isopropyl alcohol 100%	669929	1
Hedinger/Phönix	Isopropyl alcohol 100%	70771B	1
Caelo	Isopropyl alcohol 100%	16039911	2
Hedinger	Isopropyl alcohol 100%	70796B	1
Caelo	Isopropyl alcohol 100%	16039926	1
Gehe/Hedinger	Isopropyl alcohol 100%	70802B	1
Aug. Hedinger GmbH & Co...	Isopropyl alcohol 100%	70768B	1
Hedinger	Isopropyl alcohol 100%	70809B	6
Hedinger/Gehe	Isopropyl alcohol 100%	70796B	1
Hedinger / Gehe	Isopropyl alcohol 100%	70802B	1
Caelo	Isopropyl alcohol 100%	15498831	1
Caelo	Isopropyl alcohol 100%	16039932	1
Hedinger	Isopropyl alcohol 100%	70799B	5
Hedinger / Phönix	Isopropyl alcohol 100%	907948	1
Caelo	Isopropyl alcohol 100%	16039907	1
Hedinger/Noweda	Isopropyl alcohol 100%	70767B	1
Euro OTC	Isopropyl alcohol 100%	70771B	1
Hedinger/Phönix	Isopropyl alcohol 100%	70783B	1
Hedinger / Sana	Isopropyl alcohol 100%	70799B	1
Caelo	Isopropyl alcohol 100%	16039930	1
Caelo	Isopropyl alcohol 100%	15398812	1
Bombastus	Isopropyl alcohol 100%	7474936	1
Sanacorp	Isopropyl alcohol 100%	16039901	1
Gehe/Fischar	Isopropyl alcohol 100%	1005101	2
Hedinger/Sanacorp	Isopropyl alcohol 100%	70788B	1
Caelo	Isopropyl alcohol 100%	16039919	1
Hedinger	Isopropyl alcohol 100%	70788B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70734B	1
Gehe	Isopropyl alcohol 100%	70685B	1
Caelo	Isopropyl alcohol 100%	16039923	2
Hedinger	Isopropyl alcohol 100%	707088	1
hedinger	Isopropyl alcohol 100%	70818B	1
Hedinger / Noweda	Isopropyl alcohol 100%	70788B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70799B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70818B	4
Sanacorp	Isopropyl alcohol 100%	70809B	3
Hedinger	Isopropyl alcohol 100%	708188	1
Hedinger	Isopropyl alcohol 100%	70818B	2
Celo	Isopropyl alcohol 100%	16039925	1
Caelo	Isopropyl alcohol 100%	15398811	1

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Supplier	Substance	Batch	Spectra
Celo	Isopropyl alcohol 100%	16039937	1
Hedinger/Gehe	Isopropyl alcohol 100%	70804B	1
Hedinger	Isopropyl alcohol 100%	70808B	1
Caelo	Isopropyl alcohol 100%	16137312	2
phönix	Isopropyl alcohol 100%	70799B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70794B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70796B	1
Caelo	Isopropyl alcohol 100%	16137308	2
Caelo	Isopropyl alcohol 100%	16039902	1
Caelo	Isopropyl alcohol 100%	16137302	2
Caelo	Isopropyl alcohol 100%	16137301	3
Caelo	Isopropyl alcohol 100%	70799B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70818B	3
Caelo	Isopropyl alcohol 100%	1603997	1
Hedinger/N	Isopropyl alcohol 100%	70818B	1
Caelo	Isopropyl alcohol 100%	708188	1
Hedinger	Isopropyl alcohol 100%	70825B	4
Allianc. Healthc. / Hed...	Isopropyl alcohol 100%	70837B	1
Hedinger	Isopropyl alcohol 100%	7089B	1
Hedinger	Isopropyl alcohol 100%	708258	2
Rondell Apotheke	Isopropyl alcohol 100%	70818B	1
Caelo	Isopropyl alcohol 100%	70609B	1
Ebert & Jacobi 28.7.16	Isopropyl alcohol 100%	16137317	1
Caelo	Isopropyl alcohol 100%	16137325	2
Caelo	Isopropyl alcohol 100%	16137311	1
Hedinger / Gehe	Isopropyl alcohol 100%	70809B	1
Caelo	Isopropyl alcohol 100%	16137322	2
Hedinger	Isopropyl alcohol 100%	70835B	4
Hedinger/Phönix	Isopropyl alcohol 100%	70825B	1
Caelo	Isopropyl alcohol 100%	16137303	1
Hedinger/Phönix	Isopropyl alcohol 100%	70809B	1
Caelo	Isopropyl alcohol 100%	16137307	1
Hedinger/Gehe	Isopropyl alcohol 100%	70809B	1
Phönix / Hedinger	Isopropyl alcohol 100%	70809B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70835B	1
Caelo	Isopropyl alcohol 100%	16137327	1
Caelo	Isopropyl alcohol 100%	16137317	2
Hedinger/Noweda	Isopropyl alcohol 100%	708188	1
Hedinger/AHD	Isopropyl alcohol 100%	707888	1
Caelo	Isopropyl alcohol 100%	16137336	3
Caelo	Isopropyl alcohol 100%	53380	1
Gehe	Isopropyl alcohol 100%	70835B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70816B	1
Caelo	Isopropyl alcohol 100%	16310605	2
Hedinger/Phoenix	Isopropyl alcohol 100%	70837B	3
Hedinger Sanacorp	Isopropyl alcohol 100%	70835B	1
Noweda	Isopropyl alcohol 100%	16137302	1
Caelo	Isopropyl alcohol 100%	16137329	1
Anzag/Hedinger	Isopropyl alcohol 100%	70835B	1
Ichthyol/Phönix	Isopropyl alcohol 100%	70835B	1
Caelo	Isopropyl alcohol 100%	16039925	1
sanacorp, 29,30EUR, 15.09...	Isopropyl alcohol 100%	70835B	1
noweda	Isopropyl alcohol 100%	16137324	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70835B	1
Caelo	Isopropyl alcohol 100%	16137305	2
Hedinger	Isopropyl alcohol 100%	70858b	1
Caelo	Isopropyl alcohol 100%	16234009	1
Caelo	Isopropyl alcohol 100%	16137332	1
Hedinger	Isopropyl alcohol 100%	70809	1
A. Hedinger / Kehr	Isopropyl alcohol 100%	708358	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	163234002	1
Caelo	Isopropyl alcohol 100%	16234010	4
Hedinger	Isopropyl alcohol 100%	70855B	1
Caelo	Isopropyl alcohol 100%	16234014	2
Hedinger/ Phoenix / 04...	Isopropyl alcohol 100%	70809b	1
Hedinger	Isopropyl alcohol 100%	70794B	1
Hedinger/Anzag	Isopropyl alcohol 100%	70853B	1
Caelo	Isopropyl alcohol 100%	16234002	1
Hedinger/Phönix	Isopropyl alcohol 100%	70858B	2
Hedinger/Noweda	Isopropyl alcohol 100%	70835B	2
Caelo	Isopropyl alcohol 100%	16039906	1
Hedinger/Gehe	Isopropyl alcohol 100%	70858B	3
Caelo	Isopropyl alcohol 100%	16137326	1
Hedinger	Isopropyl alcohol 100%	70862B	1
Hedinger	Isopropyl alcohol 100%	70853B	1
Caelo	Isopropyl alcohol 100%	16234001	2
Caelo	Isopropyl alcohol 100%	16234023	1
Hedinger	Isopropyl alcohol 100%	70858B	6
Hedinger/Phönix	Isopropyl alcohol 100%	70846B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70853B	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70862B	1
Caelo	Isopropyl alcohol 100%	16137330	1
Hedinger/Gehe	Isopropyl alcohol 100%	70825B	1
WE:Sanacorp 08.11.2016 ...	Isopropyl alcohol 100%	70870B	1
Caelo	Isopropyl alcohol 100%	16234017	2
HedingerAlliance	Isopropyl alcohol 100%	70866B	2
Caelo	Isopropyl alcohol 100%	16234004	3
Euro OTC	Isopropyl alcohol 100%	70858B	1
phönix	Isopropyl alcohol 100%	70837B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70875B	2
Hedinger / Noweda	Isopropyl alcohol 100%	70870B	1
Hedinger vdL	Isopropyl alcohol 100%	70853B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70853B	1
Caelo	Isopropyl alcohol 100%	70835B	1
Hedinger	Isopropyl alcohol 100%	70380	1
Phönix	Isopropyl alcohol 100%	70870B	1
Caelo	Isopropyl alcohol 100%	16137325/161123AI	1
phönix	Isopropyl alcohol 100%	70862B	1
Caelo	Isopropyl alcohol 100%	16137334	1
Hedinger	Isopropyl alcohol 100%	70879B	2
Caelo	Isopropyl alcohol 100%	16234005	2
Caelo	Isopropyl alcohol 100%	16234003	1
Hedinger/Gehe	Isopropyl alcohol 100%	70799B	1
Caelo	Isopropyl alcohol 100%	70858B	1
Caelo	Isopropyl alcohol 100%	70870B	2
Hedinger/Noweda	Isopropyl alcohol 100%	4716M-01079	1
Hedinger/Noweda	Isopropyl alcohol 100%	4916U-01079	1
Caelo	Isopropyl alcohol 100%	16137304	2
Caelo	Isopropyl alcohol 100%	16234013	1
Hedinger	Isopropyl alcohol 100%	70882B	4
GEHE	Isopropyl alcohol 100%	70882B	1
HedingerAlliance	Isopropyl alcohol 100%	70881B	2
Caelo	Isopropyl alcohol 100%	16234025	2
Caelo	Isopropyl alcohol 100%	16310609	2
Caelo	Isopropyl alcohol 100%	16234031	1
Hedinger/Gehe	Isopropyl alcohol 100%	70882B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70892B	1
Hedinger / Sana	Isopropyl alcohol 100%	70881B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70882b	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70889B	1

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Supplier	Substance	Batch	Spectra
Caesar /phönix	Isopropyl alcohol 100%	16310603	1
Caelo	Isopropyl alcohol 100%	70889B	1
Caelo	Isopropyl alcohol 100%	70881B	1
Caelo	Isopropyl alcohol 100%	20011703	1
Caelo	Isopropyl alcohol 100%	16310602	1
Caelo	Isopropyl alcohol 100%	16234026	1
Caelo	Isopropyl alcohol 100%	16234018	1
Caelo	Isopropyl alcohol 100%	16234019	1
Hedinger / Noweda	Isopropyl alcohol 100%	70889B	1
Hedinger	Isopropyl alcohol 100%	70870B	1
Caelo	Isopropyl alcohol 100%	16310604	1
Hedinger	Isopropyl alcohol 100%	70898B	4
Hedinger GmbH	Isopropyl alcohol 100%	70889B	1
HedingerAlliance	Isopropyl alcohol 100%	70882B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70889B	1
Caelo	Isopropyl alcohol 100%	16310612	1
Caelo	Isopropyl alcohol 100%	16234011	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70881B	1
Hedinger/Holdermann	Isopropyl alcohol 100%	70898B	1
L 10/Hedinger	Isopropyl alcohol 100%	70866B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70884B	1
Caelo	Isopropyl alcohol 100%	16310614	1
HEDINGER / NOWEDA	Isopropyl alcohol 100%	70898B	1
Noweda	Isopropyl alcohol 100%	70835B	1
Hedinger	Isopropyl alcohol 100%	70896B	1
Hedinger	Isopropyl alcohol 100%	70889B	2
Caelo	Isopropyl alcohol 100%	16310610	1
Hedinger vdL	Isopropyl alcohol 100%	70889B	1
Caelo	Isopropyl alcohol 100%	16234008	1
Caelo	Isopropyl alcohol 100%	16310601	1
Caelo	Isopropyl alcohol 100%	16310623	2
Allianz Healthcare	Isopropyl alcohol 100%	70896b	1
Caelo	Isopropyl alcohol 100%	14031701	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70908B	1
Hedinger	Isopropyl alcohol 100%	70906B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70870B	1
Caelo	Isopropyl alcohol 100%	16310633	2
Hedinger	Isopropyl alcohol 100%	70908B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70858B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70818B	1
Sanacorp, 18.03.17, 29,...	Isopropyl alcohol 100%	70906B	1
Hedinger GmbH	Isopropyl alcohol 100%	16310612	1
GEHE	Isopropyl alcohol 100%	70896B	1
AHL	Isopropyl alcohol 100%	70835B	1
Caelo	Isopropyl alcohol 100%	16310622	4
Hedinger/Sanacorp	Isopropyl alcohol 100%	70892B	1
Gehe	Isopropyl alcohol 100%	70892B	1
Caelo	Isopropyl alcohol 100%	16234032	1
Hedinger	Isopropyl alcohol 100%	70884B	1
Caelo	Isopropyl alcohol 100%	1100317	1
Hedinger / Nowed	Isopropyl alcohol 100%	70730B	1
Kehr/Hedinger	Isopropyl alcohol 100%	70898B	1
Caelo	Isopropyl alcohol 100%	9041704	1
Caelo	Isopropyl alcohol 100%	16310634	1
AHD	Isopropyl alcohol 100%	70898B	1
Caelo	Isopropyl alcohol 100%	16310611	1
Caelo	Isopropyl alcohol 100%	17044002	1
Hedinger	Isopropyl alcohol 100%	70915B	2
Hediner/Noweda	Isopropyl alcohol 100%	70908B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70922B	2

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	17044001	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70889B	1
Hedinger/VDL	Isopropyl alcohol 100%	70884B	1
phönix	Isopropyl alcohol 100%	70898b	1
Phönix	Isopropyl alcohol 100%	70862B	1
Gehe	Isopropyl alcohol 100%	17044002	1
Hedinger/Gehe	Isopropyl alcohol 100%	70889B	1
Caelo	Isopropyl alcohol 100%	17044003	1
Henry Lamotte Oils	Isopropyl alcohol 100%	16310633	1
Caelo	Isopropyl alcohol 100%	2051704	1
gehe	Isopropyl alcohol 100%	14219228	1
Hedinger / Kehr	Isopropyl alcohol 100%	7098B	1
Hedinger	Isopropyl alcohol 100%	708828	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70931B(I)	1
Hedinger Sanacorp	Isopropyl alcohol 100%	70931B(II)	2
Caelo	Isopropyl alcohol 100%	17044006	1
Sanacorp	Isopropyl alcohol 100%	70918B	1
Shell Chemicals	Isopropyl alcohol 100%	70577B	1
Fischar	Isopropyl alcohol 100%	4105042	1
Hedinger/Noweda	Isopropyl alcohol 100%	70906B	1
Hedinger	Isopropyl alcohol 100%	70881B	1
Hedinger	Isopropyl alcohol 100%	70900B	1
Hedinger	Isopropyl alcohol 100%	70931B	4
Caelo	Isopropyl alcohol 100%	26051704	1
Caelo	Isopropyl alcohol 100%	1630607	1
Hedinger/Ebert	Isopropyl alcohol 100%	70898B	1
Caelo	Isopropyl alcohol 100%	1630606	1
Hedinger GmbH	Isopropyl alcohol 100%	70936B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70835B	1
Caelo	Isopropyl alcohol 100%	170440015277	1
Noweda/Hedinger	Isopropyl alcohol 100%	70923B	1
Caelo	Isopropyl alcohol 100%	16310607	2
Caelo	Isopropyl alcohol 100%	17044008	1
Caelo	Isopropyl alcohol 100%	17061706	1
Caelo	Isopropyl alcohol 100%	17044029	1
Caesar & Loretz/Noweda	Isopropyl alcohol 100%	17044009	1
Hedinger	Isopropyl alcohol 100%	70918B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70931B	2
Caelo	Isopropyl alcohol 100%	17044028	1
Hedinger/Gehe	Isopropyl alcohol 100%	70941B	4
Hedinger/Gehe	Isopropyl alcohol 100%	70908B	1
Hedinger/Alliance Haelt...	Isopropyl alcohol 100%	70898B	1
Caelo	Isopropyl alcohol 100%	3071718	1
Hedinger/Ebert	Isopropyl alcohol 100%	70943B	2
Fagron	Isopropyl alcohol 100%	70936B	1
Hedinger/ AHD	Isopropyl alcohol 100%	70947B	1
Hedinger	Isopropyl alcohol 100%	70922B	1
Hedinger	Isopropyl alcohol 100%	70837B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70943B	1
Caelo	Isopropyl alcohol 100%	162334019	1
Caelo	Isopropyl alcohol 100%	17044030	3
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70936B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70875B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70936B	1
phoenix	Isopropyl alcohol 100%	70947B	1
Caelo	Isopropyl alcohol 100%	27071712	1
Hedinger/ E&J	Isopropyl alcohol 100%	70947B	1
Caelo	Isopropyl alcohol 100%	17044022	2
Hedinger/noweda	Isopropyl alcohol 100%	70957B	1
Noweda	Isopropyl alcohol 100%	707488	1

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Supplier	Substance	Batch	Spectra
HEDINGER/Gehe	Isopropyl alcohol 100%	709478	1
Caelo	Isopropyl alcohol 100%	141/AKD16	1
Sanacorp EK:4,56 EUR -11	Isopropyl alcohol 100%	70923B	1
Noweda	Isopropyl alcohol 100%	17044033	1
Caelo	Isopropyl alcohol 100%	17044013	1
Hetterich/Noewda	Isopropyl alcohol 100%	70796B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70957B	1
Caelo	Isopropyl alcohol 100%	17044027	2
Fischar	Isopropyl alcohol 100%	1007011	1
Hedinger	Isopropyl alcohol 100%	70957B	1
Caelo	Isopropyl alcohol 100%	17189305	1
Fischar	Isopropyl alcohol 100%	4105104	1
Caelo	Isopropyl alcohol 100%	16310621	1
Caelo	Isopropyl alcohol 100%	26081710	1
Hedinger Jenne	Isopropyl alcohol 100%	709538	1
Caelo	Isopropyl alcohol 100%	70959B	2
A. Hedinger/Kehr	Isopropyl alcohol 100%	709088	1
Hedinger	Isopropyl alcohol 100%	70959B	2
Hedinger	Isopropyl alcohol 100%	70947B	1
Caelo	Isopropyl alcohol 100%	17189303	2
Caelo	Isopropyl alcohol 100%	70953B	1
Caelo	Isopropyl alcohol 100%	17189313	2
Caelo	Isopropyl alcohol 100%	17189307	1
Hedinger	Isopropyl alcohol 100%	70936B	1
Caelo	Isopropyl alcohol 100%	17189302	1
Caelo	Isopropyl alcohol 100%	17044035	1
Caelo	Isopropyl alcohol 100%	17189316	1
Caelo	Isopropyl alcohol 100%	21091702	1
Hedinger / Noweda	Isopropyl alcohol 100%	70959B	1
Caelo	Isopropyl alcohol 100%	17189317	1
Hedinger/Noweda	Isopropyl alcohol 100%	70957B	1
Caelo	Isopropyl alcohol 100%	70959b	1
Caelo	Isopropyl alcohol 100%	6101704	1
Hedinger/Noweda	Isopropyl alcohol 100%	70973B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70969B	2
Caelo	Isopropyl alcohol 100%	16234020	1
Gehe/Hedinger	Isopropyl alcohol 100%	709188	1
Hedinger	Isopropyl alcohol 100%	70969B	1
Caelo	Isopropyl alcohol 100%	19101702	1
Hedinger/Noweda	Isopropyl alcohol 100%	70941B	1
Caelo	Isopropyl alcohol 100%	17189308	1
Hedinger / Noweda	Isopropyl alcohol 100%	70977B	1
Hedinger	Isopropyl alcohol 100%	70943B	1
Phönix	Isopropyl alcohol 100%	70983B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	70973B	1
Hedinger	Isopropyl alcohol 100%	70977B	1
Caelo	Isopropyl alcohol 100%	17044023	1
Hedinger	Isopropyl alcohol 100%	70983B	4
Sanacorp	Isopropyl alcohol 100%	17189318	1
Fagron	Isopropyl alcohol 100%	13111701	1
Hedinger/Noweda	Isopropyl alcohol 100%	70977B	2
Caelo	Isopropyl alcohol 100%	15111740	1
Hedinger/Ebert	Isopropyl alcohol 100%	70977B	1
Caelo	Isopropyl alcohol 100%	17189330	2
Caelo	Isopropyl alcohol 100%	17189321	1
Caelo	Isopropyl alcohol 100%	17189320	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70983B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70969B	1
Hedinger	Isopropyl alcohol 100%	70991B	2
Caelo	Isopropyl alcohol 100%	2121705	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phoenix	Isopropyl alcohol 100%	70973B	1
Hedinger/Noweda	Isopropyl alcohol 100%	709082B	1
Hedinger/Gehe	Isopropyl alcohol 100%	70898B	1
Caelo	Isopropyl alcohol 100%	17189319	2
Hedinger/ Gehe	Isopropyl alcohol 100%	70993B	1
Caelo	Isopropyl alcohol 100%	27121702	1
Hedinger Phönix	Isopropyl alcohol 100%	70991B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70983B	1
Hedinger/ AHD	Isopropyl alcohol 100%	70991B	1
Hedinger	Isopropyl alcohol 100%	70973	1
Caelo	Isopropyl alcohol 100%	180109AI/17189332	1
Caelo	Isopropyl alcohol 100%	17300405	1
Hedinger/Noweda	Isopropyl alcohol 100%	70994B	2
Caelo	Isopropyl alcohol 100%	13011808	1
Hedinger	Isopropyl alcohol 100%	70994B	4
Kehr/ Hedinger	Isopropyl alcohol 100%	70994B	1
Caelo	Isopropyl alcohol 100%	171893045391	1
Sanacorp	Isopropyl alcohol 100%	701011B	2
Hedinger/Gehe	Isopropyl alcohol 100%	70973B	1
Caelo	Isopropyl alcohol 100%	17189310	1
AHL	Isopropyl alcohol 100%	709558	1
Hedinger/Gehe	Isopropyl alcohol 100%	70994B	1
Hedinger / Phönix	Isopropyl alcohol 100%	70994B	1
Hedinger/Ebert	Isopropyl alcohol 100%	70991B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	70994B	1
Caelo	Isopropyl alcohol 100%	70983B	1
Hedinger / Anzag	Isopropyl alcohol 100%	70991B	3
Noweda	Isopropyl alcohol 100%	70993B	1
Hedinger/Noweda	Isopropyl alcohol 100%	70977B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70977B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	70959B	1
Caelo	Isopropyl alcohol 100%	19021807	1
hedinger	Isopropyl alcohol 100%	701011b	1
Caelo	Isopropyl alcohol 100%	17300433	1
Hedinger	Isopropyl alcohol 100%	171893205489	1
Caelo	Isopropyl alcohol 100%	17300415	1
Caelo	Isopropyl alcohol 100%	17300424	1
Caelo	Isopropyl alcohol 100%	70994B	1
Caelo	Isopropyl alcohol 100%	14051004	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70977B	1
GEHE	Isopropyl alcohol 100%	17300433	1
Caelo	Isopropyl alcohol 100%	15031801	1
Caelo	Isopropyl alcohol 100%	17300412	1
Hedinger / Noweda	Isopropyl alcohol 100%	701011B	1
Caelo	Isopropyl alcohol 100%	17300418	1
Caelo	Isopropyl alcohol 100%	7041802	1
Hedinger/Noweda	Isopropyl alcohol 100%	701006B	2
Hedinger/Phoenix	Isopropyl alcohol 100%	709948	1
Caelo	Isopropyl alcohol 100%	17300432	1
Caelo	Isopropyl alcohol 100%	17300422	1
Phönix W.E:11.04.18 E...	Isopropyl alcohol 100%	70991B	1
Caelo	Isopropyl alcohol 100%	18065402	3
Hedinger	Isopropyl alcohol 100%	701026B	1
Hedinger / Alliance Hea...	Isopropyl alcohol 100%	70991B	1
Caelo	Isopropyl alcohol 100%	25041802	1
Caelo	Isopropyl alcohol 100%	17051802	1
Otto Fischer	Isopropyl alcohol 100%	603117000	1
Caelo	Isopropyl alcohol 100%	25051802	1
Anzag	Isopropyl alcohol 100%	701020B	1
GEHE	Isopropyl alcohol 100%	18065406	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	17300423	1
Caelo	Isopropyl alcohol 100%	9061812	1
Aug.Hedinger/Anzag	Isopropyl alcohol 100%	7010318	1
Hedinger/ Noweda	Isopropyl alcohol 100%	701031B	1
Caelo	Isopropyl alcohol 100%	16061804	1
Hedinger	Isopropyl alcohol 100%	7010318	1
Gehe/Hedinger	Isopropyl alcohol 100%	701006B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701006B	1
Hedinger/L10	Isopropyl alcohol 100%	7010158	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	701031B	1
Sanacorp	Isopropyl alcohol 100%	18065405	1
Caelo	Isopropyl alcohol 100%	27012017	1
Hedinger/Noweda	Isopropyl alcohol 100%	701026B	1
Caelo	Isopropyl alcohol 100%	18065419	1
Caelo	Isopropyl alcohol 100%	9071802	1
Hedinger/Alliance Healt...	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	17189333	1
Caelo	Isopropyl alcohol 100%	18065405	1
Hedinger /Alliance Heal...	Isopropyl alcohol 100%	701043B	2
Sanacorp	Isopropyl alcohol 100%	70994B	1
Caelo	Isopropyl alcohol 100%	701006B	1
Hedinger	Isopropyl alcohol 100%	701031B	1
Caelo	Isopropyl alcohol 100%	18065430	1
Caelo	Isopropyl alcohol 100%	1865430	1
Caelo	Isopropyl alcohol 100%	18065429	1
Caelo	Isopropyl alcohol 100%	18065420	2
Caelo	Isopropyl alcohol 100%	180654035690	1
Hedinger/Sanacorp	Isopropyl alcohol 100%	70762B	1
Caelo	Isopropyl alcohol 100%	18065432	1
Caelo	Isopropyl alcohol 100%	180654025691	1
Hedinger Gehe	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	16081810	1
Hedinger	Isopropyl alcohol 100%	701043B	3
Hedin/Spangro	Isopropyl alcohol 100%	70994B	1
Hedinger GmbH & Co. KG	Isopropyl alcohol 100%	701043B	1
Gehe	Isopropyl alcohol 100%	701052B	1
Hedinger/ Noweda	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	3091801	1
Hedinger/Noweda	Isopropyl alcohol 100%	701035B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701035B	1
Caelo	Isopropyl alcohol 100%	13091802	1
Caelo	Isopropyl alcohol 100%	701054B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	701031B	1
Hedinger/ Gehe	Isopropyl alcohol 100%	701061B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	701065B	2
Hedinger/ AHD	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	18178203	1
Caelo	Isopropyl alcohol 100%	29091801	1
Hedinger/Gehe	Isopropyl alcohol 100%	701065B	1
Caelo	Isopropyl alcohol 100%	13101801	1
Caelo	Isopropyl alcohol 100%	18178224	1
Fischar	Isopropyl alcohol 100%	4108024	1
Noweda	Isopropyl alcohol 100%	701043B	1
Caelo	Isopropyl alcohol 100%	701043B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701065B	1
Caelo	Isopropyl alcohol 100%	7111802	1
Caelo	Isopropyl alcohol 100%	18178270	1
Caelo	Isopropyl alcohol 100%	28111806	1
Caelo	Isopropyl alcohol 100%	4121802	1
Caelo	Isopropyl alcohol 100%	18178235	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 100%	19121805	1
Hedinger/Ebert	Isopropyl alcohol 100%	701065B	1
Jenne	Isopropyl alcohol 100%	701073B	1
Caelo	Isopropyl alcohol 100%	18178231	1
Caelo	Isopropyl alcohol 100%	19121806	1
Caelo	Isopropyl alcohol 100%	18178234	1
Hedinger Phönix	Isopropyl alcohol 100%	701073B	1
Hedinger Jenne	Isopropyl alcohol 100%	701065B	1
Hedinger/Noweda	Isopropyl alcohol 100%	701031B	1
Hedinger/Phoenix	Isopropyl alcohol 100%	7010738	1

- 106 085 spectra from 582 *Apo-Ident* customers from a total of 29 838 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 *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	200	0	35 635
Type B	0	100	0	78 978
Type C	0	1826	48	106 085

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6449 %)	97.4386 % (> 97.2785 %)

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.

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	5.99	200.91
31232	31517	1.46	195.63
31386	31517	2.92	193.62
31517	31517	0.00	194.26
32817	31517	6.25	183.96

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Isopropyl alcohol 70%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30848-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20141104
Caelo	Isopropyl alcoho...	15403802	31831	40	20151127
Caelo	Isopropyl alcoho...	163189	33105	40	20161206*

Validation samples

A total of 222 872 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 *Isopropyl alcohol 70%*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 680 spectra of 18 reference samples from the substance/substance group *Isopropyl alcohol 70%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl alcohol 70%	14331004	31622 [†]	20
Caelo	Isopropyl alcohol 70%	15403802	31831 [†]	20
Caelo	Isopropyl alcohol 70%	160884	32216	40
Caelo	Isopropyl alcohol 70%	161678	32318	40
Caelo	Isopropyl alcohol 70%	161677	32319	40
Caelo	Isopropyl alcohol 70%	161676	32320	40
Caelo	Isopropyl alcohol 70%	161679	32322	40
Caelo	Isopropyl alcohol 70%	163190	33106	40
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

*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.

[†]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*.

- 78398 spectra from a total of 1812 batches from further 350 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.

- 1646 spectra from 226 *Apo-Ident* customers from 1021 batches from the substance/substance group *Isopropyl alcohol 70%*.

Supplier	Substance	Batch	Spectra
Gehe	Isopropyl alcohol 70%	11370004	3
Caelo	Isopropyl alcohol 70%	2512A-01080	1
Defektur	Isopropyl alcohol 70%	2812M-01080	1
Winthrop	Isopropyl alcohol 70%	2600670T	1
GEHE	Isopropyl alcohol 70%	12037601	1
Defektur	Isopropyl alcohol 70%	23712	1
Caelo	Isopropyl alcohol 70%	12136303	6
Caelo	Isopropyl alcohol 70%		5
Caelo	Isopropyl alcohol 70%	2081202	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	3212I-01080	1
Winthrop	Isopropyl alcohol 70%	2600681T	1
Caelo	Isopropyl alcohol 70%	24081207	1
Herstellung in Apotheke	Isopropyl alcohol 70%	20120911	1
Defektur	Isopropyl alcohol 70%	3812	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	3812E-01080	1
Caelo	Isopropyl alcohol 70%	12202801	1
Winthrop	Isopropyl alcohol 70%	2600685T	1
Apotheke am Holzweg	Isopropyl alcohol 70%	3912Y-01080	1
Defektur	Isopropyl alcohol 70%		5
Doppeleiche Apotheke	Isopropyl alcohol 70%	4012M-01080	1
Caelo	Isopropyl alcohol 70%	12136201	1
Caelo	Isopropyl alcohol 70%	12278601	4
Hedinger	Isopropyl alcohol 70%	53226	1
Euro OTC	Isopropyl alcohol 70%	4012Q-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	4212A-01080	1
GEHE	Isopropyl alcohol 70%	603117000	1
Caelo	Isopropyl alcohol 70%	24101203	1
GEHE	Isopropyl alcohol 70%	221160/3	1
Hedinger	Isopropyl alcohol 70%	53228	1
Defektur	Isopropyl alcohol 70%	53/12	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	4612I-01080	1
Caelo	Isopropyl alcohol 70%	221111206	1
Caelo	Isopropyl alcohol 70%	12278704	2
Doppeleiche Apotheke	Isopropyl alcohol 70%	4912M-01080	1
Eigenherstellung	Isopropyl alcohol 70%	9051212	1
MAROS Arznei, Noweda	Isopropyl alcohol 70%		1
Caelo	Isopropyl alcohol 70%	14121205	1
Löwen Apotheke	Isopropyl alcohol 70%	H28122012P1	1
Hedinger/Anzag	Isopropyl alcohol 70%	303007	2
Herstellung in Apotheke	Isopropyl alcohol 70%	20130102	1
Caelo	Isopropyl alcohol 70%	12278702	1
Gehe/Phönix	Isopropyl alcohol 70%	12338001	2
Winthrop	Isopropyl alcohol 70%	2600706T	1
Neugereut Apotheke	Isopropyl alcohol 70%		2

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Supplier	Substance	Batch	Spectra
Defektur	Isopropyl alcohol 70%	21012013	1
Defektur	Isopropyl alcohol 70%	2/13	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130206004	1
Caelo	Isopropyl alcohol 70%	7021307	1
Eigenherstellung	Isopropyl alcohol 70%	eigene	1
Hedinger	Isopropyl alcohol 70%	53240	1
Neugereut Apotheke	Isopropyl alcohol 70%	713M-01080	1
Fagron	Isopropyl alcohol 70%	1234	1
Hedinger/Anzag	Isopropyl alcohol 70%	303006	1
Caelo	Isopropyl alcohol 70%	22021303	1
Defektur_JP_25022013	Isopropyl alcohol 70%	913A-07015	1
Defektur_JP_07012013	Isopropyl alcohol 70%	213A-07015	1
Defektur_JP_28012013	Isopropyl alcohol 70%	513A-07015	1
Sieg-Apotheke	Isopropyl alcohol 70%	661302027	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	913A-01080	1
Defektur	Isopropyl alcohol 70%	9/13	1
Caelo	Isopropyl alcohol 70%	12338104	3
Caelo	Isopropyl alcohol 70%	13008902	2
Caelo	Isopropyl alcohol 70%	13008903	2
Caelo	Isopropyl alcohol 70%	13031304	1
Fagron	Isopropyl alcohol 70%	13009002	1
Hedinger	Isopropyl alcohol 70%	53241	3
Eigenherstellung	Isopropyl alcohol 70%	9070313	1
Defektur	Isopropyl alcohol 70%	200313Iso70	1
Stern-Defektur	Isopropyl alcohol 70%	130321004	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130327003	1
Caelo	Isopropyl alcohol 70%	12338101	1
Caelo	Isopropyl alcohol 70%	12338001	1
Hedinger/Anzag	Isopropyl alcohol 70%	303008	1
Eigenherstellung	Isopropyl alcohol 70%	1513A-01080	1
Defektur	Isopropyl alcohol 70%	16/13	1
GUMO/04.04.2013	Isopropyl alcohol 70%	2600726T	1
hergestellt am 11.04.13	Isopropyl alcohol 70%	191012/925	1
Hirsch	Isopropyl alcohol 70%	Die16041301	1
Caelo	Isopropyl alcohol 70%	Eigenherstellung	1
Defektur	Isopropyl alcohol 70%	H17042013B1	1
Purren Apotheke	Isopropyl alcohol 70%	18043	1
Defektur	Isopropyl alcohol 70%	180413Iso70	1
Caelo	Isopropyl alcohol 70%	1613q-01080	1
Herstellung in Apotheke	Isopropyl alcohol 70%	22042013	1
Hedinger	Isopropyl alcohol 70%	53242	2
Caelo	Isopropyl alcohol 70%	23041304	1
Stern-Defektur	Isopropyl alcohol 70%	130425004	1
Eigenherstellung	Isopropyl alcohol 70%	1823	1
Caelo	Isopropyl alcohol 70%	13009003	1
Eigenherstellung	Isopropyl alcohol 70%	9230413	1
Hirsch	Isopropyl alcohol 70%	1913E-01080	1
Defektur	Isopropyl alcohol 70%	100513Iso70	1
Defektur	Isopropyl alcohol 70%	22/13	1
hedinger	Isopropyl alcohol 70%	53236	1
Caelo	Isopropyl alcohol 70%	13092203	3
Caelo	Isopropyl alcohol 70%	22051301	1
geiger	Isopropyl alcohol 70%	2213E-01080	1
Sonnen-Apotheke	Isopropyl alcohol 70%	210513H1	1
Caelo	Isopropyl alcohol 70%	13092201	1
Defektur	Isopropyl alcohol 70%	280513Iso70	1
winthrop	Isopropyl alcohol 70%	2600735T	1
Defektur_EW_04062013	Isopropyl alcohol 70%	130604002	1
Apotheke	Isopropyl alcohol 70%	6062013	1
Caelo	Isopropyl alcohol 70%	130009002	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	130009003	1
Eigenproduktion	Isopropyl alcohol 70%	2413E-01080	1
Herstellung in Apotheke	Isopropyl alcohol 70%	20130613	1
Hedinger	Isopropyl alcohol 70%	53250	1
Caelo	Isopropyl alcohol 70%	18061307	1
Euro OTC	Isopropyl alcohol 70%	53245	1
Hedinger	Isopropyl alcohol 70%	53245	1
Defektur	Isopropyl alcohol 70%	210613Iso70	1
Defektur	Isopropyl alcohol 70%	27/13	1
Caelo	Isopropyl alcohol 70%	H22062013H1	1
Phönix	Isopropyl alcohol 70%	53252	1
Eigenbedarf (Hergestel...	Isopropyl alcohol 70%	260613	1
Rondell Apotheke	Isopropyl alcohol 70%	2613Q-01080	1
eigene herstellung	Isopropyl alcohol 70%	a1308	1
Stern-Defektur	Isopropyl alcohol 70%	130703007	1
Germania Apo	Isopropyl alcohol 70%	315032	1
Bombastus	Isopropyl alcohol 70%	2813Q-01080	1
Caelo	Isopropyl alcohol 70%	13155403	3
Caelo	Isopropyl alcohol 70%	13155503	5
Doppeleiche Apotheke	Isopropyl alcohol 70%	3013A-01080	1
Defektur	Isopropyl alcohol 70%	250713Iso70	1
eigene Herstellung	Isopropyl alcohol 70%	3013M-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130725001	1
Rondell Apotheke	Isopropyl alcohol 70%	3113M-07123	1
Defektur	Isopropyl alcohol 70%	37/13	1
Stern-Defektur	Isopropyl alcohol 70%	130805002	1
Eigenherstellung	Isopropyl alcohol 70%	9010813	1
Caelo	Isopropyl alcohol 70%	7082013/1	1
Eigen	Isopropyl alcohol 70%		1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130813006	1
Hedinger	Isopropyl alcohol 70%	53259	2
Caelo	Isopropyl alcohol 70%	53241	1
Eigenherstellung	Isopropyl alcohol 70%	3313Q-01080	1
Hedinger	Isopropyl alcohol 70%	53255	1
Wintrop AM GmbH	Isopropyl alcohol 70%	2600749T	1
Doppeleiche Apotheke	Isopropyl alcohol 70%	3413M-01080	1
rondell-Apotheke	Isopropyl alcohol 70%	3413M-07123	1
Caelo	Isopropyl alcohol 70%	24081303	1
Defektur	Isopropyl alcohol 70%	290813Iso70	1
Unisan	Isopropyl alcohol 70%	13155502	1
Neugereut Apotheke	Isopropyl alcohol 70%	3531Q-01080	1
Hetterich	Isopropyl alcohol 70%	140301	1
Caelo	Isopropyl alcohol 70%	3091302	1
eigene herstellung	Isopropyl alcohol 70%	a1309	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	130912001	1
Stern-Defektur	Isopropyl alcohol 70%	20130912	1
Wintrop AM GmbH/Anzag	Isopropyl alcohol 70%	2600754T	1
Defektur	Isopropyl alcohol 70%	42/13	1
Defektur	Isopropyl alcohol 70%	3713Q-01080	1
Igel Apotheke	Isopropyl alcohol 70%	3813E-01080	1
Stern-Defektur	Isopropyl alcohol 70%	130927002	1
Caelo	Isopropyl alcohol 70%	20091302	1
Caelo	Isopropyl alcohol 70%	13155401	2
Caelo	Isopropyl alcohol 70%	12101301	1
Hedinger	Isopropyl alcohol 70%	53258	1
Caelo	Isopropyl alcohol 70%	14101303	1
Stern-Rezeptur	Isopropyl alcohol 70%	131015001	1
Hirsch	Isopropyl alcohol 70%	4213E-01080	1
Caelo	Isopropyl alcohol 70%	18101301	1
Stern-Defektur	Isopropyl alcohol 70%	20131022	1

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Supplier	Substance	Batch	Spectra
Eigene Herstellung	Isopropyl alcohol 70%	AL310	1
Wensauer Apotheke	Isopropyl alcohol 70%		1
Leyh Pharma	Isopropyl alcohol 70%	132021	1
Hedinger	Isopropyl alcohol 70%	53265	1
Caelo	Isopropyl alcohol 70%	13217603	2
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53266	1
Hirsch	Isopropyl alcohol 70%	4413I-01080	1
Eigen	Isopropyl alcohol 70%	4413A-01080	1
Hedinger / Noweda	Isopropyl alcohol 70%	53266	1
Stern-Defektur	Isopropyl alcohol 70%	131108001	1
Hedinger	Isopropyl alcohol 70%	53268	2
Hedinger	Isopropyl alcohol 70%	53253	1
Caelo	Isopropyl alcohol 70%	13217501	1
Defektur	Isopropyl alcohol 70%	51/13	1
Caelo	Isopropyl alcohol 70%	15111304	1
Defektur	Isopropyl alcohol 70%	151113Iso70	1
Hedinger/AHD	Isopropyl alcohol 70%	53265	1
Brugger	Isopropyl alcohol 70%	21112013	1
Hedinger	Isopropyl alcohol 70%	53267	2
Apotheke	Isopropyl alcohol 70%	4813Q-0180	1
STERN	Isopropyl alcohol 70%	131202002	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-171013-1D	1
Phönix	Isopropyl alcohol 70%	13217601	1
Phönix	Isopropyl alcohol 70%	1217603	1
Neugereut Apotheke	Isopropyl alcohol 70%	4913M-01080	1
Caelo	Isopropyl alcohol 70%	13319405	2
Defektur	Isopropyl alcohol 70%	5013A	1
selbst	Isopropyl alcohol 70%		2
Defektur	Isopropyl alcohol 70%	58/13	1
Hirsch	Isopropyl alcohol 70%	5013Q-01080	1
Caelo	Isopropyl alcohol 70%	12121306	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-131213-1D	1
Caelo	Isopropyl alcohol 70%	13337004	1
Eigene Herstellung	Isopropyl alcohol 70%	AL311	1
Stern-Defektur	Isopropyl alcohol 70%	131216005	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53262	1
Caelo	Isopropyl alcohol 70%	13319404	2
Caelo	Isopropyl alcohol 70%	13319502	1
Defektur	Isopropyl alcohol 70%	80114Iso70	1
Hedinger/Noweda	Isopropyl alcohol 70%	53266	1
Defektur	Isopropyl alcohol 70%	2/14	1
ASS	Isopropyl alcohol 70%	314A01080	1
Neugereut Apotheke	Isopropyl alcohol 70%	214Q-01080	1
Caelo	Isopropyl alcohol 70%	13363003	2
Apoth.E.Bartel	Isopropyl alcohol 70%	70545B/2	1
Stern-Defektur	Isopropyl alcohol 70%	140116004	1
Caelo	Isopropyl alcohol 70%	13217602	1
Caelo	Isopropyl alcohol 70%	4813E-01080	1
Hedinger / Noweda	Isopropyl alcohol 70%	53267	1
Caelo	Isopropyl alcohol 70%	24011405	1
Rondell	Isopropyl alcohol 70%	414Q-07123	1
Defektur	Isopropyl alcohol 70%	514A	1
Hedinger/AHD	Isopropyl alcohol 70%	53268	1
Caelo	Isopropyl alcohol 70%	6041407	1
Eigene Herstellung	Isopropyl alcohol 70%	AL312	1
Stern-Defektur	Isopropyl alcohol 70%	140210001	1
Sonnenberg-Apotheke	Isopropyl alcohol 70%	100214	1
Hirsch	Isopropyl alcohol 70%	714E-01080	1
Caelo	Isopropyl alcohol 70%	13363001	1
Caelo	Isopropyl alcohol 70%	13363104	1

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Supplier	Substance	Batch	Spectra
Phönix 13.01.2014	Isopropyl alcohol 70%	13319404	1
Caelo	Isopropyl alcohol 70%	20021414	1
Euro OCT	Isopropyl alcohol 70%	200214	1
Caelo	Isopropyl alcohol 70%	20021415	1
Gehe	Isopropyl alcohol 70%	14026402	4
Caelo	Isopropyl alcohol 70%	13363101	2
Defektur	Isopropyl alcohol 70%	7/14	1
Apolda	Isopropyl alcohol 70%	120214	1
Kastner	Isopropyl alcohol 70%	914I-01080	1
Caelo	Isopropyl alcohol 70%	113363003	1
Stern-Defektur	Isopropyl alcohol 70%	140310001	1
Hedinger	Isopropyl alcohol 70%	53274	1
Rondell	Isopropyl alcohol 70%	1014M-07123	1
Caelo	Isopropyl alcohol 70%	14026303	2
Caelo	Isopropyl alcohol 70%	11031406	1
Gehe	Isopropyl alcohol 70%	53264	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-150314-1D	1
Alliance Health 17.03.2...	Isopropyl alcohol 70%	53279	2
Phoenix 17.03.2014	Isopropyl alcohol 70%	53280	1
Hedinger/GEHE	Isopropyl alcohol 70%	53266	1
Defektur	Isopropyl alcohol 70%	1214I	1
Klenk	Isopropyl alcohol 70%	1214M-1080	1
Gehe/Phönix	Isopropyl alcohol 70%	136363003	1
Hedinger	Isopropyl alcohol 70%	53280	5
Caelo	Isopropyl alcohol 70%	13363107	1
Alliance Healthcare/Hed...	Isopropyl alcohol 70%	53285	3
Caelo	Isopropyl alcohol 70%	AL313	1
Defektur	Isopropyl alcohol 70%	1414I	1
Stern-Defektur	Isopropyl alcohol 70%	140404005	1
Defektur	Isopropyl alcohol 70%	14/14	1
Caelo	Isopropyl alcohol 70%	14076602	6
Eigenherstellung	Isopropyl alcohol 70%	9100414	1
Caelo	Isopropyl alcohol 70%	14026401	5
Kastner	Isopropyl alcohol 70%	1714I-01080	1
Herstellung in Apotheke	Isopropyl alcohol 70%	70587B	1
Caelo	Isopropyl alcohol 70%	140226402	1
Caelo	Isopropyl alcohol 70%	14076501	2
STERN	Isopropyl alcohol 70%	140507002	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	40509/50Wo	1
Caelo	Isopropyl alcohol 70%	16052014-100	1
Leyh Pharma	Isopropyl alcohol 70%	141311	1
Caelo	Isopropyl alcohol 70%	14114501	2
Defektur	Isopropyl alcohol 70%	22/14	1
Caelo	Isopropyl alcohol 70%	2314E-01080	1
Caelo	Isopropyl alcohol 70%	6061401	1
Caelo	Isopropyl alcohol 70%	14076603	2
Caelo	Isopropyl alcohol 70%	14026403	3
Hedinger	Isopropyl alcohol 70%	53284	1
Isopropylalkohol GMP/Gehe	Isopropyl alcohol 70%	2314M-01080	1
Gutenberg-Apotheke	Isopropyl alcohol 70%	140612014	1
Fischar	Isopropyl alcohol 70%	2183	1
STERN	Isopropyl alcohol 70%	140617002	1
GEHE am 17.06.2014	Isopropyl alcohol 70%	53286	1
eigene herstellung	Isopropyl alcohol 70%	AL314	2
Fischar/Sanacorp	Isopropyl alcohol 70%	4114044	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600807T	1
Hedinger1	Isopropyl alcohol 70%	53290	1
Hedinger/AHD	Isopropyl alcohol 70%	53290	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-300714-1D	1
Hedinger/AHD	Isopropyl alcohol 70%	53277	1

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Supplier	Substance	Batch	Spectra
Rondell Apotheke	Isopropyl alcohol 70%	2814E-07123	1
Defektur	Isopropyl alcohol 70%	28/14	1
Caelo	Isopropyl alcohol 70%	14146701	3
M.Kastner	Isopropyl alcohol 70%	2914M-01080	1
Eigenherstellung Hubert...	Isopropyl alcohol 70%	2014072221 (DF)	1
Phonix	Isopropyl alcohol 70%	14026403	1
Caelo	Isopropyl alcohol 70%	1416702	1
Hedinger / Phönix	Isopropyl alcohol 70%	53266	1
Caelo	Isopropyl alcohol 70%	26071401	1
Fischar	Isopropyl alcohol 70%	4114041	1
Eigenherstellung	Isopropyl alcohol 70%	28072014	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	40729/50Hk	1
Hedinger	Isopropyl alcohol 70%	53291	1
Defektur	Isopropyl alcohol 70%	1467/2014072920	1
noweda	Isopropyl alcohol 70%	2600787T	1
Caelo	Isopropyl alcohol 70%	6081405	1
GEHE am 16.08.2014	Isopropyl alcohol 70%	53297	1
M.Kastner	Isopropyl alcohol 70%	3314I-01080	1
Gehe	Isopropyl alcohol 70%	53290	1
Caelo	Isopropyl alcohol 70%	3414E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	3414E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1-20082014	1
Hedinger	Isopropyl alcohol 70%	HA32	1
Caelo	Isopropyl alcohol 70%	25081401	1
Cealo	Isopropyl alcohol 70%	14146801	1
Phönix/Hedinger	Isopropyl alcohol 70%	53295	2
Defektur	Isopropyl alcohol 70%	34/14	1
Caelo	Isopropyl alcohol 70%	14114601	1
Caelo	Isopropyl alcohol 70%	14146803	6
Hedinger/AHD	Isopropyl alcohol 70%	53296	1
Caelo	Isopropyl alcohol 70%	14146801	3
Caelo	Isopropyl alcohol 70%	14229101	4
Caelo	Isopropyl alcohol 70%	14074205	1
Hubertus Apotheke	Isopropyl alcohol 70%	ChB120914	1
Hedinger / Noweda	Isopropyl alcohol 70%	53300	1
Rondell-Apotheke	Isopropyl alcohol 70%	3814Q-07123	1
Caelo	Isopropyl alcohol 70%	12202902	1
Eigen	Isopropyl alcohol 70%	3914A-01080	1
Kastner (eigen)	Isopropyl alcohol 70%	3914A-01080	1
Caelo	Isopropyl alcohol 70%	25091402	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600802T	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	123456	2
Caolo	Isopropyl alcohol 70%	D07104T1	1
Hubertus Apotheke	Isopropyl alcohol 70%	71014	1
Defektur	Isopropyl alcohol 70%	4114I	1
Hedinger / Phönix	Isopropyl alcohol 70%	53290	1
Eigene Herstellung	Isopropyl alcohol 70%	A1315	1
Caelo	Isopropyl alcohol 70%	141t46801	1
Eigenherstellung	Isopropyl alcohol 70%	4114Q-01080	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600830T	1
Caelo	Isopropyl alcohol 70%	14146703	1
Defektur	Isopropyl alcohol 70%	37/14	1
Caelo	Isopropyl alcohol 70%	14101402	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53300	1
Caelo	Isopropyl alcohol 70%	14146804	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41017/50W1o	1
Eigenherstellung	Isopropyl alcohol 70%	1-23102014	1
AHD/Hedinger	Isopropyl alcohol 70%	53296	1
Caelo	Isopropyl alcohol 70%	RH141030-0003	1
Hedinger	Isopropyl alcohol 70%	53297	1

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Supplier	Substance	Batch	Spectra
HirschApotheke	Isopropyl alcohol 70%	4514I-01080	1
Hedinger/Gehe	Isopropyl alcohol 70%	53302	1
Fischar	Isopropyl alcohol 70%	4114064	1
Caelo	Isopropyl alcohol 70%	14146802	1
Caelo	Isopropyl alcohol 70%	47141-01080	2
Hirsch Apotheke	Isopropyl alcohol 70%	4714I-01080	1
Caelo	Isopropyl alcohol 70%	19111401	1
Hedinger	Isopropyl alcohol 70%	53301	1
Defektur	Isopropyl alcohol 70%	43/14	1
Caelo	Isopropyl alcohol 70%	21114103	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41125/1Hk	1
Rondell Apotheke	Isopropyl alcohol 70%	4814E-07123	1
Herstellung in Apotheke	Isopropyl alcohol 70%	70643B	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53306	2
Hedinger	Isopropyl alcohol 70%	53306	1
Defektur	Isopropyl alcohol 70%	4714M	1
Defektur 4814N-01080	Isopropyl alcohol 70%	4814N-01080	2
Caelo	Isopropyl alcohol 70%	4914A-01080	1
Hedinger	Isopropyl alcohol 70%	53303	1
Eigenherstellung	Isopropyl alcohol 70%	1-11122014	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	41212/50Si	1
Caelo	Isopropyl alcohol 70%	16121402	1
Caelo	Isopropyl alcohol 70%	14330901	3
Eigenherstellung	Isopropyl alcohol 70%	5114M-01080	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-191214-1D	1
Caelo	Isopropyl alcohol 70%	14229103	2
Defektur	Isopropyl alcohol 70%	5214A	1
Caelo	Isopropyl alcohol 70%	53141-01080	1
Hedinger / Phönix	Isopropyl alcohol 70%	53309	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50103/50Wlo	1
Fagron	Isopropyl alcohol 70%	4114104	1
Fagron	Isopropyl alcohol 70%	53279	1
Hubertus Apotheke	Isopropyl alcohol 70%	ChB060115	1
Eigenherstellung	Isopropyl alcohol 70%	9261114	1
Phönix 05.01.15	Isopropyl alcohol 70%	53303	1
Rondell Apotheke	Isopropyl alcohol 70%	245Q-07123	1
Gehe/Hedinger	Isopropyl alcohol 70%	53310	1
Hedinger/AHD	Isopropyl alcohol 70%	53310	1
Defektur	Isopropyl alcohol 70%	2/15	1
Hedinger	Isopropyl alcohol 70%	53309	3
Winthrop	Isopropyl alcohol 70%	2600846T	1
Sanacorp	Isopropyl alcohol 70%	14267805	1
eigene Herstellung	Isopropyl alcohol 70%	1201-15	1
Fischar	Isopropyl alcohol 70%	4114082	1
Eigene Herstellung	Isopropyl alcohol 70%	AL316	1
Caelo	Isopropyl alcohol 70%	14331003	3
Caelo	Isopropyl alcohol 70%	20011503	1
Hirsch Apotheke	Isopropyl alcohol 70%	415M-0108	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600846T	1
Eigenherstellung	Isopropyl alcohol 70%	515E-01080	1
Wolf-Apotheke / Defektur	Isopropyl alcohol 70%	50204/50Bz	1
Caelo	Isopropyl alcohol 70%	14331004	2
Hedinger / Noweda	Isopropyl alcohol 70%	5331	1
Caelo	Isopropyl alcohol 70%	20021506	1
Caelo	Isopropyl alcohol 70%	14330803	2
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50227/50Wlo	1
Caelo	Isopropyl alcohol 70%	H030315T1	1
HirschApotheke	Isopropyl alcohol 70%	10151-01080	1
Caelo	Isopropyl alcohol 70%	15014204	1
Caelo	Isopropyl alcohol 70%	15014101	1

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Supplier	Substance	Batch	Spectra
Winthrop AM/NOW	Isopropyl alcohol 70%	2600790T	1
Defektur	Isopropyl alcohol 70%	12/15	1
Caelo	Isopropyl alcohol 70%	15014102	3
Hedinger/Gehe	Isopropyl alcohol 70%	53315	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50313/50W1o	1
Rondell Apotheke	Isopropyl alcohol 70%	1115Q-07123	1
Caelo	Isopropyl alcohol 70%	12031514	1
Defektur	Isopropyl alcohol 70%	1215A	1
Caelo	Isopropyl alcohol 70%	H170315T1	1
Hedinger	Isopropyl alcohol 70%	53308	1
Eigenherstellung	Isopropyl alcohol 70%	9270215	1
Leyh Pharma	Isopropyl alcohol 70%	143541	1
Caelo	Isopropyl alcohol 70%	18031503	1
Wintrop	Isopropyl alcohol 70%	2600863T	2
Eigenherstellung	Isopropyl alcohol 70%	1215M-01080	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50330/50W1o	1
Caelo	Isopropyl alcohol 70%	2041501	1
Defektur	Isopropyl alcohol 70%	1415M-01080	1
Eigene Herstellung	Isopropyl alcohol 70%	A1317	1
Caelo	Isopropyl alcohol 70%	14330902	1
Caelo	Isopropyl alcohol 70%	15014301	1
Hirsch Apotheke	Isopropyl alcohol 70%	1615I-01080	1
Caelo	Isopropyl alcohol 70%	14041501	1
Brinn- Holtz	Isopropyl alcohol 70%	1233-04/18	1
Caelo	Isopropyl alcohol 70%	15076401	2
Eigenherstellung	Isopropyl alcohol 70%	1815E-01080	1
HirschApotheke	Isopropyl alcohol 70%	1815E-01080	1
AHD/Hedinger	Isopropyl alcohol 70%	53318	1
Eigenherstellung	Isopropyl alcohol 70%		3
Caelo	Isopropyl alcohol 70%	15014302	2
Caelo	Isopropyl alcohol 70%	14229202	1
Caelo	Isopropyl alcohol 70%	1915A-01080	1
Hedinger	Isopropyl alcohol 70%	53315	4
Caelo	Isopropyl alcohol 70%	15014202	2
Hetterich	Isopropyl alcohol 70%	140403	1
EuroPTC/Phönix	Isopropyl alcohol 70%	15076401	2
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600866T	1
Eigenherstellung	Isopropyl alcohol 70%	2015E-01080	1
Hedinger	Isopropyl alcohol 70%	53320	1
Hedinger	Isopropyl alcohol 70%		2
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	17/2015	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53320	1
eigene Herstellung	Isopropyl alcohol 70%	5210115	1
Wintrop	Isopropyl alcohol 70%	2600869t	1
Winthrop/Sanacorp	Isopropyl alcohol 70%	2600873T	1
Hedinger	Isopropyl alcohol 70%	53316	1
Caelo	Isopropyl alcohol 70%	11051501	1
Caelo	Isopropyl alcohol 70%	5061501	1
HirschApotheke	Isopropyl alcohol 70%	2315I-01080	1
Caelo	Isopropyl alcohol 70%	15076603	2
Caelo	Isopropyl alcohol 70%	2415Q-01080	1
Hedinger/AHD	Isopropyl alcohol 70%	53322	1
Caelo	Isopropyl alcohol 70%	15053505	1
Rezeptur	Isopropyl alcohol 70%	1150617	1
Caelo	Isopropyl alcohol 70%	15076602	7
Winthrop/Alliance Healt...	Isopropyl alcohol 70%	2600875T	1
Caelo	Isopropyl alcohol 70%	18061508	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600857T	1
Caelo	Isopropyl alcohol 70%	23061501	1
Rondell Apotheke	Isopropyl alcohol 70%	2615E-07123	1

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Supplier	Substance	Batch	Spectra
Eigenherstellung	Isopropyl alcohol 70%	23/15	2
Hedinger/Gehe	Isopropyl alcohol 70%	53322	1
Hedinger/Alliance	Isopropyl alcohol 70%	53324	1
Hedinger / Noweda	Isopropyl alcohol 70%	53321	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-030715-1D	1
Winthrop/Sanacorp	Isopropyl alcohol 70%	2600882t	1
Apotheke	Isopropyl alcohol 70%	2815E-01080	1
Caelo	Isopropyl alcohol 70%	14327203	1
Hedinger / Phönix	Isopropyl alcohol 70%	53326	1
Defektur	Isopropyl alcohol 70%	2915E	1
Eigene Herstellung	Isopropyl alcohol 70%	AL318	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	50715/50W1o	1
Caelo	Isopropyl alcohol 70%	15076601	1
Caelo	Isopropyl alcohol 70%	16071503	1
Linden-Apotheke Görlitz	Isopropyl alcohol 70%	2915Q-01080	1
Hedinger	Isopropyl alcohol 70%	B230715	1
Hergestellt	Isopropyl alcohol 70%	1150727	1
Hedinger / Noweda	Isopropyl alcohol 70%	53324	1
sittig	Isopropyl alcohol 70%	10815	1
Phoenix/AHD	Isopropyl alcohol 70%	53329	1
Caelo	Isopropyl alcohol 70%	3115E-01080	1
Caelo	Isopropyl alcohol 70%	15150202	4
Eigenherstellung	Isopropyl alcohol 70%	3215E-01080	1
Winthrop/Alliance Healt...	Isopropyl alcohol 70%	2600892t	1
Rondell Apotheke	Isopropyl alcohol 70%	3215M-07123	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53324	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	3315I01080	1
C.Lange	Isopropyl alcohol 70%	50817/50La	1
Caelo	Isopropyl alcohol 70%	18081510	1
Caelo	Isopropyl alcohol 70%	18081511	1
wir leben Apotheke Tespe	Isopropyl alcohol 70%	3415M-01080	1
Caelo	Isopropyl alcohol 70%	14229201	1
Eigen/Defektur	Isopropyl alcohol 70%	3515A-01080	1
Caelo	Isopropyl alcohol 70%	15191902	2
Leyh Pharma	Isopropyl alcohol 70%	152121	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53326	1
Defektur / Wolf-Apotheke	Isopropyl alcohol 70%	50828/50W1o	1
Eigen	Isopropyl alcohol 70%	3615A-01080	1
Hedinger	Isopropyl alcohol 70%	53324	2
Fagron	Isopropyl alcohol 70%	15076501	1
Caelo	Isopropyl alcohol 70%	15192001	2
eigen	Isopropyl alcohol 70%	3615I-01080	1
Ottlik	Isopropyl alcohol 70%	2015090420	1
AHD/Hedinger	Isopropyl alcohol 70%	53329	1
Fischar	Isopropyl alcohol 70%	4115061	1
Hedinger GmbH & Co. KG/...	Isopropyl alcohol 70%	53328	1
Fischar	Isopropyl alcohol 70%	4115062	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	33/15	1
Defektur	Isopropyl alcohol 70%	50907/50Si	1
Hedinger/Geilenkirchen	Isopropyl alcohol 70%	53333	1
Defektur	Isopropyl alcohol 70%	3715Q	1
Eigene	Isopropyl alcohol 70%	3815A-01080	1
Brinn-Holtz	Isopropyl alcohol 70%	1288-09/18	1
Wolf- Apotheke / Defektur	Isopropyl alcohol 70%	50914/51W1o	1
Hedinger/Gehe	Isopropyl alcohol 70%	53333	1
Caelo	Isopropyl alcohol 70%	2600887T	1
Otto Fischar GmbH & Co....	Isopropyl alcohol 70%	4115012	1
CL. LANGE	Isopropyl alcohol 70%	50921/51LA	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600887T	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600906T	2

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Supplier	Substance	Batch	Spectra
Praxisbedarf Neurologen	Isopropyl alcohol 70%		5
Hubertus Apotheke	Isopropyl alcohol 70%	230915	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53332	1
Hochhaus-Apotheke	Isopropyl alcohol 70%	3715A-01080	1
Eigene Herstellung	Isopropyl alcohol 70%	AL319	1
Leyh Pharms	Isopropyl alcohol 70%	152521	1
Eigenherstellung	Isopropyl alcohol 70%	4115A-01080	1
Eigenherstellung	Isopropyl alcohol 70%	4015A-0108	1
Hedinger/Noweda	Isopropyl alcohol 70%	53320	1
Caelo	Isopropyl alcohol 70%	53332	1
Hedinger	Isopropyl alcohol 70%	53333	1
Defektur	Isopropyl alcohol 70%	4115Q	1
Rondell Apotheke	Isopropyl alcohol 70%	4215E-07123	1
Eigen/Defektur	Isopropyl alcohol 70%	4215M-01080	1
Eigen	Isopropyl alcohol 70%	4215E-01080	1
Hedinger	Isopropyl alcohol 70%	53334	2
Caelo	Isopropyl alcohol 70%	15192101	3
Hochhaus-Apotheke	Isopropyl alcohol 70%	4315E-01080	1
Caelo	Isopropyl alcohol 70%	2600907T	1
Defektur	Isopropyl alcohol 70%	4315Q-01080	1
Defektur	Isopropyl alcohol 70%	4415A-01080	1
Hedinger / Gehe	Isopropyl alcohol 70%	53337	1
Sonnen-Apotheke Wefensl. ...	Isopropyl alcohol 70%	37/15	1
Schwanen-Apothek-Köster	Isopropyl alcohol 70%	151028-1	1
Hedinger/AHD	Isopropyl alcohol 70%	53340	1
Hedinger	Isopropyl alcohol 70%	53340	3
Caelo	Isopropyl alcohol 70%	15309101	1
Hedinger/Gehe	Isopropyl alcohol 70%	53340	1
Wintrop	Isopropyl alcohol 70%	2600908t	1
Eigenherstellung	Isopropyl alcohol 70%	4515Q-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53337	1
Caelo	Isopropyl alcohol 70%	15150201	1
Eigenherstellung	Isopropyl alcohol 70%	9091115	1
Caelo	Isopropyl alcohol 70%	15248503	1
Eigen/Defektur	Isopropyl alcohol 70%	4715E-01080	1
hochhaus-Apotheke	Isopropyl alcohol 70%	4715E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	4715M	1
Hedinger GmbH & Co. KG/...	Isopropyl alcohol 70%	53329	1
Hedinger/Gehe	Isopropyl alcohol 70%	53338	1
Apotärze	Isopropyl alcohol 70%	4815I-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	4815M-01080	1
Caelo	Isopropyl alcohol 70%	15192003	2
Eigen/Defektur	Isopropyl alcohol 70%	4815Q-01080	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-241115-1D	1
Hubertus Apotheke	Isopropyl alcohol 70%	31215	1
Eigen/Defektur	Isopropyl alcohol 70%	5015A-01080	1
Hedinger/AHD	Isopropyl alcohol 70%	53346	1
Fischar / Anzag	Isopropyl alcohol 70%	4115073	1
Caelo	Isopropyl alcohol 70%	15192002	2
Eigene Herstellung	Isopropyl alcohol 70%	AL320	1
eigene Herstellung	Isopropyl alcohol 70%	91215	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600915T	1
Eigenherstellung	Isopropyl alcohol 70%	5015Q-01080	1
Sanacorp 26.11.15	Isopropyl alcohol 70%	2600905T	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	5115A-01080	1
Leyh Pharma	Isopropyl alcohol 70%	154531	1
Eigenherstellung	Isopropyl alcohol 70%	9211215	1
Caelo	Isopropyl alcohol 70%	2015181201E0	1
Fiebig/ Hedinger	Isopropyl alcohol 70%	53343	1
Caelo	Isopropyl alcohol 70%	15309001	4

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Supplier	Substance	Batch	Spectra
HEDINGER / Noweda	Isopropyl alcohol 70%	53340	1
hochhaus-Apotheke	Isopropyl alcohol 70%	5315E-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53341	1
Eigen	Isopropyl alcohol 70%	5315I-01080	1
eigen	Isopropyl alcohol 70%	116G-01080	1
eigen	Isopropyl alcohol 70%	116E-01080	1
Caelo	Isopropyl alcohol 70%	116M-01080	1
Apotheke	Isopropyl alcohol 70%	116E-07013	1
Caelo	Isopropyl alcohol 70%	14330802	1
Otto Fischar GmbH & Co...	Isopropyl alcohol 70%	4115114	2
Eigen/Defektur	Isopropyl alcohol 70%	216A-01080	1
Caelo	Isopropyl alcohol 70%	1160113	1
Eigenherstellung	Isopropyl alcohol 70%	216M-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	216M-01080	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	44/15	1
Schwanen-Apotheke, Köster	Isopropyl alcohol 70%	160104-1	1
Eigenherstellung	Isopropyl alcohol 70%	316E	1
Sanacorp/Winthrop WE:18...	Isopropyl alcohol 70%	2600929T	1
Hedinger/AHD	Isopropyl alcohol 70%	53326	1
Caelo	Isopropyl alcohol 70%	15403902	1
Eigen Defektur	Isopropyl alcohol 70%	316Q-01080	1
Phönix/Hedinger	Isopropyl alcohol 70%	53341	1
A. Hedinger/Noweda	Isopropyl alcohol 70%	53336	2
Hedinger/Gehe	Isopropyl alcohol 70%	53346	1
Hedinger	Isopropyl alcohol 70%	53350	1
Eigenherstellung	Isopropyl alcohol 70%	4022016-01	1
Defekur	Isopropyl alcohol 70%	516Q-01080	1
Defektur	Isopropyl alcohol 70%	60209/50Hk	1
Winthrop Arzneimittel G...	Isopropyl alcohol 70%	2600916T	1
Sonnen-Apotheke	Isopropyl alcohol 70%	3/16	1
Eiegn/Defektur	Isopropyl alcohol 70%	616E-01080	1
Eigen/Defektur	Isopropyl alcohol 70%	716M-01080	1
Rondell Apotheke	Isopropyl alcohol 70%	716M-01080	1
Martinius-Apotheke	Isopropyl alcohol 70%	A-150216-1D	1
Caelo	Isopropyl alcohol 70%	15192102	1
Frau Hennies	Isopropyl alcohol 70%	240216	1
Leyh Pharma	Isopropyl alcohol 70%	155021	1
Hedinger	Isopropyl alcohol 70%	53354	3
hochhaus-Apotheke	Isopropyl alcohol 70%	916I-01080	1
Hedinger/Noweda	Isopropyl alcohol 70%	53343	1
Caelo	Isopropyl alcohol 70%	53353	2
Caelo	Isopropyl alcohol 70%	1016A	1
C.Lange	Isopropyl alcohol 70%	60307/51La	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53354	1
Eigen Defektur	Isopropyl alcohol 70%	1016E-01080	1
Sonnen - Apotheke	Isopropyl alcohol 70%	9/16	1
Rezeptur	Isopropyl alcohol 70%	Rezeptur	1
Hedinger/Gehe	Isopropyl alcohol 70%	53357	3
Hochhaus-Apotheke	Isopropyl alcohol 70%	1116E-01080	1
Hedinger/AHD	Isopropyl alcohol 70%	53355	1
Hedinger/ Gehe	Isopropyl alcohol 70%	53354	1
Allianz	Isopropyl alcohol 70%	17036	2
Eigen/Defektur	Isopropyl alcohol 70%	1116M-01080	1
Caelo	Isopropyl alcohol 70%	15403802	8
Caelo	Isopropyl alcohol 70%	15430002	1
Rondell Apotheke	Isopropyl alcohol 70%	13161-01080	2
Noweda	Isopropyl alcohol 70%	53333	1
Rondell Apotheke	Isopropyl alcohol 70%	1316I-01080	1
Eigenherstellung	Isopropyl alcohol 70%	1416E-01080	1
Eigenherstellung	Isopropyl alcohol 70%	2016040520KS	1

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Supplier	Substance	Batch	Spectra
Herstellung	Isopropyl alcohol 70%	110416P2	1
Defaktur/eigen	Isopropyl alcohol 70%	1416Q-01080	1
Hubertus Apotheke	Isopropyl alcohol 70%	110416	1
Sittig	Isopropyl alcohol 70%	150416	1
Defaktur	Isopropyl alcohol 70%	1516M-01080	1
Hedinger / Kehr	Isopropyl alcohol 70%	53359	1
Defaktur 1616E-01080	Isopropyl alcohol 70%	1616E-01080	1
Winthrop	Isopropyl alcohol 70%	2600938T	1
Noweda/Hedinger	Isopropyl alcohol 70%	53350	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53360	1
Hedinger	Isopropyl alcohol 70%	53362	1
Defaktur	Isopropyl alcohol 70%	1716A-01080	1
Hedinger/Noweda	Isopropyl alcohol 70%	53357	1
Caelo	Isopropyl alcohol 70%	15308201	1
Caelo	Isopropyl alcohol 70%	15404002	2
Caelo	Isopropyl alcohol 70%	140505	1
Eigenherstellung	Isopropyl alcohol 70%	1916A	1
Hedinger	Isopropyl alcohol 70%	53352	1
Caelo	Isopropyl alcohol 70%	15430004	1
Hedinger/Gehe	Isopropyl alcohol 70%	5335	1
Hedinger/Gehe	Isopropyl alcohol 70%	53352	1
Caelo	Isopropyl alcohol 70%	15309201	2
Eigen/Defaktur	Isopropyl alcohol 70%	1916M-01080	1
Hedinger/Phönix	Isopropyl alcohol 70%	53348	1
Caelo	Isopropyl alcohol 70%	16049003	1
Caelo	Isopropyl alcohol 70%	53359	1
Hedinger	Isopropyl alcohol 70%	53359	2
Hedinger/Gehe	Isopropyl alcohol 70%	53351	1
Caelo	Isopropyl alcohol 70%	15437801	1
Hedinger	Isopropyl alcohol 70%	53368	2
leyh pharma	Isopropyl alcohol 70%	161411	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600948T	1
Zentiva/Alliance Health...	Isopropyl alcohol 70%	2600953T	1
Caelo	Isopropyl alcohol 70%	123456789	1
Hedinger/Noweda	Isopropyl alcohol 70%	53360	1
Defaktur/eigen	Isopropyl alcohol 70%	2216A-01080	1
Defaktur	Isopropyl alcohol 70%	2216B-01080	1
Eigenherstellung	Isopropyl alcohol 70%	2216E-01080	1
Caelo	Isopropyl alcohol 70%	2216M-01080	1
Eigen	Isopropyl alcohol 70%	Eigen	2
Caelo	Isopropyl alcohol 70%	53367	1
Eigen/Defaktur	Isopropyl alcohol 70%	2316I-01080	1
Wintrop	Isopropyl alcohol 70%	80616-12	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	18/16	1
Gehe/Hedinger26.04.16	Isopropyl alcohol 70%	53359	1
Hedinger/Gehe	Isopropyl alcohol 70%	53367	1
sittig	Isopropyl alcohol 70%	130616	1
Claudia Lange	Isopropyl alcohol 70%	60620/50La	1
Eigen	Isopropyl alcohol 70%	2416M-01080	1
Claudia Lange	Isopropyl alcohol 70%	60620/51La	1
Caelo	Isopropyl alcohol 70%	15437601	7
Hedinger	Isopropyl alcohol 70%	53370	3
Eigen/Defaktur	Isopropyl alcohol 70%	2516I-01080	1
Wolf-Apotheke	Isopropyl alcohol 70%	60623/50Dre	1
Hedinger	Isopropyl alcohol 70%	53353	1
Caelo	Isopropyl alcohol 70%	2616E-01080	1
eigene Herstellung	Isopropyl alcohol 70%	AL321	1
Otto Fischar gmbh	Isopropyl alcohol 70%	4116045	1
Eigen/Defaktur	Isopropyl alcohol 70%	2616Q-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53371	1

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Supplier	Substance	Batch	Spectra
Eigen/Defektur	Isopropyl alcohol 70%	2716A-01080	1
Claudia Lange	Isopropyl alcohol 70%	60704/50La	1
Hedinger /Sanacorp WE: ...	Isopropyl alcohol 70%	53338	1
Eigenherstellung	Isopropyl alcohol 70%	2716I01080	1
Caelo	Isopropyl alcohol 70%	2716I-01080	1
Stifts-Apotheke	Isopropyl alcohol 70%	2716Q-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53370	1
Eigenherstellung	Isopropyl alcohol 70%	1953	1
Eigenherstellung	Isopropyl alcohol 70%	Eigenherstellung	2
Martinus-Apotheke	Isopropyl alcohol 70%	A-110716-2D	1
Linden-Apotheke Görlitz	Isopropyl alcohol 70%	2816E-01080	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53367	1
Defektur/eigen	Isopropyl alcohol 70%	2816M-01080	1
Caelo	Isopropyl alcohol 70%	53369	1
Caelo	Isopropyl alcohol 70%	2916A-01080	1
Hedinger/Noweda	Isopropyl alcohol 70%	53367	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53372	1
Hedinger/Phönix	Isopropyl alcohol 70%	303035	1
Rondell Apotheke	Isopropyl alcohol 70%	3016E-01080	1
Defektur/eigen	Isopropyl alcohol 70%	3016E-01080	1
Sonnen-Apotheke Wefensl...	Isopropyl alcohol 70%	23/16	1
Caelo	Isopropyl alcohol 70%	15437802	3
Eigen/Defektur	Isopropyl alcohol 70%	3016M-01080	1
Hedinger/Alliance	Isopropyl alcohol 70%	53353	1
Hedinger/Gehe	Isopropyl alcohol 70%	53366	1
Hedinger	Isopropyl alcohol 70%	53375	1
Eigenherstellung	Isopropyl alcohol 70%	3116I-01080	1
Gehe/Hedinger	Isopropyl alcohol 70%	53370	1
Caelo	Isopropyl alcohol 70%	3081605	1
Eigen	Isopropyl alcohol 70%	3116M-01080	1
Gehe/Hedinger	Isopropyl alcohol 70%	83366	1
eigenherstellung	Isopropyl alcohol 70%	3116Q-03043	1
Hedinger	Isopropyl alcohol 70%	53371	1
Caelo	Isopropyl alcohol 70%	3216E	2
Defektur/eigen	Isopropyl alcohol 70%	3216I-01080	1
Wintrop	Isopropyl alcohol 70%	2600969T	1
Hedinger/Phönix	Isopropyl alcohol 70%	303037	3
Hedinger/ Kehr	Isopropyl alcohol 70%	53377	4
Fischar	Isopropyl alcohol 70%	4116044	1
Hedinger	Isopropyl alcohol 70%	53363	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53369	2
Caelo	Isopropyl alcohol 70%	15430005	1
Caelo	Isopropyl alcohol 70%	16138703	1
Winthrop/Phönix	Isopropyl alcohol 70%	2600852T	1
Hedinger	Isopropyl alcohol 70%	53372	1
Fagron	Isopropyl alcohol 70%		1
Eigen/Defektur	Isopropyl alcohol 70%	3516M-01080	1
Lamotte/Sanacorp	Isopropyl alcohol 70%	53377	1
Winthrop	Isopropyl alcohol 70%	2600977T	1
Hedinger/Noweda	Isopropyl alcohol 70%	53380	1
Eigen	Isopropyl alcohol 70%	3616M-01080	2
Hedinger	Isopropyl alcohol 70%	53378	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53380	2
Gehe/Hedinger	Isopropyl alcohol 70%	53379	1
N.N.	Isopropyl alcohol 70%		1
Hedinger	Isopropyl alcohol 70%	53373	1
Caelo	Isopropyl alcohol 70%	16088201	3
Rondell Apotheke	Isopropyl alcohol 70%	3816A-01080	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53382	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53377	1

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Supplier	Substance	Batch	Spectra
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53382	1
Caelo	Isopropyl alcohol 70%	16088403	3
Hedinger/Sanacorp	Isopropyl alcohol 70%	53375	1
Hedinger	Isopropyl alcohol 70%	53385	3
Hedinger	Isopropyl alcohol 70%	53383	1
Apotheke	Isopropyl alcohol 70%	12345	1
Hedinger/Gehe	Isopropyl alcohol 70%	53379	1
Hedinger/Gehe	Isopropyl alcohol 70%	53380	1
Caelo	Isopropyl alcohol 70%	53385	1
Gehe/Hedinger29.08.2016	Isopropyl alcohol 70%	53372	1
Hedinger/Gehe	Isopropyl alcohol 70%	53376	1
Hedinger	Isopropyl alcohol 70%	53382	4
Caelo	Isopropyl alcohol 70%	53383	3
Caelo	Isopropyl alcohol 70%	41161-01080	1
Hedinger	Isopropyl alcohol 70%	53386	1
Hedinger / Noweda	Isopropyl alcohol 70%	53385	1
Hedinger/Noweda	Isopropyl alcohol 70%	53379	1
allianz	Isopropyl alcohol 70%	53388	1
Caelo	Isopropyl alcohol 70%	16202803	1
Caelo	Isopropyl alcohol 70%	53378	1
Hedinger/Phönix	Isopropyl alcohol 70%	303039	3
Caelo	Isopropyl alcohol 70%	16088302	4
Hedinger/Kehr	Isopropyl alcohol 70%	53386	1
Defektur 4416A-01080	Isopropyl alcohol 70%	4416A-01080	1
Kruppa	Isopropyl alcohol 70%	1116H2	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-021116-2D	1
selbst	Isopropyl alcohol 70%	7106	1
Hedinger/Phönix	Isopropyl alcohol 70%	53385	1
WE: Phoenix 19.10.2016 ...	Isopropyl alcohol 70%	53388	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53383	1
Aug. Hedinger	Isopropyl alcohol 70%	53385	2
Eigenrezeptur	Isopropyl alcohol 70%	4616A-01080	1
Hedinger / AHD	Isopropyl alcohol 70%	53378	1
Eigenrezeptur	Isopropyl alcohol 70%	4616E-01080	1
Hedinger / Noweda	Isopropyl alcohol 70%	53387	2
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53383	1
Hedinger	Isopropyl alcohol 70%	53388	1
Hedinger	Isopropyl alcohol 70%	53387	2
Alte Apotheke	Isopropyl alcohol 70%	4716E-01080	1
Hedinger	Isopropyl alcohol 70%	53398	4
Hedinger	Isopropyl alcohol 70%	53392	2
Hedinger/Noweda	Isopropyl alcohol 70%	53383	1
Hedinger/Phönix	Isopropyl alcohol 70%	303040	1
Caelo	Isopropyl alcohol 70%	16237302	1
Eigenherstellung	Isopropyl alcohol 70%	4716Q-01080	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	47161-01080	1
Hedinger	Isopropyl alcohol 70%	53390	1
Celo	Isopropyl alcohol 70%	16167802	1
Hedinger/Phönix	Isopropyl alcohol 70%	53397	1
hedinger/noweda	Isopropyl alcohol 70%	53397	1
Caelo	Isopropyl alcohol 70%	53395	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53382	1
Caelo	Isopropyl alcohol 70%	16167802	2
Hedinger/Gehe	Isopropyl alcohol 70%	53388	1
Caelo	Isopropyl alcohol 70%	4116104	1
Hedinger/Kehr	Isopropyl alcohol 70%	53393	1
Hedinger/Gehe	Isopropyl alcohol 70%	53392	1
Defektur/Wolf-Apotheke	Isopropyl alcohol 70%	61215/50Dre	1
Euro OTC	Isopropyl alcohol 70%	53398	1
Hedinger/ Sanacorp	Isopropyl alcohol 70%	53398	1

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Supplier	Substance	Batch	Spectra
HEDINGER/Phönix	Isopropyl alcohol 70%	53387	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53398	1
Caelo	Isopropyl alcohol 70%	53398	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53401	4
Ichthyol über Phoenix	Isopropyl alcohol 70%	16167802	1
Eigen	Isopropyl alcohol 70%	5216E-01079	1
Hedinger/Phönix	Isopropyl alcohol 70%	53392	1
Caelo	Isopropyl alcohol 70%	Caelo	1
Hedinger/Gehe	Isopropyl alcohol 70%	53385	1
Hedinger/Gehe	Isopropyl alcohol 70%	53402	2
Caelo	Isopropyl alcohol 70%	53401	3
Hochhaus-Apotheke	Isopropyl alcohol 70%	117E-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	117A-01080	1
WE 27.12.16 Hedinger/Ph...	Isopropyl alcohol 70%	53401	1
Caelo	Isopropyl alcohol 70%	2601004T	1
Sanacorp (Hedinger)	Isopropyl alcohol 70%	53397	1
Hedinger	Isopropyl alcohol 70%	53404	3
Defektur	Isopropyl alcohol 70%	170109002	1
Hedinger/Phönix	Isopropyl alcohol 70%	53401	2
Hedinger	Isopropyl alcohol 70%	53402	3
Noweda/ Hedinger	Isopropyl alcohol 70%	53383	1
Caelo	Isopropyl alcohol 70%	2171-01080	1
Caelo	Isopropyl alcohol 70%	53396	1
Apotheke Dunningen	Isopropyl alcohol 70%	317A-01080	1
Hedinger/Gehe	Isopropyl alcohol 70%	53401	2
Hedinger/Noweda	Isopropyl alcohol 70%	53397	1
Stifts-Apotheke	Isopropyl alcohol 70%	317E-01080	1
Hedinger/Noweda	Isopropyl alcohol 70%	53395	1
Hedinger	Isopropyl alcohol 70%	53401	1
Caelo	Isopropyl alcohol 70%	16167902	3
EIGENHERSTELLUNG	Isopropyl alcohol 70%	19012017	1
Martinus-Apotheke	Isopropyl alcohol 70%	A-200117-1D	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53396	1
Hedinger/Phönix	Isopropyl alcohol 70%	303042	1
Caelo	Isopropyl alcohol 70%	16296604	1
Caelo	Isopropyl alcohol 70%	53404	1
Caelo	Isopropyl alcohol 70%	16167601	3
Kruppa	Isopropyl alcohol 70%	117H2	1
Alte Apo Defektur	Isopropyl alcohol 70%	517I-01080	1
Eigenherstellung	Isopropyl alcohol 70%	517Q-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53404	1
Geilenkirchen/Hedinger	Isopropyl alcohol 70%	53404	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53410	1
Apotheke	Isopropyl alcohol 70%	70214/51Dre	1
Hedinger	Isopropyl alcohol 70%	53407	1
SanacorpWE:19.01.2017 ...	Isopropyl alcohol 70%	53407	2
Caelo	Isopropyl alcohol 70%	16167801	1
Hedinger/Anz	Isopropyl alcohol 70%	53399	1
Caelo	Isopropyl alcohol 70%	53408	1
Fagron	Isopropyl alcohol 70%	53411	3
Hedinger/Sanacorp	Isopropyl alcohol 70%	3407	1
Hedinger	Isopropyl alcohol 70%	53411	1
Caelo	Isopropyl alcohol 70%	9171-01080	1
Hubertus Apotheke	Isopropyl alcohol 70%	103172	1
Hubertus Apotheke	Isopropyl alcohol 70%	103171	1
Hubertus Apotheke	Isopropyl alcohol 70%	103173	1
hochhaus-Apotheke	Isopropyl alcohol 70%	917M-01080	1
Kruppa	Isopropyl alcohol 70%	317H2	1
Hedinger/AHD	Isopropyl alcohol 70%	53407	1
Hedinger/Phoenix	Isopropyl alcohol 70%	53392	1

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Supplier	Substance	Batch	Spectra
Selbsterstellung	Isopropyl alcohol 70%	1017A-07096	1
Hedinger/Phönix	Isopropyl alcohol 70%	53410	3
Caelo	Isopropyl alcohol 70%	11031704	1
Noweda/ Hedinger	Isopropyl alcohol 70%	53408	1
Hedinger	Isopropyl alcohol 70%	53410	1
Caelo	Isopropyl alcohol 70%	53416	1
Caelo	Isopropyl alcohol 70%	16319001	3
Hedinger/Noweda	Isopropyl alcohol 70%	53406	1
Hedinger/Gehe	Isopropyl alcohol 70%	53416	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53416	3
Caelo	Isopropyl alcohol 70%	16319101	2
Kehr/Hedinger	Isopropyl alcohol 70%	53406	1
Hedinger/Phönix	Isopropyl alcohol 70%	303045	1
Caelo	Isopropyl alcohol 70%	27031704	1
bison	Isopropyl alcohol 70%	317H4	1
Hedinger	Isopropyl alcohol 70%	53400	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53412	1
Eigen	Isopropyl alcohol 70%	1317N-01080	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53411	1
Gehe	Isopropyl alcohol 70%	16318901	1
Caelo	Isopropyl alcohol 70%	53415	1
Hedinger/Noweda	Isopropyl alcohol 70%	53410	1
Hedinger	Isopropyl alcohol 70%	53406	1
Kehr/Hedinger	Isopropyl alcohol 70%	53419	4
Hedinger	Isopropyl alcohol 70%	53412	2
Hedinger	Isopropyl alcohol 70%	53418	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53416	1
Phoenix	Isopropyl alcohol 70%	4116125053416	1
Gehe	Isopropyl alcohol 70%	16319001	1
Caelo	Isopropyl alcohol 70%	13041701	1
Hedinger	Isopropyl alcohol 70%	53409	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	704103	1
Alte Apo Defektur	Isopropyl alcohol 70%	1617M-01080	1
Caelo	Isopropyl alcohol 70%	15437701	1
Kruppa	Isopropyl alcohol 70%	417H2	1
EIGENHERSTELLUNG	Isopropyl alcohol 70%	1717A-01080	1
Caelo	Isopropyl alcohol 70%	2x053426	1
hadinger/allianz	Isopropyl alcohol 70%	53420	1
Phoenix	Isopropyl alcohol 70%	4116126	6
Hedinger	Isopropyl alcohol 70%	53419	1
Fiebig	Isopropyl alcohol 70%	4116123	1
Hedinger/Kehr	Isopropyl alcohol 70%	53425	2
Ley/Noweda	Isopropyl alcohol 70%	170951	1
Hedinger/Gehe	Isopropyl alcohol 70%	53422	1
Caelo	Isopropyl alcohol 70%	4051704	1
Caelo	Isopropyl alcohol 70%	5051702	1
Hedinger	Isopropyl alcohol 70%	53429	1
Apo Dunningen	Isopropyl alcohol 70%	1917A-01080	1
Otto Fischer/Fiebig	Isopropyl alcohol 70%	4117041	15
Caelo	Isopropyl alcohol 70%	16319202	1
Hedinger	Isopropyl alcohol 70%	53425	1
Noweda/ Hedinger	Isopropyl alcohol 70%	53426	1
Phönix/Hedinger	Isopropyl alcohol 70%	53426	1
Hedinger	Isopropyl alcohol 70%	53416	2
Caelo	Isopropyl alcohol 70%	16319201	3
Caelo	Isopropyl alcohol 70%	16318901	1
Hedinger	Isopropyl alcohol 70%	53421	1
Hedinger/ Phoenix	Isopropyl alcohol 70%	53413	1
Rosen Apotheke	Isopropyl alcohol 70%	2017E-07125	1
Bison	Isopropyl alcohol 70%	517H2	1

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Supplier	Substance	Batch	Spectra
Hedinger/Noweda	Isopropyl alcohol 70%	53417	2
Caelo	Isopropyl alcohol 70%	53413	1
Otto Fischer/Fiebig	Isopropyl alcohol 70%	4117042	11
HEDINGER/Phönix	Isopropyl alcohol 70%	53426	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53421	1
Hedinger	Isopropyl alcohol 70%	53427	2
Caelo	Isopropyl alcohol 70%	53426	1
Alte Apo Defektur	Isopropyl alcohol 70%	2217M-01080	1
Caelo	Isopropyl alcohol 70%	1061701	1
Hedinger/Phoenix WE: 09...	Isopropyl alcohol 70%	53410	2
Hedinger Jenne	Isopropyl alcohol 70%	53417	1
Hedinger/Kehr	Isopropyl alcohol 70%	53435	1
Hedinger	Isopropyl alcohol 70%	53437	2
Defektur	Isopropyl alcohol 70%	170529002	1
Caelo	Isopropyl alcohol 70%	53437	2
Hedinger	Isopropyl alcohol 70%	303049	2
Ley Pharma/Phönix	Isopropyl alcohol 70%	153741	1
Caelo	Isopropyl alcohol 70%	17033801	1
Hedinger/Phönix	Isopropyl alcohol 70%	3030046	1
Otto Fischer/Phönix	Isopropyl alcohol 70%	4117043	20
Gehe	Isopropyl alcohol 70%	53391	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53432	1
Hedinger/VDL	Isopropyl alcohol 70%	53425	1
hochhaus-apotheke/Eigen...	Isopropyl alcohol 70%	2417Q-01080	1
Hedinger/ Kehr	Isopropyl alcohol 70%	53429	1
Franz GmbH, Phoenix	Isopropyl alcohol 70%	53426	1
Kruppa	Isopropyl alcohol 70%	617H2	1
Caelo	Isopropyl alcohol 70%	16167901	1
Bombastus	Isopropyl alcohol 70%	16319201	1
Leyh Pharma	Isopropyl alcohol 70%	170721	2
Hedinger/Noweda	Isopropyl alcohol 70%	53439	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	2517Q-01080	1
Caelo	Isopropyl alcohol 70%	23061707	1
Hedinger / Phönix	Isopropyl alcohol 70%	53413	1
Hedinger / Phönix	Isopropyl alcohol 70%	53430	1
GEHE	Isopropyl alcohol 70%	53420	2
Sanacorp	Isopropyl alcohol 70%	53430	1
Caelo	Isopropyl alcohol 70%	17082102	3
Sanacorp	Isopropyl alcohol 70%	53417	1
Caelo	Isopropyl alcohol 70%	53428	1
Hedinger	Isopropyl alcohol 70%	53438	1
Defektur	Isopropyl alcohol 70%	2717I-07125	1
Alte Apo Defektur	Isopropyl alcohol 70%	2217Q-01080	1
Hedinger	Isopropyl alcohol 70%	53442	3
Caelo	Isopropyl alcohol 70%	9071701	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53432	4
Hedinger/Sanacorp	Isopropyl alcohol 70%	53440	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53443	1
Hedinger / Phönix	Isopropyl alcohol 70%	53442	1
Hedinger/Phönix	Isopropyl alcohol 70%	53432	1
Hedinger	Isopropyl alcohol 70%	534375310	1
Hedinger/Phönix	Isopropyl alcohol 70%	53426	1
Hedinger Jenne	Isopropyl alcohol 70%	53435	1
Hedinger Jenne	Isopropyl alcohol 70%	53441	1
kruppa	Isopropyl alcohol 70%	717H4	1
Caelo	Isopropyl alcohol 70%	17082201	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53440	1
Fischar	Isopropyl alcohol 70%	4117052	2
Hedinger/ Noweda	Isopropyl alcohol 70%	53440	1
Hedinger	Isopropyl alcohol 70%	53440	2

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 70%	53444	3
Hedinger/Gehe	Isopropyl alcohol 70%	1200717/053443	1
Hedinger	Isopropyl alcohol 70%	53443	1
Kehr	Isopropyl alcohol 70%	53444	1
Hedinger	Isopropyl alcohol 70%	53439	1
Ley/Noweda	Isopropyl alcohol 70%	172241	1
Caelo	Isopropyl alcohol 70%	2081701	1
Hedinger	Isopropyl alcohol 70%	53449	2
Noweda	Isopropyl alcohol 70%	53422	1
Hedinger	Isopropyl alcohol 70%	534275329	1
Hedinger/Kehr	Isopropyl alcohol 70%	53439	1
Finteler Apotheke	Isopropyl alcohol 70%	53425	1
Phoenix	Isopropyl alcohol 70%	53447	1
Hedinger/Phönix	Isopropyl alcohol 70%	53451	3
Alte Apo Defektur	Isopropyl alcohol 70%	3317I-01080	2
kruppa	Isopropyl alcohol 70%	817H2	1
Delta	Isopropyl alcohol 70%	53451	1
Caelo	Isopropyl alcohol 70%	21081701	1
Caelo	Isopropyl alcohol 70%	17082101	1
Caelo	Isopropyl alcohol 70%	21081702	1
Caelo	Isopropyl alcohol 70%	17082303	1
Fischar/Fiebig	Isopropyl alcohol 70%	4117064	7
Apo Dunningen	Isopropyl alcohol 70%	3517A-01080	1
Fischar/Fiebig	Isopropyl alcohol 70%	4117065	12
Caelo	Isopropyl alcohol 70%	17082302	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53456	3
Hedinger/Ebert	Isopropyl alcohol 70%	53449	2
Hedinger/Sanacorp	Isopropyl alcohol 70%	53456	1
Kehr	Isopropyl alcohol 70%	53451	1
Hedinger/Noweda	Isopropyl alcohol 70%	53443	1
Gehe/Hedinger	Isopropyl alcohol 70%	53421	1
Caelo	Isopropyl alcohol 70%	8091702	1
carina certain	Isopropyl alcohol 70%	11097	1
OttoFischar/Fiebig	Isopropyl alcohol 70%	41170	1
Fiebig/Hedinger	Isopropyl alcohol 70%	53445	1
Hedinger/Noweda	Isopropyl alcohol 70%	3817M-01080	1
Fischar	Isopropyl alcohol 70%	4117065	1
Eigenherstellung	Isopropyl alcohol 70%	3917A-01080	1
Caelo	Isopropyl alcohol 70%	28091702	1
Heidinger/Sanacorp	Isopropyl alcohol 70%	53454	1
Caelo	Isopropyl alcohol 70%	17202801	2
Hedinger / Gehe	Isopropyl alcohol 70%	303059	1
Hedinger	Isopropyl alcohol 70%	534495370	1
Caelo	Isopropyl alcohol 70%	17202802	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53451	2
Hedinger/GEHE	Isopropyl alcohol 70%	53453	1
EIGEN	Isopropyl alcohol 70%	4117E-01080	1
Hedinger	Isopropyl alcohol 70%	53462	1
Hedinger	Isopropyl alcohol 70%	303054	1
Hedinger	Isopropyl alcohol 70%	53458	2
Caelo	Isopropyl alcohol 70%	17202903	1
EIGEN	Isopropyl alcohol 70%	4117I-01080	1
Defektur	Isopropyl alcohol 70%	71016/52Dre	1
Hedinger/Noweda	Isopropyl alcohol 70%	53454	1
Hedinger/Ebert	Isopropyl alcohol 70%	53452	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53447	1
Klosterring	Isopropyl alcohol 70%	53448	1
Hedinger	Isopropyl alcohol 70%	53461	1
Alte Apo Defektur	Isopropyl alcohol 70%	4317E-01080	1
Caelo	Isopropyl alcohol 70%	17082103	2

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Supplier	Substance	Batch	Spectra
Hedinger/Phoenix	Isopropyl alcohol 70%	53453	1
HEDINGER/Phönix	Isopropyl alcohol 70%	53456	1
Eigenherstellung	Isopropyl alcohol 70%	26107	1
Hedinger	Isopropyl alcohol 70%	53465	2
Caelo	Isopropyl alcohol 70%	17203001	3
Caelo	Isopropyl alcohol 70%	53465	2
Gehe/Hedinger	Isopropyl alcohol 70%	53461	1
Hedinger	Isopropyl alcohol 70%	534405397	1
Hedinger	Isopropyl alcohol 70%	53467	1
Caelo	Isopropyl alcohol 70%	6111701	1
Hedinger / Noweda	Isopropyl alcohol 70%	53461	1
Caelo	Isopropyl alcohol 70%	6111702	1
Hedinger/Phönix	Isopropyl alcohol 70%	53462	1
Caelo	Isopropyl alcohol 70%	141117P801/17203002	1
Gehe Hedinger	Isopropyl alcohol 70%	53448	1
Hedinger	Isopropyl alcohol 70%	53463	1
Hedinger	Isopropyl alcohol 70%	53470	2
Hedinger/Ebert	Isopropyl alcohol 70%	53462	1
Caelo	Isopropyl alcohol 70%	22111701	1
Hedinger	Isopropyl alcohol 70%	53464	1
Hedinger	Isopropyl alcohol 70%	53469	1
Sanacorp WE: 21.11.17 1...	Isopropyl alcohol 70%	53460	1
Sanacorp WE: 25.10.17 1...	Isopropyl alcohol 70%	53452	1
Defektur	Isopropyl alcohol 70%	4917A-01080	1
Alte Apo Defektur	Isopropyl alcohol 70%	5017I-01080	1
Hedinger	Isopropyl alcohol 70%	534685436	1
Kehr	Isopropyl alcohol 70%	53458	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53460	3
Caelo	Isopropyl alcohol 70%	17203002/1271117	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53466	3
Hofmann und Sommer	Isopropyl alcohol 70%	940817	1
Ley/Noweda	Isopropyl alcohol 70%	174521	3
Hedinger/Noweda	Isopropyl alcohol 70%	53355	1
Caelo	Isopropyl alcohol 70%	20121701	1
Hedinger/Phönix	Isopropyl alcohol 70%	53447	1
Hedinger	Isopropyl alcohol 70%	53474	1
Caelo	Isopropyl alcohol 70%	53476	1
Caelo	Isopropyl alcohol 70%	17203101	1
Caelo	Isopropyl alcohol 70%	9011801	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53470	1
Hedinger/Phönix	Isopropyl alcohol 70%	53480	1
Hedinger/AHD	Isopropyl alcohol 70%	53479	1
Hedinger	Isopropyl alcohol 70%	53479	1
Sanacorp	Isopropyl alcohol 70%	418E-01080	1
Hedinger/Phönix	Isopropyl alcohol 70%	53456	1
Alte Apo Defektur	Isopropyl alcohol 70%	518A-01080	1
Phönix E.K:5,68 -1L	Isopropyl alcohol 70%	53474	2
Caelo	Isopropyl alcohol 70%	29011805	1
Caelo	Isopropyl alcohol 70%	17311403	3
Phönix/Leypharma	Isopropyl alcohol 70%	180311	1
Hedinger	Isopropyl alcohol 70%	303071	1
Caelo	Isopropyl alcohol 70%	53474	1
Kehr/Hedinger	Isopropyl alcohol 70%	53482	1
Hedinger/Ebert	Isopropyl alcohol 70%	53460	1
Hedinger/Noweda	Isopropyl alcohol 70%	53485	1
Hedinger	Isopropyl alcohol 70%	53468	1
Hedinger/ Noweda	Isopropyl alcohol 70%	53480	1
Caelo	Isopropyl alcohol 70%	15021802	1
Otto Fischer	Isopropyl alcohol 70%	4117121	1
Alte Apo Defektur	Isopropyl alcohol 70%	818E-01080	1

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Supplier	Substance	Batch	Spectra
Hedinger/Phönix	Isopropyl alcohol 70%	53479	1
Gehe/Hedinger	Isopropyl alcohol 70%	53473	1
Hedinger	Isopropyl alcohol 70%	53480	2
Kruppa	Isopropyl alcohol 70%	218H2	1
Kruppa	Isopropyl alcohol 70%	118H4	1
Caelo	Isopropyl alcohol 70%	17358201	8
Hedinger Gehe	Isopropyl alcohol 70%	53473	1
Hedinger Gehe	Isopropyl alcohol 70%	53476	1
Hedinger	Isopropyl alcohol 70%	534895520	1
Hedinger	Isopropyl alcohol 70%	534685475	1
Phönix/Hedinger	Isopropyl alcohol 70%	53486	2
Hedinger/Phönix	Isopropyl alcohol 70%	53486	1
Caelo	Isopropyl alcohol 70%	12031801	1
Kehr	Isopropyl alcohol 70%	53486	1
Caelo	Isopropyl alcohol 70%	15031803	1
Fischar/Phoenix	Isopropyl alcohol 70%	4117091	1
Phoenix/Cealo	Isopropyl alcohol 70%	53496	1
Hedinger/Gehe	Isopropyl alcohol 70%	53482	1
Hedinger	Isopropyl alcohol 70%	53484	1
Hedinger/Noweda	Isopropyl alcohol 70%	53491	1
Alte Apo Defektur	Isopropyl alcohol 70%	1418I-01080	1
Hedinger/Sanacorop	Isopropyl alcohol 70%	53493	1
Caelo	Isopropyl alcohol 70%	17358202	1
Caelo	Isopropyl alcohol 70%	14041802	1
Hedinger/Kehr	Isopropyl alcohol 70%	53497	1
Hedinger/ Noweda	Isopropyl alcohol 70%	53499	1
Otto Fischer	Isopropyl alcohol 70%	4118011	1
Caelo	Isopropyl alcohol 70%	53496	1
Kruppa	Isopropyl alcohol 70%	418H4	1
Hedinger/Phönix	Isopropyl alcohol 70%	53488	4
Caelo	Isopropyl alcohol 70%	18073702	4
Hedinger/Gehe	Isopropyl alcohol 70%	53492	1
Fischar/Phönix	Isopropyl alcohol 70%	4117126	1
Caelo	Isopropyl alcohol 70%	18073702/1170418	1
Caelo	Isopropyl alcohol 70%	305201801	1
Alte Apo Defektur	Isopropyl alcohol 70%	1918I-01080	1
Hedinger/Phönix	Isopropyl alcohol 70%	53497	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53495	1
Caelo	Isopropyl alcohol 70%	534825599	1
Caelo	Isopropyl alcohol 70%	18051801	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53505	1
Caelo	Isopropyl alcohol 70%	18073801	1
Caelo	Isopropyl alcohol 70%	53493	3
Kruppa	Isopropyl alcohol 70%	518H2	1
Hedinger/Fiebig	Isopropyl alcohol 70%	53510	1
Caelo	Isopropyl alcohol 70%	18073902	5
Sanacorop	Isopropyl alcohol 70%	2218E-01080	1
Gehe/ Hedinger	Isopropyl alcohol 70%	53494/1300518	1
Kehr	Isopropyl alcohol 70%	53484	1
Kehr	Isopropyl alcohol 70%	53498	2
Kehr/A.Hedinger	Isopropyl alcohol 70%	53490	1
Hedinger/Sanacorop	Isopropyl alcohol 70%	53494	2
Caelo	Isopropyl alcohol 70%	4118012	1
Hedinger/Anzag	Isopropyl alcohol 70%	53497	1
GEHE	Isopropyl alcohol 70%	53491	1
hedinger	Isopropyl alcohol 70%	303073	1
Hedinger/Ebert	Isopropyl alcohol 70%	53494	1
Hedinger/Ebert	Isopropyl alcohol 70%	53506	2
Hedinger	Isopropyl alcohol 70%	53491	1
Hedinger/Ebert	Isopropyl alcohol 70%	53504	1

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Supplier	Substance	Batch	Spectra
Hedinger	Isopropyl alcohol 70%	303081	1
Hedinger	Isopropyl alcohol 70%	53509	1
Caelo	Isopropyl alcohol 70%	20061801	1
Caelo	Isopropyl alcohol 70%	18073901	1
Defektur	Isopropyl alcohol 70%	80625/50A1	1
Hedinger/Anz	Isopropyl alcohol 70%	53514	1
Fischar	Isopropyl alcohol 70%	4118051	1
Delta	Isopropyl alcohol 70%	18073702	1
Alte Apo Defektur	Isopropyl alcohol 70%	2818M-01080	1
Hedinger/Gehe	Isopropyl alcohol 70%	53511	1
Kruppa	Isopropyl alcohol 70%	718H4	1
Kruppa	Isopropyl alcohol 70%	718H6	1
Caelo	Isopropyl alcohol 70%	19071801	1
Caelo	Isopropyl alcohol 70%	19071802	1
hedinger /AHD	Isopropyl alcohol 70%	535045666	1
Caelo	Isopropyl alcohol 70%	18114001	2
Otto Fischer	Isopropyl alcohol 70%	4118062	1
Hedinger	Isopropyl alcohol 70%	303087	1
Delta	Isopropyl alcohol 70%	53510	1
Alte Apo Defektur	Isopropyl alcohol 70%	3218M-01080	1
Hedinger/Klosterring	Isopropyl alcohol 70%	53518	1
Hedinger/Noweda	Isopropyl alcohol 70%	53517	1
Hedinger Gehe	Isopropyl alcohol 70%	53517	1
Lehy/ Noweda	Isopropyl alcohol 70%	182741	1
Kruppa	Isopropyl alcohol 70%	818H7	1
Kehr	Isopropyl alcohol 70%	53516	1
Hedinger/Spangro	Isopropyl alcohol 70%	53508	1
Caelo	Isopropyl alcohol 70%	21081801	1
Caelo	Isopropyl alcohol 70%	18114101	1
EIGEN	Isopropyl alcohol 70%	EIGEN	1
Hedinger/Phönix	Isopropyl alcohol 70%	53520	1
Caelo	Isopropyl alcohol 70%	10091802	1
Hedinger/Phönix	Isopropyl alcohol 70%	53523	2
Hedinger/Noweda	Isopropyl alcohol 70%	53526	1
Caelo	Isopropyl alcohol 70%	18114202	3
Berliner Bär Apotheke	Isopropyl alcohol 70%	H819091	2
Alte Apo Defektur	Isopropyl alcohol 70%	3818I-01080	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53519	1
Hedinger/Spangro	Isopropyl alcohol 70%	53524	3
Hedinger/Noweda	Isopropyl alcohol 70%	53518	3
Hedinger GmbH & Co. KG	Isopropyl alcohol 70%	53515	1
hedinger/ Sanacorp	Isopropyl alcohol 70%	535105725	1
selbst	Isopropyl alcohol 70%	8108	1
Hedinger/Phönix	Isopropyl alcohol 70%	53539	1
Hedinger/Gehe	Isopropyl alcohol 70%	53532	2
Phönix/Hedinger	Isopropyl alcohol 70%	53525	1
hedinger/ Sanacorp	Isopropyl alcohol 70%	535265764	1
Caelo	Isopropyl alcohol 70%	24101804	1
Otto Fischer GmbH	Isopropyl alcohol 70%	4118073	1
Caelo	Isopropyl alcohol 70%	30101801	1
Phönix/Hedinger	Isopropyl alcohol 70%	53513	1
Phönix/Hedinger	Isopropyl alcohol 70%	53153	1
Defektur	Isopropyl alcohol 70%	819060	1
Caelo	Isopropyl alcohol 70%	8111802	2
Caelo	Isopropyl alcohol 70%	18235002	2
Caelo	Isopropyl alcohol 70%	182731	2
Hedinger Gehe	Isopropyl alcohol 70%	53536	1
Caelo	Isopropyl alcohol 70%	5121814	1
Gehe 07.12.18	Isopropyl alcohol 70%	18235302	1
Eigenherstellung	Isopropyl alcohol 70%	5018I-01080	1

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl alcohol 70%	18235101	2
Ebert/Hedinger	Isopropyl alcohol 70%	53526	1
Hedinger/Sanacorp	Isopropyl alcohol 70%	53540	1
Caelo	Isopropyl alcohol 70%	18235201	1
Caelo	Isopropyl alcohol 70%	8011901	1
Ebert/Hedinger	Isopropyl alcohol 70%	53550	1
Hedinger Gehe	Isopropyl alcohol 70%	53549	1
Hedinger	Isopropyl alcohol 70%	53525	1
Sanacorp	Isopropyl alcohol 70%	419E-01080	1
Caelo	Isopropyl alcohol 70%	22011901	1
Hedinger/Phönix	Isopropyl alcohol 70%	53541	1
Hedinger/Spangro	Isopropyl alcohol 70%	53548	1
Apotheke am Marktplatz	Isopropyl alcohol 70%	3618M-01080	1

- 106 313 spectra from 582 *Apo-Ident* customers from a total of 29 680 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 *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	160	0	35 675
Type B	0	680	0	78 398
Type C	0	1590	56	106 313

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.1176 %)
Type C	100.0000 % (> 99.6449 %)	96.5978 % (> 96.4156 %)

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.

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	76.85
31622	33105	6.19	67.81
31831	31388	3.90	74.20
33105	33105	0.00	67.71

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Isopropyl myristate
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30977-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20130502
Euro OTC	Isopropyl myrist...	1508035	31774	40	20150907*

Validation samples

A total of 222872 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 *Isopropyl myristate*. These samples are listed above in the [calibration samples](#) section.
- 35635 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 200 spectra of 6 reference samples from the substance/substance group *Isopropyl myristate*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Isopropyl myristate	1303034-03	31530 [†]	20
Euro OTC	Isopropyl myristate	1508035	31774 [†]	20
Euro OTC	Isopropyl myristate	1608039	32776	40
Caelo	Isopropyl myristate	172729	33882	40
Euro OTC	Isopropyl myristate	1801035	33926	40
Caelo	Isopropyl myristate	181308	34234	40

- 78878 spectra from a total of 1824 batches from further 350 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.

*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.

[†]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*.

- 210 spectra from 106 *Apo-Ident* customers from 59 batches from the substance/substance group *Isopropyl myristate*.

Supplier	Substance	Batch	Spectra
Euro OTC	Isopropyl myristate	1106026-01	1
Caesar&Loretz GmbH D-40...	Isopropyl myristate	1201008-01	1
Caelo	Isopropyl myristate	11178415	1
Euro OTC	Isopropyl myristate	1201008-01	3
Fiebig ek: 3,00EUR 31.08.12	Isopropyl myristate	1201008-01	1
Euro OTC	Isopropyl myristate	120100801	1
Sanacorp	Isopropyl myristate	12171511	1
Anzag	Isopropyl myristate	120100801	1
EuRho	Isopropyl myristate	1201008-01	1
EuRho	Isopropyl myristate	1106026-01	1
EuRho	Isopropyl myristate	12100801	1
Euro OTC	Isopropyl myristate	1212031-01	4
Noweda	Isopropyl myristate	12171511	1
Fiebig 3.04.13 ek: 3,45EUR	Isopropyl myristate	121203101	2
Caelo	Isopropyl myristate	12248600	1
Caelo	Isopropyl myristate	12171518	1
Caelo	Isopropyl myristate	12171522	3
Caelo	Isopropyl myristate	13019902	2
AHD	Isopropyl myristate	1301992	1
Euro OTC	Isopropyl myristate	1303034-01	5
Phönix, 18.07.2013	Isopropyl myristate	130303401	1
Caelo	Isopropyl myristate	1303034-01	1
Euro/Phönix	Isopropyl myristate	1303034-01	1
Euro OTC	Isopropyl myristate	1303034-02	19
Phönix	Isopropyl myristate	12171522	1
Phönix	Isopropyl myristate	13019910	1
Caelo	Isopropyl myristate	13019910	2
EuRho/Phönix	Isopropyl myristate	1212031-01	1
Caesar & Loretz GmbH	Isopropyl myristate	13019902	1
Euro OTC	Isopropyl myristate	130133402	1
Euro OTC	Isopropyl myristate	1303034	1
Caelo	Isopropyl myristate	13144308	7
Euro/ Sanacorp	Isopropyl myristate	1303034-02	1
Euro OTG	Isopropyl myristate	1303034-02	1
Caelo	Isopropyl myristate	130303402	1
Euro OTC	Isopropyl myristate	1303034-03	9
Euroo/Phoenix	Isopropyl myristate	1303034-03	1
Caelo	Isopropyl myristate	14155909	7
Caelo	Isopropyl myristate	1407015-01	1
Euro OTC	Isopropyl myristate	130303403	1
Euro OTC	Isopropyl myristate	1407015-01	4
GEHE 26.11.2014	Isopropyl myristate	1303034-03	1
Euro OTC	Isopropyl myristate	1407015-02	3
Noweda	Isopropyl myristate	1407015-01	1
Caelo	Isopropyl myristate	14155914	1
Euro/ Sanacorp	Isopropyl myristate	1407015-01	1
Caelo	Isopropyl myristate	14155902	1
Euro OTC	Isopropyl myristate	1407015	1
Caelo	Isopropyl myristate	30051502	1
Fagron	Isopropyl myristate	13A17-B03-295774	2
EuRho/Phönix	Isopropyl myristate	1407015-03	1
Euro OTC	Isopropyl myristate	1407015-03	10
Phoenix	Isopropyl myristate	1407015-03	2
Euro OTC	Isopropyl myristate	1508035-01	16
Caelo	Isopropyl myristate	15035906	3

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Supplier	Substance	Batch	Spectra
Euro OTC	Isopropyl myristate	140701503	1
Euro OTC	Isopropyl myristate	41140874	1
Caelo	Isopropyl myristate	1508035-01	3
Euro/Phoenix	Isopropyl myristate	1508035	1
Wolf-Apotheke	Isopropyl myristate	1508035-02	1
	Isopropyl myristate	1508035-02	1
Caelo	Isopropyl myristate	15284804	1
Euro OTC	Isopropyl myristate	1508035	1
Euro OTC	Isopropyl myristate	3515Q-02898	1
Euro OTC	Isopropyl myristate	1508035-02	5
Caelo	Isopropyl myristate	15284807	1
Caelo	Isopropyl myristate	15438204	4
Caelo	Isopropyl myristate	15438024	1
Euro OTC	Isopropyl myristate	1608039-01	12
Caelo	Isopropyl myristate	15248304	2
Caelo	Isopropyl myristate	15438206	1
Caelo	Isopropyl myristate	15248306	4
Caelo	Isopropyl myristate	15438210	1
Caelo	Isopropyl myristate	1608039-01	1
Caelo	Isopropyl myristate	2091713	1
Euro OTC	Isopropyl myristate	1608039-02	4
Caelo	Isopropyl myristate	15438215	4
AHD	Isopropyl myristate	15438215	1
Caelo	Isopropyl myristate	17272901	3
Euro OTC	Isopropyl myristate	1608039	1
Caelo	Isopropyl myristate	17359501	2
Caelo	Isopropyl myristate	21071805	1
Caelo	Isopropyl myristate	18130801	2
Sanacorp	Isopropyl myristate	18130801	1
Euro OTC	Isopropyl myristate	1801035-01	5
Euro OTC	Isopropyl myristate	180135-01	1
Nachtestung-Verlängerung	Isopropyl myristate	349/18	1

- 107 749 spectra from 582 *Apo-Ident* customers from a total of 30 621 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 *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	200	0	35 635
Type B	0	200	0	78 878
Type C	0	207	3	107 749

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6450 %)	98.5714 % (> 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.

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	30.51
31363	31363	0.00	29.60
31530	31774	1.38	32.66
31774	31774	0.00	33.14

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Isopropyl palmitate
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30868-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Isopropyl palmit...	12229109	30868	40	20120807
Bombastus	Isopropyl palmit...	284060	31268	40	20131119
Caelo	Isopropyl palmit...	14034806	31364	40	AR-15-FG-000372-01
Bombastus	Isopropyl palmit...	306390	33040	40	20161219

Validation samples

A total of 222 872 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 *Isopropyl palmitate*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Isopropyl palmitate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Isopropyl palmitate	16091706	32570	40
Bombastus	Isopropyl palmitate	306390	32995	40
Caelo	Isopropyl palmitate	180672	34079	40

- 78 958 spectra from a total of 1827 batches from further 350 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.

- 336 spectra from 183 *Apo-Ident* customers from 86 batches from the substance/substance group *Isopropyl palmitate*.

Supplier	Substance	Batch	Spectra
Bombastus	Isopropyl palmitate	266038	3
Caelo	Isopropyl palmitate	4061201	1

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Supplier	Substance	Batch	Spectra
Bombastus	Isopropyl palmitate	269359	2
Hedinger	Isopropyl palmitate	271265	1
Caelo	Isopropyl palmitate	11207309	1
GEHE	Isopropyl palmitate	269359	1
Caelo	Isopropyl palmitate	17091205	1
Caelo	Isopropyl palmitate	273823	2
Bombastus	Isopropyl palmitate	271265	2
Caelo	Isopropyl palmitate	20210212-1	1
Bombastus	Isopropyl palmitate	275014	6
Bombastus	Isopropyl palmitate	273823	2
Caelo	Isopropyl palmitate	11207301	5
Caelo	Isopropyl palmitate	12014106	2
Bombastus	Isopropyl palmitate	272307	3
Sanacorp	Isopropyl palmitate	273823	1
Euro OTC	Isopropyl palmitate		1
Caelo	Isopropyl palmitate	25031302	1
Caelo	Isopropyl palmitate	12229109	2
Bombastus	Isopropyl palmitate	262190	1
Anzag	Isopropyl palmitate	277740Bombastus	1
Gehe	Isopropyl palmitate	12229112	1
Bombastus	Isopropyl palmitate	277740	3
Bombastus	Isopropyl palmitate	276178	1
Caelo	Isopropyl palmitate	15071303	1
Bombastus	Isopropyl palmitate	279468	4
Bombastus	Isopropyl palmitate	9082013B	1
Caelo	Isopropyl palmitate	13134903	3
Fiebig 21.08.13 EK5,60	Isopropyl palmitate	13134903	1
Bombastus	Isopropyl palmitate	281057	6
Bombastus	Isopropyl palmitate	60092401	2
Caelo	Isopropyl palmitate	13134905	3
Bombastus	Isopropyl palmitate	281766	6
Caelo	Isopropyl palmitate	28111309	1
Caelo	Isopropyl palmitate	9324202	1
Caelo	Isopropyl palmitate	13134906	2
Noweda	Isopropyl palmitate	13134906	1
Caelo	Isopropyl palmitate	281766	2
Phoenix	Isopropyl palmitate	281766	1
Bombastus	Isopropyl palmitate	26041301	1
Caelo	Isopropyl palmitate	26021402	1
Bombastus	Isopropyl palmitate	284060	7
Gutenberg-Apotheke	Isopropyl palmitate	285604	1
Caelo	Isopropyl palmitate	13134909	1
Caelo	Isopropyl palmitate	14034806	5
Fagron	Isopropyl palmitate	9G14-M08	1
Audor Pharma	Isopropyl palmitate	285604	1
Bombastus	Isopropyl palmitate	4613Q-02899	1
Bombastus	Isopropyl palmitate	285604	5
Brückenapotheke	Isopropyl palmitate	285604	1
Caelo	Isopropyl palmitate	2081401	1
Bombastus	Isopropyl palmitate	288083	9
AHD	Isopropyl palmitate	14034801	1
Caelo	Isopropyl palmitate	14034807	7
AHD	Isopropyl palmitate	288083	1
Bombas über Sanacorp	Isopropyl palmitate	290363	1
Sanacorp	Isopropyl palmitate	14034807	1
Bombastus	Isopropyl palmitate	290363	3
Bombastus	Isopropyl palmitate	291043	8
Sanacorp	Isopropyl palmitate	290363	1
Caelo	Isopropyl palmitate	16021504	1
Caelo	Isopropyl palmitate	14213111	2

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Supplier	Substance	Batch	Spectra
Bombastus	Isopropyl palmitate	293140	16
Caelo	Isopropyl palmitate	14034801	1
Caelo	Isopropyl palmitate	293140	1
VDL;4,53EUR;23.06.15	Isopropyl palmitate	29314	1
bombast/Px	Isopropyl palmitate	293140	1
Caelo	Isopropyl palmitate	16071504	1
Fagron	Isopropyl palmitate	293140	1
Noweda	Isopropyl palmitate	14213111	1
Caelo	Isopropyl palmitate	291043	1
Caelo	Isopropyl palmitate	15128803	8
Sanacorp	Isopropyl palmitate	15128803	1
Caelo	Isopropyl palmitate	60092401	1
Bombastus	Isopropyl palmitate	297284	14
Caelo	Isopropyl palmitate	15169701	11
Caelo	Isopropyl palmitate	297284	1
Caeol/Phoenix	Isopropyl palmitate	15169701	1
Bombastus	Isopropyl palmitate	299989	11
Caelo	Isopropyl palmitate	15169702	2
Caelo	Isopropyl palmitate	15169705	2
Caesar/Noweda	Isopropyl palmitate	16091701	1
Caelo	Isopropyl palmitate	16091701	7
phönix	Isopropyl palmitate	299989	1
Caelo	Isopropyl palmitate	1516975	1
Bomb/Gehe	Isopropyl palmitate	299989	1
Sanacorp	Isopropyl palmitate	16091701	2
Caelo	Isopropyl palmitate	16091706	10
Ichthyol-Gesellschaft	Isopropyl palmitate	299989	1
Bombastus	Isopropyl palmitate	302669	17
Bombastus	Isopropyl palmitate	3015I-02899	1
Sanacorp, 4,85EUR, 14.1.17	Isopropyl palmitate	302669	1
Caelo	Isopropyl palmitate	16091706/1060217	1
Caelo	Isopropyl palmitate	16091709	2
Phönix	Isopropyl palmitate	16333401	1
Bombastus	Isopropyl palmitate	307838	9
Gehe	Isopropyl palmitate	16091701	1
Bombastus	Isopropyl palmitate	108611	2
Caelo	Isopropyl palmitate	16333401	4
Bombastus	Isopropyl palmitate	306390	3
Bombastus	Isopropyl palmitate	170703IP/306390	1
Caelo	Isopropyl palmitate	10071702	1
Caelo	Isopropyl palmitate	1633401	1
Delta	Isopropyl palmitate	307838	1
Noweda	Isopropyl palmitate	16333404	1
Anzag	Isopropyl palmitate	16333401	1
Caelo	Isopropyl palmitate	16333404	6
Caelo	Isopropyl palmitate	307838	1
Bombastus	Isopropyl palmitate	309754	1
Caelo	Isopropyl palmitate	17021402	11
Phönix	Isopropyl palmitate	309754	1
Bombastus	Isopropyl palmitate	17000844	3
Caelo	Isopropyl palmitate	1721402	1
Bombastus	Isopropyl palmitate	17001786	2
Caelo	Isopropyl palmitate	28031801	1
Bionorica/Kehr	Isopropyl palmitate	17000844	1
Caelo	Isopropyl palmitate	9061814	1
Sanacorp	Isopropyl palmitate	18067201	1
Bombastus	Isopropyl palmitate	18001978	2
bomb	Isopropyl palmitate	18001978	1
Caelo	Isopropyl palmitate	18003207	1
Caelo	Isopropyl palmitate	18067201	5

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Supplier	Substance	Batch	Spectra
Caelo	Isopropyl palmitate	16081808	1
Allianz	Isopropyl palmitate	18067201	1
Caelo	Isopropyl palmitate	21111820	1
Caelo	Isopropyl palmitate	18067204	3
Nachtestung-Verlängerung	Isopropyl palmitate	240/17	1
Bombastus	Isopropyl palmitate	19000596	1

- 107 623 spectra from 582 *Apo-Ident* customers from a total of 30 597 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	334	2	107 623

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6450 %)	99.4048 % (> 98.5119 %)

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.

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	5.13	16.44
31268	31364	2.70	18.56
31364	31364	0.00	19.48
33040	31364	11.74	23.12

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Juniper oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30711-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20130726
Caelo	Juniper oil	16160703	32918	40	1708747
Caelo	Juniper oil	171597	33311	40	20170601*

Validation samples

A total of 222872 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 *Juniper oil*. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 70 spectra of 3 reference samples from the substance/substance group *Juniper oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Juniper oil	13240807	31244	10
Caelo	Juniper oil	13240811	31665 [†]	20
Caelo	Juniper oil	15185205	32352	40

- 79008 spectra from a total of 1827 batches from further 350 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 16 *Apo-Ident* customers from 12 batches from the substance/substance group *Juniper 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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Juniper oil	11379012	2
Sanacorp	Juniper oil	11379012	1
Caelo	Juniper oil	11379006	1
Caelo	Juniper oil	11379007	1
Caelo	Juniper oil	11379003	1
Caelo	Juniper oil	12322707	1
Caelo	Juniper oil	18121306	1
Caelo	Juniper oil	13240802	3
Caelo	Juniper oil	111275	1
VDL;15.05.15;9,95EUR	Juniper oil	14115802	1
Caelo	Juniper oil	14115802	3
Caelo	Juniper oil	15141302	1
Caelo	Juniper oil	15185205	1
Caelo	Juniper oil	18056101	2

- 107 939 spectra from 582 *Apo-Ident* customers from a total of 30 668 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 *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	160	0	35 675
Type B	0	70	0	79 008
Type C	0	19	1	107 939

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 91.4286 %)
Type C	100.0000 % (> 99.6454 %)	95.0000 % (> 80.0000 %)

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.

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
30711	30711	0.00	29.53
31665	30711	15.69	25.96
32918	32918	0.00	32.50
33311	33311	0.00	26.30

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Lactic acid**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30021-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Lactic acid; Acidum lacticum

Special notes

When selecting the *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*
Appendix F [Addition to the second-stage models](#)

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.

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 *Lactic acid*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Lactic acid	12142108	30734	39	AR-14-FG-012230-01
Caelo	Lactic acid	13317311	31436	40	20131011
Caelo	Lactic acid	16144212	33271	40	20160527

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 119 spectra of 3 reference samples from the substance/substance group *Lactic acid*. These samples are listed above in the [calibration samples](#) section.
- 35 716 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Lactic acid*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lactic acid	90646219	30021	40
Caelo	Lactic acid	13317311	31436 [†]	20
Caelo	Lactic acid	172176	33694	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 630 spectra from 325 *Apo-Ident* customers from 110 batches from the substance/substance group *Lactic acid*.

Supplier	Substance	Batch	Spectra
Caelo	Lactic acid	11179207	2

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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	Lactic acid	11179217	6
Gehe	Lactic acid	11179217	1
Caelo	Lactic acid	11179209	1
Caelo	Lactic acid	12142101	9
Caelo	Lactic acid	90646369	1
Caelo	Lactic acid	1309211034	1
Caelo	Lactic acid	11179214	1
Caelo	Lactic acid	2101202	1
Caelo	Lactic acid	2710Q-01034	1
GEHE	Lactic acid	21021180/2	1
Caelo	Lactic acid	12142104	2
	Lactic acid	71449138	2
Caelo	Lactic acid	12142108	5
Caelo	Lactic acid	12142102	6
Caelo	Lactic acid	9321404	1
Caelo	Lactic acid	20221110-4	1
Caelo	Lactic acid	12142109	2
Bombastus	Lactic acid	12142108	2
Caelo	Lactic acid	12142112	10
Purren Apotheke	Lactic acid	12069	1
Caelo	Lactic acid	11179201	2
Noweda	Lactic acid	81302139	1
Caelo	Lactic acid	913Q-01034	1
Caelo	Lactic acid	408Q-01034	1
Caelo	Lactic acid	13020201	19
Caelo	Lactic acid	11111644	1
Caelo	Lactic acid	A-310513-1	1
Caelo	Lactic acid	A-220413-3	1
Caesar/Lorenz	Lactic acid	13020201	1
Caelo	Lactic acid	13020203	7
Noweda	Lactic acid	13020208	1
Caelo	Lactic acid	1302021	1
Caelo	Lactic acid	13020208	7
Gehe	Lactic acid	13020208	1
Sanacorp	Lactic acid	13020201	1
Caelo	Lactic acid	13020808	1
Caelo	Lactic acid	13020211	18
Phönix, 21.03.2013	Lactic acid	13020201	1
Caelo	Lactic acid	16121-01034	1
Caelo	Lactic acid	10323202	1
Bombastus	Lactic acid	10323202	1
Caesar&Loretz GmbH/Anzag	Lactic acid	13020211	1
Unisan	Lactic acid	13020208	2
Caelo	Lactic acid	9064607	1
Caelo	Lactic acid	13317304	1
AHD, 25.11.13	Lactic acid	1302011	1
Caelo	Lactic acid	13317301	32
Phönix	Lactic acid	13020211	1
Caelo	Lactic acid	130360	1
Caelo	Lactic acid	1062014C	1
Caelo	Lactic acid	5031301	1
Caelo	Lactic acid	81302029	1
Caelo	Lactic acid	13317307	12
Caelo	Lactic acid	10/AKD1	1
Caesar&lorenz,AHC	Lactic acid	13317309	1
Caelo	Lactic acid	13030201	1
Caelo	Lactic acid	13317309	2
Caelo	Lactic acid	13317308	9
Caelo	Lactic acid	13317303	2
Sanacorp	Lactic acid	13317307	1

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Supplier	Substance	Batch	Spectra
Caelo	Lactic acid	13020212	1
Caelo	Lactic acid	133173082x	1
Caelo	Lactic acid	13317313	5
Caesar & Loretz GmbH	Lactic acid	13317308	1
Gutenberg-Apotheke	Lactic acid	13317303	1
Caelo	Lactic acid	2182	1
Caelo	Lactic acid	13317311	16
Caelo	Lactic acid	13317393	1
Caelo	Lactic acid	13317315	4
Caelo	Lactic acid	14112107	12
Caelo	Lactic acid	14112106	3
Caelo	Lactic acid	14112017	1
Caelo	Lactic acid	14112112	6
Euro OTC	Lactic acid	14112112	1
Caesar & Loretz GmbH Hi...	Lactic acid	14112112	1
Cealo/Kehr	Lactic acid	13317312	1
Caesar & Loretz GmbH	Lactic acid	14112107	1
Sanacorp	Lactic acid	13317311	1
Caelo	Lactic acid	14112114	3
Phoenix Goettin	Lactic acid	14112115	1
Caelo	Lactic acid	12142162	1
Caelo	Lactic acid	14112115	9
Fagron	Lactic acid	14112112	2
Caelo	Lactic acid	17031502	1
Caelo	Lactic acid	14112119	16
Gehe	Lactic acid	14112119	1
Caelo	Lactic acid	15150401	7
Noweda 18.05.2015	Lactic acid	141121119	1
Caelo	Lactic acid	1510402	1
Caelo	Lactic acid	14112116	3
A.H.D.	Lactic acid	15150402	1
AHD; 20.7.15; 5.84EUR	Lactic acid	15150402	1
Caelo	Lactic acid	15150402	17
Caelo	Lactic acid	15150410	17
Caelo	Lactic acid	15150405	2
Caelo	Lactic acid	15150413	6
Gehe	Lactic acid	15150402	1
Caesar&Loretz/Noweda	Lactic acid	15150402	1
Rondell Apotheke	Lactic acid	15150402	1
Caeolo/Noweda	Lactic acid	15150410	1
Noweda	Lactic acid	15150410	2
Caelo	Lactic acid	1510421	1
Caelo	Lactic acid	15150421	16
Caelo	Lactic acid	15308601	16
Caelo	Lactic acid	15150418	3
Caelo	Lactic acid	133173	1
Caelo	Lactic acid	15308613	13
Caesar&Loretz GmbH	Lactic acid	15308601	1
Euro OTC	Lactic acid	1503086-03	1
Phoenix	Lactic acid	15308613	1
Rondell Apotheke	Lactic acid	15308613	1
Caelo	Lactic acid	15308602	2
Caolo- Noweda	Lactic acid	13020211	1
Caelo	Lactic acid	1530860102263531	1
Caelo	Lactic acid	15308608	25
Caelo	Lactic acid	15308609	1
Caelo	Lactic acid	1412112	1
Phoenix	Lactic acid	15308608	1
Caelo	Lactic acid	16144201	20
Caelo	Lactic acid	2014U-01034	1

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Supplier	Substance	Batch	Spectra
Caelo	Lactic acid	16144210	24
Caelo	Lactic acid	1644201	1
Sanacorp	Lactic acid	16144201	1
Caelo	Lactic acid	16144206	2
Caelo	Lactic acid	2263531	1
Caelo	Lactic acid	16144212	35
Gehe	Lactic acid	16144201	1
Euro OTC	Lactic acid	16144210	1
Caelo	Lactic acid	16141212	1
Anzag	Lactic acid	16144210	1
Noweda	Lactic acid	16144212	1
Caesar&Loretz GmbH,22.0...	Lactic acid	16144212	1
Caelo	Lactic acid	16144214	6
Caelo	Lactic acid	16144212-20170704Ma1	1
Caelo	Lactic acid	16/44219	1
GEHE	Lactic acid	16144201	1
Caelo	Lactic acid	161442	1
Caelo	Lactic acid	16144216	7
Caelo	Lactic acid	16144218	22
Sanacorp	Lactic acid	16144218	1
Caelo	Lactic acid	16141218	1
Caelo	Lactic acid	17217601	20
Caelo	Lactic acid	17217811	1
Kehr	Lactic acid	17217601	1
Caelo	Lactic acid	18034002	1
Caelo	Lactic acid	171217601	1
Caelo	Lactic acid	18034004	17
Caelo	Lactic acid	180340004	1
GEHE	Lactic acid	18034004	1
Phoenix	Lactic acid	18034004	1
Caelo	Lactic acid	1803404004	1
Caelo	Lactic acid	18034005	10
Fagron	Lactic acid	18034005	1
Caelo	Lactic acid	18034006	2
Caelo	Lactic acid	180340055756	1
Sanacorp	Lactic acid	18034005	1

- 107 329 spectra from 582 *Apo-Ident* customers from a total of 30 570 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 *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 *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	119	0	35 716
Type B	0	100	0	78 978
Type C	0	609	21	107 329

The substance/substance group *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 % (> 99.9707 %)	100.0000 % (> 94.9580 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6449 %)	96.6667 % (> 96.1905 %)

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.

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	162.55
31436	30734	6.99	158.02
33271	30734	4.82	161.76

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Lanette[®] ointment (conserved)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30499-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	1402587
Caelo	Lanette [®] ointmen...	13257301	31225	40	1403113
Caelo	Lanette [®] ointmen...	13393001	31454	30	20131206
Caelo	Lanette [®] ointmen...	153481	31913	40	20151111*
Caelo	Lanette [®] ointmen...	153482	31914	40	20151111*
Caelo	Lanette [®] ointmen...	160894	32093	40	20160318*
Caelo	Lanette [®] ointmen...	162580	32500	40	20160920*

Validation samples

A total of 222872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 270 spectra of 7 reference samples from the substance/substance group *Lanette® ointment (conserved)*. These samples are listed above in the [calibration samples](#) section.
- 35565 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 710 spectra of 19 reference samples from the substance/substance group *Lanette® ointment (conserved)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lanette® ointment (conserved)	12223801	30777	40
Caelo	Lanette® ointment (conserved)	13393001	31454 [†]	10
Caelo	Lanette® ointment (conserved)	153481	31913 [†]	20
Caelo	Lanette® ointment (conserved)	153482	31914 [†]	20
Caelo	Lanette® ointment (conserved)	153483	31915	60
Caelo	Lanette® ointment (conserved)	162580	32501	40
Caelo	Lanette® ointment (conserved)	162581	32502	40
Caelo	Lanette® ointment (conserved)	162581	32503	40
Caelo	Lanette® ointment (conserved)	162582	32504	40
Caelo	Lanette® ointment (conserved)	162582	32505	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

*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.

[†]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*.

- 78 368 spectra from a total of 1813 batches from further 350 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.

- 521 spectra from 138 *Apo-Ident* customers from 107 batches from the substance/substance group *Lanette® ointment (conserved)*.

Supplier	Substance	Batch	Spectra
Caelo	Lanette® ointment (conserved)	12081301	6
Caelo	Lanette® ointment (conserved)	12170301	1
Caelo	Lanette® ointment (conserved)	20110712-3	1
Caelo	Lanette® ointment (conserved)	20310812-5	1
Caelo	Lanette® ointment (conserved)	12223801	6
Caelo	Lanette® ointment (conserved)	20021309	1
Caelo	Lanette® ointment (conserved)	12223701	4
Caelo	Lanette® ointment (conserved)	12313101	7
Caelo	Lanette® ointment (conserved)	12312901	1
Phönix	Lanette® ointment (conserved)	12223701	1
Caelo	Lanette® ointment (conserved)	12313102	2
Caelo	Lanette® ointment (conserved)	13046701	14
Caelo	Lanette® ointment (conserved)	1222380	1
Caelo	Lanette® ointment (conserved)	13046601	4
Caelo	Lanette® ointment (conserved)	12313001	3
GEHE	Lanette® ointment (conserved)	13046701	1
Caelo	Lanette® ointment (conserved)	1231302	1
Caelo	Lanette® ointment (conserved)	12312101	1
Caelo	Lanette® ointment (conserved)	U-150513-3	1
Caelo	Lanette® ointment (conserved)	130456601	1
Caesar/Lorenz	Lanette® ointment (conserved)	13046701	1
Fagron	Lanette® ointment (conserved)	13046601	1
Caelo	Lanette® ointment (conserved)	13046501	2
Alliance	Lanette® ointment (conserved)	13046701	1
Caelo	Lanette® ointment (conserved)	13191201	6
Caelo	Lanette® ointment (conserved)	613Q-03211	1
Caelo	Lanette® ointment (conserved)	13177501	11
Caelo	Lanette® ointment (conserved)	35151-03211	1
Caelo	Lanette® ointment (conserved)	13257301	12
Caelo	Lanette® ointment (conserved)	16102013C	1
Caelo	Lanette® ointment (conserved)	13046802	4
Caelo	Lanette® ointment (conserved)	13177301	3
Caelo	Lanette® ointment (conserved)	1391201	1
Caelo	Lanette® ointment (conserved)	13257501	9
Caesar/Lorenz	Lanette® ointment (conserved)	13257301	2
Caelo	Lanette® ointment (conserved)	28111311	1
Caelo	Lanette® ointment (conserved)	6012014D	1
gehe	Lanette® ointment (conserved)	13177501	1
Caelo	Lanette® ointment (conserved)	24022014C	1
Caelo	Lanette® ointment (conserved)	13392701	11
Caelo	Lanette® ointment (conserved)	13257402	1
Caesar/Lorenz	Lanette® ointment (conserved)	12313102	1

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Supplier	Substance	Batch	Spectra
Caesar / Lorenz	Lanette [®] ointment (conserved)	13257501	1
Caelo	Lanette [®] ointment (conserved)	13393001	16
Caelo	Lanette [®] ointment (conserved)	14089501	5
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)	280714B	1
Caelo	Lanette [®] ointment (conserved)	14089601	4
Caelo	Lanette [®] ointment (conserved)	14089801	12
Caelo	Lanette [®] ointment (conserved)	14221601	2
Caelo	Lanette [®] ointment (conserved)	20092014B	1
Phoenix	Lanette [®] ointment (conserved)	14089501	1
Caelo	Lanette [®] ointment (conserved)	1339201	1
VDL;3,33EUR;22.10.14	Lanette [®] ointment (conserved)	14089801	2
AHD	Lanette [®] ointment (conserved)	14089801	1
Caelo	Lanette [®] ointment (conserved)	14200601	7
Sanacorp	Lanette [®] ointment (conserved)	14089801	1
Caelo	Lanette [®] ointment (conserved)	14277101	3
Caelo	Lanette [®] ointment (conserved)	14277401	20
Caelo	Lanette [®] ointment (conserved)	23012015C	1
Caelo	Lanette [®] ointment (conserved)	40/AKD2	1
Caelo	Lanette [®] ointment (conserved)	1420061	1
Caelo	Lanette [®] ointment (conserved)	14277301	5
Caelo	Lanette [®] ointment (conserved)	14277201	3
Anzah / Henry lamotte	Lanette [®] ointment (conserved)	13257501	1
Caelo	Lanette [®] ointment (conserved)	15049001	12
Caelo	Lanette [®] ointment (conserved)	8041502	1
Caelo	Lanette [®] ointment (conserved)	15048901	16
Caelo	Lanette [®] ointment (conserved)	15048801	1
Caelo	Lanette [®] ointment (conserved)	19082015C	1
Caesar & Loretz GmbH / ...	Lanette [®] ointment (conserved)	15211301	1
Caelo	Lanette [®] ointment (conserved)	15211201	7
Caelo	Lanette [®] ointment (conserved)	15211301	20
Caelo	Lanette [®] ointment (conserved)	15095902	3
Caelo	Lanette [®] ointment (conserved)	15211102	1
Caelo	Lanette [®] ointment (conserved)	152113001	1
Caelo	Lanette [®] ointment (conserved)	152114021	1
Caelo	Lanette [®] ointment (conserved)	15348301	11
Caelo	Lanette [®] ointment (conserved)	15211401	3
Caelo	Lanette [®] ointment (conserved)	15348201	6
Caelo	Lanette [®] ointment (conserved)	16089401	42
Phoenix	Lanette [®] ointment (conserved)	16089402	2
Caelo	Lanette [®] ointment (conserved)	16089402	20
Caesar & Loretz GmbH	Lanette [®] ointment (conserved)	15348201	1
Caelo	Lanette [®] ointment (conserved)	16089404	3
Caelo	Lanette [®] ointment (conserved)	15348202	1
Fagron	Lanette [®] ointment (conserved)	15348201	1
Caelo	Lanette [®] ointment (conserved)	16188701	2
Sanacorp	Lanette [®] ointment (conserved)	16089401	1
Caelo	Lanette [®] ointment (conserved)	ChB280916	1
Caelo	Lanette [®] ointment (conserved)	160817UL	1
Caelo	Lanette [®] ointment (conserved)	16184702	7
Caelo	Lanette [®] ointment (conserved)	161104UL/16188701	1
GEHE	Lanette [®] ointment (conserved)	16184702	1
Caelo	Lanette [®] ointment (conserved)	16188801	4
Caelo	Lanette [®] ointment (conserved)	16258101	7
Caelo	Lanette [®] ointment (conserved)	16258001	20
Caelo	Lanette [®] ointment (conserved)	16258201	11
Caelo	Lanette [®] ointment (conserved)	170328UL/16188801	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanette [®] ointment (conserved)	16184703	1
GEHE	Lanette [®] ointment (conserved)	9639910	1
GEHE	Lanette [®] ointment (conserved)	16258101	2
Caelo	Lanette [®] ointment (conserved)	15258001	1
Gehe	Lanette [®] ointment (conserved)	16258001	1
Caelo	Lanette [®] ointment (conserved)	170530UL/16188801	1
Caelo	Lanette [®] ointment (conserved)	17041501	10
Caelo	Lanette [®] ointment (conserved)	170710UL/16188801	1
Sanacorp	Lanette [®] ointment (conserved)	160258001	1
Caelo	Lanette [®] ointment (conserved)	17134001	7
Caelo	Lanette [®] ointment (conserved)	17133901	12
Caelo	Lanette [®] ointment (conserved)	17133801	1
Bombastus	Lanette [®] ointment (conserved)	16258001	1
Sanacorp	Lanette [®] ointment (conserved)	17133901	1
Caelo	Lanette [®] ointment (conserved)	171107UL/17134001	1
Caelo	Lanette [®] ointment (conserved)	180102UL/17134001	1
Caelo	Lanette [®] ointment (conserved)	17133902	4
Caelo	Lanette [®] ointment (conserved)	17243102	8
Caelo	Lanette [®] ointment (conserved)	17243001	2
Caelo	Lanette [®] ointment (conserved)	17311001	6
Caelo	Lanette [®] ointment (conserved)	17311002	1
Caelo	Lanette [®] ointment (conserved)		1
Caelo	Lanette [®] ointment (conserved)	18023301	2
Caelo	Lanette [®] ointment (conserved)	18087001	8
Caelo	Lanette [®] ointment (conserved)	18023202	1
Caelo	Lanette [®] ointment (conserved)	309918023301	1
Caelo	Lanette [®] ointment (conserved)	18118502	1
Caelo	Lanette [®] ointment (conserved)	18118402	2
Caelo	Lanette [®] ointment (conserved)	180870001	1
Henry Lamotte Oils GmbH	Lanette [®] ointment (conserved)	18087001	1

- 107 438 spectra from 582 *Apo-Ident* customers from a total of 30 577 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 *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	270	0	35 565
Type B	0	710	0	78 368
Type C	0	470	51	107 438

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 % (> 99.9705 %)	100.0000 % (> 97.7778 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.1549 %)
Type C	100.0000 % (> 99.6449 %)	90.2111 % (> 89.6353 %)

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.

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
31454	31225	3.12	23.90
31225	31225	0.00	26.04
31913	31913	0.00	25.77
31914	31914	0.00	27.60
32093	32093	0.00	26.73
31166	31166	0.00	26.19
32500	32500	0.00	25.37

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Lanolin DAB
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30013-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Lanolin DAB	13062501	31003	40	20130226
Caelo	Lanolin DAB	14032001	31439	40	AR-15-FG-008283-01
Caelo	Lanolin DAB	15255201	31746	40	20150727
Fagron	Lanolin DAB	15G02-T11-024155	31794	40	AR-16-FG-004053-01
Bombastus	Lanolin DAB	294969	31795	40	20150611
Caelo	Lanolin DAB	15405502	31798	40	20151130
Caelo	Lanolin DAB	163026	32863	40	20161028*

Validation samples

A total of 222 872 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 *Lanolin DAB*. These samples are listed above in the [calibration samples](#) section.
- 35 555 spectra from a total of 840 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 600 spectra of 17 reference samples from the substance/substance group *Lanolin DAB*.

Supplier	Substance	Batch	Sample ID	Spectra
Henry Lamotte	Lanolin DAB	5264900	30922	40
Caelo	Lanolin DAB	15255201	31746 [†]	20
Fagron	Lanolin DAB	15G02-T11-024155	31794 [†]	20
Bombastus	Lanolin DAB	294969	31795 [†]	20
Caelo	Lanolin DAB	15405502	31798 [†]	20
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

*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.

[†]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*.

- 78478 spectra from a total of 1813 batches from further 350 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.

- 1960 spectra from 416 *Apo-Ident* customers from 345 batches from the substance/substance group *Lanolin DAB*.

Supplier	Substance	Batch	Spectra
Fagron	Lanolin DAB	14E06-T07-012186	5
Caelo	Lanolin DAB	11281701	2
Caelo	Lanolin DAB	11281702	2
Bombastus	Lanolin DAB	264723	1
DAB 2008	Lanolin DAB	11281701	1
Caelo	Lanolin DAB	11282001	2
Caelo	Lanolin DAB	10358301	1
Caelo	Lanolin DAB	11315101	3
Bombastus	Lanolin DAB	264721	1
Anzag	Lanolin DAB	11315101	1
Caelo	Lanolin DAB	12037401	4
Caelo	Lanolin DAB	11315102	2
Caelo	Lanolin DAB	12037101	7
Caelo	Lanolin DAB	7071205	1
Bombastus	Lanolin DAB	266981	1
Euro OTC	Lanolin DAB	11281901	2
Caesar & Loretz GmbH, 4...	Lanolin DAB	12037101	1
Lamotte/Noweda	Lanolin DAB	5152000	1
Fagron	Lanolin DAB	11k18-t01	1
Fagron	Lanolin DAB	12C06-T02	1
VDL	Lanolin DAB	12037301	1
Caelo	Lanolin DAB	12065102	1
Caelo	Lanolin DAB	12065101	5
Fagron	Lanolin DAB	12E22-T06	1
Bombastus	Lanolin DAB	270443	1
Caelo	Lanolin DAB	12193901	12
Caelo	Lanolin DAB	12193701	22
VDL	Lanolin DAB	12065101/32	1
Fagron	Lanolin DAB	12E22-T04	4
Gehe	Lanolin DAB	12193701	1
Sanacorp	Lanolin DAB	12193701	2
Bombastus	Lanolin DAB	270439	1
Anzag/	Lanolin DAB	12193901	1
Fagron	Lanolin DAB	12E22-T07	1
Caesar & Loretz GmbH	Lanolin DAB	12193701	1
Phönix Gotha	Lanolin DAB	12193901	1
Caesar & Loretz GmbH, 4...	Lanolin DAB	12260301	1
Noweda	Lanolin DAB	12065101	1
Caelo	Lanolin DAB	12260301	5
Caelo	Lanolin DAB	20240912-1	1
Caesar & Loretz GmbH	Lanolin DAB	12193701	1
Sanacorp	Lanolin DAB	12260301	1
Fagron	Lanolin DAB	12H01-T04	2
Caelo	Lanolin DAB	12194201	3
Caelo	Lanolin DAB	12260302	3

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	213Q-01765	1
Caelo	Lanolin DAB	14011304	1
Caelo	Lanolin DAB	12308802	21
Bombastus	Lanolin DAB	274414	1
Caelo	Lanolin DAB	12193702	2
Henry Lamotte Oils	Lanolin DAB	5264900	1
Caelo	Lanolin DAB	12H01-T02	1
Caelo	Lanolin DAB	713I-01765	1
Sanacorp	Lanolin DAB	12308801	1
Phönix Gotha	Lanolin DAB	12308802	1
Caelo	Lanolin DAB	12037002	1
Bombstus	Lanolin DAB	273293	1
Caelo	Lanolin DAB	12037301	2
Anzag	Lanolin DAB	5264900	1
Caelo	Lanolin DAB	12308601	6
Anzag/Henry Lamotte	Lanolin DAB	5264900	1
Sanacorp	Lanolin DAB	12308802	2
Caelo	Lanolin DAB	13062501	9
Sanacorp	Lanolin DAB	13062401	2
Caelo	Lanolin DAB	12H01-T01	1
Anzag 10.04.13	Lanolin DAB	5264900	1
Caelo	Lanolin DAB	13062401	13
Lamotte/Noweda	Lanolin DAB	5264900	1
Phönix Gotha	Lanolin DAB	13062401	2
Caesar & Loretz GmbH, 4...	Lanolin DAB	13062401	1
Alliance Healthcare	Lanolin DAB	13062401	1
Henry Lamotte Oils / AHD	Lanolin DAB	5375500	3
Bombastus	Lanolin DAB	274413	1
Caelo	Lanolin DAB	13062602	3
Fagron	Lanolin DAB	13B04-T20-001084	3
Sanacorp	Lanolin DAB	13062501	1
Phönix	Lanolin DAB	13062401	1
Phönix	Lanolin DAB	11113902	1
Fagron	Lanolin DAB	13B04-T20-0010B4	1
Fagron	Lanolin DAB	13B04-T22-001078	2
Caelo	Lanolin DAB	13062701	6
Bombastus	Lanolin DAB	277968	1
Lamotte/Noweda	Lanolin DAB	5375500	1
Caelo	Lanolin DAB	13102802	24
Fagron	Lanolin DAB	13B04-T21-001085	4
Phönix	Lanolin DAB	5316400	1
Alliance	Lanolin DAB	13102802	1
Alliance Healthcare	Lanolin DAB	5375500	1
Bombastus	Lanolin DAB	13173601	1
Henry Lamotte Oils GmbH...	Lanolin DAB	5264900	1
Noweda	Lanolin DAB	13102802	1
Caelo	Lanolin DAB	1306501	1
Bombastus	Lanolin DAB	277970	4
Gehe	Lanolin DAB	13062501	1
Fagron	Lanolin DAB	13B04-T20-00108	1
Fagron	Lanolin DAB	13B12-T01-001087	2
Caelo	Lanolin DAB	5211Q-01765	1
Caelo	Lanolin DAB	3613A-01765	1
Caelo	Lanolin DAB	13227601	23
Sanacorp	Lanolin DAB	13227601	2
Henry Lamotte	Lanolin DAB	5375500	2
AHD , 05.09.13	Lanolin DAB	274414	1
Caelo	Lanolin DAB	13227701	17
Bombastus	Lanolin DAB	274412	1
Noweda	Lanolin DAB	7102013A	1

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Supplier	Substance	Batch	Spectra
Bombastus	Lanolin DAB	280111	3
Henry Lamotte Oils GmbH...	Lanolin DAB	5375500	2
Lamotte/Anzag	Lanolin DAB	5447700	1
Caelo	Lanolin DAB	14101306	1
Fagron	Lanolin DAB	13E07-T18-003392	3
Fagron	Lanolin DAB	13804-T22-0002	1
Fagron	Lanolin DAB	12H01-T01	1
phönix	Lanolin DAB		1
Caelo	Lanolin DAB	13062801	2
Noweda	Lanolin DAB	13227701	1
Caelo	Lanolin DAB	4413M01765	1
Caesar & Loretz GmbH	Lanolin DAB	13227601	1
Caelo	Lanolin DAB	13E07-T20-003399	1
Bombastus	Lanolin DAB	276824	1
Bombastus	Lanolin DAB	277969	1
Caelo	Lanolin DAB	1310802	1
Caelo	Lanolin DAB	9112013B	1
AHD, 08.11.13	Lanolin DAB	280111	1
Bombastus	Lanolin DAB	277967	2
Caelo	Lanolin DAB	13227602	5
Henry	Lanolin DAB	5316400	1
Gehe	Lanolin DAB	13B04-T20-001084	1
Caelo	Lanolin DAB	23326501	1
Caelo	Lanolin DAB	13326701	29
Fagron	Lanolin DAB	13E07-T21-003404	1
Phönix Gotha	Lanolin DAB	13227701	2
Caelo	Lanolin DAB	13326501	27
Caelo	Lanolin DAB	13326701-3455311103	1
HenryLamotte/Alliance	Lanolin DAB	5517200	1
Caelo	Lanolin DAB	31121301	1
Caelo	Lanolin DAB	13227801	5
Fagron	Lanolin DAB	13E07-Trg-oo3395	1
Caelo	Lanolin DAB	9011406	1
Caelo	Lanolin DAB	133326701	1
Caelo	Lanolin DAB	1096249	2
Caelo	Lanolin DAB	11011404	1
Caelo	Lanolin DAB	12308801	1
Fagron	Lanolin DAB	13E0760-0002	1
Caelo	Lanolin DAB	5113A-01765	1
Caelo	Lanolin DAB	13326601	7
Fagron	Lanolin DAB	13H13T11-006183	1
Caelo	Lanolin DAB	13345902	19
Bombastus	Lanolin DAB	9/14	1
Bombastus	Lanolin DAB	282979	2
Caeol	Lanolin DAB	7022014A	1
Gehe	Lanolin DAB	13326601	1
Fagron	Lanolin DAB	13E07-T22-003407	1
Fagron	Lanolin DAB	13H13-T12-006187	3
Gehe am 21.2.14	Lanolin DAB	13326501	2
Caelo	Lanolin DAB	14032001	24
Phönix	Lanolin DAB	13326701	1
Caelo	Lanolin DAB	14032101	21
Noweda	Lanolin DAB	13345902	1
Alliance Healthcare	Lanolin DAB	5447700	3
Caelo	Lanolin DAB	13326502	6
Caelo	Lanolin DAB	14032201	4
Lamotte/Alliance	Lanolin DAB	5517200	1
Fagron	Lanolin DAB	13H13T11006184	1
Henry Lamotte/ Noweda	Lanolin DAB	5517200	1
Caelo	Lanolin DAB	1042014A	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	9041401	1
Caesar/Lorenz	Lanolin DAB	14032001	1
Caelo	Lanolin DAB	13345901	1
Fagron	Lanolin DAB	13H13-T08-006173	1
Fagron	Lanolin DAB	13E07-T20-003401	1
Krieger	Lanolin DAB	133266012x	1
Phoenix 10.04.2014	Lanolin DAB	14032001	2
Fagron	Lanolin DAB	13H13-12	1
AHD 14.5.14, Preis 16,69	Lanolin DAB		1
Caesar & Loretz GmbH	Lanolin DAB	14032001	1
Caelo	Lanolin DAB	26052014B	1
Bombastus	Lanolin DAB	285097	4
Caelo	Lanolin DAB	160614	1
Caelo	Lanolin DAB	14032301	11
Gehe	Lanolin DAB	14032001	1
Henry/AHD	Lanolin DAB	5651400	1
Noweda	Lanolin DAB	14032301	1
sanacorp	Lanolin DAB	14032001	1
Sanacorp	Lanolin DAB	34/AKD1	1
Caelo	Lanolin DAB	26061401	1
Fagron	Lanolin DAB	14A06T02	3
AHD	Lanolin DAB	5517200	1
Phönix Gotha	Lanolin DAB	14032101	1
Caelo	Lanolin DAB	8072014A	1
	Lanolin DAB	13H13-T10-006179	1
Fagron	Lanolin DAB	14A06-T03-009017	3
ANZAG 01.01.143	Lanolin DAB	14a06-t01-009011	1
Henry Lamotte/ Noweda	Lanolin DAB	5651400	2
Caelo	Lanolin DAB	13H13-To8-006173	1
Caelo	Lanolin DAB	14165901	29
Caelo	Lanolin DAB	8082014B	1
Raben-Apotheke Mildenau	Lanolin DAB	282976	1
Fagron	Lanolin DAB	14A06-T06-009028	1
Fagron	Lanolin DAB	14A06T01009011	1
Fagron	Lanolin DAB	14A06-T01-009011	4
Caelo	Lanolin DAB	14165601	38
Gehe 29.07.14	Lanolin DAB	14032001	1
Sanacorp	Lanolin DAB	14165901	1
Fagron	Lanolin DAB	14A06-T02-009014	2
Bombastus	Lanolin DAB	286690	1
Bombastus	Lanolin DAB	286691	2
Caelo	Lanolin DAB	18092014B	1
Caelo	Lanolin DAB	14032401	6
Caelo	Lanolin DAB	14032302	2
UNISAN	Lanolin DAB	5651400	5
Bombastus	Lanolin DAB	14032101	1
Bombastus	Lanolin DAB	285096	2
Bombastus	Lanolin DAB	14166001	1
Bombastus	Lanolin DAB	286688	1
Bombastus	Lanolin DAB	288637	5
Caelo	Lanolin DAB	14166001	12
Phönix Gotha	Lanolin DAB	14165901	2
Caelo	Lanolin DAB	14165701	3
Sanacorp/ Henry Lamotte...	Lanolin DAB	5651400	1
sanacorp	Lanolin DAB	14165901	1
Phönix	Lanolin DAB	14165601	1
GEHE 26.11.2014	Lanolin DAB	14A06-T04-009021	1
Fagron	Lanolin DAB	13H13-T08006173	1
Caelo	Lanolin DAB	14A06-T01-009011	1
Fagron	Lanolin DAB	14A06-T04-009021	1

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Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH	Lanolin DAB	14165601	1
Caelo	Lanolin DAB	14333701	4
phönix	Lanolin DAB	34/AKD2	1
Fagron	Lanolin DAB	14E06-T10	1
Caelo	Lanolin DAB	14333602	29
Gehe	Lanolin DAB	14165601	1
Sanacorp 31.12.14 EK 3,76	Lanolin DAB	14333602	2
Gehe	Lanolin DAB	14E06-T07-012186	1
Alliance health 12.01.15	Lanolin DAB	14A06-T05-0002	1
Caelo	Lanolin DAB	16011501	1
Caelo	Lanolin DAB	5651400	1
Fagron	Lanolin DAB	14E06T07	1
Fagron	Lanolin DAB	14E06-T11-012200	2
Rabenapotheke	Lanolin DAB	288634	2
Lamotte	Lanolin DAB	5651400	1
Caelo	Lanolin DAB	23012015B	1
Caeolo/ Noweda	Lanolin DAB	14333701	1
Caelo	Lanolin DAB	1433602	3
Fagron	Lanolin DAB	14166001	1
Caelo	Lanolin DAB	14334001	28
Fagron	Lanolin DAB	14E06-T09-012194	6
Fagron	Lanolin DAB	14E06-T07	1
Caelo	Lanolin DAB	1433001	1
Phönix Gotha	Lanolin DAB	14334001	1
Bombastus	Lanolin DAB	288636	2
Sanacorp	Lanolin DAB	14032301	1
Fagron	Lanolin DAB	14E06-T10-012197	1
Caelo	Lanolin DAB	14333901	8
Bombastus	Lanolin DAB	290885	4
Caelo	Lanolin DAB	2913U-01765	1
Caelo	Lanolin DAB	15024201	27
Henry Lamotte	Lanolin DAB	5860800	1
Caesar&lorenz,Phoenix	Lanolin DAB	14333602	1
Caelo	Lanolin DAB	15024003	1
Noweda	Lanolin DAB	14333901	1
Sanacorp	Lanolin DAB	14333602	2
Phönix Gotha	Lanolin DAB	15024201	2
Bombastus	Lanolin DAB	292906	4
Henry/Fiebig	Lanolin DAB	5860800	3
Sanacorp	Lanolin DAB	14334001	1
GEHE	Lanolin DAB	14K11-T03-016984	1
Fagron	Lanolin DAB	14K11-T03-016984	2
Fargon	Lanolin DAB	14k11-t01-016976	1
Henry Lamotte/Noweda	Lanolin DAB	5860800	1
Caelo	Lanolin DAB	15024102	26
Fagron	Lanolin DAB	14K11-T01-016976	4
Caelo	Lanolin DAB	14K11-T01-016976	2
Noweda	Lanolin DAB	14165701	1
Caelo	Lanolin DAB	8071503	1
Caelo	Lanolin DAB	15193501	26
Gehe	Lanolin DAB	15024102	1
Fagron	Lanolin DAB	14K11-T03-016983	2
Fagron	Lanolin DAB	15C19-T02-020812	8
Caelo	Lanolin DAB	15024301	3
Caelo	Lanolin DAB	15c1903020815	1
Fagron	Lanolin DAB	15C19T03	1
Phönix	Lanolin DAB	15024102	1
Bombasatus	Lanolin DAB	288635	1
Caelo	Lanolin DAB	17082015D	1
Caelo	Lanolin DAB	15193401	18

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Supplier	Substance	Batch	Spectra
Bombastus	Lanolin DAB	292904	1
Caelo	Lanolin DAB	15255201	23
Caelo	Lanolin DAB	15024101	1
Henry Lamotte Oils GmbH...	Lanolin DAB	5860800	1
Fagron	Lanolin DAB	15C19-T03-020815	6
Fagron	Lanolin DAB	15C19-T04-020818	1
Caelo	Lanolin DAB	15255501	2
Caelo	Lanolin DAB	1525501	1
Gehe	Lanolin DAB	15255201	2
Caelo	Lanolin DAB	15255202	26
Phönix Gotha	Lanolin DAB	15193401	1
Bombastus	Lanolin DAB	294968	1
Bombastus	Lanolin DAB	292905	1
Fagron	Lanolin DAB	15c19-t05-020821	1
anzag	Lanolin DAB	15255301	1
Lamotte	Lanolin DAB	5860800	1
Noweda	Lanolin DAB	15255501	2
Lamotte / AHD EK 6,75	Lanolin DAB	5860800	1
Caesar & Loretz GmbH	Lanolin DAB	15024102	1
Lamotte	Lanolin DAB	600746001	1
Caelo	Lanolin DAB	15405502	29
caesar&loretz,Phönix	Lanolin DAB	15405502	1
Caelo	Lanolin DAB	15255301	6
Bombastus	Lanolin DAB	294967	2
Caeolo/Noweda	Lanolin DAB	15193501	1
Noweda	Lanolin DAB	15C19-T02-020812	1
Caelo	Lanolin DAB	15255601	6
Bombastus	Lanolin DAB	124967	1
Henry Lamotte Oils GmbH...	Lanolin DAB	6000746001	2
Sanacorp	Lanolin DAB	15255301	1
Lamotte	Lanolin DAB	6000746001	2
Caelo	Lanolin DAB	15405601	28
Caelo	Lanolin DAB	15405501	21
Fagron	Lanolin DAB	15255201	1
Caelo	Lanolin DAB	15405505	1
Fagron	Lanolin DAB	15G02-T11-024155	2
Caelo	Lanolin DAB	15045502	1
Cael Sanacorp 05.02.2016	Lanolin DAB	15255202	1
Bombastus	Lanolin DAB	297583	6
Castor/Phönix	Lanolin DAB	15255301	1
Caelo	Lanolin DAB	15405801	3
Noweda	Lanolin DAB	15255601	2
Caelo	Lanolin DAB	1515Q-01765	1
Bombastus	Lanolin DAB	299082	5
Alliance H.	Lanolin DAB	15405501	1
Cealo/ AHD	Lanolin DAB	15405501	1
WE:06.04.2016 Phönix	Lanolin DAB	16054901	3
WE:18.03.2016 Sanacorp	Lanolin DAB	15405502	1
Caelo	Lanolin DAB	15C19-T01-020809	2
Caelo	Lanolin DAB	16054801	34
Euro OTC	Lanolin DAB	260416v1	1
Caelo	Lanolin DAB	16054901	39
Henry Lamotte/ Noweda	Lanolin DAB	6000746001	1
Caelo	Lanolin DAB	123456	1
Fagron	Lanolin DAB	15405601	1
Cealo/AHD	Lanolin DAB	16054801	2
Caelo	Lanolin DAB	1540502	1
Eigene Herstellung	Lanolin DAB	10052016	1
Noweda	Lanolin DAB	15405501	1
Caelo	Lanolin DAB	16054602	4

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Supplier	Substance	Batch	Spectra
Fagron	Lanolin DAB	15c19-t02-020812	1
Bombastus	Lanolin DAB	300144	1
Caelo	Lanolin DAB	16549	1
Caelo	Lanolin DAB	16054701	7
Phönix	Lanolin DAB	16054901	1
Phoenix	Lanolin DAB	16054901	2
Caelo	Lanolin DAB	16064901	1
Euro OTC	Lanolin DAB	16054901	2
Fagron	Lanolin DAB	15E04-T01-022046	2
Fagron	Lanolin DAB	15C19-T01-020809	1
Fagron	Lanolin DAB	15G02-T10-024152	2
Caelo	Lanolin DAB	16054702	1
Henry Lamotte/ Noweda	Lanolin DAB	60000746001	1
Fagron	Lanolin DAB	15C19-T01-0001	1
Fagron	Lanolin DAB	15C-9-T02020812	1
Caelo	Lanolin DAB	16189402	2
Ichthyol-Gesellschaft	Lanolin DAB	16054701	1
Bombastus	Lanolin DAB	301170	3
Fagron	Lanolin DAB	15C19-T05-020821	1
Caelo	Lanolin DAB	16189501	28
phönix	Lanolin DAB	16189401	2
Lamotte GmbH	Lanolin DAB	6000746001	1
Bombastus	Lanolin DAB	16189501	1
Anzag	Lanolin DAB	16189501	1
Caelo	Lanolin DAB	290316L	1
Cealo	Lanolin DAB	16054701	1
Caelo	Lanolin DAB	16189401	34
Fagron	Lanolin DAB	16G01-T04-034850	5
Fargron/Noweda	Lanolin DAB	15C19-T01-020809	1
Caesar & Loretz	Lanolin DAB	16189401	1
Gehe	Lanolin DAB	16054602	1
Caelo	Lanolin DAB	4616M-01765	1
Fagron	Lanolin DAB	16G01-T08-034867	5
Alte Apotheke	Lanolin DAB	16189602	1
Phoenix	Lanolin DAB	16189401	1
Caelo	Lanolin DAB	16302401	40
Fagron	Lanolin DAB	16G01-T05-034853	7
Caelo	Lanolin DAB	16189701	1
Caesar & Loretz	Lanolin DAB	16302401	3
Caelo	Lanolin DAB	16302301	45
Gehe	Lanolin DAB	16054702	1
GEHE	Lanolin DAB	16189501	2
Phoenix	Lanolin DAB	16302301	1
Caesar & Loretz GmbH Hi...	Lanolin DAB	16189401	1
Bombastus	Lanolin DAB	302809	5
Fagron	Lanolin DAB	15c19-t03-020815	1
Bombastus	Lanolin DAB	304541	5
Bombastus	Lanolin DAB	163023	1
Bombastus	Lanolin DAB	302807	1
Caelo	Lanolin DAB	16189602	1
Henry Lamotte/Noweda	Lanolin DAB	6003682006	1
Bombastus	Lanolin DAB	60080101	3
Caesar & Loretz GmbH	Lanolin DAB	16189501	1
Fagron	Lanolin DAB	16G01-T03-034847	4
AHDE/Cael030.12.16 EUR5,33	Lanolin DAB	16302401	1
SanacorpWE:12.12.2016 ...	Lanolin DAB	16189401	1
SanacorpWE:27.01.2017 ...	Lanolin DAB	16302301	1
Caelo	Lanolin DAB		2
Caelo	Lanolin DAB	16302202	2
Caeolo/Noweda	Lanolin DAB	16302401	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	16344401	18
Caelo	Lanolin DAB	1602301	1
Caelo	Lanolin DAB	16302501	1
Klosterring	Lanolin DAB	16302202	1
Caelo	Lanolin DAB	16302402	1
Bombastus	Lanolin DAB	305411	2
Sanacorp, 25.2.17, 4,30EUR	Lanolin DAB	16302301	1
AHD	Lanolin DAB	16189401	1
Caelo	Lanolin DAB	16189501/160314L	1
Hubertus Apotheke	Lanolin DAB	16302401	1
Gehe	Lanolin DAB	301170	1
Caelo	Lanolin DAB	17018401	60
AHD 14.03.17 Ek:6,91	Lanolin DAB	6003682006	1
Bombastus	Lanolin DAB	16302401	1
Caelo	Lanolin DAB	17018701	23
Caelo	Lanolin DAB	80816	1
Caelo	Lanolin DAB	1230317	1
Bombastus	Lanolin DAB	305440	1
Sanacorp,04.04.17, 4,30EUR	Lanolin DAB	17018401	1
Bombastus	Lanolin DAB	302808	2
Fagron	Lanolin DAB	16302401	1
Sanacorp	Lanolin DAB	17078401	1
Fagron	Lanolin DAB	16G01-T07-034861	4
Noweda	Lanolin DAB	16189401	1
Bombastus	Lanolin DAB	305441	1
Caelo	Lanolin DAB	15344401	1
Fagron	Lanolin DAB	16G01-T06-034857	2
Caesar & Loretz GmbH	Lanolin DAB	16344401	1
GEHE	Lanolin DAB	17018701	1
Noweda	Lanolin DAB	17018401	1
Caelo	Lanolin DAB	8061713	1
Caelo	Lanolin DAB	17A03-T05-040010	1
Sanacorp	Lanolin DAB	305411	2
Caelo	Lanolin DAB	16302302	1
Fagron	Lanolin DAB	17A03-T05-040010	2
Bombastus	Lanolin DAB	304540	1
Fagron	Lanolin DAB	17018401	1
Caesar & Loretz GmbH	Lanolin DAB	17018701	1
GEHE	Lanolin DAB	17018401	1
caesar & Loretz	Lanolin DAB	16054901	1
Caelo	Lanolin DAB	1701801	1
Caelo	Lanolin DAB	17135101	27
Fagron	Lanolin DAB	17135101	1
phönix	Lanolin DAB	17135101	1
Caesar & Loretz/Noweda	Lanolin DAB	17018401	1
Fagron	Lanolin DAB	16G01-T06	1
Euro OTC	Lanolin DAB	306635	1
Bombastus	Lanolin DAB	306635	2
Caelo	Lanolin DAB	17135201	20
Caelo	Lanolin DAB	17018503	2
Lamotte / AHC	Lanolin DAB	8002875003	1
Bombastus	Lanolin DAB	306634	1
Fagron	Lanolin DAB	17A03-T02-040001	3
Sanacorp	Lanolin DAB	306634	1
Sanacorp	Lanolin DAB	17135101	2
Fagron	Lanolin DAB	17A03-T03-040004	1
Caelo	Lanolin DAB	1735201	2
Caelo	Lanolin DAB	1634401	1
Caelo	Lanolin DAB	1713510	1
Phoenix WE:04.11.17 100...	Lanolin DAB	17135101	1

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Supplier	Substance	Batch	Spectra
Caelo	Lanolin DAB	17222601	40
Bombastus	Lanolin DAB	309000	4
Caelo	Lanolin DAB	4817E-01765	1
Noweda	Lanolin DAB	17135101	1
Bombastus	Lanolin DAB	306633	2
Caelo	Lanolin DAB	16302601	1
Caelo	Lanolin DAB	17135102	3
Caelo	Lanolin DAB	17222401	20
Sanacorp	Lanolin DAB	17222601	3
Fagron	Lanolin DAB	17A03-T02-040010	1
Fagron	Lanolin DAB	17-A03-T04-040007	1
Caeolo/Gehe	Lanolin DAB	17135101	1
Caelo	Lanolin DAB	23121703	1
Kehr	Lanolin DAB	17135201	1
GEHE	Lanolin DAB	309000	1
Phönix	Lanolin DAB	17222601	1
Sanacorp	Lanolin DAB	306635	1
Bombastus	Lanolin DAB	17000425	1
GEHE	Lanolin DAB	17135101	1
Fagron	Lanolin DAB	17H24-T03-047694	1
Caelo	Lanolin DAB	17296601	11
Cealo	Lanolin DAB	17222401	2
Fiebig	Lanolin DAB	17222701	1
Krieger	Lanolin DAB	17222601	2
Anzag	Lanolin DAB	17A03-T02-040001	1
Gehe	Lanolin DAB	17000364	1
	Lanolin DAB	309000	1
Caelo	Lanolin DAB	17296702	3
Caelo	Lanolin DAB	172226015502	1
Fagron	Lanolin DAB	17H24-T01-047688	2
Fagron	Lanolin DAB	17H24T04047697	1
Caelo	Lanolin DAB	17296501	11
Caelo	Lanolin DAB	17H24-T04-047697	1
Sanacorp	Lanolin DAB	17000364	3
Caelo	Lanolin DAB	17296602	21
Bombastus	Lanolin DAB	17001447	2
Caelo	Lanolin DAB	17135401	1
Anzag	Lanolin DAB	17222401	1
Sanacorp	Lanolin DAB	17001447	4
Henry Lamotte/Noweda	Lanolin DAB	8002875002	1
Sanacorp W.E: 31.03.20...	Lanolin DAB	17222601	1
26.07.2018	Lanolin DAB	17000364	1
Caelo	Lanolin DAB	17222691	1
Bombastus	Lanolin DAB	17000364	2
Noweda	Lanolin DAB	17222601	1
Fiebig	Lanolin DAB	17296702	1
Caelo	Lanolin DAB	23051815	1
Caesar & Loretz/ Noweda	Lanolin DAB	17222601	1
AHD	Lanolin DAB	17222601	1
Henry Lamotte	Lanolin DAB	8002875002	1
Bombastus	Lanolin DAB	17001446	1
Bombastus	Lanolin DAB	18001869	1
Caelo	Lanolin DAB	172960025649	1
Fagron	Lanolin DAB	17K27-T07-050540	4
Delta	Lanolin DAB	17222601	1
Euro OTC	Lanolin DAB	17K27-T07-050540	1
Kehr	Lanolin DAB	17296501	1
Caelo	Lanolin DAB	18044301	28
Caelo	Lanolin DAB	17222701	1
Cealo/Phoenix	Lanolin DAB	17222601	1

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Supplier	Substance	Batch	Spectra
Bombastus	Lanolin DAB	18001870	1
Caelo	Lanolin DAB	18044101	9
Fiebig	Lanolin DAB	18044001	1
Cealo/Gehe	Lanolin DAB	17296602	1
Caelo	Lanolin DAB	30081806	1
H.Lamotte	Lanolin DAB	8002875002	1
Caelo	Lanolin DAB	18044001	2
Fagron	Lanolin DAB		1
Bombastus	Lanolin DAB	18003633	1
Fagron	Lanolin DAB	18044101	1
Caelo	Lanolin DAB	180443015739	1
Jenne	Lanolin DAB	18044301	1
Caelo	Lanolin DAB	18044301-L20181115Ma	1
Caelo	Lanolin DAB	18107202	5
Caelo	Lanolin DAB	188044301	1
Caelo	Lanolin DAB	18230201	5
H.Lamotte	Lanolin DAB	8004134012	2
Cealo/AHD	Lanolin DAB	18044301	1
Caelo	Lanolin DAB	18107401	1
Kehr	Lanolin DAB	18003635	1
Bombastus	Lanolin DAB	18005860	1
Caelo	Lanolin DAB	18230302	1
Sanacorp	Lanolin DAB	18003635	2

- 105 999 spectra from 581 *Apo-Ident* customers from a total of 30 342 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 *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	280	0	35 555
Type B	0	600	0	78 478
Type C	0	1902	58	105 999

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 % (> 99.9705 %)	100.0000 % (> 97.8571 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.0000 %)
Type C	100.0000 % (> 99.6449 %)	97.0408 % (> 96.8878 %)

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.

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
31798	31794	4.38	28.60
32863	32863	0.00	28.52
31003	32863	10.11	26.04
31439	31439	0.00	38.85
31746	32863	3.76	27.37
31794	31794	0.00	26.87
31795	31794	1.91	27.69

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Lauromacrogols
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30765-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Fagron	Macrogolglycerol...	12L06-N02	30765	40	1405328
Caelo	Lauromacrogol 400	13095802	31025	40	20130523

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Polysorbate 60	12133619	31033	40	20120531
Fagron	Macrogol 20 glyc...	13H09-N06	31182	40	1407195
Caelo	Polysorbate 20	14019413	31323	40	AR-15-FG-008174-01
Caelo	Polysorbate 60	14027102	31324	40	AR-15-FG-008175-01
Caelo	Lauromacrogol 400	13340701	31372	40	AR-14-FG-012474-01
Caelo	Macrogol 4 laury...	14054401	31381	40	1507230
Caelo	Macrogol 20 glyc...	14033701	31469	40	20140214
Caelo	Macrogol 4 laury...	14225301	31583	40	20140820
Caelo	Macrogolglycerol...	14283805	31608	40	20141014
Caelo	Macrogolglycerol...	14283808	31625	40	AR-15-FG-010151-01
Caelo	Polysorbate 20	14365105	31697	40	20150116
Euro OTC	Lauromacrogol 400	1510024	31768	40	20151102*
Euro OTC	Lauromacrogol 400	1605006	32283	40	20160531*
Fagron	Lauromacrogol 400	16E18-B04-326089	32824	40	20160527
Caelo	Polysorbate 60	170258	33058	40	20170313*
Caelo	Macrogol 4 laury...	16100205	33216	40	20160527
Caelo	Macrogol 20 glyc...	162800	33323	40	20161026*
Caelo	Macrogol 20 glyc...	170801	33324	40	20170428*
Caelo	Polysorbate 20	182768	34331	40	20180312*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 840 spectra of 21 reference samples from the substance/substance group *Lauromacrogols*. These samples are listed above in the [calibration samples](#) section.
- 34 995 spectra from a total of 826 batches from further 208 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 1218 spectra of 33 reference samples from the substance/substance group *Lauromacrogols*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Lauromacrogol 400	12E03-N05	30594	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
Caelo	Macrogol 20 glycerol monoste...	14033701	31469 [†]	20
Caelo	Macrogol 4 lauryl ether	14225301	31583 [†]	20
Caelo	Macrogolglycerol hydroxyste...	14283805	31608 [†]	20
Caelo	Macrogolglycerol hydroxyste...	14283808	31625 [†]	20
Fagron	Macrogolglycerol hydroxyste...	14283808	31640	60
Caelo	Polysorbate 20	14365105	31697 [†]	20
Euro OTC	Lauromacrogol 400	1510024	31768 [†]	18
Caelo	Polysorbate 60	161771	32329	40
Caelo	Polysorbate 20	162335	32330	40
Caelo	Macrogol 20 glycerol monoste...	162800	32702	40
Euro OTC	Lauromacrogol 400	1610034	32816	40
Caelo	Polysorbate 60	170999	33322	40
Caelo	Macrogol 20 glycerol monoste...	161883	33325	40
Caelo	Macrogol 20 glycerol monoste...	161884	33326	40
Euro OTC	Lauromacrogol 400	1703033	33448	40
Caelo	Macrogol 4 lauryl ether	161002	33690	40
Caelo	Macrogol 20 glycerol monoste...	161883	33722	40
Caelo	Macrogol 20 glycerol monoste...	161884	33723	40
Euro OTC	Lauromacrogol 400	1710026	33844	40
Caelo	Polysorbate 20	172825	33884	40
Caelo	Polysorbate 60	172920	33888	40
Caelo	Lauromacrogol 400	172509	33899	40
Caelo	Macrogol 20 glycerol monoste...	172882	33901	40
Caelo	Macrogol 20 glycerol monoste...	172880	33902	40
Caelo	Macrogolglycerol hydroxyste...	16349304	33935	40
Caelo	Macrogol 4 lauryl ether	17028303	33950	40
Euro OTC	Lauromacrogol 400	1801043	34007	40
Caelo	Polysorbate 60	180292	34081	40
Caelo	Lauromacrogol 400	181755	34235	40
Caelo	Macrogol 20 glycerol monoste...	181870	34239	40
Caelo	Macrogol 20 glycerol monoste...	183242	34335	40
Caelo	Polysorbate 60	182897	34338	40

- 77860 spectra from a total of 1800 batches from further 345 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.

- 3510 spectra from 495 *Apo-Ident* customers from 714 batches from the substance/substance group *Lauromacrogols*.

Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 20	11117201	1
Caelo	Polysorbate 20	11179506	2
Caelo	Polysorbate 20	11179511	4

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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	Polysorbate 20	2704212525	1
Caelo	Polysorbate 20	11347701	1
Sanacorp	Polysorbate 20	12345	1
Caelo	Polysorbate 20	11347711	8
Phönix Gotha	Polysorbate 20	11347701	1
Caelo	Polysorbate 20	11347707	4
VDL	Polysorbate 20	11347707	1
Caelo	Polysorbate 20	11347715	6
Caelo	Polysorbate 20	2112E-02525	1
Sanacorp	Polysorbate 20	11347711	1
Caelo	Polysorbate 20	20210312-1	1
Caelo	Polysorbate 20	20220312-1	1
Caelo	Polysorbate 20	11347719	8
Caelo	Polysorbate 20	19021303	1
Caelo	Polysorbate 20	11117205	2
Caelo	Polysorbate 20	11347702	1
Sanacorp	Polysorbate 20	12303006	1
Fagron	Polysorbate 20	11I15-N13	1
Anzag	Polysorbate 20	12303006Caelo	1
Caelo	Polysorbate 20	12303006	8
Noweda	Polysorbate 20	12303016	1
Caelo	Polysorbate 20	12303016	13
Caelo	Polysorbate 20	4612A-02525	1
GEHE	Polysorbate 20	13086505	1
Caelo	Polysorbate 20	2713E2525	1
Caelo	Polysorbate 20	13086505	3
Caelo	Polysorbate 20	13086509	9
Sanacorp	Polysorbate 20	13086509	2
Caelo	Polysorbate 20	13086512	14
Caelo	Polysorbate 20	13066512	1
Caelo	Polysorbate 20	13086517	14
Sanacorp	Polysorbate 20	13086517	1
Caelo	Polysorbate 20	1329001	1
Caelo	Polysorbate 20	611poly	1
Caelo	Polysorbate 20	80479168	1
Caelo	Polysorbate 20	13297001-3449311132	1
Caelo	Polysorbate 20	13297001	7
Caelo	Polysorbate 20	13297005	10
Caelo	Polysorbate 20	13086510	1
Phönix Gotha	Polysorbate 20	13297005	1
Fagron	Polysorbate 20	13J18-B02-287378	4
Caelo	Polysorbate 20	13297009	11
Bombastus	Polysorbate 20	13297001	1
Phoenix	Polysorbate 20	13086517	1
Euro OTC	Polysorbate 20	13297009	1
Caelo	Polysorbate 20	13297010	18
VDL	Polysorbate 20	13297005	1
	Polysorbate 20	14019413	1
Caelo	Polysorbate 20	1912M-02525	1
Caelo	Polysorbate 20	14019413	1
Fagron	Polysorbate 20	14A23-B01-294167	1
Fagron	Polysorbate 20	25092014A	1
Caelo	Polysorbate 20	14019410	8
Sanacorp	Polysorbate 20	4/AKD1	1
Caelo	Polysorbate 20	714E-02525	1
Caelo	Polysorbate 20	1086517	1
Phönix	Polysorbate 20	14019410	2
Caelo	Polysorbate 20	1709930	1
Fagron	Polysorbate 20	13J18-B02	1
Fagron	Polysorbate 20	14A23-B01	1

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Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 20	14019418	22
Sanacorp	Polysorbate 20	14019410	1
Berkel AHK	Polysorbate 20	14019418	1
Cealo	Polysorbate 20	14019418	1
Caelo	Polysorbate 20	14041503	1
Caelo	Polysorbate 20	14213213	7
Caelo	Polysorbate 20	14213211	2
Euro OTC	Polysorbate 20	14213213	1
Caelo	Polysorbate 20	3114I-02525	1
Caelo	Polysorbate 20	14365105	17
VDL;4,39EUR;23.03.15	Polysorbate 20	14365105	1
Fagron	Polysorbate 20	14365105	1
Caelo	Polysorbate 20	14365109	22
Caelo	Polysorbate 20	14365116	25
Phönix Gotha	Polysorbate 20	14365116	1
Caelo	Polysorbate 20	15159004	1
Phönix	Polysorbate 20	14365116	1
Caelo	Polysorbate 20	3478	1
Caelo	Polysorbate 20	15323902	15
Caelo	Polysorbate 20	5/AKD7	1
Noweda	Polysorbate 20	15323902	1
Caelo	Polysorbate 20	1532902	2
Cael Sanacorp 05.02.2016	Polysorbate 20	15323902	1
Caelo	Polysorbate 20	15323912	16
Caelo	Polysorbate 20	12031605	1
Caelo	Polysorbate 20		3
Caelo	Polysorbate 20	1532302	1
Caelo	Polysorbate 20	16029703	44
WE:31.03.2016 Sanacorp	Polysorbate 20	15323902	2
Caesar & Loretz GmbH Hi...	Polysorbate 20	15323902	1
Fagron	Polysorbate 20	16029703	1
Caelo	Polysorbate 20	1523902	1
Euro OTC	Polysorbate 20	16029703	2
Caelo	Polysorbate 20	2215I-02525	1
Caelo	Polysorbate 20	1465109	1
Caelo	Polysorbate 20	16114502	5
Fagron	Polysorbate 20	16114502	2
Sanacorp, 16.08.2016, 4...	Polysorbate 20	16114502	1
Caelo	Polysorbate 20	16114503	29
Caolo- Noweda	Polysorbate 20	16029703	1
Anzag	Polysorbate 20	16114502	1
Caelo	Polysorbate 20	16233501	33
Caesar & Loretz GmbH	Polysorbate 20	16233501	1
Phönix	Polysorbate 20	16233501	1
Caeolo/Gehe	Polysorbate 20	16233501	1
Caelo	Polysorbate 20	170130P/16233501	1
Caelo	Polysorbate 20	16233506	14
Caelo	Polysorbate 20	162335	1
Gehe	Polysorbate 20	16233501	1
Noweda	Polysorbate 20	16233506	1
Caelo	Polysorbate 20	16233500	1
Caelo	Polysorbate 20	24061713	1
Caelo	Polysorbate 20	17021303	23
Caelo	Polysorbate 20	16114504	1
Sanacorp	Polysorbate 20	16114503	1
21.03.2017	Polysorbate 20	153233912	1
Sanacorp	Polysorbate 20	17021303	1
Caelo	Polysorbate 20	17021311	7
Fagron	Polysorbate 20	17021311	1
Caelo	Polysorbate 20	17021310	27

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Supplier	Substance	Batch	Spectra
Alliance	Polysorbate 20	17021310	1
Anzag	Polysorbate 20	17021303	2
Jenne	Polysorbate 20	17021310	1
AHD	Polysorbate 20	17021310	1
Kehr	Polysorbate 20	17021303	1
Caelo	Polysorbate 20	17021304	1
Caelo	Polysorbate 20	17325301	13
Caelo	Polysorbate 20	17325301-20180404Ma	1
Caelo	Polysorbate 20	17021307	1
Caelo	Polysorbate 20	25041806	1
Caelo	Polysorbate 20	17325407	16
Caeolo	Polysorbate 20	17325301	1
Dr. Wolff	Polysorbate 20	17021303	1
Caelo	Polysorbate 20	19071802	1
Caelo	Polysorbate 20	17325410	7
Bionorica/Phönix	Polysorbate 20	17325410	1
Caelo	Polysorbate 20	173254105745	1
Caelo	Polysorbate 20	17325413	7
Gehe	Polysorbate 20	17325410	1
euro//Noweda	Polysorbate 20	17325413	1
Sanacorp	Polysorbate 20	17325413	2
Kehr	Polysorbate 20	17325413	2
Caelo	Polysorbate 20	18276801	7
Caelo	Polysorbate 20	18276806	1
Eurho Phönix	Polysorbate 20	18276806	1
Euro OTC	Polysorbate 20	18276806	1
Caelo	Polysorbate 60	12133611	2
Caelo	Polysorbate 60	13098006	1
Caelo	Polysorbate 60	12133602	1
Caelo	Polysorbate 60	13258902	5
Gehe am 06.02.2014	Polysorbate 60	13258902	1
Caelo	Polysorbate 60	14027103	1
Caelo	Polysorbate 60	15067401	4
Caelo	Polysorbate 60	14027102	1
Caelo	Polysorbate 60	15067408	12
Caelo	Polysorbate 60	15067407	1
Caelo	Polysorbate 60	15067409	2
Caesar&Loretz GmbH	Polysorbate 60	15067409	1
Caelo	Polysorbate 60	16007302	9
Caelo	Polysorbate 60	15292906	5
Caelo	Polysorbate 60	16177104	2
Gehe	Polysorbate 60	16177104	1
Caelo	Polysorbate 60	17025804	2
Ebert-Jacobi	Polysorbate 60	1617106	1
Caelo	Polysorbate 60	17099901	8
Caelo	Polysorbate 60	17099903	1
Sanacorp	Polysorbate 60	17099905	1
Caelo	Polysorbate 60	18005903	2
Sanacorp	Polysorbate 60	18005909	1
Caelo	Polysorbate 60	1805909	1
Caelo	Polysorbate 60	18005910	1
Fagron	Macrogol 20 glycerol monoste...	12H23-N03	4
Fagron	Macrogol 20 glycerol monoste...	ES61A85388	1
Caelo	Macrogol 20 glycerol monoste...	12326201	2
Fagron	Macrogol 20 glycerol monoste...	13H09-N06	5
Caelo	Macrogol 20 glycerol monoste...	ES62A93607	1
Caelo	Macrogol 20 glycerol monoste...	13213601	1
Bombastus	Macrogol 20 glycerol monoste...	13H09-N06	1
Caelo	Macrogol 20 glycerol monoste...	13213602	3
Caelo	Macrogol 20 glycerol monoste...	14033701	2

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Supplier	Substance	Batch	Spectra
Bombastus	Macrogol 20 glycerol monoste...	700906	1
Caelo	Macrogol 20 glycerol monoste...	14302001	2
Caelo	Macrogol 20 glycerol monoste...	15410502	2
Caelo	Macrogol 20 glycerol monoste...	3042223	1
Caelo	Macrogol 20 glycerol monoste...	15410504	3
Euro OTC	Macrogol 20 glycerol monoste...	15410502	1
Caelo	Macrogol 20 glycerol monoste...	16188401	5
Caelo	Macrogol 20 glycerol monoste...	17080101	2
Caelo	Macrogol 20 glycerol monoste...	17080102	1
Caelo	Macrogol 20 glycerol monoste...	18018506	1
Caelo	Macrogol 20 glycerol monoste...	18018501	1
Caesar & Loretz GmbH, 4...	Macrogol 4 lauryl ether	11220306	1
Caelo	Macrogol 4 lauryl ether	12057804	4
Noweda	Macrogol 4 lauryl ether	1111400032	1
Spinnrad	Macrogol 4 lauryl ether	1111400032	2
Caelo	Macrogol 4 lauryl ether	12057806	3
Gehe	Macrogol 4 lauryl ether	11220306	1
GEHE	Macrogol 4 lauryl ether	21021172/5	1
Caelo	Macrogol 4 lauryl ether	11220306	1
Spinnrad GmbH	Macrogol 4 lauryl ether	1111400032	1
Caelo	Macrogol 4 lauryl ether	20121112-1	1
Caelo	Macrogol 4 lauryl ether	12180202	3
Spinnrad	Macrogol 4 lauryl ether	512400031	2
Spinnrad/Anzag	Macrogol 4 lauryl ether	12124000321	2
Anzag	Macrogol 4 lauryl ether	12180204	1
Noweda	Macrogol 4 lauryl ether	512400031	1
Caelo	Macrogol 4 lauryl ether	12180204	2
Spinnrad	Macrogol 4 lauryl ether	12124000321	5
Caelo	Macrogol 4 lauryl ether	13041702	4
Sanacorp	Macrogol 4 lauryl ether	12180204	1
Caesar&Loretz,Anzag	Macrogol 4 lauryl ether	13041702	1
Spinnrad GmbH	Macrogol 4 lauryl ether	2240003	1
Spinnrad	Macrogol 4 lauryl ether	111140032	1
Caelo	Macrogol 4 lauryl ether	13041706	3
spinnrad	Macrogol 4 lauryl ether	1214000321	1
Fagron	Macrogol 4 lauryl ether	13B13N01	1
AHD, 25.07.2013	Macrogol 4 lauryl ether	13136202	1
Noweda	Macrogol 4 lauryl ether	413400031	2
Spinnrad	Macrogol 4 lauryl ether	413400031	4
Spinnrad/Noweda	Macrogol 4 lauryl ether	413400031	1
Caelo	Macrogol 4 lauryl ether	13136202	2
Jenne	Macrogol 4 lauryl ether	13136202	1
Spinnrad/Phönix	Macrogol 4 lauryl ether	413400031	1
Fagron	Macrogol 4 lauryl ether	13136202	1
Gehe	Macrogol 4 lauryl ether	13136206	1
Spinnrad GmbH	Macrogol 4 lauryl ether	12124000321	1
Sanacorp	Macrogol 4 lauryl ether	1013400032	1
spinnrad	Macrogol 4 lauryl ether	512400031	1
Soinnrad	Macrogol 4 lauryl ether	11012014B	1
Caelo	Macrogol 4 lauryl ether	13229805	6
Caesar &Loretz GmbH	Macrogol 4 lauryl ether	13229802	1
Caelo	Macrogol 4 lauryl ether	7121201	1
Caelo	Macrogol 4 lauryl ether	13229801	1
Spinnrad / Noweda	Macrogol 4 lauryl ether	512400031	1
Caelo	Macrogol 4 lauryl ether	1013400032	1
spinnrad	Macrogol 4 lauryl ether	1213400033	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	512400031	1
Caelo	Macrogol 4 lauryl ether	14054401	7
Caelo	Macrogol 4 lauryl ether	13229808	2
Noweda	Macrogol 4 lauryl ether	123400033	1

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Supplier	Substance	Batch	Spectra
Gehe	Macrogol 4 lauryl ether	14054401	1
Spinnrad	Macrogol 4 lauryl ether	1213400033	2
Euro OTC	Macrogol 4 lauryl ether	14054401	1
Spinnrad GmbH / Phönix	Macrogol 4 lauryl ether	413400031	1
Caelo	Macrogol 4 lauryl ether	14054405	7
Spinnrad GmbH	Macrogol 4 lauryl ether	1013400032	1
Raben-Apotheke Mildena	Macrogol 4 lauryl ether	314400031	1
Spinnrad/Noweda	Macrogol 4 lauryl ether	314400031	1
Fagron	Macrogol 4 lauryl ether	13K18-B30-288163	1
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	314400031	2
Spinnrad GmbH	Macrogol 4 lauryl ether	314400031	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	14054405	1
Fagron	Macrogol 4 lauryl ether	14E06-B05-293846	1
spinnrad	Macrogol 4 lauryl ether	314400031	1
sanacorp	Macrogol 4 lauryl ether	14054405	1
Spinnrad	Macrogol 4 lauryl ether	101440032	1
Spinnrad	Macrogol 4 lauryl ether	1014400032	2
Caelo	Macrogol 4 lauryl ether	14225303	5
Caelo	Macrogol 4 lauryl ether	14225301	3
Spinnrad GmbH	Macrogol 4 lauryl ether	1014400032	2
Schärer&Schlapfer	Macrogol 4 lauryl ether	14E06-B05-295979	2
Fagron	Macrogol 4 lauryl ether	14E06-B05-293848	1
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	1014400032	1
Caesar & Loretz GmbH Hi...	Macrogol 4 lauryl ether	14283001	1
Spinnrad/Gehe	Macrogol 4 lauryl ether	1014400032	1
Spinnrad / Noweda	Macrogol 4 lauryl ether	1014400032	1
Euro OTC	Macrogol 4 lauryl ether	1407007-01	1
Spinnrad / Alliance HC	Macrogol 4 lauryl ether	314400031	1
Caelo	Macrogol 4 lauryl ether	3272779	1
Caelo	Macrogol 4 lauryl ether	14225306	3
Caelo	Macrogol 4 lauryl ether	1014400032	3
Caelo	Macrogol 4 lauryl ether	14225308	4
AHD;2,32EUR;19.06.15	Macrogol 4 lauryl ether	1014400032	1
Caesar & Loretz GmbH	Macrogol 4 lauryl ether	14225308	1
Noweda 10.07.2015	Macrogol 4 lauryl ether	1014400032	1
Sanacorp	Macrogol 4 lauryl ether	1014400032	1
Caelo	Macrogol 4 lauryl ether	15041801	5
Fagron	Macrogol 4 lauryl ether	15A26B02	1
AHD/ Spinnrad	Macrogol 4 lauryl ether	314400031	1
spinnrad	Macrogol 4 lauryl ether	715400031	2
VDL;7.75EUR; 30.09.2015	Macrogol 4 lauryl ether	15041801	1
Caesar&loretz,Phoenix	Macrogol 4 lauryl ether	14225308	1
Caelo	Macrogol 4 lauryl ether	15041704	9
Euro OTC	Macrogol 4 lauryl ether	1503032-02	1
Caelo	Macrogol 4 lauryl ether	5041801	1
Spinnrad/Sanacorp	Macrogol 4 lauryl ether	715400031	2
Caelo	Macrogol 4 lauryl ether	715400031	1
Caelo	Macrogol 4 lauryl ether	4214A-02868	1
Caelo	Macrogol 4 lauryl ether	15323701	17
Hedinger	Macrogol 4 lauryl ether	15041704	1
Spinnrad/Phoenix	Macrogol 4 lauryl ether	1014400032	1
Caesar & Loretz/Noweda	Macrogol 4 lauryl ether	715400031	1
Anzag	Macrogol 4 lauryl ether	15323701	1
Caelo	Macrogol 4 lauryl ether	15323704	9
Spinnrad/ Noweda	Macrogol 4 lauryl ether	715400031	1
Euro OTC	Macrogol 4 lauryl ether	15323704	1
Gehe/Spinnrad	Macrogol 4 lauryl ether	715400031	1
Gehe/ Spinnrad	Macrogol 4 lauryl ether	715400031	1
Caelo	Macrogol 4 lauryl ether	16100201	8
Caelo	Macrogol 4 lauryl ether		1

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Supplier	Substance	Batch	Spectra
Spinnrad	Macrogol 4 lauryl ether	715400031	2
Spinnrad/Noweda	Macrogol 4 lauryl ether	715400031	1
Sinnrad GmbH,Bad Seegeb...	Macrogol 4 lauryl ether	316400031	1
Spinnrad	Macrogol 4 lauryl ether	316400031	4
Fagron	Macrogol 4 lauryl ether	316400031	2
Ichthyol/Gehe	Macrogol 4 lauryl ether	316400031	1
Caelo	Macrogol 4 lauryl ether	16100205	11
Caelo	Macrogol 4 lauryl ether	616A-02868	1
Euro OTC	Macrogol 4 lauryl ether	1605006-02	1
INTR/Phönix	Macrogol 4 lauryl ether	16100205	1
Sanacorp, 21.03.17, 9,45EUR	Macrogol 4 lauryl ether	16100205	1
Euro OTC	Macrogol 4 lauryl ether	1142238	1
Caelo	Macrogol 4 lauryl ether	16102911	1
Spinnrad GmbH	Macrogol 4 lauryl ether	316400031	1
Fagron	Macrogol 4 lauryl ether	16E18-B04-326871	1
GEHE	Macrogol 4 lauryl ether	15323704	1
Caelo	Macrogol 4 lauryl ether	16100207	8
Spinnrad/Noweda	Macrogol 4 lauryl ether	316400031	1
Caelo	Macrogol 4 lauryl ether	1510024-02	2
Euro OTC	Macrogol 4 lauryl ether	1610034-01	1
Caelo	Macrogol 4 lauryl ether	221542	1
Fagron	Macrogol 4 lauryl ether	16E18-B04-328737	1
Fagron	Macrogol 4 lauryl ether	17A23-B01-332868	1
Caelo	Macrogol 4 lauryl ether	17028301	14
Fagron	Macrogol 4 lauryl ether	17A23-B01-332867	1
Kehr	Macrogol 4 lauryl ether	16100207	2
Fagron	Macrogol 4 lauryl ether	170303301	1
Caelo	Macrogol 4 lauryl ether	17028303	4
Spinnrad	Macrogol 4 lauryl ether	417400031	1
Sanacorp	Macrogol 4 lauryl ether	417400001	1
Caelo	Macrogol 4 lauryl ether	1710026	1
Caelo	Macrogol 4 lauryl ether	1710026-01	1
Caelo	Macrogol 4 lauryl ether	18040101	9
Sanacorp	Macrogol 4 lauryl ether	17028303	1
Fagron	Macrogol 4 lauryl ether	17H21-Bo7-341795	1
Kehr	Macrogol 4 lauryl ether	17028303	1
Spinnrad	Macrogol 4 lauryl ether	316400031	1
Caelo	Macrogol 4 lauryl ether	18040103	5
Fagron	Macrogol 4 lauryl ether	18B26-B06346398	1
Bombastus	Macrogol 4 lauryl ether	18040103	1
Spinnrad/Gehe	Macrogol 4 lauryl ether	218400031	1
Caelo	Macrogol 4 lauryl ether	18215501	2
Gehe	Macrogol 4 lauryl ether	18215501	1
Fagron	Lauromacrogol 400	11F28-N08	3
Euro OTC	Lauromacrogol 400	1407007-01	4
Euro OTC	Lauromacrogol 400	1009020-02	2
Caelo	Lauromacrogol 400	11107905	1
Fagron	Lauromacrogol 400	12A26-N08	9
Euro OTC	Lauromacrogol 400	1109011-01	2
Ichthyol	Lauromacrogol 400	110408	4
Gepepharm / Gehe	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	110408	18
Fagron	Lauromacrogol 400	11D28-N20	1
Gehe	Lauromacrogol 400	110408	3
gepepharm/Anzag 27.04.2...	Lauromacrogol 400	110408	8
gepepharm GmbH	Lauromacrogol 400	110408	10
Fagron	Lauromacrogol 400	11f28-n08	1
Fagron	Lauromacrogol 400	12E03-N04	24
Caelo	Lauromacrogol 400	12092512	3
Caelo	Lauromacrogol 400	11107901	1

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Supplier	Substance	Batch	Spectra
Phoenix	Lauromacrogol 400	110408	1
Gepepharm/VDL	Lauromacrogol 400	110408	3
Caelo	Lauromacrogol 400	11107804	1
Gepepharm Anzag	Lauromacrogol 400	110408	17
Caelo	Lauromacrogol 400	12092501	1
Gepepharm GmbH	Lauromacrogol 400	110408	3
GEPE/Anzag	Lauromacrogol 400	110408	2
Caelo	Lauromacrogol 400	12A26-N08	1
Gepepharm	Lauromacrogol 400	19101201	1
Anzag	Lauromacrogol 400	110408	3
Gepepharm	Lauromacrogol 400	110408	6
Gepepharm	Lauromacrogol 400	6111203	1
Fagron	Lauromacrogol 400	12-0719	1
Gepepharm/Gehe	Lauromacrogol 400	110408	2
Gepepharm	Lauromacrogol 400	4111M-02384	1
Fagron	Lauromacrogol 400	12e03-n04	1
Gepepharm	Lauromacrogol 400	27111202	1
gegepharm,Anzag	Lauromacrogol 400	110408	2
Gepepharm / Sanacorp	Lauromacrogol 400	110408	2
Gepepharm	Lauromacrogol 400	19121203	1
ANZAG	Lauromacrogol 400	110408	2
Phönix Gotha	Lauromacrogol 400	12092516	1
Fagron	Lauromacrogol 400	12/18-N04	5
gepepharm, Noweda	Lauromacrogol 400	110408	4
gepepharm/Phönix	Lauromacrogol 400	110408	2
gebepfarm	Lauromacrogol 400	20030412-1	1
Fagron	Lauromacrogol 400	12118-N04	1
Caelo	Lauromacrogol 400	12E03-N04	2
Euro OTC	Lauromacrogol 400	502956	1
Stumpf/gepepharm	Lauromacrogol 400	110408	1
gebepfarm	Lauromacrogol 400	813E-02384	1
Gepepharm	Lauromacrogol 400	2002312384	1
gepepharm/Otto	Lauromacrogol 400	65793	1
gebepfarm	Lauromacrogol 400	813Q-02384	1
gepepharm	Lauromacrogol 400	110408	4
Fagron	Lauromacrogol 400	12I18-N04	2
Ebert+Jacobi	Lauromacrogol 400	12A26-N08	1
Gegepharm/N/26.02.13 PZ...	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	12092516	2
Phoenix (gepepharm)	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	3121505	1
Gepepharm	Lauromacrogol 400	30031303	1
Euro OTC	Lauromacrogol 400	1210035-01	2
Fagron	Lauromacrogol 400	13B13-N01	25
Fagron	Lauromacrogol 400	11I07-N05	1
Caelo	Lauromacrogol 400	13B13-N01	3
Fagron	Lauromacrogol 400	13B13-No1	1
Phönix	Lauromacrogol 400	12E03-N04	1
gepepharm/gehe	Lauromacrogol 400	110408	2
gepepharm/Phönix	Lauromacrogol 400	130109	5
Phönix	Lauromacrogol 400	13B13-N01	1
Fagron	Lauromacrogol 400	13B13-N01	1
Caelo	Lauromacrogol 400	12092525	3
Gebepfarm/Anzag	Lauromacrogol 400	130109	1
Gepepharm	Lauromacrogol 400	130109	16
gepepharm/Noweda	Lauromacrogol 400	130109	2
gepepharm	Lauromacrogol 400	130109	52
Anzag	Lauromacrogol 400	13A31N04	1
Fagron	Lauromacrogol 400	13813-N01	3
Fagron	Lauromacrogol 400	13A31-N04	3

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Supplier	Substance	Batch	Spectra
gepepharm GmbH/ Noweda	Lauromacrogol 400	130109	1
Gepepharm/VDL	Lauromacrogol 400	130109	24
Gebepharma/Anzag	Lauromacrogol 400	110408	1
gepepharm/Phönix	Lauromacrogol 400	1101409	1
gepepharm/Phoenix	Lauromacrogol 400	130109	4
Euro OTC	Lauromacrogol 400	1302014-01	6
Fagron	Lauromacrogol 400	12A26-N08	1
gepepharm / Noweda	Lauromacrogol 400	130109	9
Phönix Gotha	Lauromacrogol 400	13B13-N01	1
Gepepharm / Gehe	Lauromacrogol 400	130109	6
GEHE	Lauromacrogol 400	13B13-N01	1
Noweda	Lauromacrogol 400	13B13-N01	1
gepepharmGmbH	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	12092530	2
gepepharm GmbH	Lauromacrogol 400	130109	26
Gepepharm GmbH / Anzag	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	13095802	9
Caelo	Lauromacrogol 400	13-0108	1
gepepharm / Sanacorp	Lauromacrogol 400	130109	6
Gehe	Lauromacrogol 400	130109	2
Gepepharm/Gehe	Lauromacrogol 400	130109	5
Fagron	Lauromacrogol 400	12-1074	1
Caelo	Lauromacrogol 400	130109	17
gepepharm GmbH	Lauromacrogol 400	13-0108	1
gepepharm GmbH	Lauromacrogol 400	13-0109	1
Caelo	Lauromacrogol 400	13095801	3
Schärer&Schläpfer AG/Ph...	Lauromacrogol 400	13B13-N01	1
gepepharm / Noweda	Lauromacrogol 400	110408	1
gepepharm GmbH	Lauromacrogol 400	130109	1
EoRho	Lauromacrogol 400	1302014-01	2
gepepharm/sanacorp	Lauromacrogol 400	130109	1
gepepharm	Lauromacrogol 400	13044009	1
Phönix/gepepharm	Lauromacrogol 400	130109	3
Euro OTC	Lauromacrogol 400	13F13-N07	1
gepepharm/ Noweda	Lauromacrogol 400	130109	7
Gepepharm/Phoenix	Lauromacrogol 400	3813E02384	1
Fagron	Lauromacrogol 400	13F13-N07	5
Sanacorp	Lauromacrogol 400	130109	5
Fagron	Lauromacrogol 400	13G02-N03	15
Caelo	Lauromacrogol 400	90807	1
GEHE	Lauromacrogol 400	130109	1
Euro OTC	Lauromacrogol 400	221542	1
Caesar & Lorenz	Lauromacrogol 400	13095802	1
gepepharm/Sanac	Lauromacrogol 400	130109	3
Gepepharm/Phönix	Lauromacrogol 400	130109	5
Caelo	Lauromacrogol 400	130600401	1
Gepegepharm	Lauromacrogol 400	130109	1
Euro OTC	Lauromacrogol 400	1306004-01	8
Sanacorp	Lauromacrogol 400	13095802	1
Phönix Gotha	Lauromacrogol 400	13-0599	1
gepepharm, Noweda	Lauromacrogol 400	130109	1
gepepharm	Lauromacrogol 400	130109	1
Gepepharm GmbH / Anzag	Lauromacrogol 400	130109	1
Phönix Gotha	Lauromacrogol 400	13G02-N030461/1210	1
Fagron	Lauromacrogol 400	130599	1
Gepepharm/Sanacorp	Lauromacrogol 400	130109	4
gepe/Gehe	Lauromacrogol 400	130109	1
gepepharm	Lauromacrogol 400	13-0108	2
Caelo	Lauromacrogol 400	13095811	5
Sanacorp	Lauromacrogol 400		1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Lauromacrogol 400	130109	3
Fagron	Lauromacrogol 400	21121201	1
Fagron	Lauromacrogol 400	13G02-No3	2
Gepepharm/V.d.L.	Lauromacrogol 400	130109	1
Fagron	Lauromacrogol 400	13J01-N03	2
Caelo	Lauromacrogol 400	13095809	2
Fagron	Lauromacrogol 400	13K18-B30-288163	10
gepepharm GmbH/Noweda	Lauromacrogol 400	130109	4
Gepepharm/Noweda	Lauromacrogol 400	130109	2
Phoenix/gepepharm	Lauromacrogol 400	110408	1
Gepepharm/Phoenix	Lauromacrogol 400	130109	2
Fagron	Lauromacrogol 400	3713U-02384	1
Fagron	Lauromacrogol 400	13K18-B30	5
Caelo	Lauromacrogol 400	13340701	6
Caelo	Lauromacrogol 400	13095817	4
Caesar/Noweda	Lauromacrogol 400	13B13-N01	1
Fagron	Lauromacrogol 400	13K18-B30-288164	4
Gepepharm/ Noweda	Lauromacrogol 400	130109	1
Euro OTC	Lauromacrogol 400	1306004-02	3
Gepepharm/Phoenix	Lauromacrogol 400	1614U2384	1
gebepfarm N PZN 01915345	Lauromacrogol 400	130109	1
Caelo	Lauromacrogol 400	13-0599	1
Fagron	Lauromacrogol 400	13G02N03	1
Fagron	Lauromacrogol 400	13K18-B30-28816	3
Caelo	Lauromacrogol 400	13340703	4
Phoenix	Lauromacrogol 400	130109	1
gepepharm/Sanacorp	Lauromacrogol 400	130109	7
Fagron	Lauromacrogol 400	13g02-n03	1
Fagron	Lauromacrogol 400	13G02-N030515/1084	1
Sanacorp	Lauromacrogol 400	130108	1
Fagron	Lauromacrogol 400	13K18-B30288163	1
gepepharm/Gehe	Lauromacrogol 400	130109	3
gepepharm gmbh	Lauromacrogol 400	130109	4
Fagron	Lauromacrogol 400	13k18-b30-288163	1
Fagron	Lauromacrogol 400	13-0599	2
Fagron	Lauromacrogol 400	13K18-B30-288165	2
Fargon	Lauromacrogol 400	13K18-B30-288166	1
Fagron	Lauromacrogol 400	13G02-N030021/1084	1
Caelo	Lauromacrogol 400	13K18-B30	1
gepepharm GmbH	Lauromacrogol 400	3072014A	1
Fagron	Lauromacrogol 400	13G02-N030047/1084	1
Fagron	Lauromacrogol 400	14E06-B05-293848	3
Fagron	Lauromacrogol 400	14E06-B05-293847	12
gepepharm® GmbH	Lauromacrogol 400	110408	1
Caelo	Lauromacrogol 400	13K18-B30-288163	1
gepepharma/Phönix	Lauromacrogol 400	130109	1
Fagron	Lauromacrogol 400	14E06-B05-293846	4
Gepepharm / GEHE	Lauromacrogol 400	130109	1
Caelo	Lauromacrogol 400	13340706	1
Phönix	Lauromacrogol 400	13-0108130109	1
Hedinger/Gehe	Lauromacrogol 400	13G02-N03	1
gepepharm/Anzag	Lauromacrogol 400	130109	1
Caelo	Lauromacrogol 400	13340710	3
Gepepharm über Phoenix	Lauromacrogol 400	130109	7
Fagron	Lauromacrogol 400	13-1827	1
Fagron	Lauromacrogol 400	14H04-B03-297070	5
Gepepharm	Lauromacrogol 400	17111403	1
Gebepfarm GmbH	Lauromacrogol 400	130109	2
Noweda/gepepharm	Lauromacrogol 400	130109	1
GEHE 28.11.2014	Lauromacrogol 400	14H04-B03-297070	1

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Supplier	Substance	Batch	Spectra
gepepharm GmbH	Lauromacrogol 400	27112014A	1
gepepharm / Sanacorp	Lauromacrogol 400	13-0108	1
Sanacorp	Lauromacrogol 400	13340710	1
AHD 09.12.14	Lauromacrogol 400	130109	2
Caelo	Lauromacrogol 400	13340712	1
Fagron	Lauromacrogol 400	14E06-B05293848	1
Fagron	Lauromacrogol 400	14H04-B03-297073	3
Caelo	Lauromacrogol 400	14220807	2
Fagron	Lauromacrogol 400	14H04B03	1
Fagron	Lauromacrogol 400	14H04-B03	7
Caelo	Lauromacrogol 400	21011501	1
Gehe gepepharmn	Lauromacrogol 400	110408	1
Fagron	Lauromacrogol 400	14E06-B05-295979	3
Caelo	Lauromacrogol 400	14220805	2
Fagron	Lauromacrogol 400	9002-92-0	1
Phoenix	Lauromacrogol 400	13-0108	1
Gepepharm/Fiebig	Lauromacrogol 400	130109	1
Fagron	Lauromacrogol 400	14H04-B03-297071	2
Caelo	Lauromacrogol 400	14H04-B03-297071	2
Euro OTC	Lauromacrogol 400	1410010-01	1
Fagron	Lauromacrogol 400	14-0731	5
Löwen City-Apotheke Bar...	Lauromacrogol 400	2042015	1
Caelo	Lauromacrogol 400	14220813	3
Calo/AHD	Lauromacrogol 400	14-0731	1
Fagron	Lauromacrogol 400	14E06-B05-29847	1
gepepharm GmbH	Lauromacrogol 400	1915345	1
Fagron	Lauromacrogol 400	14H04-B03-301517	5
Caelo	Lauromacrogol 400	14220816	8
gepepharm/ Sanacorp 22...	Lauromacrogol 400	130109	1
Caelo	Lauromacrogol 400	14H04-B03-301517	2
gepepharm/AHD	Lauromacrogol 400	130109	1
Gepepharm / Noweda	Lauromacrogol 400	140911	1
Gepepharm/Phönix	Lauromacrogol 400	140911	4
Fagron	Lauromacrogol 400	1314A-02384	1
Euro OTC	Lauromacrogol 400	150303201	1
Gepepharm	Lauromacrogol 400	13051502	1
Fagron	Lauromacrogol 400	15A26-B02-303625	9
gepepharm GmbH	Lauromacrogol 400	8062015D	1
Fagron	Lauromacrogol 400	14H04-B03-297074	2
gepepharm GmbH/ NOW	Lauromacrogol 400	140911	1
gepepharm	Lauromacrogol 400	140911	25
GEPEPHARM	Lauromacrogol 400	14-1414	1
GEPEPHARM	Lauromacrogol 400	140911	5
Caelo	Lauromacrogol 400	14220820	2
Phoenix	Lauromacrogol 400	140911	2
Gehe/gepepharm	Lauromacrogol 400	140911	2
Gepepharm	Lauromacrogol 400	25061502	1
Caelo	Lauromacrogol 400	14220808	1
Caelo	Lauromacrogol 400	14220818	1
Fagron	Lauromacrogol 400	14H04-B03-301520	4
Gepepharm über Phoenix	Lauromacrogol 400	140911	3
gepepharm/Phönix	Lauromacrogol 400	140911	11
Gepepharm/Sanacorp	Lauromacrogol 400	140911	9
Caelo	Lauromacrogol 400	15A26-B02	2
Gepepharm/Gehe	Lauromacrogol 400	140911	11
Gepepharm	Lauromacrogol 400	140911	19
Gepepharm GmH	Lauromacrogol 400	140911	5
Fagron	Lauromacrogol 400	14H04-B03-301518	2
Caelo	Lauromacrogol 400	140911	9
gepepharm/Sanacorp	Lauromacrogol 400	140911	1

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Supplier	Substance	Batch	Spectra
Noweda	Lauromacrogol 400	15A26-B02-303625	1
Phoenix/gepepharm	Lauromacrogol 400	140911	3
Caelo	Lauromacrogol 400	1410010-10	1
gepepharm GmbH	Lauromacrogol 400	140911	17
Noweda/gepepharm	Lauromacrogol 400	140911	1
Allianc. Healthc./ Gepe	Lauromacrogol 400	140911	2
Fagron	Lauromacrogol 400	14371706	1
Depharm/Sanacorp	Lauromacrogol 400	140911	2
Fagron	Lauromacrogol 400	15A26-B02	8
Fagron	Lauromacrogol 400	14H04-B03-301519	6
Euro OTC	Lauromacrogol 400	1503032-01	3
Gepepharm/ Gehe	Lauromacrogol 400	14-1414	1
gepepharm/Gehe	Lauromacrogol 400	140911	3
Fagron	Lauromacrogol 400	15A26-B02-303628	19
Anzag	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	15192205	9
Phönix Gotha	Lauromacrogol 400	140911	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	15A26-02	1
gepepharm/Noweda	Lauromacrogol 400	140911	4
Fagron	Lauromacrogol 400	15A26-B02-303626	5
gepep/Phoenix	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	15192203	3
Fagron	Lauromacrogol 400	14H-04-B03-301518	2
gepepharm/Gehe	Lauromacrogol 400	140911	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	15A26-B02	1
Fagron	Lauromacrogol 400	15A26B02-303627	1
apomix PKH GmbH Halle	Lauromacrogol 400	15A26B02-30362	1
Gepepharm/Kehr	Lauromacrogol 400	51123/2Sie	1
Caelo	Lauromacrogol 400	15192202	2
Euro OTC	Lauromacrogol 400	1503032-02	3
Gepepharm /Noweda	Lauromacrogol 400	140911	1
phoenix/noveda	Lauromacrogol 400	140911	2
gepepharm	Lauromacrogol 400	140911	2
Caelo	Lauromacrogol 400	15a26-b02-303628	1
Fagron	Lauromacrogol 400	15A26-B02303626	1
gepepharm/Sanacorp	Lauromacrogol 400	14-1414	1
Fagron	Lauromacrogol 400	15A26-B02-303629	5
Gatt-Koller	Lauromacrogol 400	1504/05153915	2
Gepepharm/Noweda	Lauromacrogol 400	140911	3
Fagron	Lauromacrogol 400	15a26-B02	1
Fagron	Lauromacrogol 400	303628	1
apomix AHD	Lauromacrogol 400	140911	11
Fagron	Lauromacrogol 400	15a26-b02-303625	1
gepepharm/Gehe	Lauromacrogol 400	14-1414	2
Caelo	Lauromacrogol 400	15A26-B02-303627	1
Fagron	Lauromacrogol 400	15A26B02303627	1
Fagron	Lauromacrogol 400	T-190116-1	1
Gepepharm /Fiebig	Lauromacrogol 400	labip-g97-110616-01	1
Caelo	Lauromacrogol 400	15192208	5
Fagron	Lauromacrogol 400	15g10-b05-313605	2
Gehe/Fragon	Lauromacrogol 400	15A26B02303627	1
Fagron	Lauromacrogol 400	15E27-B99-308668	1
Euro OTC	Lauromacrogol 400	1503032	1
Fagron	Lauromacrogol 400	15G10-B05-314366	4
gepepharm / Phönix	Lauromacrogol 400	140911	2
Euro OTC	Lauromacrogol 400	1510024-01	5
Fagron	Lauromacrogol 400	15G1-B05-313605	1
Fiebig/ gepepharm	Lauromacrogol 400	140911	1
Fagron	Lauromacrogol 400	14A26-B02-303629	1
Fagron	Lauromacrogol 400	15A26-B02-303627	5

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Supplier	Substance	Batch	Spectra
Hedinger/ Sanacorp	Lauromacrogol 400	140911	1
Gepepharm GmbH/Gehe	Lauromacrogol 400	140911/20160309/13	1
Gepepharm GmbH	Lauromacrogol 400	140911	5
Fagron	Lauromacrogol 400	15G10-B05-313605	5
Euro OTC	Lauromacrogol 400	15A26-B02303628	1
gepepharm / Noweda	Lauromacrogol 400	140911	1
Gepepharm/Anzag	Lauromacrogol 400	140911	1
AHD 21.03.16 EK 36,71	Lauromacrogol 400	140911	1
Kehr/gepepharm	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	15363702	7
Fagron	Lauromacrogol 400	2215I-02384	1
Euro OTC	Lauromacrogol 400	1510024-02	8
Gepepharm/Sana	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	16/077/M	1
Fagron	Lauromacrogol 400	15G10-B05-315343	2
Gepepharm GmbH/Phoenix	Lauromacrogol 400	140911	2
phönix	Lauromacrogol 400	15g10b05314366	1
Fagron	Lauromacrogol 400	15G10-B05-313606	1
gepepharm/G	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	15G10-B05-313605	1
Fagron	Lauromacrogol 400	15C10-B05-314366	1
Fagron	Lauromacrogol 400	15a26-b02-303628	1
Fagron	Lauromacrogol 400	15G10-B05	6
Euro	Lauromacrogol 400	1510024-01	1
Cepepharm / Gehe	Lauromacrogol 400	140911	3
Fagron	Lauromacrogol 400	15G10-B05-31457	1
Croda Iberica	Lauromacrogol 400	1510024-02	1
Caelo	Lauromacrogol 400	14-1414	1
Caelo	Lauromacrogol 400	12345	1
Fagron	Lauromacrogol 400	15G10B05315343	1
Lamotte	Lauromacrogol 400	15192209	1
gepepharm GmbH/Gehe	Lauromacrogol 400	140911	3
Gehe/Fragon	Lauromacrogol 400	15G10B05317456	1
Gepepharm/Sanacorp	Lauromacrogol 400	14-1414	1
Caelo	Lauromacrogol 400		2
Fagron	Lauromacrogol 400	16/149/P	1
Caelo	Lauromacrogol 400	15G10-B05	1
Fagron	Lauromacrogol 400	15G10-B05-317457	5
Fagron	Lauromacrogol 400	15G10-B05-318670	3
Caelo	Lauromacrogol 400	15363703	4
Fagron	Lauromacrogol 400	15G10-B05-317456	5
Caelo	Lauromacrogol 400	15192209	2
Bombastus	Lauromacrogol 400	15G10-B05-318670	1
Fagron	Lauromacrogol 400	15-0596	2
Fagron	Lauromacrogol 400	15G10-B05317456	2
Euro OTC	Lauromacrogol 400	1510025-01	1
geprpharm GmbH	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	1510024-02	1
Fagon	Lauromacrogol 400	15G10-B05-318670	1
Fagron	Lauromacrogol 400	15G10-B025-318670	1
Caelo	Lauromacrogol 400	15G10-B05-315343	1
Fagron	Lauromacrogol 400	16E18-804-321110	1
Fagaron	Lauromacrogol 400	15G10-B05	1
Fagron	Lauromacrogol 400	15g10-b05-317457	2
Fagron	Lauromacrogol 400	16E18-B04-321110	3
Ebert & Jacobi 31.05...	Lauromacrogol 400	140911	2
Euro OTC	Lauromacrogol 400	151002401	1
Fagron	Lauromacrogol 400	15G10	2
Caelo	Lauromacrogol 400	15363701	1
Audor Pharma	Lauromacrogol 400	140911	2

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	16E18-B04	15
Fagron	Lauromacrogol 400	16E18-B04-321109	6
Caelo	Lauromacrogol 400	15363712	6
Caelo	Lauromacrogol 400	15363707	2
Euro OTC	Lauromacrogol 400	1605006-01	9
Euro OTC	Lauromacrogol 400	260315/1	1
Fagron	Lauromacrogol 400	16E18-B04-322723	5
Gepepharm/ Phönix	Lauromacrogol 400	140911	1
Fagron	Lauromacrogol 400	15g10-b05-317456	1
Fagron	Lauromacrogol 400	16e18-b04-321110	1
AHD	Lauromacrogol 400	140911	1
Fagron	Lauromacrogol 400	15G10-B05-31745	1
Fagron	Lauromacrogol 400	16-0290	4
Fagron	Lauromacrogol 400	16e18-b04-321109	1
Fagron	Lauromacrogol 400	16E18-B04-322724	2
Fagron	Lauromacrogol 400	16B18-B04-321109	1
gepapharm GmbH	Lauromacrogol 400	140911	1
Fagron	Lauromacrogol 400	16E18-B04-322722	7
Gepepharm GmbH/Gehe	Lauromacrogol 400		1
AHD	Lauromacrogol 400	160312	1
gepepharm	Lauromacrogol 400	160312	23
Caelo	Lauromacrogol 400	160312	11
ALH	Lauromacrogol 400	160312	6
Caesar & Loretz/Sanacorp	Lauromacrogol 400	15363712	1
Gepepharm/Noweda	Lauromacrogol 400	160312	3
gepepharm GmbH	Lauromacrogol 400	160312	17
Caelo	Lauromacrogol 400	16E18-B04-322723	2
Caelo	Lauromacrogol 400	16102902	10
gepepharm GmbH/Phönix	Lauromacrogol 400	160312	4
Gepepharm/Fiebig	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16E18B04324095	2
Caelo	Lauromacrogol 400	15363710	2
Fagron	Lauromacrogol 400	16E18-B04-324095	9
Fagron	Lauromacrogol 400	16E18804-322722	1
gepepharm GmbH/Kehr	Lauromacrogol 400	160312	7
Fagron	Lauromacrogol 400	1618B04-324095	1
Caelo	Lauromacrogol 400	16E18-B04-324095	2
gepepharm GmbH	Lauromacrogol 400	140911	1
gepepharm/ Kehr	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16102904	7
gepepharm	Lauromacrogol 400	16-0290	1
Fagron	Lauromacrogol 400	16E-18-BB04-324095	1
Fagron	Lauromacrogol 400	16E18-B04-326091	3
Sanacorp	Lauromacrogol 400	160290	1
gepepharm/Phoenix	Lauromacrogol 400	160312	3
gepepharm/gehe	Lauromacrogol 400	160312	5
Caelo	Lauromacrogol 400	16102901	1
Fagron	Lauromacrogol 400	16E18-804-324095	1
Gepepharm/ Gehe	Lauromacrogol 400	160312	2
Gepepharm/ Noweda	Lauromacrogol 400	160132	1
Gepepharm GmbH/Phoenix	Lauromacrogol 400	160312	2
Euro OTC	Lauromacrogol 400	1605006-02	7
gepepharm GmbH / Allian...	Lauromacrogol 400	140911	1
Gepepharm/Alliance	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16102903	1
Fagron	Lauromacrogol 400	16E18-B04-0290	1
Gepepharm	Lauromacrogol 400	160312	10
Euro OTC	Lauromacrogol 400	160500602	1
Schärer & Schläpfer AG/...	Lauromacrogol 400	16E18-B04	1
Allianc. Health. / gepe...	Lauromacrogol 400	160312	1

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Supplier	Substance	Batch	Spectra
Devesa/NOW	Lauromacrogol 400	15363712	1
gepepharm GmbH/Gehe	Lauromacrogol 400	160312	5
Caelo	Lauromacrogol 400	16E18-B04-327811	1
Fagron	Lauromacrogol 400	16E18-B04-32495	1
gepepharm/Krieger	Lauromacrogol 400	160312	1
Gepepharm GmbH/Gehe	Lauromacrogol 400	160312	10
gepepharm/Nowe	Lauromacrogol 400	160312	11
Fagron	Lauromacrogol 400	16E18-B04-324095	1
Gepepharm/Phönix	Lauromacrogol 400	160312	6
Caelo	Lauromacrogol 400	16E18-B04-328699	1
gepepharm gmbh	Lauromacrogol 400	160312	2
Anzag	Lauromacrogol 400	160312	2
Fagron	Lauromacrogol 400	16E18-B04326089	2
Fagron	Lauromacrogol 400	16E18-B04328699	1
gepepharm	Lauromacrogol 400	1603102	1
gepepharm/Noweda	Lauromacrogol 400	160312	2
Fargon GmbH & Co.KG	Lauromacrogol 400	16E18-B04-326091	1
Fagron	Lauromacrogol 400	16E18B04326089	1
Fagron	Lauromacrogol 400	16E18-B04-326090	4
Caelo	Lauromacrogol 400	15363705	1
Fagron	Lauromacrogol 400	16E18-B04-328699	10
Fagron	Lauromacrogol 400	16E18-B04-326089	7
Euro OTC	Lauromacrogol 400	1142238	2
Gepepharm	Lauromacrogol 400	16031705	1
gepepharm / Alliance he...	Lauromacrogol 400	160312	3
Caelo	Lauromacrogol 400	B14-1414	1
Fagron	Lauromacrogol 400	16E18-B04-328582	3
Euro OTC	Lauromacrogol 400	1610034-01	7
Caelo	Lauromacrogol 400	16102909	3
Fagron	Lauromacrogol 400	16E18-B04-327811	4
Fagron	Lauromacrogol 400	17A23-B01-330982	4
Phönix/Apomix	Lauromacrogol 400	3B280217	1
Caelo	Lauromacrogol 400	163012	1
Fagron	Lauromacrogol 400	16E-18-B04-327811	1
Gepepharm	Lauromacrogol 400	9041702	1
Fagron	Lauromacrogol 400	16E-18-B04-328582	1
Bombastus	Lauromacrogol 400	16E18-B04-328582	1
Fagron	Lauromacrogol 400	1605006-01	1
Gepepharm/AHD	Lauromacrogol 400	160312	2
Caelo	Lauromacrogol 400	16102914	2
Gepeph/Phönix	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16102916	22
gepepharm/Gehe	Lauromacrogol 400	160312	4
Euro OTC	Lauromacrogol 400	160312	2
Gepepharm/Anzag	Lauromacrogol 400	160312	3
Fagron	Lauromacrogol 400	16e18-b04-324095	1
Fragon/Noweda	Lauromacrogol 400	17A23-B01-330982	1
Euro OTC	Lauromacrogol 400	1410010-02	1
Ichthyol-Gesellschaft	Lauromacrogol 400	160312	1
Schärer & Schläpfer AG	Lauromacrogol 400	16E18-B04-324095	1
gepepharm gmbH/Noweda	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16102912	2
Caelo	Lauromacrogol 400	16D18-B04	1
Caelo	Lauromacrogol 400	16E18B04326089	1
Bombastus	Lauromacrogol 400	16102912	1
Caelo	Lauromacrogol 400	16102911	2
Gehe	Lauromacrogol 400	160312	4
Caelo	Lauromacrogol 400	16-1155	1
gepepharm GmbH/Phönix	Lauromacrogol 400	140911	1
fagr	Lauromacrogol 400	16-0290	1

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	16E-B04-328737	1
Caelo	Lauromacrogol 400	17046401	8
GEpepharm GmbH	Lauromacrogol 400	160312	3
Kehr	Lauromacrogol 400	17046502	2
gegepharm	Lauromacrogol 400	1603125281	1
Gepepharm/ Phönix	Lauromacrogol 400	160312	1
Gepepharm/Gehe	Lauromacrogol 400	160312	1
Noweda	Lauromacrogol 400	1915345	1
Gepepharm	Lauromacrogol 400	17061708	1
gepepharm GmbH, Gehe	Lauromacrogol 400	160312	1
gepepharm CmbH	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	17046502	5
Sanacorp	Lauromacrogol 400	160312	1
Gepepharm GmbH / Gehe	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	16102920	4
gepepharm/ Gehe 5.5.17	Lauromacrogol 400	160312-20170704Ma9	1
gepepharm/ Gehe 26.6.17	Lauromacrogol 400	160312-20170704Ma10	1
Fagron	Lauromacrogol 400	17A23-B01-332867	6
phönix	Lauromacrogol 400	17a23-b01-330983	1
Caelo	Lauromacrogol 400	17A23-B01-33287	1
Fagron	Lauromacrogol 400	17A23-B01-330983	9
Fagron	Lauromacrogol 400	17A23B01-330982	1
Gepepharm	Lauromacrogol 400	21071712	1
Fagron	Lauromacrogol 400	17A23-B01-332869	5
gepepharm/ Sanacorp	Lauromacrogol 400	160312	1
Gepepharm GmbH	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	17A23-B01-330983	1
Fagron	Lauromacrogol 400	16E18-B04-328737	1
Euro OTC	Lauromacrogol 400	1703033-01	18
Noweda	Lauromacrogol 400	160312	2
Noweda	Lauromacrogol 400	16E18-B04-326089	1
Fagron	Lauromacrogol 400	17A23-B01	9
Noweda/Gepepharm	Lauromacrogol 400	160312	1
gepepharm/ Gehe	Lauromacrogol 400	20170829/2	1
Frago/Gehe	Lauromacrogol 400	17A23-B01-332869	1
Euro OTC	Lauromacrogol 400		1
Caelo	Lauromacrogol 400	16102908	1
Gehe	Lauromacrogol 400	17A23-B01-332867	1
gepepharm/ Noweda	Lauromacrogol 400	160312	1
Gehe	Lauromacrogol 400	140911	1
Euro OTC	Lauromacrogol 400	1184359	1
Fagron	Lauromacrogol 400	16E-18-B04-321109	1
gepepharm GmbH/ Gehe	Lauromacrogol 400	160312	2
/Sanacorp	Lauromacrogol 400	160312	1
GEHE	Lauromacrogol 400	160312	1
Gehe/Fragon	Lauromacrogol 400	17A23B01332868	1
Fagron	Lauromacrogol 400	332867	1
Caelo	Lauromacrogol 400	17046408	3
Gehe/gepepharm	Lauromacrogol 400	160312	1
Caelo	Lauromacrogol 400	17A23-B01-332868	1
Caelo	Lauromacrogol 400	17046406	4
Gegepharm	Lauromacrogol 400	160312	2
Caelo	Lauromacrogol 400	17046412	2
Fagron	Lauromacrogol 400	17A23-B01-332868	5
Gepepharm	Lauromacrogol 400	28101704	1
gehe/gepepharm	Lauromacrogol 400	160312	1
Gegepharm/Phönix	Lauromacrogol 400	160312	1
Fagron	Lauromacrogol 400	140911	1
Caelo	Lauromacrogol 400	1703033-01	2
Gepepharm	Lauromacrogol 400	160312	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Lauromacrogol 400	170303301	1
Euro OTC	Lauromacrogol 400	171116PC/1703033-01	1
Caelo	Lauromacrogol 400	18111708	1
Fagron	Lauromacrogol 400	17A23-B01-335355	5
Fagron	Lauromacrogol 400	17A23-B01-332867	1
Fagron	Lauromacrogol 400	14A23B01332867	2
Caelo	Lauromacrogol 400	17046404	1
Caelo	Lauromacrogol 400	17046411	14
anzag gepepharm	Lauromacrogol 400	160312	1
Fagron	Lauromacrogol 400	16-1155	1
Noweda	Lauromacrogol 400	17-0845	1
Caelo	Lauromacrogol 400	17046552	1
gepepharm/Gehe	Lauromacrogol 400	160312	2
Fagron	Lauromacrogol 400	17A23-B01-335356	1
EuRho/Sanacorp	Lauromacrogol 400	1703033-01	1
Fagron	Lauromacrogol 400	17AB23-B01-332868	1
Fagron	Lauromacrogol 400	17H21-B07-339504	3
Frago/Noweda	Lauromacrogol 400	17H21-B07	2
gepepharm/ Gehe 15.12.17	Lauromacrogol 400	160312-20180112Ma7	1
Fagron	Lauromacrogol 400	17A23-B01-355355	1
gepepharm	Lauromacrogol 400	1603125464	1
Fagron	Lauromacrogol 400	17H21-B07-339505	1
Caelo	Lauromacrogol 400	7250901	1
Fagron	Lauromacrogol 400	330983	1
Fagron	Lauromacrogol 400	17H21-B07	8
Euro OTC	Lauromacrogol 400	1710026-01	7
Caelo	Lauromacrogol 400	1184359	1
Fagron	Lauromacrogol 400	17H21-B07-341795	7
Fagron	Lauromacrogol 400	17H21-B07-339506	3
gepepharm/AHD	Lauromacrogol 400	160312	1
Fagron	Lauromacrogol 400	17H21-B07-341796	7
Caelo	Lauromacrogol 400	17250902	8
Fagron	Lauromacrogol 400	17H21-B-07-341796	1
Fagron	Lauromacrogol 400	17H21-807	1
Noweda	Lauromacrogol 400	160312A	1
Gepepharm	Lauromacrogol 400	16-0290	1
Sanacoro W.E:01.03.18 ...	Lauromacrogol 400	17A23-b01-330983	1
Euro OTC	Lauromacrogol 400	1275280	2
Gepepharm GmbH/Phoenix	Lauromacrogol 400	160312A	3
Standgefäß Apotheke, Ve...	Lauromacrogol 400	16E18-B04-328582	1
Fagron	Lauromacrogol 400	18A-18-B98-344797	1
Caelo	Lauromacrogol 400	17A23-B01-332868	1
Kehr	Lauromacrogol 400	17250904	2
Fagron	Lauromacrogol 400	18A18-B98-344798	3
Caelo	Lauromacrogol 400	17250901	1
Caelo	Lauromacrogol 400	17250904	10
Caelo	Lauromacrogol 400	41796	1
gepepharm	Lauromacrogol 400	160312A	4
Fagron	Lauromacrogol 400	17H21-B07-341797	1
Noweda	Lauromacrogol 400	1710026-01	1
Euro OTC	Lauromacrogol 400	14100100-01	1
Gepepharm/Kehr	Lauromacrogol 400	160312A	1
Gepepharm / Gehe	Lauromacrogol 400	160312A	6
Gepepharm/Gehe	Lauromacrogol 400	160312A	2
Fagron	Lauromacrogol 400	17H21-B07-3411795	1
Fagron	Lauromacrogol 400	18A18-B98	1
gepepharmGmbH	Lauromacrogol 400	160312A	1
Gepepharm/Noweda	Lauromacrogol 400	160312A	7
Fagron	Lauromacrogol 400	17-0845	1
Gepepharm/Phönix	Lauromacrogol 400	160312A	1

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Supplier	Substance	Batch	Spectra
Fagron	Lauromacrogol 400	18A18-B98-344789	1
Fagron	Lauromacrogol 400	18A18-B98-344799	2
AHL	Lauromacrogol 400	160312A	1
gepepharm CmbH	Lauromacrogol 400	160312A	1
gepepharm/Phoenix	Lauromacrogol 400	160312A	1
Fagron	Lauromacrogol 400	18A19-B98-344798	1
Fagron	Lauromacrogol 400	17H21-B07-339505	1
Euro OTC	Lauromacrogol 400	1801043-01	2
Euro OTC	Lauromacrogol 400	180101043-01	1
Fragon/Noweda	Lauromacrogol 400	17H21-B07-339507	1
Euro OTC	Lauromacrogol 400	1710026-01/180606P	1
Sanacorp	Lauromacrogol 400	160312A	4
Gepepharm GmbH	Lauromacrogol 400	160312A	2
Gepepharm/Spangro	Lauromacrogol 400	160312A	1
gepepharm / Noweda	Lauromacrogol 400	160312-A	1
gepepharm/ Gehe	Lauromacrogol 400	160312A	2
Fagron	Lauromacrogol 400	18a18-b98-344799	1
Caelo	Lauromacrogol 400	18B26-B06-346397	2
PKH Halle/AHD	Lauromacrogol 400	160312A	1
Euro OTC	Lauromacrogol 400	MLE2018625	1
Caelo	Lauromacrogol 400	160312A	13
Caelo	Lauromacrogol 400	15-0596	1
Fagron	Lauromacrogol 400	188B26-B06-346396	2
Allianz	Lauromacrogol 400	160312A	1
Caelo	Lauromacrogol 400	1801043-01	5
Fagron	Lauromacrogol 400	18b26-b06-346397	1
Gepepharm/ Noweda	Lauromacrogol 400	160312A	5
Delta	Lauromacrogol 400	17H21-B07-341795	1
Caelo	Lauromacrogol 400	17250908	4
Fagron	Lauromacrogol 400	18-0103	1
Caelo	Lauromacrogol 400	17250909	6
Fagron	Lauromacrogol 400	18826-B06-346398	1
Fagron	Lauromacrogol 400	18B26-B06-347342	4
Fagron	Lauromacrogol 400	18B26-B06-347341	1
Caelo	Lauromacrogol 400	18B26-B06-347342	1
Euro OTC	Lauromacrogol 400	180143-01	1
Fagron	Lauromacrogol 400	18826-B06-347341	1
Caelo	Lauromacrogol 400	17250913	4
Hedinger Phönix	Lauromacrogol 400	160312A	1
Anzag/Anzag 28.08.18	Lauromacrogol 400	17250913	1
gepepharm GmbH/Alliance...	Lauromacrogol 400	160312A	1
Fagron	Lauromacrogol 400	18B26-B06	3
Fagron	Lauromacrogol 400	18B26-B03-347343	1
Fagron	Lauromacrogol 400	18B26-B06-0103	1
Gehe/Gepepharm	Lauromacrogol 400	160312A	1
gepepharm/Phönix	Lauromacrogol 400	160312A	1
gepepharm gmbH/Noweda	Lauromacrogol 400	160312A	1
Gepepharm/Phoenix	Lauromacrogol 400	160312A	1
Fagron	Lauromacrogol 400	160312A	1
Bombastus	Lauromacrogol 400	17250913	2
Fagron	Lauromacrogol 400	18B26B06347342	1
Gepepharm/Anzag	Lauromacrogol 400	160312A	1
Gegepharm	Lauromacrogol 400	160312A	1
Caelo	Lauromacrogol 400	18D30-B09-350641	1
gepepharm/ Gehe 16.10.18	Lauromacrogol 400	160312A-T20181115Ma7	1
Caelo	Lauromacrogol 400	18175503	1
Fagron	Lauromacrogol 400	18B26-B06-346398	1
Caelo	Lauromacrogol 400	18826806347342	1
Phönix /fargon	Lauromacrogol 400	18D30-B09-350640	1
Caelo	Lauromacrogol 400	18175504	3

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Supplier	Substance	Batch	Spectra
Caelo	Lauromacrogol 400	18175501	6
Fagron	Lauromacrogol 400	18D30-B09-350640	1
Caelo	Lauromacrogol 400	1808025-01	1
Caelo	Lauromacrogol 400	18175502	2
Kehr	Lauromacrogol 400	17250909	1
Fagro/Noweda	Lauromacrogol 400	18826-806-346397	1
gepepharm GmbH	Lauromacrogol 400	160312A	1
Fagron	Lauromacrogol 400	18d30-b09-350640	2
Fagron	Lauromacrogol 400	18D30-B09	1
Fagron	Lauromacrogol 400	18D30-B09-352739	1
Euro OTC	Lauromacrogol 400	1808025-01	1
Fagron	Lauromacrogol 400	18B30-B09	1
Caelo	Macrogolglycerol hydroxystea...	11161504	5
Noweda	Macrogolglycerol hydroxystea...	11C18-N08	1
Caelo	Macrogolglycerol hydroxystea...	10236606	1
Gehe	Macrogolglycerol hydroxystea...	11K16-N09	1
Fagron	Macrogolglycerol hydroxystea...	12E11-N03	4
Caelo	Macrogolglycerol hydroxystea...	21071201	1
Phönix	Macrogolglycerol hydroxystea...	11161504	1
Caelo	Macrogolglycerol hydroxystea...	12103803	4
Euro OTC	Macrogolglycerol hydroxystea...	28227168E0	1
Phönix Gotha	Macrogolglycerol hydroxystea...	282268E0	1
Fagron	Macrogolglycerol hydroxystea...	11K16-N09	3
Fagron	Macrogolglycerol hydroxystea...	79793775L0	1
Fagron	Macrogolglycerol hydroxystea...	12H24-N06	4
Caelo	Macrogolglycerol hydroxystea...	19111202	1
Caelo	Macrogolglycerol hydroxystea...	17111202	1
Caelo	Macrogolglycerol hydroxystea...	20130912-1	1
Gehe	Macrogolglycerol hydroxystea...	79793775L0	1
Caelo	Macrogolglycerol hydroxystea...	12103807	5
Fagron	Macrogolglycerol hydroxystea...	12L06-N02	13
Fagron	Macrogolglycerol hydroxystea...	150056P0	1
Caelo	Macrogolglycerol hydroxystea...	6021304	1
Caelo	Macrogolglycerol hydroxystea...	12158602	2
Sanacorp	Macrogolglycerol hydroxystea...	12L06-N02	2
Anzag 07.02.13 ek:4,70EUR	Macrogolglycerol hydroxystea...	12103807	1
Caelo	Macrogolglycerol hydroxystea...	12158606	9
Caesar &Loretz GmbH	Macrogolglycerol hydroxystea...	12158610	1
Fagron	Macrogolglycerol hydroxystea...	153356P0	1
Caelo	Macrogolglycerol hydroxystea...	12158611	3
Caelo	Macrogolglycerol hydroxystea...	26061303	1
Caelo	Macrogolglycerol hydroxystea...	12158610	2
Fagron	Macrogolglycerol hydroxystea...	12D23-N03	1
Fagron	Macrogolglycerol hydroxystea...	13D23-N03	14
Fagron	Macrogolglycerol hydroxystea...	13d23-n03	1
	Macrogolglycerol hydroxystea...	13D23-N03	1
Fagron	Macrogolglycerol hydroxystea...	8771216E0	1
Caelo	Macrogolglycerol hydroxystea...	1215614	1
Noweda	Macrogolglycerol hydroxystea...	13d23-N03	1
Fagron	Macrogolglycerol hydroxystea...	13D23N03	3
Caelo	Macrogolglycerol hydroxystea...	12158614	4
Fagron	Macrogolglycerol hydroxystea...	13D23-N03	2
Fargon	Macrogolglycerol hydroxystea...	13G03-N18	1
Fagron	Macrogolglycerol hydroxystea...	509A372	1
Sanacorp	Macrogolglycerol hydroxystea...	2/AKD16	1
Fagron	Macrogolglycerol hydroxystea...	13G03-N18	4
Caelo	Macrogolglycerol hydroxystea...	13072004	11
Fagron	Macrogolglycerol hydroxystea...	13K07-N02	5
Fagron	Macrogolglycerol hydroxystea...	87712168E0	1
Gehe	Macrogolglycerol hydroxystea...	13K07-N02	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogolglycerol hydroxystea...	21121203	1
Phönix 31.01.2014	Macrogolglycerol hydroxystea...	13D23N03	1
Caelo	Macrogolglycerol hydroxystea...	13K07-N02	1
Fagron	Macrogolglycerol hydroxystea...	49426297V0	2
Sanacorp	Macrogolglycerol hydroxystea...	13072004	1
Fagron	Macrogolglycerol hydroxystea...	87712168E0	1
Fafron/Anzag	Macrogolglycerol hydroxystea...	49426297V0	1
Caelo	Macrogolglycerol hydroxystea...	13072008	4
Fagron	Macrogolglycerol hydroxystea...	13K07N02	3
Gutenberg-Apotheke	Macrogolglycerol hydroxystea...	13072008	1
Caelo	Macrogolglycerol hydroxystea...	13072005	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-292160	12
Fagron	Macrogolglycerol hydroxystea...	14B14-B06292160	2
Sanacorp	Macrogolglycerol hydroxystea...	14B14B06	1
BASF SE	Macrogolglycerol hydroxystea...	14B14B06292160	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06	6
Caelo	Macrogolglycerol hydroxystea...	12071402	1
BASF SE/ Phönix	Macrogolglycerol hydroxystea...	39658724U0	1
Caelo	Macrogolglycerol hydroxystea...	4613M-01308	1
Hedinger	Macrogolglycerol hydroxystea...	13333702	1
Caelo	Macrogolglycerol hydroxystea...	P146/14	1
Caelo	Macrogolglycerol hydroxystea...	29091402	1
Caelo	Macrogolglycerol hydroxystea...	30091404	1
Caelo	Macrogolglycerol hydroxystea...	2101415	1
Caelo	Macrogolglycerol hydroxystea...	14196805	13
phönix	Macrogolglycerol hydroxystea...	14196805	1
Gehe	Macrogolglycerol hydroxystea...	14196804	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-295486	9
AHD	Macrogolglycerol hydroxystea...	14B14-B06-295486	1
Caelo	Macrogolglycerol hydroxystea...	14B14-B06-292160	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-29212160	1
Sanacorp	Macrogolglycerol hydroxystea...	14196805	1
Caelo	Macrogolglycerol hydroxystea...	14283805	6
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-2965486	1
Caelo	Macrogolglycerol hydroxystea...	14b14-b06-2921600855	1
Fagron	Macrogolglycerol hydroxystea...	14B14-B06-295468	1
Caelo	Macrogolglycerol hydroxystea...	140415C	1
Sanacorp	Macrogolglycerol hydroxystea...	1423805	1
Alliance health	Macrogolglycerol hydroxystea...	14283808	1
Euro OTC	Macrogolglycerol hydroxystea...	1483808	1
Fagron	Macrogolglycerol hydroxystea...	14K28B01301467	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-301467	2
Fagron	Macrogolglycerol hydroxystea...	30378697Vo	1
Caelo	Macrogolglycerol hydroxystea...	14283808	7
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-301467	12
Caelo	Macrogolglycerol hydroxystea...	14283813	12
Bombastus	Macrogolglycerol hydroxystea...	14196805	1
Fagron	Macrogolglycerol hydroxystea...	14K28-801-301467	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01	6
Phönix	Macrogolglycerol hydroxystea...	14283813	1
Caelo	Macrogolglycerol hydroxystea...	14283810	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-301468	8
Fagrom/VDL	Macrogolglycerol hydroxystea...	14K28-B01-301467	1
Caelo	Macrogolglycerol hydroxystea...	15169405	12
Fagron	Macrogolglycerol hydroxystea...	30378697V0	1
Fagron	Macrogolglycerol hydroxystea...	700362-0001	1
Caelo	Macrogolglycerol hydroxystea...	30378697V0	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01	1
Fagron	Macrogolglycerol hydroxystea...	303786970V0	1
Caelo	Macrogolglycerol hydroxystea...	14k28-b01-301467	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogolglycerol hydroxystea...	15169404	13
Bombastus	Macrogolglycerol hydroxystea...	14K28-B01-309197	1
Fagron	Macrogolglycerol hydroxystea...	14K28-B01-309197	2
Caelo	Macrogolglycerol hydroxystea...	15169805	1
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-301468	2
Fagron	Macrogolglycerol hydroxystea...	15E18-B10-309198	4
Fagron	Macrogolglycerol hydroxystea...	15E18-B10	3
Caelo	Macrogolglycerol hydroxystea...	14K28-B01-309197	1
Caelo	Macrogolglycerol hydroxystea...	15378302	21
Alliance H.	Macrogolglycerol hydroxystea...	15378302	1
Caelo	Macrogolglycerol hydroxystea...	15378304	9
Caelo	Macrogolglycerol hydroxystea...	16045403	16
phönix	Macrogolglycerol hydroxystea...	15378302	1
Caelo	Macrogolglycerol hydroxystea...	14C28-b01	1
Sanacorp	Macrogolglycerol hydroxystea...	15378309	1
Sanacorp/Fischar	Macrogolglycerol hydroxystea...	16045403	1
Caelo	Macrogolglycerol hydroxystea...	15378309	2
Caelo	Macrogolglycerol hydroxystea...	16045406	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-324748	6
Caelo	Macrogolglycerol hydroxystea...	1647401	1
Caelo	Macrogolglycerol hydroxystea...	16247401	20
Fagron	Macrogolglycerol hydroxystea...	16H05-B04	2
Caesar & Loretz GmbH Hi...	Macrogolglycerol hydroxystea...	16247401	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-326362	4
Calo/AHD	Macrogolglycerol hydroxystea...	16247401	1
Fagron	Macrogolglycerol hydroxystea...	70201688Q0	1
Caelo	Macrogolglycerol hydroxystea...	16247405	9
Caelo	Macrogolglycerol hydroxystea...	16247405/1060217	1
siehe Protokoll	Macrogolglycerol hydroxystea...	15378302	1
Fagron	Macrogolglycerol hydroxystea...	702016880o	1
Fagron	Macrogolglycerol hydroxystea...	16H05B04328700	1
Fagron	Macrogolglycerol hydroxystea...	16H05-B04-328700	8
Bombastus	Macrogolglycerol hydroxystea...	16H05-B04-328700	1
Fagron	Macrogolglycerol hydroxystea...	16H-05-B04-328700	1
Caelo	Macrogolglycerol hydroxystea...	16247410	7
Sanacorp	Macrogolglycerol hydroxystea...	16247405	1
Anzag	Macrogolglycerol hydroxystea...	16247401	1
Gehe	Macrogolglycerol hydroxystea...	16247401	1
Fagron	Macrogolglycerol hydroxystea...	170703MS/17D03B04333	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-333357	2
Caelo	Macrogolglycerol hydroxystea...	17D03-B04-333357	2
Caelo	Macrogolglycerol hydroxystea...	16349303	12
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-333357	1
Caelo	Macrogolglycerol hydroxystea...	1624401	1
Caelo	Macrogolglycerol hydroxystea...	16349304	7
Caelo	Macrogolglycerol hydroxystea...	54764324U0	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-334770	5
Noweda	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Fagron	Macrogolglycerol hydroxystea...	54764324U0	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B-04-333357	1
Kehr	Macrogolglycerol hydroxystea...	16349304	1
Fagron	Macrogolglycerol hydroxystea...	17D03-B04	1
Caelo	Macrogolglycerol hydroxystea...	16349305	6
Krieger	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Caelo	Macrogolglycerol hydroxystea...	19021802	1
Fagron	Macrogolglycerol hydroxystea...	17J05-B99-341057	1
Fagron	Macrogolglycerol hydroxystea...	267209T0	1
Caelo	Macrogolglycerol hydroxystea...	17257003	11
Fagron	Macrogolglycerol hydroxystea...	17D03-B04-334770	1
Euro OTC	Macrogolglycerol hydroxystea...	17J05-B99-341057	1

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Supplier	Substance	Batch	Spectra
Gehe	Macroglycerol hydroxystea...	17257003	1
Caelo	Macroglycerol hydroxystea...	17257007	1
Caelo	Macroglycerol hydroxystea...	16349310	1
Caelo	Macroglycerol hydroxystea...	18204506	3
Caelo	Macroglycerol hydroxystea...	163493105682	1
Caelo	Macroglycerol hydroxystea...	18204507	3
Allianz	Macroglycerol hydroxystea...	18204507	1
Caelo	Macroglycerol hydroxystea...	21111816	1
Fagron	Macroglycerol hydroxystea...	18204509	1
Fagron	Macroglycerol hydroxystea...	18G13-B05	1
Caelo	Macroglycerol hydroxystea...	18204509	1
Fagron	Macroglycerol hydroxystea...	18G13-B05-351723	1

- 104 449 spectra from 581 *Apo-Ident* customers from a total of 29 974 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 *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	840	0	34 995
Type B	0	1201	17	77 860
Type C	0	3447	63	104 449

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 % (> 99.9705 %)	100.0000 % (> 99.2857 %)
Type B	100.0000 % (> 99.9688 %)	98.6043 % (> 98.3580 %)
Type C	100.0000 % (> 99.6449 %)	98.2051 % (> 98.1197 %)

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.

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
30765	30765	0.00	22.53
31608	30765	12.24	26.06
31625	31625	0.00	28.29
31025	32283	1.99	23.52
31372	31372	0.00	26.25
31768	31768	0.00	26.45
32283	32283	0.00	25.19
31033	31324	5.40	14.93
31323	31323	0.00	24.72
31697	31323	9.96	25.13
34331	34331	0.00	23.89
31182	31182	0.00	18.11
31324	31324	0.00	14.85
31469	31182	4.63	20.75
33323	33323	0.00	18.79
33324	33324	0.00	19.25
32824	31324	12.72	38.57
33058	33058	0.00	22.41
33216	31381	8.12	25.98
31381	31381	0.00	23.61
31583	31381	7.42	21.62

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Lavender oil / Clary sage oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30861-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	Lavender oil	12201206	30861	40	20120721
Fagron	Lavender oil	13D24-N01	31223	40	AR-15-FG-009308-01
Caelo	Lavender oil	12201213	31237	30	20120721
Caelo	Lavender oil	12334514	31238	30	20121120

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Clary sage oil	13334802	31413	40	1509218
Caelo	Lavender oil	13252605	31416	40	20130802
Caelo	Lavender oil	13252207	31422	40	20130802
Euro OTC	Lavender oil	1312008-01	31528	40	AR-15-FG-000438-01
Caelo	Clary sage oil	1431102	31668	40	20141031
Euro OTC	Lavender oil	1507031	31721	40	0000010673
Euro OTC	Lavender oil	1510040	31800	40	20151119*
Euro OTC	Lavender oil	1608026	32710	40	20160902*
Fagron	Lavender oil	15I03-B01-314158	32996	40	20150916
Caelo	Clary sage oil	171087	33911	40	20170427*

Validation samples

A total of 222 872 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 *Lavender oil / Clary sage oil*. These samples are listed above in the [calibration samples](#) section.
- 35 295 spectra from a total of 833 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 460 spectra of 14 reference samples from the substance/substance group *Lavender oil / Clary sage oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Lavender oil	13252207	31422 [†]	20
Euro OTC	Lavender oil	1312008-01	31528 [†]	20
Caelo	Clary sage oil	1431102	31668 [†]	20
Euro OTC	Lavender oil	1507031	31721 [†]	20
Euro OTC	Lavender oil	1510040	31800 [†]	20
Euro OTC	Lavender oil	1601053	31997	40
Euro OTC	Lavender oil	1606004	32458	40
Caelo	Lavender oil	162922	32684	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	Lavender oil	1610029	32834	40
Euro OTC	Lavender oil	1701005	32986	40
Caelo	Clary sage oil	16269902	33281	40
Euro OTC	Lavender oil	1706003	33597	40
Euro OTC	Lavender oil	1710038	33846	40
Euro OTC	Lavender oil	1808034	34213	40

- 78618 spectra from a total of 1816 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.

- 877 spectra from 256 *Apo-Ident* customers from 321 batches from the substance/substance group *Lavender oil / Clary sage oil*.

Supplier	Substance	Batch	Spectra
Fagron	Lavender oil	11F09-N07	1
Fiebig	Lavender oil	266070	1
Gehe	Lavender oil	11221301	1
Fagron	Lavender oil	11K17-N06	1
Fagron	Lavender oil	652607	1
Caelo	Lavender oil	11053709	3
Phönix	Lavender oil	652607	1
Caelo	Lavender oil	11221308	1
Caesar & Loretz GmbH, 4...	Lavender oil	12056804	1
Caelo	Lavender oil	3091207	1
Bombastus	Lavender oil	272797	4
Taoasis	Lavender oil	30560-108326	1
PVL	Lavender oil	1401110	1
Noweda	Lavender oil	11221315	2
Caelo	Lavender oil	12056804	2
Fagron	Lavender oil	12B16-N02	4
primavera	Lavender oil	1480513	1
Fagron	Lavender oil	11L22-N16	4
Caelo	Lavender oil	16101203	1
Fagron	Lavender oil	12D05-N02	5
Caelo	Lavender oil	12056802	4
Caelo	Lavender oil	12056809	15
Caelo	Lavender oil	12056814	5
Caelo	Lavender oil	273289	1
Caelo	Lavender oil	4110E-01990	1
Fiebi 29.09.12 ek:8,95	Lavender oil	271465	1
Fagron	Lavender oil	612211990	2
Anzag 15.11.2012	Lavender oil	270560	1
Phönix	Lavender oil	11L22-N16	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
Fagron	Lavender oil	12H15-N01	8
Caelo	Lavender oil	213A-01990	1
Caelo	Lavender oil	12056815	1
Caelo	Lavender oil	12201201	1
Caelo	Lavender oil	9229520	2
Fagron	Lavender oil	1601311990	1
Caelo	Lavender oil	12056821	2
Caelo	Lavender oil	12056816	2
Caelo	Lavender oil	12056822	9
Hedinger	Lavender oil	273007	1
Bombastus	Lavender oil	273007	1
Phönix	Lavender oil	12D05-N02	1
Caelo	Lavender oil	12334501	6
Caelo	Lavender oil	12H15-N01	4
Caelo	Lavender oil	11221315	1
Bombastus	Lavender oil	273980	2
Bombastus	Lavender oil	273725	1
Anzag 10.04.13 ek: 9,57EUR	Lavender oil	273725	1
Caelo	Lavender oil	12334510	7
Anzag 10.04.13 ek: 5.83EUR	Lavender oil	12334510	1
Gehe	Lavender oil	12H15-N01	2
Bombastus	Lavender oil	276644	1
Caelo	Lavender oil	12201206	2
Caesar & Loretz/ Noweda	Lavender oil	12056816	1
Phönix	Lavender oil		1
Bombastus	Lavender oil	274960	1
Caelo	Lavender oil	12334503	3
Taoasis GmbH	Lavender oil	30560	1
Sanacorp	Lavender oil	12056821	1
Caelo	Lavender oil	12334507	3
Caelo	Lavender oil	276783	1
Caesar & Loretz GmbH D-...	Lavender oil	12334510	2
Sanacorp	Lavender oil	12334513	1
Caelo	Lavender oil	12334513	12
Bombastus	Lavender oil	276783	2
Taoasis	Lavender oil	30560-110088	1
Fagron	Lavender oil	13097R	1
Euro OTC	Lavender oil	1210031-01	1
Fagron	Lavender oil	12334516	2
Caelo	Lavender oil	13071302	1
Caelo	Lavender oil	12H15-No1	1
Caelo	Lavender oil	1234501	1
Jenne	Lavender oil	192900-0003	1
Caelo	Lavender oil	12334516	5
Caelo	Lavender oil	12081301	1
Caelo	Lavender oil	15081301	1
Taoasis	Lavender oil	30560-111623	1
Bombastus	Lavender oil	279919	6
Noweda	Lavender oil		1
Caelo	Lavender oil	30081301	1
geile	Lavender oil	12334516	1
AHC 22.08.13 EK5,83 25ml	Lavender oil	12334516	1
Fagron	Lavender oil	13D24-N01	3
Caelo	Lavender oil	1245	1
Caelo	Lavender oil	L12334511	1
Caelo	Lavender oil	12334514	6
Fagron	Lavender oil	13B22-N02	10
Noweda	Lavender oil	11221309	1
Caelo	Lavender oil	13133706	19
Caelo	Lavender oil	13B22-No2	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	12201215	1
Caelo	Lavender oil	1234514	2
Caesar & Loretz GmbH, 4...	Lavender oil	13133706	1
Taoasis	Lavender oil	30560-113019	1
Fagron	Lavender oil	13D24-N01	1
Fagron	Lavender oil	13B22N02	2
Bombastus	Lavender oil	281980	1
Caelo	Lavender oil	12201213	2
Caelo	Lavender oil	13133703	12
Caelo	Lavender oil	123344514	1
Caesar & Loretz GmbH, 4...	Lavender oil	11355	1
Euro OTC	Lavender oil	1302023-01	1
Fagron	Lavender oil	13G11-N04	12
Taoasis	Lavender oil	30560-113018	1
Euro OTC	Lavender oil	12334514	2
AHD, 25.11.13	Lavender oil	13G11-N04	1
Fagron	Lavender oil	5013I1990	1
Fagron	Lavender oil	13D24N01	3
Caelo	Lavender oil	3011401	1
Fagron	Lavender oil	13B22-N02	1
Gehe	Lavender oil	13252601	1
Caelo	Lavender oil	1021403	1
Caelo	Lavender oil	13252201	5
Caelo	Lavender oil	1313375	1
Bombastus	Lavender oil	284486	2
Taoasis	Lavender oil	130201-115396	1
Sanacorp	Lavender oil	13133703	2
Taoasis	Lavender oil	130201-115678	1
Caelo	Lavender oil	13252212	1
Caelo	Lavender oil	13133715	13
Taoasis/Taoasis	Lavender oil	30560-112844	1
Caelo	Lavender oil	13252605	1
Caelo	Lavender oil	13133705	2
Fagron	Lavender oil	13D24-0003	1
Caelo	Lavender oil	13252202	7
Fagron	Lavender oil	13E30-B01	4
Caelo	Lavender oil	17051404	1
PHOENIX 05.05.2014	Lavender oil	130202301	1
Caelo	Lavender oil	13252204	8
Fagron	Lavender oil	13E30-B01-285543	2
Bombastus	Lavender oil	275898	1
Caelo	Lavender oil	2189	1
Noweda	Lavender oil	284691	1
Fagron	Lavender oil	13E30-B01-285544	5
GEHE 17.05.2014	Lavender oil	13133703	1
Caelo	Lavender oil	13252207	4
Taoasis	Lavender oil	130201-116395	2
Bombastus	Lavender oil	287254	3
Taoasis	Lavender oil	130201-116899	6
Noweda	Lavender oil	13252201	1
Fagron	Lavender oil	13J11-B03	4
Sanacorp	Lavender oil	13G11-N04	1
Fagron	Lavender oil	13G11N04	1
Caelo	Lavender oil	13252206	3
Caelo	Lavender oil	13252220	8
Fagron	Lavender oil	13J11-B03-289423	6
Caelo	Lavender oil	13252607	1
Fagron	Lavender oil	13J11B03	1
Caelo	Lavender oil	13202218	1
Fagron	Lavender oil	759243	1

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Supplier	Substance	Batch	Spectra
Fagron	Lavender oil	13J11-B03-289424	1
Phönix	Lavender oil	13252220	2
Fagron	Lavender oil	13J11-BC3-289423	1
Caelo	Lavender oil	13252225	4
Fagron	Lavender oil	780162	1
Caelo	Lavender oil	13252611	2
Caelo	Lavender oil	13252224	1
Caelo	Lavender oil	7111403	1
Caelo	Lavender oil	13252218	1
Caelo	Lavender oil	14218301	3
VDL;15.12.14;20.19EUR	Lavender oil	12201213	1
Fagron	Lavender oil	13e30-b01-285544	1
Caelo	Lavender oil	1421831	1
AHD 15.10.14 EK 5,76	Lavender oil	13252220	1
Taoasis	Lavender oil	4651010-118091	1
Caelo	Lavender oil	14218314	9
Caelo	Lavender oil	780162	1
Caelo	Lavender oil	14218311	6
Bombastus	Lavender oil	290711	1
Primavera	Lavender oil	8508143	1
Caelo	Lavender oil		1
Fagron	Lavender oil	13/11-B03-289423	1
Fagron	Lavender oil	13J11-B03-780162	1
Taoasis	Lavender oil	4651010118091	1
Fagron	Lavender oil	14a07-B02	1
Caelo	Lavender oil	14218322	6
Fagron	Lavender oil	14A07-B02	4
Caelo	Lavender oil	14218321	1
phönix	Lavender oil	759243	1
Bombastus	Lavender oil	288979	5
Taoasis/Noweda	Lavender oil	130201-117994	1
Caelo	Lavender oil	31031501	1
Taoasis	Lavender oil	LOG2014-119488	2
Frey & Lau GmbH/Phoenix	Lavender oil	14A07-B02-289955	1
Caelo	Lavender oil	17041502	1
Fagron	Lavender oil	4A07-B02	1
Caelo	Lavender oil	14218310	1
VDI;7,53EUR;13.4.15	Lavender oil	13252611	2
Caelo	Lavender oil	13252603	1
Fagron	Lavender oil	14A07-B02-289955	2
Fagron	Lavender oil	14A07-B02-294931	4
Caelo	Lavender oil	13252616	4
Fagron	Lavender oil	14D14B02	1
Fagron	Lavender oil	794323	1
Caelo	Lavender oil	15043512	1
Caelo	Lavender oil	14218324	4
Caelo	Lavender oil	15043505	5
Caelo	Lavender oil	15043516	1
Fagron	Lavender oil	14A07B02	1
Caelo	Lavender oil	15043504	6
Fagron	Lavender oil	14D14-B02-302035	1
Fagron	Lavender oil	14D-B02-302034	1
Caelo	Lavender oil	14A07-B02-289955	1
Caelo	Lavender oil	1414-B02-302035	1
Bombastus	Lavender oil	293661	4
ACM	Lavender oil	4683Pos2	1
Caelo	Lavender oil	15043519	3
Fagron	Lavender oil	14D14-B02-302034	3
Bergland Pharma / Anzag	Lavender oil	K051367	1
Taoasis	Lavender oil	30560-111202	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	480435519	1
Euro OTC	Lavender oil	1503006-01	2
Caelo	Lavender oil	13252621	1
Caelo	Lavender oil	15043518	4
Taoasis	Lavender oil	22015-122102	1
Caelo	Lavender oil	15278102	2
Taoasis	Lavender oil	LOG2014-121513	2
Caelo	Lavender oil	15043525	10
Caelo	Lavender oil	15043520	2
Bombastus	Lavender oil	295593	3
Fagron	Lavender oil	14d14-b02	1
Bombastus	Lavender oil	295738	3
Fagron	Lavender oil	14A07-B02-294930	1
Fagron	Lavender oil	14D14-B02	4
Caelo	Lavender oil	15043526	7
Fagron	Lavender oil	140120277773	1
Caelo	Lavender oil	15C26-B02-310275	5
Fagron	Lavender oil	15b10-b07	1
Caelo	Lavender oil	15278101	8
Fagron	Lavender oil	15B10-B07-304078	2
Caelo	Lavender oil	15363001	5
Fagron	Lavender oil	15C26-B02-310775	1
Taoasis	Lavender oil	43703-122404	1
Caelo	Lavender oil	15C26-B02-310775	2
Fagron	Lavender oil	15CV26-B02-309881	1
Noweda	Lavender oil	293661	1
Euro OTC	Lavender oil	15043525	2
Euro OTC	Lavender oil	15B10-B07	1
Fagron	Lavender oil	893241	3
Caelo	Lavender oil	15363302	17
Fagron	Lavender oil	15/03-B01-314158	3
Fagron	Lavender oil	15B10-B07-304079	2
Caelo	Lavender oil	1510040-01	2
Fagron	Lavender oil	15B10-B07-309880	1
Taoasis	Lavender oil	LOG2014-120278	1
AHD	Lavender oil	15363302	1
Fagron	Lavender oil	15I03-B01-893241	1
InfectoPharm/Noweda	Lavender oil	297733	1
Fagron	Lavender oil	867858	1
Euro OTC	Lavender oil	1507031-01	1
Caelo	Lavender oil	15363305	2
Fagron	Lavender oil	15C26-B02	1
Bombastus	Lavender oil	297733	2
Taoasis	Lavender oil	22015-122995	2
Sanacorp WE:15.04.16 EK...	Lavender oil	15278101	1
Caelo	Lavender oil	15363304	5
Euro OTC	Lavender oil	1601053-01	1
Caelo	Lavender oil	123456	1
Caelo	Lavender oil	15363002	1
Fagron	Lavender oil	15C26-B02-314159	3
Euro OTC	Lavender oil	1510040-01	2
Caelo	Lavender oil	559621	1
Bombastus	Lavender oil	297007	3
Bombastus	Lavender oil		1
Bombastus	Lavender oil	277773	1
Caelo	Lavender oil	15363310	10
Caelo	Lavender oil	16023003	4
Fagron	Lavender oil	15I03-B01-317687	3
Bombastus	Lavender oil	300666	3
Fagron	Lavender oil	1503B01317685	1

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	15363303	3
Fagron	Lavender oil	16A07-B01	3
Euro OTC	Lavender oil	160105301	1
Fagron	Lavender oil	15I03-B01-317686	1
Caelo	Lavender oil	15363004	4
Fagron	Lavender oil	15I03-B01-314160	1
Caelo	Lavender oil	16023002	7
L10/Bambastus	Lavender oil	301109	1
Caelo	Lavender oil	16A07-B01-32196	1
Fagron	Lavender oil	16A07-B01-321295	3
Bombastus	Lavender oil	301109	1
Caelo	Lavender oil	16023001	9
Fagron	Lavender oil	15I03-B01-317686	1
Fagron	Lavender oil	15/03-B01-317687	1
Caelo	Lavender oil	911624	1
Fagron	Lavender oil	911624	2
Caelo	Lavender oil	16A07-B01-32195	1
Gehe	Lavender oil	301109	1
Bombastus	Lavender oil	303335	2
Fagron	Lavender oil	16A07-B01-322846	1
Caelo	Lavender oil	16023017	7
Fagron	Lavender oil	16A07-B01-32195	1
Fagron	Lavender oil	16A07-B01-321296	2
Caelo	Lavender oil	16023015	1
Caelo	Lavender oil	1536007	1
Euro OTC	Lavender oil	1610029-01	3
Fagron	Lavender oil	15/03-B01-317685	1
Caelo	Lavender oil	16023002/1270217	1
Caelo	Lavender oil	15363013	1
Caelo	Lavender oil	18031703	1
Gehe	Lavender oil	306049	1
Gehe/EuRo	Lavender oil	1601053-01	1
Bombastus	Lavender oil	305279	1
Caelo	Lavender oil	16292206	10
Caelo	Lavender oil	16292205	12
Fagron	Lavender oil	15/03-B01-317686	1
Euro OTC	Lavender oil	1701005-01	3
Caelo	Lavender oil	16023018	1
Sanacorp	Lavender oil	15278102	1
Caelo	Lavender oil	16023014	2
Caelo	Lavender oil	15363007	1
Caelo	Lavender oil	305279	2
Sanacorp WE11.04.17 -15...	Lavender oil	16023018	1
Noweda	Lavender oil	15363011	1
Fagron	Lavender oil	16A07-B01-322523	1
Caelo	Lavender oil	8061702	1
Caelo	Lavender oil	15363011	1
Caelo	Lavender oil	16292211	9
Fagron	Lavender oil	16H01-B04-329685	5
Fagron	Lavender oil	16A07-B01-321296	1
Bombastus	Lavender oil	303303	2
Caelo	Lavender oil	305280	1
Fagron	Lavender oil	16H01-B04-327861	3
Caelo	Lavender oil	16292209	2
AHD	Lavender oil	16292214	1
Caelo	Lavender oil	26081707	1
Caelo	Lavender oil	1536016	1
Fargon	Lavender oil	16A07-B01	1
Bergland	Lavender oil	K700033	1
Bombastus	Lavender oil	308369	2

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Supplier	Substance	Batch	Spectra
Caelo	Lavender oil	16292207	1
Kehr	Lavender oil	16292216	1
Fagron	Lavender oil	16H01-B04-329684	1
Sanacorp	Lavender oil	308369	2
Caelo	Lavender oil	15111741	1
Euro OTC	Lavender oil	16292214	1
Caelo	Lavender oil	1712070L/16292216	1
Caelo	Lavender oil	16292216	5
Caelo	Lavender oil	16292217	1
Fagron	Lavender oil	16H01-B04-335505	4
Bombastus	Lavender oil	311260	1
Bombastus	Lavender oil	311261	3
Caelo	Lavender oil	162992216	1
Caelo	Lavender oil	16292214	1
Fagron	Lavender oil	16H01-B04-335506	1
Caelo	Lavender oil	17132701	2
gehe	Lavender oil	15363019	1
GEHE	Lavender oil	17132710	1
Caelo	Lavender oil	17132707	1
Caelo	Lavender oil	17132711	8
Caelo	Lavender oil	16H01-B04	1
Caelo	Lavender oil	17132710	4
Bombastus	Lavender oil	308745	2
Euro OTC	Lavender oil	1706003-01	1
Caelo	Lavender oil	16H01-B04-336278	4
Caelo	Lavender oil	1710038-01	2
Bombastus	Lavender oil	311562	2
Sanacorp	Lavender oil	16292214	1
Caelo	Lavender oil	15363019	1
Fagron	Lavender oil	16H01-B04-329684-201	1
Sanacorp WE: 09.04.18 E...	Lavender oil	17132710	1
Fagron	Lavender oil	16H01-B04	2
Taoasis	Lavender oil	2015-2395	1
Caelo	Lavender oil	30041807	1
Caelo	Lavender oil	17132712	2
Fagron	Lavender oil	192900-0004	1
Caelo	Lavender oil	16081806	1
Sanacorp	Lavender oil	18128204	2
Fagron	Lavender oil	17G20-B07-342693	1
Caelo	Lavender oil	30081810	1
Caelo	Lavender oil	30081811	1
Caelo	Lavender oil	18128202	3
Caelo	Lavender oil	17244101	2
Caelo	Lavender oil	31101803	1
Bombastus	Lavender oil	18002108	1
Bombastus	Lavender oil	307666	1
Caelo	Lavender oil	18128204	1
Fagron	Lavender oil	17G20-B07342691	1
Primavera/Phoenix	Lavender oil	163H26	1
Fagron	Lavender oil	17G20-B07-349418	1
Caelo	Lavender oil	18B26-B02-351972	1
Primavera/Phoenix	Clary sage oil	416L25	1

- 107082 spectra from 582 *Apo-Ident* customers from a total of 30365 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 *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	540	0	35 295
Type B	0	460	0	78 618
Type C	0	847	30	107 082

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 % (> 99.9705 %)	100.0000 % (> 98.8889 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.6957 %)
Type C	100.0000 % (> 99.6449 %)	96.5792 % (> 96.2372 %)

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.

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
31223	31223	0.00	59.33
31422	31223	2.03	59.12
31528	31528	0.00	63.26
31721	31721	0.00	59.59
31800	31800	0.00	57.84
32710	32710	0.00	61.16
30861	32710	18.10	58.86
31237	32710	17.40	65.73
31238	31721	2.55	56.73
31416	32710	18.39	60.28
32996	31721	3.83	51.14
31413	31413	0.00	57.96
31668	33911	4.57	62.23
33911	33911	0.00	59.97

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Liniment ointments
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30982-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Leyh Pharma	Hydrated linimen...	124611	30982	80	20121123
Bombastus	Non-ionic hydrou...	282335	31169	40	1405256
apomix	Hydrated linimen...	73A041113	31170	40	1405106
Caelo	Hydrated linimen...	14063201	31438	40	20140513

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Non-ionic hydrou...	14134601	31476	40	20140516
Caelo	Non-ionic hydrou...	15420901	31827	40	20151221
Bombastus	Non-ionic hydrou...	297176	31830	40	20150909
Caelo	Hydrated linimen...	160217	31938	40	20160127*
Caelo	Hydrated linimen...	153244	31939	40	20150922*
Caelo	Non-ionic hydrou...	153267	31943	40	20150922*
Caelo	Non-ionic hydrou...	153342	31945	40	20151008*
Caelo	Non-ionic hydrou...	160216	31947	40	20160127*
Caelo	Non-ionic hydrou...	161138	32090	40	20160415*
apomix	Hydrated linimen...	08B010216	32305	40	20160203
apomix	Hydrated linimen...	32B090516	32727	40	20160509

Validation samples

A total of 222872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 640 spectra of 15 reference samples from the substance/substance group *Liniment ointments*. These samples are listed above in the [calibration samples](#) section.
- 35195 spectra from a total of 832 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 2180 spectra of 57 reference samples from the substance/substance group *Liniment ointments*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Non-ionic hydrous liniment S...	15420901	31827 [†]	20
Bombastus	Non-ionic hydrous liniment S...	297176	31830 [†]	20
Caelo	Hydrated liniment SR/DAC (NR...	160217	31938 [†]	20
Caelo	Hydrated liniment SR/DAC (NR...	153244	31939 [†]	20
Caelo	Non-ionic hydrous liniment S...	153267	31943 [†]	20
Caelo	Non-ionic hydrous liniment S...	153341	31944	60
Caelo	Non-ionic hydrous liniment S...	153342	31945 [†]	20
Caelo	Non-ionic hydrous liniment S...	153342	31946	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	Non-ionic hydrous liniment S...	160216	31947 [†]	20
Caelo	Hydrated liniment SR/DAC (NR...	160217	32089	40
Caelo	Non-ionic hydrous liniment S...	161139	32091	40
Caelo	Non-ionic hydrous liniment S...	161140	32092	40
Caelo	Hydrated liniment SR/DAC (NR...	161824	32395	40
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	32398	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	32401	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	32404	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	32605	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	32609	40
Caelo	Non-ionic hydrous liniment S...	162182	32610	40
Caelo	Non-ionic hydrous liniment S...	162183	32611	40
Caelo	Non-ionic hydrous liniment S...	162183	32612	40
Caelo	Non-ionic hydrous liniment S...	162183	32613	40
Caelo	Non-ionic hydrous liniment S...	162183	32614	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...	162585	32617	40
Caelo	Non-ionic hydrous liniment S...	162585	32618	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	Hydrated liniment SR/DAC (NR...	171989	33572	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	Hydrated liniment SR/DAC (NR...	173334	34014	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	Hydrated liniment SR/DAC (NR...	181848	34158	40
Caelo	Non-ionic hydrous liniment S...	182331	34254	40
Caelo	Non-ionic hydrous liniment S...	182789	34355	40

- 76 898 spectra from a total of 1792 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*

[†]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*.

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.

- 2399 spectra from 350 *Apo-Ident* customers from 939 batches from the substance/substance group *Liniment ointments*.

Supplier	Substance	Batch	Spectra
apomix	Hydrated liniment SR/DAC (NR...	88A061211	1
Leyh Pharma GmbH	Hydrated liniment SR/DAC (NR...	110531	1
Apomix	Hydrated liniment SR/DAC (NR...	16A070312	2
Bombastus	Hydrated liniment SR/DAC (NR...	265946	1
GEHE/Pharmachem/20.04.2...	Hydrated liniment SR/DAC (NR...	91211	1
apomix	Hydrated liniment SR/DAC (NR...	12A150212	1
Bombastus	Hydrated liniment SR/DAC (NR...	268572	1
Apomix	Hydrated liniment SR/DAC (NR...	35A290512	1
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	115051	1
Bombastus	Hydrated liniment SR/DAC (NR...	269132	1
ApoMix	Hydrated liniment SR/DAC (NR...	4A110112	1
Bombastus	Hydrated liniment SR/DAC (NR...	270673	3
ApoMix	Hydrated liniment SR/DAC (NR...	12A150212	1
Bombastus	Hydrated liniment SR/DAC (NR...	269848	1
apomix 004	Hydrated liniment SR/DAC (NR...	23A270312	1
Gehe/Pharmachem /13.06...	Hydrated liniment SR/DAC (NR...	250412	1
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	122141	1
apomix	Hydrated liniment SR/DAC (NR...	6A180112	1
Sanacorp/ Leyh Pharma	Hydrated liniment SR/DAC (NR...	123011	1
apomix	Hydrated liniment SR/DAC (NR...	56A240712	3
Apomix Anzag	Hydrated liniment SR/DAC (NR...	51B170712	2
apomix	Hydrated liniment SR/DAC (NR...	60A020812	1
Caelo	Hydrated liniment SR/DAC (NR...	47B020712	1
Phönix (PKH Halle)	Hydrated liniment SR/DAC (NR...	60A020812	1
Apomix	Hydrated liniment SR/DAC (NR...	44A120612	1
apomix	Hydrated liniment SR/DAC (NR...	65B290812	1
apomix	Hydrated liniment SR/DAC (NR...	69A120912	1
Apomix	Hydrated liniment SR/DAC (NR...	58A010812	1
Bombastus	Hydrated liniment SR/DAC (NR...	274772	1
Anzag	Hydrated liniment SR/DAC (NR...	74B081012	2
Apomix	Hydrated liniment SR/DAC (NR...	76B1611012	1
Bombastus	Hydrated liniment SR/DAC (NR...	273774	3
Apomix	Hydrated liniment SR/DAC (NR...	83A071112	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	274014	1
apomix/ Noweda	Hydrated liniment SR/DAC (NR...	65B290812	1
Phoenix (PKH Halle)	Hydrated liniment SR/DAC (NR...	7A290113	1
Apomix	Hydrated liniment SR/DAC (NR...	5A210113	1
Apomix	Hydrated liniment SR/DAC (NR...	72A011012	1
apomix	Hydrated liniment SR/DAC (NR...	80A061112	1
apomix	Hydrated liniment SR/DAC (NR...	48A020712	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	275789	1
Bombastus	Hydrated liniment SR/DAC (NR...	273773	1
Apomix	Hydrated liniment SR/DAC (NR...	69A120912	1
Phoenix (PKH Halle)	Hydrated liniment SR/DAC (NR...	5A210113	1
Bombastus	Hydrated liniment SR/DAC (NR...	275792	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	5A210113	1
Bombastus	Hydrated liniment SR/DAC (NR...	275864	1
Bombastus	Hydrated liniment SR/DAC (NR...	275869	1

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Supplier	Substance	Batch	Spectra
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	85A281112	1
Apomix	Hydrated liniment SR/DAC (NR...	21A180313	2
Apomix	Hydrated liniment SR/DAC (NR...	5A210110	1
leyh Pharma/ Sanacorp	Hydrated liniment SR/DAC (NR...	124941	1
Apomix	Hydrated liniment SR/DAC (NR...	10A260213	1
Sanacorp	Hydrated liniment SR/DAC (NR...	275869	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	15A050313	1
Leyh/Gehe	Hydrated liniment SR/DAC (NR...	131121	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	25A220413	1
Leyh	Hydrated liniment SR/DAC (NR...	124941	1
Apomix	Hydrated liniment SR/DAC (NR...	27A230413	1
Bombastus	Hydrated liniment SR/DAC (NR...	277782	2
Apomix	Hydrated liniment SR/DAC (NR...	33A210513	2
Bombastus	Hydrated liniment SR/DAC (NR...	277778	1
PKH GmbH/ Phönix	Hydrated liniment SR/DAC (NR...	23A020413	1
Euro OTC	Hydrated liniment SR/DAC (NR...	33A210513	1
apomix	Hydrated liniment SR/DAC (NR...	27B230413	1
Pharmachem/Anzag/10.07...	Hydrated liniment SR/DAC (NR...	60513	1
Pharmachem/ANZAG/27.03...	Hydrated liniment SR/DAC (NR...	210113	1
Bombastus	Hydrated liniment SR/DAC (NR...	279400	4
Bombastus	Hydrated liniment SR/DAC (NR...	279397	1
Bombastus	Hydrated liniment SR/DAC (NR...	278256	1
Anzag	Hydrated liniment SR/DAC (NR...	30B130513	1
Phönix Gotha	Hydrated liniment SR/DAC (NR...	279496	1
apomix	Hydrated liniment SR/DAC (NR...	23A020413	1
Bombastus	Hydrated liniment SR/DAC (NR...	277781	1
apomix	Hydrated liniment SR/DAC (NR...	33A210513	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	40A170613	1
Apomix	Hydrated liniment SR/DAC (NR...	17B050313	1
Apomix	Hydrated liniment SR/DAC (NR...	36B270513	1
Bombastus	Hydrated liniment SR/DAC (NR...	280805	1
Apomix	Hydrated liniment SR/DAC (NR...	49B170713	1
Apomix/Phoenix	Hydrated liniment SR/DAC (NR...	51A230713	1
Apomix	Hydrated liniment SR/DAC (NR...	90A171212	1
Bombastus	Hydrated liniment SR/DAC (NR...	279399	1
Apomix	Hydrated liniment SR/DAC (NR...	20B180313	1
apomix	Hydrated liniment SR/DAC (NR...	46B150713	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	38A040613	1
Apomix	Hydrated liniment SR/DAC (NR...	51A230713	2
Bombastus	Hydrated liniment SR/DAC (NR...	281642	2
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	43A010713	1
Apomix	Hydrated liniment SR/DAC (NR...	48A170713	1
PKH Halle	Hydrated liniment SR/DAC (NR...	56A120813	4
Caelo	Hydrated liniment SR/DAC (NR...	281646	1
Apomix	Hydrated liniment SR/DAC (NR...	42B240613	1
Gehe/Apomix/06.11.2013	Hydrated liniment SR/DAC (NR...	21013	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	15A260813	2
Bombastus	Hydrated liniment SR/DAC (NR...	281562	1
Bombstus/ Sanacorp	Hydrated liniment SR/DAC (NR...	281643	2
apomix/Phönix	Hydrated liniment SR/DAC (NR...	68A300913	1
Apomix	Hydrated liniment SR/DAC (NR...	43A010713	1
Bombastus	Hydrated liniment SR/DAC (NR...	281645	2
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	29A060513	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	71A291013	2
Angag Leyh	Hydrated liniment SR/DAC (NR...	4580715	1
PKH GmbH Apomix / Phönix	Hydrated liniment SR/DAC (NR...	69B071013	2
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	21013	1
Bombastus	Hydrated liniment SR/DAC (NR...	281646	2
PHK GmbH	Hydrated liniment SR/DAC (NR...	66A160913	1
PHK GmbH	Hydrated liniment SR/DAC (NR...	71A291013	2

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Supplier	Substance	Batch	Spectra
Apomix	Hydrated liniment SR/DAC (NR...	70A071013	2
apomix	Hydrated liniment SR/DAC (NR...	72B041113	1
Apomix	Hydrated liniment SR/DAC (NR...	56A120813	1
Bombastus	Hydrated liniment SR/DAC (NR...	282882	1
Apomix	Hydrated liniment SR/DAC (NR...	77A251113	1
Bombastus	Hydrated liniment SR/DAC (NR...	280876	1
Gehe/Apomix	Hydrated liniment SR/DAC (NR...	77A251113	1
Bombastus	Hydrated liniment SR/DAC (NR...	282884	1
Apomix Phönix	Hydrated liniment SR/DAC (NR...	71A291013	1
apomix	Hydrated liniment SR/DAC (NR...	79A091213	1
Bombastus	Hydrated liniment SR/DAC (NR...	284340	4
Bombastus	Hydrated liniment SR/DAC (NR...	284338	1
Gehe	Hydrated liniment SR/DAC (NR...	284338	1
Bombastus	Hydrated liniment SR/DAC (NR...	284339	1
PKH GmbH/ Sanacorp	Hydrated liniment SR/DAC (NR...	78B031213	1
Apomix	Hydrated liniment SR/DAC (NR...	6A2000114	1
Phoenix/Apomix	Hydrated liniment SR/DAC (NR...	71A291013	1
Apomix	Hydrated liniment SR/DAC (NR...	79A091213	2
Bombastus	Hydrated liniment SR/DAC (NR...	285791	2
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	3A070114	1
Apomix	Hydrated liniment SR/DAC (NR...	62B050913	1
Bombastus	Hydrated liniment SR/DAC (NR...	4A070114	1
Bombastus	Hydrated liniment SR/DAC (NR...	284234	1
Bombastus	Hydrated liniment SR/DAC (NR...	282885	1
Gehe/apomix/12.03.14	Hydrated liniment SR/DAC (NR...	79A091213	1
Apomix	Hydrated liniment SR/DAC (NR...	72B041113	1
Apomix	Hydrated liniment SR/DAC (NR...	9A270114	1
Bombastus	Hydrated liniment SR/DAC (NR...	285737	4
GEHE/LEYH Parma/09.04.2...	Hydrated liniment SR/DAC (NR...	134211	2
Bombastus	Hydrated liniment SR/DAC (NR...	281644	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	22A250314	1
Apomix /Alliance	Hydrated liniment SR/DAC (NR...	3A070114	1
Bombastus	Hydrated liniment SR/DAC (NR...	285738	2
GEHE/Apomix/29.04.14	Hydrated liniment SR/DAC (NR...	24A310314	1
Apomix	Hydrated liniment SR/DAC (NR...	25A310314	2
Apomix	Hydrated liniment SR/DAC (NR...	6A200114	1
apomix	Hydrated liniment SR/DAC (NR...	13A110214	2
Apomix Anzag	Hydrated liniment SR/DAC (NR...	17A030314	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	17A030314	1
Bombastus	Hydrated liniment SR/DAC (NR...	285740	1
Apomix/Gehe/12.05.14	Hydrated liniment SR/DAC (NR...	81A161213	1
Bombastus	Hydrated liniment SR/DAC (NR...	285739	2
Apomix	Hydrated liniment SR/DAC (NR...	3A070114	2
Phönix	Hydrated liniment SR/DAC (NR...		1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	22A250314	1
Apomix	Hydrated liniment SR/DAC (NR...	12B110214	1
Bombastus	Hydrated liniment SR/DAC (NR...	285792	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	33A070514	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	75A131113	1
Apomix	Hydrated liniment SR/DAC (NR...	13A110214	1
Bombastus	Hydrated liniment SR/DAC (NR...	286935	4
PKH Halle	Hydrated liniment SR/DAC (NR...	24A310314	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	19B100314	1
Bombastus	Hydrated liniment SR/DAC (NR...	285838	1
Apomix	Hydrated liniment SR/DAC (NR...	22A250314	1
	Hydrated liniment SR/DAC (NR...	37B190514	1
sanacorp	Hydrated liniment SR/DAC (NR...	24A310314	1
apomix GmbH/Phönix	Hydrated liniment SR/DAC (NR...	36A120514	1
Bombastus	Hydrated liniment SR/DAC (NR...	286936	2
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	41A260514	1

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Supplier	Substance	Batch	Spectra
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	43B040614	1
Bombastus	Hydrated liniment SR/DAC (NR...	287323	1
apomix	Hydrated liniment SR/DAC (NR...		1
Bombastus	Hydrated liniment SR/DAC (NR...	287409	1
Apomix	Hydrated liniment SR/DAC (NR...	34B080514	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	12B110214	1
Leyh-Pharma GmbH	Hydrated liniment SR/DAC (NR...	142231	1
Leyh-Pharma GmbH	Hydrated liniment SR/DAC (NR...	133721	1
Bombastus	Hydrated liniment SR/DAC (NR...	287411	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	35A080514	1
Raben-Apotheke Mildenau	Hydrated liniment SR/DAC (NR...	49A230614	1
pkh, Phönix	Hydrated liniment SR/DAC (NR...	14B170214	1
Bombastus	Hydrated liniment SR/DAC (NR...	287410	3
Apomix	Hydrated liniment SR/DAC (NR...	45A170614	1
PKH Halle	Hydrated liniment SR/DAC (NR...	42A020614	1
apomix	Hydrated liniment SR/DAC (NR...	46B260514	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	47B170614	1
apomix	Hydrated liniment SR/DAC (NR...	36A120514	1
Gehe/18.08.14	Hydrated liniment SR/DAC (NR...	42A020614	3
AHD/23.07.14/Leyh Pharma	Hydrated liniment SR/DAC (NR...	142231	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	45A170614	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	42A020614	1
Pharmachem GmbH	Hydrated liniment SR/DAC (NR...	20614	2
Raben-Apotheke Mildenau	Hydrated liniment SR/DAC (NR...	63A120814	2
Bombastus	Hydrated liniment SR/DAC (NR...	288535	5
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	59A050814	1
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	59A050814	1
Bombastus	Hydrated liniment SR/DAC (NR...	4114E-03266	1
Bombastus	Hydrated liniment SR/DAC (NR...	288538	2
apomix/Gehe	Hydrated liniment SR/DAC (NR...	68A080914	1
Caelo	Hydrated liniment SR/DAC (NR...	20614	1
Apomix / Phönix	Hydrated liniment SR/DAC (NR...	47B170614	1
Apomix	Hydrated liniment SR/DAC (NR...	61A110814	1
Caelo	Hydrated liniment SR/DAC (NR...	287410	1
Bombastus	Hydrated liniment SR/DAC (NR...	288533	1
AMH Niemann/Sanacorp	Hydrated liniment SR/DAC (NR...	46B260514	1
AHD/Leyh Pharma/25.10.14	Hydrated liniment SR/DAC (NR...	144031	1
apomix	Hydrated liniment SR/DAC (NR...	42A020614	1
Apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
Bombastus	Hydrated liniment SR/DAC (NR...	289864	5
aopmix/Phoenix	Hydrated liniment SR/DAC (NR...	62A110814	1
apomix	Hydrated liniment SR/DAC (NR...	62A110814	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	67A010914	1
Apomix	Hydrated liniment SR/DAC (NR...	72A220914	1
Bombastus	Hydrated liniment SR/DAC (NR...	288536	2
apomix	Hydrated liniment SR/DAC (NR...	73B131014	1
apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
PKH Halle	Hydrated liniment SR/DAC (NR...	69A080914	1
Apomix /Alliance	Hydrated liniment SR/DAC (NR...	41A260514	1
apomix	Hydrated liniment SR/DAC (NR...	63A120814	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	81A251114	1
Apomix	Hydrated liniment SR/DAC (NR...	76A271014	1
Bombastus	Hydrated liniment SR/DAC (NR...	289862	2
Gehe 09.01.15 Apomix	Hydrated liniment SR/DAC (NR...	67A010914	1
Gehe 09.01.15/apomix	Hydrated liniment SR/DAC (NR...	74A131014	1
Bombastus	Hydrated liniment SR/DAC (NR...	289863	6
Rabenapothke	Hydrated liniment SR/DAC (NR...	76A271014	1
Bombastus	Hydrated liniment SR/DAC (NR...	288537	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	85A091214	1
Bombastus	Hydrated liniment SR/DAC (NR...	88A161214	1

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Supplier	Substance	Batch	Spectra
Fagron	Hydrated liniment SR/DAC (NR...	289863	1
Bombastus	Hydrated liniment SR/DAC (NR...	291867	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	5A190115	1
Bombastus	Hydrated liniment SR/DAC (NR...	292492	1
apomix	Hydrated liniment SR/DAC (NR...	88A161214	1
apomix	Hydrated liniment SR/DAC (NR...	3B130115	1
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	86A161214	1
Bombastus	Hydrated liniment SR/DAC (NR...	291866	3
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	160115	1
Apomix	Hydrated liniment SR/DAC (NR...	3B130115	1
Apomix	Hydrated liniment SR/DAC (NR...	80A241114	1
Sanacorp	Hydrated liniment SR/DAC (NR...	2A120115	1
AMH Niemann/Noweda	Hydrated liniment SR/DAC (NR...	83A021214	1
Bombastus	Hydrated liniment SR/DAC (NR...	292491	7
Euro Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	110315	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	9A020215	1
Gehe	Hydrated liniment SR/DAC (NR...	6B260115	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	84B021214	1
Noweda	Hydrated liniment SR/DAC (NR...	15A040315	1
apomix	Hydrated liniment SR/DAC (NR...	2A120115	1
Bombastus	Hydrated liniment SR/DAC (NR...	292493	4
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	2A120115	1
Bombastus	Hydrated liniment SR/DAC (NR...	292621	2
apomix	Hydrated liniment SR/DAC (NR...	10B160215	1
Gehe/Apomix	Hydrated liniment SR/DAC (NR...	20A170315	1
AMH Niemann/Noweda	Hydrated liniment SR/DAC (NR...	26A130415	1
Apomix	Hydrated liniment SR/DAC (NR...	25B130415	1
Apomix	Hydrated liniment SR/DAC (NR...	10B160215	1
Bombastus	Hydrated liniment SR/DAC (NR...	293590	4
PKH / Phoenix Leipzig	Hydrated liniment SR/DAC (NR...	14A040315	1
Pharmachem	Hydrated liniment SR/DAC (NR...	160115	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	24A070415	1
Bombastus	Hydrated liniment SR/DAC (NR...	293591	1
Caelo	Hydrated liniment SR/DAC (NR...	14350002	1
Bombastus	Hydrated liniment SR/DAC (NR...	294435	2
pkh, Phönix	Hydrated liniment SR/DAC (NR...	32A120515	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	32A120515	1
Caelo	Hydrated liniment SR/DAC (NR...	15002302	1
Bombastus	Hydrated liniment SR/DAC (NR...	294434	4
Fagron	Hydrated liniment SR/DAC (NR...	294434	1
Bombastus	Hydrated liniment SR/DAC (NR...	295854	5
Leyh Pharma	Hydrated liniment SR/DAC (NR...	151621	1
Apomix/Gehe	Hydrated liniment SR/DAC (NR...	31A040515	2
Bombastus	Hydrated liniment SR/DAC (NR...	294433	4
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	33A190515	1
apomix	Hydrated liniment SR/DAC (NR...	37B010615	1
Apomix	Hydrated liniment SR/DAC (NR...	33A190515	1
Euro OTC	Hydrated liniment SR/DAC (NR...	42B160615	1
Anzag	Hydrated liniment SR/DAC (NR...	33A190515	1
AMH Niemann GmbH und Co...	Hydrated liniment SR/DAC (NR...	30B040515	1
apomix	Hydrated liniment SR/DAC (NR...	46A290615	1
Pharmachem GmbH/Phönix	Hydrated liniment SR/DAC (NR...	30815	1
PKH Halle / Phoenix	Hydrated liniment SR/DAC (NR...	44A220615	1
Bombastus	Hydrated liniment SR/DAC (NR...	296506	3
PKH Halle/ Phoenix Lepz...	Hydrated liniment SR/DAC (NR...	47A060715	1
AHD /LeyhPharma	Hydrated liniment SR/DAC (NR...	150321	1
Bombastus	Hydrated liniment SR/DAC (NR...	296589	2
Apomix/NOWEDA	Hydrated liniment SR/DAC (NR...	54A030815	1
Bombastus	Hydrated liniment SR/DAC (NR...	296504	6
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	41A080615	1

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Supplier	Substance	Batch	Spectra
Pharmachem GmbH & Co KG	Hydrated liniment SR/DAC (NR...	100315	4
Apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	55A040815	1
Apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	50A130715	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	67A220915	1
Apomix/Sana	Hydrated liniment SR/DAC (NR...	66A210915	1
Bombastus	Hydrated liniment SR/DAC (NR...	295857	3
Bombastus	Hydrated liniment SR/DAC (NR...	295853	2
apomix	Hydrated liniment SR/DAC (NR...	68B210915	1
Apomix	Hydrated liniment SR/DAC (NR...	64A140915	1
Bombastus	Hydrated liniment SR/DAC (NR...	297054	1
Allianc. Health. /Apomix	Hydrated liniment SR/DAC (NR...	297052	1
apomix	Hydrated liniment SR/DAC (NR...	66A210915	1
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	56B100815	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	64A140915	1
Caelo	Hydrated liniment SR/DAC (NR...	15324403	1
apomix	Hydrated liniment SR/DAC (NR...	81B071215	1
Leyh Phama	Hydrated liniment SR/DAC (NR...	154111	1
Noweda	Hydrated liniment SR/DAC (NR...	74A261015	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	76A031115	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	78A161115	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	58a180815	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	71A051015	2
Bombastus	Hydrated liniment SR/DAC (NR...	295852	1
Pharmachem/ Noweda	Hydrated liniment SR/DAC (NR...	310715	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	78A161115	1
Apomix	Hydrated liniment SR/DAC (NR...	71A051015	1
Caelo	Hydrated liniment SR/DAC (NR...	15324402	1
Allianc. Health. /Apomix	Hydrated liniment SR/DAC (NR...	299338	1
apomix	Hydrated liniment SR/DAC (NR...	61A010915	1
Apomix PKH GmbH	Hydrated liniment SR/DAC (NR...	79011215	1
PKH Halle	Hydrated liniment SR/DAC (NR...	85A281215	1
Bombastus	Hydrated liniment SR/DAC (NR...	297053	1
Bombastus	Hydrated liniment SR/DAC (NR...	299988	2
Bombastus	Hydrated liniment SR/DAC (NR...	298572	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	85A281215	1
Bombastus	Hydrated liniment SR/DAC (NR...	296503	1
Leyh Pharma / Alliance ...	Hydrated liniment SR/DAC (NR...	153511	1
apomix/ Phoenix / 13.04...	Hydrated liniment SR/DAC (NR...	84a141215	1
Apomix/ Galenus Apotheke	Hydrated liniment SR/DAC (NR...	7A250116	1
apomix / Phoenix / 19.0...	Hydrated liniment SR/DAC (NR...	9A010216	1
Bombastus	Hydrated liniment SR/DAC (NR...	299986	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	10A080216	1
Bombastus	Hydrated liniment SR/DAC (NR...	300968	7
Bombastus	Hydrated liniment SR/DAC (NR...	299987	3
apomix	Hydrated liniment SR/DAC (NR...	14B220216	1
Bombastus	Hydrated liniment SR/DAC (NR...	300966	2
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	190416	1
Leyhs Pharma GmbH	Hydrated liniment SR/DAC (NR...	161121	1
apomix	Hydrated liniment SR/DAC (NR...	19A070316	1
Leyh Pharma	Hydrated liniment SR/DAC (NR...	160551	1
apomix / Phoenix / 17.0...	Hydrated liniment SR/DAC (NR...	22a210316	1
Bombastus	Hydrated liniment SR/DAC (NR...	26B0590416	1
Bombastus	Hydrated liniment SR/DAC (NR...	300965	3
Pharmachem	Hydrated liniment SR/DAC (NR...	190416	1
Bombastus	Hydrated liniment SR/DAC (NR...	301562	4
apomix / Phoenix / 25.0...	Hydrated liniment SR/DAC (NR...	17A290216	1
Bombastus	Hydrated liniment SR/DAC (NR...	300967	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	27A050416	6
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	9A010216	3
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	13A160216	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrated liniment SR/DAC (NR...	301561	1
Leyh	Hydrated liniment SR/DAC (NR...	153511	1
Pharmachem GmbH Pößneck	Hydrated liniment SR/DAC (NR...	190416	1
apomix	Hydrated liniment SR/DAC (NR...	428140616	1
Bombastus	Hydrated liniment SR/DAC (NR...	301992	2
Bombastus	Hydrated liniment SR/DAC (NR...	301995	3
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	35A170516	1
Apomix	Hydrated liniment SR/DAC (NR...	85A281215	1
Apomix	Hydrated liniment SR/DAC (NR...	69A220915	1
apomix / Phoenix / 05...	Hydrated liniment SR/DAC (NR...	38a060616	1
Bombastus	Hydrated liniment SR/DAC (NR...	301993	2
Caelo	Hydrated liniment SR/DAC (NR...	34B170516	1
apomix PKH GmbH Halle	Hydrated liniment SR/DAC (NR...	28A060416	1
apomix	Hydrated liniment SR/DAC (NR...	17A290216	1
apomix / Phoenix / 03...	Hydrated liniment SR/DAC (NR...	20a150316	1
Apomix/Anzag	Hydrated liniment SR/DAC (NR...	24A290316	1
Euro OTC	Hydrated liniment SR/DAC (NR...	300968	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	43A140616	5
apomix/Gehe	Hydrated liniment SR/DAC (NR...	46A280616	2
Apomix	Hydrated liniment SR/DAC (NR...	45A270616	1
Leyhs	Hydrated liniment SR/DAC (NR...	162231	1
Leyhs	Hydrated liniment SR/DAC (NR...	163541	1
Bombastus	Hydrated liniment SR/DAC (NR...	302930	2
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	55A250716	1
PKH Halle/ Phoenix / 12...	Hydrated liniment SR/DAC (NR...	33a090516	1
Leyh	Hydrated liniment SR/DAC (NR...	162141	2
Bombastus	Hydrated liniment SR/DAC (NR...	302931	2
apomix/ Phoenix / 07.09...	Hydrated liniment SR/DAC (NR...	57a010816	1
Bombastus	Hydrated liniment SR/DAC (NR...	302933	3
Bombastus	Hydrated liniment SR/DAC (NR...	303962	4
Bombastus	Hydrated liniment SR/DAC (NR...	303963	5
apomix/Gehe	Hydrated liniment SR/DAC (NR...	60A150816	6
apomix	Hydrated liniment SR/DAC (NR...	55A250716	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	16B190716	1
apomix	Hydrated liniment SR/DAC (NR...	53B140716	1
Bombastus	Hydrated liniment SR/DAC (NR...	301989	1
apomix/ Phoenix / 01.11...	Hydrated liniment SR/DAC (NR...	65a060916	2
Bombastus	Hydrated liniment SR/DAC (NR...	303961	3
Apomix	Hydrated liniment SR/DAC (NR...	63B050916	1
apomix	Hydrated liniment SR/DAC (NR...	60A150816	1
Bombastus	Hydrated liniment SR/DAC (NR...	303960	1
apomix/ Phoenix / 11.11...	Hydrated liniment SR/DAC (NR...	52a130716	1
Apomix/Kehr	Hydrated liniment SR/DAC (NR...	69A200916	1
Apomix	Hydrated liniment SR/DAC (NR...	64A050916	1
Apomix	Hydrated liniment SR/DAC (NR...	45A270606	1
apomix / Anzag	Hydrated liniment SR/DAC (NR...	64A050916	1
Caelo	Hydrated liniment SR/DAC (NR...	67A12092916	1
Bombastus	Hydrated liniment SR/DAC (NR...	304843	2
Bombastus	Hydrated liniment SR/DAC (NR...	3048843	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	81A211116	6
Leyhs	Hydrated liniment SR/DAC (NR...	164541	2
apomix/Phönix	Hydrated liniment SR/DAC (NR...	81A211116	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	66b120916	1
apomix	Hydrated liniment SR/DAC (NR...	83B051216	1
Apomix	Hydrated liniment SR/DAC (NR...	74B111016	1
Caelo	Hydrated liniment SR/DAC (NR...	16182403	1
Bombastus	Hydrated liniment SR/DAC (NR...	304842	3
Leyh Pharma/Noweda	Hydrated liniment SR/DAC (NR...	164021	1
Apomix	Hydrated liniment SR/DAC (NR...	4576872	1
Caelo	Hydrated liniment SR/DAC (NR...	304842	1

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrated liniment SR/DAC (NR...	304841	1
Apomix /Noweda	Hydrated liniment SR/DAC (NR...	73A101016	1
PKH Halle/Kehr	Hydrated liniment SR/DAC (NR...		1
Bombastus	Hydrated liniment SR/DAC (NR...	305596	1
Apomix	Hydrated liniment SR/DAC (NR...	1A020117	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	72a270916	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	72a101016	1
apomix / AHD	Hydrated liniment SR/DAC (NR...	3B090117	1
PKH Halle	Hydrated liniment SR/DAC (NR...	72A101016	1
apomix / Noweda	Hydrated liniment SR/DAC (NR...	83B051216	1
Bombastus	Hydrated liniment SR/DAC (NR...	306059	6
Bombastus	Hydrated liniment SR/DAC (NR...	304844	3
Bombastus	Hydrated liniment SR/DAC (NR...	307263	10
Fagron	Hydrated liniment SR/DAC (NR...	16182403	1
apomix/Gehe	Hydrated liniment SR/DAC (NR...	72A270916	4
apomix/Noweda	Hydrated liniment SR/DAC (NR...	80A211116	2
Apomix	Hydrated liniment SR/DAC (NR...	75B191016	1
apomix/Holdermann	Hydrated liniment SR/DAC (NR...	65A060916	1
Bombastus	Hydrated liniment SR/DAC (NR...	306362	1
Bombastus	Hydrated liniment SR/DAC (NR...	307265	2
Bombastus	Hydrated liniment SR/DAC (NR...	304840	2
Bombastus	Hydrated liniment SR/DAC (NR...	306060	2
Apomix	Hydrated liniment SR/DAC (NR...	14A150317	1
Noweda	Hydrated liniment SR/DAC (NR...	304844	2
Bombastus	Hydrated liniment SR/DAC (NR...	307264	6
Apomix/Phoenix	Hydrated liniment SR/DAC (NR...	306060	1
Leyh Pharma/Sanacorp	Hydrated liniment SR/DAC (NR...	164641	1
apomix	Hydrated liniment SR/DAC (NR...	8A070217	1
Pharmachem / AHD	Hydrated liniment SR/DAC (NR...	307264	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	8a070217	1
apomix	Hydrated liniment SR/DAC (NR...	11A070217	1
Pharmachem/Noweda	Hydrated liniment SR/DAC (NR...	10916	1
apomix	Hydrated liniment SR/DAC (NR...	18B030417	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	2B090117	1
apomix	Hydrated liniment SR/DAC (NR...	17B270317	1
apomix/ Phoenix Leipzig...	Hydrated liniment SR/DAC (NR...	16a200317	1
Bombastus	Hydrated liniment SR/DAC (NR...	307680	1
Caelo	Hydrated liniment SR/DAC (NR...	17064401	1
Bomastus Werke	Hydrated liniment SR/DAC (NR...	307264	1
apomix/Anzag	Hydrated liniment SR/DAC (NR...	11a270217	1
Bomastus Werke	Hydrated liniment SR/DAC (NR...	307265	1
Apomix	Hydrated liniment SR/DAC (NR...	28B160517	2
Bombastus	Hydrated liniment SR/DAC (NR...	308912	5
Bombastus	Hydrated liniment SR/DAC (NR...	307683	1
apomix/Phönix	Hydrated liniment SR/DAC (NR...	24A240417	1
Apomix/Phoenix-Leipzig/...	Hydrated liniment SR/DAC (NR...	29A160517	1
Caelo	Hydrated liniment SR/DAC (NR...	17022202	1
Bombastus	Hydrated liniment SR/DAC (NR...	308911	2
Apomix	Hydrated liniment SR/DAC (NR...	11A270217	1
Apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	35A120617	1
Caelo	Hydrated liniment SR/DAC (NR...	16330502	1
Noweda PKH Halle	Hydrated liniment SR/DAC (NR...	31A290517	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	16A200317	1
Phönix	Hydrated liniment SR/DAC (NR...	39A190617	1
Bombastus	Hydrated liniment SR/DAC (NR...	308909	2
apomix/Sanacorp	Hydrated liniment SR/DAC (NR...	34B120617	1
Caelo	Hydrated liniment SR/DAC (NR...	31a290517	1
Apomix	Hydrated liniment SR/DAC (NR...	19B040417	1
Caelo	Hydrated liniment SR/DAC (NR...	308912	1
apomix	Hydrated liniment SR/DAC (NR...	27A150517	1

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Supplier	Substance	Batch	Spectra
apomix/Phoenix Leipzig ...	Hydrated liniment SR/DAC (NR...	47a170717	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	33B120617	1
Apomix / Alliance Healt...	Hydrated liniment SR/DAC (NR...	46B170717	1
Bombastus	Hydrated liniment SR/DAC (NR...	308910	2
Apomix	Hydrated liniment SR/DAC (NR...	42B030717	1
Noweda	Hydrated liniment SR/DAC (NR...	307263	1
Apomix	Hydrated liniment SR/DAC (NR...	22A180417	1
apomix, Phoenix 26.10.2...	Hydrated liniment SR/DAC (NR...	48a170717	1
Apomix	Hydrated liniment SR/DAC (NR...	31A290517	1
Bombastus	Hydrated liniment SR/DAC (NR...	310641	3
Apomix, Phoenix 07.11.2...	Hydrated liniment SR/DAC (NR...	60A180917	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	36B130617	1
Bombastus	Hydrated liniment SR/DAC (NR...	310642	3
PKH GmbH	Hydrated liniment SR/DAC (NR...	35A120617	1
apomix	Hydrated liniment SR/DAC (NR...	48A170717	1
Kehr	Hydrated liniment SR/DAC (NR...	56B210817	1
Bombastus	Hydrated liniment SR/DAC (NR...	310644	5
Bombastus	Hydrated liniment SR/DAC (NR...	171207WL/310644	1
Caelo	Hydrated liniment SR/DAC (NR...	70717	1
Gehe	Hydrated liniment SR/DAC (NR...	310642	1
Bombastus	Hydrated liniment SR/DAC (NR...	171229WL/310644	1
apomix, Phönix, 29.12.2...	Hydrated liniment SR/DAC (NR...	57a070917	1
Apomix	Hydrated liniment SR/DAC (NR...	39A190617	1
apomix, Phönix, 09.01.2...	Hydrated liniment SR/DAC (NR...	64a091017	1
Bombastus	Hydrated liniment SR/DAC (NR...		2
Bombastus	Hydrated liniment SR/DAC (NR...	17000557	1
apomix	Hydrated liniment SR/DAC (NR...	62A021017	1
Bombastus	Hydrated liniment SR/DAC (NR...	310643	1
Caelo	Hydrated liniment SR/DAC (NR...	17198902	1
Bombastus	Hydrated liniment SR/DAC (NR...	17000560	3
Apomix/Phönix	Hydrated liniment SR/DAC (NR...	22A231017	1
Apomix	Hydrated liniment SR/DAC (NR...	62A021017	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	49B240717	1
Pharmachem/Alliance Hea...	Hydrated liniment SR/DAC (NR...	70717	1
apomix/Aep	Hydrated liniment SR/DAC (NR...	66A161017	2
Bombastus	Hydrated liniment SR/DAC (NR...	180305WL/307264	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	73A041217	1
AHD PKH	Hydrated liniment SR/DAC (NR...	62A021017	1
apomix	Hydrated liniment SR/DAC (NR...	23A240417	1
Bombastus	Hydrated liniment SR/DAC (NR...	17000558	2
apomix/Noweda	Hydrated liniment SR/DAC (NR...	68A301017	1
Apomix/ GEHE	Hydrated liniment SR/DAC (NR...	5A150118	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001841	4
Pharmachem/Phönix	Hydrated liniment SR/DAC (NR...	50318	2
apomix	Hydrated liniment SR/DAC (NR...	5A150118	1
Caelo	Hydrated liniment SR/DAC (NR...	52B010817	1
Apomix	Hydrated liniment SR/DAC (NR...	74B271217	2
apomix / Phoenix 13.04.18	Hydrated liniment SR/DAC (NR...	3a080118	1
Apomix/Noweda	Hydrated liniment SR/DAC (NR...	8A050218	1
apomix / Phoenix 13.04.18	Hydrated liniment SR/DAC (NR...	2a080118	1
Bombastus	Hydrated liniment SR/DAC (NR...	18001660	3
PKH Halle/ Alliance Hea...	Hydrated liniment SR/DAC (NR...	11A270218	1
PKH Halle/ Alliance Hea...	Hydrated liniment SR/DAC (NR...	8A050218	1
Apomix	Hydrated liniment SR/DAC (NR...	11A270218	1
Caelo	Hydrated liniment SR/DAC (NR...	18001660	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001840	1
apomix	Hydrated liniment SR/DAC (NR...	11A270218	1
apomix / Phoenix Leipzi...	Hydrated liniment SR/DAC (NR...	14a190318	1
apomix	Hydrated liniment SR/DAC (NR...	17A270318	2
Bombastus	Hydrated liniment SR/DAC (NR...	18001657	2

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Supplier	Substance	Batch	Spectra
PKH Halle/ GEHE	Hydrated liniment SR/DAC (NR...	3A080118	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001838	1
Apomix	Hydrated liniment SR/DAC (NR...	20A100418	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	17A270318	1
PKH/ Phoenix Leipzig 04...	Hydrated liniment SR/DAC (NR...	24a080518	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	20A100418	1
Apomix	Hydrated liniment SR/DAC (NR...	30A280518	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001837	1
phönix/Apomix	Hydrated liniment SR/DAC (NR...	25A090518	1
apomix/ Phoenix 18.07.18	Hydrated liniment SR/DAC (NR...	29A280518	1
Caelo	Hydrated liniment SR/DAC (NR...	18109001	1
Apomix	Hydrated liniment SR/DAC (NR...	16B270318	1
Apomix/ GEHE	Hydrated liniment SR/DAC (NR...	15A210318	1
Apomix/AHD	Hydrated liniment SR/DAC (NR...	31A290518	1
Bombastus	Hydrated liniment SR/DAC (NR...	18001655	1
apomix/Noweda	Hydrated liniment SR/DAC (NR...	16B270318	1
Bombastus	Hydrated liniment SR/DAC (NR...	18002961	3
apomix / Phoenix	Hydrated liniment SR/DAC (NR...	48A300718	1
Bombastus	Hydrated liniment SR/DAC (NR...	17001839	1
Apomix	Hydrated liniment SR/DAC (NR...	42B090718	1
apomix	Hydrated liniment SR/DAC (NR...	49A300718	1
Bombastus	Hydrated liniment SR/DAC (NR...	18001658	1
Apomix / Phoenix	Hydrated liniment SR/DAC (NR...	62A170918	1
Apomix / Phoenix	Hydrated liniment SR/DAC (NR...	39A020718	1
Pharmachem Pößneck	Hydrated liniment SR/DAC (NR...	270918	1
Caelo	Hydrated liniment SR/DAC (NR...	18233003	1
Bombastus	Hydrated liniment SR/DAC (NR...	18004546	3
Bombastus	Hydrated liniment SR/DAC (NR...	18005586	1
apomix	Hydrated liniment SR/DAC (NR...	73B101218	1
Bombastus	Non-ionic hydrous liniment S...	258820	1
Bombastus	Non-ionic hydrous liniment S...	264191	1
Bombastus	Non-ionic hydrous liniment S...	267329	1
Bombastus	Non-ionic hydrous liniment S...	269133	1
Bombastus	Non-ionic hydrous liniment S...	267339	1
Bombastus	Non-ionic hydrous liniment S...	268124	1
Bombastus	Non-ionic hydrous liniment S...	269843	1
Caelo	Non-ionic hydrous liniment S...	269134	1
Gehe	Non-ionic hydrous liniment S...	269845	1
Bombastus	Non-ionic hydrous liniment S...	269131	1
Bombastus	Non-ionic hydrous liniment S...	269847	2
Gehe	Non-ionic hydrous liniment S...	269846	1
PKH Halle	Non-ionic hydrous liniment S...	6A120312	1
Bombastus	Non-ionic hydrous liniment S...	271236	1
Bombastus	Non-ionic hydrous liniment S...	268125	1
Bombastus	Non-ionic hydrous liniment S...	269848	1
Noweda	Non-ionic hydrous liniment S...	271243	1
Bombastus	Non-ionic hydrous liniment S...	271304	2
Bombastus	Non-ionic hydrous liniment S...	271249	1
Bombastus	Non-ionic hydrous liniment S...	271245	2
Bombastus	Non-ionic hydrous liniment S...	272614	1
apomix	Non-ionic hydrous liniment S...	8A170412	1
Apomix 001	Non-ionic hydrous liniment S...	10A150512	2
Gehe	Non-ionic hydrous liniment S...	271303	1
Phönix Gotha	Non-ionic hydrous liniment S...	270008	1
Bombastus	Non-ionic hydrous liniment S...	273373	1
Phönix (PKH Halle)	Non-ionic hydrous liniment S...	16A060812	1
Bombastus	Non-ionic hydrous liniment S...	272615	4
Bombastus	Non-ionic hydrous liniment S...	273371	1
Anzag	Non-ionic hydrous liniment S...	274016	1
Phönix Gotha	Non-ionic hydrous liniment S...	273375	2

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Supplier	Substance	Batch	Spectra
PKH Halle,Phönix	Non-ionic hydrous liniment S...	17A030912	1
Bombastus	Non-ionic hydrous liniment S...	274016	2
Gehe	Non-ionic hydrous liniment S...	272611	1
Apomix	Non-ionic hydrous liniment S...	15A300712	1
Sanacorp	Non-ionic hydrous liniment S...	274820	1
Bombastus	Non-ionic hydrous liniment S...	274819	2
Anzag	Non-ionic hydrous liniment S...	275786	1
Bombastus	Non-ionic hydrous liniment S...	275785	2
Bombastus	Non-ionic hydrous liniment S...	274813	1
Bombastus	Non-ionic hydrous liniment S...	273375	1
Noweda	Non-ionic hydrous liniment S...	274820	1
Fagron	Non-ionic hydrous liniment S...	257210	1
Gehe	Non-ionic hydrous liniment S...	274014	1
Bombastus	Non-ionic hydrous liniment S...	274820	1
Bombastus	Non-ionic hydrous liniment S...	275786	4
Apomix	Non-ionic hydrous liniment S...	17A030912	1
Bombastus	Non-ionic hydrous liniment S...	275787	2
Bombastus	Non-ionic hydrous liniment S...	274815	1
Bombastus	Non-ionic hydrous liniment S...	274014	2
Bombastus	Non-ionic hydrous liniment S...	275788	4
Anzag	Non-ionic hydrous liniment S...	275788	1
Caelo	Non-ionic hydrous liniment S...	275787	1
Apomix	Non-ionic hydrous liniment S...	24A101212	1
PKH Halle,Anzag	Non-ionic hydrous liniment S...	20A221012	1
Bombastus	Non-ionic hydrous liniment S...	276525	5
Bombastus	Non-ionic hydrous liniment S...	274869	1
Caelo	Non-ionic hydrous liniment S...	275785	1
Gehe	Non-ionic hydrous liniment S...	275792	1
Gehe	Non-ionic hydrous liniment S...	278253	2
apomix	Non-ionic hydrous liniment S...	20A221012	1
Phönix Gotha	Non-ionic hydrous liniment S...	275792	1
Bombastus	Non-ionic hydrous liniment S...	273374	1
Bombastus	Non-ionic hydrous liniment S...	275626	1
Bombastus	Non-ionic hydrous liniment S...	275792	1
Caelo	Non-ionic hydrous liniment S...	2/AD1	1
Bombastus	Non-ionic hydrous liniment S...	278255	1
Bombastus	Non-ionic hydrous liniment S...	278258	4
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	4A110313	1
Bombastus	Non-ionic hydrous liniment S...	278259	6
Bombastus	Non-ionic hydrous liniment S...	278256	1
Bombastus	Non-ionic hydrous liniment S...	276526	1
Phönix Gotha	Non-ionic hydrous liniment S...	278255	1
Bombastus	Non-ionic hydrous liniment S...	278260	4
Caelo	Non-ionic hydrous liniment S...	276526	1
apomix	Non-ionic hydrous liniment S...	24A101212	1
Bombastus	Non-ionic hydrous liniment S...	279501	3
Bombastus	Non-ionic hydrous liniment S...	276523	1
Sanacorp	Non-ionic hydrous liniment S...	279500	1
Caesar & Loretz/ Noweda	Non-ionic hydrous liniment S...	278260	1
Caelo	Non-ionic hydrous liniment S...	123304	1
Bombastus	Non-ionic hydrous liniment S...	276524	1
Bombastus	Non-ionic hydrous liniment S...	279499	2
Bombastus	Non-ionic hydrous liniment S...	279502	5
Bombastus	Non-ionic hydrous liniment S...	275789	1
Fagron	Non-ionic hydrous liniment S...	125304	1
apomix/Phönix	Non-ionic hydrous liniment S...	17A030912	2
Fagron	Non-ionic hydrous liniment S...	123304	2
Bombastus	Non-ionic hydrous liniment S...	279496	3
Bombastus	Non-ionic hydrous liniment S...	279498	2
Caelo	Non-ionic hydrous liniment S...	278260	1

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	279497	1
Sanacorp	Non-ionic hydrous liniment S...	279501	1
Gehe	Non-ionic hydrous liniment S...	279498	2
Fagron	Non-ionic hydrous liniment S...	258210	1
Fagron	Non-ionic hydrous liniment S...	27301	1
Apomix/ Phönix	Non-ionic hydrous liniment S...	11A010713	1
Apomix Anzag	Non-ionic hydrous liniment S...	6A080413	1
Apomix	Non-ionic hydrous liniment S...	11A010713	1
Bombastus	Non-ionic hydrous liniment S...	600991111	1
Gehe	Non-ionic hydrous liniment S...	280873	1
Bombastus	Non-ionic hydrous liniment S...	281558	3
Fagron	Non-ionic hydrous liniment S...	122304	1
Bombastus	Non-ionic hydrous liniment S...	279500	4
Apomix/Phönix	Non-ionic hydrous liniment S...	9A290513	1
apomix	Non-ionic hydrous liniment S...	10A1206013	1
Bombastus	Non-ionic hydrous liniment S...	281562	1
Bombastus	Non-ionic hydrous liniment S...	281563	2
Apomix/Noweda	Non-ionic hydrous liniment S...	12A100713	1
Bombastus	Non-ionic hydrous liniment S...	280877	7
Caelo	Non-ionic hydrous liniment S...	281564	2
Bombaltus/Sanac	Non-ionic hydrous liniment S...	279498	1
Phönix Gotha	Non-ionic hydrous liniment S...	281559	2
apomix	Non-ionic hydrous liniment S...	11A010713	1
/Noweda	Non-ionic hydrous liniment S...	281562	1
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	281564	1
Gehe	Non-ionic hydrous liniment S...	280877	1
Bombastus	Non-ionic hydrous liniment S...	281564	4
Bombastus	Non-ionic hydrous liniment S...	281561	2
Bombastus	Non-ionic hydrous liniment S...	281560	1
apomix/Phönix	Non-ionic hydrous liniment S...	20A121211	1
Noweda	Non-ionic hydrous liniment S...	281562	1
Bombastus	Non-ionic hydrous liniment S...	280876	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	17A230913	1
Bombastus	Non-ionic hydrous liniment S...	282333	3
Bombastus	Non-ionic hydrous liniment S...	282334	4
Apomix	Non-ionic hydrous liniment S...	17A230913	1
Apomix / Phönix	Non-ionic hydrous liniment S...	20A051113	1
Apomix / Phönix	Non-ionic hydrous liniment S...	23A111213	1
Gehe	Non-ionic hydrous liniment S...	282335	1
Bombastus	Non-ionic hydrous liniment S...	131648	1
Caelo	Non-ionic hydrous liniment S...	122304	1
Bombastus	Non-ionic hydrous liniment S...	282332	4
Bombastus	Non-ionic hydrous liniment S...	282946	3
Selbstersteller	Non-ionic hydrous liniment S...	20140116	1
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	282947	1
Bombastus	Non-ionic hydrous liniment S...	284233	1
Bombastus	Non-ionic hydrous liniment S...	284234	1
Bombastus	Non-ionic hydrous liniment S...	282947	5
Caelo	Non-ionic hydrous liniment S...	282333	1
Bombastus	Non-ionic hydrous liniment S...	7021402	1
Apomix	Non-ionic hydrous liniment S...	15A260813	1
Bombastus	Non-ionic hydrous liniment S...	229263	1
Apomix	Non-ionic hydrous liniment S...	20A051113	1
Bombastus	Non-ionic hydrous liniment S...	284237	1
Apomix / Phönix	Non-ionic hydrous liniment S...	17A230913	1
Bombastus	Non-ionic hydrous liniment S...	284236	1
Apomix	Non-ionic hydrous liniment S...	23A111213	2
Caelo	Non-ionic hydrous liniment S...	21A201113	1
apomix	Non-ionic hydrous liniment S...	20A051113	1
Phönix Gotha	Non-ionic hydrous liniment S...	282946	1

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrous liniment S...	281562	1
Noweda	Non-ionic hydrous liniment S...	25A191213	1
Bombastus	Non-ionic hydrous liniment S...	285793	4
Eigene Herstellung	Non-ionic hydrous liniment S...	1546	1
Bombastus	Non-ionic hydrous liniment S...	282945	2
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	285025	1
Bombastus	Non-ionic hydrous liniment S...	285790	2
Caelo	Non-ionic hydrous liniment S...	14024104	1
Bombastus	Non-ionic hydrous liniment S...	285025	2
Apomix / Phönix	Non-ionic hydrous liniment S...	25A191213	3
Wolf-Apotheke	Non-ionic hydrous liniment S...	285793	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	4A250214	1
Apomix	Non-ionic hydrous liniment S...	4A250214	2
Bombastus	Non-ionic hydrous liniment S...	285023	1
Gehe	Non-ionic hydrous liniment S...	285024	1
Eigene Herstellung	Non-ionic hydrous liniment S...	1567	1
Bombastus	Non-ionic hydrous liniment S...	286417	5
Bombastus	Non-ionic hydrous liniment S...	285838	1
Gehe/Apomix	Non-ionic hydrous liniment S...	286417	1
Apomix/Noweda	Non-ionic hydrous liniment S...	3B180214	1
Bombastus	Non-ionic hydrous liniment S...	286419	3
Apomix	Non-ionic hydrous liniment S...	7A170414	1
Caelo	Non-ionic hydrous liniment S...	284237	1
Bombastus	Non-ionic hydrous liniment S...	285792	2
Caelo	Non-ionic hydrous liniment S...	4063101	1
Bombastus	Non-ionic hydrous liniment S...	285024	1
Apomix	Non-ionic hydrous liniment S...	286420	1
Bombastus	Non-ionic hydrous liniment S...	285795	4
Caelo	Non-ionic hydrous liniment S...	102600630	1
Bombastus	Non-ionic hydrous liniment S...	284231	1
Noweda	Non-ionic hydrous liniment S...	285795	1
Bombastus	Non-ionic hydrous liniment S...	286418	8
apomix/Phönix	Non-ionic hydrous liniment S...	5B170414	2
Bombastus	Non-ionic hydrous liniment S...	286421	1
Caelo	Non-ionic hydrous liniment S...	14134601	9
Bombastus	Non-ionic hydrous liniment S...	282335	1
Caelo	Non-ionic hydrous liniment S...	14024102	1
Bombastus	Non-ionic hydrous liniment S...	287321	6
Bombastus	Non-ionic hydrous liniment S...	287318	7
Apomix / Phönix	Non-ionic hydrous liniment S...	10A150514	1
Caelo	Non-ionic hydrous liniment S...	287323	1
Apomix Anzag	Non-ionic hydrous liniment S...	12A270514	1
Bombastus	Non-ionic hydrous liniment S...	287323	4
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	10A150514	1
Noweda	Non-ionic hydrous liniment S...	287323	1
Bombastus	Non-ionic hydrous liniment S...	288386	1
Bombastus	Non-ionic hydrous liniment S...	288451	4
Noweda	Non-ionic hydrous liniment S...	10A150514	1
Bombastus	Non-ionic hydrous liniment S...	288387	2
Bombastus	Non-ionic hydrous liniment S...	288453	7
Apomix / Phönix	Non-ionic hydrous liniment S...	15A140714	1
apomix	Non-ionic hydrous liniment S...	7A170414	1
Bombastus	Non-ionic hydrous liniment S...	286420	1
Caelo	Non-ionic hydrous liniment S...	14209501	8
Bombastus	Non-ionic hydrous liniment S...	488451	1
Phönix Gotha	Non-ionic hydrous liniment S...	287316	1
Apomix	Non-ionic hydrous liniment S...	12A270514	1
apomix / Anzag	Non-ionic hydrous liniment S...	13A040614	1
Caelo	Non-ionic hydrous liniment S...	14173601	3
Apomix/Noweda	Non-ionic hydrous liniment S...	13A040614	1

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Supplier	Substance	Batch	Spectra
Alliance Health 09.05.2...	Non-ionic hydrous liniment S...	14134601	2
Gehe 18.08.14	Non-ionic hydrous liniment S...	288387	4
Bombastu-Werke AG/Gehe	Non-ionic hydrous liniment S...	288452	1
Fagron	Non-ionic hydrous liniment S...	288452	1
Bombastus	Non-ionic hydrous liniment S...	287319	2
Apomix	Non-ionic hydrous liniment S...	18A200814	1
Bombastus	Non-ionic hydrous liniment S...	288389	2
Bombastus	Non-ionic hydrous liniment S...	287320	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	15A140714	1
PharmaChem	Non-ionic hydrous liniment S...	140814	1
Bombastus	Non-ionic hydrous liniment S...	288454	4
Caelo	Non-ionic hydrous liniment S...	288454	1
	Non-ionic hydrous liniment S...	288452	1
Apomix	Non-ionic hydrous liniment S...	16A040814	1
apomix / Anzag	Non-ionic hydrous liniment S...	15A140714	1
Caelo	Non-ionic hydrous liniment S...	14276002	7
Bombastus	Non-ionic hydrous liniment S...	289206	3
Apomix / Phönix	Non-ionic hydrous liniment S...	16A040814	1
Bombastus	Non-ionic hydrous liniment S...	289208	2
Caelo	Non-ionic hydrous liniment S...	14276001	5
Caesar/Noweda	Non-ionic hydrous liniment S...	14173601	1
Bombastus	Non-ionic hydrous liniment S...	289205	1
Apomix	Non-ionic hydrous liniment S...	22A101114	2
Bombastus	Non-ionic hydrous liniment S...	289209	4
Gehe	Non-ionic hydrous liniment S...	289205	1
apomix / Anzag	Non-ionic hydrous liniment S...	22A101114	1
Bombastus	Non-ionic hydrous liniment S...	288452	1
apomix	Non-ionic hydrous liniment S...	13A040614	1
Caelo	Non-ionic hydrous liniment S...	14328402	3
Bomastus/Phönix	Non-ionic hydrous liniment S...	290610	1
Bombastus	Non-ionic hydrous liniment S...	290613	8
apomix/Phönix	Non-ionic hydrous liniment S...	22A101114	1
Bombastus	Non-ionic hydrous liniment S...	288390	1
Bombastus	Non-ionic hydrous liniment S...	289207	1
Bombastus	Non-ionic hydrous liniment S...	290612	3
Bombastus	Non-ionic hydrous liniment S...	291221	3
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	22A101114	1
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	20A150914	1
AHD 09.01.15/apomix	Non-ionic hydrous liniment S...	A150914	1
Apomix	Non-ionic hydrous liniment S...	27A221214	2
Bombastus	Non-ionic hydrous liniment S...	290121	2
Apomix / Phönix	Non-ionic hydrous liniment S...	24A271114	1
Caelo	Non-ionic hydrous liniment S...	14350703	2
Caelo	Non-ionic hydrous liniment S...	15002302	4
Phönix Gotha	Non-ionic hydrous liniment S...	290610	1
Bombastus	Non-ionic hydrous liniment S...	290610	3
Caelo	Non-ionic hydrous liniment S...	291222	3
Fagron	Non-ionic hydrous liniment S...	14350703	1
Alliance health	Non-ionic hydrous liniment S...	14350703	2
Bombastus	Non-ionic hydrous liniment S...	291220	2
Bombastus	Non-ionic hydrous liniment S...	291223	4
Apomix	Non-ionic hydrous liniment S...	25A021214	2
Apomix	Non-ionic hydrous liniment S...	2A100215	2
Bombastus	Non-ionic hydrous liniment S...	291286	4
Bombastus	Non-ionic hydrous liniment S...	291222	6
Noweda	Non-ionic hydrous liniment S...	22A101114	1
	Non-ionic hydrous liniment S...	14350703	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	25A021214	1
Bombastus	Non-ionic hydrous liniment S...	291859	3
Apomix/Gehe	Non-ionic hydrous liniment S...	27A221214	1

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Supplier	Substance	Batch	Spectra
Apomix / Phönix	Non-ionic hydrous liniment S...	22A101114	1
Caelo	Non-ionic hydrous liniment S...	291286	1
Bombastus	Non-ionic hydrous liniment S...	291861	3
Caelo	Non-ionic hydrous liniment S...	15014601	7
Gehe Kassel	Non-ionic hydrous liniment S...	15014601	2
apomix	Non-ionic hydrous liniment S...	2A100215	1
Bombastus	Non-ionic hydrous liniment S...	291860	3
Bombastus	Non-ionic hydrous liniment S...	292618	3
Bombastus	Non-ionic hydrous liniment S...	292742	2
Bombastus	Non-ionic hydrous liniment S...	292621	3
Noweda	Non-ionic hydrous liniment S...	292618	1
Sanacorp	Non-ionic hydrous liniment S...	15002302	1
apomix	Non-ionic hydrous liniment S...	3A100215	2
Sanacorp	Non-ionic hydrous liniment S...	15014601	1
Bombastus	Non-ionic hydrous liniment S...	293579	5
Caelo	Non-ionic hydrous liniment S...	15096101	8
Apomix	Non-ionic hydrous liniment S...	5A110315	1
Bombastus	Non-ionic hydrous liniment S...	293577	3
Caelo	Non-ionic hydrous liniment S...	15096002	11
Phönix Gotha	Non-ionic hydrous liniment S...	292617	1
apomix/Phönix	Non-ionic hydrous liniment S...	8A080415	1
Noweda/Apomix	Non-ionic hydrous liniment S...	6B180315	1
Bombastus	Non-ionic hydrous liniment S...	293578	3
Bombastus	Non-ionic hydrous liniment S...	293574	1
Caelo	Non-ionic hydrous liniment S...	5A110315	1
Bombastus	Non-ionic hydrous liniment S...	294211	8
PKH GmbH / Phönix	Non-ionic hydrous liniment S...	11B270515	1
Caelo	Non-ionic hydrous liniment S...	294211	2
Bombastus	Non-ionic hydrous liniment S...	294213	2
Apomix/Noweda	Non-ionic hydrous liniment S...	6B180315	1
Caelo	Non-ionic hydrous liniment S...	293579	1
Caelo/Noweda	Non-ionic hydrous liniment S...	15096101	1
Caelo	Non-ionic hydrous liniment S...	24A271114	1
Bombastus	Non-ionic hydrous liniment S...	192621	1
apomix / Anzag	Non-ionic hydrous liniment S...	1A200115	1
Bombastus	Non-ionic hydrous liniment S...	294277	2
Bombastus	Non-ionic hydrous liniment S...	295071	1
apomix	Non-ionic hydrous liniment S...	12A100615	1
Bombastus	Non-ionic hydrous liniment S...	295068	2
Bombastus	Non-ionic hydrous liniment S...	295070	5
Caelo	Non-ionic hydrous liniment S...	15192502	9
Caelo	Non-ionic hydrous liniment S...	15192301	5
Bombastus	Non-ionic hydrous liniment S...	295072	2
Bombastus	Non-ionic hydrous liniment S...	295069	3
Bombastus	Non-ionic hydrous liniment S...	294212	1
Phönix Gotha	Non-ionic hydrous liniment S...	295072	1
Bombastus	Non-ionic hydrous liniment S...	295073	1
Noweda/apomix	Non-ionic hydrous liniment S...	12A100615	1
Apomix / Phönix	Non-ionic hydrous liniment S...	12A100615	1
Caelo	Non-ionic hydrous liniment S...	10A110515	1
Apomix	Non-ionic hydrous liniment S...	11B270515	1
apomix	Non-ionic hydrous liniment S...	15A150715	2
Bombastus	Non-ionic hydrous liniment S...	60091111	1
Noweda 27.08.15	Non-ionic hydrous liniment S...	15192301	1
PKH Halle / Phoenix	Non-ionic hydrous liniment S...	15A150715	1
apomix	Non-ionic hydrous liniment S...	14A300615	1
Caelo	Non-ionic hydrous liniment S...	14092015A	1
Bombastus	Non-ionic hydrous liniment S...	296108	2
Apomix / Phönix	Non-ionic hydrous liniment S...	15A150715	1
Caelo	Non-ionic hydrous liniment S...	15192401	9

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Supplier	Substance	Batch	Spectra
apomix	Non-ionic hydrous liniment S...	16A050815	2
Bombastus	Non-ionic hydrous liniment S...	296585	8
Apomix	Non-ionic hydrous liniment S...	16A050815	2
Bombastus	Non-ionic hydrous liniment S...	295910	4
Bombastus	Non-ionic hydrous liniment S...	296106	3
Bombastus	Non-ionic hydrous liniment S...	15192502	1
PKH Halle/ Phoenix Lepz...	Non-ionic hydrous liniment S...	10A110515	1
Caelo	Non-ionic hydrous liniment S...	16A050815	2
Caelo	Non-ionic hydrous liniment S...	15192391	1
Caelo	Non-ionic hydrous liniment S...	295910	1
Phönix Gotha	Non-ionic hydrous liniment S...	296108	1
Bombastus	Non-ionic hydrous liniment S...	296109	2
Caelo	Non-ionic hydrous liniment S...	295072	1
Sanacorp 21.10.15 und...	Non-ionic hydrous liniment S...	15192301	1
Caelo	Non-ionic hydrous liniment S...	15326703	8
Bombastus	Non-ionic hydrous liniment S...	98434	1
Bombastus	Non-ionic hydrous liniment S...	296584	7
Caelo	Non-ionic hydrous liniment S...	15096001	1
Bombastus	Non-ionic hydrous liniment S...	297175	3
Noweda	Non-ionic hydrous liniment S...	8A080415	1
Bombastus	Non-ionic hydrous liniment S...	295911	2
Bombastus	Non-ionic hydrous liniment S...	296589	1
Apomix	Non-ionic hydrous liniment S...	20A280915	1
Bombastus	Non-ionic hydrous liniment S...	297172	3
Bombastus	Non-ionic hydrous liniment S...	296110	3
Bombastus	Non-ionic hydrous liniment S...	296111	1
Caelo	Non-ionic hydrous liniment S...	297171	1
Rondell Apotheke	Non-ionic hydrous liniment S...	297175	1
apomix	Non-ionic hydrous liniment S...	20A280915	1
Bombastus	Non-ionic hydrous liniment S...	296107	2
Apomix / Phönix	Non-ionic hydrous liniment S...	16A050815	1
PKH GmbH	Non-ionic hydrous liniment S...	6B180315	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	23A181115	1
Apomix	Non-ionic hydrous liniment S...	23A181115	2
Caelo	Non-ionic hydrous liniment S...	15326702	10
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	18A070915	1
Bombastus	Non-ionic hydrous liniment S...	297176	3
Bombastus	Non-ionic hydrous liniment S...	297173	2
Noweda	Non-ionic hydrous liniment S...	296109	1
apomix AHD	Non-ionic hydrous liniment S...	23A181115	1
Leyh Pharma	Non-ionic hydrous liniment S...	153811	1
Bombastus	Non-ionic hydrous liniment S...	297177	6
Apomix/ Phönix	Non-ionic hydrous liniment S...	25A081215	1
Apomix/ Phoenix	Non-ionic hydrous liniment S...	25A081215	1
Caelo	Non-ionic hydrous liniment S...	15420901	2
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	18a070915	1
Cael/Phönix	Non-ionic hydrous liniment S...	15326702	1
Pößneck Pharma / Gehe	Non-ionic hydrous liniment S...	23A181115	2
Caelo	Non-ionic hydrous liniment S...	297178	1
Apomix	Non-ionic hydrous liniment S...	25A081215	1
Bombastus	Non-ionic hydrous liniment S...	298465	2
Bombastus	Non-ionic hydrous liniment S...	297171	1
Bombastus	Non-ionic hydrous liniment S...	297174	2
apomix	Non-ionic hydrous liniment S...	26A281215	1
Caelo	Non-ionic hydrous liniment S...	296585	1
Caelo	Non-ionic hydrous liniment S...	1519252	1
apomix	Non-ionic hydrous liniment S...	10A110515	1
Bombastus	Non-ionic hydrous liniment S...	298467	1
PKH GmbH	Non-ionic hydrous liniment S...	27A291215	1
Noweda	Non-ionic hydrous liniment S...	15420902	1

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Supplier	Substance	Batch	Spectra
Apomix	Non-ionic hydrous liniment S...	2A020216	4
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	26A28125	1
Apomix PKH GmbH	Non-ionic hydrous liniment S...	20A280915	1
Caelo	Non-ionic hydrous liniment S...	16021601	16
Caelo	Non-ionic hydrous liniment S...	300199	3
Bombastus	Non-ionic hydrous liniment S...	297178	4
Bombastus	Non-ionic hydrous liniment S...	298468	1
Bombastus	Non-ionic hydrous liniment S...	299133	3
Caelo	Non-ionic hydrous liniment S...	15420902	4
Bombastus	Non-ionic hydrous liniment S...	298466	1
Bombastus	Non-ionic hydrous liniment S...	300200	7
Bombastus	Non-ionic hydrous liniment S...	300195	4
Caelo	Non-ionic hydrous liniment S...	298466	1
Bombstus	Non-ionic hydrous liniment S...	300199	1
Caelo	Non-ionic hydrous liniment S...	297175	1
Bombastus	Non-ionic hydrous liniment S...	300197	5
Bombastus	Non-ionic hydrous liniment S...	300199	2
Bombastus	Non-ionic hydrous liniment S...	300196	3
Apomix / Phönix	Non-ionic hydrous liniment S...	4A010316	1
Caelo	Non-ionic hydrous liniment S...	15421002	3
Apomix PKH GmbH	Non-ionic hydrous liniment S...	4A010316	1
apomix/ Phoenix / 07.04...	Non-ionic hydrous liniment S...	25a081215	1
Euro OTC	Non-ionic hydrous liniment S...	15192401	1
Bombastus	Non-ionic hydrous liniment S...	29715	1
Caelo	Non-ionic hydrous liniment S...	15279702	1
Bombastus	Non-ionic hydrous liniment S...	300859	6
Caelo	Non-ionic hydrous liniment S...	16113801	7
Bombastus	Non-ionic hydrous liniment S...	300862	6
PKH Halle/Noweda	Non-ionic hydrous liniment S...	25A081215	1
Bombastus	Non-ionic hydrous liniment S...	300198	1
Sanacorp	Non-ionic hydrous liniment S...	8/AKD101	1
Bombastus	Non-ionic hydrous liniment S...	300860	4
Caesar/Noweda	Non-ionic hydrous liniment S...	15326703	1
Bombastus	Non-ionic hydrous liniment S...	300861	2
apomix / Phoenix / 23.0...	Non-ionic hydrous liniment S...	4a010316	1
PKH GmbH	Non-ionic hydrous liniment S...	7A300316	1
Noweda	Non-ionic hydrous liniment S...	15421002	1
Bombastus	Non-ionic hydrous liniment S...	299132	1
Apomix / Gehe	Non-ionic hydrous liniment S...	6A310316	1
Caelo	Non-ionic hydrous liniment S...	300863	2
Caelo	Non-ionic hydrous liniment S...	299133	1
Allianc. Health. /Apomix	Non-ionic hydrous liniment S...	301558	1
apomix	Non-ionic hydrous liniment S...	6A310316	1
Apomix / Phönix	Non-ionic hydrous liniment S...	8A100516	3
Phoenix	Non-ionic hydrous liniment S...	300860	1
Apomix/Noweda	Non-ionic hydrous liniment S...	2A020216	1
Fagron	Non-ionic hydrous liniment S...	301558	1
Apomix	Non-ionic hydrous liniment S...	6A310316	2
Caelo	Non-ionic hydrous liniment S...	16114002	9
Caelo	Non-ionic hydrous liniment S...	16113901	7
wepa/Sanaco	Non-ionic hydrous liniment S...	1542102	1
Bombastus	Non-ionic hydrous liniment S...	301558	8
Bombastus	Non-ionic hydrous liniment S...	301555	1
Caelo	Non-ionic hydrous liniment S...	16113902	1
apomix	Non-ionic hydrous liniment S...	9A190516	1
Bombastus	Non-ionic hydrous liniment S...	300864	6
Bombastus	Non-ionic hydrous liniment S...	300863	3
Bombastus	Non-ionic hydrous liniment S...	301557	3
PKH Halle/Phönix	Non-ionic hydrous liniment S...	12A200616	1
Bombastus	Non-ionic hydrous liniment S...	301556	2

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Supplier	Substance	Batch	Spectra
apomix	Non-ionic hydrous liniment S...	10A310516	1
Bombastus	Non-ionic hydrous liniment S...	302286	8
Caelo	Non-ionic hydrous liniment S...	302283	1
apomix	Non-ionic hydrous liniment S...	8A100516	1
Apomix	Non-ionic hydrous liniment S...	10A310516	2
apomix / Phoenix / 05...	Non-ionic hydrous liniment S...	12a200616	1
Caelo	Non-ionic hydrous liniment S...	16176802	3
Caelo	Non-ionic hydrous liniment S...	300864	2
Bombastus	Non-ionic hydrous liniment S...	302284	3
Bombastus	Non-ionic hydrous liniment S...	302851	2
Caelo	Non-ionic hydrous liniment S...	1616701	1
Caelo	Non-ionic hydrous liniment S...	16176701	13
Apomix	Non-ionic hydrous liniment S...	9A190516	1
Ebert u. Jacobi 16.0...	Non-ionic hydrous liniment S...	300864	1
Caelo	Non-ionic hydrous liniment S...	1676802	1
Bombastus	Non-ionic hydrous liniment S...	302287	9
Bombastus	Non-ionic hydrous liniment S...	60091112	1
Bombastus	Non-ionic hydrous liniment S...	302283	2
Bombastus	Non-ionic hydrous liniment S...	302285	3
Phoenix	Non-ionic hydrous liniment S...	302283	1
apomix / Phoenix / 24...	Non-ionic hydrous liniment S...	14a180716	1
Euro OTC	Non-ionic hydrous liniment S...	16218301	2
Caelo	Non-ionic hydrous liniment S...	16218301	10
Ichthyol/Phönix	Non-ionic hydrous liniment S...	16113901	2
Caelo	Non-ionic hydrous liniment S...	16218201	12
Beiersdorf/Kehr	Non-ionic hydrous liniment S...	302849	1
PKH/Phönix	Non-ionic hydrous liniment S...	9A190516	1
Apomix/ Anzag	Non-ionic hydrous liniment S...	10A310516	1
PKH Halle	Non-ionic hydrous liniment S...	13A200616	1
apomix	Non-ionic hydrous liniment S...	14A180716	2
Caelo	Non-ionic hydrous liniment S...	10A310516	1
Bombastus	Non-ionic hydrous liniment S...	302852	10
apomix	Non-ionic hydrous liniment S...	17A220816	1
Caelo	Non-ionic hydrous liniment S...	300862	1
Phoenix	Non-ionic hydrous liniment S...	303895	1
Bombastus	Non-ionic hydrous liniment S...	302849	2
Bombastus	Non-ionic hydrous liniment S...	300858	1
Bombastus	Non-ionic hydrous liniment S...	303895	2
apomix PKH GmbH Halle	Non-ionic hydrous liniment S...	9A190516	1
apomix/ Phoenix / 24.10...	Non-ionic hydrous liniment S...	8a100516	1
Bombastus	Non-ionic hydrous liniment S...	304933	6
Apomix	Non-ionic hydrous liniment S...	12A200616	1
apomix/Noweda	Non-ionic hydrous liniment S...	19A010916	1
Caelo	Non-ionic hydrous liniment S...	16258501	12
Caelo	Non-ionic hydrous liniment S...	16258401	7
Celo	Non-ionic hydrous liniment S...	16113801	1
Euro OTC	Non-ionic hydrous liniment S...	16C190716	1
Caelo	Non-ionic hydrous liniment S...	302285	1
Bombastus	Non-ionic hydrous liniment S...	303897	1
Apomix	Non-ionic hydrous liniment S...	19A010916	1
Bombastus	Non-ionic hydrous liniment S...	303898	5
Caelo	Non-ionic hydrous liniment S...	16B190716	1
Bombastus	Non-ionic hydrous liniment S...	303894	5
Bombastus	Non-ionic hydrous liniment S...	304932	6
Bombastus	Non-ionic hydrous liniment S...	304934	5
Apomix / Phönix	Non-ionic hydrous liniment S...	21A241016	1
PKH GmbH	Non-ionic hydrous liniment S...	21A241016	1
Bombastus	Non-ionic hydrous liniment S...	303896	3
Bombastus	Non-ionic hydrous liniment S...	304935	6
apomix/Phoenix/03.01.2017	Non-ionic hydrous liniment S...	22a251016	2

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrous liniment S...	16318801	30
PKH GmbH	Non-ionic hydrous liniment S...	22A251016	1
GEHE	Non-ionic hydrous liniment S...	24A231116	1
Caelo	Non-ionic hydrous liniment S...	16318802	6
Bombastus	Non-ionic hydrous liniment S...	304496	1
Caelo	Non-ionic hydrous liniment S...	303898	1
Caelo	Non-ionic hydrous liniment S...	1625401	1
Bombastus	Non-ionic hydrous liniment S...	305593	2
Bombastus	Non-ionic hydrous liniment S...	305596	5
Bombastus	Non-ionic hydrous liniment S...	302887	1
Bombastus	Non-ionic hydrous liniment S...	306361	9
Bombastus	Non-ionic hydrous liniment S...	305595	3
Bombastus	Non-ionic hydrous liniment S...	30898	1
Bombastus	Non-ionic hydrous liniment S...	305594	2
Bombastus	Non-ionic hydrous liniment S...	26A281216	1
Bombastus	Non-ionic hydrous liniment S...	303893	1
Bombastus	Non-ionic hydrous liniment S...	304936	3
Bombastus	Non-ionic hydrous liniment S...	306360	2
Bombastus	Non-ionic hydrous liniment S...	306357	1
Bombastus	Non-ionic hydrous liniment S...	306362	9
hochhaus-Apotheke	Non-ionic hydrous liniment S...	16318801	1
PKH GmbH/Kehr	Non-ionic hydrous liniment S...	24A231116	1
Caelo	Non-ionic hydrous liniment S...	17027801	13
Bombastus	Non-ionic hydrous liniment S...	306358	3
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	1a100117	1
Apomix/Phönix	Non-ionic hydrous liniment S...	18B010916	1
GEHE	Non-ionic hydrous liniment S...	2A010217	3
Bombastus	Non-ionic hydrous liniment S...	306359	2
Apomix	Non-ionic hydrous liniment S...	1A100117	1
Bombastus	Non-ionic hydrous liniment S...	307682	1
Apomix / Gehe	Non-ionic hydrous liniment S...	1A100117	1
Bombastus	Non-ionic hydrous liniment S...	307684	5
Apomix/Noweda	Non-ionic hydrous liniment S...	24A231116	1
Caelo	Non-ionic hydrous liniment S...	17027901	7
Bombastus	Non-ionic hydrous liniment S...	307680	1
Caelo	Non-ionic hydrous liniment S...	307658	1
Caelo	Non-ionic hydrous liniment S...	26A281216	1
Caelo	Non-ionic hydrous liniment S...	306362	2
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	4a010317	1
Bombastus	Non-ionic hydrous liniment S...	307683	2
Bombastus	Non-ionic hydrous liniment S...	307685	4
apomix / Gehe	Non-ionic hydrous liniment S...	18B010916	1
Gehe	Non-ionic hydrous liniment S...	17064404	1
Noweda	Non-ionic hydrous liniment S...	16318802	1
hochhaus-Apotheke	Non-ionic hydrous liniment S...	2116617027801	1
Apomix/Noweda	Non-ionic hydrous liniment S...	2A010217	1
Caelo	Non-ionic hydrous liniment S...	307685	1
Bombastus	Non-ionic hydrous liniment S...	305591	1
Caelo	Non-ionic hydrous liniment S...	17064402	21
Bombastus	Non-ionic hydrous liniment S...	307681	1
Caelo	Non-ionic hydrous liniment S...	10260682	1
Bombastus	Non-ionic hydrous liniment S...	308623	3
apomix/ Phoenix Leipzig...	Non-ionic hydrous liniment S...	6A290317	1
Caelo	Non-ionic hydrous liniment S...	308627	1
Cealo/Noweda	Non-ionic hydrous liniment S...	17027801	1
Bombastus	Non-ionic hydrous liniment S...	308626	4
Gehe	Non-ionic hydrous liniment S...	306361	1
Bombastus	Non-ionic hydrous liniment S...	308624	3
phönix	Non-ionic hydrous liniment S...	17027801	1
Bombastus	Non-ionic hydrous liniment S...	308628	10

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Supplier	Substance	Batch	Spectra
PKH Halle/ Phoenix Lepz...	Non-ionic hydrous liniment S...	8A250417	2
Bombastus	Non-ionic hydrous liniment S...	308627	2
Fagron	Non-ionic hydrous liniment S...	17027801	1
Sanacorp	Non-ionic hydrous liniment S...	17064402	1
PKH Halle/Holdermann	Non-ionic hydrous liniment S...	10A100517	1
Bombastus	Non-ionic hydrous liniment S...	309790	2
Caelo	Non-ionic hydrous liniment S...	17064401	10
Apomix	Non-ionic hydrous liniment S...	8A250417	1
Noweda	Non-ionic hydrous liniment S...	308628	1
GEHE	Non-ionic hydrous liniment S...	14A260617	1
Apomix	Non-ionic hydrous liniment S...	6A290317	1
Bombastus	Non-ionic hydrous liniment S...	309786	1
phoenix	Non-ionic hydrous liniment S...	309791	1
Bombastus	Non-ionic hydrous liniment S...	309794	1
Caelo	Non-ionic hydrous liniment S...	17144401	10
Caelo	Non-ionic hydrous liniment S...	1290617/17064402	1
Caelo	Non-ionic hydrous liniment S...	1744401	1
Bombastus	Non-ionic hydrous liniment S...	309795	3
Bombastus	Non-ionic hydrous liniment S...	309791	2
Bombastus	Non-ionic hydrous liniment S...	309801	1
Caelo	Non-ionic hydrous liniment S...	17175201	4
Bombastus	Non-ionic hydrous liniment S...	309802	5
Kehr/ PKH GmbH	Non-ionic hydrous liniment S...	14A260617	1
Caelo	Non-ionic hydrous liniment S...	17117303	1
Apomix/Phoenix Leipzig ...	Non-ionic hydrous liniment S...	14A260617	3
Caelo	Non-ionic hydrous liniment S...	20170829Ma1	1
Pharmachem	Non-ionic hydrous liniment S...	309802	1
Bombastus	Non-ionic hydrous liniment S...	309796	1
Caelo	Non-ionic hydrous liniment S...	6A290317	1
Caelo	Non-ionic hydrous liniment S...	13A260617	2
Bombastus	Non-ionic hydrous liniment S...	388627	1
Bombastus	Non-ionic hydrous liniment S...	310358	3
Bombastus	Non-ionic hydrous liniment S...	308622	1
Apomix/Noweda	Non-ionic hydrous liniment S...	13A260617	1
Kehr	Non-ionic hydrous liniment S...	14A260617	1
Bombastus	Non-ionic hydrous liniment S...	309798	2
Bombastus	Non-ionic hydrous liniment S...	309804	5
Caelo	Non-ionic hydrous liniment S...	17175301	6
Bombastus	Non-ionic hydrous liniment S...	309797	1
Bombastus	Non-ionic hydrous liniment S...	310359	1
Apomix	Non-ionic hydrous liniment S...	13A260617	1
GEHE	Non-ionic hydrous liniment S...	16A020817	1
Caelo	Non-ionic hydrous liniment S...	17208901	6
Caelo	Non-ionic hydrous liniment S...	17209001	7
Bombastus	Non-ionic hydrous liniment S...	309803	1
Apomix	Non-ionic hydrous liniment S...	21A250917	1
Apomix, Phoenix 03.11.2...	Non-ionic hydrous liniment S...	19A040917	1
Bombastus	Non-ionic hydrous liniment S...	311041	6
Phönix	Non-ionic hydrous liniment S...	17175201	2
PKH/Noweda	Non-ionic hydrous liniment S...	21A250917	1
Apomix/AHD	Non-ionic hydrous liniment S...	17A140817	1
Fagron	Non-ionic hydrous liniment S...	311041	1
Caelo	Non-ionic hydrous liniment S...	17144502	2
GEHE	Non-ionic hydrous liniment S...	21A250917	1
Bombastus	Non-ionic hydrous liniment S...	311611	3
Bombastus	Non-ionic hydrous liniment S...	17000577	3
Apomix/AHD	Non-ionic hydrous liniment S...	24A151117	1
apomix,Phönix, 23.11..2...	Non-ionic hydrous liniment S...	19a040917	1
Caelo	Non-ionic hydrous liniment S...	17208802	1
apomix	Non-ionic hydrous liniment S...	16A020817	1

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrous liniment S...	311609	2
Bombastus	Non-ionic hydrous liniment S...	311610	2
Bombastus	Non-ionic hydrous liniment S...	17001403	2
Caelo	Non-ionic hydrous liniment S...	17261101	6
Caelo	Non-ionic hydrous liniment S...	17261201	4
apomix, Phönix, 09.01.2...	Non-ionic hydrous liniment S...	22a231017	2
Apomix/AHD	Non-ionic hydrous liniment S...	25A071217	1
Bombastus	Non-ionic hydrous liniment S...	17000574	2
Bombastus	Non-ionic hydrous liniment S...	310358-20180112Ma4	1
GEHE	Non-ionic hydrous liniment S...	17312501	1
Caelo	Non-ionic hydrous liniment S...	17312501	8
GEHE	Non-ionic hydrous liniment S...	27A181217	1
Bombastus	Non-ionic hydrous liniment S...	17001409	3
apomix, Phoenix, 26.01...	Non-ionic hydrous liniment S...	25a071217	3
Bombastus	Non-ionic hydrous liniment S...	17001410	2
Bombastus	Non-ionic hydrous liniment S...	310355	1
Apomix	Non-ionic hydrous liniment S...	17A140817	1
Bombastus	Non-ionic hydrous liniment S...	17001412	6
Caelo	Non-ionic hydrous liniment S...	17313201	3
Apomix/AHD	Non-ionic hydrous liniment S...	25A181217	1
Bombastus	Non-ionic hydrous liniment S...	17001408	1
Caelo	Non-ionic hydrous liniment S...	17312601	8
apomix/Noweda	Non-ionic hydrous liniment S...	25A071217	1
Apomix/Phönix	Non-ionic hydrous liniment S...	24A151117	1
Bombastus	Non-ionic hydrous liniment S...	311039	1
Bombastus	Non-ionic hydrous liniment S...	17001405	2
Gehe	Non-ionic hydrous liniment S...	25A071217	1
Bombastus	Non-ionic hydrous liniment S...	17001411	3
Caelo	Non-ionic hydrous liniment S...	18050701	19
Kehr	Non-ionic hydrous liniment S...	22A231017	1
GEHE	Non-ionic hydrous liniment S...	18050701	1
Apomix/AHD	Non-ionic hydrous liniment S...	27A181217	1
Caelo	Non-ionic hydrous liniment S...	17A140817	1
Bombastus	Non-ionic hydrous liniment S...	18000055	1
Bombastus	Non-ionic hydrous liniment S...	18000058	5
AHL	Non-ionic hydrous liniment S...	17312501	1
Bombastus	Non-ionic hydrous liniment S...	18000057	2
GEHE	Non-ionic hydrous liniment S...	2A170118	1
PKH Halle	Non-ionic hydrous liniment S...	27A181217	1
Caelo	Non-ionic hydrous liniment S...	18050702	9
Bombastus	Non-ionic hydrous liniment S...	17001407	1
Bombastus	Non-ionic hydrous liniment S...	18001761	1
apomix, phoenix 02.05.2...	Non-ionic hydrous liniment S...	4a190218	1
Apomix	Non-ionic hydrous liniment S...	5A120318	1
apomix/Noweda	Non-ionic hydrous liniment S...	2A170118	1
Bombastus	Non-ionic hydrous liniment S...	18000059	4
Bombastus	Non-ionic hydrous liniment S...	18001764	1
apomix, phoenix 28.05.2...	Non-ionic hydrous liniment S...	6a120318	1
Apomix/Phönix	Non-ionic hydrous liniment S...	2A170118	1
Apomix/AHD	Non-ionic hydrous liniment S...	6A120318	1
Caelo	Non-ionic hydrous liniment S...	1805702	1
Bombastus	Non-ionic hydrous liniment S...	18001767	4
Bombastus	Non-ionic hydrous liniment S...	18002331	1
apomix / Phoenix Leipzi...	Non-ionic hydrous liniment S...	5a120318	1
apomix	Non-ionic hydrous liniment S...	9A230518	1
Bombastus	Non-ionic hydrous liniment S...	18002332	2
Anzag	Non-ionic hydrous liniment S...	17027801	1
Caelo	Non-ionic hydrous liniment S...	11A040618	1
Caelo	Non-ionic hydrous liniment S...	18086702	3
PKH Halle	Non-ionic hydrous liniment S...	13A260618	1

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Supplier	Substance	Batch	Spectra
apomix/ Phoenix 18.07.18	Non-ionic hydrous liniment S...	9A230518	3
Bombastus	Non-ionic hydrous liniment S...	18002335	3
Fagron	Non-ionic hydrous liniment S...	18086801	1
Caelo	Non-ionic hydrous liniment S...	18153501	5
Delta	Non-ionic hydrous liniment S...	18050701	1
Bombastus	Non-ionic hydrous liniment S...	18003532	4
Caelo	Non-ionic hydrous liniment S...	200618	2
Bombastus	Non-ionic hydrous liniment S...	18002884	1
Apomix	Non-ionic hydrous liniment S...	17A020818	1
Apomix/AHD	Non-ionic hydrous liniment S...	16A170718	1
Bombastus	Non-ionic hydrous liniment S...	18002885	2
Bombastus	Non-ionic hydrous liniment S...	18001768	1
Anzag/Anzag 14.09.18	Non-ionic hydrous liniment S...	18003529	1
Apomix/AHD	Non-ionic hydrous liniment S...	15A170718	1
Bombastus	Non-ionic hydrous liniment S...	18003529	1
apomix / Phoenix	Non-ionic hydrous liniment S...	11A040618	1
Bombastus	Non-ionic hydrous liniment S...	18002886	1
Caelo	Non-ionic hydrous liniment S...	18174401	2
Bombastus	Non-ionic hydrous liniment S...	18004183	1
Chiesi/Phoenix	Non-ionic hydrous liniment S...	18050701	1
PKH Halle	Non-ionic hydrous liniment S...	17A020818	1
Bombastus	Non-ionic hydrous liniment S...	18004191	3
Caelo	Non-ionic hydrous liniment S...	18106503	5
Kehr/ PKH GmbH	Non-ionic hydrous liniment S...	15A170718	1
Caelo	Non-ionic hydrous liniment S...	140918	4
apomix / Phoenix	Non-ionic hydrous liniment S...	22A100918	2
Caelo	Non-ionic hydrous liniment S...	181065035784	1
Bombastus	Non-ionic hydrous liniment S...	18005139	1
Kehr	Non-ionic hydrous liniment S...	16A170718	1
Phönix/Gehe	Non-ionic hydrous liniment S...	18106503	1
Caelo	Non-ionic hydrous liniment S...	18233201	2
Bombastus	Non-ionic hydrous liniment S...	18005144	1
Caelo	Non-ionic hydrous liniment S...	18153602	1
Apomix/AHD	Non-ionic hydrous liniment S...	24A081018	1
Caelo	Non-ionic hydrous liniment S...	18174501	1
Bombastus	Non-ionic hydrous liniment S...	18006450	1
Pharmachem / Gehe	Non-ionic hydrous liniment S...	91118	1
Fagron	Non-ionic hydrous liniment S...	18233201	1
apomix / Phoenix	Non-ionic hydrous liniment S...	23A081018	1

- 105 560 spectra from 581 *Apo-Ident* customers from a total of 29 755 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 *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	640	0	35 195
Type B	0	2180	0	76 898
Type C	0	2390	9	105 452

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 % (> 99.9705 %)	100.0000 % (> 99.0625 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.7248 %)
Type C	100.0000 % (> 99.6450 %)	99.6248 % (> 99.4998 %)

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.

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
31169	31169	0.00	46.20
31476	32090	5.70	45.17
31827	31947	2.22	45.46
31830	31947	1.53	45.84
31943	31943	0.00	46.02
31945	31945	0.00	45.74
31947	31947	0.00	45.99
32090	32090	0.00	45.38
31938	31938	0.00	44.18
31939	31939	0.00	42.34
32305	31170	5.58	42.64
32727	32090	8.44	44.69
30982	31939	8.73	41.55
31170	31170	0.00	42.67
31438	31938	3.70	43.49

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Lotio Cordes®
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31075-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Lotio Cordes®

Special notes

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

no information

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>
Appendix F	Addition to the second-stage models

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.

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 *Lotio Cordes®*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Ichthyol	Lotio Cordes®	12D014	31075	40	1403759
Ichthyol	Lotio Cordes®	14D010	31595	20	20140826
Ichthyol	Lotio Cordes®	15D002	32487	40	20150318

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 100 spectra of 3 reference samples from the substance/substance group *Lotio Cordes*[®]. These samples are listed above in the [calibration samples](#) section.
- 35 735 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Lotio Cordes*[®].

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	<i>Lotio Cordes</i> [®]	14D010	31595 [†]	40
Ichthyol	<i>Lotio Cordes</i> [®]	15D021	32965	40
Ichthyol	<i>Lotio Cordes</i> [®]	16D011	33839	40

- 78 958 spectra from a total of 1827 batches from further 350 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.

- 101 spectra from 30 *Apo-Ident* customers from 23 batches from the substance/substance group *Lotio Cordes*[®].

Supplier	Substance	Batch	Spectra
Ichthyol	<i>Lotio Cordes</i> [®]	11D030	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
ichtyol	Lotio Cordes [®]	12D014	1
Phoenix/Stiefel	Lotio Cordes [®]	12D014	1
Ichthyol/Phönix	Lotio Cordes [®]	13D009	1
Anzag/Ichtyol-Gesellsch. ...	Lotio Cordes [®]	13D009	1
Ichthyol/gehe	Lotio Cordes [®]	13D010	1
Ichthyol	Lotio Cordes [®]	13D009	1
Ichthyol	Lotio Cordes [®]	14041402	1
Ichthyol-Gesellschaft, ...	Lotio Cordes [®]	13D010	1
Ichthyol	Lotio Cordes [®]	13D010	1
Alliance Health 05.06.2 ...	Lotio Cordes [®]	11D029	1
Ichthyol / Noweda	Lotio Cordes [®]	14D010	2
Ichthyol/Sanacorp	Lotio Cordes [®]	14D010	1
Caelo	Lotio Cordes [®]	12081403	1
Ichthyol/gehe	Lotio Cordes [®]	14D010	2
Ichthyol	Lotio Cordes [®]	14D010	2
Ichthyol/Phönix	Lotio Cordes [®]	14D010	2
Caelo	Lotio Cordes [®]	14D010	1
Ichthyol	Lotio Cordes [®]	27041507	1
Ichthyol	Lotio Cordes [®]	16021509	1
Caelo	Lotio Cordes [®]	14D011	3
Ichthyol	Lotio Cordes [®]	27041508	1
Ichthyol /Noweda	Lotio Cordes [®]	15D001	1
Ichthyol/Phönix	Lotio Cordes [®]	15D001	2
Ichthyol	Lotio Cordes [®]	14D011	1
Ichthyol	Lotio Cordes [®]	15D001	2
Ichthyol/Anzag	Lotio Cordes [®]	15D002	1
Ichthyol/Phoenix	Lotio Cordes [®]	15D001	1
Ichthyol/Phönix	Lotio Cordes [®]	15D002	4
Ichthyol	Lotio Cordes [®]	15D002	2
Caelo	Lotio Cordes [®]	15D002	1
Ichthyol/Phoenix	Lotio Cordes [®]	15D002	1
Ichthyol Gesellschaft/N...	Lotio Cordes [®]	15d001	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	15D001	1
Ichthyol Gesellschaft- ...	Lotio Cordes [®]	13D010	1
Euro OTC	Lotio Cordes [®]	15D022	2
Ichtyol-Gesellschaft	Lotio Cordes [®]	15D002	1
Ichthyol/GEHE	Lotio Cordes [®]	14D011	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	15D022	1
Ichthyol	Lotio Cordes [®]	16D010	2
Ichtyol	Lotio Cordes [®]	16D010	20
Ichthyol-Gesellschaft	Lotio Cordes [®]	4111709	1
Caelo	Lotio Cordes [®]	10D011	20
Ichthyol/Ebert	Lotio Cordes [®]	15D022	1
Ichthyol-Gesellschaft	Lotio Cordes [®]	30041806	1
Kehr	Lotio Cordes [®]	16D011	1
Ichthyol / Gehe	Lotio Cordes [®]	16D011	1
Ichtyol/Phoenix	Lotio Cordes [®]	18D002	1
Ichthyol	Lotio Cordes [®]	18D001	1

- 107 858 spectra from 582 *Apo-Ident* customers from a total of 30 657 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 *Lotio 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 *Lotio 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	100	0	35 735
Type B	0	119	1	78 958
Type C	0	94	7	107 857

The substance/substance group *Lotio 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 % (> 99.9707 %)	100.0000 % (> 94.0000 %)
Type B	100.0000 % (> 99.9689 %)	99.1667 % (> 96.6667 %)
Type C	100.0000 % (> 99.6451 %)	93.0693 % (> 90.0990 %)

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.

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
32487	31075	6.90	38.55
31595	31075	3.96	28.89
31075	31075	0.00	30.49

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Macrogol 8 stereate type I
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30554-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Macrogol 8 stereate type I; Polyethylenglycol-8-stearat

Special notes

When selecting the *Macrogol 8 stereate type I* substance/substance group, the following information is displayed to the user:

no information

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>
Appendix F	Addition to the second-stage models

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.

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 stereate 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*

Validation samples

A total of 222 872 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 *Macrogol 8 stearate type I*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Macrogol 8 stearate type I*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol 8 stearate type I	162302	32339	40
Caelo	Macrogol 8 stearate type I	162302	32701	40
Caelo	Macrogol 8 stearate type I	182402	34339	40

- 78 958 spectra from a total of 1828 batches from further 350 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 36 *Apo-Ident* customers from 27 batches 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.

Supplier	Substance	Batch	Spectra
Caelo	Macrogol 8 stearate type I	12125404	1
Fagron	Macrogol 8 stearate type I	11K04-N06	1
Fagron	Macrogol 8 stearate type I	12E24-N07	1
Caelo	Macrogol 8 stearate type I	12E24-N07	1
Caelo	Macrogol 8 stearate type I	12H23-N02	1
Fagron	Macrogol 8 stearate type I	T30911	1
Caelo	Macrogol 8 stearate type I	T30911	1
Caelo	Macrogol 8 stearate type I	13324504	4
Caelo	Macrogol 8 stearate type I	13304501	1
Phönix	Macrogol 8 stearate type I	13324501	1
sana	Macrogol 8 stearate type I	13077505	1
Caelo	Macrogol 8 stearate type I	13324501	1
Caelo	Macrogol 8 stearate type I	13324506	2
Fagron	Macrogol 8 stearate type I	13H08-N04	1
Caelo	Macrogol 8 stearate type I	14074603	2
Fagron	Macrogol 8 stearate type I	1115M-03130	1
Fagron	Macrogol 8 stearate type I	14H04-B01-298920	1
Fagron	Macrogol 8 stearate type I	T32431	1
Fagron	Macrogol 8 stearate type I	14A17-B08-290544	1
Caelo	Macrogol 8 stearate type I	15249601	4
Caelo	Macrogol 8 stearate type I	15249601	1
Caelo	Macrogol 8 stearate type I	15377301	5
Fagron	Macrogol 8 stearate type I	1515Q-03130	1
Caelo	Macrogol 8 stearate type I	153773	1
Caelo	Macrogol 8 stearate type I	16063205	2
Caelo	Macrogol 8 stearate type I	16063202	3
Caelo	Macrogol 8 stearate type I	15377305	1
Gehe	Macrogol 8 stearate type I	16063202	1
Caelo	Macrogol 8 stearate type I	16230202	2
Caelo	Macrogol 8 stearate type I	17218602	4
Anzag	Macrogol 8 stearate type I	16230202	1
Caelo	Macrogol 8 stearate type I	17309504	4
Kehr	Macrogol 8 stearate type I	17309504	1
Sanacorp	Macrogol 8 stearate type I	17309504	1
Caelo	Macrogol 8 stearate type I	17309502	1

- 107 902 spectra from 582 *Apo-Ident* customers from a total of 30 653 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	57	0	107 902

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6451 %)	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.

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	20.50
31453	31453	0.00	28.21
33900	33900	0.00	20.29
33717	33717	0.00	39.35

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Macrogol ointment**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30465-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Macrogol ointment; Unguentum polyäthylenglycoli

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*
Appendix F [Addition to the second-stage models](#)

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.

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

Validation samples

A total of 222 872 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 *Macrogol ointment*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 260 spectra of 6 reference samples from the substance/substance group *Macrogol ointment*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol ointment	153838	31989	60
Caelo	Macrogol ointment	162577	32493	40
Caelo	Macrogol ointment	162578	32494	40
Caelo	Macrogol ointment	172237	33751	40
Caelo	Macrogol ointment	182006	34257	40
Caelo	Macrogol ointment	182587	34357	40

- 78 818 spectra from a total of 1824 batches from further 350 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.

- 172 spectra from 76 *Apo-Ident* customers from 59 batches from the substance/substance group *Macrogol ointment*.

Supplier	Substance	Batch	Spectra
Caelo	Macrogol ointment	10166302	1
Caelo	Macrogol ointment	12117202	2
Caelo	Macrogol ointment	11277702	1
Caelo	Macrogol ointment	6091202	1
Anzag	Macrogol ointment	12117202	1
Caelo	Macrogol ointment	12179102	2
Anzag/	Macrogol ointment	12261402	2
Caelo	Macrogol ointment	29111202	1
Caelo	Macrogol ointment	12353501	7
Ebert+Jacobi	Macrogol ointment	11277701	1
Caelo	Macrogol ointment	12353502	4
Noweda	Macrogol ointment	12179102	1
Euro OTC	Macrogol ointment		1
Caelo	Macrogol ointment	13002502	7
Caelo	Macrogol ointment	12261403	2
Caelo	Macrogol ointment	22051304	1
Caelo	Macrogol ointment	13002602	4
Caelo	Macrogol ointment	13002601	1
Caelo	Macrogol ointment	19071305	1
Caelo	Macrogol ointment	13177702	3
cesar&lorenz/Phönix	Macrogol ointment	11327702	1
Caelo	Macrogol ointment	312E-02834	1
Bombastus	Macrogol ointment	13177801	1
Caelo	Macrogol ointment	13177701	1
Caelo	Macrogol ointment	13177801	6
Sanacorp	Macrogol ointment	13177801	1
Caelo	Macrogol ointment	13275302	1
Caelo	Macrogol ointment	14012201	6
Caelo	Macrogol ointment	14078601	9
Caelo	Macrogol ointment	13324902	1
Caelo	Macrogol ointment	13324901	1
Caelo	Macrogol ointment	14219802	3
Caelo	Macrogol ointment	6031507	1
Caelo	Macrogol ointment	14336302	4
Caelo	Macrogol ointment	14219801	3
Fagron	Macrogol ointment	14012201	1
Caelo	Macrogol ointment	14336301	6
Caesar & Loretz GmbH	Macrogol ointment	14336301	1
Caelo	Macrogol ointment	1012A-02834	1
Caelo	Macrogol ointment	4511M-02834	1
Caelo	Macrogol ointment	15170701	5
Caesar & Loretz GmbH	Macrogol ointment	14078601	1
Caelo	Macrogol ointment	151707107	1
Caelo	Macrogol ointment	15170602	4
Caelo	Macrogol ointment	15383902	2
Caelo	Macrogol ointment	15383802	1
Caelo	Macrogol ointment	16062003	4
Caelo	Macrogol ointment	3315A-02834	1
Caelo	Macrogol ointment	16092003	1
Caelo	Macrogol ointment	16062002	2
Caelo	Macrogol ointment	16186401	1
Caelo	Macrogol ointment	16257801	3
Caelo	Macrogol ointment	16186301	11
GEHE	Macrogol ointment	16186301	1
Caelo	Macrogol ointment	16257802	3
apomix/ Phoenix Leipzig...	Macrogol ointment	16314502	1
Caelo	Macrogol ointment	16314502	6
GEHE	Macrogol ointment	16314502	1
Caelo	Macrogol ointment	17063901	1
Caelo	Macrogol ointment	17127601	14

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Supplier	Substance	Batch	Spectra
Caelo	Macrogol ointment	18111706	1
GEHE	Macrogol ointment	17127601	2
Caelo	Macrogol ointment	171276	1
Bombastus	Macrogol ointment	17319301	1
Caelo	Macrogol ointment	17127601/5579	1
Caelo	Macrogol ointment	18057801	1
Caelo	Macrogol ointment	17319301	1
Caelo	Macrogol ointment	18057701	3
Caelo	Macrogol ointment	18057501	1
Caelo	Macrogol ointment	17319302	1
Caelo	Macrogol ointment	18200702	1

- 107 787 spectra from 582 *Apo-Ident* customers from a total of 30 623 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 *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	160	0	35 675
Type B	0	260	0	78 818
Type C	0	164	8	107 787

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.6923 %)
Type C	100.0000 % (> 99.6450 %)	95.3488 % (> 93.6047 %)

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.

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	31247	19.70	39.10
31247	31247	0.00	39.56
31442	31247	17.58	27.96
31486	31247	9.82	33.86

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Macrogol-2-laurylether
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31731-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	1603434
Caelo	Macrogol-2-laury...	14054309	31867	40	20140225

Validation samples

A total of 222 872 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 *Macrogol-2-laurylether*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 3 reference samples from the substance/substance group *Macrogol-2-laurylether*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogol-2-laurylether	14054304	31731 [†]	20
Caelo	Macrogol-2-laurylether	14054309	31867 [†]	20
Caelo	Macrogol-2-laurylether	15411908	33273	40

- 78 998 spectra from a total of 1827 batches from further 350 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 9 *Apo-Ident* customers from 4 batches from the substance/substance group *Macrogol-2-laurylether*.

Supplier	Substance	Batch	Spectra
Caelo	Macrogol-2-laurylether	15411902	2

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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	Macrogol-2-laurylether	15411903	1
Caelo	Macrogol-2-laurylether	15411904	25
Caelo	Macrogol-2-laurylether	15411910	1

- 107 930 spectra from 582 *Apo-Ident* customers from a total of 30 676 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 *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	80	0	35 755
Type B	0	80	0	78 998
Type C	0	29	0	107 930

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6452 %)	100.0000 % (> 79.3103 %)

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.

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	25.45
31867	31731	7.09	23.13

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Macrogols 300**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31151-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20160222

Validation samples

A total of 222 872 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 *Macrogols 300*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 300 spectra of 8 reference samples from the substance/substance group *Macrogols 300*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Macrogols 300	16022102	32073 [†]	20
Caelo	Macrogols 300	160221	32209	40
Caelo	Macrogols 300	161609	32212	40
Caelo	Macrogols 300	162196	32337	40
Caelo	Macrogols 300	172105	33710	40
Caelo	Macrogols 300	181748	34232	40
Caelo	Macrogols 300	182525	34312	40
Caelo	Macrogols 300	183201	34325	40

- 78 778 spectra from a total of 1822 batches from further 350 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.

- 50 spectra from 28 *Apo-Ident* customers from 31 batches from the substance/substance group *Macrogols 300*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Macrogols 300	1406212102	1
Euro OTC	Macrogols 300	2512051	1
Caelo	Macrogols 300	12272906	1
Caelo	Macrogols 300	12108103	1
Caelo	Macrogols 300	1307109	1
Caelo	Macrogols 300	11336201	1
Caelo	Macrogols 300	13233304	5
Caelo	Macrogols 300	1323304	1
Phoenix am 13.03.14	Macrogols 300	13233304	1
Euro OTC	Macrogols 300	4312I-02102	1
Caelo	Macrogols 300	14043802	1
Caelo	Macrogols 300	14145106	2
Caelo	Macrogols 300	14183102	2
Euro OTC	Macrogols 300	5214I-02102	1
Caelo	Macrogols 300	15286409	5
Caelo	Macrogols 300	15286402	2
Caelo	Macrogols 300	160221	1
Euro OTC	Macrogols 300	4315A-02102	1
Caelo	Macrogols 300	16160903	2
Caelo	Macrogols 300	17034401	3
Caelo	Macrogols 300	17034402	1
Caelo	Macrogols 300	162196	1
Sanacorp	Macrogols 300	1703441	1
Gehe	Macrogols 300	16219601	1
Caelo	Macrogols 300	17210502	2
Gehe	Macrogols 300	17034406	1
Caelo	Macrogols 300	17034404	1
Caelo	Macrogols 300	8051813	1
Caelo	Macrogols 300	17034406	1
Caelo	Macrogols 300	18040001	3
Caelo	Macrogols 300	18174803	1
Nachtestung-Verlängerung	Macrogols 300	164/17	1
Caelo	Macrogols 300	18252503	1

- 107 909 spectra from 582 *Apo-Ident* customers from a total of 30 649 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 *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	120	0	35 715
Type B	0	300	0	78 778
Type C	0	47	3	107 909

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.0000 %)
Type C	100.0000 % (> 99.6451 %)	94.0000 % (> 88.0000 %)

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.

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	51.08
31370	31151	4.11	47.27
32073	31151	12.79	43.30

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Macrogols 400**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30523-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Euro OTC	Macrogols 400	1510042	31814	40	20151216*
Euro OTC	Macrogols 400	1609017	32714	40	20160929*
Caelo	Macrogols 400	170137	33057	40	20170125*

Validation samples

A total of 222 872 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 *Macrogols 400*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 460 spectra of 12 reference samples from the substance/substance group *Macrogols 400*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Macrogols 400	1510042	31814 [†]	20
Euro OTC	Macrogols 400	1603008	32185	40
Euro OTC	Macrogols 400	1412015	32187	40
Caelo	Macrogols 400	160022	32211	40
Euro OTC	Macrogols 400	1607022	32461	40
Euro OTC	Macrogols 400	1610001	32712	40
Caelo	Macrogols 400	162941	33096	40
Euro OTC	Macrogols 400	1702024	33226	40
Caelo	Macrogols 400	171100	33321	40
Caelo	Macrogols 400	172833	33890	40
Euro OTC	Macrogols 400	1711029	33932	40
Euro OTC	Macrogols 400	1807027	34214	40

- 78 618 spectra from a total of 1818 batches from further 350 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*

*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.

[†]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*.

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.

- 596 spectra from 206 *Apo-Ident* customers from 154 batches from the substance/substance group *Macrogols 400*.

Supplier	Substance	Batch	Spectra
Fagron	Macrogols 400	11F07-N01	1
Caelo	Macrogols 400	11293304	1
Caelo	Macrogols 400	11172705	1
Fagron	Macrogols 400	11I13-N04	1
Fagron	Macrogols 400	11/45	1
Fagron	Macrogols 400	12C21-N10	7
Caelo	Macrogols 400	11293311	1
Caelo	Macrogols 400	12043301	3
Caelo	Macrogols 400	12043312	2
Fagron	Macrogols 400	12c21-n10	1
Caelo	Macrogols 400	12043311	1
Caelo	Macrogols 400	12152602	4
Phönix	Macrogols 400	12152601	1
Caelo/Gehe	Macrogols 400	12043311	1
Caelo	Macrogols 400	12152608	6
Caelo	Macrogols 400	12152601	1
Fagron	Macrogols 400	12H02-N05	4
Caelo	Macrogols 400	12152613	3
Caelo	Macrogols 400	20190612-1	1
Caelo	Macrogols 400	11293302	1
Caelo	Macrogols 400	12152612	8
Caelo	Macrogols 400	20021306	1
Caelo	Macrogols 400	12152611	3
Phoenix	Macrogols 400	12152611	1
Noweda	Macrogols 400	12152614	3
Euro OTC	Macrogols 400	1206030-01	3
Fagron	Macrogols 400	12H02-N05	1
Caelo	Macrogols 400	1213M-03059	1
Noweda	Macrogols 400	1215614	1
Fagron	Macrogols 400	13A25-N02	6
Caelo	Macrogols 400	12152607	1
Caelo	Macrogols 400	12152614	2
Phönix Gotha	Macrogols 400	12277607	1
Euro OTC	Macrogols 400	1206030-02	4
Caelo	Macrogols 400	12277607	9
Noweda	Macrogols 400	12043312	1
Caelo	Macrogols 400	1206030-02	2
Caelo	Macrogols 400	13171104	5
Caelo	Macrogols 400	131711102	1
Caelo	Macrogols 400	12277603	1
Caelo	Macrogols 400	13171102	9
Caelo	Macrogols 400	38121-03059	1
Caelo	Macrogols 400	13171103	4
Caelo	Macrogols 400	13171106	4
Euro OTC	Macrogols 400	1304030-01	10
Fagron	Macrogols 400	13F06-N11	4
Caelo	Macrogols 400	13171109	2
Phönix	Macrogols 400	1206030-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogols 400	12277608	1
Caelo	Macrogols 400	13171107	3
Caelo	Macrogols 400	27111309	1
Caelo	Macrogols 400	13171112	4
Caelo	Macrogols 400	13272901	4
Fagron	Macrogols 400	13I26-N21	1
Caesar/Noweda	Macrogols 400	13171106	1
Caelo	Macrogols 400	13272904	7
Bombastus	Macrogols 400	13F06-N11	3
Hedinger	Macrogols 400	13F06-N11	1
Euro OTC	Macrogols 400	1304030	1
Caelo	Macrogols 400	13272909	3
Caelo	Macrogols 400	13171113	2
Fafron/Anzag	Macrogols 400	1014E-03059	1
Caelo	Macrogols 400	2412U-03059	1
Caelo	Macrogols 400	14009102	4
Euro OTC	Macrogols 400	130403001	1
AHD	Macrogols 400	13171106	1
Alliance Health 14.04.2...	Macrogols 400	13272908	2
Caelo	Macrogols 400	14009103	2
Caelo	Macrogols 400	14009101	3
Caelo	Macrogols 400	13272906	2
Fagron	Macrogols 400	13126-N21	1
VDL 16.04.14	Macrogols 400	13272906//05R06	1
Euro OTC	Macrogols 400	1402011-11	1
Fagron	Macrogols 400	13F06-B40-289978	1
Caelo	Macrogols 400	14009107	6
Caelo	Macrogols 400	13272908	1
Caelo	Macrogols 400	1409103	1
Euro OTC	Macrogols 400	1402011-01	13
Caelo	Macrogols 400	14009110	1
Caelo	Macrogols 400	14009113	2
Caelo	Macrogols 400	140211-01	1
Caelo	Macrogols 400	14009109	5
Caelo	Macrogols 400	14195601	12
Fagron	Macrogols 400	2314A-03059	1
Caelo	Macrogols 400	14195603	12
Phönix	Macrogols 400	14009109	1
Fagron	Macrogols 400	14B05-B04-294688	3
Caelo	Macrogols 400	14195602	7
Fagron	Macrogols 400	14B05-B04	1
Caelo	Macrogols 400	1314I-03059	1
Caelo	Macrogols 400	14195605	3
Fagron	Macrogols 400	14G10-B05	1
Caelo	Macrogols 400	14352801	4
OTG/Phönix	Macrogols 400	1412015-01	1
Caesar & Loretz GmbH	Macrogols 400	14195603	1
Canea/Phönix	Macrogols 400	14352805	1
Caelo	Macrogols 400	14352803	14
Euro OTC	Macrogols 400	1412015-01	5
Caelo	Macrogols 400	14352805	1
Caelo	Macrogols 400	14352814	14
Caelo	Macrogols 400	14195613	1
Caelo	Macrogols 400	14352804	4
AHD;19.06.15;3,34EUR	Macrogols 400	14352801	1
Fagron	Macrogols 400	14G10-B05-300393	2
Caelo	Macrogols 400	1412015-01	1
Caelo	Macrogols 400	14352813	4
Caelo	Macrogols 400	18081505	1
Bombastus	Macrogols 400	14352814	2

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Supplier	Substance	Batch	Spectra
Caesar&Loretz GmbH/Anzag	Macrogols 400	14352803	2
Fagron	Macrogols 400	14K26-B01	2
Caelo	Macrogols 400	21092015B	1
Caelo	Macrogols 400	15131406	2
Phönix	Macrogols 400	14352814	1
Fagron	Macrogols 400	14G10-B05300393	1
Noweda	Macrogols 400	15131406	1
Bombastus	Macrogols 400	3215E-03059	1
Caelo	Macrogols 400	15131401	2
Caelo	Macrogols 400	15324001	5
Fagron	Macrogols 400	14G10-B05-300394	2
Caelo	Macrogols 400	15324002	15
Caelo	Macrogols 400	15324007	1
Euro OTC	Macrogols 400	1510042-01	4
Caelo	Macrogols 400	15131407	2
Caelo	Macrogols 400	16002201	23
Caelo	Macrogols 400	15324003	1
Gehe	Macrogols 400	16002201	2
Noweda	Macrogols 400	15324008	1
Phoenix	Macrogols 400	16002203	1
Caelo	Macrogols 400	15324008	2
Caelo	Macrogols 400	16002203	4
Caelo	Macrogols 400	16002202	3
Euro OTC	Macrogols 400	1603008-01	3
Fagron	Macrogols 400	15B16-B02-308528	1
Caelo	Macrogols 400	16128202	3
Caelo	Macrogols 400	16128203	22
Euro OTC	Macrogols 400	1412015-02	1
Caelo	Macrogols 400	15H28-B11-313603	1
sanacorp, 3,43EUR, 20.09...	Macrogols 400	16128201	1
Caelo	Macrogols 400	16128205	6
Bombastus	Macrogols 400	160300801	1
WE:Sanacorp 19.10.2016 ...	Macrogols 400	16128203	1
ALH	Macrogols 400	16128203	1
Caelo	Macrogols 400	3790505	1
Euro OTC	Macrogols 400	1607022-01	4
Caelo	Macrogols 400	16128204	7
Caelo	Macrogols 400	16294102	5
Gehe	Macrogols 400	16128203	2
Caelo	Macrogols 400	16294107	2
Anzag	Macrogols 400	16128203	1
Caelo	Macrogols 400	16128204/170227M	1
Fagron	Macrogols 400	14K26-B01-301176	1
Caelo	Macrogols 400	16294106	4
Euro OTC	Macrogols 400	1610001-01	1
phönix	Macrogols 400	16128205	1
Caelo	Macrogols 400	161282	1
Caelo	Macrogols 400	17013702	7
Anzag	Macrogols 400	17013701	1
Caelo	Macrogols 400	17013701	11
Finteler Apotheke	Macrogols 400	17013701	1
Euro OTC	Macrogols 400	1702024-01	1
Kehr	Macrogols 400	17013701	2
Finteler Apotheke	Macrogols 400	17110001	1
Caelo	Macrogols 400	162941	1
Fagron	Macrogols 400	16D07-B09-322539	1
Caelo	Macrogols 400	17110001	19
Caelo	Macrogols 400	17013706	10
Fagron	Macrogols 400	17110001	1
Anzag	Macrogols 400	17110001	1

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Supplier	Substance	Batch	Spectra
Caelo	Macrogols 400	17110003	1
Fagron	Macrogols 400	16K14-B01-331740	1
Sanacorp	Macrogols 400	17110006	1
Caelo	Macrogols 400	17110007	5
Caelo	Macrogols 400	17283301	10
Euro OTC	Macrogols 400	1702024-02	2
Caelo	Macrogols 400	17110006	2
Sanacorp	Macrogols 400	17283301	3
Euro OTC	Macrogols 400	180308M/1711029-01	1
Caelo	Macrogols 400	17283302	4
Krieger	Macrogols 400	17013706	1
Caelo	Macrogols 400	17283303	4
Caelo	Macrogols 400	18022801	1
Euro OTC	Macrogols 400	1711029-01	2
Caelo	Macrogols 400	18039802	11
Sanacorp	Macrogols 400	17283302	1
Euro OTC	Macrogols 400	17112019-01	1
Fagron	Macrogols 400	18039802	1
Caelo	Macrogols 400	18039804	1
calo	Macrogols 400	18039804	1
Caelo	Macrogols 400	18129401	9
Caelo	Macrogols 400	18039803	3
Allianz	Macrogols 400	180396802	1
Caelo	Macrogols 400	16081807	1
Caelo	Macrogols 400	18229702	1
Caelo	Macrogols 400	18229703	2
Kehr	Macrogols 400	17283302	1
Euro OTC	Macrogols 400	1807027-01	1
Sanacorp	Macrogols 400	18229706	1

- 107 363 spectra from 582 *Apo-Ident* customers from a total of 30 528 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 *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	200	0	35 635
Type B	0	460	0	78 618
Type C	0	583	13	107 363

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.6957 %)
Type C	100.0000 % (> 99.6449 %)	97.8188 % (> 97.3154 %)

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.

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	24.06
31367	33057	8.15	20.55
32714	32714	0.00	22.60
31814	31814	0.00	25.00
33057	33057	0.00	23.20

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Mandarin oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31747-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	1602210
Caelo	Mandarin oil	15398001	31863	40	20151127

Validation samples

A total of 222 872 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 *Mandarin oil*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Mandarin oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Mandarin oil	14064103	31747 [†]	20
Caelo	Mandarin oil	15398001	31863 [†]	20
Caelo	Mandarin oil	170368	33074	40
Caelo	Mandarin oil	180923	34055	40

- 78 958 spectra from a total of 1826 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Caelo	Mandarin oil	15398003	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
Caelo	Mandarin oil	15011601	12
Caelo	Mandarin oil	15398001	1
Taoasis	Mandarin oil	412011-124957	1
Caelo	Mandarin oil	17036801	2
Caelo	Mandarin oil	17361201	2
Caelo	Mandarin oil	18092301	1

- 107 939 spectra from 582 *Apo-Ident* customers from a total of 30 673 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 *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	80	0	35 755
Type B	0	120	0	78 958
Type C	0	20	0	107 939

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6454 %)	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.

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	20.12
31863	31747	5.12	19.28

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Matricaria oil, rich in (-)-alpha-bisabolol
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30738-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20131009
Caelo	Matricaria oil, ...	13334702	31428	40	20131009

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 150 spectra of 4 reference samples from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*. These samples are listed above in the [calibration samples](#) section.
- 35 685 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 5 reference samples from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Matricaria oil, rich in (-)-...	13195101	31160	20
Caelo	Matricaria oil, rich in (-)-...	13334702	31427 [†]	20
Caelo	Matricaria oil, rich in (-)-...	13334702	31428 [†]	20
Caelo	Matricaria oil, rich in (-)-...	163310	33081	40
Caelo	Matricaria oil, rich in (-)-...	181173	34072	40

- 78 938 spectra from a total of 1826 batches from further 350 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 spectra from 7 *Apo-Ident* customers from 11 batches from the substance/substance group *Matricaria oil, rich in (-)-alpha-bisabolol*.

[†]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*.

Supplier	Substance	Batch	Spectra
Taoasis	Matricaria oil, rich in (-)-...	929-115334	1
Caelo	Matricaria oil, rich in (-)-...	18091401	1
Taoasis	Matricaria oil, rich in (-)-...	16266-119132	1
Caelo	Matricaria oil, rich in (-)-...	15080505	2
Taoasis	Matricaria oil, rich in (-)-...	6181024-121466	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-122141	1
Caelo	Matricaria oil, rich in (-)-...	15137801	2
Taoasis	Matricaria oil, rich in (-)-...	6181024-123770	1
Taoasis	Matricaria oil, rich in (-)-...	6181024-123496	1
Caelo	Matricaria oil, rich in (-)-...	4916E-03052	1
Caelo	Matricaria oil, rich in (-)-...	16048910	1

- 107 946 spectra from 582 *Apo-Ident* customers from a total of 30 669 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 *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	150	0	35 685
Type B	0	140	0	78 938
Type C	0	13	0	107 946

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 % (> 99.9706 %)	100.0000 % (> 96.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6456 %)	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.

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
31428	31239	6.69	41.26
30738	31239	14.55	42.55
31239	31239	0.00	42.33
31427	31239	6.50	41.21

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Melissa oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30207-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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*

Validation samples

A total of 222 872 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 *Melissa oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Melissa oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Melissa oil	16053609	33784	40
Caelo	Melissa oil	180973	34084	40

- 78 998 spectra from a total of 1828 batches from further 350 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.

- 141 spectra from 68 *Apo-Ident* customers from 49 batches from the substance/substance group *Melissa oil*.

Supplier	Substance	Batch	Spectra
Caelo	Melissa oil	11323902	3
Caelo	Melissa oil	11323903	1

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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	Spectra
Caelo	Melissa oil	4110I-01993	1
Caesar&Loretz,Anzag	Melissa oil	11323902	1
Caesar & Loretz GmbH, 4...	Melissa oil	11323910	1
Caelo	Melissa oil	17091201	1
Caelo	Melissa oil	11323911	1
Caelo	Melissa oil	12283804	5
Caelo	Melissa oil	20230712-7	1
Caelo	Melissa oil	5211R-01993	1
Caelo	Melissa oil	122283804	1
Caelo	Melissa oil	11323909	1
Anzag 27.02.13 ek: 8.17EUR	Melissa oil	122833801	1
Caelo	Melissa oil	12283809	8
Caelo	Melissa oil	28051311	1
Phönix	Melissa oil	12283809	1
celo/phönix	Melissa oil	12283805	1
Caelo	Melissa oil	13086304	1
Caelo	Melissa oil	13086310	3
Caelo	Melissa oil	21111303	1
Caelo	Melissa oil	13086306	4
Caelo	Melissa oil	12283805	2
Caelo	Melissa oil	12283801	1
Caelo	Melissa oil	13086308	6
Caelo	Melissa oil	190412	1
Sanacorp	Melissa oil	13086306	1
Caelo	Melissa oil	13086311	6
Caelo	Melissa oil	17012014	1
Caelo	Melissa oil	13354105	2
Sanacorp	Melissa oil	1334110	1
Caelo	Melissa oil	13354110	3
Caelo	Melissa oil	13354113	5
Caelo	Melissa oil	13354108	1
Caelo	Melissa oil	14332504	2
Caelo	Melissa oil	14332501	5
Nachprüfung	Melissa oil	130863060	1
Caelo	Melissa oil	14332508	1
Caelo	Melissa oil	14332511	14
Caelo	Melissa oil	18081501	1
Caelo	Melissa oil	15172303	9
Caelo	Melissa oil	14332512	1
Caelo	Melissa oil	1512303	1
Caelo	Melissa oil	15172308	8
Caelo	Melissa oil	15172310	1
Caelo	Melissa oil	14332502	1
Caelo	Melissa oil	16053601	9
Alte Apotheke	Melissa oil	16053601	1
Caelo	Melissa oil	10019704	1
Caelo	Melissa oil	21041715	1
Caleo/Phönix	Melissa oil	16053609	1
Caelo	Melissa oil	16053609	4
Caelo	Melissa oil	16334905	6
Caelo	Melissa oil	1712070M/16053609	1
Caelo	Melissa oil	18097301	2
Caelo	Melissa oil	16334912	1

- 107818 spectra from 582 *Apo-Ident* customers from a total of 30632 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 *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	120	0	35 715
Type B	0	80	0	78 998
Type C	0	139	2	107 818

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6450 %)	98.5816 % (> 96.4539 %)

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.

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	49.08
31403	31163	4.83	46.54
33080	33080	0.00	50.18

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Methyl salicylate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31038-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Fagron	Methyl salicylate	14D03-B04-294169	31607	40	20140414
Fagron	Methyl salicylate	16E23-B05-332971	33275	40	20160608

Validation samples

A total of 222 872 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 *Methyl salicylate*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Methyl salicylate*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Methyl salicylate	14D03-B04-294169	31607 [†]	20
Caelo	Methyl salicylate	15409810	33280	40
Fagron	Methyl salicylate	18B19-B06-346255	34047	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 84 spectra from 45 *Apo-Ident* customers from 53 batches from the substance/substance group *Methyl salicylate*.

Supplier	Substance	Batch	Spectra
Fagron	Methyl salicylate	11D08-N07	3

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
Fagron	Methyl salicylate	11H30-N14	1
Caelo	Methyl salicylate	10313708	3
Caelo	Methyl salicylate	7111203	1
Caelo	Methyl salicylate	90328419	1
Fagron	Methyl salicylate	12D27-N05	5
Fagron	Methyl salicylate	12C02-No2	1
Fagron	Methyl salicylate	12D27-n05	1
Fagron	Methyl salicylate	19061309	1
Fagron	Methyl salicylate	711Q-01867	1
Caelo	Methyl salicylate	12215215	1
Fagron	Methyl salicylate	172650-0002	2
Fagron	Methyl salicylate	13d24-no9	1
Fagron	Methyl salicylate	13D24-N09	6
Caesar & Loretz GmbH, 4...	Methyl salicylate	12215215	1
Fagron	Methyl salicylate	12D24-N09	1
Fagron	Methyl salicylate	13/11-N06	4
Caelo	Methyl salicylate	12308307	1
Phönix	Methyl salicylate	13D24-N09	1
Caelo	Methyl salicylate	13I11-N06	1
Fagron	Methyl salicylate	13I11-N06	1
Fagron	Methyl salicylate	13/11-N060013/364	1
Fagron	Methyl salicylate	13/11-N060025/364	1
Caelo	Methyl salicylate	13185101	3
Fagron	Methyl salicylate	14D03-B04	1
PHOENIX 08.05.2014	Methyl salicylate	13I11-N06	1
Fagron	Methyl salicylate	14D03-B04-292643	1
Alliance Health 10.06.2...	Methyl salicylate	RMS1332311	1
Caelo	Methyl salicylate	13189308	1
Alliance Health 18.11.2...	Methyl salicylate	13185102	1
Fagron	Methyl salicylate	30121414	1
Fagron	Methyl salicylate	RMS1332311	1
Bomb/ Noweda	Methyl salicylate	RMS1332311	1
Fagron	Methyl salicylate	1139	1
Fagron	Methyl salicylate	14D03-B04-294169	2
Fagron	Methyl salicylate	14D03-B04-294170	1
Fagron	Methyl salicylate	RMS1332311	1
Caelo	Methyl salicylate	14D03-B04-294169	1
Fagron	Methyl salicylate	14D03-B04-301825	1
Caelo	Methyl salicylate	15B09-B04	1
Caelo	Methyl salicylate	13189309	2
ACM	Methyl salicylate	KNC1794J14	1
Caelo	Methyl salicylate	12308313	1
Fagron	Methyl salicylate	15B09-B04	1
Fagron	Methyl salicylate	RMS1409712	2
Fagron	Methyl salicylate	15B09-B04303941	1
Caelo	Methyl salicylate	15117904	2
Fagron	Methyl salicylate	15809-B04	1
Caelo	Methyl salicylate	15117910	1
Fagron	Methyl salicylate	15B09-04-309068	1
Fagron	Methyl salicylate	15H04-B01	1
Fagron	Methyl salicylate	303941	1
Fagron	Methyl salicylate	15B09-B04-303941	1
Caelo	Methyl salicylate	15409807	1
Fagron	Methyl salicylate	24061714	1
Fagron	Methyl salicylate	16e23-b05-332971	1
Fagron	Methyl salicylate	15H04-B01-326798	1
Caelo	Methyl salicylate	17071301	1
Caelo	Methyl salicylate	13-11-n06	1
Caelo	Methyl salicylate	18039003	1
Fagron	Methyl salicylate	17H21-B04-338848	1

- 107 875 spectra from 582 *Apo-Ident* customers from a total of 30 628 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	84	0	107 875

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	100.0000 % (> 92.8571 %)

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.

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	145.70
31607	31038	6.76	146.30
33275	31038	2.39	147.32

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Metronidazole 25% in white petrolatum
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30663-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	20	1405100
Caelo	Metronidazole 25...	14116801	31316	20	20140411
Caelo	Metronidazole 25...	16063101	32456	40	20160229
Caelo	Metronidazole 25...	16063101	32768	40	20160229

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 120 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.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 3 reference samples from the substance/substance group *Metronidazole 25% in white petrolatum*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Metronidazole 25% in white p...	12266401	30663 [†]	20
Caelo	Metronidazole 25% in white p...	14116801	31316 [†]	20
Caelo	Metronidazole 25% in white p...	16249701	33272	40

- 78 998 spectra from a total of 1827 batches from further 350 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.

- 40 spectra from 13 *Apo-Ident* customers from 15 batches from the substance/substance group *Metronidazole 25% in white petrolatum*.

[†]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*.

Supplier	Substance	Batch	Spectra
GEHE/26.02.2013	Metronidazole 25% in white p...	12306601	1
Caelo	Metronidazole 25% in white p...	13077601	3
celo/Jenne	Metronidazole 25% in white p...	13077601	1
Sanacorp	Metronidazole 25% in white p...	12306601	1
Caelo	Metronidazole 25% in white p...	1285301	1
Caelo	Metronidazole 25% in white p...	13109801	4
Caelo	Metronidazole 25% in white p...	13002801	2
Caelo	Metronidazole 25% in white p...	13188901	2
Caelo	Metronidazole 25% in white p...	13296501	3
Caelo	Metronidazole 25% in white p...	14024301	3
Caelo	Metronidazole 25% in white p...	14116801	3
Caelo	Metronidazole 25% in white p...	14209301	1
Gehe	Metronidazole 25% in white p...	14209301	1
Noweda 20.02.2015	Metronidazole 25% in white p...	14247301	1
Caelo	Metronidazole 25% in white p...	14247201	1
Caelo	Metronidazole 25% in white p...	15207101	5
Cael Sanacorp 05.02.2016	Metronidazole 25% in white p...	15207101	1
Caelo	Metronidazole 25% in white p...	16063101	5
Caelo	Metronidazole 25% in white p...	16249701	1

- 107 919 spectra from 582 *Apo-Ident* customers from a total of 30 665 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 *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	120	0	35 715
Type B	0	60	20	78 998
Type C	0	39	1	107 919

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	75.0000 % (> 71.2500 %)
Type C	100.0000 % (> 99.6452 %)	97.5000 % (> 90.0000 %)

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.

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	55.12
31316	30663	6.87	50.24
32456	30663	15.99	55.98
32768	30663	23.41	56.87

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Mint oil / Peppermint oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30856-2019-05-24
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
Appendix F	Addition to the second-stage models

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.

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	Peppermint oil	12114206	30856	40	20120424
Euro OTC	Peppermint oil	1312009-01	31294	40	20140130
Caelo	Peppermint oil	13303915	31410	40	1502136
Euro OTC	Peppermint oil	1512011	31811	40	20151214*

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Mint oil	16053503	32474	40	1701393
Caelo	Mint oil	15380507	32476	40	1701394
Caelo	Mint oil	16053503	32780	40	20160309
Caelo	Mint oil	15380509	32781	40	20151116

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 320 spectra of 8 reference samples from the substance/substance group *Mint oil / Peppermint oil*. These samples are listed above in the [calibration samples](#) section.
- 35 515 spectra from a total of 840 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 300 spectra of 8 reference samples from the substance/substance group *Mint oil / Peppermint oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Peppermint oil	1512011	31811 [†]	20
Caelo	Peppermint oil	161904	32333	40
Euro OTC	Peppermint oil	1607018	32468	40
Caelo	Mint oil	15380507	32484	40
Caelo	Mint oil	16053508	32845	40
Euro OTC	Peppermint oil	1703032	33229	40
Caelo	Peppermint oil	172919	33699	40
Euro OTC	Peppermint oil	1804008	34089	40

*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.

[†]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*.

- 78 778 spectra from a total of 1822 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.

- 666 spectra from 286 *Apo-Ident* customers from 238 batches from the substance/substance group *Mint oil / Peppermint oil*.

Supplier	Substance	Batch	Spectra
Taoasis	Peppermint oil	501319-105273	1
Fagron	Peppermint oil	11C14-N06	2
Caelo	Peppermint oil	11124710	1
Caelo	Peppermint oil	11287416	9
Caelo	Peppermint oil	11287407	5
Bombastus	Peppermint oil	271257	1
Anzag ek:13.70EUR 15.08.12	Peppermint oil	270566	1
Taoasis	Peppermint oil	515574-107811	1
Fagron	Peppermint oil	267849	1
Anzag	Peppermint oil	11G19N07	1
Taoasis	Peppermint oil	512777-107965	1
Sensient	Peppermint oil	C9982	1
Phönix	Peppermint oil	11124710	1
Caelo	Peppermint oil	2112E-01995	1
	Peppermint oil	9183299	1
Fagron	Peppermint oil	11A05-N02	1
Caesar & Loretz GmbH, 4...	Peppermint oil	12184601	2
Fagron	Peppermint oil	12D10-N04	6
Bombastus	Peppermint oil	274804	1
Fagron	Peppermint oil	11G19-N07	4
Caelo	Peppermint oil	11124709	3
Fiebig	Peppermint oil	21022172/1	1
Fagron	Peppermint oil	11F09-N12	1
Caelo	Peppermint oil	20151112-6	1
Bombastus	Peppermint oil	1001311995	1
Caelo	Peppermint oil	269560	1
Caelo	Peppermint oil	11287421	5
Sanacorp	Peppermint oil	11287416	1
Caelo	Peppermint oil	12114206	15
Caelo	Peppermint oil	1124709	1
Bombastus	Peppermint oil	275481	2
Caelo	Peppermint oil	11287419	1
Bombastus	Peppermint oil	274976	1
Taoasis	Peppermint oil	525728-109630	1
Fagron	Peppermint oil	12114206	1
Caelo	Peppermint oil	11124706	1
Caelo	Peppermint oil	12114219	4
Caelo	Peppermint oil	10235317	1
Caelo	Peppermint oil	46/AD1	1
Bombastus	Peppermint oil	80312004	1
Hedinger	Peppermint oil	12114206	1
Taoasis	Peppermint oil	539490-111157	2
Taoasis GmbH	Peppermint oil	534640-110874	1
Bombastus	Peppermint oil	277504	3
Fagron	Peppermint oil	8574769	1

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Supplier	Substance	Batch	Spectra
Bombastus	Peppermint oil	278812	2
Euro OTC	Peppermint oil	1303015-01	2
Caelo	Peppermint oil	12114211	2
Noweda	Peppermint oil	12114206	1
Taomed	Peppermint oil		1
Caelo	Peppermint oil	11071312	1
Sanacorp	Peppermint oil	12114219	1
Sanacorp	Peppermint oil	12114206	1
Phoenix	Peppermint oil	12114211	1
Caelo	Peppermint oil	688901	2
Bombastus	Peppermint oil	277817	2
Bombastus	Peppermint oil	279930	4
Caelo	Peppermint oil	12114225	13
Fagron	Peppermint oil	13A10-N8	1
Caelo	Peppermint oil	13105801	10
Fagron	Peppermint oil	13A10-N08	5
Caelo	Peppermint oil	12D10-N04	1
Fagron	Peppermint oil	13A10N08	2
Caelo	Peppermint oil	C101761	1
Bio-Diät / Phönix	Peppermint oil	20553	1
Fagron	Peppermint oil	688901	1
Caelo	Peppermint oil	13105905	2
Taoasis	Peppermint oil	548992-112346	3
Caelo	Peppermint oil	12114224	2
phönix	Peppermint oil		1
Bombastus	Peppermint oil	280894	1
Caelo	Peppermint oil	12020812	1
Caelo	Peppermint oil	1324302	1
Sanacorp	Peppermint oil	47/AKD19	1
Fagron	Peppermint oil	13i04-N10	1
AHD, 29.11.13	Peppermint oil	282542	1
Fagron	Peppermint oil	100030-N05	1
Caelo	Peppermint oil	13241303	8
Bombastus	Peppermint oil	283491	4
Fagron	Peppermint oil	13I04-N10	4
Caelo	Peppermint oil	12020815	1
Fagron	Peppermint oil	13I04-N01	7
Sanacorp	Peppermint oil	280894	1
Bombastus	Peppermint oil	282542	1
Gehe	Peppermint oil	13303903	1
Caelo	Peppermint oil	13A10-N08	2
Fagron	Peppermint oil	13/04-N10	2
Fagron	Peppermint oil	250214PJK02	1
Caelo	Peppermint oil	13303904	6
Anzag	Peppermint oil	283491	1
Bombastus	Peppermint oil	286204	3
Caelo	Peppermint oil	13105306	1
Caelo	Peppermint oil	13303912	2
Bombastus	Peppermint oil	286376	1
Fagron	Peppermint oil	700599	1
Caelo	Peppermint oil	13303903	5
Taoasis	Peppermint oil	13486-116309	1
Bombastus	Peppermint oil	284588	1
Caelo	Peppermint oil	1330394904	1
Caelo	Peppermint oil	3913I-01995	1
GEHE 06.06.2014	Peppermint oil	283491	1
Taoasis	Peppermint oil	6316-115825	1
Fagron	Peppermint oil	1304-N01	2
Caesar/Noweda	Peppermint oil	13303915	1
Fagron	Peppermint oil	13104-N10	1

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Supplier	Substance	Batch	Spectra
Fagron	Peppermint oil	285571	1
Bombastus	Peppermint oil	285715	2
Caelo	Peppermint oil	13303915	11
Bombastus	Peppermint oil	283734	1
Sanacorp	Peppermint oil	13303915	3
sanacorp	Peppermint oil	13I04-N01	1
Fagron	Peppermint oil	14B03-B40	3
Phönix	Peppermint oil	13303915	1
Caelo	Peppermint oil	14150209	7
Caelo	Peppermint oil	13/04-N01	1
Caelo	Peppermint oil	12180024	1
Bombastus	Peppermint oil	287528	3
Caeo	Peppermint oil	14150209	1
Bombastus	Peppermint oil	285571	2
Caelo	Peppermint oil	20111417	1
Fagron	Peppermint oil	14B03-B40-295665	3
Primavera	Peppermint oil	7703L22	1
Hedinger/Gehe	Peppermint oil	13105801	1
Euro OTC	Peppermint oil	1404038-01	1
Fagron	Peppermint oil	14B03B40	1
Primavera	Peppermint oil	5409142	1
Bombastus	Peppermint oil	290301	5
Bombastus	Peppermint oil	289675	1
Caelo	Peppermint oil	14150218	1
Bombastus	Peppermint oil	287325	1
Caelo	Peppermint oil	14150214	14
Caelo	Peppermint oil	13318004	4
Caelo	Peppermint oil	14150220	6
Gehe	Peppermint oil	13105801	1
Bombastus	Peppermint oil	14150216	1
Taoasis/Phönix	Peppermint oil	32724-118746	1
sanacorp	Peppermint oil	14150214	1
Caelo	Peppermint oil	150415A	1
Taoasis	Peppermint oil	31145-118741	1
Caelo	Peppermint oil	14150221	4
Bombastus	Peppermint oil	290394	2
Caelo	Peppermint oil	13I04-N01	1
Taoasis	Peppermint oil	37979-120290	1
Bombastus	Peppermint oil	292472	7
Caelo	Peppermint oil	13303914	1
Euro OTC	Peppermint oil	1410005-01	1
Caelo	Peppermint oil	14150225	10
Bombastus	Peppermint oil	289595	1
Caelo	Peppermint oil		2
Bombastus	Peppermint oil	292138	6
Bombastus	Peppermint oil	288864	2
Phönix Gotha	Peppermint oil	14150225	1
Fagron	Peppermint oil	15B11-B08	1
Euro OTC	Peppermint oil	1504017-01	3
Bombastus	Peppermint oil	294293	4
Caelo	Peppermint oil	14369911	2
ACM	Peppermint oil	407000718901021	1
Bombastus	Peppermint oil	295737	5
Caelo	Peppermint oil	14369909	11
Caelo	Peppermint oil	1469910	1
Fagron	Peppermint oil	15B11-B08-304117	1
Caelo	Peppermint oil	15B11-B08-308854	1
Fagron	Peppermint oil	15B11-B08-308854	1
Caelo	Peppermint oil	15127004	2
Caelo	Peppermint oil	14150215	2

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Supplier	Substance	Batch	Spectra
Bombastus	Peppermint oil	295985	3
Caelo	Peppermint oil	14369910	2
Caelo	Peppermint oil	2115E-01995	1
Bombastus	Peppermint oil	294802	1
Caelo	Peppermint oil	15255801	26
Bombastus	Peppermint oil	296017	1
Caelo	Peppermint oil	15126904	1
Bombastus	Peppermint oil	295599	2
Caelo	Peppermint oil	15255805	3
Caelo	Peppermint oil	15235504	2
Caelo	Peppermint oil	15112908	1
Bombastus	Peppermint oil	297946	1
Caelo	Peppermint oil	15255811	11
Euro OTC	Peppermint oil	1512011-01	5
Fagron	Peppermint oil	15255801	1
Bombastus	Peppermint oil	299058	4
Fagron	Peppermint oil	15K27-B01	1
Caelo	Peppermint oil	15112909	2
Fagron	Peppermint oil	15K27-B01-317773	2
Caesar/Noweda	Peppermint oil	15255811	1
Alliance	Peppermint oil	56335	1
Bombastus	Peppermint oil	300468	3
Caelo	Peppermint oil	152555801	1
Bombastus	Peppermint oil	297256	4
Caelo	Peppermint oil	298969	1
Euro OTC	Peppermint oil	909185	1
Sanacorp, 16.08.2016, 7...	Peppermint oil	15255816	2
Caelo	Peppermint oil	15255817	5
Caelo	Peppermint oil	297256	1
Caelo	Peppermint oil	15255816	19
Fagron	Peppermint oil	16F01-B03-322190	2
Fagron	Peppermint oil	16F01-B03	1
Caelo	Peppermint oil	15363207	1
Fagron	Peppermint oil	15363207	1
Bombastus	Peppermint oil	303064	1
Caelo	Peppermint oil	52/AKD15	1
Alliance Healthcare	Peppermint oil	16F01-B03-322190	1
Caelo	Peppermint oil	153663207	1
Bombastus	Peppermint oil	302909	1
Bombastus	Peppermint oil	300843	4
Caelo	Peppermint oil	16114603	4
Euro OTC	Peppermint oil	15255816	1
Fagron	Peppermint oil	16F01-B03-322818	1
Caelo	Peppermint oil	16190405	5
Fagron	Peppermint oil	1512011-01	1
Caelo	Peppermint oil	15383707	1
Caelo	Peppermint oil	16114602	14
Caelo	Peppermint oil	4214U-01995	1
Bombastus	Peppermint oil	304515	6
Caelo	Peppermint oil	16114611	15
Gehe	Peppermint oil	305627	2
hochhaus-Apotheke	Peppermint oil	16114603	1
Caelo	Peppermint oil	16114607	2
Fargon	Peppermint oil		1
Bombastus	Peppermint oil	298969	1
Euro OTC	Peppermint oil	1607018-01	2
Anzag	Peppermint oil	16114611	1
Fagron	Peppermint oil	16F01-B03-326342	3
Caelo	Peppermint oil	16114604	1
Caelo	Peppermint oil	16114601	1

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Supplier	Substance	Batch	Spectra
Caelo	Peppermint oil	8061701	1
Caelo	Peppermint oil	5170717	1
Fagron	Peppermint oil	17F08-B07-336043	2
Caelo	Peppermint oil	15363214	6
Caelo	Peppermint oil	16114625	3
Caelo	Peppermint oil	16114613	1
Bombastus	Peppermint oil	307810	1
Euro OTC	Peppermint oil	1607018-02	2
Sanacorp	Peppermint oil	16114625	1
Caelo	Peppermint oil	4517A-01995	1
Fagron	Peppermint oil	304515	1
Bombastus	Peppermint oil	305627	1
Caelo	Peppermint oil	1538707	1
Bombastus	Peppermint oil	17000387	1
Fagron	Peppermint oil	17F08-B07	1
Bombastus	Peppermint oil	60012008	1
Euro OTC	Peppermint oil	1703032-01	2
Bombastus	Peppermint oil	307854	1
Euro OTC	Peppermint oil	170303	1
Bombastus	Peppermint oil	311547	1
Caelo	Peppermint oil	16114627	5
Sanacorp	Peppermint oil	309390	2
Caelo	Peppermint oil	1703032-01	1
Caelo	Peppermint oil	17188609	8
Kehr	Peppermint oil	17188609	1
Bombastus	Peppermint oil	311274	1
Caelo	Peppermint oil	16114619	1
Fagron	Peppermint oil	17F08-B07-337476	1
Fagron	Peppermint oil	17F08-B07-342991	2
Caelo	Peppermint oil	1703032-02	2
Caelo	Peppermint oil	17188611	1
Caelo	Peppermint oil	17188610	3
Bombastus	Peppermint oil	309390	1
Caelo	Peppermint oil	17291901	1
Caelo	Peppermint oil	26051806	1
Caelo	Peppermint oil	1718610	1
Fagron	Peppermint oil	17F08-B07-139332	1
GEHE	Peppermint oil	17F08-B07-324991	2
EuRho/Noweda	Peppermint oil	17291901	1
Caelo	Peppermint oil	16114628	2
Sanacorp	Peppermint oil	17002163	1
Caelo	Peppermint oil	18047501	1
Caelo	Peppermint oil	171886095683	1
Caelo	Peppermint oil	18009910	3
Euro OTC	Peppermint oil	1804008-01	2
Caelo	Peppermint oil	22091805	1
Euro OTC	Peppermint oil	1703030-02	1
Caelo	Peppermint oil	307839	1
Caelo	Peppermint oil	18009905	1
Caelo	Peppermint oil	18009914	1
Caelo	Peppermint oil	18221702	2
Caelo	Peppermint oil	18221703	3
Bombastus	Peppermint oil	18004277	1
Sanacorp	Peppermint oil	18004277	1
Caelo	Peppermint oil	1820401	1
Sanacorp	Peppermint oil	18003400	1
Caelo	Mint oil	1061802	1
Caelo	Mint oil	16053514	1
Caelo	Mint oil	17134803	1
Caelo	Mint oil	16053508	1

- 107 293 spectra from 582 *Apo-Ident* customers from a total of 30 444 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 *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	320	0	35 515
Type B	0	300	0	78 778
Type C	0	639	27	107 293

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 % (> 99.9705 %)	100.0000 % (> 98.1250 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.0000 %)
Type C	100.0000 % (> 99.6449 %)	95.9459 % (> 95.4955 %)

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.

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
31410	31410	0.00	57.33
30856	31410	11.55	55.02
31294	31811	2.59	56.80
32474	32474	0.00	57.92
31811	31811	0.00	57.63
32476	32476	0.00	55.15
32780	32474	3.79	57.14
32781	32476	6.04	56.34

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Myrtle oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31836-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	1606483
Caelo	Myrtle oil	15225102	32349	40	20150721
Caelo	Myrtle oil	17227302	33879	40	1804344

Validation samples

A total of 222 872 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 *Myrtle oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Myrtle oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Myrtle oil	15225102	31836 [†]	20
Caelo	Myrtle oil	15225103	32182	40
Caelo	Myrtle oil	173184	34082	40

- 78 978 spectra from a total of 1827 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Caelo	Myrtle oil	15225104	1
Caelo	Myrtle oil	16296202	1

[†]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*.

- 107 957 spectra from 582 *Apo-Ident* customers from a total of 30 678 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	2	0	107 957

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6493 %)	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.

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	27.96
32349	31836	3.39	29.48
33879	33879	0.00	27.04

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Non-ionic hydrophil ointment
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30463-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Non-ionic hydrop...	13138001	31001	40	20130531
Caelo	Non-ionic hydrop...	13332901	31227	40	20131104

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Non-ionic hydrop...	13333101	31451	40	1509156
Caelo	Non-ionic hydrop...	15151601	31748	40	9129
Bombastus	Non-ionic hydrop...	295368	31749	30	20150625
Caelo	Non-ionic hydrop...	161042	32088	20	20160411*
Bombastus	Non-ionic hydrop...	300481	32105	40	20160225
Bombastus	Non-ionic hydrop...	300481	32726	40	20160225
Fagron	Non-ionic hydrop...	170744	33360	40	20170413*
Caelo	Non-ionic hydrop...	172006	34010	40	20170810*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 370 spectra of 10 reference samples from the substance/substance group *Non-ionic hydrophil ointment*. These samples are listed above in the [calibration samples](#) section.
- 35 465 spectra from a total of 838 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 1460 spectra of 38 reference samples from the substance/substance group *Non-ionic hydrophil ointment*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Non-ionic hydrophil ointment	15151601	31748 [†]	20
Bombastus	Non-ionic hydrophil ointment	295368	31749 [†]	30
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	161042	32088 [†]	20
Caelo	Non-ionic hydrophil ointment	153465	32106	40
Caelo	Non-ionic hydrophil ointment	160438	32107	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
Caelo	Non-ionic hydrophil ointment	161041	32108	40
Caelo	Non-ionic hydrophil ointment	161042	32109	30
Caelo	Non-ionic hydrophil ointment	161043	32110	40
Caelo	Non-ionic hydrophil ointment	161043	32111	40
Caelo	Non-ionic hydrophil ointment	161044	32112	40
Caelo	Non-ionic hydrophil ointment	161044	32113	40
Caelo	Non-ionic hydrophil ointment	161045	32114	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	161793	32420	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	170865	33365	40
Caelo	Non-ionic hydrophil ointment	170742	33366	40
Caelo	Non-ionic hydrophil ointment	170746	33367	40
Caelo	Non-ionic hydrophil ointment	170866	33368	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

- 77618 spectra from a total of 1800 batches from further 350 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.

- 701 spectra from 220 *Apo-Ident* customers from 207 batches from the substance/substance group *Non-ionic hydrophil ointment*.

Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrophil ointment	266631	2
Euro OTC	Non-ionic hydrophil ointment	266631	1
Caelo	Non-ionic hydrophil ointment	11357801	1
Bombastus	Non-ionic hydrophil ointment	268754	2
Bombastus	Non-ionic hydrophil ointment	267625	3
Noweda	Non-ionic hydrophil ointment	11357301	1
vdl	Non-ionic hydrophil ointment	11357601	2

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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	Non-ionic hydrophil ointment	12087001	3
Caelo	Non-ionic hydrophil ointment	21081202	1
Bombastus	Non-ionic hydrophil ointment	271977	1
Bombastus	Non-ionic hydrophil ointment	271973	1
Bombastus	Non-ionic hydrophil ointment	271976	1
Caelo	Non-ionic hydrophil ointment	12086901	2
Bombastus	Non-ionic hydrophil ointment	272063	3
Sanacorp	Non-ionic hydrophil ointment	271980	1
Caelo	Non-ionic hydrophil ointment	21111203	1
Caelo	Non-ionic hydrophil ointment	12155901	5
Sanacorp	Non-ionic hydrophil ointment	271981	1
Caelo	Non-ionic hydrophil ointment	12223601	3
Caelo	Non-ionic hydrophil ointment	12156101	2
Caelo	Non-ionic hydrophil ointment	4812I-02543	1
Bombastus	Non-ionic hydrophil ointment	271981	2
Caelo	Non-ionic hydrophil ointment	12086902	1
Caesar &Loretz GmbH	Non-ionic hydrophil ointment	12352901	1
Caelo	Non-ionic hydrophil ointment	12086802	1
Fagron	Non-ionic hydrophil ointment	12223301	3
Caelo	Non-ionic hydrophil ointment	513Q-02543	1
Caelo	Non-ionic hydrophil ointment	12155801	1
Bombastus, Noweda	Non-ionic hydrophil ointment	272063	1
Caelo	Non-ionic hydrophil ointment	12352801	6
Bombastus	Non-ionic hydrophil ointment	275259	2
Caelo	Non-ionic hydrophil ointment	12223501	3
Caelo	Non-ionic hydrophil ointment	12353001	1
Caelo	Non-ionic hydrophil ointment	12352901	3
Caelo	Non-ionic hydrophil ointment	13045501	3
Bombastus	Non-ionic hydrophil ointment	275260	2
Noweda	Non-ionic hydrophil ointment	1812U-02543	1
Fagron	Non-ionic hydrophil ointment	13045301	1
Phönix	Non-ionic hydrophil ointment	13045501	1
Bombastus	Non-ionic hydrophil ointment	275256	1
Caelo	Non-ionic hydrophil ointment	12223301	1
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	13138101	8
Sanacorp	Non-ionic hydrophil ointment	13045401	1
Caelo	Non-ionic hydrophil ointment	11273303	1
Caelo	Non-ionic hydrophil ointment	13045601	2
Noweda	Non-ionic hydrophil ointment	271980	1
Cealo	Non-ionic hydrophil ointment	13138101	1
Caelo	Non-ionic hydrophil ointment	130450401	1
Sanacorp	Non-ionic hydrophil ointment	13138001	1
Caelo	Non-ionic hydrophil ointment		1
Caelo	Non-ionic hydrophil ointment	11273001	1
Bombastus	Non-ionic hydrophil ointment	278694	2
Caelo	Non-ionic hydrophil ointment	13138201	4
Caelo	Non-ionic hydrophil ointment	5112I-02543	1
Caelo	Non-ionic hydrophil ointment	13138001	14
Caelo	Non-ionic hydrophil ointment	278694	1
Bombastus	Non-ionic hydrophil ointment	280909	3
Caelo	Non-ionic hydrophil ointment	13045201	3
Caelo	Non-ionic hydrophil ointment	13137901	1
Caelo	Non-ionic hydrophil ointment	13263501	7
Caelo	Non-ionic hydrophil ointment	13137801	1
Caelo	Non-ionic hydrophil ointment	13263401	1
Caelo	Non-ionic hydrophil ointment	13263601	3
Noweda	Non-ionic hydrophil ointment	13138101	1

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrophil ointment	13263701	4
Noweda	Non-ionic hydrophil ointment	2122013c	1
Caelo	Non-ionic hydrophil ointment	CHB13263501	1
Bombastus	Non-ionic hydrophil ointment	282903	2
Martinus-Apotheke	Non-ionic hydrophil ointment	13138001	1
Caelo	Non-ionic hydrophil ointment	13263902	3
Caelo	Non-ionic hydrophil ointment	13333401	4
Caelo	Non-ionic hydrophil ointment	13332901	7
Caelo	Non-ionic hydrophil ointment	13263301	2
Berkel AHK	Non-ionic hydrophil ointment	13332901	3
Caelo	Non-ionic hydrophil ointment	1318001	1
Post-Apotheke	Non-ionic hydrophil ointment	13263701	2
Caelo	Non-ionic hydrophil ointment	13333501	5
Caelo	Non-ionic hydrophil ointment	13263801	2
Bombastus	Non-ionic hydrophil ointment	282904	3
GEHE 10.03.2014	Non-ionic hydrophil ointment	13137901	1
Caelo	Non-ionic hydrophil ointment	13333101	10
Caelo	Non-ionic hydrophil ointment	13333001	3
VDL	Non-ionic hydrophil ointment	13332901	1
Caelo	Non-ionic hydrophil ointment	13333201	2
Bombastus	Non-ionic hydrophil ointment	286003	5
Caelo	Non-ionic hydrophil ointment	1333101	1
Bombastus	Non-ionic hydrophil ointment	6861335	1
Caelo	Non-ionic hydrophil ointment	20061406	1
Caelo	Non-ionic hydrophil ointment	14068401	1
Caelo	Non-ionic hydrophil ointment	13333301	3
Berkel AHK	Non-ionic hydrophil ointment	13333101	2
AHD	Non-ionic hydrophil ointment	14069001	3
Bombastus	Non-ionic hydrophil ointment	288043	6
Caelo	Non-ionic hydrophil ointment	14068901	2
Caelo	Non-ionic hydrophil ointment	14068801	2
Caelo	Non-ionic hydrophil ointment	14068601	9
Bombastus	Non-ionic hydrophil ointment	286001	1
Sanacorp	Non-ionic hydrophil ointment	14068601	1
Bombastus	Non-ionic hydrophil ointment	286002	2
Euro OTC	Non-ionic hydrophil ointment	14068601	4
Caelo	Non-ionic hydrophil ointment	14221301	1
Caelo	Non-ionic hydrophil ointment	14221401	6
bom	Non-ionic hydrophil ointment	286003	1
Caelo	Non-ionic hydrophil ointment	14259001	5
Caelo	Non-ionic hydrophil ointment	14068701	2
Caelo	Non-ionic hydrophil ointment	17112014A	1
Caelo	Non-ionic hydrophil ointment	14258901	6
GEHE 23.09.2014	Non-ionic hydrophil ointment	14221301	1
Bombastus	Non-ionic hydrophil ointment	288042	3
Caelo	Non-ionic hydrophil ointment	14259101	3
Bombastus	Non-ionic hydrophil ointment	288044	6
Sanacorp	Non-ionic hydrophil ointment	288043	1
Caelo	Non-ionic hydrophil ointment	14221501	2
Caelo	Non-ionic hydrophil ointment	14259201	2
Berkel AHK	Non-ionic hydrophil ointment	15002901	6
Sanacorp	Non-ionic hydrophil ointment	15002901	1
Caelo	Non-ionic hydrophil ointment	15002901	4
Caelo	Non-ionic hydrophil ointment	15007402	4
Bombastus	Non-ionic hydrophil ointment	290281	1
Bombastus	Non-ionic hydrophil ointment	290283	7
Caelo	Non-ionic hydrophil ointment	15002801	3
Caelo	Non-ionic hydrophil ointment	15027801	17
Caelo	Non-ionic hydrophil ointment	5052015B	1
Bombastus	Non-ionic hydrophil ointment	282902	1

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrophil ointment	15105101	8
Caelo	Non-ionic hydrophil ointment	15027601	1
Caelo	Non-ionic hydrophil ointment	15002601	3
Noweda08.06.2015	Non-ionic hydrophil ointment	15027801	1
Bombastus	Non-ionic hydrophil ointment	293401	1
Caelo	Non-ionic hydrophil ointment	290283	1
Fagron	Non-ionic hydrophil ointment	290282	1
Caelo	Non-ionic hydrophil ointment	15105001	2
Bombastus	Non-ionic hydrophil ointment	293402	2
Caelo	Non-ionic hydrophil ointment	15151601	9
Sanacop	Non-ionic hydrophil ointment	15105101	1
Caelo	Non-ionic hydrophil ointment	1326501	1
Caelo	Non-ionic hydrophil ointment	19081505	1
Caelo	Non-ionic hydrophil ointment	15151801	5
Caelo	Non-ionic hydrophil ointment	15105301	1
Bombastus	Non-ionic hydrophil ointment	296803	4
Bombastus	Non-ionic hydrophil ointment	295367	1
Caelo	Non-ionic hydrophil ointment	15286701	6
Bombastus	Non-ionic hydrophil ointment	293403	3
Bombastus	Non-ionic hydrophil ointment	296801	4
Bombastus	Non-ionic hydrophil ointment	295368	5
Caelo	Non-ionic hydrophil ointment	15286801	3
Caelo	Non-ionic hydrophil ointment	288044	1
Caelo	Non-ionic hydrophil ointment	15105201	1
Caelo	Non-ionic hydrophil ointment	15287001	12
Caelo	Non-ionic hydrophil ointment	15286901	4
Caelo	Non-ionic hydrophil ointment	15346401	6
Bombastus	Non-ionic hydrophil ointment	296802	1
Caelo	Non-ionic hydrophil ointment	15344701	1
Caelo	Non-ionic hydrophil ointment	297633	2
Caelo	Non-ionic hydrophil ointment	15286601	2
Bombastus	Non-ionic hydrophil ointment	297633	1
Caelo	Non-ionic hydrophil ointment	15346501	1
Caelo	Non-ionic hydrophil ointment	16043801	4
Bombastus	Non-ionic hydrophil ointment	300481	7
Caelo	Non-ionic hydrophil ointment	297634	1
Caelo	Non-ionic hydrophil ointment	16104101	14
Caesar /Noweda	Non-ionic hydrophil ointment	15346401	1
Bombastus	Non-ionic hydrophil ointment	297634	2
Bombastus	Non-ionic hydrophil ointment	300479	4
Phoenix	Non-ionic hydrophil ointment	16104501	2
Caelo	Non-ionic hydrophil ointment	15346301	1
Caelo	Non-ionic hydrophil ointment	16104201	1
Caelo	Non-ionic hydrophil ointment	16173501	8
Bomb/Gehe	Non-ionic hydrophil ointment	301280	1
Caelo	Non-ionic hydrophil ointment	300481	2
Caelo	Non-ionic hydrophil ointment	16104501	2
Bombastus	Non-ionic hydrophil ointment	301280	7
Caelo	Non-ionic hydrophil ointment	16179401	24
Caelo	Non-ionic hydrophil ointment	16173401	5
Bombastus	Non-ionic hydrophil ointment	300480	1
Bombastus	Non-ionic hydrophil ointment	303640	7
Caelo	Non-ionic hydrophil ointment	16179302	8
Bombastus	Non-ionic hydrophil ointment	160905UEN	1
Bombastus	Non-ionic hydrophil ointment	301279	2
Caelo	Non-ionic hydrophil ointment	16179303	5
Gehe	Non-ionic hydrophil ointment	16104401	1
Bombastus	Non-ionic hydrophil ointment	161220NHC/301280	1
Bombastus	Non-ionic hydrophil ointment	600807	1
Bombastus	Non-ionic hydrophil ointment	303642	5

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Supplier	Substance	Batch	Spectra
Bombastus	Non-ionic hydrophil ointment	303644	3
Caelo	Non-ionic hydrophil ointment	16234801	7
Bombastus	Non-ionic hydrophil ointment	306522	6
Bombastus	Non-ionic hydrophil ointment	303643	4
Caelo	Non-ionic hydrophil ointment	16179402	3
Caelo	Non-ionic hydrophil ointment	170328UENA303640	1
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
Noweda	Non-ionic hydrophil ointment	16234801	1
Noweda	Non-ionic hydrophil ointment	16179302	1
Caelo	Non-ionic hydrophil ointment	16234901	4
Bombastus	Non-ionic hydrophil ointment	308111	4
Caelo	Non-ionic hydrophil ointment	17074501	6
Caelo	Non-ionic hydrophil ointment	17074201	7
Caelo	Non-ionic hydrophil ointment	16179301	1
Caelo	Non-ionic hydrophil ointment	17086501	4
Caelo	Non-ionic hydrophil ointment	17086701	2
Caelo	Non-ionic hydrophil ointment	17074401	6
Bombastus	Non-ionic hydrophil ointment	308109	2
Caelo	Non-ionic hydrophil ointment	17086601	2
Caelo	Non-ionic hydrophil ointment	27071704	1
Caelo	Non-ionic hydrophil ointment	16235001	2
Caelo	Non-ionic hydrophil ointment	170865015315	1
Bombastus	Non-ionic hydrophil ointment	17086701	1
Bombastus	Non-ionic hydrophil ointment	170905NHC/308112	1
Caelo	Non-ionic hydrophil ointment	308111	1
Bombastus	Non-ionic hydrophil ointment	308112	2
Caelo	Non-ionic hydrophil ointment	17074601	5
Bombastus	Non-ionic hydrophil ointment	308108	3
Sanacorp	Non-ionic hydrophil ointment	17086501	2
Caelo	Non-ionic hydrophil ointment	17151101	2
Bombastus	Non-ionic hydrophil ointment	171128NHC/308111	1
Bombastus	Non-ionic hydrophil ointment	171114NHC/308111	1
Noweda	Non-ionic hydrophil ointment	17074601	1
Caelo	Non-ionic hydrophil ointment	17151001	2
Caelo	Non-ionic hydrophil ointment	18121708	1
Bombastus	Non-ionic hydrophil ointment	311098	7
Phönix/Bionorica	Non-ionic hydrophil ointment	17200601	1
Caelo	Non-ionic hydrophil ointment	17294601	5
Caelo	Non-ionic hydrophil ointment	17200603	2
Caelo	Non-ionic hydrophil ointment	19021813	1
Bombastus	Non-ionic hydrophil ointment	180308NHC/308108	1
Caelo	Non-ionic hydrophil ointment	17200601	4
Noweda	Non-ionic hydrophil ointment	17994601	1
Euro OTC	Non-ionic hydrophil ointment	311098	1
Caelo	Non-ionic hydrophil ointment	17294602	4
Kehr	Non-ionic hydrophil ointment	17294601	1
Bombastus	Non-ionic hydrophil ointment	17001326	3
Caelo	Non-ionic hydrophil ointment	14051806	1
Bombastus	Non-ionic hydrophil ointment	18001523	3
Kehr	Non-ionic hydrophil ointment	18107902	1
Bombastus	Non-ionic hydrophil ointment		1
Caelo	Non-ionic hydrophil ointment	18107902	6
Caelo	Non-ionic hydrophil ointment	170744015335	1
Caelo	Non-ionic hydrophil ointment	17294603	2
Caelo	Non-ionic hydrophil ointment	18107903	1
Caelo	Non-ionic hydrophil ointment	18107901	3
Caelo	Non-ionic hydrophil ointment	18200801	5

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Supplier	Substance	Batch	Spectra
Caelo	Non-ionic hydrophil ointment	18200802	1
Bombastus	Non-ionic hydrophil ointment	18002339	2
Kehr	Non-ionic hydrophil ointment	18253602	1
Sanacorp	Non-ionic hydrophil ointment	18200802	1
Caelo	Non-ionic hydrophil ointment	18253604	1
Caelo	Non-ionic hydrophil ointment	18200803	1

- 107 258 spectra from 582 *Apo-Ident* customers from a total of 30 477 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 *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	370	0	35 465
Type B	0	1412	48	77 618
Type C	0	614	87	107 258

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 % (> 99.9705 %)	100.0000 % (> 98.3784 %)
Type B	100.0000 % (> 99.9688 %)	96.7123 % (> 96.5068 %)
Type C	100.0000 % (> 99.6449 %)	87.5892 % (> 87.1612 %)

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.

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
31748	31748	0.00	13.33
31749	31748	4.24	16.42
31451	31451	0.00	16.77
31227	31748	7.40	16.54
32088	32088	0.00	12.97
32105	31748	5.26	15.74
32726	33360	7.71	19.15
31001	31748	9.46	17.08
33360	33360	0.00	19.12
34010	34010	0.00	11.50

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Octyldodecanol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30867-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20150506
Caelo	Octyldodecanol	16095507	32958	40	20160421

Validation samples

A total of 222 872 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 *Octyldodecanol*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Octyldodecanol*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Octyldodecanol	15135212	31753 [†]	20
Caelo	Octyldodecanol	163127	33093	40
Caelo	Octyldodecanol	171381	34052	40
Caelo	Octyldodecanol	181120	34220	40

- 78 938 spectra from a total of 1826 batches from further 350 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.

- 1507 spectra from 368 *Apo-Ident* customers from 196 batches from the substance/substance group *Octyldodecanol*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	11060319	2
Caelo	Octyldodecanol	11060305	1
Spangropharm	Octyldodecanol	11060317	1
Fagron	Octyldodecanol	11J13-N05	5
Caelo	Octyldodecanol	11369003	7
Caelo	Octyldodecanol	11369004	3
Caelo	Octyldodecanol	11060317	1
Caelo	Octyldodecanol	11369014	2
Caelo	Octyldodecanol	26071208	1
Fagron	Octyldodecanol	12C21-N03	3
Caelo	Octyldodecanol	11369017	5
Caelo	Octyldodecanol	B11060317	1
Fargon	Octyldodecanol	11C14-N14	1
Caelo	Octyldodecanol	1136017	1
Caelo	Octyldodecanol	11369016	8
Caelo	Octyldodecanol	11369012	2
Caelo	Octyldodecanol	11369021	3
Fagron	Octyldodecanol	CE11350022	1
Phönix 08.11.12	Octyldodecanol	11369021	1
Caelo	Octyldodecanol	12165506	3
Caelo	Octyldodecanol	CE11350022	2
Gehe	Octyldodecanol	11369012	1
Caelo	Octyldodecanol	12165511	9
Caelo	Octyldodecanol	12165509	6
Gehe	Octyldodecanol	11369021	1
Noweda	Octyldodecanol	21022171/7	1
Fagron	Octyldodecanol	200714112-2	1
Fagron	Octyldodecanol	12J04-N01	3
Caelo	Octyldodecanol	12165515	12
Gehe	Octyldodecanol	12165515	1
Caelo	Octyldodecanol	12165519	8
Phönix	Octyldodecanol	12J04-N01	1
Noweda	Octyldodecanol	1216551	1
Caelo	Octyldodecanol	1265515	1
Phoenix/Fargon	Octyldodecanol	12J04-N01	1
Caelo	Octyldodecanol	12165520	9
Noweda	Octyldodecanol	12165515	1
Phönix	Octyldodecanol	12165521	3
Caelo	Octyldodecanol	12165514	3
Caelo	Octyldodecanol	13044002	9
Caelo	Octyldodecanol	12165521	10
Gehe	Octyldodecanol	12165519	1
Sanacorp	Octyldodecanol	12165514	2
Gehe	Octyldodecanol	12165506	1
Anzag	Octyldodecanol	12165519	1
Caelo	Octyldodecanol	12165517	2
AHD 09.04.2013	Octyldodecanol	12165521	1
Caelo	Octyldodecanol	1098722	1
Noweda	Octyldodecanol	13044005	1
Caelo	Octyldodecanol	13044005	12
Sanacorp	Octyldodecanol	13044002	1
A.H.D.	Octyldodecanol	13044007	1
Phönix Gotha	Octyldodecanol	13044002	1
Fagron	Octyldodecanol	12C31-N03	1
Caelo	Octyldodecanol	13044007	8
Caesar/Lorenz	Octyldodecanol	13044009	1
Sanacorp	Octyldodecanol	13044005	2
Caelo	Octyldodecanol	13044009	12
Beiersdorf/Anzag	Octyldodecanol	13044007	1
Fagron	Octyldodecanol	13E07-N03	3

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	82695089	1
Caesar & Loretz/ Noweda	Octyldodecanol	13044009	1
Caelo	Octyldodecanol	2613M-02875	2
Caesar/Noweda	Octyldodecanol	13044009	1
Phönix	Octyldodecanol	13044005	1
Noweda	Octyldodecanol	13044013	1
Caelo	Octyldodecanol	13044013	16
Noweda	Octyldodecanol	13044016	1
Caelo	Octyldodecanol	13044015	9
Caelo	Octyldodecanol	13044016	16
Caelo	Octyldodecanol	13044010	12
Sanacorp	Octyldodecanol	13E07-N07	1
Sanacorp	Octyldodecanol	13222003	4
Caelo	Octyldodecanol	13222003	17
Caelo	Octyldodecanol	2513A-02875	1
Euro OTC	Octyldodecanol	13044015	1
Caelo	Octyldodecanol	12091304	1
Caelo	Octyldodecanol	13092013A	1
Gehe	Octyldodecanol	13044013	1
Alliance healthcare	Octyldodecanol	13044013	1
Caelo	Octyldodecanol	4113A2875	1
Noweda	Octyldodecanol	13222003	1
AHD, 09.10.2013	Octyldodecanol	13044016	1
Caelo	Octyldodecanol	1322005	1
Caelo	Octyldodecanol	13222002	11
Caelo	Octyldodecanol	12111303	1
Caelo	Octyldodecanol	13222005	4
Sanacorp	Octyldodecanol	12142726	1
Caelo	Octyldodecanol	10281907	1
Sanacorp	Octyldodecanol	13222002	1
Sanacorp	Octyldodecanol	AKD31	1
Caelo	Octyldodecanol	13044040	1
Caelo	Octyldodecanol	13222008	17
Noweda	Octyldodecanol	13222008	1
Sanacorp	Octyldodecanol	13222008	1
Caelo	Octyldodecanol	13222010	1
Caesar & Loretz GmbH	Octyldodecanol	13222008	1
Caelo	Octyldodecanol	13222001	1
Phönix	Octyldodecanol	13222008	1
Caesar&lorenz,Phoenix	Octyldodecanol	13044016	1
Caelo	Octyldodecanol	2xa13360002	1
Caelo	Octyldodecanol	12011401	1
Caelo	Octyldodecanol	11012014A	1
Caelo	Octyldodecanol	13360002	12
Caelo / Noweda	Octyldodecanol	13222008	1
Caelo	Octyldodecanol	13222011	9
Caelo	Octyldodecanol	13360003	8
Caelo	Octyldodecanol	6022014B	1
Caelo	Octyldodecanol	13360005	6
Sanacorp	Octyldodecanol	13360006	1
Noweda	Octyldodecanol	13360002	1
Caelo	Octyldodecanol	13360006	12
Caesar&lorenz,Phoenix	Octyldodecanol	13360006	1
Caelo	Octyldodecanol	13360001	3
Gehe	Octyldodecanol	13360003	1
Caelo	Octyldodecanol	13360008	14
Noweda	Octyldodecanol	13360003	1
Krieger	Octyldodecanol	13360006	1
Fagron	Octyldodecanol	13L02-B05	2
Gehe	Octyldodecanol	13360006	1

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Supplier	Substance	Batch	Spectra
VDL 30.04.14 _ 5.77 euro	Octyldodecanol	13360006	1
Fagron	Octyldodecanol	10598578	1
Caelo	Octyldodecanol	133360010	1
Caelo	Octyldodecanol	13360011	14
AHD 30.5 preis:6,07	Octyldodecanol	13360011//05R06	1
Klenk	Octyldodecanol	13360003	1
Caelo	Octyldodecanol	24062014B	1
Caelo	Octyldodecanol	13360010	15
Caelo	Octyldodecanol	13360012	14
Caesar & Loretz GmbH	Octyldodecanol	13360010	1
Sanacorp	Octyldodecanol	13102-b05-288974	1
Caelo	Octyldodecanol	13222013	1
PHOENIX 30.06.2014	Octyldodecanol	13360011	1
Phoenix	Octyldodecanol	13360006	1
Caelo	Octyldodecanol	13360009	2
Noweda	Octyldodecanol	13360012	1
Fagron	Octyldodecanol	13L02-B05-288975	1
Caelo	Octyldodecanol	14130202	1
Gehe	Octyldodecanol	13360012	1
Caelo	Octyldodecanol	14130205	14
Caelo	Octyldodecanol	14130207	28
sanacorp	Octyldodecanol	14130207	2
Caelo	Octyldodecanol	14130206	15
Phoenix	Octyldodecanol	14130207	1
Caelo	Octyldodecanol	15092014B	1
Caelo	Octyldodecanol	14158402	15
Caelo	Octyldodecanol	14130204	3
Caelo	Octyldodecanol	3314E-02875	1
Phönix	Octyldodecanol	14130206	1
Caeo	Octyldodecanol	14130205	1
Caelo	Octyldodecanol	31101416	1
Caesar/Noweda	Octyldodecanol	13222010	1
Caelo	Octyldodecanol	8012015B	1
Caelo	Octyldodecanol	14158410	9
Fagron	Octyldodecanol	14E06-B02	4
VDL; 5,77EUR;21.01.2015	Octyldodecanol	14158402	1
Caelo	Octyldodecanol	14158411	3
Fagron	Octyldodecanol	14E06-B02-293746	1
Phoenix	Octyldodecanol	14158411	1
Caelo	Octyldodecanol	14371705	5
Caelo	Octyldodecanol	14371706	15
Caelo	Octyldodecanol	14158407	2
Caelo	Octyldodecanol	1431707	1
Caelo	Octyldodecanol	14371707	5
Caelo	Octyldodecanol	143710706	1
Caelo	Octyldodecanol		2
Fagron	Octyldodecanol	14E06-B02-293745	1
sanacorp	Octyldodecanol	14371706	1
Caelo	Octyldodecanol	14371711	24
VDL,5,77EUR; 27.04.15	Octyldodecanol	14371711	2
Caelo	Octyldodecanol	11052015A	1
Caelo	Octyldodecanol	14371710	2
Caesar&loretz,Phoenix	Octyldodecanol	14371711	1
Caelo	Octyldodecanol	1314I-02875	1
Bombastus	Octyldodecanol	14371703	1
Caelo	Octyldodecanol	14158401	1
Sanacorp	Octyldodecanol	14371711	1
Fagron	Octyldodecanol	14E06-B02-301706	1
Fagron	Octyldodecanol	14E06-B02-30170	1
Fagron	Octyldodecanol	14e06-b02-293745	1

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	14371716	11
Fresenius	Octyldodecanol	300615100	1
Noweda 10.07.2015	Octyldodecanol	14371714	1
Sanacorp	Octyldodecanol	14371716	1
Caelo	Octyldodecanol	14371714	5
Fagron	Octyldodecanol	14E06-B02-301705	2
Caelo	Octyldodecanol	15135205	1
Caelo	Octyldodecanol	17082015C	1
Fagron	Octyldodecanol	15E06-B02-30170	1
Caelo	Octyldodecanol	15135203	14
Caelo	Octyldodecanol	15135206	31
Caelo	Octyldodecanol	15135207	7
Caesar/Noweda	Octyldodecanol	15135207	1
Caelo	Octyldodecanol	14371703	1
Anzag/Henry Lamotte	Octyldodecanol	14371711	1
caesar&loretz,Phönix	Octyldodecanol	15135206	1
Caelo	Octyldodecanol	15135211	9
Caelo	Octyldodecanol	14135206	1
Caelo	Octyldodecanol	15135213	69
Caelo	Octyldodecanol	15135212	9
Cealo/Gehe	Octyldodecanol	15135212	2
Caesar & Loretz GmbH	Octyldodecanol	15135206	1
Noweda	Octyldodecanol	15135213	1
Caelo	Octyldodecanol	4214U-02875	1
Caelo	Octyldodecanol	15383003	6
Caelo	Octyldodecanol	151352	1
Caelo	Octyldodecanol	1513513	1
Caelo	Octyldodecanol	15383005	47
Caelo	Octyldodecanol	15383004	17
VDL;15.3.16;5,75EUR	Octyldodecanol	15383005	1
Caelo	Octyldodecanol	1538005	2
Caelo	Octyldodecanol	153830	3
Fagron	Octyldodecanol	15383004	1
Caelo	Octyldodecanol	153830004	1
Anzag	Octyldodecanol	15383005	1
Caelo	Octyldodecanol	1538004	2
Caelo	Octyldodecanol	15383008	23
Caelo	Octyldodecanol	1538003	1
Euro OTC	Octyldodecanol	15383004	1
Bombastus	Octyldodecanol	15383008	1
Caesar&Loretz GmbH	Octyldodecanol	15383004	1
Caelo	Octyldodecanol	15383009	22
Caelo	Octyldodecanol	15383002	2
Euro/Phönix	Octyldodecanol	15383009	1
Caeolo/Noweda	Octyldodecanol	15383008	1
Caelo	Octyldodecanol	1583004	1
Caelo	Octyldodecanol	16095502	12
Caolo	Octyldodecanol	15383005	1
Phönix	Octyldodecanol	1538009	1
Noweda	Octyldodecanol	15383009	1
Phoenix	Octyldodecanol	15383009	1
Caelo	Octyldodecanol	16095503	32
Caol/Phoenix	Octyldodecanol	15383005	1
Gehe	Octyldodecanol	15383009	1
Caelo	Octyldodecanol	1538009	1
Ichthylol/Phönix	Octyldodecanol	16095503	1
Anzag	Octyldodecanol	16095503	2
Caesar&Loretz	Octyldodecanol	16095502	1
Caelo	Octyldodecanol	1583009	1
Caesar & Loretz/AHC	Octyldodecanol	16095503	1

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Supplier	Substance	Batch	Spectra
ALH	Octyldodecanol	16099503	1
Phoenix	Octyldodecanol	16095503	1
Caelo	Octyldodecanol	516A-02875	1
Caelo	Octyldodecanol	16095507	46
Caelo	Octyldodecanol	16095506	37
ALH	Octyldodecanol	16095503	1
Caelo	Octyldodecanol	160955	1
ALH	Octyldodecanol	16095507	2
Caelo	Octyldodecanol	16095501	3
Caesar & Loretz/Noweda	Octyldodecanol	16095503	2
Fagron	Octyldodecanol	16G20-B99-324356	12
GEHE	Octyldodecanol	16095507	1
Caelo	Octyldodecanol	16095511	39
Caelo	Octyldodecanol	717Q-02875	1
Caelo	Octyldodecanol	16312701	49
Fagron	Octyldodecanol	15135213	1
ALH	Octyldodecanol	16312701	2
Caelo/Anzag	Octyldodecanol	16312701	2
Anzag	Octyldodecanol	16095507	1
Phönix	Octyldodecanol	16095506	1
Fagron	Octyldodecanol	16312701	1
Phoenix WE 22.03.17 EK...	Octyldodecanol	16095511	1
Gehe	Octyldodecanol	16312701	3
Caelo	Octyldodecanol	16095508	1
Gehe	Octyldodecanol	16095503	1
Euro OTC	Octyldodecanol	16312701	1
Anzag	Octyldodecanol	16312701	1
Caesar&Loretz GmbH,09.0...	Octyldodecanol	16095507	1
Euro OTC	Octyldodecanol	16095511	1
Noweda	Octyldodecanol	16095511	1
Phoenix	Octyldodecanol	16312701	1
Caelo	Octyldodecanol	16312706	18
Krieger	Octyldodecanol	16312701	1
AHD	Octyldodecanol	16312701	1
Caelo	Octyldodecanol	16312707	15
Bombastus	Octyldodecanol	16095506	1
Caelo	Octyldodecanol	16312710	7
GEHE	Octyldodecanol	16312701	1
Kehr	Octyldodecanol	16312707	1
Caelo	Octyldodecanol	163127	1
Caelo	Octyldodecanol	16312704	2
Caelo	Octyldodecanol	17138102	34
Caelo	Octyldodecanol	17077701	6
Fagron	Octyldodecanol	17138102	1
Caesar & Loretz	Octyldodecanol	16312707	1
Caelo	Octyldodecanol	27101712	1
Caelo	Octyldodecanol	17138105	13
Caelo	Octyldodecanol	4111712	1
Noweda	Octyldodecanol	17138105	1
Sanacorp WE:09.11.17 10...	Octyldodecanol	17138105	1
Caelo	Octyldodecanol	1718102	1
Caelo	Octyldodecanol	4817E-02875	1
Caelo/Noweda	Octyldodecanol	17138102	1
Caelo	Octyldodecanol	17077701	1
Sanacorp	Octyldodecanol	17138102	1
Gehe	Octyldodecanol	17138102	1
Kehr	Octyldodecanol	17138102	1
Caelo	Octyldodecanol	1738102	1
Caelo	Octyldodecanol	17138103	7
Caeolo / Phönix	Octyldodecanol	16312707	1

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Supplier	Substance	Batch	Spectra
Caelo	Octyldodecanol	17138109	10
Sanacorp WE:21.12.17 E...	Octyldodecanol	17138109	1
Caelo	Octyldodecanol	1801190D/17138109	1
gehe	Octyldodecanol	17138109	1
Caelo	Octyldodecanol	1802080D/17138109	1
Caelo	Octyldodecanol	17273002	40
Caelo	Octyldodecanol	17273003	7
Caelo	Octyldodecanol	17273001	25
Caelo	Octyldodecanol	187273002	1
Phönix W.E:27.02.18 E...	Octyldodecanol	17273001	1
Caesar & Lorenz GmbH	Octyldodecanol	17273002	2
Kehr	Octyldodecanol	1098722	1
GEHE	Octyldodecanol	1098685	1
GEHE	Octyldodecanol	17273002	1
Caelo	Octyldodecanol	17273008	12
Kehr	Octyldodecanol	17273008	3
Allianz	Octyldodecanol	17273001	1
Sanacorp	Octyldodecanol	17273001	1
Caelo	Octyldodecanol	1273001	1
Caelo	Octyldodecanol	17273006	1
Caesar & Lorenz GmbH	Octyldodecanol	17273008	2
Caelo	Octyldodecanol	18112001	11
Allianz	Octyldodecanol	18112001	3
Fagron	Octyldodecanol	17273008	1
Caelo	Octyldodecanol	160112-01	1
Caelo	Octyldodecanol	12091806	1
Caelo	Octyldodecanol	18112002	7
Caelo	Octyldodecanol	250918A	1
Cealo/Noweda	Octyldodecanol	17273008	1
Noweda	Octyldodecanol	18112001	1
Fagron	Octyldodecanol	18112004	1
Caelo	Octyldodecanol	18112006	9
Caelo	Octyldodecanol	18112008	4
Gehe	Octyldodecanol	18112002	1
Sanacorp	Octyldodecanol	18112002	1
Caelo	Octyldodecanol	18112004	1
Caelo	Octyldodecanol	18112011	2
Caelo	Octyldodecanol	18112010	1

- 106 452 spectra from 582 *Apo-Ident* customers from a total of 30 488 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 *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	160	0	35 675
Type B	0	140	0	78 938
Type C	0	1497	10	106 452

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6449 %)	99.3364 % (> 99.1374 %)

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.

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	4.01	54.95
31330	31330	0.00	53.12
31753	31330	12.60	54.38
32958	31330	7.91	51.42

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Oleic acid**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 32471-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 222 872 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.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Oleic acid*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Oleic acid	15298701	32475	40
Caelo	Oleic acid	15298701	32747	40
Caelo	Oleic acid	172741	33898	40

- 78 958 spectra from a total of 1828 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Caelo	Oleic acid	16309108	1

*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.

- 107 958 spectra from 582 *Apo-Ident* customers from a total of 30 679 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 *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	35 755
Type B	0	120	0	78 958
Type C	0	1	0	107 958

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6537 %)	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.

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	61.10
33076	33076	0.00	57.52

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Oregano oil
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30669-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20140904

Validation samples

A total of 222 872 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 *Oregano oil*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Oregano oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Oregano oil	14242905	31788 [†]	20
Caelo	Oregano oil	16011001	32070	60
Caelo	Oregano oil	16011001	33469	40

- 78 958 spectra from a total of 1828 batches from further 350 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 6 *Apo-Ident* customers from 5 batches from the substance/substance group *Oregano oil*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Oregano oil	12347604	2
Caelo	Oregano oil	15248805	1
Noweda/Taoasis	Oregano oil	43878A-123313	1
Caelo	Oregano oil	16011001	1
Taoasis	Oregano oil	43878A-123313	1
Caelo	Oregano oil	1601101	1

- 107 952 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *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	200	0	35 635
Type B	0	120	0	78 958
Type C	0	7	0	107 952

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
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.

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
31302	31196	2.95	49.80
30669	31196	6.56	54.28
31406	31196	6.52	50.98
31196	31196	0.00	48.74
31788	31196	7.96	48.24

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Paraffin classification
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30874-2019-05-24
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 alcohololum unguentum; Oculentum emulsificans DAC; Paraffin, liquid; Paraffin, white; Paraffin, yellow; Paraffinum; Unguentum alcohololum lanae SR; Unguentum Cordes®; Unguentum Cordes®; Unguentum emulsificans DAB; Vaseline, white; Vaseline, yellow; Vaselinum album; Vaselinum album pro opthalmicum; 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:

- Advice for the identification of paraffin: Paraffin, liquid and paraffin, light liquid 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>
Appendix F	Addition to the second-stage models

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.

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	Paraffin, liquid	12102101	30874	40	20120416
Caelo	Paraffin, liquid	12324307	30877	40	20121031
Caelo	Hydrophobic base...	12229003	30932	40	1405121
Caelo	Emulsifying hydr...	12343501	30933	40	1405098
Caelo	Paraffin, white	12374502	31009	40	20130102
Caelo	Paraffin, white	12032413	31010	40	20120203
Caelo	Hydrophobic base...	13299604	31168	40	20130909
apomix	Eye ointment, em...	15B241013	31174	40	1405331
Caelo	Wool alcohol oin...	12244302	31228	70	AR-15-FG-001376-01
Caelo	Wool alcohol oin...	14032501	31272	40	1507263
Hansen & Rose...	Hydrophobic base...	1023472	31292	40	20140328
Caelo	Paraffin, liquid	13248007	31351	40	AR-15-FG-002534-01
Caelo	Paraffin, liquid	13390602	31358	40	AR-15-FG-002530-01
Caelo	Paraffin, white	13341601	31437	40	20131108
Caelo	Wool alcohol oin...	14067001	31441	40	20140307
Caelo	Eye paraffin	13338710	31445	40	20131108
Caelo	Hydrophobic base...	14044601	31446	40	AR-15-FG-007940-01
Caelo	Hydrophilic oint...	14024802	31456	40	AR-14-FG-012697-01
Caelo	Paraffin, white	13268421	31468	40	20130823
Caelo	Paraffin, yellow	12321908	31473	40	AR-15-FG-002511-01
Euro OTC	Wool alcohol oin...	1211017-01	31522	40	AR-14-FG-012695-01
Euro OTC	Paraffin, yellow	1401017-01	31541	40	20140210
Caelo	Hydrophilic oint...	14024802	31567	40	20140129
Caelo	Emulsifying hydr...	14276401	31570	40	AR-15-FG-014916-01
Euro OTC	Paraffin, liquid	1409007-01	31587	40	20140929
Euro OTC	Paraffin, white	1405014-01	31590	40	20140702
Bombastus	Paraffin, white	290271	31601	40	20140929
Ichthyol	Unguentum Cordes®	13A067	31602	40	1507406
Caelo	Eye paraffin	13338711	31610	40	AR-15-FG-008217-01
Caelo	Hydrophilic oint...	13245302	31611	40	20131008
Fagron	Hydrophilic oint...	14G08-T08-013954	31612	40	20140829
Euro OTC	Paraffin, liquid	1506021	31702	40	0000010380
Euro OTC	Paraffin, white	1509019	31736	60	20150929*
Euro OTC	Paraffin, liquid	1509011	31740	40	20150918*
apomix	Wool alcohol oin...	02A070515	31744	40	AR-16-FG-004495-01
Ichthyol	Unguentum Cordes®	15A137	31807	40	20150804
Euro OTC	Paraffin, liquid	1511030	31812	40	20151208*
Euro OTC	Paraffin, liquid	1511029	31816	40	20151208*
Caelo	Hydrophilic oint...	154164	31909	40	20151215*
Caelo	Hydrophilic oint...	154165	31910	40	20151215*
Caelo	Paraffin, white	153276	31916	40	20151001*
Caelo	Paraffin, white	153368	31917	40	20151012*
Caelo	Emulsifying hydr...	153311	31920	40	20151006*
Caelo	Wool alcohol oin...	153347	31921	40	20150930*
Caelo	Paraffin, yellow	153304	31940	40	20151001*
Caelo	Paraffin, yellow	153305	31941	40	20151001*
apomix	Wool alcohol oin...	01A180215	31949	40	20150223
Ichthyol	Unguentum Cordes®	15A150	31954	40	20150930
Caelo	Wool alcohol oin...	153421	31999	40	20151012*
Caelo	Wool alcohol oin...	153562	32017	40	20151028*
Euro OTC	Paraffin, liquid	1604009	32279	40	20160511*
Caelo	Paraffin, white	162274	32495	40	20160804*
Caelo	Wool alcohol oin...	162513	32517	40	20160907*
Euro OTC	Paraffin, liquid	1607039	32704	40	20160826*
Caelo	Eye paraffin	162718	32900	40	20161020*
apomix	Eye ointment, em...	06A090516	32946	40	20160517
apomix	Eye ointment, em...	10A041016	32947	40	20161017
Caelo	Emulsifying hydr...	170323	33133	40	20170206*
Fagron	Paraffin, liquid	16E30-B05-327577	33274	40	20160614
Caelo	Emulsifying hydr...	171137	33396	40	20170426*

continued on the next page

continued from previous page

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Paraffin, liquid	15B18-B01-333364	33729	40	20150302

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 2490 spectra of 61 reference samples from the substance/substance group *Paraffin classification*. These samples are listed above in the [calibration samples](#) section.
- 33 345 spectra from a total of 787 batches from further 202 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 5281 spectra of 141 reference samples from the substance/substance group *Paraffin classification*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Paraffin, white	90292119	30006	39
Caelo	Paraffin, white	11374906	30466	30
Caelo	Hydrophilic ointment DAB	11211601	30609	40
Ichthyol	Unguentum Cordes [®]	11A202	30626	40
Caelo	Paraffin, liquid	13248007	31351 [†]	20
Caelo	Paraffin, liquid	13390602	31358 [†]	20
Caelo	Wool alcohol ointment SR wit...	14032501	31448	40
Euro OTC	Wool alcohol ointment DAB	1211017-01	31522 [†]	20
Euro OTC	Paraffin, yellow	1401017-01	31541 [†]	20
Caelo	Hydrophilic ointment DAB	14024802	31567 [†]	20
Caelo	Emulsifying hydrophobic base...	14276401	31570 [†]	20
Euro OTC	Paraffin, yellow	1401017-01	31586	60
Euro OTC	Paraffin, liquid	1409007-01	31587 [†]	20
Euro OTC	Paraffin, white	1405014-01	31590 [†]	20
Bombastus	Paraffin, white	290271	31601 [†]	20
Ichthyol	Unguentum Cordes [®]	13A067	31602 [†]	20
Caelo	Eye paraffin	13338711	31610 [†]	20

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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	Hydrophilic ointment DAB	13245302	31611 [†]	20
Fagron	Hydrophilic ointment DAB	14G08-T08-013954	31612 [†]	20
Euro OTC	Paraffin, liquid	1506021	31702 [†]	20
Euro OTC	Paraffin, white	1509019	31736 [†]	10
Euro OTC	Paraffin, liquid	1509011	31740 [†]	20
apomix	Wool alcohol ointment SR/DAC	02A070515	31744 [†]	20
Ichthyol	Unguentum Cordes®	15A137	31807 [†]	20
Euro OTC	Paraffin, liquid	1511030	31812 [†]	20
Euro OTC	Paraffin, liquid	1511029	31816 [†]	20
Caelo	Hydrophilic ointment DAB	154164	31909 [†]	20
Caelo	Hydrophilic ointment DAB	154165	31910 [†]	20
Caelo	Paraffin, white	153276	31916 [†]	20
Caelo	Paraffin, white	153368	31917 [†]	20
Caelo	Paraffin, white	153368	31918	60
Caelo	Paraffin, white	153497	31919	60
Caelo	Emulsifying hydrophobic base...	153311	31920 [†]	20
Caelo	Wool alcohol ointment SR wit...	153347	31921 [†]	20
Caelo	Paraffin, yellow	153304	31940 [†]	20
Caelo	Paraffin, yellow	153305	31941 [†]	20
Caelo	Paraffin, yellow	153306	31942	60
apomix	Wool alcohol ointment SR/DAC	01A180215	31949 [†]	20
Ichthyol	Unguentum Cordes®	15A150	31954 [†]	20
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	153562	32017 [†]	20
Caelo	Wool alcohol ointment DAB	153563	32018	60
Caelo	Wool alcohol ointment DAB	153619	32019	60
Caelo	Wool alcohol ointment DAB	153618	32020	60
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
Euro OTC	Paraffin, liquid	1602026	32189	40
Euro OTC	Paraffin, white	1602009	32191	40
Caelo	Paraffin, white	161380	32223	40
Caelo	Paraffin, white	161380	32224	40
Euro OTC	Paraffin, white	1605019	32282	40
Euro OTC	Paraffin, liquid	1604045	32285	40
Caelo	Paraffin, liquid	161710	32323	40
Caelo	Hydrophilic ointment DAB	161668	32389	40
Caelo	Hydrophilic ointment DAB	161668	32390	40
Caelo	Hydrophilic ointment DAB	161670	32391	40
Euro OTC	Paraffin, liquid	1606032	32462	40
Caelo	Wool alcohol ointment DAB	162488	32511	40
Caelo	Wool alcohol ointment DAB	162488	32512	40
Caelo	Emulsifying hydrophobic base...	162259	32518	40
Caelo	Emulsifying hydrophobic base...	162260	32519	40
Euro OTC	Paraffin, liquid	1608007	32706	40
Euro OTC	Paraffin, white	1608041	32711	40
Euro OTC	Wool alcohol ointment DAB	1608040	32777	40
Euro OTC	Paraffin, liquid	1610017	32830	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wool alcohol ointment DAB	162951	32864	40
Caelo	Wool alcohol ointment DAB	162952	32865	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	Paraffin, white	162411	32901	40
Ichthyol	Unguentum Cordes®	16A061	32912	40
Euro OTC	Paraffin, white	1612007	32982	40
Euro OTC	Paraffin, liquid	1701052	32985	40
Euro OTC	Paraffin, yellow	1701027	32987	40
Caelo	Emulsifying hydrophobic base...	170321	33124	40
Caelo	Emulsifying hydrophobic base...	170322	33132	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	Wool alcohol ointment DAB	163318	33184	40
Caelo	Wool alcohol ointment DAB	163317	33185	40
Caelo	Hydrophobic base gel DAC	16151105	33223	40
Euro OTC	Paraffin, liquid	1701033	33236	40
Caelo	Emulsifying hydrophobic base...	171253	33398	40
Caelo	Emulsifying hydrophobic base...	171137	33399	40
Euro OTC	Paraffin, yellow	1705016	33444	42
Euro OTC	Paraffin, white	1705015	33445	40
Caelo	Eye paraffin	15441514	33491	40
apomix	Eye ointment, emulsifying DAC	08A150517	33503	40
apomix	Eye ointment, emulsifying DAC	13C071216	33504	40
Caelo	Emulsifying hydrophobic base...	171979	33545	40
Caelo	Wool alcohol ointment DAB	172062	33547	40
Caelo	Wool alcohol ointment DAB	171416	33548	40
Caelo	Hydrophilic ointment DAB	171855	33554	40
Caelo	Hydrophilic ointment DAB	171563	33555	40
Caelo	Hydrophilic ointment DAB	171564	33556	40
Euro OTC	Paraffin, liquid	1706017	33598	40
Euro OTC	Paraffin, liquid	1707002	33599	40
Caelo	Wool alcohol ointment SR wit...	16251301	33614	40
apomix	Wool alcohol ointment SR/DAC	01B310517	33615	40
apomix	Wool alcohol ointment SR/DAC	01B310517	33616	40
Euro OTC	Paraffin, white	1709016	33659	40
Euro OTC	Paraffin, liquid	1709002	33662	40
Euro OTC	Paraffin, yellow	1709015	33663	40
Euro OTC	Paraffin, liquid	1710025	33848	40
Euro OTC	Paraffin, white	1712008	33934	40
Euro OTC	Paraffin, liquid	1801041	33998	40
Euro OTC	Paraffin, liquid	1802016	34003	40
Caelo	Hydrophobic base gel DAC	173204	34018	40
Caelo	Hydrophilic ointment DAB	170830	34025	40
Caelo	Hydrophilic ointment DAB	172906	34026	40
Caelo	Hydrophilic ointment DAB	173302	34027	40
Euro OTC	Paraffin, white	1804011	34098	40
Euro OTC	Paraffin, yellow	1804012	34099	40
Caelo	Wool alcohol ointment SR wit...	180745	34143	40
Caelo	Emulsifying hydrophobic base...	181406	34155	40
Caelo	Paraffin, yellow	180920	34161	40
Euro OTC	Paraffin, liquid	1806004	34192	40
Caelo	Paraffin, yellow	181915	34255	40
Caelo	Hydrophilic ointment DAB	182075	34261	40
Caelo	Wool alcohol ointment SR wit...	181899	34271	40

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Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Paraffin, liquid	1810001	34303	40
Euro OTC	Paraffin, liquid	1810002	34304	40
Caelo	Emulsifying hydrophobic base...	182502	34307	40
Caelo	Wool alcohol ointment DAB	182509	34353	40
Ichthyol	Unguentum Cordes [®]	18A101	34364	40

- 73 797 spectra from a total of 1695 batches from further 339 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.

- 11 443 spectra from 539 *Apo-Ident* customers from 2888 batches from the substance/substance group *Paraffin classification*.

Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, white	263683	1
Noweda	Paraffin, white	255510	1
Caelo	Paraffin, white	11115501	1
Caelo	Paraffin, white	11265703	1
Caelo	Paraffin, white	11108710	1
Bombastus	Paraffin, white	265814	2
Caelo	Paraffin, white	90292119	1
Caelo	Paraffin, white	11265708	2
Caelo	Paraffin, white	11265701	1
Bombastus	Paraffin, white	268099	2
Anzag	Paraffin, white	1105029-01	1
Caelo	Paraffin, white	11060212	2
Caelo	Paraffin, white	11060209	3
Euro OTC	Paraffin, white	1109002-01	2
Gehe	Paraffin, white	268099	1
Bombastus	Paraffin, white	267010	2
Bombastus	Paraffin, white	267671	2
Bombastus	Paraffin, white	268390	1
Caelo	Paraffin, white	11104910	1
Bombastus	Paraffin, white	2704212549	1
Caesar & Loretz GmbH, 4...	Paraffin, white	11301301	1
Caelo	Paraffin, white	11301301	5
Caelo	Paraffin, white	11265711	1
Bombastus	Paraffin, white	268016	1
Bombastus	Paraffin, white	270492	1
Caelo	Paraffin, white	11315401	1
Caelo	Paraffin, white	29051201	1
Fagron	Paraffin, white	11K14-T01	7
Caelo	Paraffin, white	11040603	1
Caelo	Paraffin, white	12061201	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
Caesar&lorenz,Anzag	Paraffin, white	12003601	2
Bombastus	Paraffin, white	1406212549	1
Caelo	Paraffin, white	20061206	1
Caelo	Paraffin, white	11104901	1
Bombastus	Paraffin, white	270831	1
Bombastus	Paraffin, white	30061201	1
Caelo	Paraffin, white	3071202	1
Caelo	Paraffin, white	11374903	4
Bombastus	Paraffin, white	270489	3
vdl	Paraffin, white	11265710	1
Caelo	Paraffin, white	23071202	1
Gehe	Paraffin, white	11315403	1
Bombastus	Paraffin, white	270165	1
Caelo	Paraffin, white	12078105	1
Noweda	Paraffin, white	263762	1
Caelo	Paraffin, white	12012707	2
Caelo	Paraffin, white	14081205	1
Caelo	Paraffin, white	11315413	2
Caelo	Paraffin, white	11060210	1
Caelo	Paraffin, white	17081202	1
Caelo	Paraffin, white	12031202	1
Caelo	Paraffin, white	22081206	1
Caelo	Paraffin, white	12071805	5
Bombastus	Paraffin, white	270634	2
Phoenix	Paraffin, white	270491	1
Phönix Gotha	Paraffin, white	270633	1
Caelo	Paraffin, white	3091209	1
Bombastus	Paraffin, white	270490	1
Bombastus	Paraffin, white	270163	2
Phagron	Paraffin, white		1
Caelo	Paraffin, white	11315408	2
Caelo	Paraffin, white	11060211	1
Noweda	Paraffin, white	270163	3
Bombastus	Paraffin, white	269731	1
GEHE	Paraffin, white	270834	1
GEHE	Paraffin, white	270163	1
Caelo	Paraffin, white	12190401	4
Caelo	Paraffin, white	12071804	1
Bombastus	Paraffin, white	270834	4
Caelo	Paraffin, white	11374906	4
Caelo	Paraffin, white	27091205	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12071805	1
Bombastus	Paraffin, white	2909212549	1
Caelo	Paraffin, white	12081601	3
Bombastus	Paraffin, white	270635	2
Henry Lamotte Oils GmbH	Paraffin, white	5098800	2
Caelo	Paraffin, white	12182505	9
Bombastus	Paraffin, white	270491	1
Caelo	Paraffin, white	26101202	1
Caelo	Paraffin, white	12115101	10
Bombastus	Paraffin, white	270982	3
Bombastus	Paraffin, white	269734	3
Phönix 16.10.12	Paraffin, white	12D16-T01	1
Caelo	Paraffin, white	12111203	1
Anzag 08.10.12	Paraffin, white	270491	1
Fagron	Paraffin, white	10H12-T01	1
Caelo	Paraffin, white	12032405	1
Anzag/	Paraffin, white	12182505	2
Caelo	Paraffin, white	26111203	1
Caelo	Paraffin, white	12032413	20

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	12003603	1
Fagron	Paraffin, white	12D16-To1	1
Caelo	Paraffin, white	12121201	1
Caelo	Paraffin, white	12121204	1
Caelo	Paraffin, white	12115102	15
Henry Lamotte/N/14.12.12	Paraffin, white	5322600	1
Caelo	Paraffin, white	17121206	1
ANZAG	Paraffin, white	12032413	1
Phönix Gotha	Paraffin, white	12032413	1
Fagron	Paraffin, white	12D16-T01	2
Gehe	Paraffin, white	12032404	1
Caelo	Paraffin, white	12032412	2
Bombastus	Paraffin, white	270984	1
Gehe	Paraffin, white	1205048-01	1
Caelo	Paraffin, white		11
Caelo	Paraffin, white	12032404	1
Caelo	Paraffin, white	20160812-4	1
Bombastus	Paraffin, white	271261	2
Caelo	Paraffin, white	12012604	2
Caelo	Paraffin, white	11315402	1
Bombastus	Paraffin, white	265508	1
Caelo	Paraffin, white	12209204	16
Bombastus	Paraffin, white	1001312549	1
Euro OTC	Paraffin, white	1205048-01	3
Caelo	Paraffin, white	11011309	1
Caelo	Paraffin, white	11315412	1
Bombastus	Paraffin, white	271437	3
Caelo	Paraffin, white	17011309	1
Bombastus	Paraffin, white	270983	1
Bombastus	Paraffin, white	270976	4
Caesar & Loretz GmbH, 4. . .	Paraffin, white	12209204	1
Caelo	Paraffin, white	12311003	4
Anzag 27.12.12 ek:5.45	Paraffin, white	12209204	1
Sanacorp	Paraffin, white	12190401	1
Caelo	Paraffin, white	11060213	2
Caelo	Paraffin, white	12209203	3
Fagron	Paraffin, white	12B20-T02	1
Caelo	Paraffin, white	1021302	1
Bombastus	Paraffin, white	270980	2
Caelo	Paraffin, white	12209210	29
Caelo	Paraffin, white	402312550	1
Caelo	Paraffin, white	1203413	1
Bombastus	Paraffin, white	271213	3
Sanacorp	Paraffin, white	12115107	1
Caelo	Paraffin, white	613Q-02549	1
Fagron	Paraffin, white	12H10-T05	2
Bombastus	Paraffin, white	269733	1
Henry Lamotte Oils GmbH	Paraffin, white	5322600	1
Bombastus	Paraffin, white	271435	1
Bombastus	Paraffin, white	270553	1
Caelo	Paraffin, white	12115106	7
Caelo	Paraffin, white	713I-02549	1
Caelo	Paraffin, white	12311004	5
Caelo	Paraffin, white	813E-02549	1
Phönix	Paraffin, white	12032413	1
Bombastus	Paraffin, white	2002312549	1
Caelo	Paraffin, white	12115107	9
Bombastus	Paraffin, white	270977	1
Caelo	Paraffin, white	122092004	1
Caelo	Paraffin, white	12337701	5

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	5098800	1
Caelo	Paraffin, white	12115113	1
Caelo	Paraffin, white	8031302	1
Noweda	Paraffin, white	12209203	1
Lamotte	Paraffin, white	5322600	1
Caelo	Paraffin, white	12306401	4
Fiebig 22.02.13 ek:3,63EUR	Paraffin, white	12115107	1
Anzag	Paraffin, white	271435	1
Caelo	Paraffin, white	13031301	1
Noweda	Paraffin, white	271261	1
Caelo	Paraffin, white	20031303	1
Caelo	Paraffin, white	12311011	10
Phönix	Paraffin, white	12115107	1
Caelo	Paraffin, white	12012609	6
Caelo	Paraffin, white	12081502	1
Caelo	Paraffin, white	12311010	12
Fagron	Paraffin, white	12/17-To1	1
Caelo	Paraffin, white	5041303	1
Anzag 15.03.13 ek: 5,61EUR	Paraffin, white	12209210	1
Anzag 27.03.13 ek: 3,66EUR	Paraffin, white	12115101	1
Caelo	Paraffin, white	12115105	1
Caelo	Paraffin, white	12306302	5
Caelo	Paraffin, white	11041302	1
Bombastus	Paraffin, white	270978	3
Bombastus	Paraffin, white	277059	2
Caelo	Paraffin, white	15041305	1
Caelo	Paraffin, white	12321902	1
Bombastus	Paraffin, white	2761127	1
Gehe	Paraffin, white	12311004	1
Caelo	Paraffin, white	18041315	1
Fagron	Paraffin, white	12I17-T01	2
Caelo	Paraffin, white	276127	1
Phönix	Paraffin, white	12209210	1
Caelo	Paraffin, white	12337704	11
GEHE	Paraffin, white	12115106	1
Euro OTC	Paraffin, white	1210009-01	3
Bombastus	Paraffin, white	276088	1
Caelo	Paraffin, white	10271001	1
Euro OTC	Paraffin, white	1210006-01	8
Caelo	Paraffin, white	12337703	16
Phönix 08.04.2013	Paraffin, white	12/17-T01	1
Sanacorp	Paraffin, white	1215107	1
Doroderm GmbH/ Noweda	Paraffin, white	12115106	1
Caelo	Paraffin, white	8051303	1
Caelo	Paraffin, white	13051305	1
Caelo	Paraffin, white	12374501	5
Caelo	Paraffin, white	12115108	4
Caelo	Paraffin, white	12D19-T54-000715	3
Fagron	Paraffin, white	12/17-T01	2
Caesar & Loretz GmbH, 4...	Paraffin, white	12209210	1
Caelo	Paraffin, white	1061301	1
Caelo	Paraffin, white	13005701	8
Caelo	Paraffin, white	1210006-01	1
Gehe	Paraffin, white	277059	2
Caelo	Paraffin, white	6061302	1
Euro OTC	Paraffin, white	F602635	1
Caelo	Paraffin, white	12337707	9
Bombastus	Paraffin, white	270979	5
Phönix Gotha	Paraffin, white	270634	1
Gehe	Paraffin, white	277060	1

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Supplier	Substance	Batch	Spectra
Alliance Healthcare	Paraffin, white	12306302	1
Bombastus	Paraffin, white	271260	1
Anzag	Paraffin, white	12209204	1
Caelo	Paraffin, white	12374502	12
Bombastus	Paraffin, white	277988	2
Bombastus	Paraffin, white	277060	4
Bombastus	Paraffin, white	276968	1
Fagron	Paraffin, white	12K01-T52-000717	1
Caelo	Paraffin, white	13095601	10
Caelo	Paraffin, white	12012605	1
Caelo	Paraffin, white	11108711	1
Henry Lamotte Oils GmbH	Paraffin, white	5489700	3
Phönix	Paraffin, white	5489700	1
AHD	Paraffin, white	5489700	1
Lamotte	Paraffin, white	5215200	1
Caelo	Paraffin, white	12306202	2
Caelo	Paraffin, white	11283902	1
Caelo	Paraffin, white	12209210	1
Caelo	Paraffin, white	26061307	1
Caelo	Paraffin, white	27061301	1
Bombastus	Paraffin, white	277987	5
Caelo	Paraffin, white	12182504	1
Caelo	Paraffin, white	11104903	1
Euro OTC	Paraffin, white	1302022-01	6
Alliance Healthcare	Paraffin, white	276088	1
Bombastus	Paraffin, white	5215200	1
Caelo	Paraffin, white	10071305	1
Euro OTC	Paraffin, white	12337707	1
AHC 08.07.13 EK5,61	Paraffin, white	12374502	1
Caelo	Paraffin, white	13005712	12
Caelo	Paraffin, white	12306303	1
Bombastus	Paraffin, white	279969	5
Caelo	Paraffin, white	16071306	1
Caelo	Paraffin, white	13095602	1
Sanacorp	Paraffin, white	12374502	1
Sanacorp	Paraffin, white	12337704	2
Beiersdorf	Paraffin, white	30841410	4
Caelo	Paraffin, white	13050102	3
Caelo	Paraffin, white	10220214	1
Bombastus	Paraffin, white	3013M2549	1
Caelo	Paraffin, white	13005710	6
Caelo	Paraffin, white	1231010	1
Caelo	Paraffin, white	13130909	15
Bombastus	Paraffin, white	279970	4
Bombastus	Paraffin, white	269732	1
Caelo	Paraffin, white	100/AKD8	1
Caelo	Paraffin, white	13174901	1
Bombastus	Paraffin, white	3113Q02549	1
Caelo	Paraffin, white	13005711	12
Bombastus	Paraffin, white	277986	2
Caelo	Paraffin, white	1310909	1
Caesar/Lorenz	Paraffin, white	12337704	1
Caesar/Lorenz	Paraffin, white	12321906	1
Euro OTC	Paraffin, white	1210010-01	2
Sanacorp	Paraffin, white	12311010	1
Noweda	Paraffin, white	12337707	1
Fagron	Paraffin, white	11G11-T02	2
Bombastus	Paraffin, white	278595	1
Caelo	Paraffin, white	12337706	13
Gehe	Paraffin, white	279969	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	12321906	3
Alliance Healthcare	Paraffin, white	277444	1
Caelo	Paraffin, white	20081304	1
Gehe	Paraffin, white	279161	1
Caelo	Paraffin, white	13109010	1
Ichthyol	Paraffin, white	13A010	2
Caelo	Paraffin, white	213E-02549	1
Sanacorp	Paraffin, white	13130909	2
Bombastus	Paraffin, white	279161	6
Fagron	Paraffin, white	12D19-T54-000715	1
Caelo	Paraffin, white	10091301	1
Caelo	Paraffin, white	13028302	1
Caelo	Paraffin, white	13084902	13
Caelo	Paraffin, white	13130910	6
Phönix	Paraffin, white	277987	1
Caelo	Paraffin, white	19091308	1
Caelo	Paraffin, white	1215106	1
Caelo	Paraffin, white	13005713	4
canea, gehe	Paraffin, white	13095701	2
Caelo	Paraffin, white	26091303	1
Caelo	Paraffin, white	13005719	9
Bombastus	Paraffin, white	4013E-02549	1
Caelo	Paraffin, white	13130901	5
Caesar & Loretz GmbH, 4...	Paraffin, white	13130911	1
Caelo	Paraffin, white	8101302	1
Caelo	Paraffin, white	13130911	7
Noweda	Paraffin, white	13337706	1
AHD, 30.09.2013	Paraffin, white	279970	1
Bombastus	Paraffin, white	280452	8
Caelo	Paraffin, white	12337708	16
HerryLamotte/AHD	Paraffin, white	5098800	1
Caelo	Paraffin, white	15101308	1
Caelo	Paraffin, white	280702	1
Caelo	Paraffin, white	1310911	1
Caelo	Paraffin, white	21101306	1
Bombastus	Paraffin, white	258551	1
Phönix	Paraffin, white	277986	1
Sanacorp	Paraffin, white	12337708	1
Bombastus	Paraffin, white	6861393	1
Bombastus	Paraffin, white	282336	2
Caelo	Paraffin, white	12111307	1
Sanacorp	Paraffin, white	12031506	1
Caelo	Paraffin, white	13084906	14
Caelo	Paraffin, white	13130912	13
Fagron	Paraffin, white	12115107	1
Bombastus	Paraffin, white	276127	1
Caelo	Paraffin, white	13185502	8
Fagron	Paraffin, white	probe	1
Caelo	Paraffin, white	13130907	6
Bombstus/ Phönix	Paraffin, white	280451	1
Euro OTC	Paraffin, white	1108046-01	2
Fagron	Paraffin, white	13D02-T02-002660	1
Caelo	Paraffin, white	13084903	1
Caelo	Paraffin, white	22111306	1
Caesar & Loretz GmbH, 4...	Paraffin, white	12337706	1
Sanacorp	Paraffin, white	13084906	2
Caesar&Loretz GmbH/Anzag	Paraffin, white	12337708	1
Bombastus	Paraffin, white	278620	1
Caelo	Paraffin, white	12337709	15
Caelo	Paraffin, white	130510	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	13185504	4
Caelo	Paraffin, white	13185501	1
Bombastus	Paraffin, white	279805	1
Phönix	Paraffin, white	280451	1
Bombastus	Paraffin, white	281291	3
Fagron	Paraffin, white	12K01-T52-002659	2
Caelo	Paraffin, white	13005708	2
gehe 26.11.13	Paraffin, white	5489700	1
Fagron	Paraffin, white	12J31-T52-000963	1
Caelo	Paraffin, white	13084905	11
Caelo	Paraffin, white	13095701	5
Caelo	Paraffin, white	13005720	2
Caelo	Paraffin, white	13121303	1
Caelo	Paraffin, white	13163701	5
Phönix	Paraffin, white	281291	1
Euro OTC	Paraffin, white	1305031-01	13
Bombastu-Werke AG/Gehe	Paraffin, white	282964	3
Bombastus	Paraffin, white	282700	4
Bombastus	Paraffin, white	5213A2549	1
Caelo	Paraffin, white	13185505	1
Caelo	Paraffin, white	27121304	1
Caelo	Paraffin, white	13163602	2
Henry Lamotte Oils GmbH	Paraffin, white	5538300	2
Gehe	Paraffin, white	1210006-01	1
Caelo	Paraffin, white	1305031-01	1
Caelo	Paraffin, white	13084907	1
Fagron	Paraffin, white	12K01-T52	1
Caelo	Paraffin, white	1318504	1
Caelo	Paraffin, white	8012014D	1
Caolo/Anzag	Paraffin, white	13185505	1
Caesar/Noweda	Paraffin, white	13084905	1
Caelo	Paraffin, white	13011407	1
Hansen&Rosenthal/Phönix	Paraffin, white	1108046-01	1
Caelo	Paraffin, white	13268408	21
Bombastus	Paraffin, white	282964	2
Caelo	Paraffin, white	PV43	1
Caelo	Paraffin, white	51210195	1
Caelo	Paraffin, white	13185506	4
Caelo	Paraffin, white	10155402	1
Bombastus	Paraffin, white	282966	7
Caesar & Loretz GmbH Hi...	Paraffin, white	13095701	1
Caelo	Paraffin, white	12321905	4
Bombastus	Paraffin, white	270981	1
wolff/AHD	Paraffin, white	5538300	1
Caelo	Paraffin, white	22011401	1
Caelo	Paraffin, white	12K01-T52-002659	1
Fagron	Paraffin, white	13I19-T05-006193	1
Euro OTC	Paraffin, white	929392	1
Caelo	Paraffin, white	AKD50	1
Caelo	Paraffin, white	283949	1
Caelo	Paraffin, white	13163702	4
Caelo	Paraffin, white	13268409	13
Fagron	Paraffin, white	13/19-T05-006193	1
Bombastus	Paraffin, white	283949	6
Bombastus	Paraffin, white	282699	1
Caelo	Paraffin, white	8021401	1
Caelo	Paraffin, white	23051101	1
Caelo	Paraffin, white	2061201	1
Bombastus	Paraffin, white	281539	1
Gehe am 03.02.2014	Paraffin, white	5489700	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	13185512	9
Caelo	Paraffin, white	13338702	5
Phoenix	Paraffin, white		3
Bombastus	Paraffin, white	283873	1
Caelo	Paraffin, white	25021403	1
Caelo	Paraffin, white	13338703	13
Caelo	Paraffin, white	27021402	1
Bombastus	Paraffin, white	283951	1
Euro OTC	Paraffin, white	F603290	1
Caelo	Paraffin, white	4031406	1
Caelo	Paraffin, white	13341602	4
Caelo	Paraffin, white	11031403	1
Lamotte/ Anzag	Paraffin, white	5538300	1
Gehe am 27.2.14	Paraffin, white	12337706	1
Caelo	Paraffin, white	13185507	6
Caelo	Paraffin, white	13D02-T02-002660	1
Caelo	Paraffin, white	15031402	1
Anzag	Paraffin, white	13163701	1
Anzag	Paraffin, white	1402501	1
Caelo	Paraffin, white	13185514	2
Anzag	Paraffin, white	285231	1
Caelo	Paraffin, white	13268410	9
Caelo	Paraffin, white	14025201	10
Caelo	Paraffin, white	13185513	1
Phoenix 18.03.2014	Paraffin, white	12337709	1
Caelo	Paraffin, white	13338704	3
Caelo	Paraffin, white	30012014F	1
Sanacorp	Paraffin, white	13338712	1
Caelo	Paraffin, white	282964	1
Caelo	Paraffin, white	13341605	7
Caelo	Paraffin, white	13341606	6
AHD	Paraffin, white	13268410	2
Caelo	Paraffin, white	13268420	4
Gutenberg-Apotheke	Paraffin, white	13185502	1
Bombastus	Paraffin, white	283948	1
Caelo	Paraffin, white	13338714	7
Bombastus	Paraffin, white	285231	3
Fagron	Paraffin, white	13338703	1
Caelo	Paraffin, white	250414002	1
Phoenix	Paraffin, white	13084906	1
Phoenix am 22.04.2014	Paraffin, white	270981	1
Phoenix am 10.03.2014	Paraffin, white	13338703	1
Gehe	Paraffin, white	282966	1
Caelo	Paraffin, white	13268411	6
Gehe	Paraffin, white	286095	2
Caelo	Paraffin, white	13338712	7
Fagron	Paraffin, white	1401453	1
Bombastus	Paraffin, white	286095	3
Caelo	Paraffin, white	13338707	7
Caelo	Paraffin, white	13341608	8
Caelo	Paraffin, white	10051402	1
Caelo	Paraffin, white	12321908	4
Bombastus	Paraffin, white	2014Q2549	1
Caelo	Paraffin, white	286095	1
Sanacorp	Paraffin, white	102/AKD1	1
Sanacorp	Paraffin, white	16AKD2	1
Caelo	Paraffin, white	23051404	1
	Paraffin, white	13341606	1
Caelo	Paraffin, white	13268421	12
Caelo	Paraffin, white	5061412	1

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, white	286096	5
Caelo	Paraffin, white	282700	1
Herbasinica	Paraffin, white	13338712	1
Caelo	Paraffin, white	16061403	1
Phonix	Paraffin, white	13341604	1
Fagron	Paraffin, white	13I19-T05-006192	2
Caelo	Paraffin, white	14025101	4
Fagron	Paraffin, white	13I19-T05-008452	2
Caelo	Paraffin, white	13338710	12
Caelo	Paraffin, white	27061401	1
Hedinger/Noweda	Paraffin, white	4-219072	1
Bombastus	Paraffin, white	285309	1
Fagron	Paraffin, white	13/19-T05-006192	1
VDL;13.06.14	Paraffin, white	13268421	1
Caelo	Paraffin, white	13333101	1
Bombastus	Paraffin, white	280702	2
Sanacorp	Paraffin, white	13268420	1
Caelo	Paraffin, white	14087402	4
Phönix	Paraffin, white	13268410	1
Caelo	Paraffin, white	19071401	1
Caelo	Paraffin, white	13341612	7
Noweda	Paraffin, white	13268421	1
Caelo	Paraffin, white	13365104	3
Sanacorp 05.07.14 EK: 6...	Paraffin, white	13365104	2
Caelo	Paraffin, white	1338714	1
Berkel AHK	Paraffin, white	13338710	1
Caelo	Paraffin, white	1081409	1
henry lamotte oils gmbh	Paraffin, white	5538300	1
Euro OTC	Paraffin, white	1401018-01	2
Fagron	Paraffin, white	14C14T01	3
Bombastus	Paraffin, white	287149	5
Bombastus	Paraffin, white	287147	1
Caelo	Paraffin, white	12081404	1
Gehe	Paraffin, white	286096	1
Caelo	Paraffin, white	15081406	1
Caelo	Paraffin, white	13338713	6
Caelo	Paraffin, white	26081409	1
Euro OTC	Paraffin, white	288714	1
Caelo	Paraffin, white	13268422	4
Caelo	Paraffin, white	13268423	3
Fagron	Paraffin, white	13D02-T02-004621	1
Bombastus	Paraffin, white	285310	10
Euro OTC	Paraffin, white	1405014-01	9
Caelo	Paraffin, white	14087404	10
Caelo	Paraffin, white	jjjjjj	1
Caelo	Paraffin, white	11091402	1
Fagron	Paraffin, white	14201001	1
Caelo	Paraffin, white	13365103	2
Caelo	Paraffin, white	13380703	12
Fagron	Paraffin, white	13h19-T05-008453	1
Caelo	Paraffin, white	14087403	2
Bombastus	Paraffin, white	288714	4
Sanacorp	Paraffin, white		1
Caelo	Paraffin, white	26091406	1
Caelo	Paraffin, white	P159/14	1
Caelo	Paraffin, white	14087406	2
Berkel AHK	Paraffin, white	14087403	1
Caelo	Paraffin, white	13338711	1
Caelo	Paraffin, white	14124703	2
Caelo	Paraffin, white	17101410	1

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, white	288716	6
Caelo	Paraffin, white	13380704	5
Gehe	Paraffin, white	288714	2
Bombastus	Paraffin, white	287148	2
Bombastus	Paraffin, white	289344	3
Caelo	Paraffin, white	14087405	3
Fagron	Paraffin, white	14E30-T07-012096	4
Henry Lamotte GMBH/AHD	Paraffin, white	5691100	2
Fagron	Paraffin, white	14E30-T07-012095	1
Caelo	Paraffin, white	14124707	16
Caelo	Paraffin, white	133380703	1
Caelo	Paraffin, white	22111401	1
Caelo	Paraffin, white	14201001	2
Caelo	Paraffin, white	25112014A	1
Caelo	Paraffin, white	14124704	5
Phoenix	Paraffin, white	13268423	1
Caelo	Paraffin, white	14087409	3
Beiersdorf/Gehe	Paraffin, white	1401017-01	1
Caelo	Paraffin, white	14124702	1
Bombastus	Paraffin, white	288717	3
Caelo	Paraffin, white	13380707	11
Caelo	Paraffin, white	5121403	1
Caelo	Paraffin, white	14200901	4
Bombastus	Paraffin, white	288715	3
Caelo	Paraffin, white	13380702	4
Euro OTC	Paraffin, white	1401017-01	3
Caelo	Paraffin, white	14087408	2
Caelo	Paraffin, white	15121407	1
Bombastus	Paraffin, white	290271	4
Caelo	Paraffin, white	14087410	6
Euro OTC	Paraffin, white	1409009-01	3
Caelo	Paraffin, white	14124708	3
Caelo	Paraffin, white	30121427	1
Caelo	Paraffin, white	14324301	7
Phönix Gotha	Paraffin, white	14087402	1
Fagron	Paraffin, white	13119-T05-008452	1
cae	Paraffin, white	13380706	1
Fagron	Paraffin, white	14E30-T07-014285	8
Fagron	Paraffin, white	790619-013771	1
Caelo	Paraffin, white	13341604	1
Caelo	Paraffin, white	13380706	3
Caelo	Paraffin, white	14124707	1
Sanacorp	Paraffin, white	14087410	1
Caelo	Paraffin, white	22011510	1
Caelo	Paraffin, white	6861393	1
Fagron	Paraffin, white	13/19-T05-008452	1
Caelo	Paraffin, white	14189006	6
Caelo	Paraffin, white	11021510	1
Bombastus	Paraffin, white	291318	14
Caelo	Paraffin, white	14189003	2
Fagron	Paraffin, white	290441	1
Caelo	Paraffin, white	14189002	6
Caelo	Paraffin, white	13380719	7
Caelo	Paraffin, white	13380708	11
Caelo	Paraffin, white	14189004	4
Caelo	Paraffin, white	50115/1	1
Bombastus	Paraffin, white	290441	6
Bombastus	Paraffin, white	2888717	1
Caelo	Paraffin, white	7031502	1
Caelo	Paraffin, white	14189007	6

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	14324402	1
Sanacorp	Paraffin, white	13380709	1
Caelo	Paraffin, white	13380709	7
Caelo	Paraffin, white	14324601	2
Sanacorp	Paraffin, white	13380707	1
Fagron	Paraffin, white	14E30-T07	3
Caelo	Paraffin, white	20031518	1
Bombastus	Paraffin, white	291319	2
Caelo	Paraffin, white	14189018	7
Caelo	Paraffin, white	13380720	25
Bombastus	Paraffin, white	290714	3
Caelo	Paraffin, white	15060003	13
Euro OTC	Paraffin, white	1501037-01	4
Caelo	Paraffin, white	18041504	1
Caelo	Paraffin, white	14124706	3
Phönix Gotha	Paraffin, white	289344	1
Caelo	Paraffin, white	28041508	1
Caelo	Paraffin, white	14248403	2
Caelo	Paraffin, white	15060005	9
Caelo	Paraffin, white	290441	2
Caelo	Paraffin, white	14301804	6
Caelo	Paraffin, white	13380721	16
Bombastus	Paraffin, white	292219	2
Gehe	Paraffin, white	291318	1
Bombastus	Paraffin, white	292220	4
Caelo	Paraffin, white	14124705	1
Caelo	Paraffin, white	14189019	1
Bombastus	Paraffin, white	14087402	1
Fagron	Paraffin, white	14189012	2
Caelo	Paraffin, white	21051509	1
Caelo	Paraffin, white	14189008	2
Caelo	Paraffin, white	15060006	4
Caelo	Paraffin, white	4051502	1
Henry Lamotte Oils GmbH	Paraffin, white	5691100	1
Caelo	Paraffin, white	14189012	2
Caelo	Paraffin, white	15060005	1
Sanacorp	Paraffin, white	106/AKD4	1
Caelo	Paraffin, white	15060004	6
Fagron	Paraffin, white	14E30-T07-012094	1
Caelo	Paraffin, white	292220	1
Caelo	Paraffin, white	14301805	5
Caelo	Paraffin, white	20061503	1
Caelo	Paraffin, white	15060007	2
Gehe 20.06.15/euro	Paraffin, white	13380709	1
Fagron	Paraffin, white	14F30-T07-014285	1
Caelo	Paraffin, white	15050005	1
Caelo	Paraffin, white	15060014	12
Fagron	Paraffin, white	14J03T-03-020831	1
Fagron	Paraffin, white	291318	2
Fagron	Paraffin, white	14e30-t07-012095	1
Caelo	Paraffin, white	20071505	1
Caelo	Paraffin, white	15060008	3
Caelo	Paraffin, white	15204301	10
Caelo	Paraffin, white	2948852	1
Caelo	Paraffin, white	12081504	1
Caelo	Paraffin, white	15204302	9
Caelo	Paraffin, white	15060012	4
Caelo	Paraffin, white	14347302	10
Hedinger	Paraffin, white	15060004	1
Sanacorp	Paraffin, white	107/AKD6	1

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Supplier	Substance	Batch	Spectra
Fagron	Paraffin, white	14189019	1
Caelo	Paraffin, white	15050002	8
Caelo	Paraffin, white	15204303	21
Euro OTC	Paraffin, white	1505017-01	6
Bombastus	Paraffin, white	294852	4
Caelo	Paraffin, white	4091517	1
Phönix Gotha	Paraffin, white	15060012	1
Caelo	Paraffin, white	14092015B	1
Caelo	Paraffin, white	15060011	2
Fagron	Paraffin, white	14j03-t003-020827	1
Caelo	Paraffin, white	15060013	4
Anzag/Henry Lamotte	Paraffin, white	15060014	1
Caelo	Paraffin, white	15162503	7
Caelo	Paraffin, white	15162501	2
Bombastus	Paraffin, white	295301	7
Bombastus	Paraffin, white	295265	2
Bombastus	Paraffin, white	295344	4
Gehe	Paraffin, white	15060012	1
Caelo	Paraffin, white	15162504	7
Caelo	Paraffin, white	15050003	1
Fagron	Paraffin, white	14j03-to3-020827	1
Caelo	Paraffin, white	790619-021159	2
Caelo	Paraffin, white	14201003	1
Caelo	Paraffin, white	15219903	3
Euro OTC	Paraffin, white	1509019-01	7
Fagron	Paraffin, white	14j03-t03020831	1
Caelo	Paraffin, white	15162505	11
Caelo	Paraffin, white	15278805	3
Caelo	Paraffin, white	15204304	6
Caelo	Paraffin, white	295300	1
Noweda	Paraffin, white	13380721	1
Lamotte	Paraffin, white	6000083007	1
Euro OTC	Paraffin, white	150901901	1
Bombastus	Paraffin, white	12/2019	1
Caelo	Paraffin, white	14355806	10
Caelo	Paraffin, white	15330502	1
Bombastus	Paraffin, white	293553	2
Bombastus	Paraffin, white	297282	5
Fagron	Paraffin, white	14J03-T03-020831	2
Fagron	Paraffin, white	14J03-T03	1
ACM	Paraffin, white	KNC1628J15	1
Gehe	Paraffin, white	297282	1
Caelo	Paraffin, white	15162507	9
Caelo	Paraffin, white	6000083007	2
Fagron	Paraffin, white	14I03-T03-020831	1
Henry Lamotte	Paraffin, white	1509019-01	1
Bombastus	Paraffin, white	294851	1
Caelo	Paraffin, white	15162519	1
Caelo	Paraffin, white	297283	1
Bambustus/Noweda	Paraffin, white	296854	4
Bambustus/Noweda	Paraffin, white	295265	1
Caelo	Paraffin, white	15162508	3
Gehe	Paraffin, white	293553	1
Euro OTC	Paraffin, white	297283	1
Caelo	Paraffin, white	15050004	3
Caelo	Paraffin, white	15336808	3
Bombastus	Paraffin, white	298427	2
Sanacorp	Paraffin, white	15204301	1
Caelo	Paraffin, white	15162512	4
Bombastus	Paraffin, white	297283	8

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	15278804	9
Bombastus	Paraffin, white		1
Caelo	Paraffin, white	15339806	14
Caelo	Paraffin, white	15336810	4
Caelo	Paraffin, white	15278808	1
Henry Lamotte Oils GmbH	Paraffin, white	6000083007	2
Bombastus	Paraffin, white	298599	13
Caelo	Paraffin, white	15162506	1
Caelo	Paraffin, white	15349701	5
Noweda	Paraffin, white	15339806	1
Euro OTC	Paraffin, white	15339806	1
Caelo	Paraffin, white	15330401	1
Fagron	Paraffin, white	14J03-020827	1
Sana 21.03.16 EK 4,96	Paraffin, white	15336810	1
Caelo	Paraffin, white	15278801	2
gehe	Paraffin, white	15339806	1
Caelo	Paraffin, white	1509019-01	1
Caesar & Loretz/Noweda	Paraffin, white	15339806	1
Caelo	Paraffin, white	15339807	14
Caelo	Paraffin, white	15330601	3
Caelo	Paraffin, white	15349702	8
Bombastus	Paraffin, white	299469	6
Fagron	Paraffin, white	14J03T03020831	1
Caelo	Paraffin, white	15278809	2
Bombastus	Paraffin, white	299468	2
Caelo	Paraffin, white	15336809	6
Caelo	Paraffin, white	15349706	3
Caelo	Paraffin, white	15349705	1
Euro OTC	Paraffin, white	1602009-01	4
Caelo	Paraffin, white	15339801	1
Caelo	Paraffin, white	15349709	3
Caelo	Paraffin, white	15339808	14
Caelo	Paraffin, white	108/AKD12	1
Caelo	Paraffin, white	15339805	3
Caelo	Paraffin, white	15349708	6
Caelo	Paraffin, white	323915339805	1
Caelo	Paraffin, white	15355806	1
Fagron	Paraffin, white	14J03-T03-020827	5
Bombastus	Paraffin, white	300120	11
Caelo	Paraffin, white	15441501	3
Phoenix	Paraffin, white	15349706	1
Caesar & Loretz	Paraffin, white	15339808	1
Caelo	Paraffin, white	299469	1
Caelo	Paraffin, white	16029211	9
Caelo	Paraffin, white	15441505	4
Bombastus	Paraffin, white	2999469	1
Bombastus	Paraffin, white	302037	17
Caelo	Paraffin, white	16138003	18
Ebert & Jacobi 19.07...	Paraffin, white	1509019-01	1
Caelo	Paraffin, white	16029210	2
Sanacorp, 21.07.2016	Paraffin, white	1605019-01	2
Euro OTC	Paraffin, white	302037	1
Caelo	Paraffin, white	16029212	1
Fagron	Paraffin, white	14L11-T03-027930	6
Bombatus/Gehe	Paraffin, white	302037	2
Caelo	Paraffin, white	16029208	1
Phoenix	Paraffin, white	16029210	1
Noweda	Paraffin, white	16138004	1
Euroo/Gehe	Paraffin, white	1602009-01	1
Caelo	Paraffin, white	16029219	4

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	16029213	2
Euro OTC	Paraffin, white	1605019-01	5
Euro OTC	Paraffin, white	16138004	1
WE:Phönix 02.09.2016 E...	Paraffin, white	302037	2
Anza	Paraffin, white	15162519	1
sanacorp, 6,08EUR, 29.08...	Paraffin, white	16138003	1
Caelo	Paraffin, white	16029221	6
Anzag	Paraffin, white	15349706	1
Caelo	Paraffin, white	16029222	4
Caelo	Paraffin, white	1544150	1
Caelo	Paraffin, white	15349707	4
Fragon/Phoenix	Paraffin, white	14J03-T03-020831	1
Ichthyol/Phönix	Paraffin, white	16138003	1
phönix	Paraffin, white	16138003	1
Caelo	Paraffin, white	15441506	1
Fagron	Paraffin, white	14j03-t03-020827	1
Ichthyol-Gesellschaft	Paraffin, white	160829VA	1
Caelo	Paraffin, white	16227403	5
Euro OTC	Paraffin, white	160519-01	1
Caelo	Paraffin, white	16138004	15
Lamotte 001	Paraffin, white	5691100	1
Lamotte	Paraffin, white	6002062001	2
Caelo	Paraffin, white	161338003	1
Bombastus	Paraffin, white	304124	11
Bombastus	Paraffin, white	300119	3
Caelo	Paraffin, white	16227401	2
Caelo	Paraffin, white	16029220	7
Caelo	Paraffin, white	16181902	13
Bambynek/Gehe	Paraffin, white	303786	1
Caelo	Paraffin, white	1544159	1
Caelo	Paraffin, white	16181901	5
Caelo	Paraffin, white	16227402	6
Celo	Paraffin, white	16181902	2
Bomb/Gehe	Paraffin, white	304124	1
Caelo	Paraffin, white	1111111	1
Caelo	Paraffin, white	16227404	16
Caelo	Paraffin, white	15441502	2
Caelo	Paraffin, white	6002062001	1
Caesar & Loretz GmbH Hi...	Paraffin, white	16227403	1
PHÖNIX	Paraffin, white	16227402	1
Alte Apotheke	Paraffin, white	16181902	1
Caelo	Paraffin, white	16224704	1
Caelo	Paraffin, white	16227405	8
Caelo	Paraffin, white	16227406	11
Caelo	Paraffin, white	15441504	7
Caelo	Paraffin, white	16181904	13
Bombastus	Paraffin, white	306020	14
Caelo	Paraffin, white	16181903	11
Fagron	Paraffin, white	27930	1
Caelo	Paraffin, white	170203VA/16181901	1
Caelo	Paraffin, white	15441509	1
Caelo	Paraffin, white	16029220/1170117	1
Caelo	Paraffin, white	16272001	1
Caelo	Paraffin, white	303786	1
HenryLamotte	Paraffin, white	6002062001	3
Caelo	Paraffin, white	301424	1
Euro OTC	Paraffin, white	1608041-01	3
Caelo	Paraffin, white	15441511	4
Caelo	Paraffin, white	16082701	2
Caelo	Paraffin, white	306020	2

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	11031707	1
Sanacorp	Paraffin, white	15441504	1
Caelo	Paraffin, white	21031701	1
Gehe	Paraffin, white	306019	1
Caelo	Paraffin, white	16272003	3
Caelo	Paraffin, white	16227411	6
Caelo	Paraffin, white	16272002	5
Caelo	Paraffin, white	15441514	4
Bombastus	Paraffin, white	304125	1
Sanacorp,04.04.17, 6,08EUR	Paraffin, white	16181904	1
Caelo	Paraffin, white	8041703	1
Caelo	Paraffin, white	16227412	10
Sanacorp 37.03.2017 ek:...	Paraffin, white	16272002	1
Caelo	Paraffin, white	1101559	1
Caelo	Paraffin, white	16161901	1
Caelo	Paraffin, white	26041702	1
Caesar&Loretz GmbH,27.0...	Paraffin, white	16227405	1
Henry Lamotte Oils	Paraffin, white	16181904	1
GEHE	Paraffin, white	300119	1
Caelo	Paraffin, white	16138002	1
Fagron	Paraffin, white	162274112	4
Allianz Healthcare	Paraffin, white	16181904	1
Bombastus	Paraffin, white	305140	1
Caelo	Paraffin, white	11051702	1
Caelo	Paraffin, white	16272004	3
Fagron	Paraffin, white	14L11-T03-027931	1
Caelo	Paraffin, white	16326702	23
Caesar & Loretz/Noweda	Paraffin, white	16326702	1
Caelo	Paraffin, white	15441510	1
Euro OTC	Paraffin, white	1612007-01	2
Bombastus	Paraffin, white	298600	1
Bombastus	Paraffin, white	307661	16
Caelo	Paraffin, white	10061715	1
Gehe	Paraffin, white	60081104	1
Euro OTC	Paraffin, white	16272003	1
Caelo	Paraffin, white	16326702-20170704Ma3	1
Caelo	Paraffin, white	3071709	1
Caelo	Paraffin, white	16272010	4
	Paraffin, white	162720105299	1
Cealo/AHD	Paraffin, white	16272004	1
Caelo	Paraffin, white	307661	1
Euro OTC	Paraffin, white	307661	1
Fagron	Paraffin, white	16272004	3
Caelo	Paraffin, white	16272017	14
Bombastus	Paraffin, white	308197	9
Caelo	Paraffin, white	1612007-01	2
Caelo	Paraffin, white	16241105	2
Bomastus/Phönix	Paraffin, white	307661	1
Caelo	Paraffin, white	28071709	1
apomix/Noweda	Paraffin, white	306020	1
Caelo	Paraffin, white	16872018	1
Sanacorp	Paraffin, white	16227412	1
Noweda	Paraffin, white	307661	1
Fagron	Paraffin, white	306019	2
Anza	Paraffin, white	16181901	1
Caelo	Paraffin, white	26081705	1
Caelo	Paraffin, white	3091702	1
Caelo	Paraffin, white	15441515	1
Caelo	Paraffin, white	16272008	2
Bombastus	Paraffin, white	111967	1

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Supplier	Substance	Batch	Spectra
Pharmachem GmbH	Paraffin, white	1038202	1
Caelo	Paraffin, white	16272009	1
Caelo	Paraffin, white	17038202	8
Caelo	Paraffin, white	16271810	2
Bombastus	Paraffin, white	309122	3
Henry Lamotte/ AHD	Paraffin, white	6002062001	1
Fagron	Paraffin, white	16L27-T01-042281	2
Kehr	Paraffin, white	17038202	1
Caelo	Paraffin, white	17038203	7
Caelo	Paraffin, white	30091701	1
Caelo	Paraffin, white	16181804	1
Caelo	Paraffin, white	16326707	2
Bombastus	Paraffin, white	19101701	1
Caelo	Paraffin, white	23101702	1
Caelo	Paraffin, white	17106001	9
Bombastus	Paraffin, white	309564	9
Caelo	Paraffin, white	11111704	1
Caelo	Paraffin, white	171114VA/16241105	1
Caelo	Paraffin, white	1672017	1
Caelo	Paraffin, white	17038204	3
Caelo	Paraffin, white	17038201	2
Noweda	Paraffin, white	16272018	1
Bombastus	Paraffin, white	309563	2
Caelo	Paraffin, white	170382045420	1
Caelo	Paraffin, white	17038206	1
Caelo	Paraffin, white	2121704	1
Bombastus	Paraffin, white	17038204	1
Caelo	Paraffin, white	17052001	4
Caelo	Paraffin, white	17038213	2
Caelo	Paraffin, white	17038212	7
Caelo	Paraffin, white	17106002	10
Bombastus	Paraffin, white	17000584	7
Caelo	Paraffin, white	23121701	1
Sanacorp	Paraffin, white	17106002	1
Caelo	Paraffin, white	14J03-Z03-020829	1
Caelo	Paraffin, white	17038215	3
Caelo	Paraffin, white	17000584	2
AHD	Paraffin, white	16326706	1
Fagron	Paraffin, white	17052001	1
Sanacorp E.K:5,64 -100...	Paraffin, white	309564	1
Caelo	Paraffin, white	26011805	1
Euro OTC	Paraffin, white	1709016-01	1
Caelo	Paraffin, white	10021803	1
chaelo/gehe	Paraffin, white	17106002	1
Caelo	Paraffin, white	17038219	6
Phoenix	Paraffin, white	16326706	1
Caelo	Paraffin, white	311259	1
Bionorica Ethics	Paraffin, white	311259	1
Fagron	Paraffin, white	16L27-T01-042282	1
Bombastus	Paraffin, white	60081102	1
AHD	Paraffin, white	17106004	3
Bombastus	Paraffin, white	311259	5
Caelo	Paraffin, white	17052003	1
Caelo	Paraffin, white	15031806	1
Fiebig	Paraffin, white	17106002	1
Caelo	Paraffin, white	15359105	4
Caelo	Paraffin, white	16271807	1
Euro/Phönix	Paraffin, white	17347901	3
Caelo	Paraffin, white	17204203	1
EuRho/Noweda	Paraffin, white	1705015-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, white	17204201	19
Sanacorp	Paraffin, white	17204209	1
Caelo	Paraffin, white	17350004	4
Caelo	Paraffin, white	17106005	14
Caelo	Paraffin, white	17347901	2
Caelo	Paraffin, white	17106008	1
Lamotte	Paraffin, white	8002875007	1
Caelo	Paraffin, white	12041801	1
Sanacorp	Paraffin, white	309563	1
AHD	Paraffin, white	17106005	2
Caelo	Paraffin, white	17347901/2110418	1
Caelo	Paraffin, white	3051811	1
Bombastus	Paraffin, white	18000101	9
Euro OTC	Paraffin, white	1712008-01	2
Caelo	Paraffin, white	17560004	1
Bombastus	Paraffin, white	18002117	7
Caelo	Paraffin, white	17350003	1
Henry Lamotte	Paraffin, white	8002875007	1
Caelo	Paraffin, white	25051801	1
Caelo	Paraffin, white	1720401	1
Caelo	Paraffin, white	17106004	2
Caelo	Paraffin, white	17347801	5
Caelo	Paraffin, white	6061801	1
Caelo	Paraffin, white	7061802	1
Caelo	Paraffin, white	17204209	1
Caesar & Loretz/ Noweda	Paraffin, white	1710005	1
Caelo	Paraffin, white	29061803	1
Fagron	Paraffin, white	1166979	1
Caelo	Paraffin, white	17052010	6
Bomastus-Werke AG	Paraffin, white	18002117	1
Caelo	Paraffin, white	17350005	2
AHD	Paraffin, white	17347803	1
Sanacorp	Paraffin, white	17204201	1
Caelo	Paraffin, white	1710650	1
Caelo	Paraffin, white	30081813	1
Caelo	Paraffin, white	17350007	1
Sanacorp	Paraffin, white	16181907	1
Caelo	Paraffin, white	16181907	4
Caelo	Paraffin, white	22091803	1
Euro OTC	Paraffin, white	17347802	1
Caelo	Paraffin, white	1704209-1703824	1
Caelo	Paraffin, white	17350013	3
Caelo	Paraffin, white	17350006	1
Caelo	Paraffin, white	19101810	1
Bombastus	Paraffin, white	18003484	2
Caelo	Paraffin, white	17350019	1
Caelo	Paraffin, white	17350016	2
Caelo	Paraffin, white	17347802	1
Caelo	Paraffin, white	17350017	3
Caelo	Paraffin, white	17347802-V20181115Ma	1
Apo Ident/ Noweda	Paraffin, white	16326707	1
Caelo	Paraffin, white	18006401	4
Fagron	Paraffin, white	17L22-T05-056230	1
Caelo	Paraffin, white	17111801	1
Caelo	Paraffin, white	5121803	1
Fagron	Paraffin, white	18005001	1
Caelo	Paraffin, white	17350014	1
Sanacorp	Paraffin, white	18174301	1
Caelo	Paraffin, white	18174301	3
Noweda/ Bombatus	Paraffin, white	18003484	1

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Supplier	Substance	Batch	Spectra
Audor Pharma	Paraffin, white	18174302	1
Caelo	Paraffin, white	19121801	1
Caelo	Paraffin, white	18174304	2
Caelo	Paraffin, white	18006406	1
Caelo	Paraffin, white	17L22-T05-056478	1
Bombastus	Paraffin, white	18005698	1
Caelo	Paraffin, white	2021901	1
Caesar & Loretz GmbH	Paraffin, white	18174301	1
Caelo	Paraffin, white	18174311	1
Caelo	Paraffin, white	18005016	1
Caelo	Eye paraffin	15441502	19
Caelo	Eye paraffin	14124703	6
Caelo	Eye paraffin	13338711	3
Phoenix	Eye paraffin	13338713	2
Caelo	Eye paraffin	13338713	6
Caelo	Eye paraffin	20101401	1
Caelo	Eye paraffin	14124707	14
Caelo	Eye paraffin	29101401	1
Caelo	Eye paraffin	13338707	1
Caelo	Eye paraffin	14124704	7
Caelo	Eye paraffin	1412703	1
Caelo	Eye paraffin	19/AKD2	1
Caelo	Eye paraffin	13338710	1
Sanacorp	Eye paraffin	14124704	1
Caelo	Eye paraffin	5011507	1
Caelo	Eye paraffin	14124708	5
Caelo	Eye paraffin	14124705	6
Caelo	Eye paraffin	6021505	1
Caelo	Eye paraffin	1424704	1
Phoenix Goettin	Eye paraffin	14124704	1
Caelo	Eye paraffin	24031503	1
Gehe	Eye paraffin	14124706	1
Caelo	Eye paraffin	14124706	6
Caelo	Eye paraffin	14301804	14
Fagron	Eye paraffin	790619-013771	1
Caelo	Eye paraffin	15050003	13
Caelo	Eye paraffin	15050005	6
Caelo	Eye paraffin	14301805	6
Sanacorp	Eye paraffin	14124705	1
Caelo	Eye paraffin	19051504	1
Sanacorp	Eye paraffin	19/AKD4	1
Caelo	Eye paraffin	15050002	29
Caelo	Eye paraffin	31071502	1
Caelo	Eye paraffin	1505003	1
Caesar & Loretz GmbH / ...	Eye paraffin	14301804	1
Caelo	Eye paraffin	14301806	1
Caelo/ Noweda	Eye paraffin	14301804	1
Caelo	Eye paraffin	15278805	12
Caelo	Eye paraffin	15050004	8
Caelo	Eye paraffin	15050002	1
Caelo	Eye paraffin	1505002	2
Caelo	Eye paraffin	19/AKD7	1
Caesar & Loretz/Noweda	Eye paraffin	150500004	1
Caelo	Eye paraffin	15278804	13
Caelo	Eye paraffin	15278801	17
Caelo	Eye paraffin	15050007	4
Caelo	Eye paraffin	152788	2
Fagron	Eye paraffin	760619-021159	1
Fagron	Eye paraffin	790619-021159	1
Caelo	Eye paraffin	15278808	5

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Supplier	Substance	Batch	Spectra
Sanacorp	Eye paraffin		1
Caelo	Eye paraffin	15278801/20160309/5	1
Caelo	Eye paraffin	15278809	8
Caelo	Eye paraffin		3
Caelo	Eye paraffin	152778809	1
Beiersdorf AG	Eye paraffin	15441502	1
Caelo	Eye paraffin	15441501	14
Caelo	Eye paraffin	1527880	1
Ebert & Jacobi 31.05...	Eye paraffin	15278809	1
Caelo	Eye paraffin	15441505	22
Ebert u. Jacobi 20.07...	Eye paraffin	15441505	1
Caelo	Eye paraffin	19/AKD13	1
Caelo	Eye paraffin	154415	2
Caelo	Eye paraffin	15278803	2
Caelo	Eye paraffin	15441506	6
Caelo	Eye paraffin	160427VA0	1
Caelo	Eye paraffin	15441509	23
Caelo	Eye paraffin	1578809	1
Caelo	Eye paraffin	15441504	22
Gehe	Eye paraffin	15441509	1
Caelo	Eye paraffin	13338702	1
Caeolo/Noweda	Eye paraffin	15441504	1
Caelo	Eye paraffin	14551510	1
Caelo	Eye paraffin	15441510	10
Caelo	Eye paraffin	15441514	27
Caelo	Eye paraffin	15441511	19
phönix	Eye paraffin	15441514	1
Caelo	Eye paraffin	1544111	1
Caelo	Eye paraffin	15278803/170314VA	1
Caelo	Eye paraffin	15441414	1
Caelo	Eye paraffin	16121502	1
Gehe	Eye paraffin	15441514	2
Klenk	Eye paraffin	15441514	2
Caelo	Eye paraffin	15278802	2
Fagron	Eye paraffin	15441514	2
Noweda	Eye paraffin	15441510	2
Caelo	Eye paraffin	1544514	2
Caelo	Eye paraffin	17061704	1
Gehe	Eye paraffin	15441511	1
Caeolo	Eye paraffin	15441514	1
Caelo	Eye paraffin	16271810	20
Euro OTC	Eye paraffin	15441514	1
Finteler Apotheke	Eye paraffin	16271807	2
Caelo	Eye paraffin	16271807	14
Sanacorp	Eye paraffin	16271807	3
Caelo	Eye paraffin	15441515	3
Caelo	Eye paraffin	3210-16271807	1
Noweda	Eye paraffin	16271807	1
Caelo	Eye paraffin	171123VPA/16271808	1
Sanacorp	Eye paraffin	16271810	1
Caelo	Eye paraffin	1627810	1
Caelo	Eye paraffin	17052001	19
Caelo	Eye paraffin	18121707	1
Caelo	Eye paraffin	10271807	1
Caelo	Eye paraffin	170520	1
Caelo	Eye paraffin	16096913	2
Fiebig	Eye paraffin	17052001	2
Caelo	Eye paraffin	17052008	8
Caelo	Eye paraffin	180206AV/17052002	1
Caelo	Eye paraffin	16271808	2

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Supplier	Substance	Batch	Spectra
Sanacorp	Eye paraffin	17052001	1
Phoenix/Cealo	Eye paraffin	15441504	1
Caelo	Eye paraffin	17052003	9
Caelo	Eye paraffin	17052009	2
Kehr	Eye paraffin	17052010	1
Caelo	Eye paraffin	17052007	1
Caelo	Eye paraffin	10752008	1
Sanacorp	Eye paraffin	17052010	2
Caelo	Eye paraffin	3051809	1
Caelo	Eye paraffin	17342001	1
Bombastus	Eye paraffin	16271810	1
Caelo	Eye paraffin	23051817	1
Caelo	Eye paraffin	17052010	9
Caelo	Eye paraffin	17052012	7
Caelo	Eye paraffin	23061813	1
Sanacorp	Eye paraffin	17052003	2
Caelo	Eye paraffin	173420055675	1
Caelo	Eye paraffin	17342005	3
Caelo	Eye paraffin	17345005	1
Cealo/ Alliance	Eye paraffin	17342005	1
Caelo	Eye paraffin	17111804	1
Caelo	Eye paraffin	17342006	1
Caelo	Eye paraffin	17342014	1
Caelo	Eye paraffin	17342007	1
Ichthyol	Unguentum Cordes®	11A150	1
Ichthyol	Unguentum Cordes®	11A120	1
Caelo	Unguentum Cordes®	11A162	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes®	11A122	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes®	11A162	1
Caelo	Unguentum Cordes®	11A118	2
Ichthyol Gesellschaft C...	Unguentum Cordes®	11A171	1
Ichthyol	Unguentum Cordes®	11A153	1
Gehe	Unguentum Cordes®	11A223	2
Ichthyol-Gesellschaft	Unguentum Cordes®	10A026	1
Sanacorp/ Sanova	Unguentum Cordes®	11A187	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	11A233	1
Sanova	Unguentum Cordes®	11A040	1
IchthyolAnzag 10.05.2012	Unguentum Cordes®	11A234	1
Ichthyol Gesellschaft	Unguentum Cordes®	11A234	1
CIchthyol/K	Unguentum Cordes®	11A199	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A041	1
Noweda	Unguentum Cordes®	11a199	1
Gehe	Unguentum Cordes®	11A161	1
Gehe	Unguentum Cordes®	12A054	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A054	1
Ichthyol/Krieger	Unguentum Cordes®	11A146	1
Gehe	Unguentum Cordes®	11A234	1
Ichthyol/Krieger	Unguentum Cordes®	11A202	1
Gehe	Unguentum Cordes®	12A056	2
Ichthyol-Gesellschaft/Ph...	Unguentum Cordes®	12A058	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A058	1
Ichthyol 004	Unguentum Cordes®	12A059	1
ICHTHYOL-GES/GEHE	Unguentum Cordes®	11A040	1
Ichthyol/Anzag	Unguentum Cordes®	12A055	1
Caelo	Unguentum Cordes®	11A202	1
Caelo	Unguentum Cordes®	12A060	1
Ichthyol Gesellschaft	Unguentum Cordes®	12A058	1
Ichthyol-Gesellschaft	Unguentum Cordes®	11A085	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A077	1
Caelo	Unguentum Cordes®	12A022	1

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Supplier	Substance	Batch	Spectra
Caelo	Unguentum Cordes [®]	12A056	1
Ichthyol / Noweda	Unguentum Cordes [®]	11A146	1
ICHTHYOL-GES/GEHE	Unguentum Cordes [®]	10A016	1
Ichthyol-Gesellschaft / K	Unguentum Cordes [®]	11A202	1
Caelo	Unguentum Cordes [®]	12A021	1
ichthyol- gesellschaft ...	Unguentum Cordes [®]	11A202	1
Ichthyol/Otto	Unguentum Cordes [®]	12A020	1
Phoenix	Unguentum Cordes [®]	12A056	1
Ichthyol	Unguentum Cordes [®]	11A085	3
Ichthyol	Unguentum Cordes [®]	26101201	1
Ichthyol	Unguentum Cordes [®]	12A078	1
Anzag	Unguentum Cordes [®]	12A055	1
Ichthyol / Gehe	Unguentum Cordes [®]	11A202	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A079	1
Anzag 29.10.12	Unguentum Cordes [®]	12A007	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A079	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A060	2
Ichthyol Gesellschaft	Unguentum Cordes [®]	12A087	1
Gehe	Unguentum Cordes [®]	12A087	1
Caelo	Unguentum Cordes [®]	12A078	1
Gehe	Unguentum Cordes [®]	12A079	1
Phoenix	Unguentum Cordes [®]	12A087	1
Ichthyol/Noweda	Unguentum Cordes [®]	12A064	1
Caelo	Unguentum Cordes [®]	9A163	1
Noweda/ Ichtyol	Unguentum Cordes [®]	12A124	1
Anzag 26.09.2012	Unguentum Cordes [®]	11A202	1
ichthyol,Anzag	Unguentum Cordes [®]	12A124	1
Ichthyol/Gehe	Unguentum Cordes [®]	11A043	1
ichthyol	Unguentum Cordes [®]	12A129	1
Ichthyol	Unguentum Cordes [®]	14121203	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A129	1
Gehe	Unguentum Cordes [®]	12A075	1
Ichthyol	Unguentum Cordes [®]	12A120	1
Ichthyol/Anzag	Unguentum Cordes [®]	12A124	1
Phönix	Unguentum Cordes [®]	12A131	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A102	1
ichthyol	Unguentum Cordes [®]	20201112-1	1
Ichthyol -Gesellschaft	Unguentum Cordes [®]	12A064	1
Caelo	Unguentum Cordes [®]	12A130	1
Ichthyol,Noweda	Unguentum Cordes [®]	12A142	1
Ichthyol/Otto	Unguentum Cordes [®]	12A130	2
ichthyol	Unguentum Cordes [®]	12A060	1
Ichthiol	Unguentum Cordes [®]	2112212532	1
Ichthyol / Gehe	Unguentum Cordes [®]	12A102	1
Ichthyl Phönix	Unguentum Cordes [®]	12A129	1
Phönix	Unguentum Cordes [®]	12A129	1
Ichthyol	Unguentum Cordes [®]	12A064	1
Ichthyol-Gesellschaft / G	Unguentum Cordes [®]	12A064	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A130	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	12A130	1
Ichthyol	Unguentum Cordes [®]	12A131	2
Stumpf/Ichthyol	Unguentum Cordes [®]	12A115	1
Ichthyol - Gesellschaft	Unguentum Cordes [®]	11A085	1
ichthyol	Unguentum Cordes [®]	12A102	1
Ichthyol	Unguentum Cordes [®]	12A139	1
Gehe	Unguentum Cordes [®]	12A124	1
Caelo	Unguentum Cordes [®]	12A131	1
Ichthyol	Unguentum Cordes [®]	12a145	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A115	2
Caelo	Unguentum Cordes [®]	12A141	1

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Supplier	Substance	Batch	Spectra
Ichthyol/N/14.02.13	Unguentum Cordes®	12A131	1
Ichthyol Gesellschaft	Unguentum Cordes®	11A202	1
Ichthyol-Gesellschaft / G	Unguentum Cordes®	12A123	1
Ichthyol	Unguentum Cordes®	12A115	2
Ichthyol/ Noweda	Unguentum Cordes®	12A053	1
Anzag	Unguentum Cordes®	12A115	1
Ichthyol/Otto	Unguentum Cordes®	12A130	1
Bombastus	Unguentum Cordes®	12A123	1
Sanacorp	Unguentum Cordes®	12A129	1
Gehe	Unguentum Cordes®	12a155	2
Phönix/Ichthyol	Unguentum Cordes®	12A139	1
gebepharma	Unguentum Cordes®	913I-02532	1
Gehe	Unguentum Cordes®	12A155	1
Noweda	Unguentum Cordes®	12A123	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A156	1
ichthyol	Unguentum Cordes®	12A115	1
Ichthyol,Noweda	Unguentum Cordes®	12A139	1
Cordes	Unguentum Cordes®	12A155	1
Ichthyol	Unguentum Cordes®	12A157	1
Ichthyol Cordes	Unguentum Cordes®	12A075	1
Ichthyol	Unguentum Cordes®	12a152	1
Sanacorp	Unguentum Cordes®	12A160	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	12A155	1
Ichthyol	Unguentum Cordes®	12A157	1
Ichthyol/ Cordes	Unguentum Cordes®	12A139	1
ichthyol	Unguentum Cordes®	1413M-02532	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	11A202	1
Ichthyol / Gehe	Unguentum Cordes®	12A115	1
Ichthyol	Unguentum Cordes®	12A160	1
Ichthyol/Krieger	Unguentum Cordes®	12A102	1
Caelo	Unguentum Cordes®	12A140	1
IchthyolGesellschaft Co...	Unguentum Cordes®	12A152	1
Stumpf/Ichthyol	Unguentum Cordes®	12A190	1
Ichthyol-Gesellschaft	Unguentum Cordes®	12A053	1
Ichthyol/Gehe	Unguentum Cordes®	12A156	1
Ichthyol	Unguentum Cordes®	12A152	3
ichthyol	Unguentum Cordes®	12A190	1
Gehe	Unguentum Cordes®	12A205	2
Ichthyol, Noweda	Unguentum Cordes®	12A147	1
ICHTHYOL-GES/GEHE	Unguentum Cordes®	12A152	1
Ichthyol-Gesellschaft / G	Unguentum Cordes®	12A118	2
Ichthyol	Unguentum Cordes®	12A190	1
Ichthyol	Unguentum Cordes®	11A233	1
Caelo	Unguentum Cordes®	12A156	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A115	3
Ichthyol-Gesellschaft	Unguentum Cordes®	12A205	1
ichthyol	Unguentum Cordes®	12A152	1
Ichthyol / Gehe	Unguentum Cordes®	12A152	2
Ichthyol/Anzag	Unguentum Cordes®	12A130	1
Ichthyol-Gesellschaft	Unguentum Cordes®	12A123	1
Cordes	Unguentum Cordes®	12A079	1
Ichthyol	Unguentum Cordes®	12A121	2
Caelo	Unguentum Cordes®		1
Caelo	Unguentum Cordes®	13A004	1
Ichthyol /Noweda	Unguentum Cordes®	12A152	1
Fagron	Unguentum Cordes®	12A152	1
Ichthyol/Anzag	Unguentum Cordes®	11A187	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A206	1
Caelo	Unguentum Cordes®	12A206	4
Ichthyol	Unguentum Cordes®	12A211	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft	Unguentum Cordes [®]	12A206	1
Noweda	Unguentum Cordes [®]	12A184	1
Ichthyol	Unguentum Cordes [®]	13A029	2
Ichthyol	Unguentum Cordes [®]	12A205	2
ichthyol	Unguentum Cordes [®]	12A139	1
Caelo	Unguentum Cordes [®]	12A146	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	12A184	1
Ichthyol	Unguentum Cordes [®]	13A003	1
Ichthyol	Unguentum Cordes [®]	13A005	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	12A006	1
Ichthyol/Phönix	Unguentum Cordes [®]	13A030	1
Anzag/ Ichtyol	Unguentum Cordes [®]	13A029	1
Ichthyol/ Cordes	Unguentum Cordes [®]	12A205	1
Ichthyol Jenne	Unguentum Cordes [®]	12A211	1
ichthyol	Unguentum Cordes [®]	12A206	1
Ichthyol	Unguentum Cordes [®]	13A030	2
Ichthyol / Noweda	Unguentum Cordes [®]	12A152	2
Sanova	Unguentum Cordes [®]	12A130	1
Ichthyol/Gehe	Unguentum Cordes [®]	12A190	1
Ichthyol	Unguentum Cordes [®]	13A031	2
ICHTHYOL-Gesellschaft	Unguentum Cordes [®]	12A184	1
Ichtyol-Gesellschaft	Unguentum Cordes [®]	12A184	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	13A031	1
ichthyol	Unguentum Cordes [®]	13A032	1
Ichthyol/Gehe	Unguentum Cordes [®]	13A006	1
Sanacorp	Unguentum Cordes [®]	12a184	1
Alliance Health	Unguentum Cordes [®]	13A032	1
Ichthyol / Anzag	Unguentum Cordes [®]	12A079	1
Ichthyol/Phönix	Unguentum Cordes [®]	12A184	1
Gehe	Unguentum Cordes [®]	13A031	3
Phönix	Unguentum Cordes [®]	13A034	1
Ichthyol/phönix	Unguentum Cordes [®]	13A034	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	11A187	1
Ichthyol	Unguentum Cordes [®]	12A185	1
Ichthyol/Krieger	Unguentum Cordes [®]	12A184	1
Ichthyol	Unguentum Cordes [®]	13A032	2
Ichthtyol	Unguentum Cordes [®]	12A185	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	12A184	1
Ichthyol/AHD	Unguentum Cordes [®]	12A185	1
Ichthyol	Unguentum Cordes [®]	13A034	1
Ichthy	Unguentum Cordes [®]	12A185	1
Sanacorp / Ichthyol	Unguentum Cordes [®]	12A206	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes [®]	13A034	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	12A183	1
Ichthyol-Ges	Unguentum Cordes [®]	12A184	1
Ichthyol	Unguentum Cordes [®]	13A006	1
Caelo	Unguentum Cordes [®]	12A183	2
Alliance	Unguentum Cordes [®]	12A184	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A034	1
Ichthyol/GEHE	Unguentum Cordes [®]	13A034	1
Ichtyol	Unguentum Cordes [®]	13A067	1
	Unguentum Cordes [®]	13A034	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	13A034	1
Ichthyol	Unguentum Cordes [®]	13A047	2
Ichthyol/Alliance healt...	Unguentum Cordes [®]	13A047	1
Ichthyol / Phoenix Leip...	Unguentum Cordes [®]	12A118	1
Ichthyol	Unguentum Cordes [®]	13A048	1
Ichtyol,Noweda	Unguentum Cordes [®]	13A047	1
Ichthyol/Anzag	Unguentum Cordes [®]	13A067	1
Ichthyol/ebert	Unguentum Cordes [®]	13A034	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Unguentum Cordes®	13A010	1
Caelo	Unguentum Cordes®	913M-02532	1
Caelo	Unguentum Cordes®	3112A-02532	1
Ichthyol-Gesellschaft / E	Unguentum Cordes®	12A152	1
Noweda	Unguentum Cordes®	12A183	2
Ichthyol-Gesellschaft/V...	Unguentum Cordes®	12A183	1
Ichthyol/Phönix	Unguentum Cordes®	13A033	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A184	1
Ichthyol-Gesellschaft	Unguentum Cordes®	12A183	1
Ichthyol	Unguentum Cordes®	13092013D	1
ichthyol/ANZAG	Unguentum Cordes®	13A047	1
Ichthyol/ Noweda	Unguentum Cordes®	13A034	1
Phönix Gotha	Unguentum Cordes®	13A032	1
Caelo	Unguentum Cordes®	12A185	1
IchthyolGesellschaft Co...	Unguentum Cordes®	12A183	1
Caelo	Unguentum Cordes®	13A047	1
Ichthyol,Noweda	Unguentum Cordes®	13a009	2
cordes/phoenix	Unguentum Cordes®	13A047	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A010	1
Ichthyol	Unguentum Cordes®	13A067	1
Ichthyol/Noweda	Unguentum Cordes®	13A042	1
Caelo	Unguentum Cordes®	13A042	2
Ichthyol/Anzag	Unguentum Cordes®	13A049/13A050	1
Ichthyol/Phönix	Unguentum Cordes®	4113Q-02532	1
Ichthyol / Sanacorp	Unguentum Cordes®	12A183	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A050	1
Gehe - Ichthyol	Unguentum Cordes®	12A183	1
Ichthyol/Gehe	Unguentum Cordes®	13A051	1
Ichthyol-Gesellschaft, ...	Unguentum Cordes®	13A050	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A048	1
Ichthyol/ Noweda	Unguentum Cordes®	12A183	1
Ichthyol	Unguentum Cordes®	13A050	4
Cordes/Phönix	Unguentum Cordes®	13A050	1
Ichthyol-Gesellschaft	Unguentum Cordes®	11A177	1
ichthyol/N/PZN:01062983	Unguentum Cordes®	13A050	1
Caelo	Unguentum Cordes®	13A049	1
Ichthyol	Unguentum Cordes®	13A042	2
Ichthyol/Phoenix	Unguentum Cordes®	13A049	1
Ichthyol / Gehe	Unguentum Cordes®	12A184	1
ichthyol/Sanacorp	Unguentum Cordes®	12A183	1
Ichthyol / Noweda	Unguentum Cordes®	13A042	1
Stumpf/Ichtyol	Unguentum Cordes®	13A051	1
Bombastus	Unguentum Cordes®	13A042	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A051	1
Ichthyol	Unguentum Cordes®	13A052	1
Ichthyol	Unguentum Cordes®	13A043	4
Ichtyol/Noweda	Unguentum Cordes®	13A053	1
Hedinger	Unguentum Cordes®	13A053	1
Jenne	Unguentum Cordes®	13A049	1
Sanacorp	Unguentum Cordes®	2/AKD2	1
noweda/Ichtyol	Unguentum Cordes®	13A043	1
Ichthyol-Gesellschaft / G	Unguentum Cordes®	13A042	1
Cordes	Unguentum Cordes®	13A052	1
phönix	Unguentum Cordes®	13A051	1
Caelo	Unguentum Cordes®	Ichtyol	1
Cordes	Unguentum Cordes®	13a025	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	12A185	1
Ichthyl Phönix	Unguentum Cordes®	13A053	1
Ichthyol	Unguentum Cordes®	13A053	1
ICHTHYOL/11	Unguentum Cordes®	13A031	1

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Supplier	Substance	Batch	Spectra
Phönix	Unguentum Cordes®	12A049	1
Gehe	Unguentum Cordes®	13A054	1
Caelo	Unguentum Cordes®	131A043	1
Ichthyol / Noweda	Unguentum Cordes®	13A043	1
Ichthyol / Noweda	Unguentum Cordes®	13A051	1
Ichthyol/Noweda	Unguentum Cordes®	13A042	1
Ichtyol	Unguentum Cordes®	11A038	1
Phoenix 26.11.12	Unguentum Cordes®	12A185	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A054	1
IchthyolSanacorp	Unguentum Cordes®	13A025	1
ichthyol gesellschaft	Unguentum Cordes®	13A051	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	12A183	1
Ichthyol/Otto	Unguentum Cordes®	13A055	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	13A043	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A055	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A055	1
Cordes	Unguentum Cordes®	13A106	1
Caelo	Unguentum Cordes®	13A055	1
Noweda/Ichthyol	Unguentum Cordes®	13A106	1
Ichtyol	Unguentum Cordes®	12A106	1
Ichthyol/Noweda	Unguentum Cordes®	13A106	1
Ichthyol	Unguentum Cordes®	13A055	2
Caelo	Unguentum Cordes®	13a043	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13A055	1
Ichthyol/Noweda	Unguentum Cordes®	13A055	1
ichthyol-gesellschaft	Unguentum Cordes®	13A068	2
Ichthyol/Sanacorp	Unguentum Cordes®	12A211	1
Ichthyol / Gehe	Unguentum Cordes®	13A054	1
Ichthyol/ Noweda	Unguentum Cordes®	13A043	1
Sanacorp	Unguentum Cordes®	13A042	1
Ebert/Ichthyol	Unguentum Cordes®	13A052	1
Ichtyol/ Phönix	Unguentum Cordes®	13A135	1
Caelo	Unguentum Cordes®	13A043	1
ichthyol gesellschaft	Unguentum Cordes®	13A055	1
Ichthyol/Noweda	Unguentum Cordes®	13A043	1
Ichthyol	Unguentum Cordes®	13A107	1
Gehe	Unguentum Cordes®	13A106	1
Ichthyol/Gehe	Unguentum Cordes®	13A106	1
Ichthyol / Noweda	Unguentum Cordes®	11A042	1
Phoenix/Ichthyol	Unguentum Cordes®	13A055	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A106	1
Ichthyol/Phönix	Unguentum Cordes®	13A054	1
Ichthyol/14.01.14/K	Unguentum Cordes®	13A026	1
ichthyol	Unguentum Cordes®	13A1008	1
Ichthyol / Gehe	Unguentum Cordes®	13A042	1
Ichthyol	Unguentum Cordes®	13A106	2
ichthyol/Gehe	Unguentum Cordes®	13A109	1
Ichthyol/Phoenix	Unguentum Cordes®	13A135	1
Ichtyol	Unguentum Cordes®	13A054	1
Ichthyol Gesellschaft/G...	Unguentum Cordes®	13A089	1
Sanacorp	Unguentum Cordes®	13A068	1
Ichthyol / Gehe	Unguentum Cordes®	13A106	1
Gehe	Unguentum Cordes®	13A136	2
Ichthyol/VDL	Unguentum Cordes®	13A136	1
Sanacorp	Unguentum Cordes®	13A136	1
Ichthyol	Unguentum Cordes®	13A089	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A108	1
Ichthyol/Gehe	Unguentum Cordes®	13A109	1
Ichthyol	Unguentum Cordes®	13A111	1
Ichthyol	Unguentum Cordes®	13A109	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes®	13A137	1
ICHTHYOL	Unguentum Cordes®	13A135	1
Ichthyol	Unguentum Cordes®	13A068	1
Ichthyol/Phoenix	Unguentum Cordes®	13A054	1
Ichthyol/Otto	Unguentum Cordes®	13A136	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13A053	1
Gehe - Ichthyol	Unguentum Cordes®	13A136	1
Caelo	Unguentum Cordes®	13A138	2
Ichthyol GmBH	Unguentum Cordes®	13A137	1
ichthyol/AHD	Unguentum Cordes®	13A109	1
Ichthyol	Unguentum Cordes®	24022014B	1
Ichthyol / Gehe	Unguentum Cordes®	13A138	1
Ichthyol/GEHE	Unguentum Cordes®	13a138	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A135	1
Euro OTC	Unguentum Cordes®	13A068	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes®	13A053	1
Ichthyol	Unguentum Cordes®	13A138	3
Ichthyol	Unguentum Cordes®	13A140	1
Ichthyol/Phönix	Unguentum Cordes®	13A140	1
Ichthyol /Noweda	Unguentum Cordes®	13A090	2
Ichthyol/Sanacorp	Unguentum Cordes®	13A140	1
Ichthyol	Unguentum Cordes®	13A112	2
Alliance Health 11.03.14	Unguentum Cordes®	13A090	1
Ichthyol	Unguentum Cordes®	13A136	1
Ichthyol	Unguentum Cordes®	13A090	1
Ichthyol	Unguentum Cordes®	14031409	1
Ichthyol	Unguentum Cordes®	13A141	1
Caelo	Unguentum Cordes®	13A090	2
Ichthyol / Gehe	Unguentum Cordes®	13A142	3
Ichthyol / Gehe	Unguentum Cordes®	13A068	2
Ichthyol -Gesellschaft	Unguentum Cordes®	13A091	1
Caesar & Loretz GmbH Hi...	Unguentum Cordes®	13A090	1
Phoenix/Ichthyol	Unguentum Cordes®	13A140	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	13A089	1
Gehe	Unguentum Cordes®	13A153	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A142	1
IchthyolSanacorp	Unguentum Cordes®	13A110	1
Caelo	Unguentum Cordes®	13A141	1
ichthyol/Gehe	Unguentum Cordes®	13A091	1
Ichthyol	Unguentum Cordes®	13A015	1
Ichthyol/Noweda	Unguentum Cordes®	13A090	2
Ichthyol/gehe	Unguentum Cordes®	13A114	1
Stumpf/Ichthyol	Unguentum Cordes®	13A142	1
Ichthyol/Noweda	Unguentum Cordes®	13A089	2
Ichthyol	Unguentum Cordes®	414022-2-P	1
Ichthyol / Gehe	Unguentum Cordes®	13A153	1
Noweda	Unguentum Cordes®	13A091	1
Ichthyol	Unguentum Cordes®	13A111	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13A142	1
Ichthyol	Unguentum Cordes®	13A142	1
Ichthyol	Unguentum Cordes®	5052014B	1
Ichthiol	Unguentum Cordes®	13A110	1
Gehe	Unguentum Cordes®	13A141	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	12A184	1
Ichthyol/Gehe	Unguentum Cordes®	13A181	2
Caelo	Unguentum Cordes®	13A153	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	13A138	1
Ichthyol/Phönix	Unguentum Cordes®	13A089	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	13A181	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A156	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes®	13A153	1
Gehe/Ichthyol	Unguentum Cordes®	13A090	1
Caelo	Unguentum Cordes®	13A157	1
ichthyol/Sanacorp	Unguentum Cordes®	13A090	1
Caelo	Unguentum Cordes®	13A136	1
Sanacorp	Unguentum Cordes®	103/AKD1	1
Ichthyol /Noweda	Unguentum Cordes®	13A181	1
Ichthyol -Gesellschaft	Unguentum Cordes®	13A181	1
Ichthyol/Krieger/23.05...	Unguentum Cordes®	13A209	1
Ichthyol / Gehe	Unguentum Cordes®	13A181	1
Ichthyol/Noweda	Unguentum Cordes®	13A158	1
Ichthyol/GEHE	Unguentum Cordes®	13A142	1
Caelo	Unguentum Cordes®	13A181	3
Ichthyol Gesellschaft	Unguentum Cordes®	13A159	1
Caelo	Unguentum Cordes®	13A159	1
Ichthyol	Unguentum Cordes®	13A171	1
Ichthyol/Ebert	Unguentum Cordes®	13A159	1
Sanacorp	Unguentum Cordes®	13A159	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	13A067	1
Berkel AHK	Unguentum Cordes®	13A158	1
Ichthyol	Unguentum Cordes®	13A159	2
Ichthyol/Phoenix	Unguentum Cordes®	13A166	1
Caelo	Unguentum Cordes®	13A171	2
Stumpf/Ichtyol	Unguentum Cordes®	13A166	1
Ichthyol / Gehe	Unguentum Cordes®	13A156	1
Ichthtyol	Unguentum Cordes®	13A178	1
Caelo	Unguentum Cordes®	13A113	1
Anzag	Unguentum Cordes®	13A172	1
Ichthyol	Unguentum Cordes®	13A178	2
Ichthyol/Phönix	Unguentum Cordes®	13A166	3
Ichthyol / Gehe	Unguentum Cordes®	13A166	1
Ichthyol/Otto	Unguentum Cordes®	13A159	1
Ichthyol	Unguentum Cordes®	13A172	3
Ichtyol-Gesellschaft	Unguentum Cordes®	13A178	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A170	1
Ichthyol/Sanacorp	Unguentum Cordes®	13A214	1
Ichthyol/Noweda	Unguentum Cordes®	13A172	1
Ichthyol/Gehe	Unguentum Cordes®	13A178	3
ichthyol	Unguentum Cordes®	13A090	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	13A166	1
Gehe	Unguentum Cordes®	13A156	1
Cordes/Gehe	Unguentum Cordes®	13A172	1
Cordes/Gehe	Unguentum Cordes®	13A157	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13A180	3
Caelo	Unguentum Cordes®	14A055	2
Ichthyol	Unguentum Cordes®	13A180	1
Caelo	Unguentum Cordes®	13A172	1
Ichthyol/Sanacorp	Unguentum Cordes®	14A055	2
Ichthyol/Gehe	Unguentum Cordes®	14A055	2
Ichthyol Gesellschaft	Unguentum Cordes®	13A171	1
Anzag/Ichthyol	Unguentum Cordes®	13A180	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	13A172	1
Caelo	Unguentum Cordes®	14A009	1
Ichthyol/Gehe	Unguentum Cordes®	13A216	1
Ichthyol/gehe	Unguentum Cordes®	14A005	1
Ichthyol/Noweda	Unguentum Cordes®	14A009	1
Ichthyol Gesellschaft	Unguentum Cordes®	13A172	1
Ichthyol/Noweda	Unguentum Cordes®	14A047	1
anzag	Unguentum Cordes®	14A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A079	1

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Unguentum Cordes®	13A180	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A079	2
Ichthyol / E	Unguentum Cordes®	14A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A056	1
Ichthyol	Unguentum Cordes®	13A166	1
Ichthyol/ Gehe	Unguentum Cordes®	14A056	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes®	14A005	1
Stumpf/Ichtyol	Unguentum Cordes®	14A057	1
Ichtyol-Gesellschaft	Unguentum Cordes®	14A079	1
Ichthyol	Unguentum Cordes®	30092014C	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A057	1
Ichthyol/Gehe	Unguentum Cordes®	4913Q-02532	1
Ichthyol	Unguentum Cordes®	14A057	3
sanacorp	Unguentum Cordes®	14A060	1
Euro OTC	Unguentum Cordes®	14A079	2
Ichthyol/Sanacorp	Unguentum Cordes®	14A060	1
Ichthyol cordes / Noweda	Unguentum Cordes®	14A079	1
Cordes	Unguentum Cordes®	14A055	1
Bombastus	Unguentum Cordes®	14A060	1
Ichthyol/Gehe	Unguentum Cordes®	14A056	2
Ichthyol-Gesellschaft/P...	Unguentum Cordes®	14A095	2
Ichthyol	Unguentum Cordes®	14A095	2
Sanova Pharma	Unguentum Cordes®	13A166	1
sanacorp/ichthyol	Unguentum Cordes®	14A061	2
Ichthyol/Phönix	Unguentum Cordes®	14A057	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	14A047	1
Ichthyol über Phoenix	Unguentum Cordes®	13A166	1
Ichthyol	Unguentum Cordes®	14A061	1
Ichtyol-Gesellschaft/Ph...	Unguentum Cordes®	14A095	1
Alliance health	Unguentum Cordes®	14A079	1
Caelo	Unguentum Cordes®	14A079	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A060	1
Ichthyol/Geilenkirchen	Unguentum Cordes®	14A095	1
Ichthyol Gesellschaft	Unguentum Cordes®	14A061	2
Gehe/Ichthyol	Unguentum Cordes®	14A061	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A168	1
Ichthyol	Unguentum Cordes®	14A005	1
Euro OTC	Unguentum Cordes®	14A078	2
Fagron	Unguentum Cordes®	1744	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A095	1
Ichthyol/Phoenix	Unguentum Cordes®	14A079	1
Cordes	Unguentum Cordes®	14A062	1
Ichthyol/Gehe	Unguentum Cordes®	14A062	3
eurho	Unguentum Cordes®	14a079	1
Ichthyol /Noweda	Unguentum Cordes®	13A067	1
Caelo	Unguentum Cordes®	14A063	2
Ichthyol-Gesellschaft	Unguentum Cordes®	14A063	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A063	2
Caelo	Unguentum Cordes®	14A095	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A079	1
Ichthyol	Unguentum Cordes®	14A060	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A062	1
Ichthyol/Phönix	Unguentum Cordes®	14A095	1
Caelo	Unguentum Cordes®	14A172	1
Stumpf/Ichtyol	Unguentum Cordes®	14A063	1
Cordes, Hermani / Gehe	Unguentum Cordes®	14A112	1
Noweda/Ichthyol	Unguentum Cordes®	14A113	1
Ichthyol	Unguentum Cordes®	14A113	1
Ichthyol/Phönix	Unguentum Cordes®	14A062	1
Ichthyol-Gesellschaft	Unguentum Cordes®	14A095	1

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Supplier	Substance	Batch	Spectra
Ichthyol / Noweda	Unguentum Cordes [®]	14A172	1
Ichthyol	Unguentum Cordes [®]	7011501	1
Ichthyol	Unguentum Cordes [®]	14A063	1
Caelo	Unguentum Cordes [®]	14A113	2
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A098	1
Ichthyol	Unguentum Cordes [®]	14A098	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	13A172	1
Ichthyol	Unguentum Cordes [®]	13012015B	1
Ichthyol/Otto	Unguentum Cordes [®]	14A113	1
Ichthyol/ Noweda	Unguentum Cordes [®]	14A099	1
Ichthyol	Unguentum Cordes [®]	14A172	3
Ichthyol / Sanacorp	Unguentum Cordes [®]	14A172	1
Ichthyol über Phoenix	Unguentum Cordes [®]	14A062	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A006	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	14A114	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	14A115	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A113	1
Ichthyol	Unguentum Cordes [®]	14A114	1
Cealo	Unguentum Cordes [®]	14A113	1
ichthyol	Unguentum Cordes [®]	14a113	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A079	1
Ichthyol/gehe	Unguentum Cordes [®]	14A099	1
Sanacorp	Unguentum Cordes [®]	14A172	1
Ichthyol- Gesellschaft ...	Unguentum Cordes [®]	14A172	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A112	1
ICHTHYOL	Unguentum Cordes [®]	14A114	1
Ichthyol/Phönix	Unguentum Cordes [®]	14A172	2
Ichtyol/Sanacorp	Unguentum Cordes [®]	14A097	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	14A172	2
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	14A063	1
Caelo	Unguentum Cordes [®]	14A173	1
Ichthyol über Phoenix	Unguentum Cordes [®]	14A114	1
Ichthyol / Noweda	Unguentum Cordes [®]	14A173	1
AHD	Unguentum Cordes [®]	14A117	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	14A116	1
sanacorp/ichthyol	Unguentum Cordes [®]	14A117	1
Ichthyol/Anzag	Unguentum Cordes [®]	15A020	1
Ichthyol	Unguentum Cordes [®]	14A132	1
Ichtyol - Gehe	Unguentum Cordes [®]	14A1115	1
Ichthyol/Phönix	Unguentum Cordes [®]	14A116	1
Ichthyol-Gesellschaft /...	Unguentum Cordes [®]	15A020	2
Ichthyol/Ebert	Unguentum Cordes [®]	14A060	1
phönix	Unguentum Cordes [®]	14A116	1
Cordes, Hermani / Gehe	Unguentum Cordes [®]	14A171	1
Ichthyol/Gehe	Unguentum Cordes [®]	14A130	1
Ichthyol Gesellschaft/AHD	Unguentum Cordes [®]	13A180	1
Ichthyol/Phönix	Unguentum Cordes [®]	15A020	2
Cordes	Unguentum Cordes [®]	14A117	2
ICHTHYOL Gesellschaft /...	Unguentum Cordes [®]	15A020	1
Fagron	Unguentum Cordes [®]	15A020	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	14A171	1
ICHTHYOL	Unguentum Cordes [®]	14A171	1
ichthyol	Unguentum Cordes [®]	14A172	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	14A173	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	14A179	1
Ichthyol/Fiebig	Unguentum Cordes [®]	13A166	1
Ichthyol/ Noweda	Unguentum Cordes [®]	14A172	1
Ichthyol	Unguentum Cordes [®]	14A171	2
Ichthyol/phönix	Unguentum Cordes [®]	15A020	1
Bombastus	Unguentum Cordes [®]	15a020	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes®	14A173	2
Ichthyol-Gesellschaft	Unguentum Cordes®	15A020	1
Ichthyol/Sanacorp	Unguentum Cordes®	14A179	1
Ichthyol/ Gehe	Unguentum Cordes®	15A020	2
Ichthyol/Fiebig	Unguentum Cordes®	14A179	1
Ichthyol/Anzag	Unguentum Cordes®	1415A-02532	1
Gehe Kassel	Unguentum Cordes®	15A021	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes®	15A020	1
Ichthyol / G	Unguentum Cordes®	15A020	1
Caelo	Unguentum Cordes®	15A020	1
Ichthyol/Phönix	Unguentum Cordes®	14A179	1
Caelo	Unguentum Cordes®	15a020	1
Ichthyol	Unguentum Cordes®	14A116	1
Ichthyol	Unguentum Cordes®	13041504	1
ichthyol gesellschaft	Unguentum Cordes®	14A143	1
Anzag	Unguentum Cordes®	15A021	1
Ichthyol/Gehe	Unguentum Cordes®	14A117	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes®	14a114	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A011	1
Caelo	Unguentum Cordes®	14A116	1
ICHTHYOL/GEHE	Unguentum Cordes®	15A011	1
Alliance health	Unguentum Cordes®	15A023	1
Caelo	Unguentum Cordes®	14A143	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	14A130	1
AHD	Unguentum Cordes®	15A021	1
Caelo	Unguentum Cordes®	14A213	2
Ichthyol-Gesellschaft	Unguentum Cordes®	5052015A	1
Fagron	Unguentum Cordes®	15A010	1
Caelo	Unguentum Cordes®	15A040	1
Noweda/Ichthyol	Unguentum Cordes®	15A020	2
Noweda/Ichthyol	Unguentum Cordes®	14A173	1
Gehe,11.05.15/Cordes	Unguentum Cordes®	15A040	1
Cordes	Unguentum Cordes®	15A040	2
Ichthyol/Phönix	Unguentum Cordes®	15A029	1
Caelo	Unguentum Cordes®	14A312	1
Ichthyol Pharma	Unguentum Cordes®	15A011	1
Ichthyol / Noweda	Unguentum Cordes®	15A021	1
Ichthyol/Otto	Unguentum Cordes®	15A010	1
Ichthyol/Phoenix	Unguentum Cordes®	15A011	1
sanacorp/ichthyol	Unguentum Cordes®	15A022	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A022	1
Anzag	Unguentum Cordes®	15A023	1
Ichthyol/Phönix	Unguentum Cordes®	15A023	1
Caelo	Unguentum Cordes®	15A023	2
Ichthyol/Gehe	Unguentum Cordes®	15A040	2
Ichthyol-Gesellschaft /...	Unguentum Cordes®	15A023	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A027	1
Ichthyol/Noweda	Unguentum Cordes®	15A023	1
Ichthyol/Fiebig	Unguentum Cordes®	15A040	1
Ichthyol, Noweda	Unguentum Cordes®	15A023	1
Ichthyol/ Noweda	Unguentum Cordes®	15A040	1
Fagron	Unguentum Cordes®	Ichthyol/Phoenix	1
Ichthyol/GEHE	Unguentum Cordes®	14a113	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A041	1
Caelo	Unguentum Cordes®	15A027	1
Ichthyol	Unguentum Cordes®	15A021	2
ichthyol gesellschaft	Unguentum Cordes®	15A022	1
Ichthyol/Gehe	Unguentum Cordes®	15A023	1
Gehe - Ichthyol	Unguentum Cordes®	15A027	1
Ichthyol/Phoenix	Unguentum Cordes®	15A022	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Gehe	Unguentum Cordes [®]	15A027	4
Ichthyol Pharma	Unguentum Cordes [®]	15A042	1
Ichthyol	Unguentum Cordes [®]	15A042	3
sanacorp/ichthyol	Unguentum Cordes [®]	15A042	1
Alliance	Unguentum Cordes [®]	15A020	1
Ichthyol	Unguentum Cordes [®]	15A023	1
Ichthyol/Phönix	Unguentum Cordes [®]	15A042	1
Noweda / Ichthyol Gesel...	Unguentum Cordes [®]	15A060	1
Caelo	Unguentum Cordes [®]	15A060	1
SANOVA	Unguentum Cordes [®]	15A044	1
A.H.D.	Unguentum Cordes [®]	15A060	1
Ichthyol	Unguentum Cordes [®]	15A-042	1
Phoenix	Unguentum Cordes [®]	15A027	1
sanacorp/ichthyol	Unguentum Cordes [®]	15A044	1
Ichthyol GmbH	Unguentum Cordes [®]	15A041	1
Ichthyol	Unguentum Cordes [®]	15A020	1
Ichthyol über Phoenix	Unguentum Cordes [®]	15A042	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A038	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	15A021	1
Ichthyol	Unguentum Cordes [®]	15A060	2
Caelo	Unguentum Cordes [®]	15A042	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A060	2
Ichthyol/Gehe	Unguentum Cordes [®]	15A043	2
Sanacorp	Unguentum Cordes [®]	15A043	1
Gehe-Ichthyol	Unguentum Cordes [®]	15A060	2
Ichthyol-Gesellschaft	Unguentum Cordes [®]	31072015A	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A037	1
Ichthyol/Fiebig	Unguentum Cordes [®]	15A043	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A042	1
Ichthyol	Unguentum Cordes [®]	15A089	1
Stumpf/Ichthyol-Gesells...	Unguentum Cordes [®]	15A089	1
Ichthyol Gesellschaft/S...	Unguentum Cordes [®]	15A060	2
Caelo	Unguentum Cordes [®]	15A089	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	15A043	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A061	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A043	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	15A020	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	15A061	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A090	2
Ichthyol	Unguentum Cordes [®]	15A089	2
Ichthyol Gesellschaft/...	Unguentum Cordes [®]	15A090	1
Ichthyol	Unguentum Cordes [®]	15A040	1
Caelo	Unguentum Cordes [®]	12A211	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	15A061	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A090	1
Caelo	Unguentum Cordes [®]	15A061	2
Ichthyol	Unguentum Cordes [®]	4091516	1
Ichthyol	Unguentum Cordes [®]	15A091	2
Ichthyol Gesellschaft	Unguentum Cordes [®]	15A074	1
Cordes	Unguentum Cordes [®]	15A060	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	15A060	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	15A061	1
Caelo	Unguentum Cordes [®]	15A091	1
Ichthyol/AHC	Unguentum Cordes [®]	15A089	1
ICHTHYOL	Unguentum Cordes [®]	15a089	1
Ichthyol /Noweda	Unguentum Cordes [®]	15A060	1
Ichthyol-Gesellschaft/Sa...	Unguentum Cordes [®]	15A037	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	15A062	2
Caelo	Unguentum Cordes [®]	15A092	2
Ichthyol	Unguentum Cordes [®]	15A092	2

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A062	1
Gehe	Unguentum Cordes®	15A062	3
Ichthyol	Unguentum Cordes®	15A074	1
Ichthyol-Gesellschaft /...	Unguentum Cordes®	15A061	1
Ichthyol	Unguentum Cordes®	15A093	2
Ichtyol Gesellschaft	Unguentum Cordes®	15A027	1
Ichthyol/GEHE	Unguentum Cordes®	15A061	1
Phoenix	Unguentum Cordes®	15a093	1
Gehe	Unguentum Cordes®	15A091	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A089	1
ichthyol gesellschaft	Unguentum Cordes®	15A076	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A076	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A023	1
Berkel AHK	Unguentum Cordes®	14A056	1
Ichthyol/Phönix	Unguentum Cordes®	15A062	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A092	1
Ichthyol	Unguentum Cordes®	15A106	1
Ichthyol	Unguentum Cordes®	15A075	1
Ichthyol	Unguentum Cordes®	14A079	1
Ichthyol/Phönix	Unguentum Cordes®	15A092	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A106	1
Ichtyol/Anzag	Unguentum Cordes®	15A074	1
Caelo	Unguentum Cordes®	15A106	1
Ichthyol/Sanacorp	Unguentum Cordes®	15A093	1
Ichthyol/Phoenix	Unguentum Cordes®	15A106	1
anzag	Unguentum Cordes®	15A062	1
Ichthyol	Unguentum Cordes®	15A062	1
Ichthyol /Noweda	Unguentum Cordes®	15a073	1
Ichthyol über Phoenix	Unguentum Cordes®	15A092	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A091	1
Ichthyol/Sanacorp	Unguentum Cordes®	15A106	1
Ichthyol/Phönix	Unguentum Cordes®	15A061	1
Caelo	Unguentum Cordes®	15A062	3
Ichthyol/ Noweda	Unguentum Cordes®	15a021	1
Noweda	Unguentum Cordes®	15A062	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes®	15A073	1
Cordes	Unguentum Cordes®	15A106	1
Sanacorp/Ichthyol-Gesel...	Unguentum Cordes®	15A062	1
phoenix Ichthyol	Unguentum Cordes®	15A106	1
Ichthyol	Unguentum Cordes®	15A107	2
Ichthyol-Gesellschaft	Unguentum Cordes®	15A090	1
Ichthyol/ AHD	Unguentum Cordes®	15A091	1
Ichtyol - Gesellschaft	Unguentum Cordes®	15A108	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A062	1
ichthyol gesellschaft	Unguentum Cordes®	15A041	1
sanacorp/ichthyol	Unguentum Cordes®	15A108	1
Ichthyol	Unguentum Cordes®	15A108	2
Fagron	Unguentum Cordes®	15A073	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A108	1
Ichthyol / Noweda	Unguentum Cordes®	15A073	3
Ichthyol/Phönix	Unguentum Cordes®	15A108	3
Ichthyol/Sanacorp	Unguentum Cordes®	15A074	1
Ichthyol/Gehe	Unguentum Cordes®	15A106	1
Caelo	Unguentum Cordes®	14A114	1
Gehe-Ichthyol	Unguentum Cordes®	15A073	1
Caelo	Unguentum Cordes®	15a073	1
Ichthyol / Sanacorp	Unguentum Cordes®	15A062	1
Ichtyol/Gehe	Unguentum Cordes®	15A78	1
Ichthyol / Fiebig	Unguentum Cordes®	15A062	1
Noweda	Unguentum Cordes®	15A123	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Phönix	Unguentum Cordes®	15A073	1
Ichthyol Pharma	Unguentum Cordes®	15A139	1
Caelo	Unguentum Cordes®	15A137	2
Ichthyol/ Anzag	Unguentum Cordes®	15A139	1
Ichthyol	Unguentum Cordes®	15A073	2
Caelo	Unguentum Cordes®	15A139	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A106	1
Ichthyol/Otto	Unguentum Cordes®	15A107	1
Ichthyol	Unguentum Cordes®	15A137	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A139	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A080	1
Ichthyol/ Noweda	Unguentum Cordes®	15A108	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A137	1
Gehe-Ichthyol	Unguentum Cordes®	15A123	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A137	1
Caelo	Unguentum Cordes®	15A073	2
Ichthyol Gesllschaft	Unguentum Cordes®	15A093	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	15A091	1
Ichthyol /Noweda	Unguentum Cordes®	12A118	1
Ichthyol	Unguentum Cordes®	15A140	3
phoenix / ichthyol	Unguentum Cordes®	15A108	1
Ichthyol/Phoenix	Unguentum Cordes®	15A107	1
ichthyol	Unguentum Cordes®	15A139	1
Ichthyol / Phoenix	Unguentum Cordes®	15A123	2
Ichthyol/AHP	Unguentum Cordes®	15A141	1
Ichthyol/Fiebig	Unguentum Cordes®	15A140	1
Ichthyol /Noweda	Unguentum Cordes®	15A123	3
Ichthyol/Noweda	Unguentum Cordes®	15A079	1
VDL	Unguentum Cordes®	15A140	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A123	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes®	15A087	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A107	1
Sanacorp	Unguentum Cordes®	15A137	1
Ichthyol/ Anzag	Unguentum Cordes®	15A141	2
Ichthyol/Phönix	Unguentum Cordes®	15A140	1
ichthyol	Unguentum Cordes®	15A061	1
Ichthyol/Phoenix WE:02...	Unguentum Cordes®	15A137	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A140	2
Phönix/Ichthyol	Unguentum Cordes®	15A123	1
Ichthyol/Sanacorp	Unguentum Cordes®	15A123	1
Ichthyol/Phoenix	Unguentum Cordes®	15A141	1
Ichthyol/Phönix	Unguentum Cordes®	15A123	1
Gehe/Ichthyol	Unguentum Cordes®	15A124	4
Ichthyol-Gesellschaft	Unguentum Cordes®	15A141	1
Ichthyol Gesellsch./Pho...	Unguentum Cordes®	15A123	1
Ichthyol über Phoenix	Unguentum Cordes®	15A142	1
Ichthyol/Gehe	Unguentum Cordes®	15A042	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A123	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A142	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A140	1
Ichthyol Pharma	Unguentum Cordes®	15A141	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A142	1
Ichthyol	Unguentum Cordes®	15A148	5
Ichthyol-Gesellschaft	Unguentum Cordes®	15A124	4
Ichthyol	Unguentum Cordes®	15A079	1
IchthyolSanacorp	Unguentum Cordes®	15A076	1
Fiebig/Ichthyol	Unguentum Cordes®	15A124	1
Ichthyol/Phönix	Unguentum Cordes®	15A124	1
Ichthyol /Noweda	Unguentum Cordes®	15A148	1
Ichthyol/Noweda	Unguentum Cordes®	15A124	1

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Supplier	Substance	Batch	Spectra
Ichthyol/ Noweda	Unguentum Cordes®	15A148	1
Ichthyol	Unguentum Cordes®	15A142	1
Ichthyol	Unguentum Cordes®	15A123	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A042	1
Ichthyol	Unguentum Cordes®	15A150	1
Ichthyol- Gesellschaft	Unguentum Cordes®	15A149	1
Cordes/Phönix	Unguentum Cordes®	15A124	1
Förster/Phönix	Unguentum Cordes®	158142	1
Caelo	Unguentum Cordes®	15A123	2
Ichthyol/Sanacorp	Unguentum Cordes®	15A149	2
Ichthyl-Gesellschaft/Ph...	Unguentum Cordes®	15A141	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A148	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A124	1
Ichthyol/ Phönix	Unguentum Cordes®	15A150	4
Noweda	Unguentum Cordes®	15A060	1
Caelo	Unguentum Cordes®	15A149	1
Ichthyol/Phönix	Unguentum Cordes®	15A142	1
Caelo	Unguentum Cordes®	15A124	1
Caelo	Unguentum Cordes®	16/082/C	1
Ichthyol-Gesellschaft /...	Unguentum Cordes®	15A124	1
Ichthyol/Gehe	Unguentum Cordes®	15A150	2
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	15A073	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	15A042	1
ichthyol	Unguentum Cordes®	15A124	2
Ichthyol /AHD	Unguentum Cordes®	15A155	1
Ichthyol-Gesellschaft/G...	Unguentum Cordes®	15A125	1
Gehe	Unguentum Cordes®	15A150	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A142	2
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A079	1
Ichthyol Gesellschaft /...	Unguentum Cordes®	15A125	1
Ichthyol	Unguentum Cordes®	15A124	1
Caelo	Unguentum Cordes®	15A155	1
Noweda/Ichthyol-Gesells...	Unguentum Cordes®	15A123	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A060	1
Gehe/Ichthyol	Unguentum Cordes®	15A125	3
Ichthyol / Phoenix	Unguentum Cordes®	15A125	1
Ichthyol / Gehe	Unguentum Cordes®	15A162	1
Ichthyol/Noweda	Unguentum Cordes®	15A124	1
Noweda	Unguentum Cordes®	15A191	1
Ichthyol/Phönix	Unguentum Cordes®	15A162	1
Caelo	Unguentum Cordes®	15A150	1
Ichthyol	Unguentum Cordes®	15A155	1
Ichthyol/ Anzag	Unguentum Cordes®	15A155	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	15A124	1
Caelo	Unguentum Cordes®	15a124	1
Gehe	Unguentum Cordes®	15A142	1
Caelo	Unguentum Cordes®	15A125	1
Ichthyol	Unguentum Cordes®	15a159	1
ichthyol	Unguentum Cordes®	15A125	1
ichthyol gesellschaft	Unguentum Cordes®	15A159	2
Ichthyol/Phönix	Unguentum Cordes®	15A150	1
Euro OTC	Unguentum Cordes®	15A155	1
Ichthyol/Phoenix	Unguentum Cordes®	15A156	1
Ichthyol /Noweda	Unguentum Cordes®	15A159	1
Ichthyol	Unguentum Cordes®	15A159	1
Ichthyol-Gesellschaft	Unguentum Cordes®	15A191	1
Ichthyol / Phönix	Unguentum Cordes®	15A156	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	15A150	1
Ichthyol Gesellschaft	Unguentum Cordes®	15A159	1
Bombastus	Unguentum Cordes®	15A149	1

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Supplier	Substance	Batch	Spectra
Caelo	Unguentum Cordes [®]	15A191	4
Caelo	Unguentum Cordes [®]	15A159	1
Ichthyol über Phoenix	Unguentum Cordes [®]	16A044	1
Ichthyol/Anzag	Unguentum Cordes [®]	15A123	1
Phoenix	Unguentum Cordes [®]	15A149	1
Ichthyol/Phönix	Unguentum Cordes [®]	15A125	1
sanacorp/ichthyol	Unguentum Cordes [®]	15A156	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A044	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A156	1
Ichthyol Pharma	Unguentum Cordes [®]	15A155	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes [®]	15A124	1
ichthyol-gesellschaft	Unguentum Cordes [®]	15A191	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	15A041	1
Ichthyol/Anzag	Unguentum Cordes [®]	1713M-02532	1
Noweda/Ichthyol	Unguentum Cordes [®]	15A191	1
Ichthyol/ Sanacorp	Unguentum Cordes [®]	16A044	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	15A191	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	15A156	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A164	1
Ichthyol/Noweda	Unguentum Cordes [®]	15A123	1
Ichthyol/Anzag	Unguentum Cordes [®]	15A195	1
Gehe/Ichthyol	Unguentum Cordes [®]	15A191	4
Caelo	Unguentum Cordes [®]	16A044	1
Ichthyol	Unguentum Cordes [®]	15A191	4
anzag	Unguentum Cordes [®]	15a192	1
Ichthyol /Noweda	Unguentum Cordes [®]	15A191	1
Ichthyol / K	Unguentum Cordes [®]	15A191	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	15A191	2
Ichthyol/ Anzag	Unguentum Cordes [®]	16A046	2
ichthyol gesellschaft	Unguentum Cordes [®]	16A011	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	15A191	1
Gehe/Ichthyol	Unguentum Cordes [®]	15A141	1
Ichthyol/N	Unguentum Cordes [®]	16A046	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes [®]	15A148	1
Ichthyol Gesllschaft	Unguentum Cordes [®]	16A045	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A139	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A148	1
Ichthyol/Gehe	Unguentum Cordes [®]	15A156	2
Phoenix	Unguentum Cordes [®]	16A046	1
Ichthyol	Unguentum Cordes [®]	16A047	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A046	1
Ichthyol	Unguentum Cordes [®]	15A156	1
Gehe/Ichthyol	Unguentum Cordes [®]	15A192	1
SANOVA	Unguentum Cordes [®]	16A045	1
Ichtyol	Unguentum Cordes [®]	15A192	1
Ichthyol/Phoenix	Unguentum Cordes [®]	15A191	1
Noweda	Unguentum Cordes [®]	15A192	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A073	1
Ichthyol/Phönix	Unguentum Cordes [®]	16a044	1
Ichthyol/ Krieger	Unguentum Cordes [®]	16A044	1
Ichthyol/Noweda	Unguentum Cordes [®]	16A045	2
Noweda/Ichthyol	Unguentum Cordes [®]	15A123	1
Ichthyol	Unguentum Cordes [®]	16A048	2
Nachprüfung	Unguentum Cordes [®]	12a124	1
Caelo	Unguentum Cordes [®]	16A074	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A047	1
Ichtyol/Phoenix	Unguentum Cordes [®]	15A137	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	15A156	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A046	1
Ichthyol GmbH	Unguentum Cordes [®]	16A045	1

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Supplier	Substance	Batch	Spectra
Ichthyol/Noweda	Unguentum Cordes®	15A192	2
Ichthyol/Anzag	Unguentum Cordes®	16A048	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A048	1
Sanacorp	Unguentum Cordes®	16A048	2
Euro OTC	Unguentum Cordes®	16A074	1
Ichthyol/Phönix	Unguentum Cordes®	16A048	1
Ichthyol/Alliance	Unguentum Cordes®	16A083	2
Caelo	Unguentum Cordes®	16A045	1
Cordes	Unguentum Cordes®	16A046	1
Phönix	Unguentum Cordes®	16A048	1
ichthyol	Unguentum Cordes®	15a195	1
Ichthyol Gesellschaft	Unguentum Cordes®	16a045	1
Sanacorp, 15.08.2016, 3...	Unguentum Cordes®	16A048	1
Ebert 17.08.16 KKH	Unguentum Cordes®	16A048	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A047	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A083	1
Caelo	Unguentum Cordes®	16A047	1
Caelo	Unguentum Cordes®	15A192	1
Galderma/Phönix	Unguentum Cordes®	16A077	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	16a048	1
Ichthyol/Phönix	Unguentum Cordes®	16A048	1
Ichthyol Gesellschaft- ...	Unguentum Cordes®	15A192	1
Gehe-Ichthyol	Unguentum Cordes®	16A083	2
Ichthyol/Gehe	Unguentum Cordes®	16A083	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	16A047	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A083	4
Ichthyol-Gesellschaft	Unguentum Cordes®	16a173	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A083	1
Ichthyol	Unguentum Cordes®	16A045	1
Phoenix	Unguentum Cordes®	16A045	1
Caelo	Unguentum Cordes®	16A051	2
Ichthyol/Gehe	Unguentum Cordes®	16A051	1
Caelo	Unguentum Cordes®	16A083	2
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A173	1
Ichthyol	Unguentum Cordes®	16A058	3
Ichthyol über Phoenix	Unguentum Cordes®	16A058	1
Caelo	Unguentum Cordes®	16A058	5
Ichthyol-Gesellschaft/ ...	Unguentum Cordes®	16A013	1
ichthyol	Unguentum Cordes®		1
Bombastus	Unguentum Cordes®	16A083	1
Ichthyol/Anzag	Unguentum Cordes®	16A083	1
Ichthyol	Unguentum Cordes®	16A173	3
Ichthyol-Gesellschaft	Unguentum Cordes®	16A122	2
Ichthyol-Gesellschaft	Unguentum Cordes®	160726UC	1
ICHTHYOL/ Phönix	Unguentum Cordes®	16A083	1
Caelo	Unguentum Cordes®	16A077	1
Phoenix	Unguentum Cordes®	16A121	1
Anzag	Unguentum Cordes®	16A014	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A048	1
Ichthyol/Noweda	Unguentum Cordes®	16A119	1
Caelo	Unguentum Cordes®	16A085	3
Ichthyol/ Anzag	Unguentum Cordes®	16A119	1
ichthyol	Unguentum Cordes®	16A058	1
Ichthyol /Noweda	Unguentum Cordes®	16A085	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	15A12	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A119	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A173	1
sanacorp/ichthyol	Unguentum Cordes®	16A121	1
Caelo	Unguentum Cordes®	16a085	1
Caelo	Unguentum Cordes®	16A119	1

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Supplier	Substance	Batch	Spectra
Ichthyol Gesellschaft C...	Unguentum Cordes®	16A121	1
InfectoPharm	Unguentum Cordes®	16A085	1
Ichthyol/Gehe	Unguentum Cordes®	16A058	1
AHD	Unguentum Cordes®	16A085	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A121	1
Caelo	Unguentum Cordes®	16A122	2
Ichthyol/Phoenix	Unguentum Cordes®	16A121	4
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A121	1
Ichthyol/Noweda	Unguentum Cordes®	16A085	1
Ichthyol	Unguentum Cordes®	16A123	2
Ichthyol / Gehe	Unguentum Cordes®	16A173	1
Beiersdorf AG	Unguentum Cordes®	62932210	2
ICHTHYOL-GESELLSCHAFT Co...	Unguentum Cordes®	16A085	1
Cordes/Noweda	Unguentum Cordes®	16A121	1
Gehe/Ichthyol	Unguentum Cordes®	16A099	3
Sanacorp	Unguentum Cordes®	16A085	1
Ichthyol Gesellschaft- ...	Unguentum Cordes®	16A099	1
Cordes Hermann	Unguentum Cordes®	15A020	1
Cordes Hermann	Unguentum Cordes®	16A085	1
ALH	Unguentum Cordes®	16A061	1
Ichthyol AG / Anzag	Unguentum Cordes®	16A085	2
Ichthyol	Unguentum Cordes®	16A085	2
Ichthyol / Phönix	Unguentum Cordes®	16A122	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	16a011	1
Ichthyol-Gesellschaft /...	Unguentum Cordes®	16A085	2
Cordes	Unguentum Cordes®	16A122	1
Ichthyol/Noweda	Unguentum Cordes®	16A099	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	16A123	1
Ichthyol/Alliance Healt...	Unguentum Cordes®	16A099	1
Ichthyol	Unguentum Cordes®	16A122	2
Ichthyol/Phönix	Unguentum Cordes®	16A119	1
PHÖNIX	Unguentum Cordes®	16A124	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A123	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A085	3
ichthyol	Unguentum Cordes®	16A119	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A083	1
Ichthyol über Phoenix	Unguentum Cordes®	16A119	1
Gehe/Ichthyol	Unguentum Cordes®	16A085	1
Caelo	Unguentum Cordes®	16A099	3
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A121	1
Ichthyol/Gehe	Unguentum Cordes®	15A123	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A099	1
Ichthyol Gesellschaft C...	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A022/170117UC	1
GEHE	Unguentum Cordes®	16A099	1
sanacorp/ichthyol	Unguentum Cordes®	16A139	2
Ichthyol gesellschaft GmbH	Unguentum Cordes®	16A085	1
Ichthyol / Phoenix	Unguentum Cordes®	16A099	1
Ichthyol	Unguentum Cordes®	16A124	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A099	1
Ichthyol/Phönix	Unguentum Cordes®	16A023	1
Caelo	Unguentum Cordes®	16A013	1
Caelo	Unguentum Cordes®	16A137	3
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A124	1
Ichthyol/ Krieger	Unguentum Cordes®	16A139	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A099	1
Ichthyol / Phoenix	Unguentum Cordes®	16A139	1
Bombastus	Unguentum Cordes®	16A099	1
Ichthyol/ Gehe	Unguentum Cordes®	16A139	1
	Unguentum Cordes®	16A099	2

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Supplier	Substance	Batch	Spectra
Ichthyol Gesellschaft	Unguentum Cordes®	16A139	1
Ichthyol/Gehe	Unguentum Cordes®	16A070	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A137	2
Ichthyol/Noweda 31.01.2017	Unguentum Cordes®	16A140	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16a139	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A139	1
Ichthyol/O.G.	Unguentum Cordes®	16A140	1
Cordes/Noweda	Unguentum Cordes®	16A101	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A101	4
Caelo	Unguentum Cordes®	16A140	2
Noweda/Ichthyol	Unguentum Cordes®	16A099	1
Ichthyol	Unguentum Cordes®	16A099	3
Ichthyol/Noweda	Unguentum Cordes®	16A139	2
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A140	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A140	1
Ichthyol / Noweda	Unguentum Cordes®	16A123	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A140	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A139	1
PhoenixWE:7.02.2017 E...	Unguentum Cordes®	16A141	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A101	2
Ichthyol Gesellschaft	Unguentum Cordes®	16A140	1
Ichthyol Gesellschaft/N...	Unguentum Cordes®	16A101	1
sanacorp/ichthyol	Unguentum Cordes®	16A142	1
Ichthyol Gesellschaft/G...	Unguentum Cordes®	16A141	1
Ichthyol-Gesellschaft /...	Unguentum Cordes®	16A099	1
Ichthyol	Unguentum Cordes®	16A140	1
Gehe/Ichthyol	Unguentum Cordes®	16A139	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A022	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A124	1
Ichthyol	Unguentum Cordes®	16A119	1
Cordes/Noweda	Unguentum Cordes®	16A140	2
Ichthyol-Gesellschaft	Unguentum Cordes®	16A142	1
Caelo	Unguentum Cordes®	16A141	1
Noweda	Unguentum Cordes®	16A101	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A099	1
Ichthyol/Phönix	Unguentum Cordes®	16A142	1
Gehe	Unguentum Cordes®	16A101	1
Ichthyol/Noweda	Unguentum Cordes®	16A142	2
Ichthyol/Kehr	Unguentum Cordes®	16A101	1
Ichthyol/Sanacorp	Unguentum Cordes®	16A142	1
Ichthyol/ Anzag	Unguentum Cordes®	16A141	1
Ichthyol/Phoenix	Unguentum Cordes®	16A140	3
Ichthyol/Phoenix	Unguentum Cordes®	16A102	1
Ichthyol-Gesellschaft/K...	Unguentum Cordes®	16A101	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A143	2
Ichthyol/AllianceHealth...	Unguentum Cordes®	16A101	1
ichthyol-G.	Unguentum Cordes®	16A099	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A102	2
Ichthyol/ Phönix	Unguentum Cordes®	16A101	1
Ichthyol/Gehe	Unguentum Cordes®	16A102	1
ICHTHYOL-GESELLSCHAFT C...	Unguentum Cordes®	16A143	1
Ichthyol/ Noweda	Unguentum Cordes®	16A137	1
Ichthyol/Noweda	Unguentum Cordes®	16A101	1
Ichthyol/Noweda	Unguentum Cordes®	16A143	1
Euro OTC	Unguentum Cordes®	14A172	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	16A141	1
Euro OTC	Unguentum Cordes®	16A123	1
AHL	Unguentum Cordes®	16A143	1

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Supplier	Substance	Batch	Spectra
ichthyol	Unguentum Cordes [®]	16A101	3
Noweda / Ichthyol	Unguentum Cordes [®]	16A101	1
Ichthol/Anzag	Unguentum Cordes [®]	16A102	1
Ichthyol/Phönix	Unguentum Cordes [®]	16A102	1
Henry Lamotte	Unguentum Cordes [®]	16A102	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A058	1
Ichthyol/ Now	Unguentum Cordes [®]	16A144	1
Caelo	Unguentum Cordes [®]	16A153	3
Euro OTC	Unguentum Cordes [®]	16A101	1
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	16A140	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	16A124	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A026	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	16A142	1
Caelo	Unguentum Cordes [®]	16A143	1
ichthyol	Unguentum Cordes [®]	16A143	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	16A102	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16a141	1
Ichth/Noweda	Unguentum Cordes [®]	16A144	1
Ichthyol Gesellsch./Pho...	Unguentum Cordes [®]	16A183	1
Cordes/Phönix	Unguentum Cordes [®]	16A142	2
Ichthyol	Unguentum Cordes [®]	16A022	1
Ichthyol/O.G.	Unguentum Cordes [®]	16A153	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A153	1
Noweda	Unguentum Cordes [®]	16A085	1
Anza	Unguentum Cordes [®]	16A181	1
Phoenix	Unguentum Cordes [®]	16A102	1
Gehe	Unguentum Cordes [®]	16A143	1
Ichthyol/Gehe	Unguentum Cordes [®]	16A183	1
Euro OTC	Unguentum Cordes [®]	16A139	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	16A102	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A144	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A143	1
Caelo	Unguentum Cordes [®]	16A102	1
Caelo	Unguentum Cordes [®]	16A072	1
Bombastus	Unguentum Cordes [®]	16A183	1
Cordes/Gehe	Unguentum Cordes [®]	16A155	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	16A155	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A102	1
ichthyol gesellschaft	Unguentum Cordes [®]	16A143	1
Ichthyol	Unguentum Cordes [®]	16A176	3
Ichthyol/GEHE	Unguentum Cordes [®]	16A143	1
AHD	Unguentum Cordes [®]	16A070	1
Caelo	Unguentum Cordes [®]	16A144	2
Ichthyol Gesellschaft/ ...	Unguentum Cordes [®]	16A144	1
Ichthyol Gesellschaft/ ...	Unguentum Cordes [®]	16A102	1
Caelo	Unguentum Cordes [®]	16A142	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes [®]	16A144	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	16A155	1
ichthyol	Unguentum Cordes [®]	16A176	1
Ichthyol/ Anzag	Unguentum Cordes [®]	16A155	1
Noweda / Ichthyol	Unguentum Cordes [®]	16A102	1
Anzag	Unguentum Cordes [®]	16A178	1
Sanova Pharma/Gehe	Unguentum Cordes [®]	16A102	2
Ichthyol-Gesellschaft/ ...	Unguentum Cordes [®]	16A141	1
Ichthyol	Unguentum Cordes [®]	16A102	3
Ichthyol/Fiebig	Unguentum Cordes [®]	16A184	1
Ichthyol- Gesellschaft	Unguentum Cordes [®]	16A155	1
ichthyol gmbh/Alliance ...	Unguentum Cordes [®]	16A183	1
Caelo	Unguentum Cordes [®]	16A183	1
Ichthyol	Unguentum Cordes [®]	16A184	4

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Supplier	Substance	Batch	Spectra
Ichthyol	Unguentum Cordes®	16A16	1
Ichthyol/Sanacorp	Unguentum Cordes®	16A176	1
Noweda/Ichthyol	Unguentum Cordes®	16A102	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	16A144	1
Ichthyol/Noweda	Unguentum Cordes®	16A176	1
Ichthyol/Noweda	Unguentum Cordes®	16A139	1
Ichthyol Gesellschaft /...	Unguentum Cordes®		1
Ichthyol	Unguentum Cordes®	16A142	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A210	1
Ichthyol/Gehe	Unguentum Cordes®	16A210	1
Ichthyol/AllianceHealth...	Unguentum Cordes®	16A183	1
Ichthyol/Noweda	Unguentum Cordes®	16A15501062983	1
Ichthyol Gesellschaft	Unguentum Cordes®	16A184	1
Caelo	Unguentum Cordes®	16A210	2
Ichthyol	Unguentum Cordes®	16A184	1
Ichthyol / G	Unguentum Cordes®	16A184	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A051	1
Caelo	Unguentum Cordes®	16A176	1
Gehe	Unguentum Cordes®	16A184	1
Allianc. Health. / Icht...	Unguentum Cordes®	16A184	1
Ichthyol/Noweda	Unguentum Cordes®	16A210	1
Ichthyol-Gesellschaft/K...	Unguentum Cordes®	16A184	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A210	1
Ichthyol/ Phoenix	Unguentum Cordes®	16A155	1
Ichthyol/O.G.	Unguentum Cordes®	16A210	1
Ichthyol	Unguentum Cordes®	16A181	1
Ichthyol / Phönix	Unguentum Cordes®	16A210	1
Ebert-Jacobi	Unguentum Cordes®	17A008	1
Ichthyol/Noweda	Unguentum Cordes®	16A153	1
Ichthyol/Noweda	Unguentum Cordes®	17A050	1
Ichthyol/Phönix	Unguentum Cordes®	16A184	1
Ichthyol	Unguentum Cordes®	16A210	1
Ichthyol-Gesellschaft	Unguentum Cordes®	6071714	1
Ichthyol-Gesellschaft/N...	Unguentum Cordes®	17A051	1
Ichthyol/ E+J	Unguentum Cordes®	17A009	1
Cordes Phönix	Unguentum Cordes®	17A051	1
Caelo	Unguentum Cordes®	16A184	4
Ichthyol Gesellschaft/P...	Unguentum Cordes®	16A184	1
Phönix / Ichthyol	Unguentum Cordes®	16A176	1
Ichthyol/Fiebig	Unguentum Cordes®	17A018	1
Cordes	Unguentum Cordes®	16A184	1
Sanacorp	Unguentum Cordes®	16A184	1
Fagron	Unguentum Cordes®	17A052	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	17A052	1
ichthyol	Unguentum Cordes®	17A051	1
Ichthyol	Unguentum Cordes®	16A183	2
ychthyol	Unguentum Cordes®	16A184	1
ICHTHYOL-GESELLSCHAFT/P...	Unguentum Cordes®	16A210	2
Ichthyol	Unguentum Cordes®	17A053	2
Ichthyol/Phönix	Unguentum Cordes®	17A002	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	16A176	2
Ichthyol/Phönix	Unguentum Cordes®	17A054	1
Anzag	Unguentum Cordes®	17A008	1
Ichthyol-Gesellschaft	Unguentum Cordes®	16A184	2
Jenne	Unguentum Cordes®	16A183	1
Ichthyol AG / Alliance ...	Unguentum Cordes®	17A002	1
Ichthyol	Unguentum Cordes®	17A052	1
Ichthyolgesellschaft / ...	Unguentum Cordes®	17A019	1
Ichthyol-Gesellschaft/A...	Unguentum Cordes®	15A139	1
Caelo	Unguentum Cordes®	17A053	1

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Supplier	Substance	Batch	Spectra
Ichtyol/AHD	Unguentum Cordes [®]	16A184	1
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A053	1
Ichtyol Gesellschaft	Unguentum Cordes [®]	17A002	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	16A183	1
Kehr	Unguentum Cordes [®]	17A002	1
Ichtyol/Noweda	Unguentum Cordes [®]	16A176	1
Ichthyol/AllianceHealth...	Unguentum Cordes [®]	17A052	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A054	2
Ichthyol/ Noweda	Unguentum Cordes [®]	17A002	1
Caelo	Unguentum Cordes [®]	17A070	2
Caelo	Unguentum Cordes [®]	17A002	1
Ichthyol / Alliance Hea...	Unguentum Cordes [®]	17A053	1
Ichthyol Gesellschaft	Unguentum Cordes [®]	17A163	1
Ichthyol/Noweda	Unguentum Cordes [®]	17A054	2
Ichthyol / Alliance Hea...	Unguentum Cordes [®]	17A163	1
Noweda/Ichtyol	Unguentum Cordes [®]	16A184	1
ichthyol gesellschaft	Unguentum Cordes [®]	17A054	1
Ichthyol/Sanova Pharma	Unguentum Cordes [®]	17A003	1
Ichthyol/ Alliance Heal...	Unguentum Cordes [®]	17A003	1
ichthyol	Unguentum Cordes [®]	17a003	1
Caelo	Unguentum Cordes [®]	17A0025376	1
Fagron	Unguentum Cordes [®]	17a054	1
Ichthyol/Gehe	Unguentum Cordes [®]	17A164	1
Ichthyol / AHD	Unguentum Cordes [®]	17A002	1
Caelo	Unguentum Cordes [®]	17A163	2
Kehr	Unguentum Cordes [®]	17A003	1
Ichthyol/Sanacorp	Unguentum Cordes [®]	17A002	2
Ichthyol/Sanacorp	Unguentum Cordes [®]	16A184	1
Ichthyol/Phönix	Unguentum Cordes [®]	17A164	2
Ichthyol / Phönix	Unguentum Cordes [®]	17A164	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A070	1
Ichthyol	Unguentum Cordes [®]	17A164	3
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes [®]	17A163	1
Caelo	Unguentum Cordes [®]	17A003	2
Ichthyol	Unguentum Cordes [®]	17A003	1
Ichthyol-Gesellschaft/P...	Unguentum Cordes [®]	17A049	1
ichthyol	Unguentum Cordes [®]	17A163	2
AHL	Unguentum Cordes [®]	17A049	1
Ichthyol Gesellschaft /...	Unguentum Cordes [®]	171107UC/17A109	1
Ichthyol/Noweda	Unguentum Cordes [®]	17A002	1
Ichthyol Gesellschaft/AHD	Unguentum Cordes [®]	17A054	1
Ichthyol GEHE	Unguentum Cordes [®]	17A054	1
ichthyol	Unguentum Cordes [®]	17A003	1
Cordes/Phönix	Unguentum Cordes [®]	17A055	2
Ichtiol-Gesellschaft,Cor...	Unguentum Cordes [®]	16A144	1
Ichthyol-Gesellschaft	Unguentum Cordes [®]	17A003	1
Gehe	Unguentum Cordes [®]	17A004	1
Ichthyol / Gehe	Unguentum Cordes [®]	17A049	2
Bombastus	Unguentum Cordes [®]	16A176170613-6	1
Noweda-Ichthyol	Unguentum Cordes [®]	17A054	1
Ichthyol	Unguentum Cordes [®]	17A055	1
Ichthyol-Gesellschaft /...	Unguentum Cordes [®]	17A004	2
Ichthyol Gesellschaft C...	Unguentum Cordes [®]	17A003	1
Ichthyol/Anzag	Unguentum Cordes [®]	17A003	1
Phoenix/Ichthyol	Unguentum Cordes [®]	17A055	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A049	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A216	1
Ichthyol	Unguentum Cordes [®]	17A004	1
Ichtyol/Noweda	Unguentum Cordes [®]	17A004	1
Ichthyol/OG	Unguentum Cordes [®]	17A003	2

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Supplier	Substance	Batch	Spectra
ICHTHYOL-GESELLSCHAFT	Unguentum Cordes®	17A049	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A049	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A004	1
Caeolo/Gehe	Unguentum Cordes®	17A004	1
Ichthyol-Gesellschaft/A...	Unguentum Cordes®	17A049	1
Ichthyol/Phönix	Unguentum Cordes®	17A101	1
Caelo	Unguentum Cordes®	17A101	1
Ichthyol-Gesellschaft	Unguentum Cordes®	23121702	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A164	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A004	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A003	1
Ichthyol	Unguentum Cordes®	17A056	2
Ichthyol-Gesellschaft	Unguentum Cordes®	17A049	2
Noweda / Ichthyol-Gesel...	Unguentum Cordes®	17A004	1
Cordes	Unguentum Cordes®	17A004	1
Ichthyol/AHD	Unguentum Cordes®	17A005	2
Ichthyol/Alliance Healt...	Unguentum Cordes®	17A003	2
Ichthyol-Gesellschaft	Unguentum Cordes®	17A056	1
Ichthyol/Noweda	Unguentum Cordes®	17A057	1
Ichthyol/Phönix	Unguentum Cordes®	17A056	1
Ichthyol-Gesellschaft/ ...	Unguentum Cordes®	17A056	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A057	2
Ichthyol/Phönix	Unguentum Cordes®	17A057	1
AHL	Unguentum Cordes®	17A056	1
Noweda	Unguentum Cordes®	17A101	1
Ichthyol/ Phoenix	Unguentum Cordes®	17A069	1
Ichtyol/Noweda	Unguentum Cordes®	17A005	1
ICHTHYOL	Unguentum Cordes®	17A057	1
Phönix/Ichthyol	Unguentum Cordes®	17A069	1
Caelo	Unguentum Cordes®	17A005	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A069	2
ICHTYOL-Gesellsch./Sana...	Unguentum Cordes®	17A004	1
Ichthyol/Phönix	Unguentum Cordes®	17A0058	1
Ichtyol Gesells./AHD	Unguentum Cordes®	17A005	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A101	1
Ichthyol/Phönix	Unguentum Cordes®	17A069	2
Ichthyol	Unguentum Cordes®	17A069	1
Caelo	Unguentum Cordes®	17A004	2
Ichthyol Ges. / Gehe	Unguentum Cordes®	17A069	1
ichthyol gesellschaft	Unguentum Cordes®	17A069	1
Ichthyol/Noweda	Unguentum Cordes®	17A069	1
Ichthyol/Gehe	Unguentum Cordes®	17A057	1
Ichthyol / Phönix	Unguentum Cordes®	17A098	1
Caelo	Unguentum Cordes®	17A217	1
Phoenix	Unguentum Cordes®	17A218	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A069	1
Bombastus	Unguentum Cordes®	17A005	2
Phönix/Ichthyol	Unguentum Cordes®	17A005	1
ichthyol gesellschaft/ ...	Unguentum Cordes®	17a003	1
Ichthyol	Unguentum Cordes®	17A098	1
Fagron	Unguentum Cordes®	17A005	1
Ichthyol/Krieger	Unguentum Cordes®	17A005	2
ichthyol/gehe	Unguentum Cordes®	17A005	1
Ichthyol gesellschaft	Unguentum Cordes®	17A005	1
Ichthyol	Unguentum Cordes®	17A005	2
Ichthyol/ E+J	Unguentum Cordes®	17A192	1
Noweda	Unguentum Cordes®	17A005	1
Phoenix/Cealo	Unguentum Cordes®	17A007	1
Kehr	Unguentum Cordes®	17A004	1
Ichthyol/Noweda	Unguentum Cordes®	17A004	1

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Supplier	Substance	Batch	Spectra
Ichthyol / Alliance Hea...	Unguentum Cordes®	17A069	1
Ichthyol/Phönix	Unguentum Cordes®	17A104	2
Ichthyol/Spangro	Unguentum Cordes®	17A004	1
Kehr/Ichthyol	Unguentum Cordes®	17A005	1
Ichthyol/ Noweda	Unguentum Cordes®	17A0005	1
Phönix W.E:09.03.18 E...	Unguentum Cordes®	17A098	1
Phönix/Cordes	Unguentum Cordes®	17A104	1
Cordes	Unguentum Cordes®	17A005	1
Caelo	Unguentum Cordes®	17A055	1
Caelo	Unguentum Cordes®	15a149	1
Ichthyol	Unguentum Cordes®	17A007	4
Ichthyol/Sanacorp	Unguentum Cordes®	17A005	2
ichthyol	Unguentum Cordes®	17A0075535	1
Ichthyol/Noweda	Unguentum Cordes®	17A105	1
ICHTHYOL / 20	Unguentum Cordes®	17A106	1
Ichthyol/Phönix	Unguentum Cordes®	17A112	2
Ichtyol/Noweda	Unguentum Cordes®	17A007	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A105	1
Cordes/Noweda	Unguentum Cordes®	17A106	1
Ichtyol / Alliance Heal...	Unguentum Cordes®	17A104	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A007	2
Ichtyol / Alliance Heal...	Unguentum Cordes®	17A098	1
Ichthyol / Gehe	Unguentum Cordes®	17A106	2
Phoenix	Unguentum Cordes®	17A104	1
Ichthyol	Unguentum Cordes®	17A106	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A104	1
Ichtyol Gesllschaft	Unguentum Cordes®	17A098	1
Ichthyol/Noweda	Unguentum Cordes®	15A060	1
Caelo	Unguentum Cordes®	17A113	5
Ichthyol/Sanacorp	Unguentum Cordes®	17A106	1
Ichthyol-Gesellschaft/AHD	Unguentum Cordes®	17A112	1
Ichthyol/AllianceHealth...	Unguentum Cordes®	17A113	1
Ichthyol	Unguentum Cordes®	17A112	2
Caelo	Unguentum Cordes®	3051804	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A126	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A113	1
Ichthyol/ Anzag	Unguentum Cordes®	17A005	1
Noweda	Unguentum Cordes®	16A047	1
Caelo	Unguentum Cordes®	17A045	3
Ichthyol	Unguentum Cordes®	17A113	2
Phoenix	Unguentum Cordes®	17A112	1
Ichthyol-Gesellschaft	Unguentum Cordes®	12051805	1
Ichthyol/ Phoenix	Unguentum Cordes®	17A126	1
Sanacorp	Unguentum Cordes®	17A045	1
Ichthyol/Noweda	Unguentum Cordes®	17A045	2
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A202	1
Noweda / Ichthyol-Gesel...	Unguentum Cordes®	17A007	1
Ichthyol/ Noweda	Unguentum Cordes®	18A002	1
Ichtiol-Gesellschaft,Cor...	Unguentum Cordes®	17A126	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A112	1
Ichthyol / Phönix	Unguentum Cordes®	17A113	1
Ichthyol / Gehe	Unguentum Cordes®	17A113	1
Kehr / Ichthyol-Geselsc...	Unguentum Cordes®	17A126	1
Caelo	Unguentum Cordes®	17A126	2
Ichthyol Gesellschaft	Unguentum Cordes®	17A126	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A113	1
Ichthyol/Phoenix	Unguentum Cordes®	15A044	1
Ichthyol-Noweda	Unguentum Cordes®	17A105	1
Caelo	Unguentum Cordes®	17A112	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A045	2

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft	Unguentum Cordes®	17A007	1
Ichthyol/Fiebig	Unguentum Cordes®	17A045	1
Allianz	Unguentum Cordes®	18A002	1
Ichthyol/Phoenix	Unguentum Cordes®	17A045	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A127	1
Ichthyol/GEHE	Unguentum Cordes®	17A127	1
Ichthyol/AHD	Unguentum Cordes®	17A067	1
Ichthyol/Phönix	Unguentum Cordes®	17A127	1
Caelo	Unguentum Cordes®	17A067	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A049	1
Ichthyol Gesellschaft	Unguentum Cordes®	17A007	1
Delta	Unguentum Cordes®	17A045	1
Cordes	Unguentum Cordes®	17A045	1
Caelo	Unguentum Cordes®	17A127	2
Krieger	Unguentum Cordes®	18A004	1
Ichthyol-Gesellschaft	Unguentum Cordes®	21071806	1
Ichthyol-Gesellschaft	Unguentum Cordes®	23071802	1
AHD	Unguentum Cordes®	17A045	1
Ichthyol Gesllschaft/Ph...	Unguentum Cordes®	18A048	1
Ichthyol/OG	Unguentum Cordes®	17A067	1
Cordes	Unguentum Cordes®	17A067	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A127	1
Ichthyol/Sanacorp	Unguentum Cordes®	17A045	1
Ichthyol/Gehe	Unguentum Cordes®	18A048	1
Ichthyol / Phönix	Unguentum Cordes®	17A127	1
Ichthyol	Unguentum Cordes®	18A049	1
Ichthyol-Gesellschaft/ P...	Unguentum Cordes®	17A112	1
Ichthyol Gesellschaft-C...	Unguentum Cordes®	17A084	2
Ichthyol-Gesellschaft	Unguentum Cordes®	18A049	1
Ichthyol / Gehe	Unguentum Cordes®	18A049	1
Ichthyol Gesellschaft	Unguentum Cordes®	18A049	1
Ichthyol/ E+J	Unguentum Cordes®	18A005	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	18A005	1
Ichthyol/AHD	Unguentum Cordes®	18A049	1
Ichthyol/Phönix	Unguentum Cordes®	18A049	1
Ichthyol Gesellschaft-C...	Unguentum Cordes®	16A085	1
Ichthyol/Noweda	Unguentum Cordes®	1A048	1
Ichthyol-Gesellschaft	Unguentum Cordes®	17A084	3
Kehr	Unguentum Cordes®	17A007	1
Bombastus	Unguentum Cordes®	18A050	1
Cordes	Unguentum Cordes®	18A051	1
Ichthyol-Gesellschaft	Unguentum Cordes®	13101802	1
Ichthyol/Noweda	Unguentum Cordes®	18A052	1
Cordes/gehe	Unguentum Cordes®	17A084	1
Ichthyol/Noweda	Unguentum Cordes®	17A084	1
Ichthyol / Alliance Hea...	Unguentum Cordes®	18A048	1
Ichthyol/Noweda	Unguentum Cordes®	18A051	1
Caelo	Unguentum Cordes®	18A067	2
Ichthyol/Noweda	Unguentum Cordes®	17A0852ma1250g	1
Ichthyol/AHD	Unguentum Cordes®	17A084	1
Ichthyol-Gesellschaft C...	Unguentum Cordes®	17A084-U20181115Ma4	1
Ichthyol	Unguentum Cordes®	17A084	1
Phönix/Ichthyol	Unguentum Cordes®	18A050	1
Caelo	Unguentum Cordes®	18A052	1
Caelo	Unguentum Cordes®	17A085	2
Euro OTC	Unguentum Cordes®	17A085	1
Caelo	Unguentum Cordes®	18A007	1
Ichthyol-Gesellschaft	Unguentum Cordes®	181221-E02	1
Caelo	Unguentum Cordes®	18A070	1
Ichthyol	Unguentum Cordes®	17A085	2

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Supplier	Substance	Batch	Spectra
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A085	1
Ichthyol / Alliance Hea...	Unguentum Cordes [®]	18A067	1
Ichthyol / Alliance Hea...	Unguentum Cordes [®]	18A215	1
Caelo	Unguentum Cordes [®]	17a087	1
Kehr/Ichthyol	Unguentum Cordes [®]	17A087	1
Ichthyol/Noweda	Unguentum Cordes [®]	18A073	1
Ichthyol/Noweda	Unguentum Cordes [®]	18A105	1
Cordes / Gehe	Unguentum Cordes [®]	17A085	1
Ichthyol	Unguentum Cordes [®]	18A105	1
Caelo	Unguentum Cordes [®]	17A142	1
Caelo	Unguentum Cordes [®]	18A105	1
Kehr/Ichthyol	Unguentum Cordes [®]	17A142	1
Ichthyol-Gesellschaft C...	Unguentum Cordes [®]	17A087	1
Apomix	Eye ointment, emulsifying DAC	7C040612	1
PKH Halle / Noweda	Eye ointment, emulsifying DAC	9C250612	1
Caelo	Eye ointment, emulsifying DAC	4A270212	1
Apomix	Eye ointment, emulsifying DAC	11B030912	1
Noweda/ PKH Halle	Eye ointment, emulsifying DAC	16A061212	1
Phönix Gotha	Eye ointment, emulsifying DAC	16B061212	1
Caelo	Eye ointment, emulsifying DAC	3A180213	1
Noweda/apomix	Eye ointment, emulsifying DAC	1B070113	1
Apomix	Eye ointment, emulsifying DAC	3A180213	1
PKH Halle/ Phoenix	Eye ointment, emulsifying DAC	3A180213	1
Apomix	Eye ointment, emulsifying DAC	5B220413	1
Phönix Gotha	Eye ointment, emulsifying DAC	5B220413	1
PKH GmbH/Phönix	Eye ointment, emulsifying DAC	7B210513	1
PKH/Gehe	Eye ointment, emulsifying DAC	3B180213	1
Apomix / Phönix	Eye ointment, emulsifying DAC	17C061212	2
Apomix/Anzag	Eye ointment, emulsifying DAC	16B061212	1
Apomix / Phönix	Eye ointment, emulsifying DAC	7A210513	1
PKH/Gehe	Eye ointment, emulsifying DAC	10C170613	1
PKH Halle / Noweda	Eye ointment, emulsifying DAC	7D210513	1
Apomix/Noweda	Eye ointment, emulsifying DAC	7D210513	1
PKH GmbH/ Phönix	Eye ointment, emulsifying DAC	12C300813	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	12C011012	1
apomix/Phönix	Eye ointment, emulsifying DAC	9B25061	1
apomix/Phönix	Eye ointment, emulsifying DAC	11A170713	1
Apomix / AHD	Eye ointment, emulsifying DAC	11B170713	1
PKH Halle/ Phoenix	Eye ointment, emulsifying DAC	11D170713	1
apomix/ Sanacorp	Eye ointment, emulsifying DAC	12C300813	1
Apomix	Eye ointment, emulsifying DAC	15A241013	1
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	17A111113	1
Apomix /	Eye ointment, emulsifying DAC	17B111113	1
AMH Niemann/E	Eye ointment, emulsifying DAC	1C080114	1
Caelo	Eye ointment, emulsifying DAC	13084905	1
Apomix	Eye ointment, emulsifying DAC	17A111113	1
PHOENIX 03.03.2014	Eye ointment, emulsifying DAC	16B111113	1
apomix	Eye ointment, emulsifying DAC	17B111113	1
Gehe/Apomix	Eye ointment, emulsifying DAC	1C080114	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	3C200114	2
Apomix / Kehr	Eye ointment, emulsifying DAC	48200114	1
Apomix/Noweda	Eye ointment, emulsifying DAC	8D020414	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	4B200114	1
Apomix / Phönix	Eye ointment, emulsifying DAC	7B030314	1
Noweda/apomix	Eye ointment, emulsifying DAC	4B200114	1
Apomix	Eye ointment, emulsifying DAC	5A030314	1
PKH GmbH Halle	Eye ointment, emulsifying DAC	1C080114	1
apomix/Sanacorp	Eye ointment, emulsifying DAC	9A190514	1
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	14A011013	1
Alliance Healthcare/Apo...	Eye ointment, emulsifying DAC	9C190514	1

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Supplier	Substance	Batch	Spectra
Apomix / Kehr	Eye ointment, emulsifying DAC	14A011013	1
Apomix / Phönix	Eye ointment, emulsifying DAC	15A170914	1
Apomix	Eye ointment, emulsifying DAC	14C170914	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	16A231014	1
Apomix	Eye ointment, emulsifying DAC	14A011013	1
Apomix/Noweda	Eye ointment, emulsifying DAC	17A231014	1
PKH/ Noweda	Eye ointment, emulsifying DAC	12E010814	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	19A021214	1
Apomix	Eye ointment, emulsifying DAC	18B021214	1
Alliance HealthcareApomix	Eye ointment, emulsifying DAC	18B021214	1
apomix	Eye ointment, emulsifying DAC	12C010814	1
Apomix/Sanacorp 13.05.2. . .	Eye ointment, emulsifying DAC	3270115	1
Noweda/apomix	Eye ointment, emulsifying DAC	18C021214	1
Apomix/Kehr	Eye ointment, emulsifying DAC	7A160315	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	18C021214	1
All. Healthc. /Apomix	Eye ointment, emulsifying DAC	10A010615	2
Apomix/ Phönix	Eye ointment, emulsifying DAC	13A010715	1
Apomix / Noweda	Eye ointment, emulsifying DAC	9A080415	1
Apomix/Anzag	Eye ointment, emulsifying DAC	9A080415	1
Apomix/Noweda	Eye ointment, emulsifying DAC	15C030815	1
apomix/Noweda	Eye ointment, emulsifying DAC	20D011215	1
Euro OTC	Eye ointment, emulsifying DAC	18A021115	1
Apomix/Kehr	Eye ointment, emulsifying DAC	15B030815	1
apomix	Eye ointment, emulsifying DAC	15D030815	1
Apomix/Kehr	Eye ointment, emulsifying DAC	20D011215	1
PhR Neidhardt	Eye ointment, emulsifying DAC	20A011215	1
Caelo	Eye ointment, emulsifying DAC	14C030815	1
Apomix/Kehr	Eye ointment, emulsifying DAC	19B021115	1
AHD	Eye ointment, emulsifying DAC	18A021115	1
Apomix / Noweda	Eye ointment, emulsifying DAC	15A030815	1
AMH	Eye ointment, emulsifying DAC	16B011015	1
Allianc. Health. /Apomix	Eye ointment, emulsifying DAC	18A021115	1
Apomix/Kehr	Eye ointment, emulsifying DAC	2D040116	1
Apomix	Eye ointment, emulsifying DAC	2C040116	1
apomix/Noweda	Eye ointment, emulsifying DAC	18C021115	1
Apomix / Noweda	Eye ointment, emulsifying DAC	6A090516	1
Apomix/ Phönix	Eye ointment, emulsifying DAC	7A010616	1
Apomix	Eye ointment, emulsifying DAC	1D040116	1
AMH Niemannn GmbH	Eye ointment, emulsifying DAC	5B110416	1
Caelo	Eye ointment, emulsifying DAC	5D110416	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	6D090516	1
Allianc. Health. /Apomix	Eye ointment, emulsifying DAC	5D110416	1
AHD / apomix	Eye ointment, emulsifying DAC	7B010616	1
Apomix /Noweda	Eye ointment, emulsifying DAC	9B050916	1
Apomix	Eye ointment, emulsifying DAC	9C050916	1
Apomix/Kehr	Eye ointment, emulsifying DAC	10A041016	1
Apomix/Kehr	Eye ointment, emulsifying DAC	10B041016	1
Apomix / Phönix	Eye ointment, emulsifying DAC	13B071216	1
Apomix /Noweda	Eye ointment, emulsifying DAC	10C041016	1
Allianc. Health. / Apomix	Eye ointment, emulsifying DAC	10C041016	2
Apomix/Kehr	Eye ointment, emulsifying DAC	11B011116	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	13A071216	1
Apomix/Phönix	Eye ointment, emulsifying DAC	11A011116	1
Apomix	Eye ointment, emulsifying DAC	2B020117	1
AHD /apomix	Eye ointment, emulsifying DAC	3B060217	1
Apomix/Kehr	Eye ointment, emulsifying DAC	1B020117	1
Apomix / Sanacorp	Eye ointment, emulsifying DAC	6D150317	1
apomix/Holdermann	Eye ointment, emulsifying DAC	7A180417	1
Apomix /Noweda	Eye ointment, emulsifying DAC	2D020117	1
Apomix/Phönix	Eye ointment, emulsifying DAC	3C060217	1

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Supplier	Substance	Batch	Spectra
Apomix	Eye ointment, emulsifying DAC	7D180417	1
Apomix/Kehr	Eye ointment, emulsifying DAC	7D180417	1
Apomix Noweda	Eye ointment, emulsifying DAC	8B150517	1
apomix/Phönix	Eye ointment, emulsifying DAC	4C060217	1
	Eye ointment, emulsifying DAC	68150317	1
Apomix/Noweda	Eye ointment, emulsifying DAC	10A100717	1
Apomix/Phönix	Eye ointment, emulsifying DAC	13D070817	1
apomix	Eye ointment, emulsifying DAC	5C260418	1
Apomix/ Sanacorp	Eye ointment, emulsifying DAC	16C011117	1
PKH	Eye ointment, emulsifying DAC	18B231117	1
Apomix	Eye ointment, emulsifying DAC	2A070318	1
Bombastus	Wool alcohol ointment SR wit...	274517	2
Bombastus	Wool alcohol ointment SR wit...	270784	2
Phönix	Wool alcohol ointment SR wit...	270781	1
Bombastus	Wool alcohol ointment SR wit...	276135	1
Caelo	Wool alcohol ointment SR wit...	12078201	1
Bombastus	Wool alcohol ointment SR wit...	270781	1
Bombastus	Wool alcohol ointment SR wit...	277023	2
Gehe	Wool alcohol ointment SR wit...	276135	1
Bombastus	Wool alcohol ointment SR wit...	274518	3
Bombastus	Wool alcohol ointment SR wit...	277024	4
Noweda	Wool alcohol ointment SR wit...	12078301	1
Bombastus	Wool alcohol ointment SR wit...	277022	2
Bombastus	Wool alcohol ointment SR wit...	274521	1
Noweda	Wool alcohol ointment SR wit...	12244302	1
Bombastus	Wool alcohol ointment SR wit...	279105	3
Bombastus	Wool alcohol ointment SR wit...	279104	1
Bombastus	Wool alcohol ointment SR wit...	280058	2
Apomix	Wool alcohol ointment SR wit...	6A110912	1
Noweda	Wool alcohol ointment SR wit...	12078201	1
Caelo	Wool alcohol ointment SR wit...	13077301	1
Bombastus	Wool alcohol ointment SR wit...	280059	1
Bombastus	Wool alcohol ointment SR wit...	280060	1
Bombastus	Wool alcohol ointment SR wit...	270776	1
Apomix/Noweda	Wool alcohol ointment SR wit...	2A080713	1
Bombastus	Wool alcohol ointment SR wit...	283176	4
Caelo	Wool alcohol ointment SR wit...	13264102	2
Bombastus	Wool alcohol ointment SR wit...	280061	2
Caelo	Wool alcohol ointment SR wit...	13077302	1
Caele/ Jenne	Wool alcohol ointment SR wit...	13340003	1
Apomix	Wool alcohol ointment SR wit...	5231213	1
Bombastus	Wool alcohol ointment SR wit...	283174	1
Bombastus	Wool alcohol ointment SR wit...	284378	2
Phönix Gotha	Wool alcohol ointment SR wit...	284381	1
Caelo	Wool alcohol ointment SR wit...	14032502	1
Bombastus	Wool alcohol ointment SR wit...	284381	1
Bombastus	Wool alcohol ointment SR wit...	286884	1
Bombastus	Wool alcohol ointment SR wit...	280057	1
Bombastus	Wool alcohol ointment SR wit...	285952	2
Bombastus	Wool alcohol ointment SR wit...	288688	1
Phoenix 27.11.14 EK 6,08	Wool alcohol ointment SR wit...	288688	1
Apomix	Wool alcohol ointment SR wit...	6A290714	1
	Wool alcohol ointment SR wit...	291175	2
Bombastus	Wool alcohol ointment SR wit...	284379	1
Henry Lamotte Oels GmbH	Wool alcohol ointment SR wit...	7A111214	2
Bombastus	Wool alcohol ointment SR wit...	291175	1
Bombastus	Wool alcohol ointment SR wit...	291177	2
Apomix/Noweda	Wool alcohol ointment SR wit...	1A180215	1
Bombastus	Wool alcohol ointment SR wit...	288686	1
Bombastus	Wool alcohol ointment SR wit...	293378	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment SR wit...	291176	1
Caelo	Wool alcohol ointment SR wit...	15047002	2
Sanacop	Wool alcohol ointment SR wit...	288688	1
Caelo	Wool alcohol ointment SR wit...	15047101	6
Caelo	Wool alcohol ointment SR wit...	15047004	1
Bombastus	Wool alcohol ointment SR wit...	286880	1
Bombastus	Wool alcohol ointment SR wit...	293374	1
Apomix	Wool alcohol ointment SR wit...	2A070515	1
Bomba/ Kehr	Wool alcohol ointment SR wit...	288689	1
Bombastus	Wool alcohol ointment SR wit...	295358	2
Bombastus	Wool alcohol ointment SR wit...	295360	2
Bombastus	Wool alcohol ointment SR wit...	297125	1
Bombastus	Wool alcohol ointment SR wit...	295359	1
Bombastus	Wool alcohol ointment SR wit...	297130	1
Bombastus	Wool alcohol ointment SR wit...	30079	1
Bombastus	Wool alcohol ointment SR wit...	300083	2
Bombastus	Wool alcohol ointment SR wit...	297127	1
Bombastus	Wool alcohol ointment SR wit...	297128	2
Caelo	Wool alcohol ointment SR wit...	15334702	1
Caelo	Wool alcohol ointment SR wit...	15269302	1
Pharmachem	Wool alcohol ointment SR wit...	250116	1
Caelo	Wool alcohol ointment SR wit...	15047003	1
Bombastus	Wool alcohol ointment SR wit...	300084	1
Apomix/Gehe	Wool alcohol ointment SR wit...	302599	3
Caelo	Wool alcohol ointment SR wit...	15334703	1
Caelo	Wool alcohol ointment SR wit...	16251302	4
Caelo	Wool alcohol ointment SR wit...	16142802	2
Caelo	Wool alcohol ointment SR wit...	1625102	1
medphano AM GmbH	Wool alcohol ointment SR wit...	6550115	1
Apomix/Noweda	Wool alcohol ointment SR wit...	1A110416	1
Bombastus	Wool alcohol ointment SR wit...	106236	1
Caelo	Wool alcohol ointment SR wit...	16251301	2
medphano Arzneimittel/S...	Wool alcohol ointment SR wit...	6550115	1
GEHE	Wool alcohol ointment SR wit...	310488	2
Bombastus	Wool alcohol ointment SR wit...	308145	1
medphano/Gehe	Wool alcohol ointment SR wit...	6550115	1
Medphano Arzneimittel /...	Wool alcohol ointment SR wit...	6550115	1
Bombastus	Wool alcohol ointment SR wit...	18003449	1
Caelo	Wool alcohol ointment SR wit...	16142803	1
Medphano/Phönix	Wool alcohol ointment SR wit...	6550118	1
Caelo	Wool alcohol ointment SR wit...	18074502	1
Caelo	Paraffin, liquid	10162009	1
Caelo	Paraffin, liquid	11207702	2
Caelo	Paraffin, liquid	11354102	7
Noweda	Paraffin, liquid	122875	1
Euro OTC	Paraffin, liquid	1102009-01	1
Henry Lamotte GmbH, Mer...	Paraffin, liquid	79460	1
Caelo	Paraffin, liquid	9320905	1
Gehe	Paraffin, liquid	11354102	1
Fagron	Paraffin, liquid	1004C014	1
Gehe	Paraffin, liquid	122875	1
Euro OTC	Paraffin, liquid	1110014-01	3
Henry Lamotte GmbH, Mer...	Paraffin, liquid	122875	1
Caelo	Paraffin, liquid	11H04-N02	1
Caelo	Paraffin, liquid	11263606	3
Fagron	Paraffin, liquid	11L19-N01	1
Eigenherstellung	Paraffin, liquid	130712HML01	1
Caelo	Paraffin, liquid	10071202	1
Henry Lamotte Oils GmbH	Paraffin, liquid	5098101	1
Caelo	Paraffin, liquid	1205033-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, liquid	113544102	1
Caelo	Paraffin, liquid	12102101	8
Euro OTC	Paraffin, liquid	1203042-01	2
EuRho	Paraffin, liquid	1203042-01	1
H.Lamotte/Noweda	Paraffin, liquid	123075	1
Europharm/Otto	Paraffin, liquid	1110014-01	1
Lamotte	Paraffin, liquid	123075	1
Phoenix	Paraffin, liquid	12042202	1
Noweda	Paraffin, liquid	11354102	1
Caelo	Paraffin, liquid	12H27-N01	2
Phönix/Henry	Paraffin, liquid	5367601	7
Eigenherstellung	Paraffin, liquid	291012HJK01	1
Caelo	Paraffin, liquid	2111202	1
Caelo	Paraffin, liquid	12042202	12
Sanacorp	Paraffin, liquid	12042202	3
Fagron	Paraffin, liquid	12H27-N01	8
Henry Lamotte Oils GmbH	Paraffin, liquid	122875	1
Caelo	Paraffin, liquid	12109603	2
EuRho	Paraffin, liquid	1207022-01	1
Bombastus	Paraffin, liquid	266032	1
Caelo	Paraffin, liquid	221108111F30-NO	1
Noweda / Henry Lamotte	Paraffin, liquid	123075	2
Caelo	Paraffin, liquid	12042205	4
Euro OTC	Paraffin, liquid	1208021-01	3
Noweda	Paraffin, liquid	1208021-01	2
Caelo	Paraffin, liquid	20210312-4	1
Henry Lamotte/Anzag	Paraffin, liquid	5367601	3
Anzag 02.01.2013	Paraffin, liquid	12042202	1
Fagron	Paraffin, liquid	123586	3
Bombastus	Paraffin, liquid	260652	1
Caelo	Paraffin, liquid	14011303	1
Caelo	Paraffin, liquid	1601312050	1
Euro OTC	Paraffin, liquid	125071	1
Caelo	Paraffin, liquid	12227701	8
Henry Lamotte GmbH, Mer...	Paraffin, liquid	5367601	2
Caelo	Paraffin, liquid	11092703	1
Fagron	Paraffin, liquid	12J23-N03	4
Sanacorp	Paraffin, liquid	12042205	2
Euro OTC	Paraffin, liquid	1211026-01	7
Caelo	Paraffin, liquid	715I-02050	1
Bombastus	Paraffin, liquid	274958	6
Fagron	Paraffin, liquid	12H27-N01	1
Henry Lamotte	Paraffin, liquid	5367601	6
Henry Lamotte/GEHE	Paraffin, liquid	5367601	2
Henry Lamotte Oils GmbH	Paraffin, liquid	123075	1
Gehe	Paraffin, liquid	12227601	1
Caelo	Paraffin, liquid	19021302	1
Anzag	Paraffin, liquid	123586	1
Euro OTC	Paraffin, liquid	1211027-01	7
Phönix/Euro	Paraffin, liquid	1211027-01	1
Fagron	Paraffin, liquid	13A30-N11	14
Caelo	Paraffin, liquid	5367601	2
Caelo	Paraffin, liquid	12324304	2
Fargon	Paraffin, liquid	13A30-N11	1
Sanacorp	Paraffin, liquid	12324307	1
Caelo	Paraffin, liquid	10162002	1
Caelo	Paraffin, liquid	10364703	1
GEHE	Paraffin, liquid	12324307	1
GEHE	Paraffin, liquid	12102101	1
Caelo	Paraffin, liquid	2103312050	1

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Supplier	Substance	Batch	Spectra
Fagron	Paraffin, liquid	11co8-no7	1
Caelo	Paraffin, liquid	12324307	19
Caelo	Paraffin, liquid	12227609	3
Lamotte	Paraffin, liquid	5367601	3
Bombastus	Paraffin, liquid	263350	1
Euro OTC	Paraffin, liquid	1207022-01	2
Europharm/Otto	Paraffin, liquid	1211027-01	1
Phönix Gotha	Paraffin, liquid	12324307	1
Sanacorp	Paraffin, liquid	1211027-01	1
Henry Lamotte oils GmbH	Paraffin, liquid	123075	2
Caelo	Paraffin, liquid	12227610	1
Eigenherstellung	Paraffin, liquid	150413HML01	1
Gehe	Paraffin, liquid	12324307	1
EUro/AHD	Paraffin, liquid	1211027-01	1
fragon	Paraffin, liquid		1
Lamotte/GEHE	Paraffin, liquid	5367601	1
Eigenherstellung	Paraffin, liquid		1
Caelo	Paraffin, liquid	1811Q-02050	1
Caelo	Paraffin, liquid	57/AD1	1
Caelo	Paraffin, liquid	1913Q-02050	1
Bombastus	Paraffin, liquid	272590	1
Caelo	Paraffin, liquid	13005805	14
Phönix	Paraffin, liquid	13A30-N11	2
Noweda	Paraffin, liquid	1211027-01	1
Fagron	Paraffin, liquid	13A3010	2
Fagron	Paraffin, liquid	13C19-N09	3
Fagron	Paraffin, liquid	959561	4
Caelo	Paraffin, liquid	1234307	1
Lamotte	Paraffin, liquid	13005805	1
Henry Lamotte Olis GmbH	Paraffin, liquid	5367601	2
Caelo	Paraffin, liquid	13050102	18
Henry Lamotte/Sanacorp	Paraffin, liquid	1313703	1
A.H. 03.06.13 ek: 6,15EUR	Paraffin, liquid	274958	1
Caelo	Paraffin, liquid		6
Sanacorp	Paraffin, liquid	5367601	1
Euro OTC	Paraffin, liquid	1303031-01	9
Caelo	Paraffin, liquid	11071302	1
Cealo	Paraffin, liquid	1300805	1
Fagron	Paraffin, liquid	13E28-N02	13
Phoenix	Paraffin, liquid	13A30-N11	1
Euro OTC	Paraffin, liquid	120802101	1
Henry Lamotte oils GmbH	Paraffin, liquid	123743	8
Henry Lamotte Oils/Phönix	Paraffin, liquid	5367601	1
Caelo	Paraffin, liquid	3213Q2050	1
LAMOTTE/NOWEDA	Paraffin, liquid	5367601	1
Caelo	Paraffin, liquid	12227602	1
Noweda	Paraffin, liquid	1303031-01	1
Ph.Eur.	Paraffin, liquid	6861849	2
Euro OTC	Paraffin, liquid	130303101	1
Henry Lamotte Olis	Paraffin, liquid	2x5367601	1
Caelo	Paraffin, liquid	1304010-01	1
Caelo	Paraffin, liquid	4112M-02048	1
Caelo	Paraffin, liquid	2213A-02050	1
Caelo	Paraffin, liquid	13005806	1
Caelo	Paraffin, liquid	13005205	1
Caelo	Paraffin, liquid	1303031-01	1
Henry Lamotte	Paraffin, liquid	122875	1
Lamotte	Paraffin, liquid	123743	1
Caelo	Paraffin, liquid	13131705	16
Caelo	Paraffin, liquid	13131704	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte / Noweda	Paraffin, liquid	123743	4
Henry Lamotte Olis GmbH...	Paraffin, liquid	123743	3
Caelo	Paraffin, liquid	12295601	1
Henry Lamotte GmbH, Mer...	Paraffin, liquid	123743	1
Euro OTC	Paraffin, liquid	1307007-01	13
Noweda	Paraffin, liquid	123743	1
Sanacorp	Paraffin, liquid	1304010-01	1
Caelo	Paraffin, liquid	1313705	2
Caelo	Paraffin, liquid	1135412	1
Fagron	Paraffin, liquid	13E28-N02	1
Phönix	Paraffin, liquid	13131705	1
Caelo	Paraffin, liquid	13232903	8
Caelo	Paraffin, liquid	12324306	1
Fagron	Paraffin, liquid	4413M2050	1
Henry Lamotte Oils GmbH	Paraffin, liquid	5367601	1
Euro OTC	Paraffin, liquid	2911028-01	1
Caelo	Paraffin, liquid	13232901	13
Gehe	Paraffin, liquid	13103309	1
Sanacorp	Paraffin, liquid	13E28-N02	1
Euro OTC	Paraffin, liquid	261113PML01	1
Eigenherstellung	Paraffin, liquid	261113HML01	1
Fagron	Paraffin, liquid	13G24-N12	6
Caelo	Paraffin, liquid	13103309	17
Oils/ Phönix	Paraffin, liquid	123743	2
Henry Lamotte Oils / No...	Paraffin, liquid	123743	2
Euro OTC	Paraffin, liquid	121102701	1
Caelo	Paraffin, liquid	83054508	1
Caelo	Paraffin, liquid	13232901ok	1
Henry Lamotte Oils GmbH...	Paraffin, liquid	123743	1
H.Lamotte/Noweda	Paraffin, liquid	5367601	1
Henry Lamotte Oils GmbH...	Paraffin, liquid	13148606	1
Caelo	Paraffin, liquid	13232902	14
Caelo	Paraffin, liquid	214U-02050	1
Fagron	Paraffin, liquid	13G24N12	1
Eigenherstellung	Paraffin, liquid	150114HML01	1
Caelo	Paraffin, liquid	27011405	1
Caelo	Paraffin, liquid	58/AKD55	1
EuRho / Noweda	Paraffin, liquid	131102401	1
Euro OTC	Paraffin, liquid	1311024/01	1
Caelo	Paraffin, liquid	13G24-N12	2
Caelo	Paraffin, liquid	16061203	1
Euro OTC	Paraffin, liquid	1311024-01	12
Fagron	Paraffin, liquid	13H02-B02	1
Henry Lamotte	Paraffin, liquid	123393	1
Caelo	Paraffin, liquid	1114U02050	1
Henry Lamotte	Paraffin, liquid	123743	2
Euro OTC	Paraffin, liquid	1309022-01	2
Phoenix	Paraffin, liquid	959561	1
Laborchemie Apolda/Jenn...	Paraffin, liquid	12345	1
Caelo	Paraffin, liquid	13248007	7
Caelo	Paraffin, liquid	1322902	1
Euro OTC	Paraffin, liquid	1304010-01	5
Caelo	Paraffin, liquid	13390604	2
Caelo	Paraffin, liquid	13390601	7
Caelo	Paraffin, liquid	1311024-01	2
Euro OTC	Paraffin, liquid	130401001	1
Euro OTC	Paraffin, liquid	131102401	2
Henry Lamotte Olis GmbH...	Paraffin, liquid	5593601	2
Noweda / Henry Lamotte	Paraffin, liquid	5593601	4
lamotte noweda,	Paraffin, liquid	5593601	1

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, liquid	284273	3
Spinnrad	Paraffin, liquid	13103308	1
Hedinger	Paraffin, liquid	5367601	1
Caelo	Paraffin, liquid	13390602	15
Phönix	Paraffin, liquid	123393	4
Eigenherstellung	Paraffin, liquid	60614HJK01	1
Euro OTC	Paraffin, liquid	130902201	1
Caelo	Paraffin, liquid	10062014A	1
Caelo	Paraffin, liquid	13390606	1
Caelo	Paraffin, liquid	13390602	1
Lamotte/Anzag	Paraffin, liquid	123743	1
Gehe	Paraffin, liquid	13390602	1
Caelo	Paraffin, liquid	5593601	1
Lamotte/Gehe	Paraffin, liquid	5593601	1
Gutenberg-Apotheke	Paraffin, liquid	13248007	1
Caelo	Paraffin, liquid	14059708	4
Bombastus	Paraffin, liquid	281540	3
Fagron	Paraffin, liquid	13L17-B01-289491	7
Sanacorp	Paraffin, liquid	13390602	1
Henry lamotte Oils GmbH...	Paraffin, liquid	5593601	1
Noweda / Henry Lamotte ...	Paraffin, liquid	5593601	1
Sanacorp	Paraffin, liquid	5593601	2
Caelo	Paraffin, liquid	1309022-02	2
Caelo	Paraffin, liquid	14134601	1
Caesar&lorenz,Anzag	Paraffin, liquid	14059708	1
Caelo	Paraffin, liquid	10071403	1
Henry Lamotte Oils GmbH	Paraffin, liquid	5593601	5
Euro OTC	Paraffin, liquid	1108033-01	1
Eigenherstellung	Paraffin, liquid	210714H01	1
Noweda	Paraffin, liquid	1404009-09	1
Fagron	Paraffin, liquid	13L-B01-289491	1
Euro OTC	Paraffin, liquid	1404009-01	14
Caelo	Paraffin, liquid	123743	1
Caelo	Paraffin, liquid	14059701	7
Caelo	Paraffin, liquid	14044507	7
Henry Lamotte oils GmbH...	Paraffin, liquid	5593601	5
Euro OTC	Paraffin, liquid	14059708	1
Devesa/Kehr	Paraffin, liquid	13390602	1
Euro OTC	Paraffin, liquid	1404010-01	4
Lamotte / Noweda	Paraffin, liquid	5593601	1
Noweda/Lamotte	Paraffin, liquid	5593601	1
Celoa vdL	Paraffin, liquid	131102401	1
Phoenix 10.10.14	Paraffin, liquid	14059701	1
Euro OTC	Paraffin, liquid	22101402	1
Caelo	Paraffin, liquid	14044504	2
Caelo	Paraffin, liquid	14059703	5
Alliance health	Paraffin, liquid	5593601	1
Fagron	Paraffin, liquid	13L17-B01-289493	4
Caelo	Paraffin, liquid	14059705	1
Euro OTC	Paraffin, liquid	140401001	2
Fagron	Paraffin, liquid	13L17-B01	2
Euro OTC	Paraffin, liquid	140400901	1
Caelo	Paraffin, liquid	13248006	2
Caelo	Paraffin, liquid	14141406	1
Euro OTC	Paraffin, liquid	1407042-01	13
Caelo	Paraffin, liquid	13L17-B01	1
Bombastus	Paraffin, liquid	14187601	1
Eigenherstellung	Paraffin, liquid	11214HAS01	1
Henry Lamotte	Paraffin, liquid	5593601	7
Caelo	Paraffin, liquid	14202507	9

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, liquid	14141408	3
Caelo	Paraffin, liquid	14202509	11
Caelo	Paraffin, liquid	1407042-01	1
Caelo	Paraffin, liquid	59/AKD2	1
Bombastus	Paraffin, liquid	288827	2
Fagron	Paraffin, liquid	13L17-B01-289492	4
Caelo	Paraffin, liquid	14011514	1
Caelo	Paraffin, liquid	14163804	4
Caelo	Paraffin, liquid	14305904	6
Eigenherstellung	Paraffin, liquid	260115ML01	1
Fagron	Paraffin, liquid	14D24-B05-295014	3
Bombastus	Paraffin, liquid	290824	2
Caelo	Paraffin, liquid	14305905	8
Euro/ Sanacorp	Paraffin, liquid	1409007-01	1
Euro OTC	Paraffin, liquid	140900701	1
Gehe	Paraffin, liquid	14305905	1
Euro OTC	Paraffin, liquid	1412010-01	12
Fagron	Paraffin, liquid	1404010-01	1
Fagron	Paraffin, liquid	29137	1
Caelo	Paraffin, liquid	14305905	1
Henry Lamotte Oels GmbH	Paraffin, liquid	123393	1
Caelo	Paraffin, liquid	14357203	9
Fagron	Paraffin, liquid	12-23-n03	1
Fagron	Paraffin, liquid	1005070	1
Caelo	Paraffin, liquid	1435905	2
Fagron	Paraffin, liquid	13117-B01-289492	1
Fiebig	Paraffin, liquid	13L17-B01-289492	1
Fagron	Paraffin, liquid	14D24-B05	7
Caelo	Paraffin, liquid	14163807	21
Caelo	Paraffin, liquid	14357204	13
Caelo	Paraffin, liquid	14D24-B05-295022	2
Fagron	Paraffin, liquid	14D24-B05-295022	2
Bombastus	Paraffin, liquid	292137	1
Fagron	Paraffin, liquid	13117-b01-289492	1
Euro OTC	Paraffin, liquid	1503046-01	7
Euro Pharma	Paraffin, liquid	150101601	1
Henry Lamotte/Sana	Paraffin, liquid	5593601	2
Euro OTC	Paraffin, liquid	133888	1
Caelo	Paraffin, liquid	1437205	1
Eigenherstellung	Paraffin, liquid	100615HJK01	1
Noweda 19.05.2015	Paraffin, liquid	14357203	1
Sanacorp	Paraffin, liquid	59/AKD4	1
Caelo	Paraffin, liquid	15106102	2
Caelo	Paraffin, liquid	14357205	3
Caelo	Paraffin, liquid	14D24B05-295022	1
Caelo	Paraffin, liquid	1503046-01	2
Eigenherstellung	Paraffin, liquid	240715HML01	1
Caelo	Paraffin, liquid	3613A-02050	1
Fagron	Paraffin, liquid	14d24-b05-295023	2
Euro OTC	Paraffin, liquid	1501016-01	5
Bombastus	Paraffin, liquid	293385	2
Euro OTC	Paraffin, liquid	1506005-01	9
Caelo	Paraffin, liquid	15106104	10
Caelo	Paraffin, liquid	15106101	4
Fagron	Paraffin, liquid	14357205	1
Caelo	Paraffin, liquid	4091515	1
Caelo	Paraffin, liquid	151060104	1
Gehe	Paraffin, liquid	1506005-01	1
Eu Rho/ Gehe	Paraffin, liquid	1503046-01	1
Euro OTC	Paraffin, liquid	150101601	1

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, liquid	294568	1
Caelo	Paraffin, liquid	25092015	1
Caelo	Paraffin, liquid	15106109	9
ACM	Paraffin, liquid	KNC2106J14	1
Caelo	Paraffin, liquid	15293203	14
Caelo	Paraffin, liquid	15106107	11
ACM	Paraffin, liquid	KNC2160J14	1
Euro OTC	Paraffin, liquid	1509011-01	7
Hansen & Rosenthal KG/N...	Paraffin, liquid	14D24-B05-295023	1
Caelo	Paraffin, liquid	150600501	1
fargon	Paraffin, liquid	196310	1
anzag	Paraffin, liquid	1509011-01	1
Caelo	Paraffin, liquid	15293205	23
Anzag	Paraffin, liquid	150600501	1
Fagron	Paraffin, liquid	15B16-B03-304611	7
EuRho/Phönix	Paraffin, liquid	1506005-01	1
Caelo	Paraffin, liquid	15293201	11
Bombastus	Paraffin, liquid	295576	3
Caelo	Paraffin, liquid	15234502	9
Bombastus	Paraffin, liquid	150600501	1
Euro OTC	Paraffin, liquid	1506021-01	1
Caelo	Paraffin, liquid	15299201	1
Devesa/ Phönix	Paraffin, liquid	14D24-B05-295022	1
Fagron	Paraffin, liquid	14D24-B05-295023	4
Caelo	Paraffin, liquid	15293202	11
Caelo	Paraffin, liquid	1307007-01	1
Anzag	Paraffin, liquid	15293205	1
Euro OTC	Paraffin, liquid	1511030-01	15
Caelo	Paraffin, liquid	15293204	11
Caelo	Paraffin, liquid	14357201	1
Fagron	Paraffin, liquid	B05-295022	1
Lamotte/Noweda	Paraffin, liquid	5593601	1
Caelo	Paraffin, liquid	15923205	1
Caelo	Paraffin, liquid	15336703	10
Bombastus	Paraffin, liquid	298396	2
Caelo	Paraffin, liquid	16/080/P	1
Caelo	Paraffin, liquid	1593205	1
Euro OTC	Paraffin, liquid	1511029-01	5
Noweda	Paraffin, liquid	15336703	1
Caesar&Loretz GmbH,AHC,...	Paraffin, liquid	15293205	1
Caelo	Paraffin, liquid	16082904	14
Henry Lamotte	Paraffin, liquid	5863401	3
Caesar&Loretz GmbH,Phön...	Paraffin, liquid	16082904	1
Caelo	Paraffin, liquid	15336702	1
Caelo	Paraffin, liquid	15234506	4
Euro OTC	Paraffin, liquid	1602026-01	16
Phoenix	Paraffin, liquid	15293202	2
Caelo	Paraffin, liquid	15230601	1
Fagron	Paraffin, liquid	941435	1
Caelo	Paraffin, liquid	1235465	1
Caelo	Paraffin, liquid	15336704	13
Caelo	Paraffin, liquid	15293209	1
Fagron	Paraffin, liquid	16082904	1
Caelo	Paraffin, liquid	1608204	1
Caelo	Paraffin, liquid	15234505	1
AHD	Paraffin, liquid	16082904	1
Euro/Gehe	Paraffin, liquid	1604045-01	2
Caelo	Paraffin, liquid	1602026-01	1
Caelo	Paraffin, liquid	160829	1
Euro OTC	Paraffin, liquid	1604045-01	4

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Supplier	Substance	Batch	Spectra
Phoenix	Paraffin, liquid	16082906	1
Caelo	Paraffin, liquid	16082906	11
Caelo	Paraffin, liquid	16149802	19
Fagron	Paraffin, liquid	13a30-n11	1
Caelo	Paraffin, liquid	1604045-01	1
Euro OTC	Paraffin, liquid	1106009-01	1
Calo	Paraffin, liquid	15429603	1
Caelo	Paraffin, liquid	15429603	10
Fagron	Paraffin, liquid	14D24-B05-295023	1
Caesar&Loretz GmbH	Paraffin, liquid	15234502	1
Euro OTC	Paraffin, liquid	1604009-01	8
Fagron	Paraffin, liquid	110816-2	1
Euro	Paraffin, liquid	1511030-01	1
Euro OTC	Paraffin, liquid	1606032-01	11
Caolo- Noweda	Paraffin, liquid	15106109	1
Caolo- Noweda	Paraffin, liquid	14163804	1
Caelo	Paraffin, liquid	1604009-01	2
Caelo	Paraffin, liquid	16082908	9
Ebert KKH 30.09.16	Paraffin, liquid	16149802	1
Euro OTC	Paraffin, liquid	16020026-01	1
Bombastus	Paraffin, liquid	300061	2
Caelo	Paraffin, liquid	16082905	14
Caelo	Paraffin, liquid	16149801	21
Fischar	Paraffin, liquid	16082905	1
Noweda/Bomnastus	Paraffin, liquid	303806	2
Bombastus	Paraffin, liquid	1606032-01	1
henry lamotte oils/Sana...	Paraffin, liquid	5863401	1
Gepepharm/Phönix	Paraffin, liquid	5863401	1
Fagron	Paraffin, liquid	16A27-B01-323777	6
WE:Phoenix 06.10.2016 ...	Paraffin, liquid	14D24-B05-295023	1
Caelo	Paraffin, liquid	1607039-01	1
Bombastus	Paraffin, liquid	303806	4
Bombastus	Paraffin, liquid	1604009-01	1
Euro OTC	Paraffin, liquid	1607039-01	7
Caelo	Paraffin, liquid	16171002	2
Phoenix	Paraffin, liquid	16082907	1
Fagron	Paraffin, liquid	16E30-B05-324041	2
Henry Lamotte Oils/GEHE	Paraffin, liquid	5863401	1
Hansen & Rosenthal/Noweda	Paraffin, liquid	16A27-B01	1
Caelo	Paraffin, liquid	16082907	11
Euro OTC	Paraffin, liquid	1608007-01	3
Caelo	Paraffin, liquid	16171001	12
05.11.2016 Phoenix 2,66EUR	Paraffin, liquid	16149801	1
Euro OTC	Paraffin, liquid	16238802	1
Bombastus	Paraffin, liquid	1607039-01	1
Caelo	Paraffin, liquid	16149806	2
Gehe-Henry	Paraffin, liquid	1000002995	3
Euro OTC	Paraffin, liquid	1610017-01	7
Euro OTC	Paraffin, liquid	16082907	1
Phagron	Paraffin, liquid	16A27-B01-323777	1
Caelo	Paraffin, liquid	16A27-B01-323777	1
Caelo	Paraffin, liquid	16238802	14
Hochhaus-Apotheke	Paraffin, liquid	16A27-B01-323777	1
Euro OTC	Paraffin, liquid	160703901	1
Fagron	Paraffin, liquid	16A27-B01	1
Caelo	Paraffin, liquid	160820907	1
Caelo	Paraffin, liquid	16238804	2
Caelo	Paraffin, liquid	16238806	28
Caelo	Paraffin, liquid	160822907	1
Phoenix	Paraffin, liquid	301968	1

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Supplier	Substance	Batch	Spectra
Bombastus	Paraffin, liquid	306312	1
Caelo	Paraffin, liquid	161710	1
Bombaustus/Kehr	Paraffin, liquid	306312	1
Gehe	Paraffin, liquid	303806	1
EuRho	Paraffin, liquid	1610017-01	1
Noweda/ Infecto Pharm	Paraffin, liquid	16238802	1
Henry Lamotte/AHC	Paraffin, liquid	16082908	1
Caelo	Paraffin, liquid	9041705	1
Caelo	Paraffin, liquid	16238803	10
Phoenix	Paraffin, liquid	1610017-01	1
Caelo	Paraffin, liquid	16171009	1
Euro OTC	Paraffin, liquid	1701033-01	11
Phönix	Paraffin, liquid	16238806	1
Caelo	Paraffin, liquid	16238807	4
Anzag	Paraffin, liquid	1610017-01	1
Caelo	Paraffin, liquid	16238809	1
Noweda	Paraffin, liquid	16238802	1
Allianz Healthcare	Paraffin, liquid	16238806	1
Fagron	Paraffin, liquid	16E30-B05-327577	4
Euro OTC	Paraffin, liquid	16238806	1
Caelo	Paraffin, liquid	16238808	12
Phönix	Paraffin, liquid	14059708	3
Caelo	Paraffin, liquid	16171008	4
Euro OTC	Paraffin, liquid	170608P/1610017-01	1
Caelo	Paraffin, liquid	1126261	1
Kehr	Paraffin, liquid	16238808	1
Caelo	Paraffin, liquid	16238808(1)	1
Caelo	Paraffin, liquid	16238808(2)	1
Caelo	Paraffin, liquid	16238808(4)	1
Caelo	Paraffin, liquid	16238808(3)	1
Caelo	Paraffin, liquid	16E30-B05-325889	2
Euro OTC	Paraffin, liquid	17133-01	1
henry lamotte oils/Sana...	Paraffin, liquid	1000002995	1
Fagron	Paraffin, liquid	16E30B05327577	1
Sanacorp	Paraffin, liquid	16238802	1
Lamotte/Phönix	Paraffin, liquid	1000002995	1
Caelo	Paraffin, liquid	16238812	1
Caelo	Paraffin, liquid	17047603	3
Caelo	Paraffin, liquid	17062001	21
Euro OTC	Paraffin, liquid	1704023-01	1
Caelo	Paraffin, liquid	16238815	3
Euro OTC	Paraffin, liquid	1701052-01	3
Caelo	Paraffin, liquid	16238813	6
Caelo	Paraffin, liquid	16238860	1
Caelo/Gehe	Paraffin, liquid	16238813	1
Caelo	Paraffin, liquid	17047604	1
Euro/Fiebig	Paraffin, liquid	1704023-01	1
Bombastus	Paraffin, liquid	308476	2
Euro OTC	Paraffin, liquid	1704023-0108598729	1
Caelo	Paraffin, liquid	17062002	4
Caelo	Paraffin, liquid	15111739	1
Kehr	Paraffin, liquid	17062005	1
Lamotte/Noweda	Paraffin, liquid	1000002995	1
Sanacorp WE: 20.11.17 1...	Paraffin, liquid	17062002	1
Caelo	Paraffin, liquid	17062007	14
Euro OTC	Paraffin, liquid	1707002-01	4
Caelo	Paraffin, liquid	17062005	9
Caelo	Paraffin, liquid	17062001/2051017	1
Caelo	Paraffin, liquid	1701033-01	1
Caelo	Paraffin, liquid	17062008	6

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Supplier	Substance	Batch	Spectra
Phönix	Paraffin, liquid	17062007	1
Sanacorp	Paraffin, liquid	17062008	1
Caelo	Paraffin, liquid	16E30B05327577	1
Sanacorp WE:27.12.17 ...	Paraffin, liquid	17062008	1
AHD	Paraffin, liquid	1710025-01	3
ALH	Paraffin, liquid	1707002-01	2
Noweda	Paraffin, liquid	1604009-01	1
Caelo	Paraffin, liquid	17321401-20180206Ma7	1
Caelo	Paraffin, liquid	17321501	16
Caelo	Paraffin, liquid	17196001	4
Caelo	Paraffin, liquid	17321401	10
Gehe	Paraffin, liquid	310779	1
Caelo	Paraffin, liquid	170620055518	1
Fagron	Paraffin, liquid	16K09-B06-332237	1
Kehr	Paraffin, liquid	310779	1
Euro OTC	Paraffin, liquid	1704023	1
AHD	Paraffin, liquid	1000002996	2
Fagron	Paraffin, liquid	1198738	1
Euro OTC	Paraffin, liquid	1710025-01	4
Caelo	Paraffin, liquid	17321503	10
Sanacorp	Paraffin, liquid	18000358	1
Caelo	Paraffin, liquid	17047610	1
Fagron	Paraffin, liquid	1179735	1
Euro OTC	Paraffin, liquid	139845	1
Caelo	Paraffin, liquid	30041805	1
Euro OTC	Paraffin, liquid	17047603	1
Caesar & Loretz / Allia. ...	Paraffin, liquid	18048102	1
Euro OTC	Paraffin, liquid	1801041-01	4
Phoenix	Paraffin, liquid	310779	1
Bombastus	Paraffin, liquid	17321503	1
Caelo	Paraffin, liquid	1701052-01	1
Euro OTC	Paraffin, liquid	142430	1
Caelo	Paraffin, liquid	18048103	1
Phoenix	Paraffin, liquid	18002494	2
Caelo	Paraffin, liquid	17321506	12
Caelo	Paraffin, liquid	180104101	1
Euro OTC	Paraffin, liquid	143577	1
Fagron	Paraffin, liquid	18B19-B06	1
Sanacorp	Paraffin, liquid	17321501	1
AHD	Paraffin, liquid	100002996	1
Bionorica Ethics	Paraffin, liquid	17321506	1
Caelo	Paraffin, liquid	17321505	5
Caelo	Paraffin, liquid	18048102	4
Fagron	Paraffin, liquid	17J02-B01-345372	2
Fagron	Paraffin, liquid	1806004-01	1
Fagron	Paraffin, liquid	16K09-B06-331721	1
Caelo	Paraffin, liquid	17321509	3
AHD	Paraffin, liquid	17321505	1
Lamotte/Noveda	Paraffin, liquid	8003083001	1
Euro OTC	Paraffin, liquid	1802016-01	2
Euro OTC	Paraffin, liquid	1806004-01	3
Caelo	Paraffin, liquid	17321507	1
Hedinger	Paraffin, liquid	17321509	2
Caelo	Paraffin, liquid	18177001	7
Henry Lamotte/Phönix	Paraffin, liquid	8003083001	1
Delta Apotheke	Paraffin, liquid	18177001	1
Caelo	Paraffin, liquid	17360403	2
Bombastus	Paraffin, liquid	18005175	1
Euro OTC	Paraffin, liquid	144404	1
Caelo	Paraffin, liquid	1817702	1

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Supplier	Substance	Batch	Spectra
Noweda	Paraffin, liquid	18005175	1
Caelo	Paraffin, liquid	18177002	1
Caelo	Paraffin, liquid	15121804	1
Caelo	Paraffin, liquid	18177004	2
Caeolo/Phönix	Paraffin, liquid	18177001	1
Caelo	Paraffin, liquid	17360409	1
Eurho Phönix	Paraffin, liquid	1710025-01	1
Euro OTC	Paraffin, liquid	1810002-01	1
Caelo	Paraffin, liquid	17360404	1
Caesar & Loretz GmbH	Paraffin, liquid	18177004	1
Caelo	Paraffin, liquid	1817004	1
Caelo	Paraffin, liquid	18177005	2
Caelo	Hydrophobic base gel DAC	12229001	2
Bombastus	Hydrophobic base gel DAC	271904	2
Caelo	Hydrophobic base gel DAC	12362505	3
Caelo	Hydrophobic base gel DAC	12229003	4
Caelo	Hydrophobic base gel DAC	12362503	5
Bombastus	Hydrophobic base gel DAC	277443	2
Caelo	Hydrophobic base gel DAC	12229005	1
Bombastus	Hydrophobic base gel DAC	279074	4
Caelo	Hydrophobic base gel DAC	12362504	2
Fagron	Hydrophobic base gel DAC	11K23-T01	1
Caelo	Hydrophobic base gel DAC	123662505	1
Caelo	Hydrophobic base gel DAC	9082013C	1
Euro OTC	Hydrophobic base gel DAC	12362505	1
Caelo	Hydrophobic base gel DAC	13165201	3
Caelo	Hydrophobic base gel DAC	13085004	2
Sanacorp	Hydrophobic base gel DAC	13165201	1
Fagron	Hydrophobic base gel DAC	10L14-T54-000713	1
Fagron	Hydrophobic base gel DAC	10L14-T54	3
Sanacorp	Hydrophobic base gel DAC	AKD18	1
Caelo	Hydrophobic base gel DAC	13299604	10
Caelo	Hydrophobic base gel DAC	13165205	2
Bombastus	Hydrophobic base gel DAC	282094	5
Caesar & Loretz GmbH, 4. . .	Hydrophobic base gel DAC	13165201	1
Caelo	Hydrophobic base gel DAC	13295701	1
Caelo	Hydrophobic base gel DAC	13295801	1
Caelo	Hydrophobic base gel DAC	64/2014	1
Fagron	Hydrophobic base gel DAC	10L14-T54-006109	4
Europ Ots Pharma	Hydrophobic base gel DAC	13299604	1
Caelo	Hydrophobic base gel DAC	282094	2
Bombastus	Hydrophobic base gel DAC	283998	1
Caelo	Hydrophobic base gel DAC	14044601	12
Caelo	Hydrophobic base gel DAC	13341703	3
Gehe 23.05.2014	Hydrophobic base gel DAC	14044601	1
Caelo	Hydrophobic base gel DAC	14102505	2
Bombastus	Hydrophobic base gel DAC	10071402	1
Caelo	Hydrophobic base gel DAC	14102504	2
Caelo	Hydrophobic base gel DAC	14102502	5
Caelo	Hydrophobic base gel DAC	14158002	4
Caelo	Hydrophobic base gel DAC	286013	2
Fagron	Hydrophobic base gel DAC	10L14-T54-009128	2
Caelo	Hydrophobic base gel DAC	14161501	4
Bombastus	Hydrophobic base gel DAC	286013	1
Caelo	Hydrophobic base gel DAC	14087501	1
Bombastus	Hydrophobic base gel DAC	28111403	1
Caelo	Hydrophobic base gel DAC	14158003	9
Bombastus	Hydrophobic base gel DAC	289214	5
Caelo	Hydrophobic base gel DAC	13341701	1
Caelo	Hydrophobic base gel DAC	14158006	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic base gel DAC	14276401	3
Bombastus	Hydrophobic base gel DAC	24031504	1
Gehe Kassel	Hydrophobic base gel DAC	271904	1
Caelo	Hydrophobic base gel DAC	14304603	3
GEHE Kassel	Hydrophobic base gel DAC	289214	1
Bombastus	Hydrophobic base gel DAC	289213	1
Caelo	Hydrophobic base gel DAC	14304604	1
Caelo	Hydrophobic base gel DAC	15064201	2
Caelo	Hydrophobic base gel DAC	15055702	2
Caelo	Hydrophobic base gel DAC	15055705	5
HansenRosenthalKG/Hansen	Hydrophobic base gel DAC	1078667	1
Bombastus	Hydrophobic base gel DAC	292717	1
Bombastus	Hydrophobic base gel DAC	294417	1
Caelo	Hydrophobic base gel DAC	15064101	12
Caelo	Hydrophobic base gel DAC	10L14-T54-009128	1
Caelo	Hydrophobic base gel DAC	15149605	3
Caelo	Hydrophobic base gel DAC	15149602	1
Bombastus	Hydrophobic base gel DAC	294418	2
Caelo	Hydrophobic base gel DAC	15149603	3
Geilenkirchen	Hydrophobic base gel DAC	15064201	1
Caelo	Hydrophobic base gel DAC	15149604	8
Bombastus	Hydrophobic base gel DAC	295729	4
Caelo	Hydrophobic base gel DAC	15240801	7
Caelo	Hydrophobic base gel DAC	15240802	2
Noweda	Hydrophobic base gel DAC	15055705	1
Caelo	Hydrophobic base gel DAC	14304624	1
Caelo	Hydrophobic base gel DAC	15240805	7
Bombastus	Hydrophobic base gel DAC	297433	1
Noweda	Hydrophobic base gel DAC	15149604	1
Noweda	Hydrophobic base gel DAC	15240805	2
Caelo	Hydrophobic base gel DAC	15240807	3
Fagron	Hydrophobic base gel DAC	15J02-T09-023890	1
Fagron	Hydrophobic base gel DAC	15436101	3
Caelo	Hydrophobic base gel DAC	15436102	4
Caelo	Hydrophobic base gel DAC	15205002	1
Bombastus	Hydrophobic base gel DAC	300896	2
Caelo	Hydrophobic base gel DAC	15055701	1
Caelo	Hydrophobic base gel DAC	15436105	2
Bombastus	Hydrophobic base gel DAC	297392	1
Caelo	Hydrophobic base gel DAC	16054201	7
Caelo	Hydrophobic base gel DAC	15240806	1
Bombastus	Hydrophobic base gel DAC	299263	2
Caelo	Hydrophobic base gel DAC	15269201	2
Caelo	Hydrophobic base gel DAC	15331102	1
Caelo	Hydrophobic base gel DAC	16070505	6
Caesar/Noweda	Hydrophobic base gel DAC	15436103	1
Euro OTC	Hydrophobic base gel DAC	15436102	1
Fagron	Hydrophobic base gel DAC	15L10-T04-028696	2
Caelo	Hydrophobic base gel DAC	16070501	1
Caelo	Hydrophobic base gel DAC	15436106	1
Caelo	Hydrophobic base gel DAC	16070503	9
Caelo	Hydrophobic base gel DAC	16054302	3
Caelo	Hydrophobic base gel DAC	15383005	1
Caelo	Hydrophobic base gel DAC	15436103	4
Fagron	Hydrophobic base gel DAC	15240805	1
Caelo	Hydrophobic base gel DAC	302145	1
Anzag	Hydrophobic base gel DAC	16172301	1
Bombastus	Hydrophobic base gel DAC	300895	1
Bombastus	Hydrophobic base gel DAC	302145	1
Bombastus	Hydrophobic base gel DAC	160607HB	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic base gel DAC	16151101	2
Caelo	Hydrophobic base gel DAC	16172301	7
Caelo	Hydrophobic base gel DAC	160705	1
Bombastus	Hydrophobic base gel DAC	302145	2
Celo	Hydrophobic base gel DAC	16172301	1
Bombastus	Hydrophobic base gel DAC	304035	4
Bombastus	Hydrophobic base gel DAC	4082897	1
Caesar & Loretz GmbH Hi...	Hydrophobic base gel DAC	16070503	2
Caelo	Hydrophobic base gel DAC	16070502	5
Caelo	Hydrophobic base gel DAC	16172401	3
Caelo	Hydrophobic base gel DAC	16151105	5
Bombastus	Hydrophobic base gel DAC	304036	5
Fagron	Hydrophobic base gel DAC	16H24-T02-034643	3
Fagron	Hydrophobic base gel DAC		1
Bombastus	Hydrophobic base gel DAC	9031704	1
Caelo	Hydrophobic base gel DAC	16240105	7
Caelo	Hydrophobic base gel DAC	16240107	4
Caelo	Hydrophobic base gel DAC	16240104	4
Gehe	Hydrophobic base gel DAC	16151105	1
Noweda	Hydrophobic base gel DAC	15331102	1
Caelo	Hydrophobic base gel DAC	17032201	1
Euro OTC	Hydrophobic base gel DAC	16240105	1
Euro/Noweda	Hydrophobic base gel DAC	16151105	1
Caelo	Hydrophobic base gel DAC	16151107	1
Caelo	Hydrophobic base gel DAC	16151102	1
Bombastus	Hydrophobic base gel DAC	306482	1
Bombastus	Hydrophobic base gel DAC	308439	1
Gehe	Hydrophobic base gel DAC	16240104	1
Caelo	Hydrophobic base gel DAC	17032303	5
Caelo	Hydrophobic base gel DAC	16240110	1
Sanacorp	Hydrophobic base gel DAC	308440	1
Caelo	Hydrophobic base gel DAC	17032102	1
Fagron	Hydrophobic base gel DAC	17032201	1
Caelo	Hydrophobic base gel DAC	16240114	5
Bombastus	Hydrophobic base gel DAC	26081706	1
Caelo	Hydrophobic base gel DAC	17043605	5
Caelo	Hydrophobic base gel DAC	16240111	5
Caelo	Hydrophobic base gel DAC	16240112	1
Caesar&Loretz GmbH	Hydrophobic base gel DAC	17043605	1
Caelo	Hydrophobic base gel DAC	17043606	4
Caelo	Hydrophobic base gel DAC	17196705	5
Caelo	Hydrophobic base gel DAC	304036	1
Gehe	Hydrophobic base gel DAC	17113702	1
Caelo	Hydrophobic base gel DAC	17196704	6
Bombastus	Hydrophobic base gel DAC	23121704	1
Caelo	Hydrophobic base gel DAC	17043604	2
Caelo	Hydrophobic base gel DAC	17113702	3
Phoenix/Cealo	Hydrophobic base gel DAC	17196704	1
Bombastus	Hydrophobic base gel DAC	308440	1
Caelo	Hydrophobic base gel DAC	17113703	8
Caelo	Hydrophobic base gel DAC	17196712	7
Caelo	Hydrophobic base gel DAC	17196707	2
Caelo	Hydrophobic base gel DAC	17196703	1
Caelo	Hydrophobic base gel DAC	18075803	6
Caelo	Hydrophobic base gel DAC	17196713	1
Bombastus	Hydrophobic base gel DAC	12051806	1
Caelo	Hydrophobic base gel DAC	17196706	1
Caelo	Hydrophobic base gel DAC	17196709	1
Bombastus	Hydrophobic base gel DAC	18001099	2
Caelo	Hydrophobic base gel DAC	17320409	5

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic base gel DAC	181400604	1
Caelo	Hydrophobic base gel DAC	18075802	1
Bombastus	Hydrophobic base gel DAC	15081828	1
Allianz	Hydrophobic base gel DAC	18075803	1
Caelo	Hydrophobic base gel DAC	18140604	2
Caelo	Hydrophobic base gel DAC	18140605	3
Caelo	Hydrophobic base gel DAC	18228301	2
Bombastus	Hydrophobic base gel DAC	5121804	1
Bombastus	Hydrophobic base gel DAC	19011905	1
Caelo	Hydrophobic base gel DAC	18140606	1
Caelo	Hydrophobic base gel DAC	18140607	1
Caelo	Hydrophobic base gel DAC	18001099	1
Caelo	Hydrophobic base gel DAC	18240302	1
Caelo	Hydrophobic base gel DAC	18240305	1
Fagron	Emulsifying hydrophobic base...	11I08-T01	2
Caelo	Emulsifying hydrophobic base...	14276401	14
Fagron	Emulsifying hydrophobic base...	11G25-T01	1
Caelo	Emulsifying hydrophobic base...	11016804	1
Caelo	Emulsifying hydrophobic base...	11105002	1
Caelo	Emulsifying hydrophobic base...	30071201	1
Bombastus	Emulsifying hydrophobic base...	271106	2
Caelo	Emulsifying hydrophobic base...	12160201	4
Caelo	Emulsifying hydrophobic base...	11301605	1
Anzag 05.11.12	Emulsifying hydrophobic base...	271106	1
Caelo	Emulsifying hydrophobic base...	12182303	3
Bombastus	Emulsifying hydrophobic base...	255106	1
Caelo	Emulsifying hydrophobic base...	12303402	6
Caelo	Emulsifying hydrophobic base...	11209302	1
Caelo	Emulsifying hydrophobic base...	12229001	4
Bombastus	Emulsifying hydrophobic base...	262696	1
Fagron	Emulsifying hydrophobic base...	1108-T01	1
Noweda	Emulsifying hydrophobic base...	12160201	1
Caelo	Emulsifying hydrophobic base...	12343501	4
Fagron	Emulsifying hydrophobic base...	12F29-T01	1
Caelo	Emulsifying hydrophobic base...	12362504	1
Caelo	Emulsifying hydrophobic base...	12229003	3
Bombastus	Emulsifying hydrophobic base...	11041301	1
Caelo	Emulsifying hydrophobic base...	12078001	1
Bombastus	Emulsifying hydrophobic base...	277443	1
Caelo	Emulsifying hydrophobic base...	13066802	10
Caelo	Emulsifying hydrophobic base...	28051301	1
Bombastus	Emulsifying hydrophobic base...	11071308	1
Caelo	Emulsifying hydrophobic base...	12362505	2
Fagron	Emulsifying hydrophobic base...	10L14-T54-111713	1
Caelo	Emulsifying hydrophobic base...	13177601	6
Bombastus	Emulsifying hydrophobic base...	279074	1
Caelo	Emulsifying hydrophobic base...	20081302	1
Caelo	Emulsifying hydrophobic base...	13177602	1
Sanacorp	Emulsifying hydrophobic base...	13177601	1
Caelo	Emulsifying hydrophobic base...	13295701	7
Bombastus	Emulsifying hydrophobic base...	22111307	1
Caelo	Emulsifying hydrophobic base...	13295801	3
Bombastus	Emulsifying hydrophobic base...	22011402	1
Noweda	Emulsifying hydrophobic base...	13361004	1
Caelo / Noweda	Emulsifying hydrophobic base...	13361004	4
Bombastus	Emulsifying hydrophobic base...	282094	1
Fagron	Emulsifying hydrophobic base...	10L14-T54-003418	1
Caelo	Emulsifying hydrophobic base...	13361004	5
Phoenix 02.05.2014	Emulsifying hydrophobic base...	282094	1
Caelo	Emulsifying hydrophobic base...	14087501	7

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Supplier	Substance	Batch	Spectra
Caelo	Emulsifying hydrophobic base...		1
Caelo	Emulsifying hydrophobic base...	14161501	8
Caelo	Emulsifying hydrophobic base...	13340814	1
Phoenix	Emulsifying hydrophobic base...	14087502	1
Caelo	Emulsifying hydrophobic base...	14276301	5
Caesar & Loretz GmbH	Emulsifying hydrophobic base...	14276401	2
Caelo	Emulsifying hydrophobic base...	15064001	3
Caelo	Emulsifying hydrophobic base...	15064101	10
Caelo	Emulsifying hydrophobic base...	15064201	3
Phönix Gotha	Emulsifying hydrophobic base...	15064101	1
Caelo	Emulsifying hydrophobic base...	15964101	1
Caelo	Emulsifying hydrophobic base...	15205002	13
Caelo	Emulsifying hydrophobic base...	15269201	13
Caelo	Emulsifying hydrophobic base...	15205101	1
Caelo	Emulsifying hydrophobic base...	15205102	1
Caelo	Emulsifying hydrophobic base...	15331102	3
Caelo	Emulsifying hydrophobic base...	16054201	9
Caelo	Emulsifying hydrophobic base...	15331101	2
Caelo	Emulsifying hydrophobic base...	16054302	4
Caelo	Emulsifying hydrophobic base...	15269102	1
Caelo	Emulsifying hydrophobic base...	16172201	4
Caelo	Emulsifying hydrophobic base...	16172301	5
Euro OTC	Emulsifying hydrophobic base...	16172201	3
Caelo	Emulsifying hydrophobic base...	16172402	1
Caelo	Emulsifying hydrophobic base...	16226002	5
Caelo	Emulsifying hydrophobic base...	16225902	2
Caelo	Emulsifying hydrophobic base...	16172401	7
Caelo	Emulsifying hydrophobic base...	16151102	2
Caelo	Emulsifying hydrophobic base...	17032201	5
Caelo	Emulsifying hydrophobic base...	17032303	10
Gehe	Emulsifying hydrophobic base...	17032303	1
Caelo	Emulsifying hydrophobic base...	17113702	5
Caelo	Emulsifying hydrophobic base...	17032102	1
Sanacorp	Emulsifying hydrophobic base...	17032303	1
Caesar & Loretz	Emulsifying hydrophobic base...	17032303	1
Noweda	Emulsifying hydrophobic base...	17113703	1
Caelo	Emulsifying hydrophobic base...	17113703	7
Noweda	Emulsifying hydrophobic base...	17032303	1
Caelo	Emulsifying hydrophobic base...	18075803	6
Cealo/Sanacorp	Emulsifying hydrophobic base...	18075803	1
Caesar & Loretz GmbH 40...	Wool alcohol ointment DAB	11185101	1
Caelo	Wool alcohol ointment DAB	11232902	1
Bombastus	Wool alcohol ointment DAB	265502	1
Bombastus	Wool alcohol ointment DAB	261436	1
Caelo	Wool alcohol ointment DAB	11335002	6
Beiersdorf	Wool alcohol ointment DAB	14939610	1
Bombastus	Wool alcohol ointment DAB	254685	1
Beiersdorf (DAB 2010)	Wool alcohol ointment DAB	13658410	1
Caelo	Wool alcohol ointment DAB	11335003	1
Caelo	Wool alcohol ointment DAB	11185001	1
Beiersdorf	Wool alcohol ointment DAB	14349010	1
Anzag	Wool alcohol ointment DAB	11335101	1
Gehe	Wool alcohol ointment DAB	11335003	1
Gehe	Wool alcohol ointment DAB	13357910	1
Gehe	Wool alcohol ointment DAB	21241410	2
Caelo	Wool alcohol ointment DAB	11335101	5
Bombastus	Wool alcohol ointment DAB	265139	1
Caelo	Wool alcohol ointment DAB	4061204	1
Caelo	Wool alcohol ointment DAB	11185201	1
Beiersdorf	Wool alcohol ointment DAB	21241410	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	20061204	1
Bombastus	Wool alcohol ointment DAB	267675	2
Fagron	Wool alcohol ointment DAB	14819510	1
Caelo	Wool alcohol ointment DAB	11335201	1
Beiersdorf / K	Wool alcohol ointment DAB	22142410	1
Beiersdorf AG	Wool alcohol ointment DAB	21111310	1
DAC 2011	Wool alcohol ointment DAB	268471	1
Beiersdorf (DAB 2010)	Wool alcohol ointment DAB	22412510	1
Gehe	Wool alcohol ointment DAB	22412510	2
Defektur	Wool alcohol ointment DAB	3812	1
Bombastus	Wool alcohol ointment DAB	270780	2
Bombastus	Wool alcohol ointment DAB	1109210014	1
Anzag Ek: 3,24EUR 11.09.12	Wool alcohol ointment DAB	12076601	1
Phoenix	Wool alcohol ointment DAB	22532710	1
Caelo	Wool alcohol ointment DAB	12151801	2
Caelo	Wool alcohol ointment DAB	12016203	6
Noweda	Wool alcohol ointment DAB	22532710	1
Gehe	Wool alcohol ointment DAB	22532710	1
Bombastus	Wool alcohol ointment DAB	263456	1
Euro OTC	Wool alcohol ointment DAB	270642	1
Caelo	Wool alcohol ointment DAB	12016202	2
Caelo	Wool alcohol ointment DAB	12076701	2
Bombastus	Wool alcohol ointment DAB	270642	3
Bombastus	Wool alcohol ointment DAB	272171	1
Caelo	Wool alcohol ointment DAB	12151802	2
Caelo	Wool alcohol ointment DAB	22532810	1
Beiersdorf AG	Wool alcohol ointment DAB	22532810	1
Beiersdorf	Wool alcohol ointment DAB	23223410	4
Beiersdorf/Gehe	Wool alcohol ointment DAB	22412510	1
Caelo	Wool alcohol ointment DAB	12151903	5
Caelo	Wool alcohol ointment DAB	11184902	1
Stumpf	Wool alcohol ointment DAB	23223410	1
Caelo	Wool alcohol ointment DAB	12151901	5
BDF Phönix	Wool alcohol ointment DAB	22422510	1
Holdermann/Beiersdorf	Wool alcohol ointment DAB	22532710	1
Anzag/	Wool alcohol ointment DAB	23223410	1
Beiersdorf/Otto	Wool alcohol ointment DAB	23033310	1
Phönix Gotha	Wool alcohol ointment DAB	12152001	2
Caelo	Wool alcohol ointment DAB	7121202	1
Gehe	Wool alcohol ointment DAB	23033310	1
Caelo	Wool alcohol ointment DAB	12152001	4
Noweda	Wool alcohol ointment DAB	23223410	1
Beiersdorf	Wool alcohol ointment DAB	23753710	1
Caelo	Wool alcohol ointment DAB	12076602	1
Beiersdorf AG	Wool alcohol ointment DAB	23223410	1
Beiersdorf	Wool alcohol ointment DAB	20271211-3	1
Caelo	Wool alcohol ointment DAB	20271211-1	1
Bombastus	Wool alcohol ointment DAB	274282	2
Sanacorp	Wool alcohol ointment DAB	274283	1
Bombastus	Wool alcohol ointment DAB	262037	1
Sanacorp	Wool alcohol ointment DAB	12151801	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	23223410	1
Phönix	Wool alcohol ointment DAB	23733710	1
Bombastus	Wool alcohol ointment DAB	270643	4
Defektur	Wool alcohol ointment DAB	2/13	1
Caelo	Wool alcohol ointment DAB	24243910	1
Caelo	Wool alcohol ointment DAB	11184901	1
Caelo	Wool alcohol ointment DAB	12339901	4
Beiersdorf	Wool alcohol ointment DAB	21431810	1
Beiersdorf	Wool alcohol ointment DAB	24233910	2

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	12340001	4
Caelo	Wool alcohol ointment DAB	12340002	3
Gehe	Wool alcohol ointment DAB	23753710	1
Caelo	Wool alcohol ointment DAB	23023210	1
Fagron	Wool alcohol ointment DAB	1234	1
Caelo	Wool alcohol ointment DAB	12340003	1
Caelo	Wool alcohol ointment DAB	12340101	6
Bombastus	Wool alcohol ointment DAB	270640	2
Caesar &Loretz GmbH	Wool alcohol ointment DAB	12340003	1
Sanacorp	Wool alcohol ointment DAB	24254010	1
Caelo	Wool alcohol ointment DAB	12076601	2
Anzag	Wool alcohol ointment DAB	22412510	2
Beiersdorf/Phoenix	Wool alcohol ointment DAB	30711310	1
Beiersdorf Manufacturing	Wool alcohol ointment DAB	30731210	1
Beiersdorf/N/22.03.2013...	Wool alcohol ointment DAB	24635410	1
Gehe	Wool alcohol ointment DAB	30711310	1
Bombastus	Wool alcohol ointment DAB	275999	3
Caelo	Wool alcohol ointment DAB	30731210	1
Noweda	Wool alcohol ointment DAB	12151901	1
AHD, 05.04.2013	Wool alcohol ointment DAB	30831410	1
Beiersdorf AG	Wool alcohol ointment DAB	14549310	1
Caelo	Wool alcohol ointment DAB	13067102	13
Caelo	Wool alcohol ointment DAB	1234002	1
Caelo	Wool alcohol ointment DAB	13067103	7
Caelo	Wool alcohol ointment DAB	13067201	10
fragon	Wool alcohol ointment DAB	12345	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	30731210	1
Noweda	Wool alcohol ointment DAB	270642	2
Bombastus	Wool alcohol ointment DAB	277191	1
Gehe	Wool alcohol ointment DAB	30831410	2
Caelo	Wool alcohol ointment DAB	13093202	1
Beiersdorf, Phönix	Wool alcohol ointment DAB	30721310	1
Caelo	Wool alcohol ointment DAB	30831410	1
Phoenix	Wool alcohol ointment DAB	30831410	1
Sanacorp	Wool alcohol ointment DAB	277190	2
Euro OTC	Wool alcohol ointment DAB	1211018-01	2
Caelo	Wool alcohol ointment DAB	25051306	1
Caelo	Wool alcohol ointment DAB	U-240513-3	1
Beiersdorf/AHD	Wool alcohol ointment DAB	22412510	1
Stumpf	Wool alcohol ointment DAB	30851510	1
Phönix	Wool alcohol ointment DAB	275999	1
Baiersdorf	Wool alcohol ointment DAB	4833010	1
Beiersdorf	Wool alcohol ointment DAB	30831410	1
Anzag	Wool alcohol ointment DAB	24254010	1
Fagron	Wool alcohol ointment DAB	13D09-T04-003308	4
Bombastus	Wool alcohol ointment DAB	277190	1
Beiersdorf	Wool alcohol ointment DAB	24113810	1
Bombastus	Wool alcohol ointment DAB	277024	2
Beiersdorf AG	Wool alcohol ointment DAB	31231810	2
Bombastus	Wool alcohol ointment DAB	277192	3
Bombastus	Wool alcohol ointment DAB	277022	1
A.H. 05.06.13 ek: 3,33EUR	Wool alcohol ointment DAB	13067101	1
Beiersdorf	Wool alcohol ointment DAB	24635410	3
Gehe	Wool alcohol ointment DAB	31231810	1
Bombastus	Wool alcohol ointment DAB	280057	1
Caelo	Wool alcohol ointment DAB	31251910	1
Beiersdorf	Wool alcohol ointment DAB	24655410	1
Beiersdorf AG	Wool alcohol ointment DAB	24254010	1
Alliance Healthcare	Wool alcohol ointment DAB	13114001	1
Caelo	Wool alcohol ointment DAB	13114001	7

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Supplier	Substance	Batch	Spectra
Beiersdorf AG	Wool alcohol ointment DAB	31251910	1
Beiersdorf	Wool alcohol ointment DAB	31322010	1
Caelo	Wool alcohol ointment DAB	24655410	1
Bombastus	Wool alcohol ointment DAB	279934	4
Caelo	Wool alcohol ointment DAB	30841410	1
Caelo	Wool alcohol ointment DAB	44/AKD9	1
Caelo	Wool alcohol ointment DAB	13114102	8
Bombastus	Wool alcohol ointment DAB	278684	4
Beiersdorf/Otto	Wool alcohol ointment DAB	31251910	1
Phönix Gotha	Wool alcohol ointment DAB	31231810	1
Beiersdorf AG/NOWEDA	Wool alcohol ointment DAB	30831410	1
Sanacorp	Wool alcohol ointment DAB	30851510	1
Caelo	Wool alcohol ointment DAB	1212M-01370	1
Caelo	Wool alcohol ointment DAB	2313E-01370	1
Beiersdorf/ Noweda	Wool alcohol ointment DAB	31322010	1
Beiersdorf AG	Wool alcohol ointment DAB	30731210	2
Sanacorp	Wool alcohol ointment DAB	279927	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	30841410	1
Defektur	Wool alcohol ointment DAB	40/13	1
Anzag	Wool alcohol ointment DAB	3312E-01370	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	31231810	1
alliance Healthcare/Bei...	Wool alcohol ointment DAB	30851510	1
BDF Beiersdorf AG	Wool alcohol ointment DAB	31322010	1
Phönix	Wool alcohol ointment DAB	31322010	1
beiersdorf/Gehe	Wool alcohol ointment DAB	30721310	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	30831410	1
Caelo	Wool alcohol ointment DAB	11068001	1
Gehe	Wool alcohol ointment DAB	31322010	1
Phönix	Wool alcohol ointment DAB	30821610	1
Caelo	Wool alcohol ointment DAB	13066903	1
Beiersdorf	Wool alcohol ointment DAB	30851510	1
Beiersdorf AG	Wool alcohol ointment DAB	30721310	1
Noweda	Wool alcohol ointment DAB	24635410	1
Bombastus	Wool alcohol ointment DAB	256518	1
Caelo	Wool alcohol ointment DAB	11335001	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	31322010	2
Bombastus	Wool alcohol ointment DAB	279105	1
Defektur	Wool alcohol ointment DAB	47/13	1
Caelo	Wool alcohol ointment DAB	1367101	1
Beiersdorf	Wool alcohol ointment DAB	11235310	1
Beiersdorf/ Noweda	Wool alcohol ointment DAB	33323210	2
Caelo	Wool alcohol ointment DAB	13126001	10
Caelo	Wool alcohol ointment DAB	13114103	4
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	33323210	1
Gehe	Wool alcohol ointment DAB	33323210	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	24233910	1
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	33323210	2
Beiersdorf	Wool alcohol ointment DAB	33323210	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	24123810	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	32352710	1
Bombastus	Wool alcohol ointment DAB	281690	5
Defektur	Wool alcohol ointment DAB	53/13	1
Fagron	Wool alcohol ointment DAB	281690	1
Gehe	Wool alcohol ointment DAB	13126001	1
Beiersdorf	Wool alcohol ointment DAB	33343310	3
Beiersdorf, Phönix	Wool alcohol ointment DAB	31121710	1
Bombastus	Wool alcohol ointment DAB	280058	1
Caelo	Wool alcohol ointment DAB	13126101	1
Caelo	Wool alcohol ointment DAB	30111302	1
Caelo	Wool alcohol ointment DAB	13242601	11

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Supplier	Substance	Batch	Spectra
Beiersdorf / Noweda	Wool alcohol ointment DAB	33343310	1
Gehe	Wool alcohol ointment DAB	280061	1
Caelo	Wool alcohol ointment DAB	13242901	5
Caelo	Wool alcohol ointment DAB	13242602	16
Beiersdorf/Krieger/06.1...	Wool alcohol ointment DAB	33323210	1
Beiersdorf	Wool alcohol ointment DAB	33723610	2
Caelo	Wool alcohol ointment DAB	13067101	1
Phönix	Wool alcohol ointment DAB	13114103	1
Caelo	Wool alcohol ointment DAB	13242902	6
Caelo	Wool alcohol ointment DAB	13242603	5
Beiersdorf AG	Wool alcohol ointment DAB	33323210	1
BDF	Wool alcohol ointment DAB	33343310	1
Beiersdorf/Gumo	Wool alcohol ointment DAB	33323210	1
BDF/ Noweda	Wool alcohol ointment DAB	33343310	1
Beiersdorf AG	Wool alcohol ointment DAB	33343310	1
Gehe	Wool alcohol ointment DAB	33753710	3
Beiersdorf	Wool alcohol ointment DAB	31241810	2
Beiersdorf	Wool alcohol ointment DAB	31121710	1
Bombastus	Wool alcohol ointment DAB	283175	1
Caelo	Wool alcohol ointment DAB	33753710	1
Caelo	Wool alcohol ointment DAB	13255001	9
Bombastus	Wool alcohol ointment DAB	279928	4
Beiersdorf	Wool alcohol ointment DAB	34224110	1
Defektur	Wool alcohol ointment DAB	3/14	1
Fagron	Wool alcohol ointment DAB	13D09T04003308	2
Beiersdorf AG / Noweda	Wool alcohol ointment DAB	33753710	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	33723610	1
Beiersdorf/V.d.L.	Wool alcohol ointment DAB	33723610	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	33753710	2
Gehe	Wool alcohol ointment DAB	30851510	1
Caelo	Wool alcohol ointment DAB	13242401	1
Beiersdorf/Otto	Wool alcohol ointment DAB	33753710	1
Caelo	Wool alcohol ointment DAB	13255101	24
Beiersdorf AG	Wool alcohol ointment DAB	6022014A	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	33343310	1
Sanacorp/ Beiersdorf	Wool alcohol ointment DAB	33723610	1
Beiersdorf	Wool alcohol ointment DAB	14021301	1
Caelo	Wool alcohol ointment DAB	13355202	1
Pharmachem/Phönix	Wool alcohol ointment DAB	90812	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	33343310	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	33723610	1
Bombastus	Wool alcohol ointment DAB	283618	7
Beiersdorf / Noweda	Wool alcohol ointment DAB	34414610	2
Noweda	Wool alcohol ointment DAB	34414610	1
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	34414610	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	814Q1270	1
Phoenix	Wool alcohol ointment DAB	32344210	1
Defektur	Wool alcohol ointment DAB	6/14	1
Beiersdorf	Wool alcohol ointment DAB	34554710	5
Beiersdorf/Noweda	Wool alcohol ointment DAB	34424610	1
Anzag 25.02.2014 Ek 8...	Wool alcohol ointment DAB	13255001	1
Caelo	Wool alcohol ointment DAB	1325501	1
Beiersdorf/ Sanacorp	Wool alcohol ointment DAB	34344210	1
Beiersdorf AG	Wool alcohol ointment DAB	34344210	1
Caelo	Wool alcohol ointment DAB	31121710	1
Beiersdorf	Wool alcohol ointment DAB	34414610	2
Phönix Gotha	Wool alcohol ointment DAB	34554710	1
Caelo	Wool alcohol ointment DAB	1324602	1
Bombastus	Wool alcohol ointment DAB	283176	1
Caelo	Wool alcohol ointment DAB	14022902	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	13255201	9
Bombastus	Wool alcohol ointment DAB	283619	3
Beiersdorf/Gehe	Wool alcohol ointment DAB	34554710	1
Phoenix	Wool alcohol ointment DAB	283619	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	414610	1
Ebert	Wool alcohol ointment DAB	13242602	1
Caelo	Wool alcohol ointment DAB	14067301	1
Beiersdorf Ag	Wool alcohol ointment DAB	34554710	1
Bombastus	Wool alcohol ointment DAB	279927	3
Beiersdorf	Wool alcohol ointment DAB	40956810	2
beiersdorf	Wool alcohol ointment DAB	34424610	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	34554710	1
Caelo	Wool alcohol ointment DAB	14067001	5
Defektur	Wool alcohol ointment DAB	18/14	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	34424610	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	40916810	1
Caelo	Wool alcohol ointment DAB	14067401	4
Sanacorp	Wool alcohol ointment DAB	44/AKD10	1
Beiersdorf	Wool alcohol ointment DAB	41026910	2
Beiersdorf/Kehr	Wool alcohol ointment DAB	4104701008/16	1
Caelo	Wool alcohol ointment DAB	4067201	1
Fagron	Wool alcohol ointment DAB	40956810	1
Beiersdorf AG	Wool alcohol ointment DAB	11062014A	1
Caelo	Wool alcohol ointment DAB	14067201	14
Fagron	Wool alcohol ointment DAB	13D09-T04-007315	1
Bombastus	Wool alcohol ointment DAB	287013	4
Bombastus	Wool alcohol ointment DAB	285423	1
Sanacorp	Wool alcohol ointment DAB	13255001	1
Beiersdorf	Wool alcohol ointment DAB	41047010	2
Beiersdorf AG	Wool alcohol ointment DAB	33753710	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	41930610	1
Caesar & Loretz GmbH	Wool alcohol ointment DAB	41930610	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	34254110	1
Caelo	Wool alcohol ointment DAB	41047010	1
Caelo	Wool alcohol ointment DAB	259166	1
Caelo	Wool alcohol ointment DAB	14067002	5
Bombastus	Wool alcohol ointment DAB	287619	2
Beiersdorf AG/Geilenkir...	Wool alcohol ointment DAB	40726610	1
Defektur	Wool alcohol ointment DAB	26/14	1
Caelo	Wool alcohol ointment DAB	41026910	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	40956810	1
Beiersdorf/Otto	Wool alcohol ointment DAB	41047010	1
Beiersdorf AG / Phönix	Wool alcohol ointment DAB	40956810	1
Gehe	Wool alcohol ointment DAB	41026910	1
Noweda	Wool alcohol ointment DAB	287013	1
Bombastus	Wool alcohol ointment DAB	287012	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	41950710	1
Euro OTC	Wool alcohol ointment DAB	1204030-01	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	41930610	1
Berkel AHK	Wool alcohol ointment DAB	14067201	1
Beiersdorf AG	Wool alcohol ointment DAB	41930610	2
eucerinum	Wool alcohol ointment DAB	33753710	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	41930610	2
eucerinum	Wool alcohol ointment DAB	34554710	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	41930610	1
Gehe	Wool alcohol ointment DAB	41950710	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	41930610	1
Noweda	Wool alcohol ointment DAB	34554710	1
Beiersdorf AG/ GEHE	Wool alcohol ointment DAB	41829810	1
Beiersdorf	Wool alcohol ointment DAB	41839810	2

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Supplier	Substance	Batch	Spectra
Fagron	Wool alcohol ointment DAB	13D09-T04	1
Caelo	Wool alcohol ointment DAB	1406701	1
Anzag/Beiersdorf	Wool alcohol ointment DAB	40930610	1
Bombastus	Wool alcohol ointment DAB	288834	8
Caelo	Wool alcohol ointment DAB	14024701	1
Caelo	Wool alcohol ointment DAB	9365602	1
Eurho/Noweda	Wool alcohol ointment DAB	1211017-01	1
Caelo	Wool alcohol ointment DAB	14067101	5
Caelo	Wool alcohol ointment DAB	14153101	13
Beiersdorf	Wool alcohol ointment DAB	41940610	1
Euro OTC	Wool alcohol ointment DAB	1211017-01	3
Phönix	Wool alcohol ointment DAB	14067001	1
Gehe/ Beiersdorf AG	Wool alcohol ointment DAB	41940610	1
Caelo	Wool alcohol ointment DAB	41910710	1
Bombastus	Wool alcohol ointment DAB	288766	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	41940610	2
Caelo	Wool alcohol ointment DAB	41940610	1
Phönix Gotha	Wool alcohol ointment DAB	41930610	1
Caelo	Wool alcohol ointment DAB	14152902	1
Phoenix	Wool alcohol ointment DAB	14153101	1
Beiersdorf / E	Wool alcohol ointment DAB	41940610	1
Defektur	Wool alcohol ointment DAB	38/14	1
Apomix	Wool alcohol ointment DAB	1A170214	1
Bombastus	Wool alcohol ointment DAB	1211018-01	1
Caelo	Wool alcohol ointment DAB		2
Beiersdorf	Wool alcohol ointment DAB	41910710	1
Phoenix	Wool alcohol ointment DAB	41940610	1
Beiersdorf SA	Wool alcohol ointment DAB	41950710	1
BDF	Wool alcohol ointment DAB	43142910	1
Stumpf/Beiersdorf Ag	Wool alcohol ointment DAB	41910710	1
Bombastus	Wool alcohol ointment DAB	280061	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	43142910	2
Caelo	Wool alcohol ointment DAB	286882	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	41910710	1
Defektur	Wool alcohol ointment DAB	41/14	1
Beiersdorf AG / Phönix	Wool alcohol ointment DAB	41940610	1
Apomix	Wool alcohol ointment DAB	285950	1
Beiersdorf AG	Wool alcohol ointment DAB	10112014A	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	41910710	1
Fagron	Wool alcohol ointment DAB	14H19-T01-011354	1
Bombastus	Wool alcohol ointment DAB	60080203	2
Defektur	Wool alcohol ointment DAB	42/14	1
Caelo	Wool alcohol ointment DAB	14207702	1
Sanacorp	Wool alcohol ointment DAB	41047010	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	41910710	1
Sana 13.11.14 EK 8,96	Wool alcohol ointment DAB	14153101	1
Beiersdorf	Wool alcohol ointment DAB	42541910	1
UNISAN	Wool alcohol ointment DAB	289509	1
Beiersdorf	Wool alcohol ointment DAB	42531910	1
Beiersdorf	Wool alcohol ointment DAB	40726610	1
GEHE 17.06.2014	Wool alcohol ointment DAB	23033310	1
Defektur	Wool alcohol ointment DAB	45/14	1
Alliance Health 30.10.2...	Wool alcohol ointment DAB	14H19-T02-011354	1
Gehe	Wool alcohol ointment DAB	43142910	1
beiersdorf	Wool alcohol ointment DAB	40726610	1
Caelo	Wool alcohol ointment DAB	14153601	9
Caelo	Wool alcohol ointment DAB	14153603	8
Beiersdorf/Gehe	Wool alcohol ointment DAB	40726610	1
Caelo	Wool alcohol ointment DAB	46/AKD2	1
Caelo	Wool alcohol ointment DAB	14282801	7

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment DAB	289509	7
Beiersdorf/ Noweda	Wool alcohol ointment DAB	43142910	1
Beiersdorf SA	Wool alcohol ointment DAB	44824310	1
Caelo	Wool alcohol ointment DAB	14153602	3
Bombastus	Wool alcohol ointment DAB	290735	2
Fagron	Wool alcohol ointment DAB	14H19-T02-011354	1
Baiersdorf AG	Wool alcohol ointment DAB	40726610	1
Beiersdorf/ Sanacorp	Wool alcohol ointment DAB	44824310	1
Beiersdorf	Wool alcohol ointment DAB	45054410	1
Beiersdorf/ Nowea	Wool alcohol ointment DAB	45054410	1
Fagron	Wool alcohol ointment DAB	23033310	1
Gehe	Wool alcohol ointment DAB	45054410	1
Sanacorp	Wool alcohol ointment DAB	43112910	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	45054410	1
Defektur	Wool alcohol ointment DAB	5/15	1
Caelo	Wool alcohol ointment DAB	1428801	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	45054410	2
Caelo	Wool alcohol ointment DAB	14282901	5
Caelo	Wool alcohol ointment DAB	14283103	12
DAB 2008	Wool alcohol ointment DAB	13255101	1
Beiersdorf über Sanacorp	Wool alcohol ointment DAB	50444710	1
Caelo	Wool alcohol ointment DAB	14152803	1
Caelo	Wool alcohol ointment DAB	50324610	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	50324610	1
Bombastus	Wool alcohol ointment DAB	291796	3
Noweda/Beiersdorf	Wool alcohol ointment DAB	50324610	1
Phönix Gotha	Wool alcohol ointment DAB	286884	1
Bombastus	Wool alcohol ointment DAB	289510	3
Beiersdorf	Wool alcohol ointment DAB	50324610	2
Caelo	Wool alcohol ointment DAB	14283001	14
Defektur	Wool alcohol ointment DAB	10/15	1
Bombastus	Wool alcohol ointment DAB	291795	4
Gehe	Wool alcohol ointment DAB	50444710	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	50444710	1
Caelo	Wool alcohol ointment DAB	291175	1
Caesar & Loretz GmbH Hi...	Wool alcohol ointment DAB	14283001	1
Bombastus	Wool alcohol ointment DAB	291797	2
Phönix Gotha	Wool alcohol ointment DAB	14282801	1
Beiersdorf	Wool alcohol ointment DAB	50454710	2
Fagron	Wool alcohol ointment DAB	14153601	1
Sanacorp	Wool alcohol ointment DAB	289509	1
Caelo	Wool alcohol ointment DAB	14283102	10
Beiersdorf	Wool alcohol ointment DAB	50444710	4
Caelo	Wool alcohol ointment DAB	14152901	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	50414810	1
Caelo	Wool alcohol ointment DAB	14283101	4
Beiersdorf AG	Wool alcohol ointment DAB	50444710	2
Caelo	Wool alcohol ointment DAB	50414810	1
Bombastus	Wool alcohol ointment DAB	293093	5
Bomastus	Wool alcohol ointment DAB	293093	2
Caelo	Wool alcohol ointment DAB	15035503	3
Beiersdorf AG	Wool alcohol ointment DAB	13042015D	1
Alliance Healthcare/Bei...	Wool alcohol ointment DAB	50454710	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	50414810	1
Beiersdorf	Wool alcohol ointment DAB	50414810	1
Noweda / Beiersdorf AG	Wool alcohol ointment DAB	50815310	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	50815310	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	50444710	1
Beiersdorf/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Bombastus	Wool alcohol ointment DAB	291794	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Wool alcohol ointment DAB	288688	1
Gehe	Wool alcohol ointment DAB	50414810	1
Caelo	Wool alcohol ointment DAB	1483101	1
Infectopharm/ Sanacorp	Wool alcohol ointment DAB	50334610	1
Beiersdorf AG	Wool alcohol ointment DAB	11052015B	1
Noweda	Wool alcohol ointment DAB	50845210	2
Caelo	Wool alcohol ointment DAB	15034801	7
Henry Lamotte Oils GmbH	Wool alcohol ointment DAB	5860600	1
Caelo	Wool alcohol ointment DAB	21051510	1
Bombastus	Wool alcohol ointment DAB	293376	2
Caelo	Wool alcohol ointment DAB	4051505	1
apomix	Wool alcohol ointment DAB	1A180215	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	50815310	1
Beiersdorf/N	Wool alcohol ointment DAB	50845210	1
Fagron	Wool alcohol ointment DAB	14H19-T02-018184	2
Gehe/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Bombastus	Wool alcohol ointment DAB	293091	2
Caelo	Wool alcohol ointment DAB	50815310	1
Fagron	Wool alcohol ointment DAB	14H19T02018184	1
Beiersdorf AG/Noweda	Wool alcohol ointment DAB	50815310	1
Sanacorp	Wool alcohol ointment DAB		1
Beiersdorf AG/Sanacorp	Wool alcohol ointment DAB	50444710	1
Beiersdorf Gehe	Wool alcohol ointment DAB	3841	1
Bombastus	Wool alcohol ointment DAB	29309932ma1	1
Beiersdorf	Wool alcohol ointment DAB	50855310	1
Caelo	Wool alcohol ointment DAB	15035501	5
Caelo	Wool alcohol ointment DAB	15034901	5
Caelo	Wool alcohol ointment DAB	50835210	1
Caelo	Wool alcohol ointment DAB	293093	1
Beiersdorf AG	Wool alcohol ointment DAB	50845210	1
Caelo	Wool alcohol ointment DAB	15035502	14
Caelo	Wool alcohol ointment DAB	15035301	10
Caelo	Wool alcohol ointment DAB	50845210	1
Bombastus	Wool alcohol ointment DAB	293956	11
Beiersdorf / Fiebig	Wool alcohol ointment DAB	50815310	1
Bombastus	Wool alcohol ointment DAB	288688	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	50935410	2
Beiersdorf	Wool alcohol ointment DAB	50925410	9
Beiersdorf/N	Wool alcohol ointment DAB	50925410	1
Bombastus	Wool alcohol ointment DAB	293092	6
Beiersdorf/Phoenix	Wool alcohol ointment DAB	50935410	1
Anzag/Beiersdorf	Wool alcohol ointment DAB	50815310	1
Caelo	Wool alcohol ointment DAB	15225501	7
beiersdorf	Wool alcohol ointment DAB	50815310	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	50925410	1
Gehe	Wool alcohol ointment DAB	50815310	1
P.W. Beyvers GmbH/Phönix	Wool alcohol ointment DAB	15225501	3
Beiersdorf/Holdermann	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Beiersdorf	Wool alcohol ointment DAB	50955510	1
Beiersdorf AG/NOWEDA	Wool alcohol ointment DAB	50845210	1
Caelo	Wool alcohol ointment DAB	15228202	19
Fagron	Wool alcohol ointment DAB	51946010	3
Beiersdorf	Wool alcohol ointment DAB	50815310	1
Beiersdorf	Wool alcohol ointment DAB	50935410	3
Beiersdorf	Wool alcohol ointment DAB	50955510	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	40726610	1
Caelo	Wool alcohol ointment DAB	15228201	9
Beiersdorf / Noweda	Wool alcohol ointment DAB	50845210	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	50955510	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	154035502	1
Schärer & Schläpfer AG/...	Wool alcohol ointment DAB	50955510	1
Gehe	Wool alcohol ointment DAB	50925410	1
Beiersdorf /Sanacorp	Wool alcohol ointment DAB	51025610	1
Bombastus	Wool alcohol ointment DAB	295358	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	52656810	1
Fagron	Wool alcohol ointment DAB	15E18-T20-021463	2
Beiersdorf	Wool alcohol ointment DAB	51946010	1
Caelo	Wool alcohol ointment DAB	15225601	14
Beiersdorf/N	Wool alcohol ointment DAB	51015610	1
Bombastus	Wool alcohol ointment DAB	295218	3
Beiersdorf / Noweda	Wool alcohol ointment DAB	51115710	2
Beiersdorf/Phönix	Wool alcohol ointment DAB	51015610	1
Sanacorp 31.10.15	Wool alcohol ointment DAB	15228202	2
Beiersdorf	Wool alcohol ointment DAB	51015610	1
Caelo	Wool alcohol ointment DAB	1522802	1
Apotheke/Defekturabfüll...	Wool alcohol ointment DAB		1
Beiersdorf AG	Wool alcohol ointment DAB	51025610	1
Beiersdorf	Wool alcohol ointment DAB	51125710	2
Beiersdorf / Phoenix	Wool alcohol ointment DAB	50935410	1
Phönix Gotha	Wool alcohol ointment DAB	15225601	1
Bombastus	Wool alcohol ointment DAB	296435	11
Bombastus	Wool alcohol ointment DAB	1211017-01	1
Anzag	Wool alcohol ointment DAB	51015610	1
caesar&lorenz,Phönix	Wool alcohol ointment DAB	15225601	1
Bombastus	Wool alcohol ointment DAB	296436	3
Caelo	Wool alcohol ointment DAB	50/AKD7	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	53437010	2
Beiersdorf/Sana	Wool alcohol ointment DAB	54137710	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	53447010	1
Caelo	Wool alcohol ointment DAB	53437010	1
Fagron	Wool alcohol ointment DAB	53437010	1
Beiersdorf/N	Wool alcohol ointment DAB	53437010	1
Caelo	Wool alcohol ointment DAB	15225401	3
Beiersdorf	Wool alcohol ointment DAB	53437010	2
Bombastus	Wool alcohol ointment DAB	296235	1
Bombastus	Wool alcohol ointment DAB	297129	1
Caesar und Loretz	Wool alcohol ointment DAB	293092	2
Noweda	Wool alcohol ointment DAB	15361801	1
Caelo	Wool alcohol ointment DAB	15361801	14
Bombastus	Wool alcohol ointment DAB	295360	1
Caelo	Wool alcohol ointment DAB	15362002	10
Beiersdorf/Noweda	Wool alcohol ointment DAB	54127710	1
Beiersdorf direkt	Wool alcohol ointment DAB	52056110	1
Bombastus	Wool alcohol ointment DAB	296437	2
Beiersdorf	Wool alcohol ointment DAB	54127710	2
Caelo	Wool alcohol ointment DAB	143020402	1
Sonnen-Apotheke Wefensl...	Wool alcohol ointment DAB	1/16	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	53447010	1
Fagron	Wool alcohol ointment DAB	15225601	1
Gehe	Wool alcohol ointment DAB	54127710	1
Beiersdorf / Sanacorp	Wool alcohol ointment DAB	53457110	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	54147810	1
Caelo	Wool alcohol ointment DAB	15362003	9
Beiersdorf über Phoenix	Wool alcohol ointment DAB	53437010	1
Beiersdorf /Alliance He...	Wool alcohol ointment DAB	54127710	1
Caelo	Wool alcohol ointment DAB	15362001	23
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	54127710	1
Caelo	Wool alcohol ointment DAB	16007202	8
Bombastus	Wool alcohol ointment DAB	295357	1

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Supplier	Substance	Batch	Spectra
Beiersdorf AG	Wool alcohol ointment DAB	60419110	1
Bombastus	Wool alcohol ointment DAB	298579	4
Caelo	Wool alcohol ointment DAB	53457110	1
Fagron	Wool alcohol ointment DAB	15E18-20-021463	1
Beiersdorf	Wool alcohol ointment DAB	50845210	1
Bayersdorf	Wool alcohol ointment DAB	54137710	1
Caelo	Wool alcohol ointment DAB	15361901	10
Caelo	Wool alcohol ointment DAB	15407001	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	54157810	1
Gehe	Wool alcohol ointment DAB	53457110	1
Beiersdorf/E	Wool alcohol ointment DAB	60419110	1
Beiersdorf	Wool alcohol ointment DAB	60419110	3
Beiersdorf	Wool alcohol ointment DAB	54157810	2
Bombastus	Wool alcohol ointment DAB	298577	10
Beiersdorf AG	Wool alcohol ointment DAB	51946010	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	53437010	1
Bombastus	Wool alcohol ointment DAB	298578	4
Caelo	Wool alcohol ointment DAB	60429110	1
Caelo	Wool alcohol ointment DAB	16066401	1
Bombastus	Wool alcohol ointment DAB	300281	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	54147810	2
Beiersdorf/N	Wool alcohol ointment DAB	54147810	1
Caeolo/Noweda	Wool alcohol ointment DAB	15361901	1
Beiersdorf AG	Wool alcohol ointment DAB	15362002	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	54157810	1
Bombastus	Wool alcohol ointment DAB	300283	3
Beiersdorf/Phönix	Wool alcohol ointment DAB	60429110	1
Caelo	Wool alcohol ointment DAB	16066601	7
Bombastus	Wool alcohol ointment DAB	300282	6
Caesar & Loretz/Noweda	Wool alcohol ointment DAB	16066601	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	54157810	1
Gehe	Wool alcohol ointment DAB	60419110	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	60839310	1
Caelo	Wool alcohol ointment DAB	16066501	9
Caelo	Wool alcohol ointment DAB	16007201	7
Beiersdorf	Wool alcohol ointment DAB	60539210	1
Beiersdorf/N	Wool alcohol ointment DAB	53457110	1
Beiersdorf AG	Wool alcohol ointment DAB	60919510	2
Caelo	Wool alcohol ointment DAB	300283	1
Caelo	Wool alcohol ointment DAB	16066801	9
Sanacorp	Wool alcohol ointment DAB	28/AKD12	1
Caelo	Wool alcohol ointment DAB	298578	1
Bombastus	Wool alcohol ointment DAB	301200	3
Beiersdorf	Wool alcohol ointment DAB	54147810	2
Caelo	Wool alcohol ointment DAB	16066701	4
Beiersdorf/Phoenix	Wool alcohol ointment DAB	61149910	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	60429110	1
Beiersdorf	Wool alcohol ointment DAB	60919510	2
Bombastus	Wool alcohol ointment DAB	301202	4
Beiersdorf/N	Wool alcohol ointment DAB	60839310	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	60539210	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	61149910	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	60539210	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	60539210	1
Bombastus	Wool alcohol ointment DAB	301199	1
Phönix	Wool alcohol ointment DAB	61149910	1
Caesar&Loretz GmbH	Wool alcohol ointment DAB	15362002	1
Bombastus	Wool alcohol ointment DAB	302206	10
Bombastus	Wool alcohol ointment DAB	60080202	2
Bombastus	Wool alcohol ointment DAB	915M-01370	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol ointment DAB	16007201	2
Beiersdorf AG	Wool alcohol ointment DAB	61841610	1
Caelo	Wool alcohol ointment DAB	16007203	1
Bayersdorf	Wool alcohol ointment DAB	61149910	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	61079710	1
Fagron	Wool alcohol ointment DAB	16066601	1
Beiersdorf	Wool alcohol ointment DAB	61079710	1
Bombastus	Wool alcohol ointment DAB	104374	1
Beiersdorf / Phoenix	Wool alcohol ointment DAB	62031710	2
Beiersdorf/AHD	Wool alcohol ointment DAB	61149910	1
Beiersdorf	Wool alcohol ointment DAB	62031710	1
Beiersdorf / Kehr	Wool alcohol ointment DAB	61149910	1
Caelo	Wool alcohol ointment DAB	54157810	1
Caelo	Wool alcohol ointment DAB	16198502	23
Beiersdorf - Noweda	Wool alcohol ointment DAB	54157810	1
Caelo	Wool alcohol ointment DAB	160905EA	1
Bombastus	Wool alcohol ointment DAB	303846	12
Ebert 18.10.16	Wool alcohol ointment DAB	62031710	1
Beiersdorf AG	Wool alcohol ointment DAB	61149910	1
Beiersdorf	Wool alcohol ointment DAB	62041710	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	61841610	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62031710	1
Caelo	Wool alcohol ointment DAB	16198501	12
Bombastus	Wool alcohol ointment DAB	30226	2
Beiersdorf/AHC	Wool alcohol ointment DAB	62932210	1
Caelo	Wool alcohol ointment DAB	16198101	14
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	62041710	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	62932210	1
Bombastus	Wool alcohol ointment DAB	302207	2
Beiersdorf/Phönix	Wool alcohol ointment DAB	62031710	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	62922210	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62922210	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	62041710	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	62932210	1
Anzag	Wool alcohol ointment DAB	16007201	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	60539210	1
ALH	Wool alcohol ointment DAB	15407001	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	63052310	1
Beiersdorf	Wool alcohol ointment DAB	62932210	1
Caelo	Wool alcohol ointment DAB	16198401	10
Caesar & Loretz	Wool alcohol ointment DAB	16198401	1
Beiersdorf	Wool alcohol ointment DAB	63052310	2
Bombastus	Wool alcohol ointment DAB	304998	3
Gehe / Beiersdorf	Wool alcohol ointment DAB	63052310	1
Caelo	Wool alcohol ointment DAB	62922210	1
Beiersdorf	Wool alcohol ointment DAB	62922210	1
Beiersdorf/Anzag	Wool alcohol ointment DAB	63052310	1
Allianc. Health. /Beier...	Wool alcohol ointment DAB	62031710	1
PHÖNIX	Wool alcohol ointment DAB	63052310	1
Caelo	Wool alcohol ointment DAB	63052310	2
Beiersdorf AG	Wool alcohol ointment DAB	63052310	1
Beiersdorf	Wool alcohol ointment DAB	64332810	2
Beiersdorf/Phönix	Wool alcohol ointment DAB	64312910	2
Caelo	Wool alcohol ointment DAB	16177603	1
Caelo	Wool alcohol ointment DAB	16298502	1
Caelo	Wool alcohol ointment DAB	16198601	16
Caeanlo	Wool alcohol ointment DAB	16198501	1
Caelo	Wool alcohol ointment DAB	16198301	3
Beiersdorf AG	Wool alcohol ointment DAB	64312910	1
Biersdorf	Wool alcohol ointment DAB	64342810	1

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Supplier	Substance	Batch	Spectra
AHD 06.02.17 EK.9,28	Wool alcohol ointment DAB	16198401	1
Anzag	Wool alcohol ointment DAB	16198502	1
Caelo	Wool alcohol ointment DAB	64342810	2
Bombastus	Wool alcohol ointment DAB	305879	17
phönix	Wool alcohol ointment DAB	16198501	1
EuroOTV	Wool alcohol ointment DAB	1608040-01	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	64332810	1
Bombastus	Wool alcohol ointment DAB	303848	2
Bombastus	Wool alcohol ointment DAB	16198502	1
Gehe/Beiersdorf	Wool alcohol ointment DAB	64342810	1
Beiersdorf/Gehe	Wool alcohol ointment DAB	64342810	1
Bombastus	Wool alcohol ointment DAB	303847	5
Phönix/ Beiersdorf Werke	Wool alcohol ointment DAB	64833610	1
Beiersdorf AG	Wool alcohol ointment DAB	64713510	1
Bombastus	Wool alcohol ointment DAB	305878	2
Caelo	Wool alcohol ointment DAB	16295101	11
Caelo	Wool alcohol ointment DAB	16198503	7
Beiersdorf	Wool alcohol ointment DAB	64342810	2
Beiersdorf/ Noweda	Wool alcohol ointment DAB	64833610	1
Phönix	Wool alcohol ointment DAB	64833610	1
Beiersdorf	Wool alcohol ointment DAB	64713510	3
Caelo	Wool alcohol ointment DAB	64713510	2
Sonnen-Apotheke Wefensl. . .	Wool alcohol ointment DAB	9/17	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	64342810	1
Bombastus	Wool alcohol ointment DAB	305881	1
Caelo	Wool alcohol ointment DAB	16248802	3
Bombastus	Wool alcohol ointment DAB	305880	5
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	64342810	1
Fargon	Wool alcohol ointment DAB	16H03-T01-035270	1
Beiersdorf	Wool alcohol ointment DAB	70314010	1
Caelo	Wool alcohol ointment DAB	16295102	3
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	70314010	1
Noweda	Wool alcohol ointment DAB	15362002	1
Gehe	Wool alcohol ointment DAB	16198601	1
Caelo	Wool alcohol ointment DAB	70314010	3
Bombastus	Wool alcohol ointment DAB	307775	4
Beiersdorf	Wool alcohol ointment DAB	51115710	1
Caesar & Loretz/Noweda	Wool alcohol ointment DAB	16295102	1
beiersdorf	Wool alcohol ointment DAB	64833610	1
Beiersdorf/ Gehe	Wool alcohol ointment DAB	64312910	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	64833610	1
Beiersdorf/Anzag	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	71114510	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	71114510	1
Bombastus	Wool alcohol ointment DAB	307774	5
Cealo/Gehe	Wool alcohol ointment DAB	16331704	2
Caelo	Wool alcohol ointment DAB	16331702	12
Caelo	Wool alcohol ointment DAB	16331704	2
phönix	Wool alcohol ointment DAB	16331701	2
Beiersdorf/Gehe	Wool alcohol ointment DAB	71114510	1
Bombastus	Wool alcohol ointment DAB	302208	1
Beiersdorf	Wool alcohol ointment DAB	648336105291	1
Kehr	Wool alcohol ointment DAB	307775	1
Beiersdorf	Wool alcohol ointment DAB	71114510	4
Sanacorp	Wool alcohol ointment DAB	16198401	1
Caelo	Wool alcohol ointment DAB	16331802	2
Bombastus	Wool alcohol ointment DAB	307776	2
Noweda/Beiersdorf	Wool alcohol ointment DAB	71214810	1
Bombastus	Wool alcohol ointment DAB	307773	1
beiersdorf/gehe	Wool alcohol ointment DAB	71114510	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Wool alcohol ointment DAB	70434110	1
Beiersdorf	Wool alcohol ointment DAB	71274810	2
Caelo	Wool alcohol ointment DAB	16331901	10
Beiersdorf	Wool alcohol ointment DAB	64833610	1
beiersdorf/ Noweda	Wool alcohol ointment DAB	71214810	1
Caelo	Wool alcohol ointment DAB	16331701	4
Caelo	Wool alcohol ointment DAB	305881	1
Noweda	Wool alcohol ointment DAB	16198502	1
Kehr/Beiersdorf	Wool alcohol ointment DAB	71114510	1
Caelo	Wool alcohol ointment DAB	17105101	4
Beiersdorf AG	Wool alcohol ointment DAB	71274810	1
Beiersdorf / Phoenix	Wool alcohol ointment DAB	71114510	1
Caelo	Wool alcohol ointment DAB	71124510	1
Caelo	Wool alcohol ointment DAB	17104901	6
Caelo	Wool alcohol ointment DAB	17105001	12
Anzag	Wool alcohol ointment DAB	16331702	1
Caelo	Wool alcohol ointment DAB	73035910	2
Beiersdorf/Nnoweda	Wool alcohol ointment DAB	71274810	1
Caesar & Loretz GmbH, P...	Wool alcohol ointment DAB	17105001	1
Beiersdorf	Wool alcohol ointment DAB	73035910	1
Beiersdorf/AEP	Wool alcohol ointment DAB	70434110	1
Beidersdorf/Kehr	Wool alcohol ointment DAB	72915810	1
Beiersdorf / Gehe	Wool alcohol ointment DAB	71274810	1
Sanacorp	Wool alcohol ointment DAB	73035910	1
Bombastus	Wool alcohol ointment DAB	308845	1
Caelo	Wool alcohol ointment DAB	28101703	1
caesar&lorenz	Wool alcohol ointment DAB	16331702	1
Caelo	Wool alcohol ointment DAB	17104903	3
Caelo	Wool alcohol ointment DAB	17104902	9
Caelo	Wool alcohol ointment DAB	163317025398	1
Beiersdorf/Phönix	Wool alcohol ointment DAB	72915810	1
Beiersdorf/GEHE	Wool alcohol ointment DAB	72915810	1
GEHE	Wool alcohol ointment DAB	1633170	1
Beiersdorf / AHD	Wool alcohol ointment DAB	71214810	1
Beiersdorf	Wool alcohol ointment DAB	74017010	1
Caelo	Wool alcohol ointment DAB	1704903	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	72915810	1
Noweda	Wool alcohol ointment DAB	17104902	1
Phönix	Wool alcohol ointment DAB	17104901	2
Bombastus	Wool alcohol ointment DAB	311387	3
Euro OTC	Wool alcohol ointment DAB	1608040-01	1
Beiersdorf/ AHC	Wool alcohol ointment DAB	71274810	1
Beiersdorf/Ebert	Wool alcohol ointment DAB	72435610	1
Caelo/Krieger	Wool alcohol ointment DAB	16331802	1
Caelo	Wool alcohol ointment DAB	74017010	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	74017010	1
Kehr	Wool alcohol ointment DAB	311387	1
Caelo	Wool alcohol ointment DAB	17105401	12
Beiersdorf/Noweda	Wool alcohol ointment DAB	64312910	1
Gehe	Wool alcohol ointment DAB	71124510	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	7477510	1
Beiersdorf	Wool alcohol ointment DAB	74747510	3
Caelo	Wool alcohol ointment DAB	74737410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74017010	1
Gehe	Wool alcohol ointment DAB	74747510	1
Bombastus	Wool alcohol ointment DAB	17001875	10
Bombastus	Wool alcohol ointment DAB	308843	3
Bombastus	Wool alcohol ointment DAB	311388	4
Beiersdorf/Alliance Hea...	Wool alcohol ointment DAB	74737410	1
Caelo	Wool alcohol ointment DAB	74747510	1

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Supplier	Substance	Batch	Spectra
Noweda/Beiersdorf	Wool alcohol ointment DAB	74747510	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74737410	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	74737410	2
Caelo	Wool alcohol ointment DAB	17141401	10
Beiersdorf	Wool alcohol ointment DAB	74747510	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74737410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74757510	1
Caelo	Wool alcohol ointment DAB	17141203	12
Beiersdorf	Wool alcohol ointment DAB	74757510	1
Bombastus	Wool alcohol ointment DAB	17001876	2
Caleo	Wool alcohol ointment DAB	17104903	1
Caelo	Wool alcohol ointment DAB	17141202	8
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	74747510	1
Caelo	Wool alcohol ointment DAB	17411202	1
Sanacoro W.E:22.02.18 ...	Wool alcohol ointment DAB	17104902	1
Caelo	Wool alcohol ointment DAB	17141404	1
Beiersdorf / Noweda	Wool alcohol ointment DAB	74757510	1
Sanacorp	Wool alcohol ointment DAB	17001876	1
Caelo	Wool alcohol ointment DAB	171412035537	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74747510	1
Bombastus	Wool alcohol ointment DAB	18001095	3
Bombastus	Wool alcohol ointment DAB	18001094	6
Bombastus	Wool alcohol ointment DAB	311389	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	74757510	1
Caelo	Wool alcohol ointment DAB	17301101	2
Beiersdorf/ AEP	Wool alcohol ointment DAB	74757510	1
Spangro	Wool alcohol ointment DAB	17411203	1
Bombastus	Wool alcohol ointment DAB	18001096	1
Beiersdorf / AEP	Wool alcohol ointment DAB	81819410	1
Bombastus	Wool alcohol ointment DAB	311386	1
Caelo	Wool alcohol ointment DAB	17206001	6
Caelo	Wool alcohol ointment DAB	17141601	1
Beiersdorf	Wool alcohol ointment DAB	81819410	1
Noweda/Beiersdorf	Wool alcohol ointment DAB	74757510	1
Beiersdorf/Phoenix	Wool alcohol ointment DAB	81819410	2
Bombastus	Wool alcohol ointment DAB	18002495	1
Beiersdorf/Noweda	Wool alcohol ointment DAB	81819410	2
Beiersdorf/Noweda	Wool alcohol ointment DAB	81328810	1
Beiersdorf/ Phoenix	Wool alcohol ointment DAB	81819410	1
Bombastus	Wool alcohol ointment DAB	17206001	1
Beiersdorf	Wool alcohol ointment DAB	81819410	1
Bombastus	Wool alcohol ointment DAB	308844	1
Beiersdorf/ Noweda	Wool alcohol ointment DAB	61841610	1
Caelo	Wool alcohol ointment DAB	81348810	1
GEHE	Wool alcohol ointment DAB	17141202	1
Beiersdorf	Wool alcohol ointment DAB	81328810	2
Beiersdorf/Phoenix	Wool alcohol ointment DAB	74747510	1
Caelo	Wool alcohol ointment DAB	17300901	1
Bombastus	Wool alcohol ointment DAB	18002497	1
Caelo	Wool alcohol ointment DAB	17301001	7
Beiersdorf	Wool alcohol ointment DAB	82721410	2
AHD	Wool alcohol ointment DAB	81939510	1
Sanacorp	Wool alcohol ointment DAB	82541010	1
Caelo	Wool alcohol ointment DAB	17300902	5
Caelo	Wool alcohol ointment DAB	17206202	1
Bombastus	Wool alcohol ointment DAB	18002498	1
Beiersdorf / Alliance H...	Wool alcohol ointment DAB	83031710	1
Noweda / Beiersdorf	Wool alcohol ointment DAB	82721410	1
Beiersdorf/Sanacorp	Wool alcohol ointment DAB	82721410	1
Sanacorp	Wool alcohol ointment DAB	18002497	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol ointment DAB	18132603	2
Caelo	Wool alcohol ointment DAB	27101806	1
Beiersdorf/Ebert	Wool alcohol ointment DAB	83321910	1
Bombastus	Wool alcohol ointment DAB	18004090	3
Beiersdorf/Phönix	Wool alcohol ointment DAB	83241810	1
Beiersdorf	Wool alcohol ointment DAB	82350810	1
Apo Ident/ Noweda	Wool alcohol ointment DAB	83241810	1
Caelo	Wool alcohol ointment DAB	18132603-W20181115Ma	1
Caelo	Wool alcohol ointment DAB	18132501	6
Kehr	Wool alcohol ointment DAB	18002496	1
Beiersdorf	Wool alcohol ointment DAB	83241810	1
Caelo	Wool alcohol ointment DAB	83321910	1
Beiersdorf/Fiebig	Wool alcohol ointment DAB	84122310	1
Bombastus	Wool alcohol ointment DAB	18004092	1
Bombastus	Wool alcohol ointment DAB	18002496	1
Caelo	Wool alcohol ointment DAB	18132604	1
Fagron	Wool alcohol ointment DAB	18132604	1
Sanacorp	Wool alcohol ointment DAB	181362604	1
Bombastus	Wool alcohol ointment DAB	18005544	1
Beiersdorf	Wool alcohol ointment DAB	83742110	1
Beiersdorf	Wool alcohol ointment DAB	84222410	1
Caelo	Hydrophilic ointment DAB	2803212539	1
Caelo	Hydrophilic ointment DAB	11212101	2
Caelo	Hydrophilic ointment DAB	11133701	1
Caelo	Hydrophilic ointment DAB	11212201	2
Lamotte	Hydrophilic ointment DAB	518400	1
Caelo	Hydrophilic ointment DAB	12014601	1
Caelo	Hydrophilic ointment DAB	12014701	2
Caelo	Hydrophilic ointment DAB	12015001	3
Caelo	Hydrophilic ointment DAB	Test	1
Caelo	Hydrophilic ointment DAB	12055901	7
Noweda	Hydrophilic ointment DAB	11211601	2
Caelo	Hydrophilic ointment DAB	12056002	4
DAB 2008 Henry Lamotte ...	Hydrophilic ointment DAB	5243000	1
Caelo	Hydrophilic ointment DAB	2109212539	1
Caesar & Loretz GmbH, 4...	Hydrophilic ointment DAB	12056002	1
Stumpf	Hydrophilic ointment DAB	269539	1
Caelo	Hydrophilic ointment DAB	12014602	1
Caelo	Hydrophilic ointment DAB	12055801	2
Caelo	Hydrophilic ointment DAB	11133601	3
Bombastus	Hydrophilic ointment DAB	269539	3
Caelo	Hydrophilic ointment DAB	12086702	3
Fagron	Hydrophilic ointment DAB	12C09-T01	2
Caelo	Hydrophilic ointment DAB	12056001	1
Caelo	Hydrophilic ointment DAB	12205201	7
Fiebig 08.10.12 ek: 10,...	Hydrophilic ointment DAB	12055901	1
Caelo	Hydrophilic ointment DAB	12205001	6
Caelo	Hydrophilic ointment DAB	10025601	1
Anzag	Hydrophilic ointment DAB	271047	1
Caelo	Hydrophilic ointment DAB	11015402	1
Stumpf	Hydrophilic ointment DAB	274004	1
Caelo	Hydrophilic ointment DAB	11212001	1
Bombastus	Hydrophilic ointment DAB	274003	1
Caelo	Hydrophilic ointment DAB	12204901	2
Bombastus	Hydrophilic ointment DAB	269537	1
Caelo	Hydrophilic ointment DAB	12204802	6
Caelo	Hydrophilic ointment DAB	12205101	4
Fagron	Hydrophilic ointment DAB		1
Caelo	Hydrophilic ointment DAB	12204803	1
Caelo	Hydrophilic ointment DAB	12311801	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Hydrophilic ointment DAB	12205001	1
Caelo	Hydrophilic ointment DAB	20221110-1	1
Bombastus	Hydrophilic ointment DAB	269532	1
Bombastus	Hydrophilic ointment DAB	269534	2
Caelo	Hydrophilic ointment DAB	10082901	1
Caelo	Hydrophilic ointment DAB	24011315	1
Noweda	Hydrophilic ointment DAB	12311801	1
Caelo	Hydrophilic ointment DAB	80127028	1
Gehe	Hydrophilic ointment DAB	12205201	1
Caelo	Hydrophilic ointment DAB	12311401	11
Fagron	Hydrophilic ointment DAB	12A12-T03	1
Krieger	Hydrophilic ointment DAB	12311401	1
Caelo	Hydrophilic ointment DAB	12311502	2
Bombastus	Hydrophilic ointment DAB	274002	1
Caelo	Hydrophilic ointment DAB	12311501	14
Caelo	Hydrophilic ointment DAB	103312539	1
Caelo	Hydrophilic ointment DAB	12311102	5
Caelo	Hydrophilic ointment DAB	5099200	1
Caelo	Hydrophilic ointment DAB	12311301	7
Phönix	Hydrophilic ointment DAB	12311301	1
Phönix	Hydrophilic ointment DAB	5321400	1
Noweda	Hydrophilic ointment DAB	12205201	1
Fagron	Hydrophilic ointment DAB	12J31-T04	3
Henry Lamotte/Anzag	Hydrophilic ointment DAB	5321400	1
Noweda	Hydrophilic ointment DAB	11133501	1
Alliance Healthcare	Hydrophilic ointment DAB	12311102	1
Caelo	Hydrophilic ointment DAB	12311701	6
Caelo	Hydrophilic ointment DAB	13014002	7
Doroderm GmbH/ Noweda	Hydrophilic ointment DAB	12311501	1
Caelo	Hydrophilic ointment DAB	13014003	5
Bombastus	Hydrophilic ointment DAB	276671	5
Caelo	Hydrophilic ointment DAB	13013901	2
Caelo	Hydrophilic ointment DAB	13014101	6
Caelo	Hydrophilic ointment DAB	25051307	1
Caelo	Hydrophilic ointment DAB	13B04-T18-001061	2
Lamotte	Hydrophilic ointment DAB	5321400	1
Caelo	Hydrophilic ointment DAB	U-020413-1	1
Bombastus	Hydrophilic ointment DAB	274004	1
Euro OTC	Hydrophilic ointment DAB	13117102	1
Caelo	Hydrophilic ointment DAB	11211601	1
Sanacorp	Hydrophilic ointment DAB	13117102	3
Bombastus	Hydrophilic ointment DAB	276670	1
Caelo	Hydrophilic ointment DAB	13117103	3
Caelo	Hydrophilic ointment DAB	15056002	1
Fagron	Hydrophilic ointment DAB	13B04-T18-001057	3
Caelo	Hydrophilic ointment DAB	13117301	20
Caelo	Hydrophilic ointment DAB	13117102	5
Caelo	Hydrophilic ointment DAB	13117401	7
Phönix Gotha	Hydrophilic ointment DAB	12G18-T10	1
Caelo	Hydrophilic ointment DAB	13014001	4
Caesar & Loretz GmbH	Hydrophilic ointment DAB	13014002	1
Bombastus	Hydrophilic ointment DAB	279002	8
Bombastus	Hydrophilic ointment DAB	279000	2
Caelo	Hydrophilic ointment DAB	13117501	12
Caelo	Hydrophilic ointment DAB	4912E-02539	1
Caesar&lorenz,Phoenix	Hydrophilic ointment DAB	12311501	1
Caelo	Hydrophilic ointment DAB	70913UngEm	1
Caelo	Hydrophilic ointment DAB	3613Q2539	1
Caesar & Loretz GmbH, 4...	Hydrophilic ointment DAB	13117501	1
Gehe	Hydrophilic ointment DAB	276671	2

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	12J31-T04	1
Caelo	Hydrophilic ointment DAB	13117201	2
Caelo	Hydrophilic ointment DAB	3962/V04/16	1
Gehe	Hydrophilic ointment DAB	13117301	2
Caelo	Hydrophilic ointment DAB	13117601	6
Caelo	Hydrophilic ointment DAB	13245801	4
Bombastus	Hydrophilic ointment DAB	279001	2
Caelo	Hydrophilic ointment DAB	13246002	3
Alliance Healthcare	Hydrophilic ointment DAB	13117501	1
Caelo	Hydrophilic ointment DAB	13245901	10
Caelo	Hydrophilic ointment DAB	12J31T04	1
Caelo	Hydrophilic ointment DAB	13245303	1
Sanacorp	Hydrophilic ointment DAB	AKD32	1
Caelo	Hydrophilic ointment DAB	13245302	5
Bombastus	Hydrophilic ointment DAB	281351	6
Caelo	Hydrophilic ointment DAB	281351	1
Caelo	Hydrophilic ointment DAB	13245601	9
Fagron	Hydrophilic ointment DAB	13H13-T04-006144	1
Caelo	Hydrophilic ointment DAB	13245401	10
Bombastus	Hydrophilic ointment DAB	281347	1
Bombastus	Hydrophilic ointment DAB	281349	1
Caelo	Hydrophilic ointment DAB	27121301	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	13245401	1
Caelo	Hydrophilic ointment DAB	13245301	7
Fagron	Hydrophilic ointment DAB	13E10-T06-003563	1
Lamotte/Alliance	Hydrophilic ointment DAB	5517900	1
Caelo	Hydrophilic ointment DAB	13245501	6
Bombastus	Hydrophilic ointment DAB	281346	2
Caelo	Hydrophilic ointment DAB	13245701	5
Bombastus	Hydrophilic ointment DAB	269536	1
Caelo	Hydrophilic ointment DAB	281347	2
Bombastus	Hydrophilic ointment DAB	281350	1
Caesar&Loretz,Phoenix	Hydrophilic ointment DAB	13245401	1
Caelo	Hydrophilic ointment DAB	14024803	3
Bombastus	Hydrophilic ointment DAB	284748	5
Anzag 17.03.2014 EK 13...	Hydrophilic ointment DAB	5448000	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	13245401	1
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	13245301	1
Caelo	Hydrophilic ointment DAB	14024601	4
Bombastus	Hydrophilic ointment DAB	281348	3
Bombastus	Hydrophilic ointment DAB	281248	1
Caelo	Hydrophilic ointment DAB	15042014B	1
AHD	Hydrophilic ointment DAB	14024803	1
Caelo	Hydrophilic ointment DAB	1614U2539	1
Caelo	Hydrophilic ointment DAB	12051401	1
Alliance Health 09.05.2...	Hydrophilic ointment DAB	14024701	1
Caelo	Hydrophilic ointment DAB	14024701	14
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14024901	2
Bombastus	Hydrophilic ointment DAB	286545	9
Caelo	Hydrophilic ointment DAB	14024802	5
Caelo	Hydrophilic ointment DAB	281349	2
Caelo	Hydrophilic ointment DAB	1423101	1
Caelo	Hydrophilic ointment DAB	14025001	7
Caelo	Hydrophilic ointment DAB	14024901	8
Caelo	Hydrophilic ointment DAB	14123201	4
Bombastus	Hydrophilic ointment DAB	14025001	2
Bombastus	Hydrophilic ointment DAB	286544	6
Lamotte/Alliance	Hydrophilic ointment DAB	5651600	1
lamotte	Hydrophilic ointment DAB	5517900	1
Caelo	Hydrophilic ointment DAB	14123301	7

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Supplier	Substance	Batch	Spectra
Bombastus	Hydrophilic ointment DAB	284746	2
lamotte	Hydrophilic ointment DAB	5448000	1
Bombastus	Hydrophilic ointment DAB	284747	1
Caelo	Hydrophilic ointment DAB	13H13-T03-006141	1
Caelo	Hydrophilic ointment DAB	286545	1
Caelo	Hydrophilic ointment DAB	14123401	12
Caelo	Hydrophilic ointment DAB	14123101	13
Sanacorp	Hydrophilic ointment DAB		1
Bombastus	Hydrophilic ointment DAB	288369	6
Fagron	Hydrophilic ointment DAB	14A06-T11	1
Fagron	Hydrophilic ointment DAB	13H13T04006144	1
Euro OTC	Hydrophilic ointment DAB	288369	1
Fagron	Hydrophilic ointment DAB	14A06-T10-009049	1
Caelo	Hydrophilic ointment DAB		2
Caelo	Hydrophilic ointment DAB	14231901	8
Caelo	Hydrophilic ointment DAB	14123502	3
Caelo	Hydrophilic ointment DAB	14225002	11
Fagron	Hydrophilic ointment DAB	14G08-T06-013948	1
Caelo	Hydrophilic ointment DAB	14225001	7
Caelo	Hydrophilic ointment DAB	4225001	1
Fagron	Hydrophilic ointment DAB	14A06-T11-009054	3
Fagron	Hydrophilic ointment DAB	14G08-T07-013951	2
Phönix	Hydrophilic ointment DAB	14024701	1
Bombastus	Hydrophilic ointment DAB	288367	4
Bombastus	Hydrophilic ointment DAB	290601	9
EuRho/ Noweda	Hydrophilic ointment DAB	14277601	1
Caelo	Hydrophilic ointment DAB	14277601	8
Euro OTC	Hydrophilic ointment DAB	14A06-T10-009049	1
Caelo	Hydrophilic ointment DAB	14277901	12
Bombastus	Hydrophilic ointment DAB	288366	1
Bombastus	Hydrophilic ointment DAB	290600	3
Caelo	Hydrophilic ointment DAB	14224901	5
Lamotte	Hydrophilic ointment DAB	5651600	2
Caelo	Hydrophilic ointment DAB	14224701	4
Bombastus	Hydrophilic ointment DAB	286543	1
Fagron	Hydrophilic ointment DAB	14G08-T06	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14277801	1
Bombastus	Hydrophilic ointment DAB	290599	4
Anzag	Hydrophilic ointment DAB	293264	1
Bombastus	Hydrophilic ointment DAB	293261	4
Caelo	Hydrophilic ointment DAB	1120462	1
Bombastus	Hydrophilic ointment DAB	293264	7
Caelo	Hydrophilic ointment DAB	14277801	7
Henry Lamotte Oils	Hydrophilic ointment DAB	5860400	2
Caelo	Hydrophilic ointment DAB	14278003	4
Fagron	Hydrophilic ointment DAB	14G08-T06-013947	2
Fagron	Hydrophilic ointment DAB	14G08-T08-013954	5
Caelo	Hydrophilic ointment DAB	15016602	2
Bombastus	Hydrophilic ointment DAB	288368	1
Lamotte/Anzag	Hydrophilic ointment DAB	5112A-02539	1
Caelo	Hydrophilic ointment DAB	15016503	4
Caelo	Hydrophilic ointment DAB	14277701	4
Caelo	Hydrophilic ointment DAB	14278002	2
Bombastus	Hydrophilic ointment DAB	293262	4
Fagron	Hydrophilic ointment DAB	14A06T11009054	1
Caelo	Hydrophilic ointment DAB	15016701	5
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	14277901	1
Caesar & Loretz GmbH	Hydrophilic ointment DAB	14277901	1
Caelo	Hydrophilic ointment DAB	15016801	10
Fagron	Hydrophilic ointment DAB	15B19-T01	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	15016601	12
Caelo	Hydrophilic ointment DAB	15113602	1
Caelo	Hydrophilic ointment DAB	15016502	9
Bombastus	Hydrophilic ointment DAB	294451	3
Gehe	Hydrophilic ointment DAB	14G08-T08-013954	1
Eigen/Defektur	Hydrophilic ointment DAB	3415I-02539	1
Caelo	Hydrophilic ointment DAB	15016901	10
Fagron	Hydrophilic ointment DAB	14Go8-To8-013954	1
Fagron	Hydrophilic ointment DAB	15F24-T05-023887	1
Lamotte//AHD	Hydrophilic ointment DAB	5860500	1
Bombastus	Hydrophilic ointment DAB	294448	4
Caelo	Hydrophilic ointment DAB	15221902	4
Eigen/Defektur	Hydrophilic ointment DAB	4215E-02539	1
Caelo	Hydrophilic ointment DAB	15016501	1
Bombastus	Hydrophilic ointment DAB	294449	1
Bombastus	Hydrophilic ointment DAB	290597	2
Caelo	Hydrophilic ointment DAB	15221501	5
Caelo	Hydrophilic ointment DAB	15221601	12
Caelo	Hydrophilic ointment DAB	15221701	21
Caelo	Hydrophilic ointment DAB	15221602	7
Sanacorp	Hydrophilic ointment DAB	6/AKD7	1
sanacorp	Hydrophilic ointment DAB	15F09-T02023370	1
Eigen/Defektur	Hydrophilic ointment DAB	5015E-02539	1
Bombastus	Hydrophilic ointment DAB	296868	6
Bombastus	Hydrophilic ointment DAB	293263	2
Fagron	Hydrophilic ointment DAB	15B19-T01-019411	2
Caelo	Hydrophilic ointment DAB	15221801	3
Caelo	Hydrophilic ointment DAB	15416401	14
Eigen Defektur	Hydrophilic ointment DAB	316M-02539	1
Caelo	Hydrophilic ointment DAB	15416502	13
Caesar & Loretz GmbH	Hydrophilic ointment DAB	15221701	2
Bombastus	Hydrophilic ointment DAB	296866	3
Caelo	Hydrophilic ointment DAB	294449	2
Lamotte/ANZAG	Hydrophilic ointment DAB	5860400	1
Caelo	Hydrophilic ointment DAB	15221901	2
Caelo	Hydrophilic ointment DAB	15097714	1
Fagron	Hydrophilic ointment DAB	15F09-T02-023370	1
Fiebig/ Lamotte	Hydrophilic ointment DAB	5860400	1
Caelo	Hydrophilic ointment DAB	16009001	7
Caelo	Hydrophilic ointment DAB	916I-02539	1
Caelo	Hydrophilic ointment DAB	16009201	8
Caesar & Loretz GmbH Hi...	Hydrophilic ointment DAB	16008701	2
Bombastus	Hydrophilic ointment DAB	296865	3
Noweda 06.04.2016	Hydrophilic ointment DAB	15221601	1
Bombastus	Hydrophilic ointment DAB	296867	1
Henry Lamotte/Anzag	Hydrophilic ointment DAB	2215M-02539	1
Caelo	Hydrophilic ointment DAB	16008701	9
Caelo	Hydrophilic ointment DAB	16009101	20
Anzag/Ichtyol-Gesellsch...	Hydrophilic ointment DAB	16009201	1
Bombastus	Hydrophilic ointment DAB	299391	2
Caelo	Hydrophilic ointment DAB	15400701	1
Eigen Defektur	Hydrophilic ointment DAB	1716E-02539	1
Caelo	Hydrophilic ointment DAB	16008702	7
Caelo	Hydrophilic ointment DAB	16009301	12
Bombastus	Hydrophilic ointment DAB	299392	3
Caesar&Loretz GmbH/Anzag	Hydrophilic ointment DAB	16009101	1
Caelo	Hydrophilic ointment DAB	16009101-20160615Ma2	1
Caelo	Hydrophilic ointment DAB	16009401	4
Caelo	Hydrophilic ointment DAB	16008901	8
Caelo	Hydrophilic ointment DAB	16009101-20160615Ma3	1

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Supplier	Substance	Batch	Spectra
Eigen/Defektur	Hydrophilic ointment DAB	2516A-02539	1
Henry Lamotte Oils Gmbh	Hydrophilic ointment DAB	5862400	1
Bombastus	Hydrophilic ointment DAB	301096	3
Bombastus	Hydrophilic ointment DAB	15221801	2
Fagron	Hydrophilic ointment DAB	15K24-T01-027590	1
Ebert & Jacobi 03.08.16	Hydrophilic ointment DAB	160091001	1
Bombastus	Hydrophilic ointment DAB	301097	4
Alliance	Hydrophilic ointment DAB	303216009101	1
Caelo	Hydrophilic ointment DAB	16166902	12
Defekur	Hydrophilic ointment DAB	3216M-02539	1
Defektur / Wolf-Apotheke	Hydrophilic ointment DAB	299390	3
Caelo	Hydrophilic ointment DAB	16166701	17
Fagron	Hydrophilic ointment DAB	15F23-T12-023864	1
Fagron	Hydrophilic ointment DAB	15B19-T01-019409	1
phönix	Hydrophilic ointment DAB	16166801	1
Bombastus	Hydrophilic ointment DAB	301095	1
Caelo	Hydrophilic ointment DAB	16166801	27
Caelo	Hydrophilic ointment DAB	160408UE	1
Bombastus	Hydrophilic ointment DAB	302999	1
Caelo	Hydrophilic ointment DAB	16166901	7
Bombastus	Hydrophilic ointment DAB	299390	4
Caelo	Hydrophilic ointment DAB	103/AKD15	1
Bombastus	Hydrophilic ointment DAB	301094	1
Caelo	Hydrophilic ointment DAB	1616801	1
Celo	Hydrophilic ointment DAB	16009101	1
Caelo	Hydrophilic ointment DAB	301097	1
Caelo	Hydrophilic ointment DAB	1617102	2
Cealo/Noweda	Hydrophilic ointment DAB	15221601	1
Phönix	Hydrophilic ointment DAB	16166901	1
Caesar & Loretz	Hydrophilic ointment DAB	16166701	1
Fagron	Hydrophilic ointment DAB	16G18-T04-035261	3
Caelo	Hydrophilic ointment DAB	16167001	12
Caeolo/Noweda	Hydrophilic ointment DAB	6/2019	1
Caeolo/Noweda	Hydrophilic ointment DAB	16167102	1
Bombastus	Hydrophilic ointment DAB	305394	3
Bombastus	Hydrophilic ointment DAB	16167001	2
Bombastus	Hydrophilic ointment DAB	303000	1
PhönixWE:2.02.2017 EK...	Hydrophilic ointment DAB	16166801	1
Caelo	Hydrophilic ointment DAB	16282401	9
Bombastus	Hydrophilic ointment DAB	305395	6
Phönix	Hydrophilic ointment DAB	16282702	1
Caelo	Hydrophilic ointment DAB	16282501	7
Henry Lamotte/ Noweda	Hydrophilic ointment DAB	6001368013	1
Sanacorp 18.03.17 Ek:11...	Hydrophilic ointment DAB	16167001	1
Henry Lamotte/Noweda	Hydrophilic ointment DAB	6001368014	2
Gehe	Hydrophilic ointment DAB	16167001	1
Caelo	Hydrophilic ointment DAB	16282801	4
Caelo	Hydrophilic ointment DAB	16282402	9
phönix	Hydrophilic ointment DAB	16008701	1
Caelo	Hydrophilic ointment DAB	296865	1
Caelo	Hydrophilic ointment DAB	16282702	2
Caelo	Hydrophilic ointment DAB	1628401	1
Lamotte/AHC	Hydrophilic ointment DAB	6001368014	1
Caelo	Hydrophilic ointment DAB	1682401	1
Caelo	Hydrophilic ointment DAB	16K09-T03-03854	1
Bombastus	Hydrophilic ointment DAB	16166801	1
Caelo	Hydrophilic ointment DAB	17040301	11
Bombastus	Hydrophilic ointment DAB	302998	1
Anza	Hydrophilic ointment DAB	305393	1
Henry Lamotte Oils GmbH...	Hydrophilic ointment DAB	6001368013	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophilic ointment DAB	17040202	5
phönix	Hydrophilic ointment DAB	17040301	1
phönix	Hydrophilic ointment DAB	16282401	1
H.Lamotte/Anzag 04.07.17	Hydrophilic ointment DAB	8002320009	5
Euro OTC	Hydrophilic ointment DAB	17040202	1
Krieger	Hydrophilic ointment DAB	16282801	1
Caelo	Hydrophilic ointment DAB	17040501	4
Allianz Healthcare	Hydrophilic ointment DAB	17040301	1
Caelo	Hydrophilic ointment DAB	17040601	7
THC Rezeptur-Set	Hydrophilic ointment DAB	307095	1
Caelo	Hydrophilic ointment DAB	105/AKD16	1
Caelo	Hydrophilic ointment DAB	17040201	13
Bombastus	Hydrophilic ointment DAB	307094	5
Caelo	Hydrophilic ointment DAB	17083004	3
Sanacorp	Hydrophilic ointment DAB	17040301	1
Bombastus	Hydrophilic ointment DAB	307095	2
Caelo	Hydrophilic ointment DAB	170905UE/16167001	1
Caelo	Hydrophilic ointment DAB	305396	1
Caleo/Noweda	Hydrophilic ointment DAB	17040201	1
Bombastus	Hydrophilic ointment DAB	308899	1
Caelo	Hydrophilic ointment DAB	17040315375	1
Caelo	Hydrophilic ointment DAB	17083301	7
Fagron	Hydrophilic ointment DAB	16K09-T03-038564	1
Wepa/ Phoenix	Hydrophilic ointment DAB	17040301	1
Caelo	Hydrophilic ointment DAB	17083102	2
Bombastus	Hydrophilic ointment DAB	308900	1
Caelo	Hydrophilic ointment DAB	17083103	2
Caelo	Hydrophilic ointment DAB	17083002	10
Phönix	Hydrophilic ointment DAB	16166801	1
Caelo	Hydrophilic ointment DAB	17083201	4
Phönix/Bionorica	Hydrophilic ointment DAB	17083002	3
Gehe/Henry Lamotte	Hydrophilic ointment DAB	6001368013	2
phönix Pharmochem	Hydrophilic ointment DAB	17040301	2
Phoenix	Hydrophilic ointment DAB	308898	3
Fagron	Hydrophilic ointment DAB	16K09-T09-038560	1
Caelo	Hydrophilic ointment DAB	17083202	3
Caelo	Hydrophilic ointment DAB	17185502	2
Bombastus	Hydrophilic ointment DAB	307093	2
Caelo	Hydrophilic ointment DAB	17156401	6
Caelo	Hydrophilic ointment DAB	17185501	8
Bombastus	Hydrophilic ointment DAB	303001	1
Anzag	Hydrophilic ointment DAB	17290703	1
Caelo	Hydrophilic ointment DAB	17290701	10
Caelo	Hydrophilic ointment DAB	17290703	3
Caelo	Hydrophilic ointment DAB	17290801	8
Bombastus	Hydrophilic ointment DAB	311063	1
Fiebig	Hydrophilic ointment DAB	17290703	1
Sanacorp	Hydrophilic ointment DAB	17290702	1
Caelo	Hydrophilic ointment DAB	299392	1
Caelo	Hydrophilic ointment DAB	17290603	4
Noweda	Hydrophilic ointment DAB	17290702	1
Fagron	Hydrophilic ointment DAB	17I11-T03-048188	3
Aponorm/Wepa	Hydrophilic ointment DAB	17185501	1
Caelo	Hydrophilic ointment DAB	17290702	8
Caelo	Hydrophilic ointment DAB	17156302	1
Bombastus	Hydrophilic ointment DAB	311065	1
Bombastus	Hydrophilic ointment DAB	17/11-T04-48192	1
Caelo	Hydrophilic ointment DAB	17330301	20
Fagron	Hydrophilic ointment DAB	18001506	1
Bombastus	Hydrophilic ointment DAB	307092	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Hydrophilic ointment DAB	8003325012	1
Fagron	Hydrophilic ointment DAB	17/11-T03-048188	1
Lamotte/AHD	Hydrophilic ointment DAB	8002320009	1
Sanacorp	Hydrophilic ointment DAB	17330301	4
Caelo	Hydrophilic ointment DAB	17330303	2
Caelo	Hydrophilic ointment DAB	17330202	1
Caelo	Hydrophilic ointment DAB	17330302	3
Bombastus	Hydrophilic ointment DAB	18001505	2
Caelo	Hydrophilic ointment DAB	17330402	5
Henry Lamotte Oils GmbH...	Hydrophilic ointment DAB	8003325012	1
Caelo	Hydrophilic ointment DAB	17330501	9
H.Lamotte/Anzag 06.11.18	Hydrophilic ointment DAB	8004399001	1
Fagron	Hydrophilic ointment DAB	1F27-T0-07539	1
Caelo	Hydrophilic ointment DAB	17E04-T08-044042	1
Caelo	Hydrophilic ointment DAB	17330301-H20190115Ma	1
Caelo	Hydrophilic ointment DAB	18207501	1
Alliance Healthcare / H...	Hydrophilic ointment DAB	8004399001	1
Sanacorp	Paraffin, yellow	57/AKD4	1
Caelo	Hydrophilic ointment DAB	1733031	1
Caelo	Hydrophilic ointment DAB	17330601	1
Bombastus	Paraffin, yellow	290713	1
Caelo	Paraffin, yellow	14248403	4
Euro OTC	Paraffin, yellow	289344	1
Euro OTC	Paraffin, yellow	12321908	1
Caelo	Paraffin, yellow	14324301	6
Bombastus	Paraffin, yellow	293629	11
Caelo	Paraffin, yellow	28071509	1
Caelo	Paraffin, yellow	17082015E	1
Caelo	Paraffin, yellow	14324501	11
Caelo	Paraffin, yellow	15219903	7
Euro OTC	Paraffin, yellow	1401017-01	1
Bombastus	Paraffin, yellow	285310	2
Bombastus	Paraffin, yellow	290714	1
Fagron	Paraffin, yellow	13K20-T05-009125	1
Caelo	Paraffin, yellow	1432501	1
Caelo	Paraffin, yellow	12306302	1
Caesar&Loretz/Noweda	Paraffin, yellow	14324301	1
Euro OTC	Paraffin, yellow	1503036-01	8
Caesar & Loretz GmbH Hi...	Paraffin, yellow	14324601	1
Bombastus	Paraffin, yellow	28270	1
Bombastus	Paraffin, yellow	285309	1
Caelo	Paraffin, yellow	15330401	8
Caelo	Paraffin, yellow	14324601	3
Caelo	Paraffin, yellow	14324402	1
Phoenix	Paraffin, yellow	57/AKD7	1
Caelo	Paraffin, yellow	15219904	1
Caesar & Loretz/Noweda	Paraffin, yellow	15330401	1
Caelo	Paraffin, yellow	13365104	1
Bombastus	Paraffin, yellow	296654	10
Caelo	Paraffin, yellow	15330402	4
Noweda	Paraffin, yellow	15330402	1
Fagron	Paraffin, yellow	14K27-T29-019303	2
Caelo	Paraffin, yellow	1503036-01	1
Caelo	Paraffin, yellow	11104910	4
Caelo	Paraffin, yellow	15330601	12
Sanacorp	Paraffin, yellow	58/AKD12	1
Bombastus	Paraffin, yellow	289344	2
Bombastus	Paraffin, yellow	300423	8
Bombastus	Paraffin, yellow	300422	1
Caelo	Paraffin, yellow	15330502	1

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Supplier	Substance	Batch	Spectra
Noweda	Paraffin, yellow	16032502	1
Caelo	Paraffin, yellow	16032502	3
Phönix	Paraffin, yellow	14324301	1
Bombastus	Paraffin, yellow	301908	7
Caelo	Paraffin, yellow	15063904	3
Phönix	Paraffin, yellow	16032602	1
Caelo	Paraffin, yellow	16032602	5
Caelo	Paraffin, yellow	13163606	1
WE:Sanacorp 05.09.2016...	Paraffin, yellow	15330601	2
Caelo	Paraffin, yellow	150717VF	1
Caelo	Paraffin, yellow	15063902	2
Bombastus	Paraffin, yellow	303809	3
Bombastus	Paraffin, yellow	15330401	1
Caelo	Paraffin, yellow	16032603	5
Sana 29.11.Ek.6,95	Paraffin, yellow	15063904	1
Fagron	Paraffin, yellow	16E17-T01-035266	1
Caelo	Paraffin, yellow	16281001	14
Caelo	Paraffin, yellow	16187702	5
Alliance Healthcare	Paraffin, yellow	303809	1
Pharmachem	Paraffin, yellow	150303-01	1
Caelo	Paraffin, yellow	16096904	4
Bombastus	Paraffin, yellow	304847	5
Euro OTC	Paraffin, yellow	1606029-01	2
Caesar&Loretz	Paraffin, yellow	16096903	1
Bombastus	Paraffin, yellow	307079	8
Bombastus	Paraffin, yellow	306182	5
Caelo	Paraffin, yellow	16096905	1
Caelo	Paraffin, yellow	1041701	1
Caelo	Paraffin, yellow	161587801	1
Caelo	Paraffin, yellow	1609603	1
Caelo	Paraffin, yellow	16096903	4
Gehe	Paraffin, yellow	16281001	1
Caelo	Paraffin, yellow	12321902	1
Bombastus	Paraffin, yellow	282700	1
Sanacorp	Paraffin, yellow	16096904	1
Caelo	Paraffin, yellow	6895914	1
Caelo	Paraffin, yellow	1618701	1
Bombastus	Paraffin, yellow	106429	1
Caelo	Paraffin, yellow	16187801	6
Caelo	Paraffin, yellow	8061714	1
Caelo	Paraffin, yellow	1606029	1
21.03.2017	Paraffin, yellow	12321902	1
Caelo	Paraffin, yellow	17052402	2
Caelo	Paraffin, yellow	17052401	8
Caelo	Paraffin, yellow	16281002	1
Bombastus	Paraffin, yellow	310192	5
Caelo	Paraffin, yellow	6111703	1
Caelo	Paraffin, yellow	16096913	5
Caelo	Paraffin, yellow	307079	1
Caelo	Paraffin, yellow	1606029-01	1
Caelo	Paraffin, yellow	1052401	1
Caelo	Paraffin, yellow	17223102	6
Gehe	Paraffin, yellow	310191	1
Bombastus	Paraffin, yellow	281291	1
Euro OTC	Paraffin, yellow	1705016-01	1
Caelo	Paraffin, yellow	17130402	2
Caelo	Paraffin, yellow	17223103	1
Euro OTC	Paraffin, yellow	1709015-01	1
Caesar & Loretz/ Noweda	Paraffin, yellow	1606913	1
Caelo	Paraffin, yellow	17303501	7

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Supplier	Substance	Batch	Spectra
Caelo	Paraffin, yellow	26051810	1
Caelo	Paraffin, yellow	9061818	1
GEHE	Paraffin, yellow	17223102	1
Bombastus	Paraffin, yellow	18000670	3
Bombastus	Paraffin, yellow	1709015-01	1
Euro OTC	Paraffin, yellow	180401201	1
Caelo	Paraffin, yellow	22091804	1
Euro OTC	Paraffin, yellow	1804012-01	2
Caelo	Paraffin, yellow	17162906	1
Bombastus	Paraffin, yellow	18004334	4
Caelo	Paraffin, yellow	18191503	1
Caesar & Loretz GmbH	Paraffin, yellow	18191503	1
Bombastus	Wool alcohol ointment SR/DAC	300084	3
Bombastus	Wool alcohol ointment SR/DAC	301938	2
Bombastus	Wool alcohol ointment SR/DAC	300080	1
Bombastus	Wool alcohol ointment SR/DAC	297128	2
Bombastus	Wool alcohol ointment SR/DAC	295359	1
Bombastus	Wool alcohol ointment SR/DAC	301937	1
Bombastus	Wool alcohol ointment SR/DAC	302598	3
Bombastus	Wool alcohol ointment SR/DAC	108187	1
Bombastus	Wool alcohol ointment SR/DAC	303995	4
Bombastus	Wool alcohol ointment SR/DAC	300082	3
Bombastus	Wool alcohol ointment SR/DAC	301940	1
Bombastus	Wool alcohol ointment SR/DAC	303994	1
Bombastus	Wool alcohol ointment SR/DAC	303996	1
Bombastus	Wool alcohol ointment SR/DAC	60089603	1
Bombastus	Wool alcohol ointment SR/DAC	303993	1
Caelo	Wool alcohol ointment SR/DAC	16198401	1
Bombastus	Wool alcohol ointment SR/DAC	305548	3
Bombastus	Wool alcohol ointment SR/DAC	302599	3
Bombastus	Wool alcohol ointment SR/DAC	305546	1
Caelo	Wool alcohol ointment SR/DAC	308141	1
Bombastus	Wool alcohol ointment SR/DAC	302600	1
Bombastus	Wool alcohol ointment SR/DAC	301935	1
Bombastus	Wool alcohol ointment SR/DAC	308144	2
Bombastus	Wool alcohol ointment SR/DAC	308145	6
medphano Arzneimittel	Wool alcohol ointment SR/DAC	6550115	1
Bombastus	Wool alcohol ointment SR/DAC	308142	5
Bombastus	Wool alcohol ointment SR/DAC	308143	1
Bombastus	Wool alcohol ointment SR/DAC	308146	1
Bombastus	Wool alcohol ointment SR/DAC	18000623	3
Bombastus	Wool alcohol ointment SR/DAC	17001148	2
Bombastus	Wool alcohol ointment SR/DAC	17001146	2
Bombastus	Wool alcohol ointment SR/DAC	17001149	3
Bombastus	Wool alcohol ointment SR/DAC	18000625	1
Bombastus	Wool alcohol ointment SR/DAC	17001147	1
Bombastus	Wool alcohol ointment SR/DAC	18000621	1
Bombastus	Wool alcohol ointment SR/DAC	18005347	1
Bombastus	Wool alcohol ointment SR/DAC	18003446	1

- 96 516 spectra from 581 *Apo-Ident* customers from a total of 27 820 batches from a further 326 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	2490	0	33 345
Type B	0	5281	0	73 700
Type C	0	11 331	112	96 480

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 % (> 99.9704 %)	100.0000 % (> 99.7590 %)
Type B	100.0000 % (> 99.9690 %)	100.0000 % (> 99.8864 %)
Type C	100.0000 % (> 99.6460 %)	99.0212 % (> 98.9950 %)

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.

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
31445	31610	3.91	27.02
31610	31610	0.00	27.49
32900	32900	0.00	27.66
31009	31941	3.10	27.40
31010	31941	4.73	28.28
31456	31456	0.00	35.32
31437	31916	2.14	26.63
31816	31816	0.00	15.71
31567	31456	8.33	36.36
31468	31916	3.94	26.43
31611	31909	6.16	38.20
31228	31228	0.00	31.20
31590	31736	8.09	29.85
31612	31456	5.93	36.59
31441	32017	8.11	30.54
31909	31909	0.00	37.11

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31601	32495	3.37	26.71
31522	31522	0.00	30.00
31910	31910	0.00	39.26
31736	31736	0.00	28.28
31999	31999	0.00	26.57
31473	31473	0.00	25.16
32017	32017	0.00	36.53
31916	31916	0.00	25.06
31541	31736	9.38	28.37
31917	31917	0.00	27.26
31940	31940	0.00	22.27
32495	32495	0.00	30.66
31941	31941	0.00	23.67
31272	31272	0.00	30.96
31921	31921	0.00	30.95
32517	32517	0.00	31.89
31174	31174	0.00	25.77
32946	31174	6.35	24.61
32947	31999	8.33	26.18
33729	31702	3.73	21.87
30874	31702	3.19	21.39
30877	31358	5.18	25.24
31351	31351	0.00	19.26
31358	31358	0.00	25.95
31587	31702	3.23	22.85
31702	31702	0.00	20.87
31168	31446	3.18	22.97
31292	31446	3.59	23.42
32279	32279	0.00	17.06
30932	30932	0.00	17.38
31602	31602	0.00	35.50
31446	31446	0.00	22.10
33274	32704	3.93	28.10
31807	31602	4.75	36.19
30933	30933	0.00	15.95
31954	31602	2.64	35.06
31570	31570	0.00	19.60
31920	31920	0.00	15.89
33133	33133	0.00	25.39
33396	33396	0.00	16.33
31740	31740	0.00	30.55
31812	31812	0.00	29.65
32704	32704	0.00	30.90
31744	31744	0.00	28.75
31949	31744	1.98	27.19

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Pasta Cordes®**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30633-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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®	13A056	31084	40	1406053
Ichthyol	Pasta Cordes®	16A063	33285	40	20160427

Validation samples

A total of 222 872 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 *Pasta Cordes*[®]. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 180 spectra of 4 reference samples from the substance/substance group *Pasta Cordes*[®].

Supplier	Substance	Batch	Sample ID	Spectra
Ichthyol	<i>Pasta Cordes</i> [®]	12A008	30633	40
Ichthyol	<i>Pasta Cordes</i> [®]	13A056	31673	60
Ichthyol	<i>Pasta Cordes</i> [®]	17A173	34046	40
Ichthyol	<i>Pasta Cordes</i> [®]	17A021	34321	40

- 78 898 spectra from a total of 1826 batches from further 350 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.

- 216 spectra from 69 *Apo-Ident* customers from 34 batches from the substance/substance group *Pasta Cordes*[®].

Supplier	Substance	Batch	Spectra
Ichthyol	<i>Pasta Cordes</i> [®]	12A008	1
Caelo	<i>Pasta Cordes</i> [®]	11A206	2
Phoenix	<i>Pasta Cordes</i> [®]	12A043	1
Ichthyol/Gehe	<i>Pasta Cordes</i> [®]	12A043	2

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Supplier	Substance	Batch	Spectra
Ichthyol/Gehe	Pasta Cordes®	11A206	1
Phönix	Pasta Cordes®	12A182	1
ICHTHYOL	Pasta Cordes®	10A187	1
Ichthyol/Sanacorp	Pasta Cordes®	12A138	1
Cordes/AHD	Pasta Cordes®	13A056	1
Ichthyol /Noweda	Pasta Cordes®	12A182	1
Ichthyol/Phoenix	Pasta Cordes®	12A182	1
ichthyol/Gehe	Pasta Cordes®	12A182	2
Caelo	Pasta Cordes®	12AD43	1
Caelo	Pasta Cordes®	12A182	2
Ichthyol	Pasta Cordes®	12a182	1
Ichthyol / Gehe	Pasta Cordes®	12A182	1
Ichthyol	Pasta Cordes®	13A056	1
Caelo	Pasta Cordes®	13A098	3
ichthyol/Gehe	Pasta Cordes®	13A146	1
Noweda	Pasta Cordes®	13A056	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	13A098	1
Ichthyol/Noweda	Pasta Cordes®	13A098	3
Ichthyol /Noweda	Pasta Cordes®	13A056	3
Ichthyol Gesellschaft	Pasta Cordes®	13A056	2
Ichthyol/Gehe	Pasta Cordes®	13A098	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	13A146	3
Ichthyol/Sanacorp	Pasta Cordes®	12A182	1
Cordes/Gehe	Pasta Cordes®	14A025	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A025	2
Ichthyol /Gehe	Pasta Cordes®	12A182	1
Ichthyol/Phoenix	Pasta Cordes®	13A056	3
Ichthyol-Gesellschaft	Pasta Cordes®	13A056	1
Ichthyol/ Noweda	Pasta Cordes®	14A025	1
Ichthyol/Ebert	Pasta Cordes®	13A098	1
Ichthyol/Phönix	Pasta Cordes®	14A025	1
Ichthyol/Phoenix	Pasta Cordes®	14A025	1
Ichthyol	Pasta Cordes®	14A025	1
Ichthyol/Fiebig	Pasta Cordes®	14A124	2
Ichthyol/Gehe	Pasta Cordes®	14A124	1
Ichthyol/Phönix	Pasta Cordes®	14A124	1
Caelo	Pasta Cordes®	13A056	1
Ichthyol/ Phönix	Pasta Cordes®	14A142	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A124	1
ichthyol gesellschaft	Pasta Cordes®	13A098	1
Ichthyol/Fiebig	Pasta Cordes®	13A056	1
Ichthyol/Fiebig	Pasta Cordes®	14A142	2
Ichthyol/Phönix	Pasta Cordes®	14A142	7
Ichthyol	Pasta Cordes®	14A142	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A124	1
Ichthyol	Pasta Cordes®	14A124	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	14A199	4
Ichthyol/Sanacorp	Pasta Cordes®	14A142	1
Phönix/Ichthyol	Pasta Cordes®	15A121	2
Ichthyol Gesellschaft C...	Pasta Cordes®	14A124	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	14a124	1
Sanacorp / Ichthyolgese...	Pasta Cordes®	14A124	1
ICHTHYOL-GESELLSCHAFT	Pasta Cordes®	15A121	1
Fischer/Gehe	Pasta Cordes®	14A142	2
Ichthyol-Gesellschaft	Pasta Cordes®	14A025	1
Ichthyol	Pasta Cordes®	15A121	3
Noweda-Ichthyol	Pasta Cordes®	15A121	1
Ichthyol Gesellschaft/K...	Pasta Cordes®	15A121	1
Ichthyol/Phoenix	Pasta Cordes®	15A121	1
Ichthyol/Sanacorp	Pasta Cordes®	15A121	1

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Supplier	Substance	Batch	Spectra
ICHTYOL GESELLSCHAFT Co...	Pasta Cordes®	15A121	1
Ichthyol Gesellschaft	Pasta Cordes®	14A142	1
Ichthyol-Gesellschaft	Pasta Cordes®	15A121	1
Ichthyol / AHD	Pasta Cordes®	14A142	1
Ichthyol/Phönix WE:2804...	Pasta Cordes®	15A121	1
Ichthyol/Sanacorp	Pasta Cordes®	15A173	2
Gehe/Ichthyol	Pasta Cordes®	15A173	1
Ichthyol Cordes/Phoenix	Pasta Cordes®	15A173	3
Ichthyol/Gehe	Pasta Cordes®	14A199	14
Ichthyol	Pasta Cordes®	14A199	1
Ichthyol/Phoenix	Pasta Cordes®	16A063	3
Ichthyol/Phoenix	Pasta Cordes®	15A173	1
Ichthyol / Noweda	Pasta Cordes®	14A142	1
Cordes / Phönix	Pasta Cordes®	15A173	1
Caelo	Pasta Cordes®	160822PC	2
Ichthyol/Gehe	Pasta Cordes®	16A064	21
Caelo	Pasta Cordes®	15A173	1
Ichthyol/ Krieger	Pasta Cordes®	15A173	1
Caelo	Pasta Cordes®	15A173	4
Ichthyol-Gesellschaft	Pasta Cordes®	170102PC/15A173	1
WE 28.11.16 Cordes/Phoe...	Pasta Cordes®	15A173	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	15A173	2
Ichthyol/OG	Pasta Cordes®	15A173	1
Ichthyol-Gesellschaft	Pasta Cordes®	14A124	1
Ichthyol GmbH	Pasta Cordes®	16A098	1
Ichthyol	Pasta Cordes®	15A173	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	16A064	2
Caelo	Pasta Cordes®	16A063	3
Ichthyol/Noweda	Pasta Cordes®	16A098	1
Ichthyol Gesellschaft	Pasta Cordes®	16A063	1
Ichthyol	Pasta Cordes®	16A064	1
Ichthyol/Noweda	Pasta Cordes®	16A063	1
Euro OTC	Pasta Cordes®	16A098	1
Caelo	Pasta Cordes®	16A098	1
Euro OTC	Pasta Cordes®	15A173	1
Ichthyol Gesellschaft C...	Pasta Cordes®	16A098	1
Phönix/Ichthyol	Pasta Cordes®	16A098	1
Ichthyol/Sanacorp	Pasta Cordes®	16A098	1
ichthyol	Pasta Cordes®	15A1735338	1
Ichthyol-Gesellschaft C...	Pasta Cordes®	17A021	1
Ichthyol/Noweda	Pasta Cordes®	17A021	1
Ichthyol/Phoenix	Pasta Cordes®	17A021	4
Ichthyol/Fiebig	Pasta Cordes®	17A021	1
Ichthyol/AHD	Pasta Cordes®	16A063	1
Ichthyol/Phoenix	Pasta Cordes®	17A021	2
AHL	Pasta Cordes®	17A021	1
Ichthyol/Noedea	Pasta Cordes®	17A021	1
Ichthyol	Pasta Cordes®	17A173	1
Ichthyol Gesellschaft /...	Pasta Cordes®	17A173	1
ichthyol	Pasta Cordes®	17A0215503	1
Ichthyol Gesellschaft /...	Pasta Cordes®	180308PC/16A064	1
Ichthyol	Pasta Cordes®	16A063	1
Ichthyol/Virchow	Pasta Cordes®	17A173	1
Caelo	Pasta Cordes®	17A021	2
Ichthyol-Gesellschaft C...	Pasta Cordes®	17A173	1
Ichthyol/Phönix	Pasta Cordes®	17A173	1
Ichthyol/Noweda	Pasta Cordes®	17A173	1
Cordes Noweda	Pasta Cordes®	17A021	2
jchthyol / Ahd	Pasta Cordes®	17A0215656	1
Noweda/Ichthyol	Pasta Cordes®	17A021	2

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Supplier	Substance	Batch	Spectra
Ichthyol	Pasta Cordes [®]	17A021	1
ichthyol /AHD	Pasta Cordes [®]	17A0215744	1
Euro OTC	Pasta Cordes [®]	17A172	1
Ichthyol/Phoenix	Pasta Cordes [®]	17A058	1
Ichthyol Gesellschaft	Pasta Cordes [®]	17A173	1
Ichthyol/Noweda	Pasta Cordes [®]	17A058	1
Ichthyol/Gehe	Pasta Cordes [®]	17A173	1

- 107 743 spectra from 582 *Apo-Ident* customers from a total of 30 646 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 *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	80	0	35 755
Type B	0	166	14	78 898
Type C	0	173	43	107 730

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	92.2222 % (> 90.5556 %)
Type C	100.0000 % (> 99.6450 %)	80.0926 % (> 78.7037 %)

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.

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	35.32
33285	31084	4.86	35.86

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Permethrin 25% solution**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31177-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	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	33247	40	20160728

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Infectopharm	Permethrin 25% s...	S071602.1	33301	40	20160728
Infectopharm	Permethrin 25% s...	S021801.1	34120	40	20180301
Infectopharm	Permethrin 25% s...	S021801.1	34121	40	20180301

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 320 spectra of 8 reference samples from the substance/substance group *Permethrin 25% solution*. These samples are listed above in the [calibration samples](#) section.
- 35 515 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 220 spectra of 6 reference samples from the substance/substance group *Permethrin 25% solution*.

Supplier	Substance	Batch	Sample ID	Spectra
Infectopharm	Permethrin 25% solution	S061401.1	31563 [†]	20
Infectopharm	Permethrin 25% solution	S071602.1	33246	40
Infectopharm	Permethrin 25% solution	S071602.1	33302	40
Infectopharm	Permethrin 25% solution	S071602.1	33328	40
Infectopharm	Permethrin 25% solution	S041701.2	33940	40
Infectopharm	Permethrin 25% solution	S041701.2	33941	40

- 78 858 spectra from a total of 1827 batches from further 350 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](#).

[†]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*.

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 96 *Apo-Ident* customers from 66 batches from the substance/substance group *Permethrin 25% solution*.

Supplier	Substance	Batch	Spectra
Anzag (Hersteller: Infe...	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	2510210212011	1
InfectoPharm	Permethrin 25% solution	23111205	1
Infectopharm	Permethrin 25% solution		31
InfectoPharm	Permethrin 25% solution	21121202	1
InfectoPharm	Permethrin 25% solution		10
InfectoPharm	Permethrin 25% solution	25021307	1
Löwen City-Apotheke Bar...	Permethrin 25% solution		1
INFECTOPHARM	Permethrin 25% solution		2
Infectopharm	Permethrin 25% solution	S081202	1
Infectopharm/Phönix	Permethrin 25% solution		3
Infectopharm/Phoenix	Permethrin 25% solution		11
InfectoPharm	Permethrin 25% solution	11061302	1
Infectopharm/AHD	Permethrin 25% solution		5
Infectopharm/ Sanacorp	Permethrin 25% solution		2
Infectopharm, von Humbo...	Permethrin 25% solution		3
Gehe	Permethrin 25% solution		1
infectopharm/Jenne	Permethrin 25% solution		1
Infectopharm	Permethrin 25% solution	S0313011	1
Infecto Pharm	Permethrin 25% solution		2
Infectopharm/ Now	Permethrin 25% solution		1
InfectoPharm/ G	Permethrin 25% solution		1
Infectopharm/Phönix	Permethrin 25% solution	S0313011	1
Infectopharm/ Noweda	Permethrin 25% solution		7
InfectoPharm	Permethrin 25% solution	6011407	1
Infectoph./Gehe	Permethrin 25% solution	S0313011	1
InfectoPharm	Permethrin 25% solution	8011424	1
Infecto/Phönix	Permethrin 25% solution		1
Phoenix/InfectoPharm	Permethrin 25% solution		5
Infectopharm / 20	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	14041401	1
Infectopharm/Gehe	Permethrin 25% solution	S0313011	1
Infectopharm/Noweda	Permethrin 25% solution		5
InfectoPharm/Gehe	Permethrin 25% solution		6
Caelo	Permethrin 25% solution		6
InfectoPharm/Phönix	Permethrin 25% solution		1
Infectopharm/Ebert	Permethrin 25% solution		2
Infectopharm / Alliance...	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	31071402	1
InfectoPharm	Permethrin 25% solution	20081401	1
InfectoPharm	Permethrin 25% solution	2091402	1
InfectoPharm	Permethrin 25% solution	11091403	1
	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	25111401	1
Euro OTC	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	9101406	1
InfectoPharm	Permethrin 25% solution	5011501	1
InfectoPharm	Permethrin 25% solution	17121403	1
InfectoPharm	Permethrin 25% solution	28011504	1
Infectopharm	Permethrin 25% solution	S0614011	1
Phönix/Infectopharm	Permethrin 25% solution		1
Infectopharm/Sanacorp	Permethrin 25% solution		2

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Supplier	Substance	Batch	Spectra
Infectopharm	Permethrin 25% solution	S1214021	1
Infectopharm / Kehr	Permethrin 25% solution		2
Dermapharm	Permethrin 25% solution		2
Ichthyol/Phönix	Permethrin 25% solution		2
InfectoPharm	Permethrin 25% solution	1072015A	1
InfectoPharm	Permethrin 25% solution	4071506	1
infectopharm	Permethrin 25% solution	23071414	1
Infectopharm/Sana	Permethrin 25% solution		1
Infect Pharm	Permethrin 25% solution		2
infecto pharm	Permethrin 25% solution	s121402	1
infectopharm	Permethrin 25% solution		2
Gehe Infectopharma	Permethrin 25% solution		1
Infectopharm/noweda	Permethrin 25% solution		1
Noweda/InfectoPharm	Permethrin 25% solution		1
Noweda/ Infectopharm	Permethrin 25% solution		1
infecto Pharma	Permethrin 25% solution		4
InfectoPharm/Kehr	Permethrin 25% solution		1
Phoenix	Permethrin 25% solution		3
InfectoPharm/AHD	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	S0216011	1
Infectopharm/Anzag	Permethrin 25% solution		2
Biomom/Noweda	Permethrin 25% solution	150901	1
Fagron	Permethrin 25% solution		1
InfectoPharm / Phönix	Permethrin 25% solution		2
AHD / Infectopharm	Permethrin 25% solution	S0216011	1
InfectoPharm / Anzag	Permethrin 25% solution		1
Infectopharm Arzneimittel	Permethrin 25% solution	S0216011	1
Biomom/Noweda	Permethrin 25% solution	160202	2
Biomom Pharma GmbH	Permethrin 25% solution	160202	1
InfectoPharm/ Alliance ...	Permethrin 25% solution		1
AHD / Infectopharm	Permethrin 25% solution		1
InfectoPharm	Permethrin 25% solution	23021717	1
InfectoPharm	Permethrin 25% solution	S021601	1
Infectopharm Arzneimittel	Permethrin 25% solution		3
InfectoPharm	Permethrin 25% solution	28041708	1
Infectopharm/Gehe	Permethrin 25% solution		1
Infecto Pharm / Phönix	Permethrin 25% solution	S072018	1
Noweda/Infectopharm	Permethrin 25% solution		1
Bombastus	Permethrin 25% solution		1
infectopharm / Sanacorp	Permethrin 25% solution		1
INFECTOPHARM/Sanacorp	Permethrin 25% solution		1
Infectopharm AM / Allia...	Permethrin 25% solution		2
Infectopharm/Fiebig	Permethrin 25% solution		1
Infectopharm/ Phönix	Permethrin 25% solution		1
Phoenix	Permethrin 25% solution	So4701	1
Biomom Pharma GmbH	Permethrin 25% solution	170503	1
Infectopharm / Gehe	Permethrin 25% solution		1
Infectopharm-Gehe	Permethrin 25% solution		1
InfectoPharm / Gehe	Permethrin 25% solution		8
Anzag	Permethrin 25% solution		1
Infecto/Ebert	Permethrin 25% solution		3
Jenne	Permethrin 25% solution		1
Biomom	Permethrin 25% solution	170503	2
Sanacorp	Permethrin 25% solution		4
Krieger	Permethrin 25% solution		2
Infectopharm	Permethrin 25% solution	S0218011	1
Caelo	Permethrin 25% solution	12091811	1
Infectopharm/ Gehe	Permethrin 25% solution		1
Biomom/AHD	Permethrin 25% solution	171201	2

- 107 731 spectra from 582 *Apo-Ident* customers from a total of 30 615 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 *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	320	0	35 515
Type B	0	210	10	78 858
Type C	0	218	10	107 731

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 % (> 99.9705 %)	100.0000 % (> 98.1250 %)
Type B	100.0000 % (> 99.9688 %)	95.4545 % (> 94.0909 %)
Type C	100.0000 % (> 99.6450 %)	95.6140 % (> 94.2982 %)

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.

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
32262	31563	7.47	168.07
32263	31563	4.93	162.63
31563	31563	0.00	135.57
31177	31177	0.00	123.09
33247	31177	8.53	135.50
33301	31177	18.89	139.41
34120	31177	19.60	147.01
34121	31177	14.06	149.33

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Petroleum ether DAB**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30899-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Petroleum ether DAB; Aether petrolei 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*
Appendix F [Addition to the second-stage models](#)

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.

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
Otto Fischar	Petroleum ether ...	6323042	31253	40	1505436
Caelo	Petroleum ether ...	13141304	31283	40	1412255

Validation samples

A total of 222 872 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.
- 35 695 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Petroleum ether DAB*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Petroleum ether DAB	91883269	30102	40
Hedinger	Petroleum ether DAB	028175B	32955	40
Caelo	Petroleum ether DAB	171715	33329	40

- 78 958 spectra from a total of 1827 batches from further 350 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.

- 1057 spectra from 296 *Apo-Ident* customers from 264 batches from the substance/substance group *Petroleum ether DAB*.

Supplier	Substance	Batch	Spectra
Hedinger	Petroleum ether DAB	28165B	5
Anzag 16.10.14	Petroleum ether DAB	28171B	1
Noweda	Petroleum ether DAB	28164B	1
Fischer Saarbrücken/GEHE	Petroleum ether DAB	6322041	1

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Supplier	Substance	Batch	Spectra
Hedinger, Heiligenwiese...	Petroleum ether DAB	28166B	2
Hedinger/Anzag 11.06.2012	Petroleum ether DAB	28166B	1
Hedinger	Petroleum ether DAB	2071202	1
Hedinger	Petroleum ether DAB	28166B	9
Caelo	Petroleum ether DAB	281668	3
Gehe	Petroleum ether DAB	28166B	1
Fischar	Petroleum ether DAB	6322061	1
Gehe	Petroleum ether DAB	6322061	1
Hedinger, Noweda	Petroleum ether DAB	28166B	2
Fischar	Petroleum ether DAB	6322079	1
Hedinger	Petroleum ether DAB	31101203	1
Hedinger/Sanacorp	Petroleum ether DAB	28166B	1
Sanacorp	Petroleum ether DAB	28166B	1
Fischar	Petroleum ether DAB	6322076	1
Hedinger	Petroleum ether DAB	2411Q-01170	1
Fischar	Petroleum ether DAB	6322074	2
Fischar	Petroleum ether DAB	6321111	1
Otto Fischar	Petroleum ether DAB	6322042	1
Hedinger	Petroleum ether DAB	28167B	15
Klenk	Petroleum ether DAB	28167b	1
Gehe	Petroleum ether DAB	6322095	1
Hedinger / Gehe	Petroleum ether DAB	28167B	1
Hedinger Phönix	Petroleum ether DAB	28167B	1
Caelo	Petroleum ether DAB	28167B	3
Hedinger/Gehe	Petroleum ether DAB	28167B	2
Hedinger/Stumpf	Petroleum ether DAB	28167B	1
Hedinger/Anzag 20.11.2012	Petroleum ether DAB	28167B	2
Sanacorp	Petroleum ether DAB	6322096	1
HEDINGER	Petroleum ether DAB	28166B	2
Noweda/Hedinger	Petroleum ether DAB	28166B	1
HEDINGER	Petroleum ether DAB	28167B	1
Fischar/Gehe	Petroleum ether DAB	6322117	1
Fischar/Gehe	Petroleum ether DAB	6322061	1
Fischar	Petroleum ether DAB	6322051	1
Hedinger, Noweda	Petroleum ether DAB	28167B	3
Hedinger/Anzag	Petroleum ether DAB	28167B	2
Fischar	Petroleum ether DAB	632207A	1
Fischar	Petroleum ether DAB	6322073	1
Anzag/Hedinger	Petroleum ether DAB	28167B	2
hedinger	Petroleum ether DAB	28167B	2
Hedinger	Petroleum ether DAB	25021302	1
GEHE	Petroleum ether DAB	6322119	1
Hedinger	Petroleum ether DAB	204311170	1
Fischar/Gehe	Petroleum ether DAB	6322053	1
Hedinger/Otto	Petroleum ether DAB	281678	1
Fischar	Petroleum ether DAB	6322114	1
Hedinger/N/08.05.13/PZN...	Petroleum ether DAB	28167B	1
Hedinger/Gehe	Petroleum ether DAB	28168B	2
Fischar	Petroleum ether DAB	6323016	1
hedinger/gehe	Petroleum ether DAB	28167B	1
Hedinger	Petroleum ether DAB	28168B	18
Fischar	Petroleum ether DAB	6322113	1
hedinger	Petroleum ether DAB	28168B	1
Hedinger/Stumpf	Petroleum ether DAB	28168B	1
Fischar/Anzag	Petroleum ether DAB	6323016	1
Fischar	Petroleum ether DAB	6323017	1
Hedinger/Phönix	Petroleum ether DAB	28168B	3
Phoenix/hedinger	Petroleum ether DAB	28168B	1
Phönix	Petroleum ether DAB	28168B	1
Otto Fischar	Petroleum ether DAB	6322116	1

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Supplier	Substance	Batch	Spectra
Hedinger	Petroleum ether DAB	281658	1
Hedinger	Petroleum ether DAB	3071304	1
Fischar/Noweda	Petroleum ether DAB	6323017	1
Gehe/ Hedinger	Petroleum ether DAB	28167B	1
Fischar / Noweda	Petroleum ether DAB	6322112	1
Caelo	Petroleum ether DAB	28168B	3
Hedinger, Noweda	Petroleum ether DAB	28168B	2
HEDINGER	Petroleum ether DAB	281688	2
Anzag/Fischar	Petroleum ether DAB	6323017	1
Fischar/Anzag	Petroleum ether DAB	6323024	1
Caelo	Petroleum ether DAB	6323033	2
Noweda	Petroleum ether DAB	28166B	1
Fischar / Anzag	Petroleum ether DAB	6322095	1
Hediniger	Petroleum ether DAB	28167B	1
Fischer Saarbrücken/GEHE	Petroleum ether DAB	6323043	1
Fischar/Sanacorp	Petroleum ether DAB	6322116	1
hedinger/phönix	Petroleum ether DAB	28167b	1
Fischar	Petroleum ether DAB	6323033	1
Hedinger	Petroleum ether DAB	13081309	1
Hedinger	Petroleum ether DAB	281688	3
Hedinger Phönix	Petroleum ether DAB	28168B	2
Fischar / Phönix	Petroleum ether DAB	3413J-01170	1
Fischar / Phönix	Petroleum ether DAB	3412I-01170	1
Fischar	Petroleum ether DAB	6323063	3
Hedinger, Heiligenwiese...	Petroleum ether DAB		1
Fischar/Phönix	Petroleum ether DAB	6323063	1
Fischar / Sanacorp	Petroleum ether DAB	6323062	1
Fischar	Petroleum ether DAB	6322119	1
	Petroleum ether DAB		1
Fischar GmbH	Petroleum ether DAB	6323066	1
Hedinger / Phoenix	Petroleum ether DAB	3966/V02/17	1
Noweda/Hedinger	Petroleum ether DAB	28168B	2
fischar/phoenix	Petroleum ether DAB	6323064	1
Hedinger	Petroleum ether DAB	28169B	12
Fischar/Gehe	Petroleum ether DAB	6323093	1
Hedinger/Gehe	Petroleum ether DAB	28169B	3
Hedinger/ Phönix	Petroleum ether DAB	(028)028	1
Otto Fischar	Petroleum ether DAB	6323063	1
Hedinger/Sanacorp	Petroleum ether DAB	28168B	2
Fischar/Noweda	Petroleum ether DAB	6323065	1
Otto Fischer	Petroleum ether DAB	6323069	1
Caelo	Petroleum ether DAB	28169B	5
Hedinger/ Gehe	Petroleum ether DAB	28168B	1
Hedinger / Anzag	Petroleum ether DAB	28163B	1
Hedinger	Petroleum ether DAB	30101310	1
Hedinger/AHD	Petroleum ether DAB	28169B	1
Caelo	Petroleum ether DAB	6322097	1
Sanacorp	Petroleum ether DAB	6323068	1
Ebert/Fischar	Petroleum ether DAB	6323093	1
Hedinger/Sanacorp	Petroleum ether DAB	28169B	4
otto fischar/Sana	Petroleum ether DAB	6323065	1
HEDINGER / 20	Petroleum ether DAB	28168B	1
Fischar	Petroleum ether DAB	6323066	1
Fischar/Phoenix	Petroleum ether DAB	6323069	1
Fischar/ Now	Petroleum ether DAB	6323064	1
hedinger/anzag	Petroleum ether DAB	28169B	1
Fischar	Petroleum ether DAB	6323068	1
Caelo	Petroleum ether DAB	281698	1
Hedinger / Gehe	Petroleum ether DAB	28169B	6
Hedinger / Anzag	Petroleum ether DAB	28168B	1

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Supplier	Substance	Batch	Spectra
Caelo	Petroleum ether DAB	13141302	1
Hedinger/Phönix	Petroleum ether DAB	28169B	3
Otto Fischar Phönix	Petroleum ether DAB	6323069	1
Spangr/Hedinger	Petroleum ether DAB	28169B	1
Hedinger/Gehe	Petroleum ether DAB	1231234	1
Phoenix/hedinger	Petroleum ether DAB	28169B	2
FISCHER GMBH / GEHE	Petroleum ether DAB	6323094	1
Phönix	Petroleum ether DAB	28169B	1
Stumpf / Hedinger	Petroleum ether DAB	28169B	1
Hedinger/Otto	Petroleum ether DAB	281698	1
Gehe-Hedinger	Petroleum ether DAB	28167B	1
Fischar/Anzag	Petroleum ether DAB	6323099	1
Noweda	Petroleum ether DAB	281698	1
Noweda	Petroleum ether DAB	28169B	1
Kruger/Hedinger/06.01.14	Petroleum ether DAB	28167B	1
Fischer	Petroleum ether DAB	6323064	1
Hedinger/Otto	Petroleum ether DAB		1
Hedinger/Phoenix	Petroleum ether DAB	28168B	1
Fischar / Noweda	Petroleum ether DAB	6323069	1
Hedinger / Noweda	Petroleum ether DAB	28169B	1
Fischar/Anzag	Petroleum ether DAB	6323095	1
Fischar Phönix	Petroleum ether DAB	6323094	1
Otto Fischar Phönix	Petroleum ether DAB	6323111	1
Kost/kost	Petroleum ether DAB	4065061213	1
Hedinger	Petroleum ether DAB	281698	2
Caelo	Petroleum ether DAB	28170B	1
Sanacorp	Petroleum ether DAB	28169B	1
Hedinger / Gehe	Petroleum ether DAB	1301401	1
Otto Fischar GmbH	Petroleum ether DAB	6323094	1
Caelo	Petroleum ether DAB	64/AKD53	1
Hedinger	Petroleum ether DAB	28170B	14
Hedinger / NOW	Petroleum ether DAB	28170B	1
Fischer/Sanacorp	Petroleum ether DAB	6323099	1
Fischar	Petroleum ether DAB	412062-2-P	1
anzag 15.11.12	Petroleum ether DAB	28167B	1
Caelo	Petroleum ether DAB	4031404	1
Fischar/Gehe	Petroleum ether DAB	632309A	1
Fischar/Noweda	Petroleum ether DAB	6323069	1
Fischar	Petroleum ether DAB	6323111	1
Hedinger/Sanacorp	Petroleum ether DAB	281698	1
Otto Fischer GmbH	Petroleum ether DAB	15031402	1
Dr. Seeger/ Phönix	Petroleum ether DAB	28169B	1
Hedinger/Noweda	Petroleum ether DAB	28170B	2
Fischar/Noweda	Petroleum ether DAB	6323112	1
hedinger/noweda	Petroleum ether DAB	28169B	1
Hedinger/Gehe	Petroleum ether DAB	28170B	2
Fischar	Petroleum ether DAB	6324016	1
Fischar/Gehe	Petroleum ether DAB	6323113	1
Hedinger , Stuttgart	Petroleum ether DAB	28170B	1
Hedinger / Gehe	Petroleum ether DAB	28170B	5
Hedinger/Jenne	Petroleum ether DAB	28170B	4
Fischar Phönix	Petroleum ether DAB	6324018	1
Hedinger/Holdermann	Petroleum ether DAB	28170B	1
Hedinger/Sanacorp	Petroleum ether DAB	28170B	1
Noweda/Hedinger	Petroleum ether DAB	28170B	1
Fischar	Petroleum ether DAB	632401A	1
Hedinger/GEHE	Petroleum ether DAB	1914M1170	1
Fischar	Petroleum ether DAB	6323099	1
hedinger/noweda	Petroleum ether DAB	281698	1
Fischar Phönix	Petroleum ether DAB	6323112	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Petroleum ether DAB	28171B	5
Barthel	Petroleum ether DAB	28171B	3
Fischar/Phoenix	Petroleum ether DAB	6324018	1
Hedinger/V.d.L.	Petroleum ether DAB	28170B	1
Noweda	Petroleum ether DAB	28171B	2
Fischar/Anzag	Petroleum ether DAB	6323062	1
Hedinger/V.d.L.	Petroleum ether DAB	28171B	1
Caelo	Petroleum ether DAB	6323095	1
Hedinger/ Jenne	Petroleum ether DAB	28171B	4
A.Hedinger / Kehr	Petroleum ether DAB	281708	1
Hedinger	Petroleum ether DAB	28171B	26
Alliance Healthcare/Fis...	Petroleum ether DAB	6324025	1
Fischar/Gehe	Petroleum ether DAB	3623111	1
Caelo	Petroleum ether DAB	6324025	1
Hedinger1	Petroleum ether DAB	28170B	1
HEDINGER / 20	Petroleum ether DAB	28170B	1
Hedinger	Petroleum ether DAB	3071401	1
Fischar	Petroleum ether DAB	6323097	1
fischar	Petroleum ether DAB	6324035	1
Otto Fischar/Gehe	Petroleum ether DAB	6324035	1
Otto Fischar/Gehe	Petroleum ether DAB	6324044	2
Jenne	Petroleum ether DAB	28171B	2
Hedinger	Petroleum ether DAB	281718	1
Hedinger/GEHE	Petroleum ether DAB	28171B	1
Hedinger	Petroleum ether DAB	6324041	2
Caelo	Petroleum ether DAB	6324044	1
Hedinger/Noweda	Petroleum ether DAB	28171B	2
Fischar/Sanacorp	Petroleum ether DAB	6324033	1
Fischar	Petroleum ether DAB	6324041	3
Hedinger / Alliance HC	Petroleum ether DAB	28171B	1
Caelo	Petroleum ether DAB	28171B	2
Hedinger/ Noweda	Petroleum ether DAB	28171B	1
hedinger	Petroleum ether DAB	298171B	1
Fischar/Gehe	Petroleum ether DAB	6324062	1
Hedinger vdL	Petroleum ether DAB	28171B	2
Hedinger / Gehe	Petroleum ether DAB	28171B	1
Hedinger/Phönix	Petroleum ether DAB	28171B	1
Hedinger/Gehe	Petroleum ether DAB	28171B	6
Stumpf/Hedinger	Petroleum ether DAB	281718	1
Fischar	Petroleum ether DAB	6324064	1
Hedinger/ Phönix	Petroleum ether DAB	28171B	1
Hedinger	Petroleum ether DAB	15091402	1
Phoenix	Petroleum ether DAB	28171B	1
Fischar/Anzag	Petroleum ether DAB	6324063	1
Sanacorp	Petroleum ether DAB		2
Fischar	Petroleum ether DAB	6324082	15
Caelo	Petroleum ether DAB	6324082	2
Fischar	Petroleum ether DAB	6324034	2
Noweda / Fischer	Petroleum ether DAB	6324075	1
anzag	Petroleum ether DAB	6324063	1
Fischer	Petroleum ether DAB	6324062	1
Gehe - Hedinger	Petroleum ether DAB	28171B	1
Hedinger/Anzag	Petroleum ether DAB	28171B	2
Fischar	Petroleum ether DAB	6324074	1
Fischar	Petroleum ether DAB	6324091	1
hedinger/gehe	Petroleum ether DAB	28171B	1
Otto Fischar GmbH	Petroleum ether DAB	6324063	1
Fischar	Petroleum ether DAB	6324075	1
Caelo	Petroleum ether DAB	28172B	2
Spangro/Hedinger	Petroleum ether DAB	28171B	1

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Supplier	Substance	Batch	Spectra
Fischar	Petroleum ether DAB	6324092	1
Hedinger	Petroleum ether DAB	28172B	38
Anzag/Fischar	Petroleum ether DAB	6324064	1
Fischer	Petroleum ether DAB	6324102	1
Fischar	Petroleum ether DAB	6324072	2
Stumpf/Hedinger	Petroleum ether DAB	28172B	1
HEDINGER / 30	Petroleum ether DAB	28172B	2
Fischar	Petroleum ether DAB	6324055	1
Hedinger	Petroleum ether DAB	12121401	1
FISCHER GMBH / GEHE	Petroleum ether DAB	6324091	1
Fischar/Sanacorp	Petroleum ether DAB	6324065	1
Fischar/Phönix	Petroleum ether DAB	6324105	1
Hedinger/Noweda	Petroleum ether DAB	21728	1
Hedinger	Petroleum ether DAB	28011506	1
Fischer	Petroleum ether DAB	6324095	1
Hedinger / Phönix	Petroleum ether DAB	28172B	1
Fischer	Petroleum ether DAB	6324103	1
Hedinger/Sanacorp	Petroleum ether DAB	28172B	3
Hedinger/Gehe	Petroleum ether DAB	28172B	8
Fischar	Petroleum ether DAB	6324105	4
Fischar	Petroleum ether DAB	6324083	1
Anzag	Petroleum ether DAB	6324092	1
Fagron	Petroleum ether DAB	6324114	1
Fischar	Petroleum ether DAB	6324114	2
Fischar/Sanacorp	Petroleum ether DAB	6324103	1
Fischar	Petroleum ether DAB	6324103	2
Hedinger / Noweda	Petroleum ether DAB	28172B	2
Fischbar	Petroleum ether DAB	6324103	1
Fischar / Noweda	Petroleum ether DAB	6324104	1
Fischar	Petroleum ether DAB	6324013	1
Fiebig	Petroleum ether DAB	6324123	1
Hedinger/Sanacorp	Petroleum ether DAB	28172b	1
FISCHER GMBH / GEHE	Petroleum ether DAB	6324104	1
Hedinger/ Noweda	Petroleum ether DAB	28172B	1
Hedinger	Petroleum ether DAB	29041501	1
Otto Fischar GmbH	Petroleum ether DAB	6324115	1
Fischer/Phönix	Petroleum ether DAB	6325014	1
Fischar	Petroleum ether DAB	6325012	3
Gehe-Hedinger	Petroleum ether DAB	28172B	1
Caelo	Petroleum ether DAB	6324113	1
fischar/Sanacorp	Petroleum ether DAB	6325021	1
Fischar/Phönix	Petroleum ether DAB	6324123	1
Fischar	Petroleum ether DAB	6325023	2
Caelo	Petroleum ether DAB	6325021	1
fischar	Petroleum ether DAB	6325023	1
phoenix/hedinger	Petroleum ether DAB	28172B	1
Fischar	Petroleum ether DAB	6325024	2
Fischar	Petroleum ether DAB	6325022	2
Fischar	Petroleum ether DAB	24061501	1
Fischar	Petroleum ether DAB	6324123	1
fischar	Petroleum ether DAB	6325024	1
Fischer/Phönix	Petroleum ether DAB	6325034	3
Hedinger/Sanacorp	Petroleum ether DAB		1
Hedinger/Phönix	Petroleum ether DAB	28172B	1
Fischar	Petroleum ether DAB	6324115	1
otto fischar/Phoenix	Petroleum ether DAB	6325044	1
Fischar	Petroleum ether DAB	6325034	1
Caelo	Petroleum ether DAB	28173B	4
Fischar/Alliance Heathc...	Petroleum ether DAB	6324064	1
A. Hedinger / Noweda	Petroleum ether DAB	281728	1

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Supplier	Substance	Batch	Spectra
A.H.Hedinger vdL	Petroleum ether DAB	28172B	1
heidinger/gehe	Petroleum ether DAB	28172B	2
Anzag/Hedinger	Petroleum ether DAB	28172B	1
Hedinger/ Phoenix WE...	Petroleum ether DAB	28172B	1
Fischar	Petroleum ether DAB	6325063	3
Otto Fischar	Petroleum ether DAB	6325063	1
Fischar	Petroleum ether DAB	6325042	1
Hedinger	Petroleum ether DAB	28173B	16
Caelo	Petroleum ether DAB	6325055	2
Hedinger/Gehe	Petroleum ether DAB	28173B	5
Otto Fischar	Petroleum ether DAB	6325051	1
Hedinger	Petroleum ether DAB	281738	6
Fischar	Petroleum ether DAB	6325052	3
Fischar / Gehe	Petroleum ether DAB	6325055	1
ACM	Petroleum ether DAB	KNC0833J15	1
Fischar/Phönix	Petroleum ether DAB	6325081	3
Fischer	Petroleum ether DAB	6325081	1
HEDINGER	Petroleum ether DAB	28173B	1
Fischar	Petroleum ether DAB	6325081	3
Gehe	Petroleum ether DAB	28173b	1
Fischar	Petroleum ether DAB	6325051	2
Fischar/Anzag	Petroleum ether DAB	6325053	1
Fischar	Petroleum ether DAB	6325025	1
Hedinger/Gehe	Petroleum ether DAB	281738	1
Hedinger/AHD	Petroleum ether DAB	28173B	1
Caelo	Petroleum ether DAB	11357104	1
Fischar/Phoenix	Petroleum ether DAB	6325051	1
Fischar/Gehe	Petroleum ether DAB	6325089	1
Hedinger/ Sanacorp	Petroleum ether DAB	28173B	2
Hedinger/ Gehe	Petroleum ether DAB	28173B	3
AllianceHealthcare	Petroleum ether DAB	28172b	1
Otto Fischer / Sanacorp	Petroleum ether DAB	6325083	1
Hedinger/AllianceHC	Petroleum ether DAB	28172B	1
Hedinger/Phönix	Petroleum ether DAB	28173B	1
Fischar/Fiebig	Petroleum ether DAB	6325065	1
Hedinger/Gehe	Petroleum ether DAB	28172b	1
fischer	Petroleum ether DAB	6325087	1
Hubertus Apotheke	Petroleum ether DAB	6325055	1
Hedinger	Petroleum ether DAB	28172b	1
Fischer/Sanacorp	Petroleum ether DAB	6325105	1
Fischar	Petroleum ether DAB	6325065	1
Sanacorp 8.12.15	Petroleum ether DAB	28174B	2
Hedinger/Sanacorp	Petroleum ether DAB	28173b	1
Hedinger / Gehe	Petroleum ether DAB	28174B	2
Fischar	Petroleum ether DAB	6325101	2
Fischar/ Phönix	Petroleum ether DAB	6325106	1
Fischer	Petroleum ether DAB	6325107	1
Hedinger/Alliance Healt...	Petroleum ether DAB	28174B	1
Hedinger/Noweda	Petroleum ether DAB	28173B	3
Fischar/Alliance H.	Petroleum ether DAB	6325104	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6325117	1
Fischar	Petroleum ether DAB	6325106	1
Hedinger Phönix	Petroleum ether DAB	28174B	1
Hedinger/Noweda	Petroleum ether DAB	28174B	4
Hedinger / Noweda	Petroleum ether DAB	28174B	2
Heidinger/Anzag	Petroleum ether DAB	28174B	1
Hedinger	Petroleum ether DAB	28174B	26
Hedinger GmbH	Petroleum ether DAB	281738	1
Hedinger über Sanacorp	Petroleum ether DAB	28173B	1
Caelo	Petroleum ether DAB	28174B	2

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Supplier	Substance	Batch	Spectra
Hedinger/AHD	Petroleum ether DAB	28174B	1
Jenne	Petroleum ether DAB	28173B	1
Fischar/Fiebig	Petroleum ether DAB	6325109	2
hedinger	Petroleum ether DAB	6326011	1
Frau Brinn-Holtz	Petroleum ether DAB	6325109	1
AEP/ Fischar	Petroleum ether DAB	6325105	1
Caelo	Petroleum ether DAB	6325111	2
fischar	Petroleum ether DAB	6325109	1
fischar	Petroleum ether DAB	6326021	2
Fischar/Phönix	Petroleum ether DAB	6326011	2
FA.Hedinger	Petroleum ether DAB	28174B	3
Fischar	Petroleum ether DAB	6326011	3
Otto Fischar/Sanacorp	Petroleum ether DAB	6325051	1
Caelo	Petroleum ether DAB	281748	1
Fischar	Petroleum ether DAB	6325119	1
Hedinger/Phönix	Petroleum ether DAB	28174B	5
Hedinger	Petroleum ether DAB	281748	4
Caelo	Petroleum ether DAB	6326014	1
Caelo	Petroleum ether DAB	6326015	1
Hedinger/Sanacorp	Petroleum ether DAB	28174B	1
Fischar	Petroleum ether DAB	6325109	2
Unisan	Petroleum ether DAB	28174B	1
Otto Fischer/Noweda	Petroleum ether DAB	6325108	1
Fischar	Petroleum ether DAB	6326026	1
Hedinger / Alliance Hea...	Petroleum ether DAB	28174B	1
Caelo	Petroleum ether DAB	6325109	1
Hedinger/Anzag	Petroleum ether DAB	28174B	1
Fischar	Petroleum ether DAB	6326027	1
Fischar	Petroleum ether DAB	55780	1
Otto Fischar/Gehe	Petroleum ether DAB	6326027	1
Fischar/Noweda	Petroleum ether DAB	6326011	1
Euro OTC	Petroleum ether DAB	23o4123	1
Caelo	Petroleum ether DAB	6326031	2
Fischar / Gehe	Petroleum ether DAB	6326014	1
Sanacorp	Petroleum ether DAB	632510A	1
Fischar/Spangro	Petroleum ether DAB	6326026	1
Fischar GmbH	Petroleum ether DAB	6325044	1
fischar/Sanacorp	Petroleum ether DAB	6326026	1
Fischar/ Sanacorp	Petroleum ether DAB	6325108	1
Otto Fischar/Noweda	Petroleum ether DAB	6325119	1
wepa/Sanaco	Petroleum ether DAB	6326031	1
Jenne	Petroleum ether DAB	15045203	1
Fischar/Phoenix	Petroleum ether DAB	6326047	1
Otto Fischer/Phönix	Petroleum ether DAB	6326026	4
Fischar	Petroleum ether DAB	6326032	1
Hedinger/Gehe	Petroleum ether DAB	28174B	1
Fischar/Alliance Health...	Petroleum ether DAB	6326027	2
Noweda/Hedinger	Petroleum ether DAB	28174B	1
Fischar/Sanacorp	Petroleum ether DAB	6326047	1
Euro OTC	Petroleum ether DAB	28174B	1
HEDINGER/Phönix	Petroleum ether DAB	28174B	2
Otto Fischer/Phönix	Petroleum ether DAB	6326047	1
Noweda/Hedinger	Petroleum ether DAB	281748	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6326052	1
Hedinger	Petroleum ether DAB	28174b	2
Otto Fischer	Petroleum ether DAB	6326052	1
Fischar	Petroleum ether DAB	6326012	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	X81A41	1
Hedinger GmbH	Petroleum ether DAB	28174B	1
Hedinger/Phoenix	Petroleum ether DAB	28174B	1

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Supplier	Substance	Batch	Spectra
otto fischer	Petroleum ether DAB	15081602	1
Fischar/phoenix	Petroleum ether DAB	6326061	5
Fischar/Phönix	Petroleum ether DAB	6325086	1
Hedinger	Petroleum ether DAB	28175B	19
Otto Fischar GmbH & Co...	Petroleum ether DAB	6325111	1
Fischar	Petroleum ether DAB	6326031	1
Caelo	Petroleum ether DAB	6326063	1
Fischar	Petroleum ether DAB	6326071	2
Phoenix	Petroleum ether DAB	6326072	1
Alliance	Petroleum ether DAB	6326027	1
Hedinger	Petroleum ether DAB	2817SB	1
Hedinger	Petroleum ether DAB	2B175B	1
Fischar/Phönix	Petroleum ether DAB	6325105	1
otto fischer	Petroleum ether DAB	6326035	1
Hedinger/Sanacorp	Petroleum ether DAB	28175B	3
Fischar	Petroleum ether DAB	6326061	2
Fischar / Gehe	Petroleum ether DAB	6326075	1
Caelo	Petroleum ether DAB	28175B	8
Fischar	Petroleum ether DAB	6326047	1
Fischer	Petroleum ether DAB	6325105	1
Caelo	Petroleum ether DAB	6326055	1
heidinger/gehe	Petroleum ether DAB	28175B	1
Fischar/Phoenix	Petroleum ether DAB	6326085	1
Otto Fischar	Petroleum ether DAB	6326085	1
Hedinger / Alliance Hea...	Petroleum ether DAB	28175B	1
Fischar	Petroleum ether DAB	6326084	2
Bombastus	Petroleum ether DAB	6326063	1
AEP/Fischar	Petroleum ether DAB	6326092	1
heidinger/anzag	Petroleum ether DAB	28174B	1
Fischar / Gehe	Petroleum ether DAB	6326061	1
Fischar	Petroleum ether DAB	6326072	1
Fischar	Petroleum ether DAB	6326092	1
tob	Petroleum ether DAB	6326092	1
Fischar/Phönix	Petroleum ether DAB	6326092	1
Calo/AHD	Petroleum ether DAB	28175B	1
Fischar	Petroleum ether DAB	6326075	1
Hedinger/Gehe	Petroleum ether DAB	28175B	4
Fischar Otto / Fischar ...	Petroleum ether DAB	6326113	1
Hedinger/AllianceHC	Petroleum ether DAB	28173B	1
Noweda	Petroleum ether DAB	28175B	1
Hedinger/ Gehe	Petroleum ether DAB	28174B	1
Hedinger/Phoenix	Petroleum ether DAB	28175B	1
heidinger	Petroleum ether DAB	28175	1
Hedinger/Phönix	Petroleum ether DAB	28175B	2
Fischar/Sanacorp	Petroleum ether DAB	6326081	1
Caelo	Petroleum ether DAB	1110516	1
Gehe/Hedinger	Petroleum ether DAB	28175B	1
phönix	Petroleum ether DAB	6326112	1
Sanacorp WE:04.02.2017 ...	Petroleum ether DAB	28175B	1
Hedinger / Noweda	Petroleum ether DAB	28175B	2
Fischar	Petroleum ether DAB	6326095	1
L 20/Hedinger	Petroleum ether DAB	28175B	1
phönix	Petroleum ether DAB	28175B	1
Fischar	Petroleum ether DAB	632701	1
Fischbar	Petroleum ether DAB	6326112	1
Otto Fischar GmbH & Co...	Petroleum ether DAB	6326101	1
Caelo	Petroleum ether DAB	6327016	1
Hedinger GmbH	Petroleum ether DAB	28175B	1
Hedinger / AHD 08.03.2017	Petroleum ether DAB	28175B	1
Fischar	Petroleum ether DAB	6327017	2

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Supplier	Substance	Batch	Spectra
Hedinger	Petroleum ether DAB	281758	2
Sanacorp	Petroleum ether DAB	28175B	1
Fischar/Noweda	Petroleum ether DAB	6326081	1
Euro OTC	Petroleum ether DAB	6327019	2
Hedinger/Noweda	Petroleum ether DAB	28175B	2
Euro OTC	Petroleum ether DAB	6326104	1
Caelo	Petroleum ether DAB	6326104	1
Fischar	Petroleum ether DAB	6327013	1
Hedinger	Petroleum ether DAB	11051703	1
Hedinger	Petroleum ether DAB	(028)028	1
Hedinger/Phönix	Petroleum ether DAB	28176B	3
Hedinger/Geilenkirchen	Petroleum ether DAB	28176B	1
Hedinger	Petroleum ether DAB	281768	3
Noweda/hedinger	Petroleum ether DAB	28175B	1
Fischer/Phönix	Petroleum ether DAB	6327018	1
Gehe	Petroleum ether DAB	28176B	1
Fischar Otto / Fischar ...	Petroleum ether DAB	6327051	1
Hedinger/Gehe	Petroleum ether DAB	28176B	1
Fischar / Gehe	Petroleum ether DAB	6327021	1
Fischer	Petroleum ether DAB	6327024	1
Noweda	Petroleum ether DAB	6327021	1
Fischar / Gehe	Petroleum ether DAB	6327033	1
Hedinger	Petroleum ether DAB	28176B	10
Fischer/Phönix	Petroleum ether DAB	6327034	1
Fischar	Petroleum ether DAB	6327034	1
hedinger/noweda	Petroleum ether DAB	28176B	1
Hedinger/Ebert	Petroleum ether DAB	28176B	2
fischar	Petroleum ether DAB	616331022	1
Fischar	Petroleum ether DAB	6327054	2
Fischar	Petroleum ether DAB	6327024	1
Phönix/Fischer	Petroleum ether DAB	6327034	1
Noweda/Hedinger	Petroleum ether DAB	28176B	1
Otto Fischer	Petroleum ether DAB	6326105	1
Otto Fischer/Noweda	Petroleum ether DAB	6327024	1
Fischer/Phönix	Petroleum ether DAB	6327061	1
Noweda	Petroleum ether DAB	28176B	1
Hedinger / AHD 01.08.2017	Petroleum ether DAB	28176B	1
Gehe/Fischar	Petroleum ether DAB	6327062	3
Phönix EK:6,26 EUR -11	Petroleum ether DAB	28176B	1
Caelo	Petroleum ether DAB	28176B	5
HEDINGER / NOWEDA	Petroleum ether DAB	28175B	1
Hedinger/Noweda	Petroleum ether DAB	28176B	3
Delta	Petroleum ether DAB	28176B	2
Noweda	Petroleum ether DAB	6327062	2
Kehr/Hedinger	Petroleum ether DAB	28175B	1
Hedinger	Petroleum ether DAB	7091707	1
phönix	Petroleum ether DAB	6327062	1
Hedinger/Gehe	Petroleum ether DAB	28178B	1
Caelo	Petroleum ether DAB	6327072	3
Fischar	Petroleum ether DAB	6327019	1
Caelo	Petroleum ether DAB	6327054	1
Fischar	Petroleum ether DAB	6327072	1
Hedinger	Petroleum ether DAB	28176B5395	1
GEHE	Petroleum ether DAB	28176B	1
Hedinger / Gehe	Petroleum ether DAB	28176B	1
Fischar/Sanacorp	Petroleum ether DAB	6327018	2
Fischar/Noweda	Petroleum ether DAB	6327072	1
Hedinger/Phoenix	Petroleum ether DAB	28176B	1
Phönix	Petroleum ether DAB	6327093	1
fischar	Petroleum ether DAB	6327055	1

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Supplier	Substance	Batch	Spectra
hedinger	Petroleum ether DAB	28176B	1
Hedinger	Petroleum ether DAB	18111701	1
Fischar	Petroleum ether DAB	6327102	2
Fischar	Petroleum ether DAB	6327074	1
Fischar	Petroleum ether DAB	6327101	1
Hedinger/Kehr	Petroleum ether DAB	28176B	1
Sanacorp	Petroleum ether DAB	28177B	1
Caelo	Petroleum ether DAB	5013J-01170	1
Hedinger/Noweda	Petroleum ether DAB	28177B	1
Fischar/Sanacorp	Petroleum ether DAB	6327072	1
Otto Fischar	Petroleum ether DAB	6327072	1
Fischar/Phönix	Petroleum ether DAB	6327093	1
Fischar/Phönix	Petroleum ether DAB	6326083	1
Caelo	Petroleum ether DAB	2816B	1
Hedinger/Sanacorp	Petroleum ether DAB	28176B	1
Hedinger/ Alliance Heal...	Petroleum ether DAB	28176B	1
Fischar/ AHD	Petroleum ether DAB	6327093	1
Noweda	Petroleum ether DAB	6327105	1
Noweda	Petroleum ether DAB	6327093	1
Caelo	Petroleum ether DAB	6327114	1
Otto Fischar GmbH	Petroleum ether DAB	6327114	1
Phoenix/Cealo	Petroleum ether DAB	28176B/0818E-01170	1
Hedinger/noweda	Petroleum ether DAB	28176B	1
Hedinger/Gehe	Petroleum ether DAB	28177B	3
Fischar/Noweda	Petroleum ether DAB	6328014	1
Hedinger/Phönix	Petroleum ether DAB	28177B	1
Hedinger/AHD	Petroleum ether DAB	28177B	1
Hedinger/Sanacorp	Petroleum ether DAB	281748	1
Hedinger/Alliance Healt...	Petroleum ether DAB	28177B	4
Otto Fischar	Petroleum ether DAB	6327092	1
Fischar/ Noweda	Petroleum ether DAB	632704	1
Hedinger	Petroleum ether DAB	28177B	4
Hedinger/Phoenix	Petroleum ether DAB	28177B	3
Fischar Phönix	Petroleum ether DAB	6328014	1
Caelo	Petroleum ether DAB	16111007	1
Phönix/Fischar	Petroleum ether DAB	6328013	1
L10/Fischar	Petroleum ether DAB	632801A	1
Caelo	Petroleum ether DAB	632711A	1
Hedinger	Petroleum ether DAB	281778	2
Hediner/Noweda	Petroleum ether DAB	28177B	2
Hedinger	Petroleum ether DAB	14051804	1
Hedinger/ Fiebig	Petroleum ether DAB	28028	1
Otto Fischar/Sanacorp	Petroleum ether DAB	6327116	1
ALH/Hedinger	Petroleum ether DAB	28177B	1
Fischar/Sanacorp	Petroleum ether DAB	6328013	1
Fischar/Noweda	Petroleum ether DAB	632711A	1
Hedinger	Petroleum ether DAB	9071803	1
Hedinger/Phönix	Petroleum ether DAB	281778	1
hedinger /AHD	Petroleum ether DAB	28176B5449	1
Hedinger/AHD	Petroleum ether DAB	28178B	2
Hedinger	Petroleum ether DAB	7081801	1
Fischer/Noweda	Petroleum ether DAB	6328013	1
Hedinger/Sanacorp	Petroleum ether DAB	28178B	1
Noweda	Petroleum ether DAB	28178B	1
Fischar	Petroleum ether DAB	632801A	1
fischar	Petroleum ether DAB	6328041	1
Otto Fischar GmbH	Petroleum ether DAB	6328065	2
Hedinger / Gehe	Petroleum ether DAB	28178B	1
Caelo	Petroleum ether DAB	28178B	1
Hedinger / AHD 23.08.2018	Petroleum ether DAB	28177B	1

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Supplier	Substance	Batch	Spectra
Caelo	Petroleum ether DAB	6326027	1
Hedinger/ Gehe	Petroleum ether DAB	28178B	1
Sanacorp	Petroleum ether DAB	28174B	1
Phönix/Fischar	Petroleum ether DAB	6328072	3
Fischar/Sanacorp	Petroleum ether DAB	6328045	1
Fischar	Petroleum ether DAB	6327112	1
Sanacorp	Petroleum ether DAB	28178B	1
Hedinger	Petroleum ether DAB	5121815	1
Fischar/Sanacorp	Petroleum ether DAB	6328065	1
Fischar Phönix	Petroleum ether DAB	6328064	1
Fischar/Phönix	Petroleum ether DAB	6328104	1
Hedinger	Petroleum ether DAB	28178B	2
Hedinger/Gehe	Petroleum ether DAB	28179B	1

- 106 902 spectra from 582 *Apo-Ident* customers from a total of 30 422 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 *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	35 695
Type B	0	117	3	78 958
Type C	0	1046	11	106 902

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 % (> 99.9706 %)	100.0000 % (> 95.7143 %)
Type B	100.0000 % (> 99.9689 %)	97.5000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6449 %)	98.9593 % (> 98.6755 %)

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.

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
31283	31283	0.00	33.89
30899	30899	0.00	33.45
31253	31253	0.00	26.50

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Petroleum oil, white, cohobated
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31212-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Petroleum oil, white, cohobated; Oleum petrae album rectif.

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>
Appendix F	Addition to the second-stage models

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.

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	40	20140124
Caelo	Petroleum oil, w...	173331	34324	40	20180129*

Validation samples

A total of 222 872 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 *Petroleum oil, white, cohobated*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Petroleum oil, white, cohobated*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Petroleum oil, white, cohoba...	14019607	31387 [†]	20
Caelo	Petroleum oil, white, cohoba...	163278	33109	40
Caelo	Petroleum oil, white, cohoba...	182344	34238	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

*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.

[†]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*.

- 14 spectra from 9 *Apo-Ident* customers from 9 batches from the substance/substance group *Petroleum oil, white, cohobated*.

Supplier	Substance	Batch	Spectra
Caelo	Petroleum oil, white, cohoba...	13086402	1
Caelo	Petroleum oil, white, cohoba...	11198403	1
Caelo	Petroleum oil, white, cohoba...	12173103	1
Caelo	Petroleum oil, white, cohoba...	13146702	2
Caelo	Petroleum oil, white, cohoba...	13303603	2
Caelo	Petroleum oil, white, cohoba...	13086401	1
Caelo	Petroleum oil, white, cohoba...	2306921	1
Caelo	Petroleum oil, white, cohoba...	14019607	3
Caelo	Petroleum oil, white, cohoba...	14242203	2

- 107 945 spectra from 582 *Apo-Ident* customers from a total of 30 671 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	13	1	107 945

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6456 %)	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.

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	16.40
31212	31212	0.00	33.46
31387	31212	4.16	33.03

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Phytomenadione**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30747-2019-05-24
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:

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*
Appendix F [Addition to the second-stage models](#)

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.

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	14I02-B04-301537	31621	40	20141210
Fagron	Phytomenadione	16D07-B03-328730	33304	40	20160603

Validation samples

A total of 222 872 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.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Phytomenadione*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Phytomenadione	14I02-B04-301537	31621 [†]	20
Fagron	Phytomenadione	16D07-B03-328576	33303	40
Fagron	Phytomenadione	17F12-B12-344796	34086	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 5 spectra from 4 *Apo-Ident* customers from 5 batches from the substance/substance group *Phytomenadione*.

Supplier	Substance	Batch	Spectra
Fagron	Phytomenadione	13C25-N07	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
Merck	Phytomenadione	EH14000190	1
Merck	Phytomenadione	EH13000590	1
Fagron	Phytomenadione	13D26-B07-286714	1
Fagron	Phytomenadione	17F28-H10-00239	1

- 107 954 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *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	35 715
Type B	0	100	0	78 978
Type C	0	5	0	107 954

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
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.

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	114.83
31621	30747	4.77	118.01
33304	30747	8.00	114.49

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Pine silvestris oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31183-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Fagron	Pine silvestris ...	13E24-N05	31183	40	1403166
Caelo	Pine silvestris ...	13334502	31202	40	1403168
Caelo	Pine silvestris ...	13334501	31405	40	20131009

Validation samples

A total of 222 872 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 silvestris oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Pine silvestris oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Pine silvestris oil	16298401	33250	40
Caelo	Pine silvestris oil	16298401	33424	40

- 78 998 spectra from a total of 1829 batches from further 350 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.

- 72 spectra from 38 *Apo-Ident* customers from 36 batches from the substance/substance group *Pine silvestris oil*.

Supplier	Substance	Batch	Spectra
Noweda	Pine silvestris oil	11161605	1
Taoasis	Pine silvestris oil	30600-18490	1
Caelo	Pine silvestris oil	11024603	1
Caelo	Pine silvestris oil	11161605	2
Caelo	Pine silvestris oil	11024602	1
Caelo	Pine silvestris oil	12080504	4

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Supplier	Substance	Batch	Spectra
Fagron	Pine silvestris oil	12G20-N04	1
Caelo	Pine silvestris oil	12246905	1
Fagron	Pine silvestris oil	12L03-N05	1
Caelo	Pine silvestris oil	12246907	2
Taoasis	Pine silvestris oil	33717-112501	2
Taoasis/Phönix	Pine silvestris oil	32372-110382	1
Caelo	Pine silvestris oil	13334501	4
noweda	Pine silvestris oil	13334501	2
Caelo	Pine silvestris oil	26091404	1
Taoasis	Pine silvestris oil	8169-117244	4
Phönix	Pine silvestris oil	13334501	2
Taoasis	Pine silvestris oil	20017-118846	1
Fagron	Pine silvestris oil	14J27-B06	1
Taoasis	Pine silvestris oil	28663-119029	1
Caelo	Pine silvestris oil	14252202	4
Caelo	Pine silvestris oil	14252203	2
Taoasis	Pine silvestris oil	28663-120876	2
Fagron	Pine silvestris oil	15F12B02308878	1
Fagron	Pine silvestris oil	15F12-B02-308878	1
Taoasis	Pine silvestris oil	28663-119531	1
Taoasis	Pine silvestris oil	35808-123038	2
Caelo	Pine silvestris oil	15239101	6
Caelo	Pine silvestris oil	15239102	2
Taoasis	Pine silvestris oil	49977-12442	1
Bergland	Pine silvestris oil	C502587	1
Taoasis	Pine silvestris oil	49977-125240	2
Fagron	Pine silvestris oil	15F12-B02-323109	1
Caelo	Pine silvestris oil	16007406	1
Caelo	Pine silvestris oil	24061710	1
Bergland	Pine silvestris oil	C700086	1
Caelo	Pine silvestris oil	16298401	4
Caelo	Pine silvestris oil	17133001	4
Caelo	Pine silvestris oil	1713001	1

- 107 887 spectra from 582 *Apo-Ident* customers from a total of 30 644 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 *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	120	0	35 715
Type B	0	80	0	78 998
Type C	0	69	3	107 887

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6451 %)	95.8333 % (> 91.6667 %)

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.

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	21.37
31202	31202	0.00	21.98
31405	31202	2.46	21.81

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Pine tar**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31221-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 222 872 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.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 60 spectra of 1 reference samples from the substance/substance group *Pine tar*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Pine tar	13008309	31614	60

- 79 018 spectra from a total of 1829 batches from further 350 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*.
- 107 959 spectra from 582 *Apo-Ident* customers from a total of 30 680 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](#).

*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 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	35 715
Type B	0	60	0	79 018
Type C	0	0	0	107 959

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 90.0000 %)
Type C	100.0000 % (> 99.6449 %)	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.

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	162.58
33442	31221	22.21	203.06
34085	34085	0.00	276.22

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Polyhexanide solution 20%**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30596-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20131217
Fagron	Polyhexanide sol. ...	16B16-B04-322720	32733	40	20160229
Fagron	Polyhexanide sol. ...	18B16-B10-345748	34087	40	20180306

Validation samples

A total of 222 872 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 *Polyhexanide solution 20%*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Polyhexanide solution 20%*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	Polyhexanide solution 20%	12A04-N06	30596	40
Fagron	Polyhexanide solution 20%	13K29-B30-288935	31571 [†]	20
Fagron	Polyhexanide solution 20%	15H28-B11-313603	32276	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 295 spectra from 156 *Apo-Ident* customers from 87 batches from the substance/substance group *Polyhexanide solution 20%*.

[†]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*.

Supplier	Substance	Batch	Spectra
Fagron	Polyhexanide solution 20%	12K20-N01	4
Caelo	Polyhexanide solution 20%	12GR227646	1
Caelo	Polyhexanide solution 20%	12B09-N01	1
Fagron	Polyhexanide solution 20%	12k20-n01	2
Fagron	Polyhexanide solution 20%	12A04-N06	1
Fragon	Polyhexanide solution 20%	12K20-N01	1
Noweda	Polyhexanide solution 20%	12K20-N01	1
Fagron	Polyhexanide solution 20%	12D27-N07	1
Fagron	Polyhexanide solution 20%	11GR180545	1
Caelo	Polyhexanide solution 20%	12K20N01	1
Phoenix	Polyhexanide solution 20%	12K20-N01	1
Fagron	Polyhexanide solution 20%	13H05-N01	8
Fagron	Polyhexanide solution 20%	13H05-N04	9
B.Braun / Gehe	Polyhexanide solution 20%	13103M18	3
Fagron	Polyhexanide solution 20%	13H05-No4	1
Fagron	Polyhexanide solution 20%	13H05-N040339/904	1
Fagron	Polyhexanide solution 20%	13K29-B30	1
Fagron	Polyhexanide solution 20%	13K29-B30-288934	5
Phytocomm	Polyhexanide solution 20%	27803278	1
Caelo	Polyhexanide solution 20%	13K29-B30-288934	1
GEHE 14.04.2014	Polyhexanide solution 20%	13K29-B30288934	1
Fagron	Polyhexanide solution 20%	13K29-B30-288938	4
Caelo	Polyhexanide solution 20%	13351M28	2
Fagron	Polyhexanide solution 20%	13K29-B30288934	1
Caelo	Polyhexanide solution 20%	13K29-B30-288938	2
Fagron	Polyhexanide solution 20%	14F25-B06-296291	2
Caelo	Polyhexanide solution 20%	14F25-B06-296291	1
Caelo	Polyhexanide solution 20%	14F25-B06-296292	2
Fagron	Polyhexanide solution 20%	14F25-B06	11
Fagron	Polyhexanide solution 20%	14F25-B06-296292	10
Gehe 16.12.14	Polyhexanide solution 20%	14F25-B06-296292	1
Caelo	Polyhexanide solution 20%	14F25-B06	1
Fagron	Polyhexanide solution 20%	14F25-b06-296292	1
Fagron	Polyhexanide solution 20%	14F25-B06-300092	6
Ichthyol Gesellschaft/AHD	Polyhexanide solution 20%	14F25-B06-296292	1
Caelo	Polyhexanide solution 20%	14GR132285	1
Sanacorp	Polyhexanide solution 20%	14f25-b06-2962291	1
Fagron	Polyhexanide solution 20%	14F25B06300092	1
Fagron	Polyhexanide solution 20%	14GR132285	2
Fagron	Polyhexanide solution 20%	14F25-B06-300093	7
Fagron	Polyhexanide solution 20%	3714M-03580	1
Caelo	Polyhexanide solution 20%	14F25-B06-300093	2
Caelo	Polyhexanide solution 20%	14F25-B06-305013	1
Fagron	Polyhexanide solution 20%	14F25-B06-305013	3
Fagron	Polyhexanide solution 20%	18071501	1
Fagron	Polyhexanide solution 20%	15C20-B06-309678	4
Fagron	Polyhexanide solution 20%	14GR274618	1
Noweda	Polyhexanide solution 20%	15H28-B11-312309	2
Fargon/ Gehe	Polyhexanide solution 20%	15H28-B11-312309	1
Noweda	Polyhexanide solution 20%	14F25B06305013	1
Fagron	Polyhexanide solution 20%	15H28-B11-312309	3
Fagron	Polyhexanide solution 20%	15H28-B11-313603	9
Fagron	Polyhexanide solution 20%	15H28-B11	6
Fagron	Polyhexanide solution 20%	15H28-B11-313604	4
Caelo	Polyhexanide solution 20%	15H28-B11-313603	1
Euro OTC	Polyhexanide solution 20%	15H28-B11-313604	1
Fagron	Polyhexanide solution 20%	15H28-B11-315703	5
Fagron	Polyhexanide solution 20%	16B16-B04-318789	6
Fagron	Polyhexanide solution 20%	15H28-B11313603	2
Fagron	Polyhexanide solution 20%	15H28	1

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Supplier	Substance	Batch	Spectra
Fagron	Polyhexanide solution 20%	2215I-03580	1
Fragon GmbH	Polyhexanide solution 20%	16GR025056	1
Caelo	Polyhexanide solution 20%	16B16-B04-318789	1
Fagron	Polyhexanide solution 20%	15h28-b11-312309	1
Fagron	Polyhexanide solution 20%	16B16-B04	5
Fagron	Polyhexanide solution 20%	16B16-B04-320854	8
Fargom	Polyhexanide solution 20%	116B16-B04-320854	1
Caelo	Polyhexanide solution 20%	15H28-B11-315703	1
Caelo	Polyhexanide solution 20%	AKD17	1
Phoenix	Polyhexanide solution 20%	16B16-B04	1
Fagron	Polyhexanide solution 20%	16B16-b04	1
Fagron	Polyhexanide solution 20%	16gr025056	1
Fagron	Polyhexanide solution 20%	16GR025056	5
Fagron	Polyhexanide solution 20%	16B16-B04-325487	9
Fagron	Polyhexanide solution 20%	16B16-B04-322720	6
Anzag	Polyhexanide solution 20%	16B16-B04-325487	1
Fagron	Polyhexanide solution 20%	25021712	1
Fargon	Polyhexanide solution 20%	16G29-B01-328171	1
Gehe/Fagaron	Polyhexanide solution 20%	16B16-B04-320854	1
Fagron	Polyhexanide solution 20%	16G29-B01-328171	6
Fragon/Noweda	Polyhexanide solution 20%	16G29-B01-328171	1
Fagron	Polyhexanide solution 20%	16G29-B01	4
Ebert-Jacobi	Polyhexanide solution 20%	16G29-B01-328171	1
Fagron	Polyhexanide solution 20%	16G29-B01-330630	3
Ebert-Jacobi	Polyhexanide solution 20%	16G29-B01-330629	1
Gepepharm	Polyhexanide solution 20%	17061709	1
Fagron	Polyhexanide solution 20%	16G29-B01-330629	6
Fagron	Polyhexanide solution 20%	16GR180497	2
Fagron	Polyhexanide solution 20%	16G-29-B01	1
Fagron	Polyhexanide solution 20%	16GR1-B01-330629	1
Fagron	Polyhexanide solution 20%	16G259-B01-328171	1
Fagron	Polyhexanide solution 20%	16G29-B01-335336	9
Anzag	Polyhexanide solution 20%	16G29-B01-335336	2
Caelo	Polyhexanide solution 20%	16G29-B01-335336	1
Fagron	Polyhexanide solution 20%	16G29-B01-337612	3
Fagron	Polyhexanide solution 20%	335336	1
Fagron	Polyhexanide solution 20%	17GR1856627	1
Fagron	Polyhexanide solution 20%	16g29-b01-335336	1
Sanacorp	Polyhexanide solution 20%	17L14-B02-343990	1
Fagron	Polyhexanide solution 20%	17L14-B02-343991	5
Fagron	Polyhexanide solution 20%	17L14-B02-343990	4
Fagron	Polyhexanide solution 20%	17GR185627	7
Beiersdorf	Polyhexanide solution 20%	18816-810-345748	1
Fagron	Polyhexanide solution 20%	18B16-B10-345748	4
Fagron	Polyhexanide solution 20%	7051803	1
Fagron	Polyhexanide solution 20%	18B16-B10	1
Fagron	Polyhexanide solution 20%	18816-B10-345748	1
Fagron	Polyhexanide solution 20%	18B16	1
Fagron	Polyhexanide solution 20%	18B10-345748	1
Sanacorp	Polyhexanide solution 20%	18D09-B01-348160	1
Fagron	Polyhexanide solution 20%	18D09-B01-348160	4
Fagron	Polyhexanide solution 20%	18D09-B01-348161	7
Fagron	Polyhexanide solution 20%	18d09b01348160	1
Fagron	Polyhexanide solution 20%	18G02-B01-353296	1
Fagron	Polyhexanide solution 20%	18D09-B01	1
Sanacorp	Polyhexanide solution 20%	18GR038066	1
Fagron	Polyhexanide solution 20%	2021906	1

- 107 664 spectra from 582 *Apo-Ident* customers from a total of 30 595 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 *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	160	0	35 675
Type B	0	100	0	78 978
Type C	0	268	27	107 664

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	90.8475 % (> 89.8305 %)

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.

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
31571	31180	8.15	30.54
31180	31180	0.00	29.08
32733	31180	12.08	32.06
34087	31180	5.00	26.39

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Polyol fatty acid ester
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30755-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	33460	40	20160901

Validation samples

A total of 222 872 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 *Polyol fatty acid ester*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Polyol fatty acid ester*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Polyol fatty acid ester	161120	32196	40
Caelo	Polyol fatty acid ester	16254506	33459	40
Caelo	Polyol fatty acid ester	172830	33676	40

- 78 958 spectra from a total of 1827 batches from further 350 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 45 *Apo-Ident* customers from 26 batches from the substance/substance group *Polyol fatty acid ester*.

Supplier	Substance	Batch	Spectra
Caelo	Polyol fatty acid ester	11162809	1
Caelo	Polyol fatty acid ester	12361804	4

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Supplier	Substance	Batch	Spectra
GEHE	Polyol fatty acid ester	12361804	1
Caelo	Polyol fatty acid ester	11162811	1
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	13158903	5
Noweda	Polyol fatty acid ester	13158903	1
Caelo	Polyol fatty acid ester	13292302	4
Caelo	Polyol fatty acid ester	13357702	5
Phönix	Polyol fatty acid ester	13357702	1
Caelo	Polyol fatty acid ester	11081403	1
Caelo	Polyol fatty acid ester	13357703	4
Caelo	Polyol fatty acid ester	14322405	3
Phönix	Polyol fatty acid ester	14033502	2
Caesar/ Noweda	Polyol fatty acid ester	2613E-01243	1
Caelo	Polyol fatty acid ester	14033502	7
Caelo	Polyol fatty acid ester	14322407	1
Sanacorp	Polyol fatty acid ester	1/AKD14	1
Caelo	Polyol fatty acid ester	143033502	1
Caelo	Polyol fatty acid ester	15298004	2
Caelo	Polyol fatty acid ester	16254502	1
Caelo	Polyol fatty acid ester	16254506	2
Caelo	Polyol fatty acid ester	16254504	2
Caelo	Polyol fatty acid ester	4111711	1
Caelo	Polyol fatty acid ester	16254508	1
Bombastus	Polyol fatty acid ester	16254506	1
Caelo	Polyol fatty acid ester	17072203	2
Caelo	Polyol fatty acid ester	17283001	1

- 107 891 spectra from 582 *Apo-Ident* customers from a total of 30 654 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	68	0	107 891

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6451 %)	100.0000 % (> 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.

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
31366	31179	5.84	19.01
33460	31179	7.30	16.62
30755	31179	7.97	17.43
31179	31179	0.00	18.88

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Polysorbate 80 / Macroglycerolricinoleat**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30766-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 / Macroglycerolricinoleat*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Macroglycerol...	12E29-N02	30766	60	20120612
Caelo	Polysorbate 80	12116009	30893	80	20120427
Fagron	Macroglycerol...	12H08-N01	31015	40	20120827
Caelo	Polysorbate 80	13372015	31325	40	AR-15-FG-008176-01
Caelo	Macroglycerol...	13272708	31368	39	1505503
Fagron	Polysorbate 80	17A23-B09-331594	33300	40	20170208

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 299 spectra of 6 reference samples from the substance/substance group *Polysorbate 80 / Macroglycerolricinoleat*. These samples are listed above in the [calibration samples](#) section.
- 35 536 spectra from a total of 841 batches from further 212 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 210 spectra of 6 reference samples from the substance/substance group *Polysorbate 80 / Macroglycerolricinoleat*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Polysorbate 80	12116009	30893 [†]	10
Caelo	Macroglycerol ricinoleate	161303	32297	40
Caelo	Macroglycerol ricinoleate	161545	32338	40
Caelo	Polysorbate 80	16260201	33296	40
Caelo	Macroglycerol ricinoleate	172238	33707	40
Caelo	Polysorbate 80	173048	33887	40

- 78 868 spectra from a total of 1824 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.

- 325 spectra from 168 *Apo-Ident* customers from 107 batches from the substance/substance group *Polysorbate 80 / Macroglycerolricinoleat*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Polysorbate 80	11179606	1
Bombastus	Polysorbate 80	11347907	1
Fargon	Polysorbate 80	10114N07	1
Phoenix	Polysorbate 80	12116005	1
Caelo	Polysorbate 80	11347907	2
Caelo	Polysorbate 80	3212I-02527	1
Caelo	Polysorbate 80	12116009	7
Caelo	Polysorbate 80	11179618	1
Caelo	Polysorbate 80	20210312-2	1
Fagron	Polysorbate 80	12K05-N04	4
Caelo	Polysorbate 80	12116005	4
Caelo	Polysorbate 80	11347909	1
Fagron	Polysorbate 80	12D02-N02	1
Fagron	Polysorbate 80	908ND3714	2
Caelo	Polysorbate 80	12315305	1
Gehe	Polysorbate 80	12K05-N04	1
Fagron	Polysorbate 80	13A10-N03	2
Caelo	Polysorbate 80	12116013	6
Caelo	Polysorbate 80	12315308	9
Fagron	Polysorbate 80	11L22-N12	1
Caelo	Polysorbate 80	21061301	1
Caelo	Polysorbate 80	123125308	1
Fagron	Polysorbate 80	13C19-N01	1
Alliance Healthcare	Polysorbate 80	12315308	1
Caelo	Polysorbate 80	10235202	1
Caelo	Polysorbate 80	12315317	10
Caelo	Polysorbate 80	3213E2527	1
Caelo	Polysorbate 80	12315328	13
Caelo	Polysorbate 80	12116014	1
Caelo	Polysorbate 80	4512A-02527	1
Fagron	Polysorbate 80	808ND3713	1
Fagron	Polysorbate 80	13C19N01	1
Caelo	Polysorbate 80	13152219	1
Sanacorp	Polysorbate 80	7/AKD20	1
Caelo	Polysorbate 80	13152216	13
Caelo	Polysorbate 80	27111308	1
gehe 28.12.2013	Polysorbate 80	13152216	3
Caelo	Polysorbate 80	13152223	10
Krieger	Polysorbate 80	131522232x	1
Caelo	Polysorbate 80	12315324	1
VDL 17.04.14	Polysorbate 80		1
Caelo	Polysorbate 80	13372015	1
Caelo	Polysorbate 80	13152218	1
Gehe 01.07.2014	Polysorbate 80	13372015	1
Fagron	Polysorbate 80	813I-02527	1
Caelo	Polysorbate 80	13372012	11
ICHTHYOL/ahp	Polysorbate 80	14190310	1
Caelo	Polysorbate 80	14190306	5
Fagron	Polysorbate 80	14C24-B07-296371	3
Caelo	Polysorbate 80	1419026	1
Caelo	Polysorbate 80	15121404	1
Caelo	Polysorbate 80	42175394	2
Caelo	Polysorbate 80	14190316	19
Fagron	Polysorbate 80	14C24-B07	1
Caelo	Polysorbate 80	14190317	1
Gehe	Polysorbate 80	14190316	1
Caelo	Polysorbate 80	15104103	10
Caelo	Polysorbate 80	25062015C	1
Caelo	Polysorbate 80	515I-02527	1
VDL Nachliefer; 2.7.15;...	Polysorbate 80	15104103	1

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Supplier	Substance	Batch	Spectra
Gehe	Polysorbate 80	15104111	1
Fagron	Polysorbate 80	14K27-B01-307106	2
Caelo	Polysorbate 80	18081502	1
Nachprüfung 3008	Polysorbate 80	13152223	1
Caelo	Polysorbate 80	15104112	14
Caelo	Polysorbate 80	15104113	1
Caelo	Polysorbate 80	4513M	1
Fargon/Kehr	Polysorbate 80	14K27-B01-307106	1
Caelo	Polysorbate 80	2772013	1
Devesa/ Phönix	Polysorbate 80	14K27-Bo1-307106	1
Caelo	Polysorbate 80	15104121	10
Caelo	Polysorbate 80	15104126	6
Caelo	Polysorbate 80	2915A-02527	1
Caelo	Polysorbate 80	1220616	1
Caelo	Polysorbate 80	16059402	27
Ebert u. Jacobi 24.06...	Polysorbate 80	15104112	1
Caelo	Polysorbate 80	16059403	1
Caelo	Polysorbate 80	16053402	1
Alte Apotheke	Polysorbate 80	16059402	1
Cealo/AHD	Polysorbate 80	16059402	1
Caelo	Polysorbate 80	16260201	12
GEHE	Polysorbate 80	16B17-B09	1
Caesar & Loretz/Noweda	Polysorbate 80	16260201	1
Fagron	Polysorbate 80	16059402	1
Caelo	Polysorbate 80	1609402	1
Sanacorp, 4,52, 18.1.17	Polysorbate 80	16059402	1
Fagron	Polysorbate 80	226953-0002	1
Caelo	Polysorbate 80	1612B08327237	1
Caelo	Polysorbate 80	16260210	11
Fagron	Polysorbate 80	16I12-B02-327237	1
Caelo	Polysorbate 80	1709947	1
Noweda	Polysorbate 80	16260210	1
Fagron	Polysorbate 80	17A23-B09-334347	1
Cealo	Polysorbate 80	16260210	1
Caelo	Polysorbate 80	17A23-B09	1
Caelo	Polysorbate 80	1190318/16260210	1
Caelo	Polysorbate 80	17064705	6
Caelo	Polysorbate 80	16260202	1
Fagron	Polysorbate 80	18B17-B07-346922	1
Caelo	Polysorbate 80	18045803	1
Caesar & Loretz GmbH	Polysorbate 80	18236805	1
Fagron	Macrogolglycerol ricinoleate	13B08-N03	2
Fagron	Macrogolglycerol ricinoleate	12G02-N11	1
BASF Chem trade GmbH/Ph...	Macrogolglycerol ricinoleate	13B08-N03	1
Fagron	Macrogolglycerol ricinoleate	13E13-N11	1
Fagron	Macrogolglycerol ricinoleate	13B08-No3	1
Fagron	Macrogolglycerol ricinoleate	13J24-B03-287433	1
Fagron	Macrogolglycerol ricinoleate	13J24-B03-296052	1
Caelo	Macrogolglycerol ricinoleate	44242575L0	1
Fagron	Macrogolglycerol ricinoleate	67100156P0	1
Caelo	Macrogolglycerol ricinoleate	14195501	1
Fagron	Macrogolglycerol ricinoleate	14L08B04	1
Fagron	Macrogolglycerol ricinoleate	14L08-B04-302328	1
Fagron	Macrogolglycerol ricinoleate	13F12-N17	2
Caelo	Macrogolglycerol ricinoleate	15312307	1
Fagron	Macrogolglycerol ricinoleate	16B08B01	1
Fagron	Macrogolglycerol ricinoleate	16B08-B01-322893	1
Caelo	Macrogolglycerol ricinoleate	16130304	2
Phönix	Macrogolglycerol ricinoleate	16B08-B01-328228	1
Caelo	Macrogolglycerol ricinoleate	16154501	1

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Supplier	Substance	Batch	Spectra
Phoenix	Macrogolglycerol ricinoleate	73353136W0	1
Caelo	Macrogolglycerol ricinoleate	16154504	1
Fagron	Macrogolglycerol ricinoleate	17J10B02	1
Fagron	Macrogolglycerol ricinoleate	17J10-B02-340819	1
Caelo	Macrogolglycerol ricinoleate	17223802	1
Caelo	Macrogolglycerol ricinoleate	6101806	1

- 107 634 spectra from 582 *Apo-Ident* customers from a total of 30 575 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 *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	299	0	35 536
Type B	0	210	0	78 868
Type C	0	325	0	107 634

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 % (> 99.9705 %)	100.0000 % (> 97.9933 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.1429 %)
Type C	100.0000 % (> 99.6450 %)	100.0000 % (> 98.1538 %)

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.

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
30766	31368	3.31	23.47
31015	31368	5.51	25.52
31368	31368	0.00	23.54
30893	31325	4.90	12.96
31325	31325	0.00	12.63
33300	31325	5.59	13.73

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Potash soap DAC
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30987-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140815
Caelo	Potash soap DAC	14289101	31650	40	20141017

Validation samples

A total of 222 872 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 *Potash soap DAC*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 400 spectra of 11 reference samples from the substance/substance group *Potash soap DAC*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Potash soap DAC	13322201	31125	40
Caelo	Potash soap DAC	14240801	31561 [†]	20
Caelo	Potash soap DAC	14289101	31650 [†]	20
Caelo	Potash soap DAC	160908	32392	40
Caelo	Potash soap DAC	160909	32393	40
Caelo	Potash soap DAC	160910	32394	40
Caelo	Potash soap DAC	171575	33408	40
Caelo	Potash soap DAC	170461	33409	40
Caelo	Potash soap DAC	170462	33410	40
Caelo	Potash soap DAC	173023	34016	40
Caelo	Potash soap DAC	180707	34149	40

- 78 678 spectra from a total of 1819 batches from further 350 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

[†]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*.

provided by the customer regarding manufacturer and batch number.

- 49 spectra from 26 *Apo-Ident* customers from 37 batches from the substance/substance group *Potash soap DAC*.

Supplier	Substance	Batch	Spectra
Caelo	Potash soap DAC	11198901	1
Caelo	Potash soap DAC	11276401	1
Caelo	Potash soap DAC	13161401	1
Caelo	Potash soap DAC	12060701	1
Caelo	Potash soap DAC	13161901	2
Caelo	Potash soap DAC	12060401	1
Caelo	Potash soap DAC	13322201	1
Caelo	Potash soap DAC	14032801	1
Caelo	Potash soap DAC	13322401	1
Caelo	Potash soap DAC	13322601	1
Caelo	Potash soap DAC	14033001	1
Klenk	Potash soap DAC	14143401	1
Caelo	Potash soap DAC	14032901	1
Caelo	Potash soap DAC	14241001	2
Caelo	Potash soap DAC	14240701	1
Caelo	Potash soap DAC	14240901	1
Caelo	Potash soap DAC	14289101	2
Caelo	Potash soap DAC	14241101	2
Caelo	Potash soap DAC	14143601	1
Caelo	Potash soap DAC	15/134/KS	1
Caelo	Potash soap DAC	14289201	1
Caelo	Potash soap DAC	15240401	1
Caelo	Potash soap DAC	15182001	1
Caelo	Potash soap DAC	15240501	4
Caelo	Potash soap DAC	15435201	2
Caelo	Potash soap DAC	16091101	1
Caelo	Potash soap DAC	16091201	1
Caelo	Potash soap DAC	16256901	2
Caelo	Potash soap DAC	17045801	3
Caelo	Potash soap DAC	16257001	1
Caelo	Potash soap DAC	17221701	2
Caelo	Potash soap DAC	17221901	1
Sanacorp	Potash soap DAC	17302101	1
Caelo	Potash soap DAC	17157501	1
Caelo	Potash soap DAC	17302201	1
Caelo	Potash soap DAC	18060501	1
Sanacorp	Potash soap DAC	18211501	1

- 107910 spectra from 582 *Apo-Ident* customers from a total of 30643 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 *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	160	0	35 675
Type B	0	371	29	78 678
Type C	0	44	5	107 910

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	92.7500 % (> 92.0000 %)
Type C	100.0000 % (> 99.6451 %)	89.7959 % (> 83.6735 %)

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.

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	58.97
31480	30987	11.81	56.58
31561	30987	12.73	58.26
31650	30987	16.18	60.26

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Potash soap Ph.Helv.**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 34278-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 222 872 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.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 40 spectra of 1 reference samples from the substance/substance group *Potash soap Ph.Helv.*

Supplier	Substance	Batch	Sample ID	Spectra
Hänseler AG	Potash soap Ph.Helv.	2017120020	34280	40

- 79 038 spectra from a total of 1829 batches from further 350 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.*
- 107 959 spectra from 582 *Apo-Ident* customers from a total of 30 680 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 *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	35 755
Type B	0	40	0	79 038
Type C	0	0	0	107 959

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9690 %)	100.0000 % (> 85.0000 %)
Type C	100.0000 % (> 99.6449 %)	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.

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	94.49
34279	34279	0.00	60.07

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Propylene glycol
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30872-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Caelo	Propylene glycol	12372405	30872	40	20130107
Henry Lamotte	Propylene glycol	0123095	30920	40	1502554
Caelo	Propylene glycol	14346604	31663	40	1508143
Euro OTC	Propylene glycol	1509031	31738	45	20151005*
Caelo	Propylene glycol	15335403	32074	40	20150930
Caelo	Propylene glycol	15355108	32486	40	20151021
Bombastus	Propylene glycol	301162	32728	40	20160323

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 285 spectra of 7 reference samples from the substance/substance group *Propylene glycol*. These samples are listed above in the [calibration samples](#) section.
- 35 550 spectra from a total of 840 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 355 spectra of 10 reference samples from the substance/substance group *Propylene glycol*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Propylene glycol	14346604	31663 [†]	20
Euro OTC	Propylene glycol	1509031	31738 [†]	15
Euro OTC	Propylene glycol	1603034	32190	40
Euro OTC	Propylene glycol	1606014	32466	40
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

- 78 723 spectra from a total of 1820 batches from further 350 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](#).

*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.

[†]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*.

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.

- 3274 spectra from 507 *Apo-Ident* customers from 515 batches from the substance/substance group *Propylene glycol*.

Supplier	Substance	Batch	Spectra
Caesar & Loretz GmbH, 4...	Propylene glycol	11300505	1
Fagron	Propylene glycol	11K28-N01	9
Fagron	Propylene glycol	11H04-N01	2
Euro OTC	Propylene glycol	11C07-N06	1
Noweda	Propylene glycol	1313HH9041	1
Gehe	Propylene glycol	11300506	1
Bombastus	Propylene glycol	265358	1
Caelo	Propylene glycol	11K28-N01	1
Caelo	Propylene glycol	1804212110	1
Caelo	Propylene glycol	10371307	1
Caelo	Propylene glycol	11300504	1
Bombastus	Propylene glycol	268295	1
Caelo	Propylene glycol	11372007	8
Caelo	Propylene glycol	11300506	3
Caelo	Propylene glycol	5061201	1
Fagron	Propylene glycol	11L22-N14	6
Noweda	Propylene glycol	1112004-01	2
Fagron	Propylene glycol	11372007	2
Caelo	Propylene glycol	11125811	1
Caelo	Propylene glycol	11300505	2
Caelo	Propylene glycol	11372006	14
Caelo	Propylene glycol	20071201	1
Fagron	Propylene glycol	12C06-N04	6
Caelo	Propylene glycol	11H04-N01	1
Caesar & Loretz GmbH, 4...	Propylene glycol	11372007	1
Caelo	Propylene glycol	11372005	3
Gehe	Propylene glycol	11372007	3
Fagron	Propylene glycol	8121120	1
GEHE	Propylene glycol	11372007	1
Caelo	Propylene glycol	12C06-N04	1
Lamotte 004	Propylene glycol	122882	1
Fagron	Propylene glycol	18081121	1
Phagron	Propylene glycol		1
Eigenherstellung	Propylene glycol	120912PML01	1
Bombastus	Propylene glycol	270359	1
Fischbar	Propylene glycol	18091201	1
Anzag	Propylene glycol	12G13N07	1
Caelo	Propylene glycol	1206038-01	1
Caelo	Propylene glycol	11372009	5
Fagron	Propylene glycol	12G13-N07	29
Caesar & Loretz GmbH	Propylene glycol	11372006	1
Caelo	Propylene glycol	122882	1
Noweda	Propylene glycol	11372005	2
Caelo	Propylene glycol	11372010	5
Caelo	Propylene glycol	11372011	3
Euro OTC	Propylene glycol	1206038-01	4
Caelo	Propylene glycol	24041221	2
Caelo	Propylene glycol	12088207	11
Fagron	Propylene glycol	12G13-N07	4
Caelo	Propylene glycol	611211	1
Phönix Gotha	Propylene glycol	11372011	1
Caelo	Propylene glycol	20111203	1

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	3512M-02110	1
Fagron	Propylene glycol	24041221	8
Caelo	Propylene glycol	12088206	4
Gehe	Propylene glycol	12088207	1
Noweda / Henry Lamotte	Propylene glycol	122882	1
Phytocomm	Propylene glycol	12088207	1
Henry Lamotte Oils	Propylene glycol	122880	1
Fagron	Propylene glycol	12g13-n07	1
Noweda	Propylene glycol	12088205	3
ANZAG	Propylene glycol	123095	8
Caelo	Propylene glycol	12088205	3
Fagron	Propylene glycol	2112212110	1
Phönix	Propylene glycol	29595B	1
Caelo	Propylene glycol	20140612-6	1
Caelo	Propylene glycol	113Q-02110	1
Caesar & Loretz GmbH, 4...	Propylene glycol	12169802	5
Caelo	Propylene glycol	12169803	10
Caelo	Propylene glycol	1288205	1
Herbasinica	Propylene glycol	12088206	2
Caelo	Propylene glycol	12169802	16
Fagron	Propylene glycol	12088205	1
Caelo	Propylene glycol	25011302	1
Caelo	Propylene glycol	6021301	1
Anzag 25.01.2013	Propylene glycol	12169802	2
Caelo	Propylene glycol	12169804	8
Henry Lamotte,Phönix	Propylene glycol	123095	2
Sanacorp	Propylene glycol	1206038-01	1
Lamotte	Propylene glycol	123095	1
Henry Lamotte	Propylene glycol	123095	14
Fagron	Propylene glycol	12J04-N06	11
Gehe	Propylene glycol	11372009	1
Caelo	Propylene glycol	28021301	1
Henry Lamotte Oils	Propylene glycol	123095	3
Henry Lamotte Oils GmbH	Propylene glycol	123095	2
Gehe	Propylene glycol	12169802	1
Caelo	Propylene glycol	12G13-N07	4
Caelo	Propylene glycol	12372404	14
Anzag 19.03.13 ek: 3,03EUR	Propylene glycol	12372404	2
Caelo	Propylene glycol	25031301	1
Caelo	Propylene glycol	12372405	15
Caelo	Propylene glycol	150771	1
A.H.D.	Propylene glycol	1112004-01	1
Bombastus	Propylene glycol	123095	1
Henry Lamotte oils GmbH	Propylene glycol	123095	1
Alliance Healthcare	Propylene glycol	272684	1
Caelo	Propylene glycol	18041302	1
Caelo	Propylene glycol	19041307	1
Fagron	Propylene glycol	12K13-N05	13
Euro OTC	Propylene glycol	1109015-01	1
Caelo	Propylene glycol	12372403	7
Fagron	Propylene glycol	1301C004-277798	15
Alliance Healthcare	Propylene glycol	12372403	1
Gehe	Propylene glycol	12372405	2
Phönix	Propylene glycol	12372405	1
Fagron	Propylene glycol	120C004-277798	1
Caelo	Propylene glycol	13100907	22
Caelo	Propylene glycol	31051317	1
Caesar & Loretz GmbH	Propylene glycol	12372404	1
Caelo	Propylene glycol	12372402	2
Fagron	Propylene glycol	1301C004	5

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	13100908	35
EuRho	Propylene glycol	1302002-01	1
Euro OTC	Propylene glycol	1302002-01	9
Hedinger	Propylene glycol	29625B	1
AHD	Propylene glycol	13100907	1
Fagron	Propylene glycol	9051220	6
Caesar/Noweda	Propylene glycol	13100906	1
Caelo	Propylene glycol	26061302	1
Fagron	Propylene glycol	12k13-n05	1
Caelo	Propylene glycol	12100907	1
Bombastus	Propylene glycol	277548	4
Caelo	Propylene glycol	13100906	11
Fagron	Propylene glycol	26021320	5
Caelo	Propylene glycol	13071303	1
Noweda	Propylene glycol	1302002-01	1
Caelo	Propylene glycol	12K13-N05	1
Henry Lam./ Phönix	Propylene glycol	123095	1
Sanacorp	Propylene glycol	1302002-01	1
Caelo	Propylene glycol	11300502	1
Fagron	Propylene glycol	12372403	1
Fagron	Propylene glycol	1304C010-281099	21
Fagron	Propylene glycol	12G13-No7	1
Phönix	Propylene glycol	Retest03083	1
Fargon	Propylene glycol	12K13-N05	2
Phoenix	Propylene glycol	13100907	1
Caelo	Propylene glycol	13167004	24
Cealo	Propylene glycol	13100907	2
Gehe	Propylene glycol	13100908	3
Sanacorp	Propylene glycol	123095	3
Caelo	Propylene glycol	2913M-02110	1
Caelo	Propylene glycol	1301C004-277798	2
Caesar /phönix	Propylene glycol	13167003	1
Caelo	Propylene glycol	13100905	2
Caelo	Propylene glycol	13167006	7
Fagron	Propylene glycol	1304C010	1
Caelo	Propylene glycol	1301C003-277799	1
Euro OTC	Propylene glycol	130200201	1
Fagron	Propylene glycol	3959/V02/15	1
Alliance Healthcare	Propylene glycol	10274303	1
Fagron	Propylene glycol	1304C010	10
Caelo	Propylene glycol	42488055	1
Fagron	Propylene glycol	1301C003	3
Caelo	Propylene glycol	13167003	19
Caelo	Propylene glycol	1310098	1
Phönix Gotha	Propylene glycol	1301C004-277798	1
Fagron	Propylene glycol	1304C009	6
Fagron	Propylene glycol	1301C003-277799	1
Caelo	Propylene glycol	2101302	1
Caelo	Propylene glycol	1272404	1
Fagron	Propylene glycol	1304c010-281099	3
Fagron	Propylene glycol	1304C010281099	1
Caesar/Noweda	Propylene glycol	13167006	2
Noweda	Propylene glycol	13167003	1
Phönix	Propylene glycol	13167004	1
Bombastus	Propylene glycol	281569	3
Euro OTC	Propylene glycol	1307021-01	7
Fagron	Propylene glycol	181013prop	1
Fagron	Propylene glycol		2
Phönix	Propylene glycol	13167006	1
canea, anzag	Propylene glycol	13167003	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Propylene glycol	1307021-01	3
Caelo	Propylene glycol	12111304	1
Caelo	Propylene glycol	1316003	1
Gehe	Propylene glycol	13167003	2
phönix	Propylene glycol	AKD30	1
Caelo	Propylene glycol	13256709	14
Caelo	Propylene glycol	13256704	26
Phönix	Propylene glycol	13167003	2
Caelo	Propylene glycol	26021320	2
Caelo	Propylene glycol	13256706	20
Fagron	Propylene glycol	1304c009-281100	1
Fagron	Propylene glycol	1304C-010	1
Caelo	Propylene glycol	13167005	1
Fagron	Propylene glycol	20122013B	1
Noweda	Propylene glycol	13256704	1
Caelo	Propylene glycol	24121301	1
Fagron	Propylene glycol	1304C009-281100	3
Fagron	Propylene glycol	13E22-B03-283450	22
Fagron	Propylene glycol	23021320	1
Phoenix	Propylene glycol	1301C004-277798	1
Sanacorp	Propylene glycol	13167006	1
Fagron	Propylene glycol	13G09-B01-283452	1
Fagron	Propylene glycol	9031321	1
Bombastus	Propylene glycol	7/14	1
Caelo	Propylene glycol	13256707	29
Fagron	Propylene glycol	13E22-B03	11
Euro OTC	Propylene glycol	130702101	1
Gehe	Propylene glycol	13256704	2
Henry Lamotte Oils	Propylene glycol	7021401	1
Caelo	Propylene glycol	70214PJK02	1
Caelo	Propylene glycol	11021404	1
Caelo	Propylene glycol	1304C009-281100	2
ANZAG 20.01.2014	Propylene glycol	13256704	1
Fagron	Propylene glycol	1304C009-28	1
Fagron	Propylene glycol	13E22B03	1
Fagron	Propylene glycol	13E22B0328345	1
Bombastus	Propylene glycol	283937	1
Caelo	Propylene glycol	13256705	18
Fagron	Propylene glycol	13040010-281099	1
Anzag	Propylene glycol	13E22-B03-283450	1
Phoenix am 10.03.2014	Propylene glycol	13256709	1
Fagron	Propylene glycol	1307021-01	1
Fagron	Propylene glycol	13E22-B03-283451	2
Phoenix	Propylene glycol	1304C010-281099	1
Caelo	Propylene glycol	31256708	1
Henry Lamotte Oils GmbH...	Propylene glycol	123095	1
Caelo	Propylene glycol	13256708	8
Fagron	Propylene glycol	1314Q2110	1
Euro OTC	Propylene glycol	1401010-01	7
Fagron	Propylene glycol	18061321	1
Sanacorp	Propylene glycol	13256706	1
Fagron	Propylene glycol	13G09-B01-283456	23
VDL	Propylene glycol	13256709	1
Fagron	Propylene glycol	14A09-B04	15
Noweda	Propylene glycol	13256705	3
Caelo	Propylene glycol	26041402	1
Caelo	Propylene glycol	14051804	13
HenryLamotteOilsGmbH	Propylene glycol	123095	1
Lamotte	Propylene glycol	5671401	17
Henry Lamotte Oils GmbH	Propylene glycol	5671401	10

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Supplier	Substance	Batch	Spectra
Fagron	Propylene glycol	14A09-B04-289600	1
Caelo	Propylene glycol	13G09-B01283456	1
Cealo / Noweda	Propylene glycol	13256708	2
Phoenix	Propylene glycol	13256705	1
VDL 14.05.14; Preis 3.07	Propylene glycol		1
Caelo	Propylene glycol	140101001	2
Phoenix	Propylene glycol	13E22B03283450	1
Caelo	Propylene glycol	123095	1
Sanacorp	Propylene glycol	AKD70	1
Caelo	Propylene glycol	14051802	18
Euro OTC	Propylene glycol	140101001	1
Fagron	Propylene glycol	18061311	1
VDL 14.05.14; Preis 3.07	Propylene glycol	14051804	2
Fagron	Propylene glycol	13G09B01283456	1
Fagron	Propylene glycol	13G09-B01	5
Hedinger	Propylene glycol	29702B	1
Caesar & Loretz GmbH Hi...	Propylene glycol	13256705	1
Henry Lamotte Oils GmbH...	Propylene glycol	5671401	1
GEHE 06.05.2014	Propylene glycol	13256705	2
Gehe	Propylene glycol	14051802	1
Caelo	Propylene glycol	3071402	1
Fagron	Propylene glycol	200749-B04-289597	1
Caelo	Propylene glycol	12071403	1
Caelo	Propylene glycol	14051803	7
Fagron	Propylene glycol	14A09-B04-289597	21
Caelo	Propylene glycol	14051805	22
Caesar & Loretz GmbH	Propylene glycol	14051804	2
Fagron	Propylene glycol	13E22-B03-28350	1
Caesar/Noweda	Propylene glycol	14051803	2
Lamotte Oils GmbH	Propylene glycol	123095	1
Fagron	Propylene glycol	280714C	1
Fagron	Propylene glycol	TQ131410	2
Bombastus	Propylene glycol	286382	4
Fagron	Propylene glycol	13G09B01	2
Caelo	Propylene glycol	140510804	1
Fagron	Propylene glycol	14A09B04	4
Phoenix	Propylene glycol	18061321	1
Otto Fischer GmbH / Alli...	Propylene glycol	5671401	1
lamotte	Propylene glycol	5671401	2
Phoenix	Propylene glycol	14a09-b04-289597	1
Caelo	Propylene glycol	14113102	16
Fagron	Propylene glycol	1405003-01	1
Euro OTC	Propylene glycol	140500301	3
Sanacorp	Propylene glycol	49/AKD1	1
Fagron	Propylene glycol	14A09-B04-289598	5
Caelo	Propylene glycol	27091402	2
Caelo	Propylene glycol	29091403	1
Caelo	Propylene glycol	13E22-B03	1
Phoenix	Propylene glycol	29722B	1
Caelo	Propylene glycol	1051805	1
Caelo	Propylene glycol	1405003-01	1
Phönix	Propylene glycol	114113102	1
Phoenix	Propylene glycol	14051805	1
Caelo	Propylene glycol	14A09-B04-289598	1
Henry Lamotte/Anzag	Propylene glycol	5671401	2
Bombastus	Propylene glycol	289078	5
Caelo	Propylene glycol	83/2014	1
noweda	Propylene glycol	14051802	1
Henry Lamotte Oils GmbH...	Propylene glycol	123095	1
Fagron	Propylene glycol	14A09-B04-289599	3

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Supplier	Substance	Batch	Spectra
Sanacorp	Propylene glycol	14113103	1
Fagron	Propylene glycol	14C05-B02-295787	10
Caelo	Propylene glycol	14248702	12
Euro OTC	Propylene glycol	1405003-01	2
Caelo	Propylene glycol	12345	1
Caelo	Propylene glycol	13111405	1
Phönix	Propylene glycol	141113102	1
Caelo	Propylene glycol	14113105	12
Fagron	Propylene glycol	14C05-B02	4
Caelo	Propylene glycol	14113103	5
Euro OTC	Propylene glycol	1408020-01	11
Phönix	Propylene glycol	14113102	1
Phoenix	Propylene glycol	14A09-B04-289597	1
Fagron	Propylene glycol	14C05-B02-295788	4
Caelo	Propylene glycol	1113102	1
Caelo	Propylene glycol	5671401	1
Fagron	Propylene glycol	23011420	1
Caelo	Propylene glycol	14248704	6
Gehe	Propylene glycol	14C05-B02-295787	1
Phönix Gotha	Propylene glycol	14C05-B02-295787	1
Caesar & Loretz GmbH Hi...	Propylene glycol	14248706	1
Caelo	Propylene glycol	14C05-B02-295787	2
Fagron	Propylene glycol	14C09-B02-289597	1
Caelo	Propylene glycol	14248703	19
Caelo	Propylene glycol	14248706	4
Noweda 29.09.2014	Propylene glycol	1304C010-281099	1
Henry Lamotte Oils GmbH	Propylene glycol	5471401	1
Caelo	Propylene glycol	1428706	1
Caelo	Propylene glycol	14248707	9
BASF AG	Propylene glycol	140802001	1
Caesar & Loretz GmbH Hi...	Propylene glycol	14248707	1
Caelo	Propylene glycol	125099	16
Fagron	Propylene glycol	270114A	1
Sanacorp	Propylene glycol	14248706	1
VDL	Propylene glycol	14113103	1
Caelo	Propylene glycol	1428704	2
Euro/ Sanacorp	Propylene glycol	14248704	1
Euro OTC	Propylene glycol	140802001	1
Alliance 05.2.15	Propylene glycol	14113105	1
Caelo	Propylene glycol	16021506	1
Henry Lamotte	Propylene glycol	5671401	1
Caelo	Propylene glycol	14346602	4
Lamotte/Noweda	Propylene glycol	5671401	1
Sanacorp	Propylene glycol	50/AKD3	1
Sanacorp	Propylene glycol	14248703	1
AHD 26.01.15	Propylene glycol	14248707	1
Bombastus	Propylene glycol	291103	1
Caelo	Propylene glycol	4248702	1
Gehe 3.3.15	Propylene glycol	14C05-B02-295787	1
Phönix 4.3.15	Propylene glycol	1405003-01	1
Henry Lamotte oils GmbH	Propylene glycol	125099	1
Caelo	Propylene glycol	14346608	13
Euro OTC	Propylene glycol	14346602	2
Caelo	Propylene glycol	14346605	2
Gehe	Propylene glycol	14346602	2
Europ. AB	Propylene glycol	5671401	1
BASF	Propylene glycol	1501013-01	2
EuRho/Noweda	Propylene glycol	140020-01	1
Sanacorp	Propylene glycol	14346607	1
Alliance Healthcare/Hen...	Propylene glycol	125099	2

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	514E-02110	1
Caelo	Propylene glycol	14346603	11
Caelo	Propylene glycol	14346607	23
Henry Lamotte / Allianc...	Propylene glycol	125099	1
Euro OTC	Propylene glycol	125099	9
Caelo	Propylene glycol	17041501	1
Fagron	Propylene glycol	14H22-B02	1
Euro OTC	Propylene glycol	1501013-01	15
EuroPTC/Phönix	Propylene glycol	15901013-01	1
Caelo	Propylene glycol	14346609	18
Henry Lamotte Oils GmbH...	Propylene glycol	125099	2
Sanacorp	Propylene glycol	125099	5
Bombastus	Propylene glycol	293947	9
Caelo	Propylene glycol	14346606	8
Euro OTC	Propylene glycol	150101301	2
Fagron	Propylene glycol	50515PJK01	1
Gehe	Propylene glycol	15A07-B04-302969	1
Fagron	Propylene glycol	15A07-B04-302969	7
Fagron	Propylene glycol	19111421	4
Fagron	Propylene glycol	14H22-B02-302506	6
Henry Lamotte	Propylene glycol	125099	2
Caelo	Propylene glycol	14346604	14
Caelo	Propylene glycol	15A07-B04-302969	1
Henry/Geibo	Propylene glycol	125099	1
Sanacorp	Propylene glycol	5671401	1
Hedinger/Phoenix	Propylene glycol	29762B	2
Caelo	Propylene glycol	1793451	1
Henry Lamotte Oils / No...	Propylene glycol	125099	2
caesar	Propylene glycol	14248707	1
Caelo	Propylene glycol	8051503	1
Henry Lamotte Oils GmbH	Propylene glycol	125099	4
Apotheke-Ansatz	Propylene glycol	19/15	1
Fagron	Propylene glycol	15A07B04	3
Caelo	Propylene glycol	1436604	1
Euro OTC	Propylene glycol	1504031-01	21
Bombastus	Propylene glycol	2983947	1
Sanacorp	Propylene glycol	15069201	1
Linden-Apo	Propylene glycol	1501013-01	1
Caelo	Propylene glycol	1071502	1
Fagron	Propylene glycol	15A07-B04-302970	20
Caelo	Propylene glycol	15069202	17
Caesar&loretz,Phoenix	Propylene glycol	15069202	1
Caelo	Propylene glycol	19111421	1
Caelo	Propylene glycol	1518601	1
Caelo	Propylene glycol	15069201	5
Caelo	Propylene glycol	15181601	23
Fagron	Propylene glycol	15A07-B04	4
Caelo	Propylene glycol	15181602	14
Euro OTC	Propylene glycol	150403101	3
Caelo	Propylene glycol	15181604	7
VDL Nachliefer; 11.7.15...	Propylene glycol	15181602	1
Fagron	Propylene glycol	14C05B02295787	1
Caelo	Propylene glycol	15181603	13
Caelo	Propylene glycol	28071503	1
Phoenix	Propylene glycol	15181602	1
Gehe	Propylene glycol	15069202	1
Caelo	Propylene glycol	15081501	1
Fagron	Propylene glycol	17082015A	1
Bombastus	Propylene glycol	295111	5
Caelo	Propylene glycol	15262401	17

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Propylene glycol	15A07-B04-302970	2
Caelo	Propylene glycol	2310070	1
Caesar&Loretz GmbH/Anzag	Propylene glycol	15181605	2
Euro OTC	Propylene glycol	15040301-01	1
Caelo	Propylene glycol	15181605	10
Hedinger	Propylene glycol	29775B	1
Bombastus	Propylene glycol	296424	4
Caelo	Propylene glycol	15A07-B04-302970	3
Euro OTC	Propylene glycol	5315HH9041	2
Caelo	Propylene glycol	15262406	5
ACM	Propylene glycol	KNC0776J15	1
Henry Lamotte Oils GmbH...	Propylene glycol	125099	1
Caelo	Propylene glycol	15262402	10
EuRho/Noweda	Propylene glycol	1504031-01	1
Caelo	Propylene glycol	15262407	10
Caelo	Propylene glycol	15262403	23
Caelo	Propylene glycol	15F25-B02-311890	1
Fagron	Propylene glycol	15F25-B02-311890	5
Caelo	Propylene glycol	151816055	1
Fagron	Propylene glycol	15A07-B04302970	1
Apotheke/Defektur Misch...	Propylene glycol	35/15	1
Caelo	Propylene glycol	5262402	1
Noweda	Propylene glycol	15069202	1
Fagron	Propylene glycol	15G28-B03-311889	4
Caelo	Propylene glycol	1526407	1
Noweda	Propylene glycol	15262402	1
Fagron	Propylene glycol	15A07B04302970	1
Rondell Apotheke	Propylene glycol	29797B	2
Caelo	Propylene glycol	54/AKD7	1
Caelo	Propylene glycol	1518602	1
Bombastus	Propylene glycol	297626	11
Henry Lamotte	Propylene glycol	1000001132	16
Caelo	Propylene glycol	3615U-02110	1
Euro OTC	Propylene glycol	1509031-01	20
Lamotte/Anzag11	Propylene glycol	1000001132	3
Caelo	Propylene glycol	15335408	12
Caelo	Propylene glycol	15262408	9
Euro PTC Pharma GmbH/Sa...	Propylene glycol	1504031-01	1
Fagron	Propylene glycol	6071520	3
Caelo	Propylene glycol	15335407	16
Gehe	Propylene glycol	15181605	1
Fagron	Propylene glycol	150403101	1
Fagron	Propylene glycol	5115Q-02110	1
Euro OTC	Propylene glycol	1509031-031	1
Caelo	Propylene glycol	15262404	15
Lamotte	Propylene glycol	125099	2
Caelo	Propylene glycol	15262409	11
henry lamotte	Propylene glycol	125099	1
Fagron	Propylene glycol	15B24-B40	3
Caelo	Propylene glycol	1000001132	5
Sanacorp	Propylene glycol	15335405	1
Bambustus/Noweda	Propylene glycol	299106	10
Caelo	Propylene glycol	15G28-B03-311889	1
Caelo	Propylene glycol	15335405	25
Euro OTC	Propylene glycol	15262403	1
Caelo	Propylene glycol	15335406	23
Caesar & Loretz GmbH	Propylene glycol	15262403	1
Fagron	Propylene glycol	15G28-B03	4
Fagron	Propylene glycol	15G28-B03-314768	22
Fagron	Propylene glycol	15262407	1

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Supplier	Substance	Batch	Spectra
Hedinger	Propylene glycol	29797B	2
Henry Lamotte / Allianc...	Propylene glycol	1000001132	2
Caelo	Propylene glycol	1562408	1
Fagron	Propylene glycol	15B24-B40-307379	4
lamotte/ Phoenix	Propylene glycol	15335405	2
Sanacorp	Propylene glycol		1
Caelo	Propylene glycol	15335403	23
Hedinger/ Sanacorp	Propylene glycol	29743B	1
Caelo	Propylene glycol	1526409	1
Caelo	Propylene glycol	300915	1
Fagron	Propylene glycol	5021520	2
Caelo	Propylene glycol	1533405	2
Henry Lamotte Oils GmbH	Propylene glycol	1000001132	5
Noweda	Propylene glycol	15262409	1
EuRho	Propylene glycol	1509031-01	2
Lamotte	Propylene glycol	1000001132	3
Caesar & Loretz GmbH Hi...	Propylene glycol	15335403	1
Henry Lamotte GmbH	Propylene glycol	125099	1
Caelo	Propylene glycol	1316Q-02110	1
Henry Lamotte/Noweda	Propylene glycol	125099	2
henry lamotte	Propylene glycol	1000001132	1
Caelo	Propylene glycol		1
Noweda	Propylene glycol	15335405	1
Lamotte GmbH	Propylene glycol	125099	1
Beiersdorf AG	Propylene glycol	15335404	1
Caelo	Propylene glycol	153565101	1
Caesar & Loretz GmbH Hi...	Propylene glycol	15335404	1
Fagron	Propylene glycol	15G28-B03-314769	2
Bombastus	Propylene glycol	299106	6
Caelo	Propylene glycol	15430504	14
Lamotte / AHD	Propylene glycol	1000001132	1
Caelo	Propylene glycol	29814B	1
Caelo	Propylene glycol	15335404	22
Caelo	Propylene glycol	6509HH9041	1
Fagron	Propylene glycol	15L26-B01	1
Euro OTC	Propylene glycol	1603034-01	18
Caelo	Propylene glycol	15430505	6
Henry Lamotte Oils / No...	Propylene glycol	1000001132	1
Fagron	Propylene glycol	15L23-B01-318036	13
Caelo	Propylene glycol	150903101	1
Henry Lamotte Olis GmbH...	Propylene glycol	10000001132	1
Caelo	Propylene glycol	15430506	8
Caelo	Propylene glycol	15430513	7
Sanacorp	Propylene glycol	15335404	1
Bombastus	Propylene glycol	301162	19
Caesar&Loretz GmbH	Propylene glycol	15335405	1
Apo-ident	Propylene glycol	1509031-01	1
Apo-ident	Propylene glycol	1603034-01	2
Phoenix	Propylene glycol	125099	1
Caelo	Propylene glycol	153335405	1
Henry Lamotte/ Noweda	Propylene glycol	1000001132	2
Wolf-Apotheke	Propylene glycol	15430506	1
Caelo	Propylene glycol	1603034-01	1
Caelo	Propylene glycol	15L23-B01-318036	1
Caelo	Propylene glycol	6071520	1
phönix	Propylene glycol	15335405	1
Celo	Propylene glycol	11607-2	1
Fagron	Propylene glycol	16C10-B04-319299	2
Fagron	Propylene glycol	15L23-B01-3108036	1
Sonnen-Apotheke Wefensl...	Propylene glycol	20/16	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Propylene glycol	1603034	1
Bombastus	Propylene glycol	15430504	2
Hedinger/Alliance Heath...	Propylene glycol	29775B	1
Hedinger/Sanacorp	Propylene glycol	29823B	1
Alliance H.	Propylene glycol	15430513	1
Fagron	Propylene glycol	16C10-B04-321081	21
Fagron	Propylene glycol	15335407	1
Euro OTC	Propylene glycol	1509031-02	1
Caelo	Propylene glycol	1540513	1
Caelo	Propylene glycol	15430502	15
Caelo	Propylene glycol	15355107	1
Caelo	Propylene glycol	15430503	29
Caelo	Propylene glycol	15413409	1
Henry Lamotte/Sanacorp	Propylene glycol	100001132	1
Euro OTC	Propylene glycol	160303401	1
Henry Lamotte Oils GmbH	Propylene glycol	1000002768	3
Caelo	Propylene glycol	15355108	12
phönix	Propylene glycol	15430502	1
Phoenix	Propylene glycol	1000001132	1
Euro OTC	Propylene glycol	15355108	1
Euro OTC	Propylene glycol	q603034-01	1
Lamotte / Noweda	Propylene glycol	1000002768	1
H.Lamotte	Propylene glycol	1000002768	2
Sonnen-Apotheke Wefensl...	Propylene glycol		1
sanacorp, 3,87EUR , 12.09...	Propylene glycol	154305025	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000001132	2
Caelo	Propylene glycol	15439502	1
Caelo/Phönix	Propylene glycol	15430502	1
Caelo	Propylene glycol	154305	1
Caelo	Propylene glycol	1540502	1
Caelo	Propylene glycol	1000002768	1
Euro OTC	Propylene glycol	150903101	1
Euro OTC	Propylene glycol	1606014-01	14
Caelo	Propylene glycol	15430514	5
phönix	Propylene glycol	15430504	2
Caelo	Propylene glycol	15430508	17
Hedinger	Propylene glycol	29823B	1
Fagron	Propylene glycol	16C10-Bo4-321081	1
Caesar & Loretz GmbH Hi...	Propylene glycol	15430508	1
Lamotte Sanacorp	Propylene glycol	1000001132	1
Henry Lamotte GmbH	Propylene glycol	1000002768	1
Anzag	Propylene glycol	1000002768	1
Fagron	Propylene glycol	16C10-B04-323302	3
Fagron	Propylene glycol	2021621	2
Alliance Healthcare	Propylene glycol	15430508	1
Fagron	Propylene glycol	16C10-B04	5
Caelo	Propylene glycol	16105403	42
Caelo	Propylene glycol	15430511	1
Lamotte/Phönix	Propylene glycol	2768	2
Euro OTC	Propylene glycol	6509HH9041	1
Caelo	Propylene glycol	16105404	5
Euro OTC	Propylene glycol	16060114-01	1
Lamotte/Phönix	Propylene glycol	1000002768	2
Bombastus	Propylene glycol	303788	21
Euro OTC	Propylene glycol	15430508	2
Carlo/ Gehe	Propylene glycol	16105403	1
Caelo	Propylene glycol	15430512	6
Fagron	Propylene glycol	15430503	1
Gehe	Propylene glycol	1000002992	2
Hedinger	Propylene glycol	29837B	1

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Supplier	Substance	Batch	Spectra
Fagron	Propylene glycol	16c10-b04-321081	1
Caelo	Propylene glycol	16C10-B04-321659	1
Caelo	Propylene glycol	16251201	54
19.04.2016 Phoenix 2,84EUR	Propylene glycol	15335403	1
Fagron	Propylene glycol	16E09-B02-324843	10
Calo/Sanacorp	Propylene glycol	16105403	1
Fagron	Propylene glycol	8021621	2
Henry Lamotte	Propylene glycol	1000002768	5
Caelo	Propylene glycol	16C10-B04-323302	2
Euro OTC	Propylene glycol	16016014-01	1
Lamotte / Noweda	Propylene glycol	15430512	2
Caesar & Loretz/Noweda	Propylene glycol	16105403	1
Fagron	Propylene glycol	16C-10-B04	1
Caelo	Propylene glycol	16251203	10
H.Lamotte/anzag 30.12.16	Propylene glycol	1000002992	1
Henr	Propylene glycol	1000002768	1
Caelo	Propylene glycol	16251202	36
Fagron	Propylene glycol	16E09-B02-324	2
Caelo	Propylene glycol	170131PG/16105403	1
Noweda/Euro	Propylene glycol	1610031-01	1
Henry Lamotte	Propylene glycol	2992	1
Caelo	Propylene glycol	1615403	1
Fagron	Propylene glycol	16G04-B01-328151	10
Caelo	Propylene glycol	16251201/1060217	1
phönix	Propylene glycol	16251202	4
Caelo	Propylene glycol	16251208	3
Caelo	Propylene glycol	1000002992	2
Fagron	Propylene glycol	16E09-B02-3024843	1
Henry Lamotte	Propylene glycol	1000002992	5
Lamotte/Kehr	Propylene glycol	8002520002	1
caesar&lorenz GmbH,Phön...	Propylene glycol	16251201	1
siehe Protokoll	Propylene glycol	303788	1
Bombastus	Propylene glycol	306364	1
Henry Lamotte / Noweda	Propylene glycol	1000002768	1
Hedinger/VDL	Propylene glycol	29847B	1
Fagron	Propylene glycol	16E09-B02	2
Noweda/Euro	Propylene glycol	1603034-01	1
Lamotte	Propylene glycol	1000002768	2
Fargon	Propylene glycol	16C10-B04-321081	1
Caelo	Propylene glycol	1562404	1
Hedinger vdL	Propylene glycol	16251202	2
Euro OTC	Propylene glycol	200749	1
Caesar & Loretz GmbH	Propylene glycol	16251201	1
Henry Lamotte Oils GmbH	Propylene glycol	1000002992	2
Lamotte/Phoenix	Propylene glycol	1000002768	1
Caelo	Propylene glycol	16C10B04323302	1
Caelo	Propylene glycol	16251207	7
Hubertus Apotheke	Propylene glycol	16G04-B01-328151	1
Fagron	Propylene glycol	15L23	1
Euro OTC	Propylene glycol	1610031-01	15
Phönix	Propylene glycol	16E09-B02-324843	1
Caelo	Propylene glycol	18031704	1
Fagron	Propylene glycol	16E09-B02-325331	2
Fagron	Propylene glycol	200749-0001	1
Henry Lamotte	Propylene glycol	8002520002	7
Henry Lamotte GmbH	Propylene glycol	1000002992	1
Caelo	Propylene glycol	1625120	1
Hedinger	Propylene glycol	29859B	1
Bombastuts/Gehe	Propylene glycol	307185	2
Euro OTC	Propylene glycol	1000002992	1

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Supplier	Substance	Batch	Spectra
Gehe	Propylene glycol	16251202	2
Euro OTC	Propylene glycol	160303401-01	1
Euro/ Sanacorp	Propylene glycol	1610031-01	1
Henry Lamotte/Alliance	Propylene glycol	8002520002	1
Fagron	Propylene glycol	16G04-B01-329687	2
Henry Lamotte,Gehe 4.4.17	Propylene glycol		1
Caelo	Propylene glycol	16251206	35
Lamotte	Propylene glycol	1000002992	1
Anzag	Propylene glycol	8002520002	4
Caelo	Propylene glycol	16251205	32
Euro OTC	Propylene glycol	1610031	1
Lamotte/AHD	Propylene glycol	8002520002	2
Caelo	Propylene glycol	11051707	1
Klosterring	Propylene glycol	1625121	1
Henry Lamotte Oils	Propylene glycol	8002520002	1
Lamotte/Anzag	Propylene glycol	8002520002	1
Euro OTC	Propylene glycol	16C10-B04-321081	1
Henry Lamotte / Noweda	Propylene glycol	8002520002	1
Lamotte	Propylene glycol	8002520002	3
Gehe	Propylene glycol	8002520002	2
H.Lamotte	Propylene glycol	8002520002	2
Fagron	Propylene glycol	16G04B01328151	3
Caelo	Propylene glycol	16G04B01328151	1
Gehe	Propylene glycol	16251207	1
Fagron	Propylene glycol	17A06-B03-332091	11
Fagron	Propylene glycol	30041621	1
Henry Lamotte / Sanacorp	Propylene glycol	8002520002	1
Henry Lamotte Oils/ Gehe	Propylene glycol	1000002992	1
Alliance/Henry	Propylene glycol	8002520002	1
Henry Lamotte/Noweda	Propylene glycol	8002520002	1
Caelo	Propylene glycol	10061712	1
GEHE	Propylene glycol	16G04-B01-328151	1
Hedinger/VDL	Propylene glycol	29859B	1
Caelo	Propylene glycol	162251207	1
Euro OTC	Propylene glycol	1703024-01	10
Caelo	Propylene glycol	17061707	1
H.Lamotte/Anzag 16.05.17	Propylene glycol	8002520002	2
Caelo	Propylene glycol	8002520002	4
Fagron	Propylene glycol	16G04-B01	1
Fagron	Propylene glycol	17A06-B03	2
Phoenix	Propylene glycol	16251205	1
Caelo	Propylene glycol	16551207	1
Phoenix	Propylene glycol	17053801	1
Bombastus	Propylene glycol	307185	6
Caelo	Propylene glycol	6071718	1
Caelo	Propylene glycol	307185	1
Caelo	Propylene glycol	16851205	1
BASF/Gehe	Propylene glycol	1610031-01	1
AHD Lamotte GmbH	Propylene glycol	8002520002	1
Henry Lamotte Oils/Phönix	Propylene glycol	8002520002	2
Caelo	Propylene glycol	17053801	24
Henry Lamotte Oils GMBH...	Propylene glycol	8002520002	4
Caelo	Propylene glycol	1651206	1
Caelo	Propylene glycol	17053804	36
Caelo	Propylene glycol	29879B	1
Caelo	Propylene glycol	17053802	6
Caelo	Propylene glycol	17a06-b03-332091	1
Noweda	Propylene glycol	17053804	1
Bombastus	Propylene glycol	309030	3
Caelo	Propylene glycol	170808PG/16251206	1

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	58/AKD16	1
Noweda	Propylene glycol	15430508	1
Phoenix	Propylene glycol	307185	1
Noweda	Propylene glycol	16251202	1
Caelo	Propylene glycol	1140817	1
Delta	Propylene glycol	17A06-B03-332091	1
Lamotte/Sanacorp	Propylene glycol	8002520002	2
Henry Lamotte GmbH/Phönix	Propylene glycol	8002520002	1
Caelo	Propylene glycol	18081702	1
phönix	Propylene glycol	17053801	1
Kehr	Propylene glycol	17053801	1
Caelo	Propylene glycol	1705804	1
phönix	Propylene glycol	17053806	2
GEHE	Propylene glycol	17A06-B03-332091	1
Caelo	Propylene glycol	170538015378	1
Henry Lamotte Oils GmbH...	Propylene glycol	8002520002	1
Caelo	Propylene glycol	17053806	35
Euro/Noweda	Propylene glycol	1703024-01	1
gehe	Propylene glycol	8002520002	1
Caelo	Propylene glycol	12101701	1
Caelo	Propylene glycol	17053803	1
Lamotte/ Vedono	Propylene glycol	8003093001	2
Caelo	Propylene glycol	17053807	4
Bombastus	Propylene glycol	309031	4
Fagron	Propylene glycol	17E22-B-10-336830	1
Henry Lamotte Oils/ Gehe	Propylene glycol	8002520002	1
Caelo	Propylene glycol	17053809	34
Henry Lamotte	Propylene glycol	8003093001	7
Gehe/Henry Lamotte	Propylene glycol	8002520002	1
Caelo	Propylene glycol	4111708	1
Caelo	Propylene glycol	171106PG/16251202	1
H.Lamotte	Propylene glycol	8003093001	1
Sanacorp	Propylene glycol	17053802	1
Fagron	Propylene glycol	17E22B10336830	2
Caelo	Propylene glycol	13111703	1
Fagron	Propylene glycol	17E22-B10-336830	4
GEHE	Propylene glycol	17053804	1
henry lamotte/gehe	Propylene glycol	8002520002	1
H.Lamotte/Anzag 21.11.17	Propylene glycol	8003093001	1
Caelo	Propylene glycol	2021621	1
Caelo	Propylene glycol	8003093001	1
Fargon	Propylene glycol	17A06-B03-332091	1
Fagron	Propylene glycol	6031720	1
Lamotte/Anzag	Propylene glycol	8003093001	2
Caesar und Loretz GmbH	Propylene glycol	17053806	2
Caelo	Propylene glycol	11121702	1
Frgon / Alliance Healthc.	Propylene glycol	17A06-B03-334896	1
Bombastus	Propylene glycol	311416	3
Caelo	Propylene glycol	170538065447	1
Henry Lamotte	Propylene glycol	8002520002	1
Caeolo / Phönix	Propylene glycol	17053806	2
GEHE	Propylene glycol	17053809	2
Caelo	Propylene glycol	17275502	20
Fagron	Propylene glycol	17E22	1
Sanacorp	Propylene glycol	8003093001	2
Sanacorp	Propylene glycol	17053814	1
AHD	Propylene glycol	17053809	1
Caelo	Propylene glycol	17053805	1
Caelo	Propylene glycol	17053814	4
Euro OTC	Propylene glycol	1708002-01	9

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	17053810	2
Fagron	Propylene glycol	17H03-B04-340573	6
Fagron	Propylene glycol	17A06-B03-334896	2
Caelo	Propylene glycol	180130PG/17275502	1
Euro OTC	Propylene glycol	1711023-01	11
Euro OTC	Propylene glycol	17423HH431	2
Lamotte/Ebert	Propylene glycol	8003093001	1
Hedinger	Propylene glycol	29897B	1
Hedinger	Propylene glycol	29905B	1
Hedinger	Propylene glycol	29859BP	1
Bombastus	Propylene glycol	17H03-B04-340573	1
Lamotte GmbH/ Kehr	Propylene glycol	8003093001	1
Caelo	Propylene glycol	2021801	1
Gehe/Lamotte	Propylene glycol	8003093001	2
Caelo	Propylene glycol	12021823	1
Caelo	Propylene glycol	17321703	31
Bombastus	Propylene glycol	17275502	1
Phoenix/Cealo	Propylene glycol	16C10-B04-319299	1
Lamotte/AHD	Propylene glycol	8003093001	1
AHL	Propylene glycol	17H03-B04-340573	2
Caelo	Propylene glycol	17321704	13
Kehr	Propylene glycol	17275502	2
Caelo	Propylene glycol	1070318/17053809	1
GEHE	Propylene glycol	17321703	1
Gehe	Propylene glycol	17321705	1
Caelo	Propylene glycol	17275504	1
Fiebig	Propylene glycol	8002520002	1
Henry Lamotte,Gehe 3.4.18	Propylene glycol	8003093001-20180404M	1
Fagron	Propylene glycol	17E22-B10-338768	1
Caelo	Propylene glycol	17A06B03334896	1
GEHE	Propylene glycol	17H03-B04-340573	1
Caelo	Propylene glycol	17321705	2
Henry Lamotte Oils/ Gehe	Propylene glycol	8003093001	1
Lamotte	Propylene glycol	8003093001	3
Allianz	Propylene glycol	8003093001	2
Caelo	Propylene glycol	5051802	1
Henry Lamotte / Sanacorp	Propylene glycol	8003093001	1
Caelo	Propylene glycol	7051807	1
Caelo	Propylene glycol	18064901	32
Fagron	Propylene glycol	17H03-B04-344395	4
Caelo	Propylene glycol	18064902	10
H.Lamotte	Propylene glycol	1000007047	2
Euro OTC	Propylene glycol	1000007047	2
Lamotte / Phönix	Propylene glycol	8003093001	1
Caesar & Lorenz GmbH	Propylene glycol	18064901	2
Sanacorp	Propylene glycol	1000007047	2
Caelo	Propylene glycol	18064904	20
Fagron	Propylene glycol	15051721	1
Caelo	Propylene glycol	9061811	1
Bombastus	Propylene glycol	311417	1
Lamotte/Anzag	Propylene glycol	1000007047	3
Henry Lamotte Oils/Phönix	Propylene glycol	1000007047	2
Caelo	Propylene glycol	7071806	1
Lamotte/Alliance Health...	Propylene glycol	1000007047	1
Delta	Propylene glycol	17H03-B04-344395	1
Lamotte/AHD	Propylene glycol	1000007047	1
Fagron	Propylene glycol	17H03-B04344395	1
Fagron	Propylene glycol	18A19-B01-346655	1
Henry Lamotte Oils GmbH...	Propylene glycol	1000007047	3
Bombastus	Propylene glycol	18000424	2

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Supplier	Substance	Batch	Spectra
Caelo	Propylene glycol	18A19-B01	1
Caelo	Propylene glycol	18064905	1
Caelo	Propylene glycol	17321708	1
Fagron	Propylene glycol	18A19-B01-348338	2
Krieger	Propylene glycol	18064901	1
Caelo	Propylene glycol	16081802	1
Lamotte/Sana	Propylene glycol	8003093001	1
Henry Lamotte	Propylene glycol	1000007047	2
Caelo	Propylene glycol	19091801	1
Caelo	Propylene glycol	18064906	2
Fagron	Propylene glycol	18064904	1
Allianz	Propylene glycol	1000007047	1
Sanacorp	Propylene glycol	18064902	1
Sanacorp	Propylene glycol	10000007047	1
Fagron	Propylene glycol	18H07-B01-352662	2
Fagron	Propylene glycol	18A19-B01-351227	3
Caelo	Propylene glycol	27101805	1
Caelo	Propylene glycol	18064908	7
Noweda	Propylene glycol	1809007-01	1
Euro OTC	Propylene glycol	18064901	1
Caelo	Propylene glycol	28111814	1
Euro OTC	Propylene glycol	1809007-01	2
Kehr	Propylene glycol	18264908	1
Kehr	Propylene glycol	18064908	1
Caelo	Propylene glycol	22121810	1
Adler	Propylene glycol	18064908	2
Sanacorp	Propylene glycol	18064906	1
Caelo	Propylene glycol	22121811	1
Caelo	Propylene glycol	18064907	3
Lamotte/Ebert+Jacobi	Propylene glycol	1000007047	1
Henry Lamotte Oils/ Gehe	Propylene glycol	1000007047	1
Caelo	Propylene glycol	18064912	3
Henry Lamotte Oils	Propylene glycol	1000007047	1
Henry Lamotte,Gehe 08.1...	Propylene glycol	1000007047-P20190115	1
Caelo	Propylene glycol	18H07-B01-352703	1
Sanacorp	Propylene glycol	6012897001	2
Caelo	Propylene glycol	1064907	1
Fagron	Propylene glycol	18H07-B01-352703	1
Fagron	Propylene glycol	18J03-B07-355043	1
Caelo	Propylene glycol	18064915	1
Sanacorp	Propylene glycol	18064913	1
Caelo	Propylene glycol	18046912	1
Henry Lamotte	Propylene glycol	6012897001	1

- 104685 spectra from 582 *Apo-Ident* customers from a total of 30 177 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 *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	285	0	35 550
Type B	0	355	0	78 723
Type C	0	3252	22	104 685

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 % (> 99.9705 %)	100.0000 % (> 97.8947 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.3099 %)
Type C	100.0000 % (> 99.6449 %)	99.3280 % (> 99.2364 %)

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.

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
31663	31663	0.00	51.98
31738	31738	0.00	49.36
32074	31663	5.42	55.44
32486	31663	6.85	58.29
32728	31663	5.63	49.59
30872	31663	3.32	48.80
30920	30920	0.00	50.55

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Psorisol base cream Audor®
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31109-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	Psorisol base cr...	AP101943PB	31109	40	1404015
Audor	Psorisol base cr...	AP45001.2PB	31674	40	20141230
Audor	Psorisol base cr...	AP55201PB	32275	40	20160204

Validation samples

A total of 222 872 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 *Psorisol base cream Audor®*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Psorisol base cream Audor®*.

Supplier	Substance	Batch	Sample ID	Spectra
Audor Pharma	Psorisol base cream Audor®	AP101943PB	31233	40
Audor Pharma	Psorisol base cream Audor®	AP45001.2PB	31674 [†]	20
Audor Pharma	Psorisol base cream Audor®	AP45001.2PB	32274	40
Audor Pharma	Psorisol base cream Audor®	AP70601PB	34037	40

- 78 938 spectra from a total of 1827 batches from further 350 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®*.

[†]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*.

Supplier	Substance	Batch	Spectra
Audor Pharma	Psorisol base cream Audor [®]	102891PB	1
Audor Pharma	Psorisol base cream Audor [®]	102891	1
Anzag	Psorisol base cream Audor [®]	AP102891PB	2
Audor Pharma	Psorisol base cream Audor [®]	Ap102891PB	1
Audor Pharma	Psorisol base cream Audor [®]	AP100472PB	2
Audor Pharma	Psorisol base cream Audor [®]	AP101943PB	3
Audor Pharma	Psorisol base cream Audor [®]	AP11943PB	1
Audor Pharma	Psorisol base cream Audor [®]	102844	2
Audor Pharma	Psorisol base cream Audor [®]	101943	1
Audor Pharma	Psorisol base cream Audor [®]	AP102844PB	1
Caelo	Psorisol base cream Audor [®]	AP102844PB	2
Audor Pharma	Psorisol base cream Audor [®]		2
Audor Pharma	Psorisol base cream Audor [®]	AP55201PB	6
Audor Pharma	Psorisol base cream Audor [®]	1417E-07016	1
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB5451	1
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB	1
Audor Pharma	Psorisol base cream Audor [®]	AP70601PB5516	1

- 107 930 spectra from 582 *Apo-Ident* customers from a total of 30 663 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 *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	120	0	35 715
Type B	0	140	0	78 938
Type C	0	20	9	107 930

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6452 %)	68.9655 % (> 58.6207 %)

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.

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
32275	31109	6.41	22.27
31109	31109	0.00	22.53
31674	31109	4.62	21.61

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Rose oil (genuine / artificial)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30111-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Fagron	Rose oil (genuin...	13J17-B01	31290	40	1507614
Caelo	Rose oil (genuin...	13335012	31301	20	20131009
Caelo	Rose oil (genuin...	13252710	31412	40	1502252

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Rose oil (genuin...	13335012	31425	40	20131009
Fagron	Rose oil (genuin...	14I25-B01-302286	31752	40	20141006
Fagron	Rose oil (genuin...	14I25-B01-302286	31842	40	20141006

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 300 spectra of 8 reference samples from the substance/substance group *Rose oil (genuine / artificial)*. These samples are listed above in the [calibration samples](#) section.
- 35 535 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 200 spectra of 6 reference samples from the substance/substance group *Rose oil (genuine / artificial)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Rose oil (genuine / artifici...	13335012	31425 [†]	20
Caelo	Rose oil (genuine / artifici...	13335012	31426	60
Fagron	Rose oil (genuine / artifici...	14I25-B01-302286	31752 [†]	20
Fagron	Rose oil (genuine / artifici...	14I25-B01-302286	31842 [†]	20
Caelo	Rose oil (genuine / artifici...	162311	32332	40
Caelo	Rose oil (genuine / artifici...	173537	33907	40

- 78 878 spectra from a total of 1826 batches from further 350 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](#).

[†]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*.

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.

- 127 spectra from 72 *Apo-Ident* customers from 62 batches from the substance/substance group *Rose oil (genuine / artificial)*.

Supplier	Substance	Batch	Spectra
Fagron	Rose oil (genuine / artifici...	11E04-N04	1
Fagron	Rose oil (genuine / artifici...	11H05-N02	1
Caelo	Rose oil (genuine / artifici...	11178601	1
Fagron	Rose oil (genuine / artifici...	12C19-N05	3
Fagron	Rose oil (genuine / artifici...	511I-02011	1
Fagron	Rose oil (genuine / artifici...	12G25-N02	6
Fagron	Rose oil (genuine / artifici...	698884	3
Phönix	Rose oil (genuine / artifici...	12G25-N02	2
Phönix	Rose oil (genuine / artifici...	12C19-N05	1
Caelo	Rose oil (genuine / artifici...	11287117	2
Fagron	Rose oil (genuine / artifici...	13C21-N04	9
Fagron	Rose oil (genuine / artifici...	12G25-N01	1
Caelo	Rose oil (genuine / artifici...	11287114	1
Phönix	Rose oil (genuine / artifici...	13C21-N04	2
Caelo	Rose oil (genuine / artifici...	12164306	1
Fagron	Rose oil (genuine / artifici...	7091301	1
Caelo	Rose oil (genuine / artifici...	13044608	2
Caelo	Rose oil (genuine / artifici...	11287123	1
Fagron	Rose oil (genuine / artifici...	12H16-B01-286704	3
Caelo	Rose oil (genuine / artifici...	13252701	2
Fagron	Rose oil (genuine / artifici...	12H16-B01	2
Caelo	Rose oil (genuine / artifici...	13252710	3
Fagron	Rose oil (genuine / artifici...	713371	1
Caelo	Rose oil (genuine / artifici...	1352710	1
Fagron	Rose oil (genuine / artifici...	2188	1
Caelo	Rose oil (genuine / artifici...	13335006	1
Fagron	Rose oil (genuine / artifici...	13J17-B01	2
Caelo	Rose oil (genuine / artifici...	17101412	1
Fagron	Rose oil (genuine / artifici...	13J17-B01-293574	1
Caelo	Rose oil (genuine / artifici...	13252722	4
Caelo	Rose oil (genuine / artifici...	19011502	1
Caelo	Rose oil (genuine / artifici...	13252723	1
Caelo	Rose oil (genuine / artifici...	14300704	1
Fagron	Rose oil (genuine / artifici...	13J17-B01-296955	1
Fagron	Rose oil (genuine / artifici...	13J17-801	1
Caelo	Rose oil (genuine / artifici...	14300712	4
Fagron	Rose oil (genuine / artifici...	14125-B01	1
Fagron	Rose oil (genuine / artifici...	1425-B01-302287	1
Fagron	Rose oil (genuine / artifici...	14I25-B01	3
Fagron	Rose oil (genuine / artifici...	14/25-B01-309675	1
Caelo	Rose oil (genuine / artifici...	14300719	1
Fagron	Rose oil (genuine / artifici...	15/25-B01-302286	1
Caelo	Rose oil (genuine / artifici...	14300703	1
Caelo	Rose oil (genuine / artifici...	15197202	11
Fagron	Rose oil (genuine / artifici...	14I25-B01-309676	1
Caelo	Rose oil (genuine / artifici...	15G29-B12-312961	1
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
Caelo	Rose oil (genuine / artifici...	15197206	2
Caelo	Rose oil (genuine / artifici...	15G29-B12-314833	1
Caelo	Rose oil (genuine / artifici...	15197211	8

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Supplier	Substance	Batch	Spectra
Caelo	Rose oil (genuine / artifici...	15187202	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-321984	4
Fagron	Rose oil (genuine / artifici...	15G29-B12-314833	1
Fagron	Rose oil (genuine / artifici...	15G29-B12	1
Klosterring	Rose oil (genuine / artifici...	15G29-B12	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-327364	1
Fagron	Rose oil (genuine / artifici...	15G29-B12-327263	1
Frey & Lau GmbH/Noweda	Rose oil (genuine / artifici...	15G29-B12	1
Caelo	Rose oil (genuine / artifici...	16231111	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-332931	1
Caelo	Rose oil (genuine / artifici...	16231113	2
Kehr	Rose oil (genuine / artifici...	16H16-B04-332931	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-348745	1
Caelo	Rose oil (genuine / artifici...	17353703	1
AHD	Rose oil (genuine / artifici...	16H16-B04-342284	1
Fagron	Rose oil (genuine / artifici...	16H16-B04-351564	1
Caelo	Rose oil (genuine / artifici...	17353709	1

- 107 832 spectra from 582 *Apo-Ident* customers from a total of 30 618 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 *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	300	0	35 535
Type B	0	200	0	78 878
Type C	0	121	6	107 832

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 % (> 99.9705 %)	100.0000 % (> 98.0000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6450 %)	95.2756 % (> 92.9134 %)

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.

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	85.28
31301	31021	9.78	78.61
31412	31412	0.00	59.73
31425	31021	5.79	80.61
31022	31412	9.47	63.90
31290	31290	0.00	144.66
31752	31290	3.46	141.65
31842	31290	3.74	139.21

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Sage oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30578-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Caelo	Sage oil	13146901	31597	40	20130522
Bombastus	Sage oil	305303	33292	40	1709470
Caelo	Sage oil	16051006	33601	40	1803004

Validation samples

A total of 222 872 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 *Sage oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Sage oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sage oil	13146901	31597 [†]	20
Bombastus	Sage oil	305303	33453	40
Caelo	Sage oil	16051012	33949	40

- 78 978 spectra from a total of 1827 batches from further 350 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.

- 105 spectra from 64 *Apo-Ident* customers from 45 batches from the substance/substance group *Sage oil*.

Supplier	Substance	Batch	Spectra
Taoasis	Sage oil	498780-106211	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
Bombastus	Sage oil	274447	1
Caelo	Sage oil	11287311	2
Anzag 10.8.12 ek:4,42	Sage oil	11287305	1
Taoasis	Sage oil	530771-108279	1
Caelo	Sage oil	11287315	1
Caelo	Sage oil	11287312	1
Caesar & Loretz GmbH, 4...	Sage oil	11287317	1
Caelo	Sage oil	10248206	1
Caelo	Sage oil	11287317	9
Caelo	Sage oil	11287306	1
Caelo	Sage oil	28051312	1
Taoasis GmbH	Sage oil	526975-110409	1
Caelo	Sage oil	5x11287317	1
Taoasis	Sage oil	526975-111295	1
Caelo	Sage oil	11287323	6
Caelo	Sage oil	1024214	1
Caelo	Sage oil	11287320	3
Caelo	Sage oil	11287318	1
Caelo	Sage oil	11287314	2
Toasis	Sage oil	526975-110409	1
Caelo	Sage oil	21111301	1
Caelo	Sage oil	13146904	1
Caelo	Sage oil	13146903	2
Sanacorp	Sage oil	282545	1
Caelo	Sage oil	13146901	5
Cealo/ Noweda	Sage oil	13146901	3
Gehe	Sage oil	11287318	1
gehe 19.11.2013	Sage oil	13146901	2
Caelo	Sage oil	31011401	1
Caelo	Sage oil	13146908	2
Caelo	Sage oil	13146907	1
Caelo	Sage oil	13146918	1
Caelo	Sage oil	13146914	6
Caelo	Sage oil	14345505	7
Caelo	Sage oil	14345511	3
Caelo	Sage oil	14345512	2
Caelo	Sage oil	1435517	1
Caelo	Sage oil	14345517	9
Bombastus	Sage oil	298189	1
Cealo	Sage oil	14345517	1
Caelo	Sage oil	1702080S/14345517	1
Caelo	Sage oil	16051006	5
Caelo	Sage oil	16051009	1
Caelo	Sage oil	1704030S/14345517	1
Caelo	Sage oil	14345514	1
Caelo	Sage oil	16051012	1
Caelo	Sage oil	17310001	3
Caelo	Sage oil	305303	1
Caelo	Sage oil	16051016	1
Caelo	Sage oil	160510125684	1

- 107 854 spectra from 582 *Apo-Ident* customers from a total of 30 635 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	94	11	107 854

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	89.5238 % (> 86.6667 %)

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.

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	33601	5.14	20.58
33292	33292	0.00	20.96
33601	33601	0.00	22.41

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Salicylic acid 50% (paraffin)
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30496-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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
Henry Lamotte	Salicylic acid 5...	5375300	30927	40	20121003
Caelo	Salicylic acid 5...	15231801	31727	40	AR-15-FG-015411-01
Caelo	Salicylic acid 5...	153729	31901	40	20151029*
Caelo	Salicylic acid 5...	153730	31902	40	20151029*

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Salicylic acid 5...	153731	31903	40	20151103*
Henry Lamotte	Salicylic acid 5...	6001023001	32176	40	20150630
Caelo	Salicylic acid 5...	162761	32520	40	20160923*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 320 spectra of 8 reference samples from the substance/substance group *Salicylic acid 50% (paraffin)*. These samples are listed above in the [calibration samples](#) section.
- 35 515 spectra from a total of 839 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 460 spectra of 12 reference samples from the substance/substance group *Salicylic acid 50% (paraffin)*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Salicylic acid 50% (paraffin)	14107901	31357	60
Caelo	Salicylic acid 50% (paraffin)	15231801	31727 [†]	20
Caelo	Salicylic acid 50% (paraffin)	153729	31901 [†]	20
Caelo	Salicylic acid 50% (paraffin)	153730	31902 [†]	20
Caelo	Salicylic acid 50% (paraffin)	153731	31903 [†]	20
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

*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.

[†]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*.

- 78 618 spectra from a total of 1818 batches from further 350 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.

- 824 spectra from 266 *Apo-Ident* customers from 177 batches from the substance/substance group *Salicylic acid 50% (paraffin)*.

Supplier	Substance	Batch	Spectra
Caelo	Salicylic acid 50% (paraffin)	11226801	3
Caelo	Salicylic acid 50% (paraffin)	1506211046	1
Caelo	Salicylic acid 50% (paraffin)	11333801	4
Euro OTC	Salicylic acid 50% (paraffin)	11333801	1
Caelo	Salicylic acid 50% (paraffin)	1309211046	1
DAC 2005	Salicylic acid 50% (paraffin)	4960200	1
Caelo	Salicylic acid 50% (paraffin)	12061201	7
Caelo	Salicylic acid 50% (paraffin)	126061201	1
Caelo	Salicylic acid 50% (paraffin)	12201901	4
Noweda	Salicylic acid 50% (paraffin)	12201901	1
Anzag 15.10.12	Salicylic acid 50% (paraffin)	12201901	1
Caelo	Salicylic acid 50% (paraffin)	12228301	12
Caelo	Salicylic acid 50% (paraffin)	20310812-6	1
Henry Lamotte	Salicylic acid 50% (paraffin)	4960200	1
Phönix	Salicylic acid 50% (paraffin)	12201801	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	5253300	1
Caelo	Salicylic acid 50% (paraffin)	613I-01046	1
Gehe	Salicylic acid 50% (paraffin)	12228301	1
Caelo	Salicylic acid 50% (paraffin)	2002311046	1
Bombastus	Salicylic acid 50% (paraffin)	12228301	1
Apomix	Salicylic acid 50% (paraffin)	1A240113	1
Gehe	Salicylic acid 50% (paraffin)	12305902	1
Lamotte	Salicylic acid 50% (paraffin)	5065800	1
Henry Lamotte/ Anzag	Salicylic acid 50% (paraffin)	5065800	1
Caelo	Salicylic acid 50% (paraffin)	12061301	1
Caelo	Salicylic acid 50% (paraffin)	13052502	9
Phoenix (PKH Halle)	Salicylic acid 50% (paraffin)	2A040313	1
Caelo	Salicylic acid 50% (paraffin)	11226601	1
Caelo	Salicylic acid 50% (paraffin)	12201701	1
Caelo	Salicylic acid 50% (paraffin)	12305901	2
A.H.D.	Salicylic acid 50% (paraffin)	1228301	1
Caelo	Salicylic acid 50% (paraffin)	13052401	4
Phönix Gotha	Salicylic acid 50% (paraffin)	13052401	1
Caelo	Salicylic acid 50% (paraffin)	s-100513-1	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5253300	1
Caelo	Salicylic acid 50% (paraffin)	12228402	1
Sanacorp	Salicylic acid 50% (paraffin)	1305202	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5375300	3
Caelo	Salicylic acid 50% (paraffin)	13087301	9
Caelo	Salicylic acid 50% (paraffin)	13160102	9
Caelo	Salicylic acid 50% (paraffin)	13087201	2
Caelo	Salicylic acid 50% (paraffin)	11333602	1

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Supplier	Substance	Batch	Spectra
Phönix	Salicylic acid 50% (paraffin)	5375300	1
Apomix / 11	Salicylic acid 50% (paraffin)	4A200613	1
Caelo	Salicylic acid 50% (paraffin)	13087401	7
Caelo	Salicylic acid 50% (paraffin)	13067201	1
Apomix	Salicylic acid 50% (paraffin)	5A250713	1
Defektur	Salicylic acid 50% (paraffin)	46/13	1
Phönix	Salicylic acid 50% (paraffin)	11274301	1
Caelo	Salicylic acid 50% (paraffin)	13160101	5
Caelo	Salicylic acid 50% (paraffin)	13278601	7
Gehe	Salicylic acid 50% (paraffin)	4313M-07018	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5253300	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5448100	1
Caelo	Salicylic acid 50% (paraffin)	13160002	2
Caelo	Salicylic acid 50% (paraffin)	13278501	12
Caelo	Salicylic acid 50% (paraffin)	13278701	12
Lamotte/VDL	Salicylic acid 50% (paraffin)	5375300	1
apomix, PKH GmbH	Salicylic acid 50% (paraffin)	7A160913	1
Caelo	Salicylic acid 50% (paraffin)	5375300	1
Caelo	Salicylic acid 50% (paraffin)	AKD2	1
Apomix/N/PZN:6639275	Salicylic acid 50% (paraffin)	9A171213	1
Caelo	Salicylic acid 50% (paraffin)	14017501	18
Caelo	Salicylic acid 50% (paraffin)	13278801	3
Caelo	Salicylic acid 50% (paraffin)	14017601	2
Gehe	Salicylic acid 50% (paraffin)	13278501	2
Apomix / 11	Salicylic acid 50% (paraffin)	1A180214	2
Phönix Gotha	Salicylic acid 50% (paraffin)	14017601	1
Caelo	Salicylic acid 50% (paraffin)	14107901	17
PKH Halle/Noweda	Salicylic acid 50% (paraffin)	9A171213	1
Caelo	Salicylic acid 50% (paraffin)		1
Caelo	Salicylic acid 50% (paraffin)	14108101	3
Caelo	Salicylic acid 50% (paraffin)	1401761	1
Caelo	Salicylic acid 50% (paraffin)	14108201	3
Phoenix 2.07.14	Salicylic acid 50% (paraffin)	14107901	1
Caesar & Loretz GmbH Hi...	Salicylic acid 50% (paraffin)	14108001	3
Cealo	Salicylic acid 50% (paraffin)	14107901	2
Caelo	Salicylic acid 50% (paraffin)	14108001	18
Raben-Apotheke Mildenau	Salicylic acid 50% (paraffin)	14108201	1
Caelo	Salicylic acid 50% (paraffin)	14205101	10
Caelo	Salicylic acid 50% (paraffin)	14108301	4
Caelo	Salicylic acid 50% (paraffin)	14205001	3
Apomix / Phönix	Salicylic acid 50% (paraffin)	6B110714	1
Noweda/Apomix	Salicylic acid 50% (paraffin)	8A250914	1
Caelo	Salicylic acid 50% (paraffin)	14108402	1
Caelo	Salicylic acid 50% (paraffin)	14337301	12
Lamotte	Salicylic acid 50% (paraffin)	5375300	1
Caeo AHDE 25.11.2014	Salicylic acid 50% (paraffin)	14205101	1
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	5448100	1
sanacorp	Salicylic acid 50% (paraffin)	14337301	1
Apomix / 11	Salicylic acid 50% (paraffin)	10A181114	1
AHD 04.07.14 EK 5,91	Salicylic acid 50% (paraffin)	14107901	1
Caelo	Salicylic acid 50% (paraffin)	14204302	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5763800	3
Caelo	Salicylic acid 50% (paraffin)	14337201	10
Fagron	Salicylic acid 50% (paraffin)	14108301	1
HENRY LAMOTTE OILS GmbH	Salicylic acid 50% (paraffin)	5375300	2
Caelo	Salicylic acid 50% (paraffin)	14204902	1
Caelo	Salicylic acid 50% (paraffin)	14337701	4
Caelo	Salicylic acid 50% (paraffin)	14354101	3
Caelo	Salicylic acid 50% (paraffin)	14337101	1
Brückenapotheke	Salicylic acid 50% (paraffin)	1715Q-07018	1

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Supplier	Substance	Batch	Spectra
AHDE08.05.2015	Salicylic acid 50% (paraffin)	5763800	1
apomix	Salicylic acid 50% (paraffin)	2A260115	2
Caelo	Salicylic acid 50% (paraffin)	14337601	2
Henry Lamotte/Sanacorp	Salicylic acid 50% (paraffin)	5809400	1
Apomix / 11	Salicylic acid 50% (paraffin)	4A080515	1
AHD/ Henry Lamotte	Salicylic acid 50% (paraffin)	5763800	2
Lamotte	Salicylic acid 50% (paraffin)	5763800	1
noweda / lamotte	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5763800	2
Henry Lamotte/Kehr	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5809400	1
Fiebig	Salicylic acid 50% (paraffin)	5763800	1
Henry Lamotte Olis GmbH...	Salicylic acid 50% (paraffin)	5763800	1
Lamotte	Salicylic acid 50% (paraffin)	5809400	1
apomix	Salicylic acid 50% (paraffin)	7A230615	1
Linden-Apo	Salicylic acid 50% (paraffin)	2615M-01046	1
HenryLamotte	Salicylic acid 50% (paraffin)	5763800	1
Noweda/Apomix	Salicylic acid 50% (paraffin)	7A230615	1
Lamotte/Gehe	Salicylic acid 50% (paraffin)	5763800	1
Sanacorp	Salicylic acid 50% (paraffin)	5809400	1
lamotte	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	5448100	1
Apomix	Salicylic acid 50% (paraffin)	6A150615	1
Henry Lamotte	Salicylic acid 50% (paraffin)	5809400	1
Caelo	Salicylic acid 50% (paraffin)	5809400	1
Caelo	Salicylic acid 50% (paraffin)	15231701	6
Caelo	Salicylic acid 50% (paraffin)	15231601	12
Lamotte/Anzag	Salicylic acid 50% (paraffin)	5809400	1
Caelo	Salicylic acid 50% (paraffin)	15231501	1
Henry Lamotte / Sana	Salicylic acid 50% (paraffin)	5809400	1
Noweda/apomix	Salicylic acid 50% (paraffin)	5A020615	1
Caelo	Salicylic acid 50% (paraffin)	15231801	14
Lamotte/PX	Salicylic acid 50% (paraffin)	5809400	1
Caelo	Salicylic acid 50% (paraffin)	15247201	9
Noweda 26.08.15	Salicylic acid 50% (paraffin)	15231801	1
Caelo	Salicylic acid 50% (paraffin)	15277001	5
Caelo	Salicylic acid 50% (paraffin)	15247101	26
Henry Lamotte	Salicylic acid 50% (paraffin)	6001023001	1
Henry Lamotte	Salicylic acid 50% (paraffin)	6001023002	1
Lamotte	Salicylic acid 50% (paraffin)	6001023002	3
Anzag	Salicylic acid 50% (paraffin)	6001023001	2
Lamotte/K	Salicylic acid 50% (paraffin)	6001023001	1
apomix	Salicylic acid 50% (paraffin)	9A150715	1
apomix	Salicylic acid 50% (paraffin)	12A130815	1
Caelo	Salicylic acid 50% (paraffin)	15305901	12
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001023001	1
Caelo	Salicylic acid 50% (paraffin)	15305801	9
apomix	Salicylic acid 50% (paraffin)	13A240915	1
Caelo	Salicylic acid 50% (paraffin)	15372901	10
HenryLamotte	Salicylic acid 50% (paraffin)	6001023001	1
Caelo	Salicylic acid 50% (paraffin)	AKD9	1
Caelo	Salicylic acid 50% (paraffin)	6001023002	1
Apomix	Salicylic acid 50% (paraffin)	14A031115	1
AHD/ Henry Lamotte	Salicylic acid 50% (paraffin)	6001023001	4
PKH Halle/Phönix	Salicylic acid 50% (paraffin)	14A031115	1
Noweda	Salicylic acid 50% (paraffin)	6001023002	1
Henry Lamotte/ Noweda	Salicylic acid 50% (paraffin)	6001023001	1
Lamotte	Salicylic acid 50% (paraffin)	6001023001	1
apomix	Salicylic acid 50% (paraffin)	1A150116	2
Henry Lamotte Olis GmbH...	Salicylic acid 50% (paraffin)	6001023001	1

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Supplier	Substance	Batch	Spectra
PKH / 11	Salicylic acid 50% (paraffin)	2A280116	1
Caelo	Salicylic acid 50% (paraffin)	15373301	11
Caesar&Loretz GmbH	Salicylic acid 50% (paraffin)	15305901	1
Caelo	Salicylic acid 50% (paraffin)	15373001	11
apomix	Salicylic acid 50% (paraffin)	2A280116	2
Caelo	Salicylic acid 50% (paraffin)	15373101	1
Caelo	Salicylic acid 50% (paraffin)	15305601	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001023002	1
Lamotte	Salicylic acid 50% (paraffin)	6001862002	7
Fagron	Salicylic acid 50% (paraffin)	15373301	1
Euro OTC	Salicylic acid 50% (paraffin)	15305801	1
Caelo	Salicylic acid 50% (paraffin)	6001862002	3
apomix	Salicylic acid 50% (paraffin)	5A070416	1
Caelo	Salicylic acid 50% (paraffin)	15394602	1
apomix	Salicylic acid 50% (paraffin)	6A270416	1
Caelo	Salicylic acid 50% (paraffin)	16121401	16
Caelo	Salicylic acid 50% (paraffin)	16121404	1
Caelo	Salicylic acid 50% (paraffin)	6001023001	1
Henry Lamotte / Kehr	Salicylic acid 50% (paraffin)	6001023002	2
Henry Lamotte	Salicylic acid 50% (paraffin)	6001862002	1
Caelo	Salicylic acid 50% (paraffin)	1612301	1
Apomix / 11	Salicylic acid 50% (paraffin)	8A240616	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001862002	2
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6001862002	1
Phoenix	Salicylic acid 50% (paraffin)	15373101	1
Caelo	Salicylic acid 50% (paraffin)	16121301	5
Sanacorp, 22.09.2016	Salicylic acid 50% (paraffin)	16197401	1
apomix	Salicylic acid 50% (paraffin)	9A140716	1
apomix	Salicylic acid 50% (paraffin)	11A290716	1
Caelo	Salicylic acid 50% (paraffin)	16197401	18
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6001862002	1
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6001862001/161014SV	1
Apomix/Gehe	Salicylic acid 50% (paraffin)	11A290716	1
Lamotte	Salicylic acid 50% (paraffin)	60011862002	1
Caelo	Salicylic acid 50% (paraffin)	16121203	1
Caelo	Salicylic acid 50% (paraffin)	6121401	1
Apomix	Salicylic acid 50% (paraffin)	10A290716	1
WE:Sanacorp 29.10.2016 ...	Salicylic acid 50% (paraffin)	1612401	1
apomix	Salicylic acid 50% (paraffin)	12A050916	1
Bombastus	Salicylic acid 50% (paraffin)	16197401	1
Anzag	Salicylic acid 50% (paraffin)	6001862002	1
Apomix/AHD	Salicylic acid 50% (paraffin)	12A050916	1
apomix	Salicylic acid 50% (paraffin)	14A121016	1
apomix	Salicylic acid 50% (paraffin)	13A121016	1
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6001862002	1
Apomix PKH	Salicylic acid 50% (paraffin)	15A251116	1
Caeanlo	Salicylic acid 50% (paraffin)	16197401	1
Hochhaus-Apotheke	Salicylic acid 50% (paraffin)	16197302	1
Caelo	Salicylic acid 50% (paraffin)	16276101	24
Henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6001023002	1
Caelo	Salicylic acid 50% (paraffin)	17017401	12
Caelo	Salicylic acid 50% (paraffin)	17017301	9
Henry Lamotte	Salicylic acid 50% (paraffin)	6004854001	2
HenryLamotte/Noweda	Salicylic acid 50% (paraffin)	6004854001	2
Caelo	Salicylic acid 50% (paraffin)	15373201	1
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6001862001/170307SV	1
Caelo	Salicylic acid 50% (paraffin)	16197202	1
Kehr/Henry Lamotte	Salicylic acid 50% (paraffin)	5809400	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6004854001	1
Euro OTC	Salicylic acid 50% (paraffin)	17017401	1

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Supplier	Substance	Batch	Spectra
Caelo	Salicylic acid 50% (paraffin)	17017501	2
Lamotte/AHD	Salicylic acid 50% (paraffin)	6004854001	3
Lamotte/Ebert	Salicylic acid 50% (paraffin)	6001862001	1
Noweda	Salicylic acid 50% (paraffin)	16276101	1
GEHE	Salicylic acid 50% (paraffin)	3A070417	1
GEHE	Salicylic acid 50% (paraffin)	2A270217	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6004854001	1
Anzag	Salicylic acid 50% (paraffin)	6004854001	2
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6004854001	2
Allianz Healthcare	Salicylic acid 50% (paraffin)	17017401	1
Caelo	Salicylic acid 50% (paraffin)	17105801	16
Henry Lamotte/Kehr	Salicylic acid 50% (paraffin)	6004854001	1
Caelo	Salicylic acid 50% (paraffin)	17105501	4
Gehe	Salicylic acid 50% (paraffin)	17105801	2
Caelo	Salicylic acid 50% (paraffin)	16197302	2
Henry Lamotte Oils GmbH	Salicylic acid 50% (paraffin)	6004854001	1
Ebert-Jacobi	Salicylic acid 50% (paraffin)	17105501	1
Caelo	Salicylic acid 50% (paraffin)	171017501	1
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6004854001	2
P. W. Beyvers GmbH	Salicylic acid 50% (paraffin)	17017301	1
Caelo	Salicylic acid 50% (paraffin)	6004854001	2
Henry Lamotte/Anzag	Salicylic acid 50% (paraffin)	6004854001	1
Caelo	Salicylic acid 50% (paraffin)	1710501	1
henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6004854001	1
Noweda/Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
Caelo	Salicylic acid 50% (paraffin)	170801SV/17172701	1
apomix/Noweda	Salicylic acid 50% (paraffin)	162796101	1
Caelo	Salicylic acid 50% (paraffin)	107105801	1
Caelo	Salicylic acid 50% (paraffin)	17172701	4
Lamotte	Salicylic acid 50% (paraffin)	6001862001	1
Henry Lamotte/Ebert	Salicylic acid 50% (paraffin)	6004854001	1
Henry Lamotte Oils/Noweda	Salicylic acid 50% (paraffin)	6007886002	2
Kehr	Salicylic acid 50% (paraffin)	6007886002	1
Caelo	Salicylic acid 50% (paraffin)	17172702	4
Euro OTC	Salicylic acid 50% (paraffin)	17105801	1
Caesar&Loretz GmbH	Salicylic acid 50% (paraffin)	17105801	1
Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
Gehe/Lamotte	Salicylic acid 50% (paraffin)	6004854001	1
SanacorpWE:18.10.17 EK...	Salicylic acid 50% (paraffin)	17172702	1
Lamotte / AHC	Salicylic acid 50% (paraffin)	6004854001	1
Caelo	Salicylic acid 50% (paraffin)	17145401	11
Anzag	Salicylic acid 50% (paraffin)	6007886001	2
Caelo	Salicylic acid 50% (paraffin)	17105602	2
Lamotte/AHD	Salicylic acid 50% (paraffin)	6007886001	2
Caelo	Salicylic acid 50% (paraffin)	17145502	4
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6007886001	2
GEHE	Salicylic acid 50% (paraffin)	10A110817	1
Caelo	Salicylic acid 50% (paraffin)	171454015424	1
Gehe	Salicylic acid 50% (paraffin)	17145401	1
GEHE	Salicylic acid 50% (paraffin)	13A041017	1
Caelo	Salicylic acid 50% (paraffin)	17261401	15
Phönix/Apomix	Salicylic acid 50% (paraffin)	17A131217	1
Caelo	Salicylic acid 50% (paraffin)	17105702	1
Henry Lamotte/Noweda	Salicylic acid 50% (paraffin)	6007886001	1
Cealo	Salicylic acid 50% (paraffin)	17172701	1
Caelo	Salicylic acid 50% (paraffin)	17261301	5
Caelo	Salicylic acid 50% (paraffin)	17326201	8
Gehe/Lamotte	Salicylic acid 50% (paraffin)	6009168001	1
Henry Lamotte Oils GMBH	Salicylic acid 50% (paraffin)	6007886001	1
Caleo	Salicylic acid 50% (paraffin)	17261401	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Salicylic acid 50% (paraffin)	17261401	1
Caelo	Salicylic acid 50% (paraffin)	18034301	11
GEHE	Salicylic acid 50% (paraffin)	4A050318	1
GEHE	Salicylic acid 50% (paraffin)	3A050318	1
Henry Lamotte Oils/Ebert	Salicylic acid 50% (paraffin)	6010004001	2
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6009168001	1
Caesar & Loretz/ Noweda	Salicylic acid 50% (paraffin)	17326201	1
Lamotte/AHD	Salicylic acid 50% (paraffin)	6009168001	2
Henry Lamotte	Salicylic acid 50% (paraffin)	6007886001	1
Caelo	Salicylic acid 50% (paraffin)	18034201	5
henry Lamotte / Noweda	Salicylic acid 50% (paraffin)	6007886001	1
Caelo	Salicylic acid 50% (paraffin)	180342201	1
GEHE	Salicylic acid 50% (paraffin)	18034301	1
Caelo	Salicylic acid 50% (paraffin)	17326301	1
lamotte phönix	Salicylic acid 50% (paraffin)	6009168001	1
Caelo	Salicylic acid 50% (paraffin)	18034402	3
Lamotte/AHD	Salicylic acid 50% (paraffin)	6010101001	3
Caelo	Salicylic acid 50% (paraffin)	18114901	2
Henry Lamotte Oils/ Gehe	Salicylic acid 50% (paraffin)	6010101001	1
Phoenix	Salicylic acid 50% (paraffin)	6010101001	1
Henry Lamotte Oils GmbH...	Salicylic acid 50% (paraffin)	6010101001	1
Caelo	Salicylic acid 50% (paraffin)	18210903	4
Lamotte/Phönix	Salicylic acid 50% (paraffin)	6010101001	1
Caelo	Salicylic acid 50% (paraffin)	18211002	1
Caelo	Salicylic acid 50% (paraffin)	18115101	1
Caelo	Salicylic acid 50% (paraffin)	18286401	2

- 107 135 spectra from 582 *Apo-Ident* customers from a total of 30 505 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 *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	320	0	35 515
Type B	0	460	0	78 618
Type C	0	819	5	107 135

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 % (> 99.9705 %)	100.0000 % (> 98.1250 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.6957 %)
Type C	100.0000 % (> 99.6449 %)	99.3932 % (> 99.0291 %)

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.

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	1.99	143.78
30927	31727	6.41	153.11
31727	31727	0.00	151.59
31901	31901	0.00	139.90
31902	31902	0.00	145.38
31903	31903	0.00	142.26
32176	31727	4.76	153.43
32520	32520	0.00	138.31

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Shea butter, refined**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30289-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Shea butter, refined

Special notes

When selecting the *Shea butter, refined* 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*
Appendix F [Addition to the second-stage models](#)

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.

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 *Shea butter, refined*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Shea butter, ref. ..	13143819	31513	40	1412122
Caelo	Shea butter, ref. ..	14261107	31582	40	20140923
Caelo	Shea butter, ref. ..	15303004	31826	30	20151112
Caelo	Shea butter, ref. ..	15144903	32300	40	20150703
Caelo	Shea butter, ref. ..	15144903	32301	40	20150703

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 190 spectra of 5 reference samples from the substance/substance group *Shea butter, refined*. These samples are listed above in the [calibration samples](#) section.
- 35 645 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 110 spectra of 4 reference samples from the substance/substance group *Shea butter, refined*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Shea butter, refined	13143819	31513 [†]	20
Caelo	Shea butter, refined	14261107	31582 [†]	20
Caelo	Shea butter, refined	15303004	31826 [†]	30
Caelo	Shea butter, refined	17085805	33470	40

- 78 968 spectra from a total of 1826 batches from further 350 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.

- 113 spectra from 43 *Apo-Ident* customers from 72 batches from the substance/substance group *Shea butter, refined*.

[†]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*.

Supplier	Substance	Batch	Spectra
Franz Thome	Shea butter, refined	400-15	1
Gehe	Shea butter, refined	11079802	1
Fagron	Shea butter, refined	121273	2
DAC 2006	Shea butter, refined	11346509	1
Sheabutter-Import Franz...	Shea butter, refined	1205355	2
Gehe	Shea butter, refined	11346509	1
Caelo	Shea butter, refined	11346514	1
Fagron	Shea butter, refined	12G12-N14	1
Caelo	Shea butter, refined	12242410	1
Caelo	Shea butter, refined	11346509	1
Fagron	Shea butter, refined	11J07-N08	1
Caelo	Shea butter, refined	12242404	1
Fagron	Shea butter, refined	12g12-n14	1
Caelo	Shea butter, refined	12242406	1
Caelo	Shea butter, refined	10133305	2
Caelo	Shea butter, refined	1224210	1
Caelo	Shea butter, refined	12242412	1
Caelo	Shea butter, refined	12242416	2
Fagron	Shea butter, refined	13C04-N01	5
Caelo	Shea butter, refined	13143807	1
Caelo	Shea butter, refined	13143810	1
Sheabutter-Import Franz...	Shea butter, refined	413-0001	1
Sanacorp/ Abis Pharma	Shea butter, refined	keine	2
Caelo	Shea butter, refined	13143814	2
Caesar/Noweda	Shea butter, refined	13143813	2
Caelo	Shea butter, refined	13143813	2
Caelo	Shea butter, refined	14033304	2
Canea/Phönix	Shea butter, refined	SB1351M13	1
Caelo	Shea butter, refined	14033303	1
Caelo	Shea butter, refined	14033310	1
sanacorp	Shea butter, refined	14033310	1
Sheabutter Import Franz...	Shea butter, refined	14-3-0001	1
Caelo	Shea butter, refined	14033306	1
Caelo	Shea butter, refined	14033312	2
Caelo	Shea butter, refined	14261102	1
Caelo	Shea butter, refined	14033313	1
Caelo	Shea butter, refined	14261108	4
Caelo	Shea butter, refined	14261109	1
Caelo	Shea butter, refined	17031501	1
Caelo	Shea butter, refined	14261107	2
Caelo	Shea butter, refined	14261111	1
Caelo	Shea butter, refined	14033314	1
Abis Pharma/Sanacorp	Shea butter, refined	10-500P/0714	1
Farfalla Essen/ Bahnhof...	Shea butter, refined	FA0130140	1
Caelo	Shea butter, refined	14261113	1
Caelo	Shea butter, refined	14261110	1
Bahnhofapotheke Kempten...	Shea butter, refined	G16FGFI	1
Caelo	Shea butter, refined	15144902	1
Caelo	Shea butter, refined	15144907	1
Caelo	Shea butter, refined	15144901	2
Caelo	Shea butter, refined	15303002	3
Caelo	Shea butter, refined	15144903	1
Caelo	Shea butter, refined	15303003	1
Caelo	Shea butter, refined	15303009	2
Caelo	Shea butter, refined	15303004	1
Caelo	Shea butter, refined	15303005	2
Sheabutter Import Franz...	Shea butter, refined	14314-18515	1
Caelo	Shea butter, refined	16017204	2
Caelo	Shea butter, refined	16017205	3
Caelo	Shea butter, refined	16017203	3

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Supplier	Substance	Batch	Spectra
Caelo	Shea butter, refined	16017214	2
Caelo	Shea butter, refined	16017208	1
Caelo	Shea butter, refined	17085806	6
Caelo	Shea butter, refined	17085803	1
Caelo	Shea butter, refined	15303007	1
Caelo	Shea butter, refined	17085809	1
Caelo	Shea butter, refined	17085817	1
Sanacop WE:18.11.17 100...	Shea butter, refined	17085809	1
sanacorp WE:28.12.17 E...	Shea butter, refined	17085815	1
Caelo	Shea butter, refined	17287506	2
Euro OTC	Shea butter, refined	1802A0688	1
Caelo	Shea butter, refined	17085812	1
Caelo	Shea butter, refined	17287510	1
Wolfvital	Shea butter, refined	W68B058	1
Caelo	Shea butter, refined	17287505	2
Caelo	Shea butter, refined	18236004	1
Caesar & Loretz GmbH	Shea butter, refined	18236002	1

- 107 846 spectra from 582 *Apo-Ident* customers from a total of 30 610 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 *Shea butter, refined* 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 *Shea butter, refined* 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	35 645
Type B	0	110	0	78 968
Type C	0	84	29	107 844

The substance/substance group *Shea butter, refined* 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 % (> 99.9706 %)	100.0000 % (> 96.8421 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.5455 %)
Type C	100.0000 % (> 99.6542 %)	74.3363 % (> 71.6814 %)

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.

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
31513	31513	0.00	28.28
31582	31513	7.61	31.19
31826	31513	12.19	33.24
32300	31513	10.67	31.24
32301	31513	4.39	27.73

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Sodium lactate solution 50%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30136-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	32839	40	AR-17-FG-006366-01
Caelo	Sodium lactate s...	170977	33319	40	20170427*

Validation samples

A total of 222 872 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 *Sodium lactate solution 50%*. These samples are listed above in the [calibration samples](#) section.
- 35 635 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Sodium lactate solution 50%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sodium lactate solution 50%	16056201	32586	40
Caelo	Sodium lactate solution 50%	16056201	32917	40
Caelo	Sodium lactate solution 50%	173153	34231	40

- 78 958 spectra from a total of 1828 batches from further 350 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.

- 725 spectra from 315 *Apo-Ident* customers from 124 batches 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.

Supplier	Substance	Batch	Spectra
Caelo	Sodium lactate solution 50%	11238701	4
Caelo	Sodium lactate solution 50%	11238706	2
Caelo	Sodium lactate solution 50%	11238712	2
Caelo	Sodium lactate solution 50%	507213157	1
Caelo	Sodium lactate solution 50%	12027303	2
Caelo	Sodium lactate solution 50%	3111Q-03157	1
phönix	Sodium lactate solution 50%	12180404/8	1
Caelo	Sodium lactate solution 50%	12180404	4
Caelo	Sodium lactate solution 50%	11238707	2
Caelo	Sodium lactate solution 50%	20310511-1	1
Sanacorp	Sodium lactate solution 50%	12180407	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%	12180407	5
Caelo	Sodium lactate solution 50%	12180408	2
Phönix	Sodium lactate solution 50%	12180407	1
Fagron	Sodium lactate solution 50%	12J18-M04	5
Caelo	Sodium lactate solution 50%	11024001	1
Caelo	Sodium lactate solution 50%	12294604	6
Noweda	Sodium lactate solution 50%	12294604	1
Anzag 27.02.2013	Sodium lactate solution 50%	12294603	1
Caelo	Sodium lactate solution 50%	12294607	6
Phönix Gotha	Sodium lactate solution 50%	K40875122	1
Caelo	Sodium lactate solution 50%	12294605	6
Caelo	Sodium lactate solution 50%		1
Caelo	Sodium lactate solution 50%	12027301	1
Caelo	Sodium lactate solution 50%	12027310	1
Caelo	Sodium lactate solution 50%	12180406	2
Caelo	Sodium lactate solution 50%	12294610	5
Caelo	Sodium lactate solution 50%	13111704	11
Caelo	Sodium lactate solution 50%	N-260313-3	1
Caesar/Lorenz	Sodium lactate solution 50%	12294610	1
Caelo	Sodium lactate solution 50%	13111705	5
Bombastus	Sodium lactate solution 50%	13111704	1
Caelo	Sodium lactate solution 50%	13267001	22
Phönix, 20.09.2013	Sodium lactate solution 50%	13111705	1
Caelo	Sodium lactate solution 50%	13267003	7
Caelo	Sodium lactate solution 50%	13267006	2
Caelo	Sodium lactate solution 50%	13267009	10
Caelo	Sodium lactate solution 50%	13267005	1
Noweda	Sodium lactate solution 50%	13267001	1
Gehe	Sodium lactate solution 50%	13267009	1
Caelo	Sodium lactate solution 50%	13330302	5
phönix	Sodium lactate solution 50%	9/AKD56	1
Caelo	Sodium lactate solution 50%	14011301	1
Caelo	Sodium lactate solution 50%	13330304	2
Caelo	Sodium lactate solution 50%	13330303	2
Caelo	Sodium lactate solution 50%	13330305	11
Fagron	Sodium lactate solution 50%	14/13	1
Caelo	Sodium lactate solution 50%	13330306	1
Caelo	Sodium lactate solution 50%	13330307	10
Caelo	Sodium lactate solution 50%	3041410	1
Caelo	Sodium lactate solution 50%	1414Q03157	1
Fagron	Sodium lactate solution 50%	14A21-B10	2
Caelo	Sodium lactate solution 50%	133305	1
Caelo	Sodium lactate solution 50%	14039503	14
Fagron	Sodium lactate solution 50%	14A21-B10-290492	2
Caelo	Sodium lactate solution 50%	14039507	3
Euro OTC	Sodium lactate solution 50%	14039503	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Sodium lactate solution 50%	14039508	1
Caelo	Sodium lactate solution 50%	14182902	9
Caesar&lorenz,Phoenix	Sodium lactate solution 50%	14182902	1
Caelo	Sodium lactate solution 50%	13330308	1
Caelo	Sodium lactate solution 50%	14182904	6
Caelo	Sodium lactate solution 50%	14039511	4
	Sodium lactate solution 50%	14182904	2
Caelo	Sodium lactate solution 50%	14182903	2
Caelo	Sodium lactate solution 50%	14271905	1
Caelo	Sodium lactate solution 50%	14271901	17
Fagron	Sodium lactate solution 50%	1311002383	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	14271901	1
phoenix	Sodium lactate solution 50%	14271901	1
Caelo	Sodium lactate solution 50%	13267002	2
Gehe	Sodium lactate solution 50%	10094060	1
Phönix	Sodium lactate solution 50%	14271901	1
Euro OTC	Sodium lactate solution 50%	14271907	1
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	8
Gehe 12.1.15	Sodium lactate solution 50%	14271907	1
Caelo	Sodium lactate solution 50%	14353201	4
AHD 19.02.15	Sodium lactate solution 50%	14353202	1
Fagron	Sodium lactate solution 50%	14271901	1
Fagron	Sodium lactate solution 50%	14271907	1
Caelo	Sodium lactate solution 50%	14353202	8
Caelo	Sodium lactate solution 50%	14353205	20
Alliance health	Sodium lactate solution 50%	14353205	1
Caelo	Sodium lactate solution 50%	14353204	2
Fagron	Sodium lactate solution 50%	14A21-810-295977	1
Caelo	Sodium lactate solution 50%	14353207	12
Noweda 18.05.2015	Sodium lactate solution 50%	14353205	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	14353205	1
Fagron	Sodium lactate solution 50%	1453202	1
Caelo	Sodium lactate solution 50%	14353208	1
Caelo	Sodium lactate solution 50%	15135505	28
Euro OTC	Sodium lactate solution 50%		1
Caelo	Sodium lactate solution 50%	14353210	10
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%	1525110	1
Caelo	Sodium lactate solution 50%	10/AKD7	1
Caelo	Sodium lactate solution 50%	15251101	50
Caelo	Sodium lactate solution 50%	14271902	1
Phoenix	Sodium lactate solution 50%	14353210	1
Caelo	Sodium lactate solution 50%	15375806	25
Caelo	Sodium lactate solution 50%	15135501	1
Fagron	Sodium lactate solution 50%	14a21-b10-295977	1
Caelo	Sodium lactate solution 50%	15375805	1
Caelo	Sodium lactate solution 50%	15375808	10
Phoenix	Sodium lactate solution 50%	15251101	1
Caelo	Sodium lactate solution 50%	2014U-03157	1
Caesar&Loretz GmbH	Sodium lactate solution 50%	15375806	1
Sanacorp	Sodium lactate solution 50%	11/AKD13	1
Caesar&Loretz	Sodium lactate solution 50%	15251101	1
Ebert 02.08.2016	Sodium lactate solution 50%	15375808	1
Caesar & Loretz/Sanacorp	Sodium lactate solution 50%	15251101	1
Caesar & Loretz/Noweda	Sodium lactate solution 50%	15375806	1

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Supplier	Substance	Batch	Spectra
Caelo	Sodium lactate solution 50%	16056201	41
Caesar & Lorenz GmbH	Sodium lactate solution 50%	71014/1	1
Otto Fischar	Sodium lactate solution 50%	16056201	1
Caelo	Sodium lactate solution 50%	1537806	1
Lamotte/Phönix	Sodium lactate solution 50%	16056201	1
Anzag	Sodium lactate solution 50%	16056201	1
Phoenix	Sodium lactate solution 50%	16056201	1
Caelo	Sodium lactate solution 50%	16056206	24
Caelo	Sodium lactate solution 50%	14A21-B10-295977	1
Caesar & Loretz	Sodium lactate solution 50%	16056206	1
Caelo	Sodium lactate solution 50%	16321004	1
Caelo	Sodium lactate solution 50%	16321001	6
Caelo	Sodium lactate solution 50%	16056207	4
Caelo	Sodium lactate solution 50%	16321003	4
Sanacorp	Sodium lactate solution 50%	16056206	1
Caelo	Sodium lactate solution 50%	16321002	12
Henry Lamotte Oils GmbH	Sodium lactate solution 50%	16321001	1
Caelo	Sodium lactate solution 50%	16321008	18
Caelo	Sodium lactate solution 50%	16321009	3
Caelo	Sodium lactate solution 50%	16056201-20170704Ma1	1
Caelo	Sodium lactate solution 50%	11/AKD16	1
Caelo	Sodium lactate solution 50%	163210	1
Caelo	Sodium lactate solution 50%	17097704	31
Caelo	Sodium lactate solution 50%	170977045365	1
Caelo	Sodium lactate solution 50%	17097701	5
Sanacorp	Sodium lactate solution 50%	17097708	1
Caelo	Sodium lactate solution 50%	17097709	17
Caelo	Sodium lactate solution 50%	17097708	4
Caelo	Sodium lactate solution 50%	17315301	21
Gehe	Sodium lactate solution 50%	17097709	1
Kehr	Sodium lactate solution 50%	17097709	1
Caelo	Sodium lactate solution 50%	170977095567	1
Caelo	Sodium lactate solution 50%	3051805	1
Caesar & Lorenz GmbH	Sodium lactate solution 50%	177097704	1
Caelo	Sodium lactate solution 50%	17315306	17
Cealo/Phönix	Sodium lactate solution 50%	17315301	1
Caelo	Sodium lactate solution 50%	17315307	4
Caelo	Sodium lactate solution 50%	173153065758	1
Sanacorp	Sodium lactate solution 50%	18135702	1
Caesar & Loretz GmbH	Sodium lactate solution 50%	18135702	1
Caelo	Sodium lactate solution 50%	18135702	3
Caelo	Sodium lactate solution 50%	18135702-N20190115Ma	1
Caelo	Sodium lactate solution 50%	180135803	1
Caelo	Sodium lactate solution 50%	19135702	1
Caelo	Sodium lactate solution 50%	17315302	1
Caelo	Sodium lactate solution 50%	18135803	1
Caelo	Sodium lactate solution 50%	18173903	1
Caelo	Sodium lactate solution 50%	18135802	1

- 107 234 spectra from 582 *Apo-Ident* customers from a total of 30 559 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 *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	200	0	35 635
Type B	0	120	0	78 958
Type C	0	714	11	107 234

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6449 %)	98.4828 % (> 98.0690 %)

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.

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	2.99	50.92
31321	32839	2.15	50.34
32839	32839	0.00	50.65
33319	33319	0.00	52.46

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Sodium laureth sulfate solution 27%
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30936-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	8930
Caelo	Sodium laureth s...	161968	32696	30	20161010*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 159 spectra of 4 reference samples from the substance/substance group *Sodium laureth sulfate solution 27%*. These samples are listed above in the [calibration samples](#) section.
- 35 676 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 230 spectra of 7 reference samples from the substance/substance group *Sodium laureth sulfate solution 27%*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sodium laureth sulfate solut...	14049902	31349 [†]	20
Caelo	Sodium laureth sulfate solut...	161968	32696 [†]	10
Caelo	Sodium laureth sulfate solut...	16196801	32818	40
Caelo	Sodium laureth sulfate solut...	163071	33090	40
Caelo	Sodium laureth sulfate solut...	171210	33335	40
Caelo	Sodium laureth sulfate solut...	172233	33698	40
Caelo	Sodium laureth sulfate solut...	172233	33883	40

- 78 848 spectra from a total of 1824 batches from further 350 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

*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.

[†]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*.

provided by the customer regarding manufacturer and batch number.

- 64 spectra from 25 *Apo-Ident* customers from 37 batches from the substance/substance group *Sodium laureth sulfate solution* 27%.

Supplier	Substance	Batch	Spectra
Caelo	Sodium laureth sulfate solut...	12044308	4
Caelo	Sodium laureth sulfate solut...	12044307	1
Caesar & Loretz GmbH, 4...	Sodium laureth sulfate solut...	12315211	1
Caelo	Sodium laureth sulfate solut...	12315211	1
Caelo	Sodium laureth sulfate solut...	13069903	1
Caelo	Sodium laureth sulfate solut...	12315203	1
Caelo	Sodium laureth sulfate solut...	2613M-01907	1
Caelo	Sodium laureth sulfate solut...	13241001	1
Caelo	Sodium laureth sulfate solut...	13069905	1
Caelo	Sodium laureth sulfate solut...	12341104	1
Caelo	Sodium laureth sulfate solut...	13069911	1
Caelo	Sodium laureth sulfate solut...	11322611	1
Caelo	Sodium laureth sulfate solut...	14049902	1
Caelo	Sodium laureth sulfate solut...	13241004	1
Caelo	Sodium laureth sulfate solut...	13241101	1
Sanacorp	Sodium laureth sulfate solut...	14049902	1
Caelo	Sodium laureth sulfate solut...	14197916	1
Caelo	Sodium laureth sulfate solut...	14197915	4
Caesar & Loretz GmbH Hi...	Sodium laureth sulfate solut...	14049913	1
Caelo	Sodium laureth sulfate solut...	14049904	1
Caelo	Sodium laureth sulfate solut...	14355308	1
Caelo	Sodium laureth sulfate solut...	14355304	2
Caelo	Sodium laureth sulfate solut...	14355310	1
Caelo	Sodium laureth sulfate solut...	14197920	1
Caelo	Sodium laureth sulfate solut...	14355314	7
Phönix	Sodium laureth sulfate solut...	14355314	1
Caelo	Sodium laureth sulfate solut...	14355315	1
Caelo	Sodium laureth sulfate solut...	15145004	1
Caelo	Sodium laureth sulfate solut...	15145010	1
Caelo	Sodium laureth sulfate solut...	15145017	5
Caelo	Sodium laureth sulfate solut...	16196801	2
Caelo	Sodium laureth sulfate solut...	16307104	1
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...	17121005	1
Caelo	Sodium laureth sulfate solut...	17223302	1
Caelo	Sodium laureth sulfate solut...	17318601	1
Caelo	Sodium laureth sulfate solut...	18118901	1
Caelo	Sodium laureth sulfate solut...	18199701	2

- 107895 spectra from 582 *Apo-Ident* customers from a total of 30644 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 *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	159	0	35 676
Type B	0	213	17	78 848
Type C	0	64	0	107 895

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 % (> 99.9706 %)	100.0000 % (> 96.2264 %)
Type B	100.0000 % (> 99.9688 %)	92.6087 % (> 91.3043 %)
Type C	100.0000 % (> 99.6451 %)	100.0000 % (> 90.6250 %)

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.

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
30936	31349	4.07	28.07
31114	31349	4.56	26.79
31349	31349	0.00	23.97
32696	32696	0.00	21.09

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Soft ointment**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30896-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Henry Lamotte	Soft ointment	5215100	30924	50	20111111
Caelo	Soft ointment	14080501	31452	40	AR-15-FG-000142-01
Caelo	Soft ointment	153768	31984	40	20151103*
Caelo	Soft ointment	160833	32097	40	20160322*
Caelo	Soft ointment	163134	32871	40	20161116*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 290 spectra of 6 reference samples from the substance/substance group *Soft ointment*. These samples are listed above in the [calibration samples](#) section.
- 35 545 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 1070 spectra of 25 reference samples from the substance/substance group *Soft ointment*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Soft ointment	12353301	30882	40
Caelo	Soft ointment	153768	31983	60
Caelo	Soft ointment	153768	31984 [†]	20
Caelo	Soft ointment	153770	31985	60
Caelo	Soft ointment	153770	31986	60
Caelo	Soft ointment	153772	31987	60
Caelo	Soft ointment	153772	31988	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	172632	33750	40
Caelo	Soft ointment	180021	34012	40
Caelo	Soft ointment	182012	34258	40
Caelo	Soft ointment	182511	34356	40

*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.

- 78 008 spectra from a total of 1809 batches from further 350 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.

- 1803 spectra from 403 *Apo-Ident* customers from 334 batches from the substance/substance group *Soft ointment*.

Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	11256701	5
Henry Lamotte,Phönix	Soft ointment	5067500	1
Caelo	Soft ointment	11282102	2
Noweda	Soft ointment	60089901	1
Henry Lamotte,Anzag	Soft ointment	5189900	2
Phönix	Soft ointment	11256301	1
Caelo	Soft ointment	92810389	1
Caelo	Soft ointment	11282301	2
Caelo	Soft ointment	11282201	7
Caelo	Soft ointment	12045401	1
Caelo	Soft ointment	11282101	2
Caelo	Soft ointment	7071202	1
Caelo	Soft ointment	12045701	5
Caelo	Soft ointment	12045702	5
Lamotte	Soft ointment	5215100	1
Caesar&loretz,Phoenix	Soft ointment	12045401	1
Phoenix	Soft ointment	12045701	1
Bombastus	Soft ointment	262274	1
Henry Lamotte/GEHE	Soft ointment	5215100	1
Caelo	Soft ointment	118282301	1
Finze	Soft ointment	5215100	1
Caelo	Soft ointment	12091303	3
Anzag ek:5,12EUR 19.09.12	Soft ointment	12091402	1
Anzag	Soft ointment	267553	1
Caelo	Soft ointment	11256302	1
Caelo	Soft ointment	1097697	2
Caelo	Soft ointment	12091402	6
Caelo	Soft ointment	12194501	8
Caelo	Soft ointment	12194601	12
Caesar&loretz,Phoenix	Soft ointment	12045501	1
HenryLamotte/Phoenix	Soft ointment	5189900	1
Caelo	Soft ointment	12045501	2
Henry Lamotte	Soft ointment	5067500	1
Noweda	Soft ointment	11256701	1
Caesar&loretz,Phoenix	Soft ointment	12091303	1
Bombastus	Soft ointment	269468	1
Phönix Gotha	Soft ointment	271425	1
Anzag	Soft ointment	269470	1
Bombastus	Soft ointment	271430	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
Henry Lamotte/GEHE	Soft ointment	5317100	1
Caelo	Soft ointment	612212542	1
Sanacorp	Soft ointment	12194501	1
Henry Lamotte Oils GmbH	Soft ointment	5317100	3
Caelo	Soft ointment	18121206	1
Caelo	Soft ointment	12194502	3
Caelo	Soft ointment	12091403	1
Caelo	Soft ointment	20230712-4	1
Fagron	Soft ointment	12E23-T01	1
Caelo	Soft ointment	12045601	1
Fagron	Soft ointment	12G09-T02	1
Noweda	Soft ointment	11133001	1
Caelo	Soft ointment	12353201	14
Caesar&lorenz,Phoenix	Soft ointment	12194502	2
lamotte7anzag	Soft ointment	5294600	1
Henry Lamotte Oils	Soft ointment	5317100	1
Caelo	Soft ointment	1253201	1
Caelo	Soft ointment	12194701	1
Caelo	Soft ointment	12353301	9
Anzag 23.01.2013	Soft ointment	12353301	1
Bombastus	Soft ointment	275422	4
lamotte/anzag	Soft ointment	5265300	2
Bombastus	Soft ointment	261106	1
Anzag 31.01.13 ek: 5,10EUR	Soft ointment	12353201	1
phönix	Soft ointment	12194701	1
Henry Lamotte/GEHE	Soft ointment	5375800	1
Fiebig 32.01.13 ek:4,84EUR	Soft ointment	5317100	1
fagron/Sanacorp	Soft ointment	12353301	1
Caelo	Soft ointment	1294502	1
Caelo	Soft ointment	12353302	2
Caelo	Soft ointment	12194401	3
Caelo	Soft ointment	13053601	14
Caelo	Soft ointment	12091401	1
Fagron	Soft ointment	13A08-T13-000189	1
Caelo	Soft ointment	13053801	17
Bombastus	Soft ointment	275424	1
Caelo	Soft ointment	12353401	10
Henry Lamotte	Soft ointment	5317100	1
Caelo	Soft ointment	11132901	1
Bombastus	Soft ointment	269469	1
Fagron	Soft ointment	13C04-T04-001710	2
Fagron	Soft ointment	13A08-T12-000186	1
Fagron	Soft ointment	13C04-T05	1
Fagron	Soft ointment	13C04-T04-0002	1
Caelo	Soft ointment	13053602	6
Phönix	Soft ointment	13053801	1
Henry Lam. / Sanacorp	Soft ointment	5215100	1
Caelo	Soft ointment	13053901	6
Caesar & Loretz GmbH, 4...	Soft ointment	13053601	1
Lamotte/ Anzag	Soft ointment	5375800	1
Henry Lamotte/Anzag	Soft ointment	5448300	1
Bombastus	Soft ointment	278048	2
Caelo	Soft ointment	3213E2542	1
Caelo	Soft ointment	13053701	1
Caelo	Soft ointment	13192901	18
Henry Lamotte oils GmbH	Soft ointment	5321600	2
Sanacorp	Soft ointment	13192901	1
Gehe	Soft ointment	5375800	1
Caelo	Soft ointment	13192501	24
Caelo	Soft ointment	1319201	1

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	1912A-02542	1
Caelo	Soft ointment	2513A-02542	1
Caelo	Soft ointment	13192502	2
Caelo	Soft ointment	13192601	32
Phönix	Soft ointment	13192901	1
Caesar u Loretz	Soft ointment	13053601	1
Caelo	Soft ointment	13192902	3
Euro OTC	Soft ointment	13192902	1
Fagron	Soft ointment	13E13-T14-003679	1
Fagron	Soft ointment	4113A-02542	1
Fagron	Soft ointment	13C04-T04-001709	3
Bombastus	Soft ointment	276854	1
Fagron	Soft ointment	13E13-T12-003670	3
Bombastus	Soft ointment	280166	2
Caelo	Soft ointment	13192801	2
Caelo	Soft ointment	13192502	1
Henra Lamotte	Soft ointment	5321600	1
Phoenix	Soft ointment	13192601	1
Lamotte	Soft ointment	5375800	1
Caelo	Soft ointment	13192701	6
Bombastus	Soft ointment	278047	1
gehe 04.12.13	Soft ointment	13192601	1
Sanacorp	Soft ointment	13192701	1
Caelo	Soft ointment	13387402	19
Henry Lamotte Oils GMBH	Soft ointment	5496100	1
Lamotte/ Anzag	Soft ointment	5496100	1
H.Lamotte / Anzag	Soft ointment	5317100	1
Caelo	Soft ointment	13375501	13
Henry Lamotte Oils Gmbh...	Soft ointment	5496100	2
Caelo	Soft ointment	8012014C	1
Caelo	Soft ointment	13375402	10
Alliance Healthcare/Hed...	Soft ointment	281897	1
Bombastus	Soft ointment	5317100	1
Henry Lamotte Oils GmbH	Soft ointment	5496100	1
Sanacorp	Soft ointment	13375402	1
Fagron	Soft ointment	13387402	1
Caelo	Soft ointment	13375503	2
Caelo	Soft ointment	10111201	1
Caelo	Soft ointment	14007601	27
Caelo	Soft ointment	5448300	1
Gehe am 04.02.2014	Soft ointment	13387402	1
Caelo	Soft ointment	13387403	3
Caelo	Soft ointment	14007301	22
Phönix Gotha	Soft ointment	278046	1
Caelo	Soft ointment	284057	1
Gehe am 25.02.14	Soft ointment	13375402	1
Caelo	Soft ointment	1314I-02542	1
Henry Lamotte oils GmbH...	Soft ointment	5448300	1
Phoenix	Soft ointment	14007601	1
Gutenberg-Apotheke	Soft ointment	5600500	3
Caelo	Soft ointment	14007501	11
Phoenix	Soft ointment	13387403	1
Bombastus	Soft ointment	284057	1
Caelo	Soft ointment	1314I2542	1
PHOENIX 10.03.2014	Soft ointment	14007302	1
Caelo	Soft ointment	14080201	13
Henry Lamotte Oils GmbH...	Soft ointment	5448300	1
Bombastus	Soft ointment	286012	7
	Soft ointment	14007601	1
Lamotte/Krieger/20.05.2...	Soft ointment	5496100	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils/ Gehe	Soft ointment	61580	1
Fagron	Soft ointment	13I24-T02-006930	1
Caelo	Soft ointment	14007302	2
Berkel AHK	Soft ointment	13387402	1
Anzag 18.04.14 EK:3,87	Soft ointment	1324-T02-006929	1
Caelo	Soft ointment	23061403	1
Sanacorp	Soft ointment	94/AKD1	1
Caelo	Soft ointment	14080101	1
Caelo	Soft ointment	14007402	3
Euro OTC	Soft ointment	14080201	1
Caelo	Soft ointment	14080301	5
Berkel AHK	Soft ointment	14007601	1
Noweda	Soft ointment	14007601	1
Caelo	Soft ointment	14080501	9
Caesar &Loretz GmbH	Soft ointment	14080501	1
Fagron	Soft ointment	2514M-02542	1
Caelo	Soft ointment	1097763	2
Caelo	Soft ointment	5081405	1
Bombastus	Soft ointment	281897	1
Alliance Healthcare	Soft ointment	14080201	1
Henry Lamotte Oils GmbH	Soft ointment	5600500	2
Caelo	Soft ointment	1324-T01-006925	1
Sanacorp	Soft ointment	14080301	1
Caelo	Soft ointment	15092014C	1
Caelo	Soft ointment	14202201	20
Caelo	Soft ointment	14202302	7
Bombastus	Soft ointment	284056	1
Bombastus	Soft ointment	288013	4
Caelo	Soft ointment	14202301	34
Phönix Gotha	Soft ointment	286010	1
Anzag;27.10.14;3,28EUR	Soft ointment	14202301	2
Berkel AHK	Soft ointment	14202201	2
Fagron	Soft ointment	13I24-T01-006925	2
Caelo	Soft ointment	14201801	2
Henry Lamotte oils GmbH...	Soft ointment	5691000	1
Caelo	Soft ointment	1420220	1
sanacorp	Soft ointment	14202301	1
Bombastus	Soft ointment	288704	7
Henry Lamotte Oils GmbH	Soft ointment	5691800	1
Caelo	Soft ointment	14202001	12
Lamotte/Alliance	Soft ointment	5691000	1
Gehe/04.12.14	Soft ointment	12353301	1
Fagron	Soft ointment	13I24-T03-006933	1
Gehe	Soft ointment	14202301	1
Sana 18.12.14 EK 5,39	Soft ointment	14202201	1
Caelo	Soft ointment	5011504	1
Caelo	Soft ointment	286011	1
AHD 17.11.14 EK 5,51	Soft ointment	13I24-T01-006925	1
Caelo	Soft ointment	8012015C	1
Fagron	Soft ointment	14202301	1
AHD 02.09.14 EK 5,03	Soft ointment	5691800	1
Berkel AHK	Soft ointment	14202001	1
Caelo	Soft ointment	14201901	7
BASF AG	Soft ointment	291333	1
Sanacorp 19.01.15 EK 5,39	Soft ointment	14202001	1
Fagron	Soft ointment	14E16-T03-012547	1
Caelo	Soft ointment	14375601	14
Allianc 03.02.15	Soft ointment	14375601	1
Phönix	Soft ointment	14264301	1
Caelo	Soft ointment	Caelo	1

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Supplier	Substance	Batch	Spectra
Caelo	Soft ointment	1422001	1
Fagron	Soft ointment	13I24-T04-006936	1
Bombastus	Soft ointment	291333	3
Fagron	Soft ointment	14201901	1
Sanacorp	Soft ointment	96/AKD3	1
Fagron	Soft ointment	13124-T01-006925	1
Henry Lamotte Oils GmbH	Soft ointment	5789000	2
Caelo	Soft ointment	1402201	1
Caelo	Soft ointment	14375901	8
Caelo	Soft ointment	31031503	1
Fagron	Soft ointment	14e16-t03-012548	1
Bombastus	Soft ointment	288702	1
Caelo	Soft ointment	15059301	20
Fagron	Soft ointment	14E16-T03-012548	1
Caelo	Soft ointment	14375801	8
Caesar&Loretz GmbH/Sana...	Soft ointment	14375602	1
ahd/lamotte	Soft ointment	5789000	1
Caelo	Soft ointment	14375603	1
Caelo	Soft ointment	14375602	24
Caelo	Soft ointment	14202011	1
Anzag;21.03.15;3,53EUR	Soft ointment	14375601	1
Fagron	Soft ointment	1324-t03-006933	1
	Soft ointment	15059301	1
Caelo	Soft ointment	7051510	1
Phönix Gotha	Soft ointment	291331	1
Sanacorp	Soft ointment	14375801	1
Bomastus	Soft ointment	291333	1
AHDE 03.06.2015	Soft ointment	14375602	2
Sanacorp	Soft ointment	97/AKD4	1
Allianz Healthcare 11.0...	Soft ointment	14375602	1
Cealo/Sanacorp	Soft ointment	15059301	1
Lamotte/Kehr	Soft ointment	5789000	1
Caelo	Soft ointment	1437591	1
Noweda	Soft ointment	15059301	1
Ichthyl-Gesellschaft C...	Soft ointment	15059401	1
Caelo	Soft ointment	15059401	10
Caelo	Soft ointment	15059402	2
Sanacorp	Soft ointment	15059301	1
Bombastus	Soft ointment	293336	3
Euro OTC	Soft ointment	14375602	1
Caelo	Soft ointment	15204401	31
Caelo	Soft ointment	15204501	21
Caelo	Soft ointment	15059601	4
Caelo	Soft ointment	15059501	1
Fagron	Soft ointment	5869200	1
Fagron	Soft ointment	15A30	1
Fargron/ Noweda	Soft ointment	15A30-T02-018955	2
caesar&loretz GmbH,Phönix	Soft ointment	15959301	1
Lamotte	Soft ointment	5789000	2
Caelo	Soft ointment	15204402	4
Caelo	Soft ointment	15e14-t01-022366	1
Bombastus	Soft ointment	295313	4
Caelo	Soft ointment	15204602	6
Fagron	Soft ointment	15F24-T16-023904	6
Caelo	Soft ointment	51123/1S1e	1
Fagron	Soft ointment	15A30-T02-018955	3
Caelo	Soft ointment	15376801	20
Caelo	Soft ointment	15204701	6
Bombastus	Soft ointment	297077	9
Caelo	Soft ointment	15377101	50

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Supplier	Substance	Batch	Spectra
Henry Lamotte Olis GmbH...	Soft ointment	5789000	3
Caelo	Soft ointment	100/AKD7	1
Fagron	Soft ointment	15E14-T02-022369	2
Sanacorp	Soft ointment	15376801	1
sanacoro	Soft ointment	15376801	1
Caelo	Soft ointment	15376901	12
Caelo	Soft ointment	15204801	3
Caela	Soft ointment	15376801	1
Fagron	Soft ointment	15059601	1
Anzag	Soft ointment	15377101	1
Caelo	Soft ointment	15377001	23
Bombastus	Soft ointment	298070	2
Noweda	Soft ointment	15376901	2
Frau Brinn-Holtz	Soft ointment	1577001	1
Sanacorp	Soft ointment	100/AKD10	1
Noweda	Soft ointment	15377001	2
InfectoPharm/Noweda	Soft ointment	15377001	1
Bombastus	Soft ointment	298069	1
Fagron	Soft ointment	15I08-T01-025888	1
Caelo	Soft ointment	16083002	25
Henry Lamotte/Anzag	Soft ointment	6001368001	1
Caelo	Soft ointment	160830	1
Caelo	Soft ointment	16083301	9
Bombastus	Soft ointment	15377001	1
Phoenix	Soft ointment	16083002	1
Fagron	Soft ointment	15377001	1
Caelo	Soft ointment	16083101	24
Henry Lamotte Oils GmbH	Soft ointment	6001368015	1
Caelo	Soft ointment	101/AKD12	1
HENRY LAMOTTE OILS GmbH	Soft ointment	6001368015	2
Henry Lamotte Olis GmbH...	Soft ointment	6001368015	2
Fagron	Soft ointment	15F24T16023904	1
Fagron	Soft ointment	15f24-t16-023904	1
phönix	Soft ointment	16083002	1
Fagron	Soft ointment	15I08-T02-025891	1
Lamotte/Kehr	Soft ointment	6001368015	2
Wolf-Apotheke	Soft ointment	16083101	1
Caelo	Soft ointment	16083001	37
Bombastus	Soft ointment	16083101	1
Euro OTC	Soft ointment	16083101	1
Caelo	Soft ointment	1614620	1
Ebert & Jacobi 19.07...	Soft ointment	16083101	1
Caelo	Soft ointment	16146201	8
Fagron	Soft ointment	16A21-T05-029597	9
Caelo	Soft ointment	16A21T05029597	1
Henry Lamotte/Anzag	Soft ointment	6001368015	1
Caelo	Soft ointment	101/AKD13	1
Bombastus	Soft ointment	16083001	1
Bombastus	Soft ointment	300642	1
Caelo	Soft ointment	16146301	12
Lamotte/Kehr	Soft ointment	5869200	1
Caelo	Soft ointment	16146401	8
Henry Lamotte	Soft ointment	6001368015	2
AHL	Soft ointment	6001368001	2
Fagron	Soft ointment	299868	1
Bombastus	Soft ointment	299869	5
Caelo	Soft ointment	160620UM	1
Caelo	Soft ointment		3
Bombastus	Soft ointment	16146301	1
Caelo	Soft ointment	16024401	1

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Supplier	Substance	Batch	Spectra
Bombastus	Soft ointment	302327	4
Caelo	Soft ointment	16083003	1
Caelo	Soft ointment	16245301	24
Caelo	Soft ointment	161111UM/16146103	1
Caelo	Soft ointment	16146502	19
phönix	Soft ointment	16083001	1
Alliance Healthcare	Soft ointment	298070	1
Caelo	Soft ointment	1603001	1
Fagron	Soft ointment	15I08-T01-0205888	1
Caelo	Soft ointment	16146103	5
Caelo	Soft ointment	15108t02025891	1
Anzag	Soft ointment	16A21-T05-029597	1
Fagron	Soft ointment	16a21-t05-029597	1
Caelo	Soft ointment	161465	1
Caelo	Soft ointment	16245201	30
Gehe	Soft ointment	16146401	1
Caesar & Loretz	Soft ointment	16245201	1
Alte Apotheke	Soft ointment	16146103	1
Caelo	Soft ointment	16245401	22
Bombastus	Soft ointment	302326	1
Gehe	Soft ointment	16146103	1
Caelo	Soft ointment	16146503	3
Fagron	Soft ointment	16G18-T02-035247	3
Ichtyol-Gesellschaft	Soft ointment	16245201	1
Caelo	Soft ointment	20011702	1
Fagron	Soft ointment	16G18-T02-035248	3
Phönix	Soft ointment	16245201	1
Bombastus	Soft ointment	6862381	1
Bombastus	Soft ointment	304548	3
Lamotte/Kehr	Soft ointment	6001368001	1
Caelo	Soft ointment	16245202	6
Caelo	Soft ointment	16245402	5
Caelo	Soft ointment	16313401	25
SanacorpWE:28.01.2017 ...	Soft ointment	16245201	1
Henry Lamotte Oils / Gehe	Soft ointment	8002320003	1
Henry Lamotte Oils GmbH	Soft ointment	8002320003	1
Fagron	Soft ointment	16245401	1
Caelo	Soft ointment	16313501	28
Bombastus	Soft ointment	305450	1
Caelo	Soft ointment	16A21-T05-029597	1
Gehe	Soft ointment	16245202	1
Fagron	Soft ointment	16A21-T06-029597	1
Euro OTC	Soft ointment	16313501	4
Gehe	Soft ointment	305449	1
Bombastus	Soft ointment	305451	3
Noweda	Soft ointment	16245202	1
	Soft ointment	16G18-T02-035248	1
Caelo	Soft ointment	16F03-T02-033989	1
Lamotte/Kehr	Soft ointment	8002320004	1
Gehe	Soft ointment	17076402	1
Caelo	Soft ointment	16146302	1
Caelo	Soft ointment	299869	1
Gehe	Soft ointment	16313402	1
Fagron	Soft ointment	17A03-T01-039997	7
Caelo	Soft ointment	17076402	1
Caelo	Soft ointment	170509UM/16245202	1
Caelo	Soft ointment	16313402	2
Euro OTC	Soft ointment	16313401	1
Caelo	Soft ointment	17076401	23
Henry Lamotte Oils GmbH...	Soft ointment	8002320003	2

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Supplier	Substance	Batch	Spectra
Sanacorp	Soft ointment	16313501	1
Caelo	Soft ointment	17076301	9
Caelo	Soft ointment	161465025263	1
Lamotte GmbH	Soft ointment	8002320003	1
Fagron	Soft ointment	17A03-T01039997	1
Caelo	Soft ointment	17076501	18
Anzag	Soft ointment	17A03-T01-039997	1
Fagron	Soft ointment	17076401	1
Caelo	Soft ointment	16G18-T02-035248	1
Cealo	Soft ointment	17076401	1
Henry Lamotte/ AHD	Soft ointment	8002320003	1
Henry Lamotte/Geilenkir...	Soft ointment	8002320003	1
phönix	Soft ointment	17076401	1
Kehr	Soft ointment	17076501	1
Caelo	Soft ointment	17064402	1
Sanacorp	Soft ointment	17076801	1
Bombastus	Soft ointment	308040	1
Bombastus	Soft ointment	305449	1
Caelo	Soft ointment	17076701	6
phoenix	Soft ointment	17076401	1
Euro/Phönix	Soft ointment	17076501	1
Caeolo/Phönix	Soft ointment	17076401	1
THC Rezeptur-Set	Soft ointment	17076401	1
Caelo	Soft ointment	170764	1
GEHE	Soft ointment	16313501	1
Caelo	Soft ointment	20170815-02542	1
Caelo	Soft ointment	16245502-20170818Ma7	1
Caelo	Soft ointment	170764015337	1
Sanacorp	Soft ointment	17076401	3
Bombastus	Soft ointment	308038	1
Noweda	Soft ointment	17076401	1
Caelo	Soft ointment	17076801	4
Caelo	Soft ointment	17076601	25
Caelo	Soft ointment	170926UM/17076301	1
Caelo	Soft ointment	17076901	6
Sanacorp	Soft ointment	17076501	1
Caelo	Soft ointment	23101705	1
AHC/Lamotte	Soft ointment	8002875005	1
Caelo	Soft ointment	17076801-20171106Ma6	1
Euro/ Phönix	Soft ointment	4517A-02542	1
Henry Lamotte	Soft ointment	8002875005	1
Caelo	Soft ointment	17197101	4
Bombastus	Soft ointment	3099727	1
Caelo	Soft ointment	17A03-T01-039997	1
Caeolo/Gehe	Soft ointment	17263201	2
Caelo	Soft ointment	17104902	1
AHD	Soft ointment	17076601	1
Caelo	Soft ointment	17197201	7
AHL	Soft ointment	8002320004	1
Phönix	Soft ointment	17197101	1
Caelo	Soft ointment	17263201	33
Caelo	Soft ointment	17263101	20
GEHE	Soft ointment	17197102	1
Fiebig	Soft ointment	17263201	2
Caelo	Soft ointment	1631351	1
Caelo	Soft ointment	17197103-20180112Ma6	1
Caelo	Soft ointment	17197102	2
GEHE	Soft ointment	17263101	1
Phoenix	Soft ointment	16313501	1
Caelo	Soft ointment	17196901	3

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Supplier	Substance	Batch	Spectra
Fagron	Soft ointment	17263101	2
Caelo	Soft ointment	17197103	1
Lamotte /Noweda	Soft ointment	8002875005	2
Caelo	Soft ointment	17203101	1
Sanacorp	Soft ointment	17263201	2
Sanacorp	Soft ointment	17197102	1
Bombastus	Soft ointment	17000370	2
Caelo	Soft ointment	17263302	3
Caelo	Soft ointment	18002302	5
ApoAmKlini	Soft ointment	1118Q-02542	2
Phoenix/Cealo	Soft ointment	17263201	1
Caelo	Soft ointment	180320UM/17263302	1
Henry Lamotte	Soft ointment	8002320004	1
Caelo	Soft ointment	17263202	3
GEHE	Soft ointment	18002501	1
Caelo	Soft ointment	17263302-20180404Ma8	1
Sanacorp	Soft ointment	17H28-T03-047827	5
Caelo	Soft ointment	18002501	17
Caesar & Lorenz GmbH	Soft ointment	18002302	1
Fagron	Soft ointment	17H28-T03-047827	1
Caelo	Soft ointment	17076401/5440	1
Caelo	Soft ointment	18002101	8
Kehr	Soft ointment	18002302	1
Bombastus	Soft ointment	18000135	1
Caelo	Soft ointment	18002303	6
Noweda	Soft ointment	18002101	1
Bombastus	Soft ointment	309727	1
Caelo	Soft ointment	172632015583	1
ALH/ Henry	Soft ointment	8002875006	1
Caelo	Soft ointment	18140502	2
Sanacorp	Soft ointment	18002302	1
Caelo	Soft ointment	18061806	1
Sanacorp	Soft ointment	18002501	2
Lamotte	Soft ointment	8002875005	1
Hedinger/Gehe	Soft ointment	18140501	1
Caelo	Soft ointment	18002320	1
Fiebig	Soft ointment	18162901	1
Caelo	Soft ointment	18162901	5
Caelo	Soft ointment	18140503	1
Caelo	Soft ointment	18001701	4
Cealo/Gehe	Soft ointment	18163001	1
Bombastus	Soft ointment	8002875005	1
Caelo	Soft ointment	180002401	2
Caelo	Soft ointment	18163001	5
Caelo	Soft ointment	18002401	12
Henry lamotte Oils GmbH	Soft ointment	802875005	1
Kehr	Soft ointment	18140501	1
Caelo	Soft ointment	18140501	2
Anzag	Soft ointment	18000135	1
Caelo	Soft ointment	29091804	1
Sanacorp	Soft ointment	18163001	1
Caelo	Soft ointment	18152901	3
Bombastus	Soft ointment	18000136	1
Caesar & Loretz GmbH	Soft ointment	18152901	1
Caelo	Soft ointment	18201201	4
Caelo	Soft ointment	18201402	9
euro//Noweda	Soft ointment	18001901	1
Kehr	Soft ointment	18162901	1
Anzag	Soft ointment	18002039	1
Noweda	Soft ointment	18004473	1

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Supplier	Substance	Batch	Spectra
Bombastus	Soft ointment	18002978	1
Caelo	Soft ointment	18001901-W20190115Ma	1
Henry Lamotte Oils GmbH...	Soft ointment	8004399002	1
Sanacorp	Soft ointment	18201402	1
Caelo	Soft ointment	18201301	1
Caelo	Soft ointment	26011904	1
Caelo	Soft ointment	18251101	3
Caelo	Soft ointment	18002001	1
Caesar & Loretz GmbH	Soft ointment	18201402	1
Alliance Healthcare Hen...	Soft ointment	8004399002	1

- 106 156 spectra from 582 *Apo-Ident* customers from a total of 30 354 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 *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	290	0	35 545
Type B	0	1059	11	78 008
Type C	0	1749	54	106 156

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 % (> 99.9705 %)	100.0000 % (> 97.9310 %)
Type B	100.0000 % (> 99.9688 %)	98.9720 % (> 98.6916 %)
Type C	100.0000 % (> 99.6449 %)	97.0050 % (> 96.8386 %)

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.

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	5.39	101.73
30924	31984	10.27	115.16
31452	31452	0.00	94.09
31984	31984	0.00	99.71
32097	32097	0.00	87.84
32871	32871	0.00	96.77

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Softisan® 378**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30887-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Softisan® 378; Adeps solidus 378

Special notes

When selecting the *Softisan® 378* 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*
Appendix F [Addition to the second-stage models](#)

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.

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*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Fagron	Softisan® 378	12K27-N05	30887	60	20121204
Fagron	Softisan® 378	13D26-N12	31117	40	1407632
Caelo	Softisan® 378	13370104	31472	40	20131119
Caelo	Softisan® 378	14301114	32298	30	20141118
Fagron	Softisan® 378	15G20-B10-326361	32964	40	1704407

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 210 spectra of 5 reference samples from the substance/substance group *Softisan*[®] 378. These samples are listed above in the [calibration samples](#) section.
- 35 625 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 130 spectra of 4 reference samples from the substance/substance group *Softisan*[®] 378.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	<i>Softisan</i> [®] 378	14301114	32298 [†]	10
Caelo	<i>Softisan</i> [®] 378	14301114	32299	40
Caelo	<i>Softisan</i> [®] 378	162686	33078	40
Caelo	<i>Softisan</i> [®] 378	162686	33101	40

- 78 948 spectra from a total of 1828 batches from further 350 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 62 *Apo-Ident* customers from 108 batches from the substance/substance group *Softisan*[®] 378.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Softisan [®] 378	10310003	1
Caelo	Softisan [®] 378	11359302	1
Caelo	Softisan [®] 378	3071201	1
Sanacorp	Softisan [®] 378	12A18-N11	1
Caelo	Softisan [®] 378	18011302	1
Caelo	Softisan [®] 378	10310008	1
Caelo	Softisan [®] 378	21031310	1
Fagron	Softisan [®] 378	12/24-N01	1
Fagron	Softisan [®] 378	12K27-N05	1
Fagron	Softisan [®] 378	13B11-N01	1
Fagron	Softisan [®] 378	11520	2
Noweda	Softisan [®] 378	2012060444	1
Fagron	Softisan [®] 378	13D26-N12	9
Fagron	Softisan [®] 378	13D26-N02	1
Fagron	Softisan [®] 378	209602	4
Caelo	Softisan [®] 378	27091306	1
Caelo	Softisan [®] 378	57657	1
THC Pharma	Softisan [®] 378		1
Caelo	Softisan [®] 378	14111312	1
Caelo	Softisan [®] 378	11121304	1
Fagron	Softisan [®] 378	13H22-N01	1
Caelo	Softisan [®] 378	209602	1
Fagron	Softisan [®] 378	13H22-N01	5
Caelo	Softisan [®] 378	13012704	1
Caelo	Softisan [®] 378	13012707	5
Fagron	Softisan [®] 378	303624	2
Caelo	Softisan [®] 378	73059	1
Bionorica/Gehe	Softisan [®] 378	75850	3
Fagron	Softisan [®] 378	12I24-N01	1
Caelo	Softisan [®] 378	28031401	1
Thc	Softisan [®] 378	2012060444	1
Caelo	Softisan [®] 378	13H22-N01	1
Sanacorp	Softisan [®] 378	3/AKD1	1
Caelo	Softisan [®] 378	1081408	1
Alliance Health.14.08.2...	Softisan [®] 378		1
Caelo	Softisan [®] 378	13012703	1
Caelo	Softisan [®] 378	13370102	2
Caelo	Softisan [®] 378	13370104	3
Fagron	Softisan [®] 378	311662	2
Fagron	Softisan [®] 378	14F11-B04-296083	3
Caelo	Softisan [®] 378	16021507	1
Gehe Kassel 09.02.2015	Softisan [®] 378	75850	1
Phoenix Goettin	Softisan [®] 378	2013091014	2
Caelo	Softisan [®] 378	4041501	1
Caelo	Softisan [®] 378	13370112	1
Fagron	Softisan [®] 378	14F11-B04	3
Caelo	Softisan [®] 378	14301103	2
Fagron	Softisan [®] 378	14F11B04-296083	1
Caelo	Softisan [®] 378	22062015B	1
Fagron	Softisan [®] 378	514E-02911	1
Caelo	Softisan [®] 378	14301104	2
Fagron	Softisan [®] 378	14F11-B04-299298	4
Fagron	Softisan [®] 378	505717	2
Fagron	Softisan [®] 378	15G20-B10-310231	1
THC Pharma	Softisan [®] 378	88154	1
Caelo	Softisan [®] 378	14301112	1
Fagron	Softisan [®] 378	15G20-B10-311893	2
Fagron	Softisan [®] 378	15G20-B10-316518	2
Caelo	Softisan [®] 378	14301113	1
Caelo	Softisan [®] 378	15G20-B10-316518	2

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Supplier	Substance	Batch	Spectra
Caelo	Softisan [®] 378	15G20-B10-310231	1
Fagron	Softisan [®] 378	15G20-B10316518	1
Caelo	Softisan [®] 378	15G20B10320309	1
THC Pharma	Softisan [®] 378	92456	1
Fagron	Softisan [®] 378	15G20-10-316518	1
Fagron	Softisan [®] 378	15G20-B10-525116	2
Caelo	Softisan [®] 378	16010402	1
Bombastus	Softisan [®] 378	302709	1
Fagron	Softisan [®] 378	15G20-B10	2
Allianc. Health. / THC ...	Softisan [®] 378	92456	1
THC Pharma/Phönix	Softisan [®] 378	95076	1
Caelo	Softisan [®] 378	15gb10326361	1
Aallianc. Healthc. / TH...	Softisan [®] 378	98561	7
Caelo	Softisan [®] 378	16010408	1
Fagron	Softisan [®] 378	15G20-B10-525272	1
Bionorica/Noweda	Softisan [®] 378	98561	1
Fagron	Softisan [®] 378	17B16-B06-331749	1
Caelo	Softisan [®] 378	98561	1
Bombastus	Softisan [®] 378	17B16-B06-331749	1
Fagron	Softisan [®] 378	17B16-B06-525441	1
Fagron	Softisan [®] 378	15G20-B10-525379	1
Bionorica/Noweda	Softisan [®] 378	103897	2
Bombastus	Softisan [®] 378	17816-806-331749	1
THC Pharma	Softisan [®] 378	98561	1
GEHE	Softisan [®] 378	17B16-B06	1
Caelo	Softisan [®] 378	103897	2
Caelo	Softisan [®] 378	21071707	1
Caelo	Softisan [®] 378	16268605	1
Caelo	Softisan [®] 378	107075	2
Fagron	Softisan [®] 378	17B16-B06-334707	2
Bionorica SE	Softisan [®] 378	107075	1
Bionorica / Alliance	Softisan [®] 378	103897	1
Bionorica / Alliance	Softisan [®] 378	107075	1
Caelo	Softisan [®] 378	14101712	1
THC Pharma / Phoenix	Softisan [®] 378	103897	2
Bionorica/Kehr	Softisan [®] 378	103897	1
Fagron	Softisan [®] 378	17F15-B05-336058	2
Bionorica/Kehr	Softisan [®] 378	107075	1
Fargon	Softisan [®] 378	17I07-B01-338745	1
Fagron	Softisan [®] 378	17F-15-B05-336058	1
Caelo	Softisan [®] 378	3/2017	1
Fagron	Softisan [®] 378	17B16-B06-333147	1
Fagron	Softisan [®] 378	17I07-B01-338745	1
AHD	Softisan [®] 378	17I07-B01-338745	1
Bionorica	Softisan [®] 378	107075	1
AHD	Softisan [®] 378	17I07-B01-340337	1
Caelo	Softisan [®] 378	17247103	1
Bionorica Ethics	Softisan [®] 378	109779	1
Bionorica/phoenix	Softisan [®] 378	318E-02911	1
Bionorica/Gehe	Softisan [®] 378	107075	1
Fagron	Softisan [®] 378	17/07-B01-340337	1
Caelo	Softisan [®] 378	19021811	1
Noweda	Softisan [®] 378	109704	1
Bionorica	Softisan [®] 378	109779	4
Fagron	Softisan [®] 378	17J06-B01-342646	2
Caelo	Softisan [®] 378	25041804	1
Caelo	Softisan [®] 378	12051807	1
Fagron	Softisan [®] 378	17J06-B01342646	1
Caelo	Softisan [®] 378	23051811	1
Fagron	Softisan [®] 378	17I07-B01-340337	1

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Supplier	Substance	Batch	Spectra
Fagron	Softisan [®] 378	17F15-B05-336059	2
Bionorica/Fiebig	Softisan [®] 378	109779	1
Caelo	Softisan [®] 378	17247109	1
Fagron	Softisan [®] 378	17J06-B01-346209	1
Fagron	Softisan [®] 378	17J06-B01-348073	3
Delta	Softisan [®] 378	17J06-B01-525706	2
Fagron	Softisan [®] 378	17J06-B01-525718	1
Caelo	Softisan [®] 378	113358	1
Caelo	Softisan [®] 378	18146401	3
Caelo	Softisan [®] 378	20101804	1
Bionorica	Softisan [®] 378	113358	2
Fagron	Softisan [®] 378	18G30-B05-352747	1
Fagron	Softisan [®] 378	17J06-B01-349162	1
Bionorica / Alliance	Softisan [®] 378	113358	1
Bionorica ethics /AHD	Softisan [®] 378	113358	1

-107758 spectra from 582 *Apo-Ident* customers from a total of 30573 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 *Softisan[®] 378* 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* 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	210	0	35 625
Type B	0	129	1	78 864
Type C	0	165	36	107 752

The substance/substance group *Softisan[®] 378* 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 % (> 99.9706 %)	100.0000 % (> 97.1429 %)
Type B	100.0000 % (> 99.9689 %)	99.2308 % (> 96.9231 %)
Type C	100.0000 % (> 99.6464 %)	82.0896 % (> 80.5970 %)

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.

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	14.79
32298	31117	0.68	13.45
32964	32964	0.00	15.88
31117	31117	0.00	13.36
31472	31117	3.89	13.10

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Sorbitan- and glycerol monooleate
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31574-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Sorbitan- and glycerol monooleate

Special notes

When selecting the *Sorbitan- and glycerol monooleate* substance/substance group, the following information is displayed to the user:

no information

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>
Appendix F	Addition to the second-stage models

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.

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- and glycerol monooleate*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Sorbitan- and gl...	14202402	31574	40	AR-15-FG-009320-01
Caelo	Sorbitan- and gl...	15122301	31726	40	20150420

Validation samples

A total of 222 872 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 *Sorbitan- and glycerol monooleate*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 200 spectra of 6 reference samples from the substance/substance group *Sorbitan- and glycerol monooleate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sorbitan- and glycerol monoo...	14202402	31574 [†]	20
Caelo	Sorbitan- and glycerol monoo...	15122301	31726 [†]	20
Caelo	Sorbitan- and glycerol monoo...	16234301	33454	40
Caelo	Sorbitan- and glycerol monoo...	16234301	33455	40
Caelo	Sorbitan- and glycerol monoo...	17132202	33936	40
Caelo	Sorbitan- and glycerol monoo...	182151	34252	40

- 78 878 spectra from a total of 1825 batches from further 350 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.

- 22 spectra from 10 *Apo-Ident* customers from 5 batches from the substance/substance group *Sorbitan- and glycerol monooleate*.

[†]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*.

Supplier	Substance	Batch	Spectra
Apomix	Sorbitan- and glycerol monoo...	20515	3
Caelo	Sorbitan- and glycerol monoo...	16234301	12
Apomix/Noweda	Sorbitan- and glycerol monoo...	21115	1
apomix/ Noweda	Sorbitan- and glycerol monoo...	21115	1
apomix	Sorbitan- and glycerol monoo...	11116	4
apomix	Sorbitan- and glycerol monoo...	10118	1

- 107 937 spectra from 582 *Apo-Ident* customers from a total of 30 675 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 *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 *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	80	0	35 755
Type B	0	200	0	78 878
Type C	0	22	0	107 937

The substance/substance group *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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 97.0000 %)
Type C	100.0000 % (> 99.6453 %)	100.0000 % (> 72.7273 %)

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.

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	31.36
31726	31574	6.89	33.67

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Sorbitan trioleate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31031-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20131017

Validation samples

A total of 222 872 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 *Sorbitan trioleate*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Sorbitan trioleate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Sorbitan trioleate	13317212	31459 [†]	20
Caelo	Sorbitan trioleate	15337406	33441	40
Caelo	Sorbitan trioleate	17056001	33461	40
Caelo	Sorbitan trioleate	180779	34080	40

- 78 938 spectra from a total of 1826 batches from further 350 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.

- 51 spectra from 25 *Apo-Ident* customers from 26 batches from the substance/substance group *Sorbitan trioleate*.

Supplier	Substance	Batch	Spectra
Caelo	Sorbitan trioleate	11284601	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
Caelo	Sorbitan trioleate	11284603	1
Caelo	Sorbitan trioleate	11284608	1
Caelo	Sorbitan trioleate	12171405	1
Caesar & Loretz GmbH	Sorbitan trioleate	12171405	1
Caelo	Sorbitan trioleate	1217408	1
Caelo	Sorbitan trioleate	12171408	3
Caelo	Sorbitan trioleate	11284607	1
Gehe	Sorbitan trioleate	12171408	1
Caelo	Sorbitan trioleate	13317204	1
Caelo	Sorbitan trioleate	13317212	5
Caesar/Lorenz	Sorbitan trioleate	13317210	1
Caelo	Sorbitan trioleate	13317209	1
Caelo	Sorbitan trioleate	13317213	1
Caelo	Sorbitan trioleate	15064901	1
Caelo	Sorbitan trioleate	14218205	1
Caelo	Sorbitan trioleate	14218202	1
Caelo	Sorbitan trioleate	15182502	2
Caelo	Sorbitan trioleate	15064909	1
Caelo	Sorbitan trioleate	15064908	1
Caelo	Sorbitan trioleate	15064903	2
Caelo	Sorbitan trioleate	15064905	1
Caelo	Sorbitan trioleate	15337405	3
Caesar&Loretz GmbH	Sorbitan trioleate	15064903	1
Caesar & Lorenz GmbH	Sorbitan trioleate	15337404	1
Caelo	Sorbitan trioleate	15337404	4
GEHE	Sorbitan trioleate	15337404	1
Caelo	Sorbitan trioleate	15337406	2
Caelo	Sorbitan trioleate	15337403	1
Caelo	Sorbitan trioleate	17056001	2
Caelo	Sorbitan trioleate	17056004	4
GEHE	Sorbitan trioleate	17056001	1
Caesar & Lorenz GmbH	Sorbitan trioleate	17056004	1

- 107 908 spectra from 582 *Apo-Ident* customers from a total of 30 654 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 *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	120	0	35 715
Type B	0	140	0	78 938
Type C	0	51	0	107 908

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6451 %)	100.0000 % (> 88.2353 %)

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.

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
31031	31031	0.00	27.02
31130	31031	7.55	31.11
31459	31031	5.41	29.99

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Spearmint oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30668-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20131118

Validation samples

A total of 222 872 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 *Spearmint oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Spearmint oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spearmint oil	13363904	31419 [†]	20
Caelo	Spearmint oil	161284	32205	40
Caelo	Spearmint oil	172396	33912	40

- 78 978 spectra from a total of 1827 batches from further 350 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 15 batches from the substance/substance group *Spearmint oil*.

Supplier	Substance	Batch	Spectra
Noweda	Spearmint oil	11346805	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
Caelo	Spearmint oil	12206913	1
Caelo	Spearmint oil	12206910	1
Caelo	Spearmint oil	13093402	1
Sanacorp	Spearmint oil	13093402	1
Caelo	Spearmint oil	14147608	2
Caelo	Spearmint oil	25062015B	1
Caelo	Spearmint oil	150013904	1
Caelo	Spearmint oil	15013909	1
Caelo	Spearmint oil	16128405	1
Caelo	Spearmint oil	16128402	1
Sanacorp	Spearmint oil	16128409	1
Caelo	Spearmint oil	16128409	1
Caelo	Spearmint oil	17239605	1
Caelo	Spearmint oil	16128404	1
Caelo	Spearmint oil	17239608	1
Sanacorp	Spearmint oil	17239602	1

- 107 941 spectra from 582 *Apo-Ident* customers from a total of 30 665 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 *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	120	0	35 715
Type B	0	100	0	78 978
Type C	0	18	0	107 941

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6454 %)	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.

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
30668	31303	11.67	40.37
31303	31303	0.00	42.41
31419	31303	7.15	44.42

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Spirit of ether**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30707-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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

Validation samples

A total of 222 872 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 *Spirit of ether*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Spirit of ether*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spirit of ether	15442201	32566	40
Caelo	Spirit of ether	15442203	33218	40
Caelo	Spirit of ether	181156	34065	40

- 78 958 spectra from a total of 1827 batches from further 350 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*.

Supplier	Substance	Batch	Spectra
Caelo	Spirit of ether	12074603	2
Caelo	Spirit of ether	11375512	1
Caelo	Spirit of ether	11375509	1
Caelo	Spirit of ether	13131807	1

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Supplier	Substance	Batch	Spectra
Caelo	Spirit of ether	13131805	2
Caelo	Spirit of ether	14339702	2
Gehe	Spirit of ether	15442203	1

- 107 949 spectra from 582 *Apo-Ident* customers from a total of 30 673 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 *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	80	0	35 755
Type B	0	120	0	78 958
Type C	0	8	2	107 949

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
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.

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	31207	5.89	129.63
31207	31207	0.00	139.98

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Spirit soap**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30546-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	173045	33893	40	20171204*

Validation samples

A total of 222 872 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 *Spirit soap*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Spirit soap*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spirit soap	16130209	33443	40
Caelo	Spirit soap	16130209	33456	40
Caelo	Spirit soap	182955	34332	40

- 78 958 spectra from a total of 1828 batches from further 350 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.

- 107 spectra from 44 *Apo-Ident* customers from 47 batches from the substance/substance group *Spirit soap*.

Supplier	Substance	Batch	Spectra
Anzag 8.10.14 EK 4.88	Spirit soap	13278403	1

continued on the next page

*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.

continued from previous page

Supplier	Substance	Batch	Spectra
Sanacorp	Spirit soap	12247102	1
Caelo	Spirit soap	12247102	1
Caelo	Spirit soap	9172002	1
Caelo	Spirit soap	12247104	2
Caelo	Spirit soap	12247108	7
Caelo	Spirit soap	12247105	1
Caelo	Spirit soap	12247107	1
Caelo	Spirit soap	3091306	1
Caelo	Spirit soap	12247110	7
Caelo	Spirit soap	2712Q-02323	1
Caelo	Spirit soap	12247109	2
Caelo	Spirit soap	10121303	1
Caelo	Spirit soap	13278402	4
Caelo	Spirit soap	13278403	8
Caelo	Spirit soap	13278405	3
Caelo	Spirit soap	13278409	6
Caelo	Spirit soap	13278408	2
Caelo	Spirit soap	14212703	1
Caelo	Spirit soap	14212706	6
Caelo	Spirit soap	14212705	1
Anzag	Spirit soap	13278409	1
Caelo	Spirit soap	12121402	1
Caelo	Spirit soap	3913U-02323	1
Caelo	Spirit soap	9031501	1
Caelo	Spirit soap	14212714	1
Caelo	Spirit soap	14212712	1
Caelo	Spirit soap	14212710	1
Caelo	Spirit soap	14212716	1
Caelo	Spirit soap	6081516	1
Caelo	Spirit soap	14364901	1
Caelo	Spirit soap	14364905	1
Caelo	Spirit soap	14364902	3
Caelo	Spirit soap	27072013	1
Caelo	Spirit soap	14364906	4
Caelo	Spirit soap	14364904	3
Caesar&Lorenz	Spirit soap	14364906	1
Caelo	Spirit soap	14364907	1
Caelo	Spirit soap	14364909	1
Caelo	Spirit soap	16130202	2
Caelo	Spirit soap	16130201	4
Caelo	Spirit soap	16069902	1
Caelo	Spirit soap	16130204	3
Caelo	Spirit soap	11051704	1
Caelo	Spirit soap	16130209	2
Fagron	Spirit soap	16130201	1
Caelo	Spirit soap	17304501	2
Caelo	Spirit soap	17304502	2
Caelo	Spirit soap	19011801	1
Caelo	Spirit soap	17304504	1
GEHE	Spirit soap	17304502	1
Caelo	Spirit soap	7071805	1
Caelo	Spirit soap	7111804	1
AHD	Spirit soap	17304502	1

- 107 852 spectra from 582 *Apo-Ident* customers from a total of 30 634 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 *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	120	0	35 715
Type B	0	120	0	78 958
Type C	0	105	2	107 852

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
Type C	100.0000 % (> 99.6450 %)	98.1308 % (> 95.3271 %)

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.

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	40.27
31393	31153	2.58	41.47
33893	33893	0.00	46.18

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Spruce needle oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31414-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	30	1412281
Caelo	Spruce needle oil	13152004	31618	40	20130617
Caelo	Spruce needle oil	14348607	31787	40	20141202

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 110 spectra of 3 reference samples from the substance/substance group *Spruce needle oil*. These samples are listed above in the [calibration samples](#) section.
- 35 725 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 130 spectra of 5 reference samples from the substance/substance group *Spruce needle oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Spruce needle oil	13152004	31414 [†]	10
Caelo	Spruce needle oil	13152004	31618 [†]	20
Caelo	Spruce needle oil	14348607	31787 [†]	20
Caelo	Spruce needle oil	163511	33095	40
Caelo	Spruce needle oil	171966	33682	40

- 78 948 spectra from a total of 1826 batches from further 350 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 spectra from 9 *Apo-Ident* customers from 10 batches from the substance/substance group *Spruce needle oil*.

[†]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*.

Supplier	Substance	Batch	Spectra
Nachprüfung	Spruce needle oil	2914A-02006	1
Caelo	Spruce needle oil	14348607	1
Taoasis	Spruce needle oil	22336-122331	1
Gehe	Spruce needle oil	15418209	1
Caelo	Spruce needle oil	13389508	1
Caelo	Spruce needle oil	3071717	1
Caelo	Spruce needle oil	15418210	1
Caelo	Spruce needle oil	17196602	3
Caelo	Spruce needle oil	8051802	1
Caelo	Spruce needle oil	15418209	1
Sanacorp	Spruce needle oil	17196601	1

- 107 946 spectra from 582 *Apo-Ident* customers from a total of 30 670 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 *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	110	0	35 725
Type B	0	130	0	78 948
Type C	0	10	3	107 946

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 % (> 99.9707 %)	100.0000 % (> 94.5455 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.3846 %)
Type C	100.0000 % (> 99.6456 %)	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.

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
31787	31414	6.46	17.25
31618	31414	2.74	17.11
31414	31414	0.00	16.03

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Squalane**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31327-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	14330704	32075	40	9465
Caelo	Squalane	16030504	32302	40	20160205
Caelo	Squalane	171380	33317	40	20170609*

Validation samples

A total of 222872 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 *Squalane*. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 3 reference samples from the substance/substance group *Squalane*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Squalane	13202603	31328	40
Caelo	Squalane	13202603	31329	40
Caelo	Squalane	17138001	33422	40

- 78958 spectra from a total of 1828 batches from further 350 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 1 *Apo-Ident* customers from 3 batches 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.

Supplier	Substance	Batch	Spectra
Euro OTC	Squalane	316001302	1
Spinnrad/Noweda	Squalane	116001301	1
Caelo	Squalane	16030504	1

- 107 956 spectra from 582 *Apo-Ident* customers from a total of 30 677 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	3	0	107 956

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
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.

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
32075	32075	0.00	13.14
32302	32075	2.88	11.57
31327	31327	0.00	12.13
33317	33317	0.00	13.35

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Syrups
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30753-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Syrups; Althae sirupus (konserviert); Cherry syrup (conserved); Ipecacuanha syrup (NRF 19.1); Marshmallow syrup (conserved); 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	<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>
Appendix F	Addition to the second-stage models

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.

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	Marshmallow syru...	12067103	30753	40	20120312

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Sorbitol solutio...	12124910	30870	40	20120525
Caelo	Ribwort plantain...	11380011	30897	60	20120112
Caelo	Raspberry syrup ...	13122003	31051	40	1402567
Caelo	Sorbitol solutio...	13060206	31124	40	20130306
Caelo	Marshmallow syru...	12303106	31147	40	1404662
Caelo	Cherry syrup (co...	13278301	31155	40	1402568
apomix	Sugar syrup DAB	73A101013	31175	40	1403164
Fagron	Ipecacuanha syru...	13G23-M02	31181	40	1404013
Caelo	Ribwort plantain...	13152307	31218	40	1404663
Caelo	Sorbitol solutio...	14034706	31353	40	8780
Caelo	Sugar syrup DAB	14134301	31355	40	20140514
Caelo	Cherry syrup (co...	14034503	31359	40	20140131
Caelo	Marshmallow syru...	13410907	31365	40	20140318
Caelo	Raspberry syrup ...	14114303	31467	40	20140411
Euro OTC	Raspberry syrup ...	1508015	31773	40	20150814*
Euro OTC	Raspberry syrup ...	1511024	31802	40	20150511*
Caelo	Sugar syrup DAB	153348	31877	40	20151014*
Euro OTC	Raspberry syrup ...	1605008	32284	40	20160513*
Euro OTC	Raspberry syrup ...	1701022	32984	40	20170126*
Caelo	Cherry syrup (co...	163453	33099	40	20161221*
Fagron	Ipecacuanha syru...	02B200616	33263	40	20160627
Caelo	Marshmallow syru...	171283	33331	40	20170511*
Fagron	Ipecacuanha syru...	01A070817	33642	40	20170810
Caelo	Ribwort plantain...	182898	34329	40	20181211*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 1020 spectra of 25 reference samples from the substance/substance group *Syrups*. These samples are listed above in the [calibration samples](#) section.
- 34 815 spectra from a total of 822 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 1500 spectra of 41 reference samples from the substance/substance group *Syrups*.

*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	Sorbitol solution 70% (non-c...	14034706	31353 [†]	20
Caelo	Sugar syrup DAB	14134301	31355 [†]	20
Caelo	Cherry syrup (conserved)	14034503	31359 [†]	20
Caelo	Raspberry syrup (conserved)	14114303	31467 [†]	20
Euro OTC	Raspberry syrup (conserved)	1508015	31773 [†]	20
Euro OTC	Raspberry syrup (conserved)	1511024	31802 [†]	20
Caelo	Sugar syrup DAB	153348	31877 [†]	20
Euro OTC	Raspberry syrup (conserved)	1603007	32193	40
Caelo	Marshmallow syrup (conserved)	161233	32210	40
Caelo	Raspberry syrup (conserved)	161516	32213	40
Caelo	Marshmallow syrup (conserved)	160775	32215	40
Caelo	Sorbitol solution 70% (non-c...	160788	32217	40
Euro OTC	Sorbitol solution 70% (non-c...	1604020	32277	40
Caelo	Marshmallow syrup (conserved)	162136	32335	40
Euro OTC	Raspberry syrup (conserved)	1608003	32705	40
Euro OTC	Raspberry syrup (conserved)	1610026	32833	40
Caelo	Raspberry syrup (conserved)	163454	33092	40
Caelo	Sugar syrup DAB	170581	33126	40
Euro OTC	Sorbitol solution 70% (non-c...	1702011	33228	40
Caelo	Raspberry syrup (conserved)	171284	33332	40
apomix	Ipecacuanha syrup (NRF 19.1)	03A171016	33420	40
apomix	Ipecacuanha syrup (NRF 19.1)	02A200616	33421	40
Euro OTC	Raspberry syrup (conserved)	1705037	33450	40
Caelo	Ribwort plantain syrup (cons...	16335301	33457	40
Caelo	Ribwort plantain syrup (cons...	16335301	33458	40
apomix	Sugar syrup DAB	30A130617	33505	40
Euro OTC	Raspberry syrup (conserved)	1709003	33660	40
Caelo	Cherry syrup (conserved)	16345303	33837	40
Caelo	Cherry syrup (conserved)	173511	33891	40
Caelo	Sorbitol solution 70% (non-c...	173054	33895	40
Euro OTC	Raspberry syrup (conserved)	1712004	33930	40
Euro OTC	Sorbitol solution 70% (non-c...	1802020	34006	40
Caelo	Ribwort plantain syrup (cons...	18078901	34048	40
Euro OTC	Raspberry syrup (conserved)	1803009	34092	40
Euro OTC	Sorbitol solution 70% (non-c...	1804019	34182	40
Euro OTC	Raspberry syrup (conserved)	1807026	34190	40
Caelo	Raspberry syrup (conserved)	181909	34222	40
Caelo	Sugar syrup DAB	181757	34246	40
Caelo	Sugar syrup DAB	182278	34247	40
Euro OTC	Raspberry syrup (conserved)	1810021	34299	40
Caelo	Sugar syrup DAB	182964	34314	40

- 77578 spectra from a total of 1790 batches from further 344 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.

[†]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*.

- 1057 spectra from 216 *Apo-Ident* customers from 539 batches from the substance/substance group *Syrups*.

Supplier	Substance	Batch	Spectra
Anzag	Cherry syrup (conserved)	11291603	1
Caelo	Cherry syrup (conserved)	109212258	1
Caelo	Cherry syrup (conserved)	12367501	2
Caelo	Cherry syrup (conserved)	11168902	1
Caelo	Cherry syrup (conserved)	13166201	1
Caelo	Cherry syrup (conserved)	13278301	2
Caelo	Cherry syrup (conserved)	14034503	1
Caelo	Cherry syrup (conserved)	14034502	2
Caelo	Cherry syrup (conserved)	14371001	1
Caelo	Cherry syrup (conserved)	15149402	1
Phönix	Cherry syrup (conserved)	14114304	1
Caelo	Cherry syrup (conserved)	16029301	2
Caelo	Cherry syrup (conserved)	16345301	2
Caelo	Cherry syrup (conserved)	16195502	1
Fagron	Ipecacuanha syrup (NRF 19.1)	11B10-M01	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)	15C11-M08	3
Fagron	Ipecacuanha syrup (NRF 19.1)	13G23-M02	1
Apomix/Gehe	Ipecacuanha syrup (NRF 19.1)	3A170915	1
Apomix	Ipecacuanha syrup (NRF 19.1)	01A090218	1
Caelo	Marshmallow syrup (conserved)	12303101	1
Caelo	Marshmallow syrup (conserved)	12303106	2
Caelo	Marshmallow syrup (conserved)	13212909	1
Sanacorp	Marshmallow syrup (conserved)	13212909	1
Caelo	Marshmallow syrup (conserved)	13152307	2
Caelo	Marshmallow syrup (conserved)	13212910	1
Caelo	Marshmallow syrup (conserved)	13212908	1
Caelo	Marshmallow syrup (conserved)	14102602	2
Caelo	Marshmallow syrup (conserved)	13410909	1
Caelo	Marshmallow syrup (conserved)	14364804	1
Caelo	Marshmallow syrup (conserved)	1548604	1
ACM	Marshmallow syrup (conserved)	1015	1
Caelo	Marshmallow syrup (conserved)	15418604	2
Caelo	Marshmallow syrup (conserved)	16077502	1
Caelo	Marshmallow syrup (conserved)	15418605	1
Gehe	Marshmallow syrup (conserved)	16213604	1
Caelo	Marshmallow syrup (conserved)	16123301	1
Sanacorp	Marshmallow syrup (conserved)	17128301	2
Caelo	Marshmallow syrup (conserved)	17128301	1
Sanacorp	Marshmallow syrup (conserved)	17249904	1
Sanacorp	Marshmallow syrup (conserved)	17357505	1
Sanacorp	Marshmallow syrup (conserved)	18155106	2
Gehe	Sorbitol solution 70% (non-c...	10323008	1
Fagron	Sorbitol solution 70% (non-c...	11G18-N14	1
Caelo	Sorbitol solution 70% (non-c...	12124903	2
Caelo	Sorbitol solution 70% (non-c...	26071209	1
Euro OTC	Sorbitol solution 70% (non-c...	1102001-02	1
Euro OTC	Sorbitol solution 70% (non-c...	1207012-01	4
Fagron	Sorbitol solution 70% (non-c...	12E08-N09	1
Gehe	Sorbitol solution 70% (non-c...	12E08-N09	1
Caelo	Sorbitol solution 70% (non-c...	12124906	2
Caelo	Sorbitol solution 70% (non-c...	22011306	1
Anzag	Sorbitol solution 70% (non-c...	120701201	1
Gehe	Sorbitol solution 70% (non-c...	1207012-01	1
Caelo	Sorbitol solution 70% (non-c...	12124908	2
Gehe	Sorbitol solution 70% (non-c...	12124910	1

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Supplier	Substance	Batch	Spectra
Caelo	Sorbitol solution 70% (non-c...	11255613	1
Caelo	Sorbitol solution 70% (non-c...	12124912	4
Caelo	Sorbitol solution 70% (non-c...	1207012-01	1
Gehe	Sorbitol solution 70% (non-c...	12K07-N04	1
Caelo	Sorbitol solution 70% (non-c...	8051306	1
Caelo	Sorbitol solution 70% (non-c...	12124914	5
Caelo	Sorbitol solution 70% (non-c...	13060203	5
Caelo	Sorbitol solution 70% (non-c...	2071306	1
EuRho	Sorbitol solution 70% (non-c...	1207012-02	1
Caelo	Sorbitol solution 70% (non-c...	13060206	2
Caelo	Sorbitol solution 70% (non-c...	28081301	1
Caelo	Sorbitol solution 70% (non-c...	13060204	5
Fagron	Sorbitol solution 70% (non-c...	13E24-B01	2
Gehe	Sorbitol solution 70% (non-c...	1207012-02	1
Caelo	Sorbitol solution 70% (non-c...	13060211	1
Caelo	Sorbitol solution 70% (non-c...	13233801	2
Gehe	Sorbitol solution 70% (non-c...	12118-N09	1
Gehe	Sorbitol solution 70% (non-c...	120701202	1
Caesar u Loretz	Sorbitol solution 70% (non-c...	13060206	1
Caelo	Sorbitol solution 70% (non-c...	13233810	6
Caelo	Sorbitol solution 70% (non-c...	13233803	3
Caelo	Sorbitol solution 70% (non-c...	3031404	1
Caelo	Sorbitol solution 70% (non-c...	13233808	3
Euro OTC	Sorbitol solution 70% (non-c...	1309026-01	4
Caelo	Sorbitol solution 70% (non-c...	1207012-02	2
Euro OTC	Sorbitol solution 70% (non-c...	1207012-02	3
Caelo	Sorbitol solution 70% (non-c...	13233807	3
Caelo	Sorbitol solution 70% (non-c...	14034702	1
Caelo	Sorbitol solution 70% (non-c...	12/18-N09	1
Euro OTC	Sorbitol solution 70% (non-c...	130902602	1
Ichthylol/Gehe	Sorbitol solution 70% (non-c...	1309026-01	1
Caelo	Sorbitol solution 70% (non-c...	1309026-01	1
Fagron	Sorbitol solution 70% (non-c...	21081406	1
Phoenix	Sorbitol solution 70% (non-c...	1309026-02	1
Caelo	Sorbitol solution 70% (non-c...	14034706	1
EuRho	Sorbitol solution 70% (non-c...	1309026-02	1
Euro OTC	Sorbitol solution 70% (non-c...	1309026-02	4
Caelo	Sorbitol solution 70% (non-c...	14169403	4
Fagron	Sorbitol solution 70% (non-c...	13J04-B01-289676	1
Fagron	Sorbitol solution 70% (non-c...	139026	1
Caelo	Sorbitol solution 70% (non-c...	14169409	2
Caelo	Sorbitol solution 70% (non-c...	14298101	7
Euro OTC	Sorbitol solution 70% (non-c...	1412031-01	9
Caelo	Sorbitol solution 70% (non-c...	14298102	3
Caesar & Loretz GmbH	Sorbitol solution 70% (non-c...	14298101	1
Caelo	Sorbitol solution 70% (non-c...	15159301	5
Euro OTC	Sorbitol solution 70% (non-c...	141203101	1
Caelo	Sorbitol solution 70% (non-c...	15159302	6
Caelo	Sorbitol solution 70% (non-c...	1412031-01	1
Fagron	Sorbitol solution 70% (non-c...	29081505	1
Caelo	Sorbitol solution 70% (non-c...	14169401	1
Caelo	Sorbitol solution 70% (non-c...	1519302	1
Caelo	Sorbitol solution 70% (non-c...	15175306	3
Euro OTC	Sorbitol solution 70% (non-c...	1412031-02	4
Caelo	Sorbitol solution 70% (non-c...	15175301	1
EuRho/Phönix	Sorbitol solution 70% (non-c...	1412031-02	1
Caelo	Sorbitol solution 70% (non-c...	15175309	4
Caelo	Sorbitol solution 70% (non-c...	15175310	3
Caelo	Sorbitol solution 70% (non-c...	15437906	5
Euro OTC	Sorbitol solution 70% (non-c...	1604020-01	7

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Supplier	Substance	Batch	Spectra
Caelo	Sorbitol solution 70% (non-c...	15175307	1
Fagron	Sorbitol solution 70% (non-c...	2013M-02299	1
Caelo	Sorbitol solution 70% (non-c...	16078806	5
Caelo	Sorbitol solution 70% (non-c...	15437907	4
Caelo	Sorbitol solution 70% (non-c...	123456789	1
Caelo	Sorbitol solution 70% (non-c...	16078807	1
Fagron	Sorbitol solution 70% (non-c...	23021702	1
Caelo	Sorbitol solution 70% (non-c...	25021706	1
Caelo	Sorbitol solution 70% (non-c...	16078810	4
Caelo	Sorbitol solution 70% (non-c...	15437900	1
Euro OTC	Sorbitol solution 70% (non-c...	1604020-02	1
Euro OTC	Sorbitol solution 70% (non-c...	1604020-03	1
Fagron	Sorbitol solution 70% (non-c...	16078810	1
Caelo	Sorbitol solution 70% (non-c...	16078811	1
Caelo	Sorbitol solution 70% (non-c...	17027005	4
Caelo	Sorbitol solution 70% (non-c...	1702011-01	1
Fagron	Sorbitol solution 70% (non-c...	26081708	1
Caelo	Sorbitol solution 70% (non-c...	17027006	1
Caelo	Sorbitol solution 70% (non-c...	17027010	3
Caelo	Sorbitol solution 70% (non-c...	17027011	2
Euro OTC	Sorbitol solution 70% (non-c...	1702011-02	1
Caelo	Sorbitol solution 70% (non-c...	21041803	1
Euro OTC	Sorbitol solution 70% (non-c...	21041804	1
Caelo	Sorbitol solution 70% (non-c...	17305401	4
Caesar & Lorenz GmbH	Sorbitol solution 70% (non-c...	17027010	1
Noweda	Sorbitol solution 70% (non-c...	17305401	1
Fagron	Sorbitol solution 70% (non-c...	3041801	1
Euro OTC	Sorbitol solution 70% (non-c...	1804019-01	2
Caelo	Sorbitol solution 70% (non-c...	17305406	1
Euro/Noweda	Sorbitol solution 70% (non-c...	170201102	1
Caelo	Sorbitol solution 70% (non-c...	17305409	1
Caelo	Sorbitol solution 70% (non-c...	17305412	1
Euro OTC	Sorbitol solution 70% (non-c...	1804019-02	1
Caelo	Ribwort plantain syrup (cons...	12347506	2
Caelo	Ribwort plantain syrup (cons...	12347501	1
Caelo	Ribwort plantain syrup (cons...	13152305	1
Sanacorp	Ribwort plantain syrup (cons...	13152303	1
Caelo	Ribwort plantain syrup (cons...	13152304	1
Caelo	Ribwort plantain syrup (cons...	13152308	3
Caelo	Ribwort plantain syrup (cons...	14125702	2
Caelo	Ribwort plantain syrup (cons...	15076003	1
Sanacorp	Ribwort plantain syrup (cons...	16335305	1
Caelo	Ribwort plantain syrup (cons...	16029007	1
Sanacorp	Ribwort plantain syrup (cons...	16335302	1
Sanacorp	Ribwort plantain syrup (cons...	18078902	3
Sanacorp	Ribwort plantain syrup (cons...	18289801	2
Sanacorp	Ribwort plantain syrup (cons...	16029009	1
Caelo	Raspberry syrup (conserved)	11291404	1
phönix	Raspberry syrup (conserved)	12038501	1
Caelo	Raspberry syrup (conserved)	12038502	2
Eurho / Sanacorp	Raspberry syrup (conserved)	1110025-01	2
Caelo	Raspberry syrup (conserved)	4071203	1
Caelo	Raspberry syrup (conserved)	12161705	4
Caelo	Raspberry syrup (conserved)	12038501	1
Caelo	Raspberry syrup (conserved)	1081201	1
Euro OTC	Raspberry syrup (conserved)	1205001-01	4
Caelo	Raspberry syrup (conserved)	24081201	1
Caelo	Raspberry syrup (conserved)	17101202	1
EuRho	Raspberry syrup (conserved)	1205001-01	3
Gehe	Raspberry syrup (conserved)	12161702	1

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Supplier	Substance	Batch	Spectra
Anzag 31.10.12	Raspberry syrup (conserved)	1205001-01	1
Sanacorp	Raspberry syrup (conserved)	12283103	3
Caelo	Raspberry syrup (conserved)	11169003	1
Anzag 13.11.12	Raspberry syrup (conserved)	12283101	1
Caelo	Raspberry syrup (conserved)	12121203	1
Caelo	Raspberry syrup (conserved)	3011301	1
Euro OTC	Raspberry syrup (conserved)	1210004-01	14
Caelo	Raspberry syrup (conserved)	12283103	2
Caelo	Raspberry syrup (conserved)	8021301	1
Caelo	Raspberry syrup (conserved)	12367602	7
Caelo	Raspberry syrup (conserved)	12283101	2
Euro OTC	Raspberry syrup (conserved)	121000401	1
A.H.D.	Raspberry syrup (conserved)	12367602	2
Gehe	Raspberry syrup (conserved)	12367602	1
Caelo	Raspberry syrup (conserved)	1105022-01	1
Caelo	Raspberry syrup (conserved)	15051312	1
Caelo	Raspberry syrup (conserved)	13122001	10
EuRho Anzag	Raspberry syrup (conserved)	1210004-01	1
EuRho/Sanacorp	Raspberry syrup (conserved)	1302026-01	1
Euro OTC	Raspberry syrup (conserved)	13802025-01	1
jenne eurho	Raspberry syrup (conserved)	1302026-01	1
Caesar & Loretz/ Noweda	Raspberry syrup (conserved)	13122003	1
AHD	Raspberry syrup (conserved)	13122001	1
Caelo	Raspberry syrup (conserved)	1302026-01	3
Caelo	Raspberry syrup (conserved)	13122002	1
Caelo	Raspberry syrup (conserved)	15071302	1
Caelo	Raspberry syrup (conserved)	13122003	2
Euro OTC	Raspberry syrup (conserved)	1302026-01-335031904	1
Eurho / Sanacorp	Raspberry syrup (conserved)	1302026-01	2
Caelo	Raspberry syrup (conserved)	2x13122001	1
Euro OTC	Raspberry syrup (conserved)	1302023-01	2
Sanacorp	Raspberry syrup (conserved)	13194301	1
Caelo	Raspberry syrup (conserved)	3961/V07/14	1
Caelo	Raspberry syrup (conserved)	1210004-01	1
Caelo	Raspberry syrup (conserved)	13194301	6
Caelo	Raspberry syrup (conserved)	13194302	1
Caelo	Raspberry syrup (conserved)	24091302	1
Euro OTC	Raspberry syrup (conserved)	1302026-01	1
Caelo	Raspberry syrup (conserved)	18111308	1
Euro OTC	Raspberry syrup (conserved)	1306006-01	2
Caelo	Raspberry syrup (conserved)	13338001	10
Caelo	Raspberry syrup (conserved)	11021405	1
Euro OTC	Raspberry syrup (conserved)	1310016-01	10
Anzag	Raspberry syrup (conserved)	1306006-01	1
Phoenix	Raspberry syrup (conserved)	13338001	1
Caelo	Raspberry syrup (conserved)	13393601	3
Caelo	Raspberry syrup (conserved)	13393602	4
Phönix	Raspberry syrup (conserved)	141114303	1
Phönix	Raspberry syrup (conserved)	14114303	2
Caelo	Raspberry syrup (conserved)	14114302	1
Euro OTC	Raspberry syrup (conserved)	140300201	1
noweda	Raspberry syrup (conserved)	13393605	1
Caelo	Raspberry syrup (conserved)	14114303	1
Euro OTC	Raspberry syrup (conserved)	11081402	1
Caelo	Raspberry syrup (conserved)	14114304	5
Caelo	Raspberry syrup (conserved)	14243401	1
Caelo	Raspberry syrup (conserved)	4101405	1
noweda	Raspberry syrup (conserved)		1
Caelo	Raspberry syrup (conserved)	14114305	3
phoenix 14.11.14	Raspberry syrup (conserved)	14114306	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Raspberry syrup (conserved)	1406031-01	5
Caelo	Raspberry syrup (conserved)	3121404	1
Caelo	Raspberry syrup (conserved)	14243403	1
Caelo	Raspberry syrup (conserved)	14114306	1
Caelo	Raspberry syrup (conserved)	14243405	3
Caelo	Raspberry syrup (conserved)	14371104	1
Caelo	Raspberry syrup (conserved)	5021510	1
Sanacorp	Raspberry syrup (conserved)	14243405	1
Caelo	Raspberry syrup (conserved)	14371106	1
Caelo	Raspberry syrup (conserved)	14371105	1
Caelo	Raspberry syrup (conserved)	13051501	1
Caelo	Raspberry syrup (conserved)	140903901	1
Caelo	Raspberry syrup (conserved)	14371108	1
Eurho/Phönix	Raspberry syrup (conserved)	1409039-01	1
Caelo	Raspberry syrup (conserved)	15149201	2
Euro OTC	Raspberry syrup (conserved)	1504011-01	3
Noweda 04.08.15	Raspberry syrup (conserved)	1501011-01	1
Fagron	Raspberry syrup (conserved)	1501011-01	1
Cealo	Raspberry syrup (conserved)	15149202	3
Caelo	Raspberry syrup (conserved)	15149202	2
Caelo	Raspberry syrup (conserved)	15320801	1
Caesar & Loretz	Raspberry syrup (conserved)	15149203	1
Caelo	Raspberry syrup (conserved)	15149205	8
Caelo	Raspberry syrup (conserved)	14371107	1
Euro OTC	Raspberry syrup (conserved)	1508015-01	4
Euro OTC	Raspberry syrup (conserved)	1511023-01	3
Caelo	Raspberry syrup (conserved)	15320804	1
Caesar&Loretz	Raspberry syrup (conserved)	15320804	1
Caelo	Raspberry syrup (conserved)	15320803	3
Caesar&Loretz	Raspberry syrup (conserved)	15320801	1
Caelo	Raspberry syrup (conserved)	15320813	1
Euro OTC	Raspberry syrup (conserved)	1511024-01	5
Caelo	Raspberry syrup (conserved)	16003601	4
Euro OTC	Raspberry syrup (conserved)	1603007-01	7
Caelo	Raspberry syrup (conserved)	151102401	1
Euro OTC	Raspberry syrup (conserved)	1605008-01	9
EuRho	Raspberry syrup (conserved)	1603007-01	1
Caesar&Loretz	Raspberry syrup (conserved)	16003602	1
Euro OTC	Raspberry syrup (conserved)	160508-01	1
Caelo	Raspberry syrup (conserved)	1615101	1
Caesar & Loretz	Raspberry syrup (conserved)	16151602	2
Euro OTC	Raspberry syrup (conserved)	1610026-01	4
Caesar & Loretz/Noweda	Raspberry syrup (conserved)	16151603	1
Caelo	Raspberry syrup (conserved)	1608003-01	1
Euro OTC	Raspberry syrup (conserved)	1608003-01	3
Caelo	Raspberry syrup (conserved)	11031705	1
Caelo	Raspberry syrup (conserved)	16151601	1
Euro OTC	Raspberry syrup (conserved)	160500801	1
Caesar & Loretz	Raspberry syrup (conserved)	16345403	3
Caelo	Raspberry syrup (conserved)	161002601	1
Caelo	Raspberry syrup (conserved)	24061707	1
Caelo	Raspberry syrup (conserved)	16345401	1
Euro OTC	Raspberry syrup (conserved)	1701022-01	3
Caelo	Raspberry syrup (conserved)	7091702	1
Euro OTC	Raspberry syrup (conserved)	1701022-02	1
Euro OTC	Raspberry syrup (conserved)	30039701/001	1
Euro OTC	Raspberry syrup (conserved)	1705037-01	7
Euro OTC	Raspberry syrup (conserved)	1709003-01	6
Caelo	Raspberry syrup (conserved)	17128404	3
Caelo	Raspberry syrup (conserved)	18121706	1

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Supplier	Substance	Batch	Spectra
Caelo	Raspberry syrup (conserved)	17128405	1
Caesar & Loretz/ Caesar...	Raspberry syrup (conserved)	17128409	1
Caesar & Loretz/ Caesar...	Raspberry syrup (conserved)	18080601	1
Caelo	Raspberry syrup (conserved)	7051802	1
Euro OTC	Raspberry syrup (conserved)	1712004-01	3
Euro OTC	Raspberry syrup (conserved)	1709004-01	1
Caelo	Raspberry syrup (conserved)	18096701	6
Caesar & Loretz/ Noweda	Raspberry syrup (conserved)	18096702	1
Caelo	Raspberry syrup (conserved)	1712004-01	1
Euro OTC	Raspberry syrup (conserved)	171200401	1
Caelo	Raspberry syrup (conserved)	24071802	1
Caelo	Raspberry syrup (conserved)	1803009-01	2
Euro OTC	Raspberry syrup (conserved)	180300901	1
Caelo/ Noweda	Raspberry syrup (conserved)	1712004-01	1
Caelo	Raspberry syrup (conserved)	18096703	1
Caelo	Raspberry syrup (conserved)	17111805	1
Caelo	Raspberry syrup (conserved)	18190901	2
apomix	Sugar syrup DAB	23081202	1
Apomix	Sugar syrup DAB	47A050712	1
Sanacorp/ PKH Halle	Sugar syrup DAB	29A110512	1
apomix	Sugar syrup DAB	46A030712	1
Apomix/ Gehe	Sugar syrup DAB	55A180712	2
Apomix	Sugar syrup DAB	12A010212	1
Gehe/ Apomix	Sugar syrup DAB	59A030812	1
apomix	Sugar syrup DAB	35A250512	1
Apomix	Sugar syrup DAB	25A200412	1
Apomix Anzag	Sugar syrup DAB	47A050712	2
Sanacorp	Sugar syrup DAB	58A270712	1
apomix	Sugar syrup DAB	43A260612	1
Anzag	Sugar syrup DAB	44A260612	1
apomix	Sugar syrup DAB	67A240912	1
Caelo	Sugar syrup DAB	58A270712	1
Sanacorp	Sugar syrup DAB	82A081112	1
Apomix	Sugar syrup DAB	81A-081112	1
Apomix	Sugar syrup DAB	1A140113	1
Anzag 25.01.2013	Sugar syrup DAB	71A091012	1
Anzag 17.01.2013	Sugar syrup DAB	88A051212	1
Apomix Anzag	Sugar syrup DAB	49A100712	1
Apomix/Gehe	Sugar syrup DAB	93A271212	1
apomix/ Phoenix	Sugar syrup DAB	76A301012	1
Apomix	Sugar syrup DAB	5A210113	1
apomix	Sugar syrup DAB	20021307	1
PKH	Sugar syrup DAB	41A190612	1
Apomix	Sugar syrup DAB	17A270213	1
apomix	Sugar syrup DAB	58A270712	1
Apomix	Sugar syrup DAB	10A3000113	1
Noweda	Sugar syrup DAB	11A060213	1
apomix	Sugar syrup DAB	16A210213	1
Apomix	Sugar syrup DAB	32A120413	1
Apomix	Sugar syrup DAB	94A281212	1
Fagron	Sugar syrup DAB	13089R	1
apomix	Sugar syrup DAB	66A210912	1
Apomix/ Phönix	Sugar syrup DAB	34A240413	1
Apomix/Sancorp	Sugar syrup DAB	21A010313	1
Apomix	Sugar syrup DAB	25A110313	1
apomix/ Phoenix	Sugar syrup DAB	11A060213	1
apomix/ Phoenix	Sugar syrup DAB	21A010313	1
Nachprüfung	Sugar syrup DAB	42A220612	1
Apomix / Noweda	Sugar syrup DAB	41A230513	1
Apomix PKH/V.d.L.	Sugar syrup DAB	37A240413	2

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Supplier	Substance	Batch	Spectra
apomix/Phoenix	Sugar syrup DAB	20A280213	1
Phoenix	Sugar syrup DAB	43A040613	1
apomix	Sugar syrup DAB	27A200313	1
Caelo	Sugar syrup DAB	21A010313	1
Caelo	Sugar syrup DAB	44A050613	1
Phönix Gotha	Sugar syrup DAB	51A090713	3
Apomix / Noweda	Sugar syrup DAB	51A090713	1
Phönix Gotha	Sugar syrup DAB	59A220813	1
Fagron	Sugar syrup DAB	38A250413	1
Apomix-Sanacorp	Sugar syrup DAB	51A090713-3399310141	1
Apomix/Sancorp	Sugar syrup DAB	45A050613	1
Phönix Gotha	Sugar syrup DAB		1
Apomix PKH/V.d.L.	Sugar syrup DAB	9A290113	1
Phönix/ apomix	Sugar syrup DAB	66A110913	1
Apomix PKH/V.d.L.	Sugar syrup DAB	64A050913	1
PKH-Halle/Sanacorp	Sugar syrup DAB	72A041013	2
Caelo	Sugar syrup DAB	76A171013	1
Apomix/Sanacorp	Sugar syrup DAB	66A110913-3442311102	1
noweda/Apomix	Sugar syrup DAB	56A160813	1
Gehe	Sugar syrup DAB	51A090713	1
apomix	Sugar syrup DAB	11121305	1
Phoenix/Apomix	Sugar syrup DAB	29A220313	1
apomix	Sugar syrup DAB	45A050613	1
apomix/Phoenix	Sugar syrup DAB	73A101013	1
Apomix, Noweda	Sugar syrup DAB	43A040613	2
Caelo	Sugar syrup DAB	79A281013	2
Apomix /Alliance	Sugar syrup DAB	85A191113	1
Anzag	Sugar syrup DAB	58A210813	1
apomix	Sugar syrup DAB	95A111213	1
AMH Niemann	Sugar syrup DAB	1A130114	1
Apomix/Anzag	Sugar syrup DAB	2112I-02263	1
Noweda / Apomix	Sugar syrup DAB	47A120613	1
Phönix Gotha	Sugar syrup DAB	1A130114	1
Apomix/Gehe	Sugar syrup DAB	9A030214	2
Apomix	Sugar syrup DAB	93A111213	1
Apomix	Sugar syrup DAB	22A050314	1
apomix VDL	Sugar syrup DAB	93A111213	1
apomix/Sanacorp	Sugar syrup DAB	96A161213	1
Apomix / Kehr	Sugar syrup DAB	18A030314	1
Phönix Gotha	Sugar syrup DAB	77A171013	1
PKH-Halle/Sanacorp	Sugar syrup DAB	10A030214	1
Apomix/GEHE	Sugar syrup DAB	17A030314	1
Gutenberg-Apotheke	Sugar syrup DAB	18A030314	1
PKH Halle	Sugar syrup DAB	19A040314	1
Apomix PKH/V.d.L.	Sugar syrup DAB	7A310114	1
Apomix	Sugar syrup DAB	99A201213	1
Apomix/Gehe	Sugar syrup DAB	o9A030214	1
Apomix	Sugar syrup DAB	21A050314	3
apomix	Sugar syrup DAB	19A040314	1
Apomix/Sanacorp	Sugar syrup DAB	35A070414	1
apomix/Phönix	Sugar syrup DAB	21A050314	1
Apomix	Sugar syrup DAB	39A050614	1
apomix/Noweda	Sugar syrup DAB	39A050614	2
apomix	Sugar syrup DAB	36A140414	1
Apomix/Sancorp	Sugar syrup DAB	2A130114	1
Apomix/Gehe	Sugar syrup DAB	18A030314	1
Caelo	Sugar syrup DAB	14189102	2
apomix	Sugar syrup DAB	49A220714	1
Caelo	Sugar syrup DAB	38A190514	1
Caelo	Sugar syrup DAB	14189101	1

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Supplier	Substance	Batch	Spectra
apomix	Sugar syrup DAB	13101405	1
Niemann GmbH & Co.KG	Sugar syrup DAB	53A080814	1
Apomix	Sugar syrup DAB	48A210714	1
Apomix / Kehr	Sugar syrup DAB	48A210714	1
Apomix/Sancorp	Sugar syrup DAB	55A130814	1
Kehr/Apomix	Sugar syrup DAB	66A160914	2
AMH Niemann GmbH	Sugar syrup DAB	74A241014	1
apomix	Sugar syrup DAB	57A140814	1
Apomix / Kehr	Sugar syrup DAB	74A241014	2
apomix	Sugar syrup DAB	59A070814	1
apomix	Sugar syrup DAB	59A010914	1
Caelo	Sugar syrup DAB	14246001	1
Caelo	Sugar syrup DAB	51A070814	1
Phoenix	Sugar syrup DAB	59A01914	1
Apomix / Kehr	Sugar syrup DAB	86A051214	1
apomix	Sugar syrup DAB	76A061114	1
Caelo	Sugar syrup DAB	14299801	3
Noweda/Apomix	Sugar syrup DAB	87A051214	1
Apomix / Kehr	Sugar syrup DAB	88A12124	1
Apomix	Sugar syrup DAB	55A130814	1
Apomix/Gehe	Sugar syrup DAB	81A251114	1
Caelo	Sugar syrup DAB	77A061114	1
Apomix / Kehr	Sugar syrup DAB	88A121214	2
Apomix/Alliance Healthc...	Sugar syrup DAB	25A170314	1
Caelo	Sugar syrup DAB	93A231214	1
apomix	Sugar syrup DAB	55A130814	1
Apomix/Alliance Healthc...	Sugar syrup DAB	7A230115	1
Apomix / Kehr	Sugar syrup DAB	5A220115	1
Apomix / Noweda	Sugar syrup DAB	93A231214	1
Alliance health	Sugar syrup DAB	11A280115	1
Apomix/Anzag	Sugar syrup DAB	1314I-02263	1
apomix PKH GmbH Halle	Sugar syrup DAB	13A290115	1
apomix	Sugar syrup DAB	1A140115	1
apomix/Kehr	Sugar syrup DAB	11A280115	2
Caelo	Sugar syrup DAB	14337004	1
apomix/ Phönix	Sugar syrup DAB	93A231214	1
Caesar & Loretz GmbH	Sugar syrup DAB	86A051214	1
Caelo	Sugar syrup DAB	22A130315	2
AMH Niemann GmbH & Co.KG	Sugar syrup DAB	22A130315	1
Apomix/Gehe	Sugar syrup DAB	60A020914	1
Apomix/Alliance Healthc...	Sugar syrup DAB	68A230914	1
Apomix/Sanacorp	Sugar syrup DAB	7A230115	1
apomix	Sugar syrup DAB	21A130315	1
Sanacorp	Sugar syrup DAB	13A290115	1
apomix/Phoenix	Sugar syrup DAB	25A080415	1
Apomix/Kehr	Sugar syrup DAB	30A200415	3
apomix	Sugar syrup DAB	26A080415	1
Caelo	Sugar syrup DAB	81A-251114	1
AMH Niemann GmbH	Sugar syrup DAB	30A200415	1
Apomix/Gehe	Sugar syrup DAB	32A240415	1
Caelo	Sugar syrup DAB	15117002	1
PKH / Phoenix	Sugar syrup DAB	93A231214	1
Apomix/Gehe	Sugar syrup DAB	15A100215	1
AMH Niemann GmbH	Sugar syrup DAB	50A020715	1
apomix	Sugar syrup DAB	41A120615	1
Caelo	Sugar syrup DAB	20A270215	2
Apomix / Kehr	Sugar syrup DAB	50A020715	1
apomix	Sugar syrup DAB	18081517	1
Apomix/ Phönix	Sugar syrup DAB	32A240415	1
Apomix/Gehe	Sugar syrup DAB	49A020715	2

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Supplier	Substance	Batch	Spectra
Apomix/Kehr	Sugar syrup DAB	42A120615	1
Caelo	Sugar syrup DAB	15150602	1
apomix	Sugar syrup DAB	37A220515	1
apomix	Sugar syrup DAB	20A270215	1
Apomix/ Phönix	Sugar syrup DAB	40A290515	2
Apomix/Kehr	Sugar syrup DAB	57A260815	2
Apomix/Phönix	Sugar syrup DAB	59A270815	1
Apomix/Alliance Healthc...	Sugar syrup DAB	58A260815	1
Caelo	Sugar syrup DAB	15315201	2
Apomix/Gehe	Sugar syrup DAB	1A140115	2
PKH GmbH / Phoenix	Sugar syrup DAB	49A020715	1
Apomix/Phönix	Sugar syrup DAB	72A091015	1
apomix/ Noweda	Sugar syrup DAB	72A091015	1
AMH Niemann GmbH	Sugar syrup DAB	70A051015	1
Apomix/ Phönix	Sugar syrup DAB	68A250915	1
apomix/alliance healthc...	Sugar syrup DAB	76A231015	2
apomix/Gehe	Sugar syrup DAB	48A010715	1
apomix/Gehe	Sugar syrup DAB	71A091015	3
Apomix/Kehr	Sugar syrup DAB	72A091015	1
apomix	Sugar syrup DAB	71A091015	1
Apomix/Phönix	Sugar syrup DAB	74A151015	1
Apomix/ Phönix	Sugar syrup DAB	81A161115	4
Apomix/Kehr	Sugar syrup DAB	85A261115	1
Apomix/Alliance Healthc...	Sugar syrup DAB	1A130116	1
AMH Niemann GmbH	Sugar syrup DAB	85A261115	1
Caelo	Sugar syrup DAB	42A120615	1
Apomix/Alliance Healthc...	Sugar syrup DAB	71A091015	1
apomix/Gehe	Sugar syrup DAB	56A310715	1
Apomix/Kehr	Sugar syrup DAB	3A150116	1
AMH Niemann GmbH & Co.K...	Sugar syrup DAB	7A250116	1
Apomix/Anzag	Sugar syrup DAB	1515Q-02263	1
Apomix / Gehe	Sugar syrup DAB	87A071215	1
apomix/Phönix	Sugar syrup DAB	2A130116	1
apomix Fiebig	Sugar syrup DAB	77A261015	1
apomix	Sugar syrup DAB	83A191115	1
Caelo	Sugar syrup DAB	15334802	1
apomix/Gehe	Sugar syrup DAB	1A130116	1
PKH / Phoenix	Sugar syrup DAB	80A061115	2
apomix/alliance healthc...	Sugar syrup DAB	3A150116	1
Caelo	Sugar syrup DAB	15427102	2
Apomix / Kehr	Sugar syrup DAB	11A120216	2
Caelo	Sugar syrup DAB	9A280116	3
Euro OTC	Sugar syrup DAB	80A061115	1
apomix	Sugar syrup DAB	2A130116	1
Noweda/Apomix	Sugar syrup DAB	9A280116	1
Caelo	Sugar syrup DAB	23A180316	1
Apomix/Alliance Healthc...	Sugar syrup DAB	14A150216	1
apomix/Phönix	Sugar syrup DAB	9A280116	1
Apomix / Kehr	Sugar syrup DAB	27A110416	3
AHD / apomix	Sugar syrup DAB	24A180316	1
apomix/alliance healthc...	Sugar syrup DAB	3a150116	1
Euro OTC	Sugar syrup DAB	13A150216	1
Sanacorp/ apomix	Sugar syrup DAB	28A110416	1
Apomix	Sugar syrup DAB	24A180316	1
rPhR Neidhar	Sugar syrup DAB	30A190416	1
Apomix/Alliance Healthc...	Sugar syrup DAB	22A170316	1
Klenk	Sugar syrup DAB	13A150216	2
Alliance H.	Sugar syrup DAB	37/A030616	1
Ichthyol/Gehe	Sugar syrup DAB	22A170316	1
Caelo	Sugar syrup DAB	16091501	3

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Supplier	Substance	Batch	Spectra
Apomix/Kehr	Sugar syrup DAB	51A010816	1
AMH Niemann GmbH & Co.K...	Sugar syrup DAB	33A170516	1
Caelo	Sugar syrup DAB	13A1502216	1
Caelo	Sugar syrup DAB	16187902	2
Apomix/Anzag	Sugar syrup DAB	37A03616	1
apomix/Kehr	Sugar syrup DAB	43A110716	2
Caelo	Sugar syrup DAB	16214002	2
Apomix/Gehe	Sugar syrup DAB	89A111215	1
Apomix/Alliance Healthc...	Sugar syrup DAB	44A110716	1
Apomix / Kehr	Sugar syrup DAB	49A290716	3
Caelo	Sugar syrup DAB	162140	1
Caelo	Sugar syrup DAB	161879	1
apomix	Sugar syrup DAB	41A040716	1
Caelo	Sugar syrup DAB	21A170316	1
Apomix/Gehe	Sugar syrup DAB	50A290716	1
AMH Niemann GmbH / Sana...	Sugar syrup DAB	49A290716	1
Apomix	Sugar syrup DAB	55a220816	1
Apomix	Sugar syrup DAB	58A190816	1
Apomix	Sugar syrup DAB	58A19816	1
PKH Halle / Phoenix	Sugar syrup DAB	57A180816	1
Apomix/Sanacorp	Sugar syrup DAB	72A041116	1
Caelo	Sugar syrup DAB	16214101	3
Caelo	Sugar syrup DAB	35A300516	2
Apomix / Kehr	Sugar syrup DAB	63A260916	4
Apomix	Sugar syrup DAB	53A120816	3
Apomix/Anzag	Sugar syrup DAB	50A290716	1
Apomix/Phönix	Sugar syrup DAB	29A190416	1
Apomix/Alliance Healthc...	Sugar syrup DAB	68A131016	1
JENNE	Sugar syrup DAB	16214101	1
Hochhaus-Apotheke	Sugar syrup DAB	64A260916	3
Caelo	Sugar syrup DAB	30A190416	1
Apomix/Anzag	Sugar syrup DAB	1116E-02263	1
Apomix/Noweda	Sugar syrup DAB	57A180816	1
Nowe/Apom	Sugar syrup DAB	77A101116	2
apomix/ AHD 01.03.17	Sugar syrup DAB	86A271216	1
Apomix	Sugar syrup DAB	71A031116	1
hochhaus-Apotheke	Sugar syrup DAB	67A131016	1
Apomix / Kehr	Sugar syrup DAB	7A230117	1
Caelo	Sugar syrup DAB	16345701	1
Apomix / Noweda	Sugar syrup DAB	30A190416	1
Apomix	Sugar syrup DAB	65A041016	1
Apomix/Noweda	Sugar syrup DAB	41A040716	1
hochhaus-Apotheke	Sugar syrup DAB	67A-131016	1
Apomix/Noweda	Sugar syrup DAB	79A241116	1
Apomix/Anzag	Sugar syrup DAB	67A131016	1
Caelo	Sugar syrup DAB	17028002	5
Apomix / Kehr	Sugar syrup DAB	70328/4Hk	1
Apomix/Noweda	Sugar syrup DAB	86A271216	1
Apomix	Sugar syrup DAB	56A220816	1
Apomix / Kehr	Sugar syrup DAB	72A041116	1
PKH Halle/ Gehe 27.04.2...	Sugar syrup DAB	5A180117	1
Apomix	Sugar syrup DAB	8A230117	1
Apomix/Noweda	Sugar syrup DAB	9A250117	1
Caelo	Sugar syrup DAB	17A240417	1
Apomix / Noweda	Sugar syrup DAB	67A131016	1
Apomix/Noweda	Sugar syrup DAB	23A290517	1
Apomix/Kehr	Sugar syrup DAB	19A150517	1
Caelo	Sugar syrup DAB	17129101	2
apomix/ AHD 23.06.17	Sugar syrup DAB	15A200317	1
Apomix/Kehr	Sugar syrup DAB	29A130617	2

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Supplier	Substance	Batch	Spectra
Caelo	Sugar syrup DAB	29A130617	1
Apomix/Kehr	Sugar syrup DAB	23A290517	2
PKH/Phoenix	Sugar syrup DAB	25A310517	1
ApomixNoweda	Sugar syrup DAB	5A180117	1
Caelo	Sugar syrup DAB	17129001	3
Caelo	Sugar syrup DAB	33A190617	1
PKH Halle (apomix) / AH...	Sugar syrup DAB	43A070817	1
Apom/Noweda	Sugar syrup DAB	28A010617	1
Apomix/Kehr	Sugar syrup DAB	44A070817	2
Caelo	Sugar syrup DAB	17275702	5
Caelo	Sugar syrup DAB	17129301	2
ApomixNoweda	Sugar syrup DAB	36A200617	1
Apomix/Kehr	Sugar syrup DAB	63A061117	3
Apomix/Kehr	Sugar syrup DAB	45A210817	1
apomix/noweda	Sugar syrup DAB	57A131017	1
apomix/ AHD 12.12.17	Sugar syrup DAB	50A240817	1
Apomix	Sugar syrup DAB	56A041017	1
Apomix	Sugar syrup DAB	50A240817	1
Caelo	Sugar syrup DAB	17304302	3
Caelo	Sugar syrup DAB	17200501	1
Kehr/Apomix	Sugar syrup DAB	66A141117	2
Caelo	Sugar syrup DAB	17304301	2
Apomix/Kehr	Sugar syrup DAB	3A180118	5
Apomix/ Noweda	Sugar syrup DAB	65A141117	1
Apomix/Sanacorp	Sugar syrup DAB	68A281117	1
ApomixNoweda	Sugar syrup DAB	67A271117	4
PKH GmbH	Sugar syrup DAB	4A240118	1
Caelo	Sugar syrup DAB	5A240118	1
Apomix/Alliance Healthc...	Sugar syrup DAB	47A220817	1
Apomix/Kehr	Sugar syrup DAB	8A070218	2
Caelo	Sugar syrup DAB	18033002	3
ApomixNoweda	Sugar syrup DAB	11A190218	1
apomix	Sugar syrup DAB	24041801	1
Caelo	Sugar syrup DAB	18032801	2
PKH Halle - Apomix / AH...	Sugar syrup DAB	11A190218	1
Caelo	Sugar syrup DAB	18095601	9
Apomix/Phoenix	Sugar syrup DAB	45A210817	1
Apomix/Kehr	Sugar syrup DAB	27A090418	1
Kehr/Apomix	Sugar syrup DAB	35A310518	2
Caelo	Sugar syrup DAB	20A120318	1
Apomix/Phoenix	Sugar syrup DAB	26A09418	1
Apomix/Noweda	Sugar syrup DAB	71A291117	1
ApomixNoweda	Sugar syrup DAB	40A040618	2
Caelo	Sugar syrup DAB	18130001	2
Caelo	Sugar syrup DAB	18033401	1
Apomix/Noweda	Sugar syrup DAB	51A170718	2
Apomix/Noweda	Sugar syrup DAB	1A160118	1
apomix/ AHD 28.08.2018	Sugar syrup DAB	24A280318	1
Caelo	Sugar syrup DAB	18175701	1
Apomix/Alliance Healthc...	Sugar syrup DAB	43a180618	1
apomix	Sugar syrup DAB	35A310518	1
Apomix	Sugar syrup DAB	12A190218	1
Apomix/Noweda	Sugar syrup DAB	68A241018	2
Apomix/Anzag	Sugar syrup DAB	59A290818	1
Apomix/Noweda	Sugar syrup DAB	45A040718	1
apomix	Sugar syrup DAB	23A280318	1
apomix	Sugar syrup DAB	26011907	1
apomix	Sugar syrup DAB	69A241018	1
apomix/ AHD 11.01.2019	Sugar syrup DAB	47A130718	1

- 106 902 spectra from 582 *Apo-Ident* customers from a total of 30 156 batches from a further 331 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	1020	0	34 815
Type B	0	1500	0	77 578
Type C	0	1047	10	106 902

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 % (> 99.9704 %)	100.0000 % (> 99.4118 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.6000 %)
Type C	100.0000 % (> 99.6449 %)	99.0539 % (> 98.7701 %)

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.

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
31155	31155	0.00	24.26
31359	31051	1.47	25.29
33099	33099	0.00	22.86
30753	31147	3.55	32.18
31147	31147	0.00	30.81
31365	31877	3.22	32.06
33331	33331	0.00	26.83

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31175	31175	0.00	29.92
31355	31175	1.91	30.88
31877	31877	0.00	31.62
30870	31353	7.84	24.27
30897	31877	3.41	32.88
31124	31353	1.98	25.07
31218	31218	0.00	34.09
31181	31181	0.00	29.09
31353	31353	0.00	25.08
34329	34329	0.00	27.00
33263	31181	5.75	30.37
33642	31181	2.44	27.41
31051	31051	0.00	24.52
31773	31773	0.00	27.85
31467	31051	1.85	24.74
31802	31802	0.00	25.81
32284	32284	0.00	25.47
32984	32984	0.00	28.33

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Tea tree oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31023-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140703

Validation samples

A total of 222 872 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 *Tea tree oil*. These samples are listed above in the [calibration samples](#) section.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 140 spectra of 4 reference samples from the substance/substance group *Tea tree oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Tea tree oil	14203203	31960 [†]	20
Caelo	Tea tree oil	15337105	33478	40
Caelo	Tea tree oil	173227	34058	40
Caelo	Tea tree oil	170677	34059	40

- 78 938 spectra from a total of 1826 batches from further 350 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 34 *Apo-Ident* customers from 52 batches from the substance/substance group *Tea tree oil*.

Supplier	Substance	Batch	Spectra
Caelo	Tea tree oil	11333516	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
Bergland / Noweda	Tea tree oil	P102633	1
primavera	Tea tree oil	5604136	1
Caelo	Tea tree oil	14111201	1
Sensient	Tea tree oil	C9663	1
Taoasis	Tea tree oil	516495-108562	1
Minck	Tea tree oil	1511E-03093	1
Bergland-Pharma/Anzag	Tea tree oil	C101782	1
Cealo	Tea tree oil	12201303	1
Bergland-Pharma/Anzag	Tea tree oil	C002685	1
Caelo	Tea tree oil	12201304	3
Caelo	Tea tree oil	11358910	1
Apoth.Bauer&Co,Münch	Tea tree oil	692624	1
Taoasis	Tea tree oil	535627-110746	2
Taoasis GmbH	Tea tree oil	98546	1
Caelo	Tea tree oil	12201313	1
Caelo	Tea tree oil	12201311	4
Apoth.Bauer&Co,Münch	Tea tree oil		1
Caelo	Tea tree oil	13099506	6
Caelo	Tea tree oil	12201303	2
Taoasis	Tea tree oil	41015006139	1
Gehe	Tea tree oil	K203705	3
apotheker bauer& cie oHgG	Tea tree oil	6548331306	1
Taoasis	Tea tree oil	33152-112369	1
Caelo	Tea tree oil	13099510	4
Bergland /Noweda	Tea tree oil	K302332	1
Taoasis	Tea tree oil	556031-114257	2
Caelo	Tea tree oil	13288902	1
bauer und cie münchen	Tea tree oil		2
Caelo	Tea tree oil	14071604	2
Apotheker bauer	Tea tree oil		1
Caelo	Tea tree oil	14302301	8
Caelo	Tea tree oil	14203201	1
Caelo	Tea tree oil	14203202	1
Caelo	Tea tree oil	14203203	2
Caelo	Tea tree oil	14302302	1
Caelo	Tea tree oil	15051807	2
Caelo	Tea tree oil	15051806	2
Caelo	Tea tree oil	15337106	3
Ebert 01.09.2016	Tea tree oil	15337105	1
Caelo	Tea tree oil	15337112	4
Caelo	Tea tree oil	15337111	2
Bombastus	Tea tree oil	304033	1
Bombastus	Tea tree oil	302427	1
Caelo	Tea tree oil	15337120	1
Caelo	Tea tree oil	300469	1
Caelo	Tea tree oil	16007506	1
Bombastus	Tea tree oil	305629	3
Caelo	Tea tree oil	170667706	3
Sanacorp/Taoasis	Tea tree oil	76283-777	1
Caelo	Tea tree oil	16007509	1
Noweda	Tea tree oil	18047603	1
Bambastus/fiebig	Tea tree oil	18001809	2

- 107 865 spectra from 582 *Apo-Ident* customers from a total of 30 629 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 *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	120	0	35 715
Type B	0	140	0	78 938
Type C	0	86	8	107 865

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.7143 %)
Type C	100.0000 % (> 99.6450 %)	91.4894 % (> 88.2979 %)

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.

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	50.56
31960	31023	7.73	51.98
31401	31023	25.55	48.42

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Thyme oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30206-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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
Caelo	Thyme oil	12020518	31018	40	1407220
Caelo	Thyme oil	14225405	31566	40	20140822
Caelo	Thyme oil	15230104	32265	40	20150702
Caelo	Thyme oil	163279	33083	40	20161222*
Bombastus	Thyme oil	17001282	33878	40	20171108

Validation samples

A total of 222872 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 *Thyme oil*. These samples are listed above in the [calibration samples](#) section.
- 35635 spectra from a total of 842 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Thyme oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Thyme oil	14225405	31566 [†]	20
Caelo	Thyme oil	16327902	33477	40
Bombastus	Thyme oil	305865	33877	40

- 78978 spectra from a total of 1827 batches from further 350 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.

- 179 spectra from 91 *Apo-Ident* customers from 78 batches from the substance/substance group *Thyme 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.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Thyme oil	14071202	1
Taoasis	Thyme oil	28739-106640	1
PVL	Thyme oil	271112	1
Caelo	Thyme oil	3211I-02023	1
Caelo	Thyme oil	11275806	1
Caelo	Thyme oil	11275801	1
Fiebi 07.11.12 ek:8,48	Thyme oil	12020503	1
Bombastus	Thyme oil	268010	2
Caelo	Thyme oil	12165401	1
Fagron	Thyme oil	10L20-N09	1
Caelo	Thyme oil	12020510	5
Caelo	Thyme oil	12020514	5
Anzag 27.12.12 ek:8,71	Thyme oil	12020510	2
Taoasis	Thyme oil	31911-109378	1
Caelo	Thyme oil	11275811	1
Caelo	Thyme oil	12020503	3
Caelo	Thyme oil	12020511	1
Caelo	Thyme oil	13021303	1
Caelo	Thyme oil	10118603	1
Taoasis	Thyme oil	109378	1
Caelo	Thyme oil	13044702	3
Caelo	Thyme oil	12201104	5
Caelo	Thyme oil	12020518	4
Taoasis	Thyme oil	31911-110649	1
Taoasis	Thyme oil	28739-104426	1
Caelo	Thyme oil	12020515	1
Caelo	Thyme oil	13044709	1
Caelo	Thyme oil	13044708	5
Caelo	Thyme oil	13044705	1
Caelo	Thyme oil	1202510	1
Caelo	Thyme oil	13044707	4
Caelo	Thyme oil	1221104	1
Caelo	Thyme oil	13044710	1
Caelo	Thyme oil	13044716	3
Euro OTC	Thyme oil		1
Bombastus	Thyme oil	283494	1
GEHE 02.07.2014	Thyme oil	13044715	3
Caelo	Thyme oil	6081401	1
	Thyme oil	13044708	1
Caelo	Thyme oil	13044715	2
Caelo	Thyme oil	14225401	3
Caelo	Thyme oil	14225406	5
Caelo	Thyme oil	14225405	1
Caelo	Thyme oil	14225413	8
VDL	Thyme oil	14225413	1
Caelo	Thyme oil	14225412	3
Caelo	Thyme oil	14225408	1
Caelo	Thyme oil	14225403	1
Caelo	Thyme oil	14225410	2
Caelo	Thyme oil	3313U-02023	1
Caelo	Thyme oil	142225412	1
Caelo	Thyme oil	14225409	2
Caelo	Thyme oil	14225417	2
Caelo	Thyme oil	14225414	1
Caelo	Thyme oil	301115	1
Caelo	Thyme oil	14225418	1
Caelo	Thyme oil	15402202	18
Caelo	Thyme oil	15230104	7
Caelo	Thyme oil	2615A-02023	1
Caelo	Thyme oil	15402203	1

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Supplier	Substance	Batch	Spectra
Caelo	Thyme oil	15402204	1
Caelo	Thyme oil	154022002	1
Caesar & Loretz/Noweda	Thyme oil	15402202	1
Caelo	Thyme oil	15402207	5
Caelo	Thyme oil	1540220	1
Caelo	Thyme oil	15402208	3
Caelo	Thyme oil	15230104/1100516	1
Gehe	Thyme oil	15402202	1
Caelo	Thyme oil	163279902	1
Caelo	Thyme oil	16327904	2
Caelo	Thyme oil	16327902	2
Caelo	Thyme oil	24061701	1
Caelo	Thyme oil	16327903	4
Fagron	Thyme oil		1
Caelo	Thyme oil	1120917	1
Caelo	Thyme oil	15402219	1
Caelo	Thyme oil	16327906	1
Caelo	Thyme oil	16327910	5
Fagron	Thyme oil	12020518	1
Sanacorp	Thyme oil	16327910	1
Caelo	Thyme oil	16327909	2
Caelo	Thyme oil	18025201	2
Caelo	Thyme oil	18087305	1
Caelo	Thyme oil	5121816	1
Caelo	Thyme oil	18087301	1
Caelo	Thyme oil	18087309	2
Sanacorp	Thyme oil	18087307	1

- 107 780 spectra from 582 *Apo-Ident* customers from a total of 30 604 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 *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	200	0	35 635
Type B	0	100	0	78 978
Type C	0	163	16	107 780

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 % (> 99.9706 %)	100.0000 % (> 97.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6450 %)	91.0615 % (> 89.3855 %)

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.

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	46.78
31566	31018	7.39	48.10
32265	33083	11.93	39.82
33083	33083	0.00	44.96
33878	33083	11.77	43.51

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Triglycerides
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30647-2019-05-24
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; 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	<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>
Appendix F	Addition to the second-stage models

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.

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	Rapeseed oil, re...	12054402	30647	40	20120321
Henry Lamotte	Omega-3-fish oil	0123108	30679	40	20120613
Caelo	Oleyl oleate (st...	12220205	30754	40	20120803
Caelo	Apricot kernel o...	11346402	30840	40	20111214
Caelo	Evening primrose...	12325103	30855	40	20121107
Caelo	Oleyl oleate (st...	12220207	30863	40	20120803
Caelo	Sesame oil, refi...	12054508	30873	40	20120323
Caelo	Codliver oil (ty...	12062501	30878	40	20120411
Caelo	Safflower oil, r...	13011302	30981	80	1407318
Caelo	Corn oil, refined	12141511	31016	40	1407320
Euro OTC	Soy lecithin, li...	1305019-01	31034	40	20130603
Caelo	Grape seed oil, ...	13065302	31121	40	1407373
Caelo	Laurel oil	13024511	31122	40	1403397
Caelo	Borage oil, refi...	13170606	31161	40	1407319
Bombastus	Flaxseed oil, na...	281489	31172	40	1407202
Henry Lamotte	Omega-3-fish oil	0123780	31178	40	20130403
Caelo	Wheatgerm oil, r...	13011508	31210	40	1407215
Caelo	Rapeseed oil, re...	13011008	31215	40	1406536
Caelo	Walnut oil, refi...	13202401	31216	40	1406537
Caelo	Sunflower oil, r...	13011411	31217	40	1406538
Caelo	Peanut oil, refi...	13306106	31246	40	1406534
Caelo	Almond oil, refi...	13350007	31250	40	1407348
Caelo	Corn oil, refined	13249005	31274	40	1407347
Caelo	Jojoba oil, native	13287709	31322	40	AR-14-FG-012487-01
Caelo	Flaxseed oil, na...	14087903	31326	40	20140401
Caelo	Pumpkin seed oil...	13358504	31332	40	AR-14-FG-012336-02
Caelo	Avocado oil, ref...	13361406	31336	40	AR-15-FG-002721-01
Caelo	Almond oil, refi...	14042704	31337	40	20140211
Caelo	Corn oil, refined	13249005	31344	40	20130819
Caelo	Peanut oil, refi...	14115404	31346	40	20140415
Caelo	Sesame oil, refi...	13397402	31350	40	AR-14-FG-012338-01
Caelo	Olive oil, native	14024409	31356	40	20140130
Caelo	Codliver oil (ty...	13396403	31361	40	AR-14-FG-012167-01
Caelo	Safflower oil, r...	13358705	31362	40	20131122
Caelo	Sunflower oil, r...	13225110	31374	40	20130813
Caelo	Apricot kernel o...	13357604	31375	40	1412121
Caelo	Rapeseed oil, re...	13236506	31376	40	20130806
Caelo	Soy oil, refined	13361305	31378	40	20131122
Caelo	Walnut oil, refi...	13364501	31380	40	20131122
Caelo	Decyl oleate	13378403	31382	40	AR-15-FG-000232-01
Caelo	Borage oil, refi...	14161904	31384	40	20140522
Caelo	Evening primrose...	14010915	31460	40	AR-14-FG-012898-01
Caelo	Wheatgerm oil, r...	13261604	31491	40	1412119
Caelo	Oleyl oleate (st...	14005001	31496	40	AR-15-FG-001552-01
Euro OTC	Soy lecithin, li...	1404022-01	31523	40	8779
Henry Lamotte	Omega-3-fish oil	0124495	31540	40	20140325
Caelo	Evening primrose...	14258610	31572	40	AR-15-FG-002720-01
Euro OTC	Decyl oleate	1309018-01	31584	40	20131007
Euro OTC	Olive oil, native	1407052-02	31585	40	20140812
Euro OTC	Evening primrose...	1407002-02	31589	40	20140718
Caelo	Pumpkin seed oil...	14199402	31609	40	1507428
Caelo	Avocado oil, ref...	14363703	31662	40	20150114
Fagron	Codliver oil (ty...	14D16-B08-304341	31677	40	20140520
Euro OTC	Evening primrose...	1506001	31708	40	20150616*

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Henry Lamotte	Omega-3-fish oil	1000000642	31729	40	1601423
Euro OTC	Almond oil, refi...	1510014	31770	40	20151022*
Euro OTC	Evening primrose...	1509005	31775	40	20150921*
Henry Lamotte	Omega-3-fish oil	1000000642	31792	40	20150414
Euro OTC	Avocado oil, refi...	1501015	31801	40	20150121*
Fagron	Codliver oil (ty...	15A07-B05-304428	31825	40	20150116
Caelo	Laurel oil	15216401	31833	30	1606485
Caelo	Soy oil, refined	15239302	31834	40	20150817
Henry Lamotte	Omega-3-fish oil	1000001175	31875	40	20150626
Caelo	Olive oil, native	161446	32195	40	20160524*
Caelo	Peanut oil, refi...	162495	32680	40	20160831*
Caelo	Apricot kernel o...	162361	32683	40	20160818*
Caelo	Wheatgerm oil, r...	16137403	32730	40	20160708
Caelo	Sunflower oil, r...	15422804	32745	40	20151218
Caelo	Grape seed oil, ...	16092402	32989	40	20160407
Bombastus	Olive oil, native	306949	32991	40	20170116
Caelo	Peanut oil, refi...	170428	33059	40	20170215*
Caelo	Apricot kernel o...	170555	33060	30	20170308*
Caelo	Flaxseed oil, na...	170467	33064	40	20170222*
Caelo	Avocado oil, refi...	170388	33067	40	20170209*
Caelo	Decyl oleate	170595	33070	40	20170308*
Caelo	Jobaba oil, native	16070602	33254	40	20160316
Caelo	Laurel oil	16275701	33255	40	20161005
Caelo	Soy oil, refined	171217	33309	40	20170509*
Caelo	Sesame oil, refi...	171777	33313	40	20170620*
Caelo	Borage oil, refi...	16266007	33510	40	20161027
Henry Lamotte	Jobaba oil, native	8002391001	33876	40	20161124
Caelo	Walnut oil, refi...	173248	33916	40	20170512*
Caelo	Pumpkin seed oil...	171379	33917	40	20170606*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 3340 spectra of 83 reference samples from the substance/substance group *Triglycerides*. These samples are listed above in the [calibration samples](#) section.
- 32 495 spectra from a total of 766 batches from further 189 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.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by †.

- 3515 spectra of 100 reference samples from the substance/substance group *Triglycerides*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Peanut oil, refined	14115404	31346 [†]	20
Caelo	Sesame oil, refined	13397402	31350 [†]	20
Caelo	Olive oil, native	14024409	31356 [†]	20
Caelo	Codliver oil (type A)	13396403	31361 [†]	20
Caelo	Safflower oil, refined type I	13358705	31362 [†]	20
Caelo	Evening primrose oil, refined	14010915	31460 [†]	20
Caelo	Jojoba oil, native	13287709	31482	60
Caelo	Oleyl oleate (stabilised)	14005001	31496 [†]	20
Caelo	Jojoba oil, native	13287709	31519	60
Euro OTC	Soy lecithin, liquid	1404022-01	31523 [†]	20
Henry Lamotte	Omega-3-fish oil	0124495	31540 [†]	20
Caelo	Evening primrose oil, refined	14258610	31572 [†]	20
Euro OTC	Decyl oleate	1309018-01	31584 [†]	20
Euro OTC	Olive oil, native	1407052-02	31585 [†]	20
Euro OTC	Evening primrose oil, refined	1407002-02	31589 [†]	20
Caelo	Pumpkin seed oil, pressed	14199402	31609 [†]	20
Caelo	Laurel oil	14176301	31657	15
Caelo	Avocado oil, refined	14363703	31662 [†]	20
Fagron	Codliver oil (type A)	14D16-B08-304341	31677 [†]	20
Euro OTC	Evening primrose oil, refined	1506001	31708 [†]	20
Henry Lamotte	Omega-3-fish oil	1000000642	31729 [†]	20
Caelo	Laurel oil	15216402	31745	60
Euro OTC	Almond oil, refined	1510014	31770 [†]	20
Euro OTC	Evening primrose oil, refined	1509005	31775 [†]	20
Henry Lamotte	Omega-3-fish oil	1000000642	31792 [†]	20
Euro OTC	Avocado oil, refined	1501015	31801 [†]	20
Fagron	Codliver oil (type A)	15A07-B05-304428	31825 [†]	20
Caelo	Laurel oil	15216401	31833 [†]	30
Caelo	Soy oil, refined	15239302	31834 [†]	20
Henry Lamotte	Omega-3-fish oil	1000001175	31875 [†]	20
Euro OTC	Olive oil, native	1602022	32186	40
Euro OTC	Almond oil, refined	1603025	32188	40
Caelo	Decyl oleate	161071	32194	40
Caelo	Avocado oil, refined	161047	32197	40
Caelo	Almond oil, refined	161444	32198	40
Caelo	Walnut oil, refined	161007	32199	40
Caelo	Oleyl oleate (stabilised)	161049	32202	40
Caelo	Peanut oil, refined	161195	32206	40
Caelo	Avocado oil, refined	161859	32315	40
Caelo	Rapeseed oil, refined	161850	32316	40
Caelo	Safflower oil, refined type I	161849	32334	40
Euro OTC	Avocado oil, refined	1605034	32457	40
Euro OTC	Evening primrose oil, refined	1605027	32463	40
Caelo	Evening primrose oil, refined	162813	32682	40
Caelo	Borage oil, refined, stabili. . .	162660	32685	40
Caelo	Corn oil, refined	162603	32689	40
Caelo	Codliver oil (type A)	162739	32690	40
Caelo	Sunflower oil, refined	162758	32691	40
Euro OTC	Olive oil, native	1608006	32709	40
Caelo	Soy oil, refined	15239302	32729	40
Henry Lamotte	Omega-3-fish oil	1000002824	32734	40
Caelo	Grape seed oil, refined	16092401	32746	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Pumpkin seed oil, pressed	15410004	32783	40
Caelo	Apricot kernel oil, refined	16236106	32931	40
Bombastus	Olive oil, native	306949	32990	40
Caelo	Olive oil, native	163274	33063	30
Caelo	Almond oil, refined	170422	33066	40
Caelo	Olive oil, native	170387	33068	40
Caelo	Corn oil, refined	170550	33069	40
Caelo	Sesame oil, refined	163125	33075	40
Caelo	Peanut oil, refined	163553	33085	40
Euro OTC	Evening primrose oil, refined	1703020	33227	40
Euro OTC	Almond oil, refined	1701036	33231	40
Caelo	Olive oil, native	171216	33306	40
Caelo	Codliver oil (type A)	171378	33308	40
Caelo	Almond oil, refined	171765	33314	40
Caelo	Peanut oil, refined	171690	33315	40
Caelo	Soy oil, refined	16347104	33462	40
Henry Lamotte	Sunflower oil, refined	8002491005	33472	40
Caelo	Grape seed oil, refined	16339703	33475	40
Caelo	Grape seed oil, refined	16339703	33476	40
Caelo	Walnut oil, refined	16100703	33488	40
Caelo	Wheatgerm oil, refined	16321301	33489	40
Caelo	Apricot kernel oil, refined	16236109	33512	40
Caelo	Sesame oil, refined	16312505	33618	40
Caelo	Safflower oil, refined type I	17092201	33653	40
Caelo	Decyl oleate	172156	33671	40
Caelo	Rapeseed oil, refined	172139	33673	40
Caelo	Olive oil, native	172365	33674	40
Caelo	Flaxseed oil, native	172364	33677	40
Caelo	Apricot kernel oil, refined	172518	33700	40
Euro OTC	Soy lecithin, liquid	1703001-01	33838	40
Euro OTC	Evening primrose oil, refined	1710011	33849	40
Caelo	Borage oil, refined, stabili...	17055407	33853	40
Bombastus	Flaxseed oil, native	309176	33880	40
Caelo	Jojoba oil, native	170733	33892	40
Caelo	Wheatgerm oil, refined	172903	33915	40
Caelo	Oleyl oleate (stabilised)	173581	33920	40
Euro OTC	Almond oil, refined	1801030	33924	40
Caelo	Laurel oil	18028202	33948	40
Euro OTC	Olive oil, native	1802011	34005	40
Caelo	Pumpkin seed oil, pressed	180837	34061	40
Caelo	Safflower oil, refined type I	180999	34062	40
Euro OTC	Soy lecithin, liquid	1803030	34094	40
Euro OTC	Evening primrose oil, refined	1803006	34095	40
Henry Lamotte	Omega-3-fish oil	1000007067	34124	40
Euro OTC	Olive oil, native	1805023	34183	40
Euro OTC	Almond oil, refined	1807007	34195	40
Euro OTC	Olive oil, native	1808026	34215	40
Euro OTC	Jojoba oil, native	1808038	34300	40

- 75 563 spectra from a total of 1734 batches from further 326 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](#).

[†]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*.

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.

- 9710 spectra from 531 *Apo-Ident* customers from 2318 batches from the substance/substance group *Triglycerides*.

Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	15311408	6
Caelo	Olive oil, native	11063906	1
Caelo	Olive oil, native	11227002	2
Caelo	Olive oil, native	11227011	1
Lamotte / Gehe	Olive oil, native	5127501	1
Noweda	Olive oil, native	267376	1
Gehe	Olive oil, native	11C16-N08	1
Caelo	Olive oil, native	11063901	1
Caelo	Olive oil, native	11376906	3
Bombastus	Olive oil, native	268118	1
Bombastus	Olive oil, native	267376	2
Henry Lamotte	Olive oil, native	5107101	1
Gehe	Olive oil, native	267376	1
Caelo	Olive oil, native	11376905	3
Bombastus	Olive oil, native	269674	1
Lamotte / Sanacorp	Olive oil, native	5283901	1
Noweda	Olive oil, native	268118	1
Caelo	Olive oil, native	406212000	1
Caelo	Olive oil, native	20061207	1
Caelo	Olive oil, native	7071206	1
Fagron	Olive oil, native	12A18-N08	2
Gehe	Olive oil, native	5107101	1
Caelo	Olive oil, native	1207771	1
Caelo	Olive oil, native	12077701	11
Caelo	Olive oil, native	13081204	1
Bombastus	Olive oil, native	270971	2
Gehe	Olive oil, native	269674	2
Bombastus	Olive oil, native	270970	4
Caelo	Olive oil, native	265359	1
Caelo	Olive oil, native	31081206	1
Caelo	Olive oil, native	1509212000	1
Caelo	Olive oil, native	12077702	2
Bombastus	Olive oil, native	272270	2
Noweda	Olive oil, native	12077702	2
Bombastus	Olive oil, native	266513	1
Noweda	Olive oil, native	272270	2
Fiebig	Olive oil, native	12077702	1
Caelo	Olive oil, native	120777027-13	1
Henry Lamotte	Olive oil, native	5232201	1
HenryLamotte	Olive oil, native	5232201	2
Caelo	Olive oil, native	12141306	12
Caelo	Olive oil, native	6111208	1
Anzag 31.10.12 ek: 2,78EUR	Olive oil, native	12077701	1
Caesar & Loretz GmbH, 4...	Olive oil, native	12141306	1
Phönix 09.11.12	Olive oil, native	272270	1
Caelo	Olive oil, native	10111201	1
Caelo	Olive oil, native	3212I-02000	1
Sanacorp	Olive oil, native	273659	1
Cealo/Gehe	Olive oil, native	12077701	1
Anzag	Olive oil, native	12077701	1
Lamotte	Olive oil, native	5232201	3
Caelo	Olive oil, native	12141309	5

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Supplier	Substance	Batch	Spectra
Bombastus	Olive oil, native	273659	3
Caelo	Olive oil, native	1214306	1
Caelo	Olive oil, native	12141305	3
Bombastus	Olive oil, native	274236	7
Fagron	Olive oil, native	12I07-N07	2
Bombastus	Olive oil, native	oo270970	1
Caelo	Olive oil, native	28121202	1
Caelo	Olive oil, native	12141310	1
Caelo	Olive oil, native	20270912-4	1
Caelo	Olive oil, native	12274104	7
Fagron	Olive oil, native	12107-N07	1
Anzag	Olive oil, native	12274104	1
Phönix/Lamotte	Olive oil, native	5272401	1
Cae	Olive oil, native	12141309	1
Lamotte / Gehe	Olive oil, native	5283901	2
Caelo	Olive oil, native	11227001	1
Caelo	Olive oil, native	24011303	1
H.Lamotte/Noweda	Olive oil, native	5232201	1
Sanacorp	Olive oil, native	12141306	2
HenryLamotte/Phoenix	Olive oil, native	5272401	4
Caelo	Olive oil, native	12274106	11
Gehe	Olive oil, native	265359	1
Caelo	Olive oil, native	12041801	4
Lamotte Phönix	Olive oil, native	5272401	2
Caelo	Olive oil, native	713I-02000	1
Bombastus	Olive oil, native	273871	5
Henry, Noweda	Olive oil, native	5232201	1
Henry Lamotte Oils GmbH	Olive oil, native	5372701	1
Henry Lamotte/Anzag	Olive oil, native	5272401	1
Caelo	Olive oil, native	12274108	1
HL/N/25.02.13 PZN:3649899	Olive oil, native	5283901	1
Gehe	Olive oil, native	12I07-N07	1
Caelo	Olive oil, native	5272401	4
Caelo	Olive oil, native	1031302	1
Caelo	Olive oil, native	503312000	1
Caelo	Olive oil, native	13010904	22
Phönix	Olive oil, native	12274106	1
Caelo	Olive oil, native	1301094	1
Henry Lamotte	Olive oil, native	5272401	3
Lamotte / Gehe	Olive oil, native	5372701	2
Ichthyol/Phönix	Olive oil, native	274236	1
Caelo	Olive oil, native	4041303	1
Alliance	Olive oil, native	277050	1
Caelo	Olive oil, native	13010906	6
Noweda	Olive oil, native	12141309	1
Bombastus	Olive oil, native	275757	2
Sanacorp	Olive oil, native	12274108	1
Bombastus	Olive oil, native	276542	1
Bombastus	Olive oil, native	277050	8
Caelo	Olive oil, native	29041301	1
Fagron	Olive oil, native	13010904	1
Lamotte	Olive oil, native	5272401	3
Fagron	Olive oil, native	13C08-N06	5
Bombastus	Olive oil, native	277049	1
Sanacorp	Olive oil, native	277050	1
Bombastus	Olive oil, native	12274106	1
Gehe	Olive oil, native	277050	2
Caelo	Olive oil, native	2113Q02000	1
Alliance Healthcare	Olive oil, native	12274108	1
Noweda	Olive oil, native	277050	2

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Supplier	Substance	Batch	Spectra
Bombastus	Olive oil, native	278583	9
celo/Jenne	Olive oil, native	13010904	1
Caelo	Olive oil, native	130109062x	1
Lamotte/Sanacorp	Olive oil, native	5271504	2
Caelo	Olive oil, native	5271504	2
Phönix Gotha	Olive oil, native	277049	1
Lamotte	Olive oil, native	123773	2
Henry Lamotte, Noweda	Olive oil, native	5372701	1
Lamotte	Olive oil, native	5372701	1
Phönix	Olive oil, native	20032	1
Bombastus	Olive oil, native	279608	5
Caelo	Olive oil, native	13010911	18
Caelo	Olive oil, native	3071302	1
Bombastus	Olive oil, native	279609	7
EuRho	Olive oil, native	13010911	1
Lamotte / Gehe	Olive oil, native	L901	1
Caelo	Olive oil, native		3
Fagron	Olive oil, native	13c08-N06	1
Caelo	Olive oil, native	13147001	9
Lamotte/ Anzag	Olive oil, native	5271504	1
Caelo	Olive oil, native	30071305	1
Sanacorp	Olive oil, native	13C08-N06	1
phönix	Olive oil, native	13010904	1
Henry lamotte/N/PZN:004. . .	Olive oil, native	5372701	1
AHD, 03.08.2011	Olive oil, native	5372701	1
Phönix, 07.11.2011	Olive oil, native	278583	1
Lamotte Phönix	Olive oil, native	5271504	1
Bombastus	Olive oil, native	265359	1
Caelo	Olive oil, native	3313I-02000	1
Bombastus	Olive oil, native	60081503	3
Gehe	Olive oil, native	13010911	1
Sanacorp	Olive oil, native	279609	1
Gehe	Olive oil, native	279609	1
Caelo	Olive oil, native	13147004	18
Henry Lamotte/Anzag	Olive oil, native	123773	1
Gehe	Olive oil, native	278583	1
Bombastus	Olive oil, native	281209	4
Lamotte/GH/11.09.13	Olive oil, native	5271504	1
sanacorp	Olive oil, native	13147004	1
Caelo	Olive oil, native	123773	1
Caelo	Olive oil, native	5464901	2
Caelo	Olive oil, native	13224702	4
Caelo	Olive oil, native	4101312	1
Caelo	Olive oil, native	13224703	17
Henry Lamotte	Olive oil, native	5271504	1
Henry Lamotte / Noweda	Olive oil, native	123773	1
Euro OTC	Olive oil, native	1212022-01	2
Bombastus	Olive oil, native	281898	5
Caelo	Olive oil, native	13224701	6
Lamotte	Olive oil, native	5464901	2
Lamotte/V.d.L.	Olive oil, native	5464901	1
Alliance Healthcare	Olive oil, native	13224703	1
Caelo	Olive oil, native	13224704	14
Caelo	Olive oil, native	14111306	1
Caelo	Olive oil, native	1324704	1
Gehe	Olive oil, native	281209	2
Fagron	Olive oil, native		1
lamotte/Gehe	Olive oil, native	5271504	1
Gehe	Olive oil, native	5470202	1
Pharmachem/AHD	Olive oil, native	13324703	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	16121306	1
Fagron	Olive oil, native	13G18-B08-286424	3
Bombastus	Olive oil, native	282963	8
Gehe	Olive oil, native	282963	2
Caelo	Olive oil, native	114Q-02000	1
Gehe - Lamotte	Olive oil, native	5271504	1
Fagron	Olive oil, native	13G18-B08	1
Caelo	Olive oil, native	13350101	4
Lamotte/Noweda	Olive oil, native	5464901	1
Bombastus	Olive oil, native	283762	3
Caelo	Olive oil, native	16011404	1
Caelo	Olive oil, native	13350104	7
Caelo	Olive oil, native	13350102	15
Caelo	Olive oil, native	13306103	1
Lamotte/ Anzag	Olive oil, native	5470202	2
Caelo	Olive oil, native	24011408	1
Caelo	Olive oil, native	279609	1
Wolf Handelsgesellschaft	Olive oil, native	128972ES	1
Fagron	Olive oil, native	13224704	1
Bombastus	Olive oil, native	8022014A	1
Bombastus	Olive oil, native	28963	1
Caelo	Olive oil, native	13021410	1
Caelo	Olive oil, native	13350103	13
Lamotte / Gehe	Olive oil, native	5470202	1
Caelo	Olive oil, native	25021404	1
Gehe	Olive oil, native	284144	1
Lamotte	Olive oil, native	5470202	3
Caesar & Loretz GmbH	Olive oil, native	13350101	1
Phoenix	Olive oil, native	5470202	1
J.H. Müller	Olive oil, native	140115	1
PHOENIX 03.03.2014	Olive oil, native	1305014-01	1
Noweda	Olive oil, native	13350102	1
Bombastus	Olive oil, native	284143	2
H.Lamotte/Noweda	Olive oil, native	5470202	1
Bombastus	Olive oil, native	284144	7
Henry Lamotte Oils GmbH...	Olive oil, native	5470202	1
Sanacorp 18.03.14 EK 10...	Olive oil, native	13G18-B08-286423	1
S.Binder	Olive oil, native	284144	1
Gehe - Lamotte	Olive oil, native	5470202	1
Caelo	Olive oil, native	13350105	3
Bombastus	Olive oil, native	4812A-02000	1
LAMOTTE/NOWEDA	Olive oil, native	5470202	1
Caelo	Olive oil, native	17041404	1
Bombastus	Olive oil, native	4328413	1
Caelo	Olive oil, native	5470202	1
Caelo	Olive oil, native	14024406	5
Caelo	Olive oil, native	14024408	14
Caelo	Olive oil, native	13051402	1
Noweda	Olive oil, native	284143	1
Fagron	Olive oil, native	284144	2
Caelo	Olive oil, native	17051403	1
Caelo	Olive oil, native	CE834/ES	1
Caelo	Olive oil, native	28051405	1
Bombastus	Olive oil, native	285942	10
Phoenix	Olive oil, native	13350103	1
Henry Lamotte Oils GmbH	Olive oil, native	124392	1
Caesar & Loretz GmbH Hi...	Olive oil, native	13350102	1
Bombastus	Olive oil, native	285160	1
Fagron	Olive oil, native	13J25-B04	1
Caelo	Olive oil, native	14024409	8

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	14024407	11
Bombastus	Olive oil, native	286533	8
Caelo	Olive oil, native	14070802	1
Bombastus	Olive oil, native	287259	7
Caelo	Olive oil, native	14118603	21
Raben-Apotheke Mildena	Olive oil, native	5623601	1
Lamotte/Sanacorp	Olive oil, native	5470202	1
Gehe - Lamotte	Olive oil, native	5623601	1
Caelo	Olive oil, native	26071403	1
Bombastus	Olive oil, native	4613M-02000	1
Bombastus	Olive oil, native	285642	1
henry lamotte oils gmbh	Olive oil, native	5464901	1
Caelo	Olive oil, native	1081402	1
Henry Lamotte Oils GmBh...	Olive oil, native	124392	1
Fagron	Olive oil, native	129189	1
Fagron	Olive oil, native	13J25-B04-289441	2
Henry Lamotte/ Noweda	Olive oil, native	124392	1
Euro OTC	Olive oil, native	1406009-01	1
Anzag/Lamotte	Olive oil, native	5623601	1
Caelo	Olive oil, native	14182302	17
Caelo	Olive oil, native	14118604	13
Caelo	Olive oil, native	5623601	1
Phoenix	Olive oil, native	1406009-01	1
Caelo	Olive oil, native	26091403	1
phönix	Olive oil, native		1
Bombastus	Olive oil, native	288752	6
Brücken-Apotheke	Olive oil, native	288752	2
Caelo	Olive oil, native	288752	2
Bombastus	Olive oil, native		1
Bombastus	Olive oil, native	6861571	2
Bombastus	Olive oil, native	289094	5
noweda	Olive oil, native		1
Phoenix	Olive oil, native	14118603	1
Caelo	Olive oil, native	14182304	3
Gehe	Olive oil, native	288752	1
Bombastus	Olive oil, native	289095	5
Caelo	Olive oil, native	14182303	19
Bombastus	Olive oil, native	287259Noweda	1
Henry Lamotte	Olive oil, native	5671601	1
Caelo	Olive oil, native	141182303	1
Lamotte / Gehe	Olive oil, native	5734701	1
Gehe	Olive oil, native	289094	1
Caelo	Olive oil, native	8121404	1
Caesar & Loretz GmbH Hi...	Olive oil, native	14182302	1
Gehe - Lamotte	Olive oil, native	5671601	2
Henry Lamotte Oils GmbH...	Olive oil, native	5734701	1
Caelo	Olive oil, native	23121413	1
Caelo	Olive oil, native	5011503	1
Phönix	Olive oil, native	14118606	1
Caelo	Olive oil, native	14118606	2
Bombastus	Olive oil, native	290924	15
Caelo	Olive oil, native	290924	1
Lamotte / Noweda	Olive oil, native	124392	1
Fagron	Olive oil, native	130190	2
Bombastus	Olive oil, native	290403	10
Sanacorp 21.01.15 EK 10...	Olive oil, native	14G08-B02-300073	1
Caelo	Olive oil, native	14306904	7
Caelo	Olive oil, native	2021501	1
Caelo	Olive oil, native	2021502	1
Lamotte/Sanacorp	Olive oil, native	5671901	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	5734701	1
Caelo	Olive oil, native	14306903	4
Caelo	Olive oil, native	14306905	14
Henry Lamotte	Olive oil, native	5671901	3
Caelo	Olive oil, native	14182305	2
Noweda 21.02.2015	Olive oil, native	14182302	1
Sanacorp	Olive oil, native	14306903	1
Fagron	Olive oil, native	14B12-B06	1
Bombastus	Olive oil, native	291374	8
Sanacorp	Olive oil, native	1/AKD4	2
Caelo	Olive oil, native	14306902	1
Caelo	Olive oil, native	7031501	1
290924	Olive oil, native	290924	2
Bombastus	Olive oil, native	14306904	1
Beiersdorf AG/Geilenkir...	Olive oil, native	291374	1
H. Lamotte/Noweda	Olive oil, native	5671901	1
Fagron	Olive oil, native	14G08-B02-300074	3
Lamotte/Anzag	Olive oil, native	5734701	1
Lamotte/Anzag	Olive oil, native	5671901	1
Caelo	Olive oil, native	18031506	1
Lamotte/Alliance	Olive oil, native	5623601	1
Caelo	Olive oil, native	24031502	1
Bombastus	Olive oil, native	292369	21
Euro OTC	Olive oil, native	14182303	1
Lamotte/Spangro	Olive oil, native	5671901	1
Caelo	Olive oil, native	18041502	1
Henry Lamotte Oils GmbH	Olive oil, native	5671901	2
Caelo	Olive oil, native	14306915	7
Caelo	Olive oil, native	14306913	1
sanacorp	Olive oil, native	14306904	1
Gehe	Olive oil, native		1
Bombastus	Olive oil, native	294034	16
Caelo	Olive oil, native	290403	2
Caelo	Olive oil, native	7051507	1
Caelo	Olive oil, native	14306916	9
Caelo	Olive oil, native	2061503	1
Fagron	Olive oil, native	133026	2
Caelo	Olive oil, native	20061502	1
Caelo	Olive oil, native	1406914	1
Caelo	Olive oil, native	14306914	1
Caelo	Olive oil, native	292369	2
Caelo	Olive oil, native	15112705	7
Henry Lamotte	Olive oil, native	5734701	1
Caelo	Olive oil, native	14071504	1
Caelo	Olive oil, native	15112704	2
Caesar & Loretz GmbH	Olive oil, native	14306904	1
Henry Lamotte Oils GmbH	Olive oil, native	5921100001	1
Lamotte/Spangro	Olive oil, native	5891202	1
sanacorp	Olive oil, native	15112706	1
Noweda/Lamotte	Olive oil, native	5813601	1
VDL Nachliefer; 10.7.15...	Olive oil, native	291374	2
Bombastus	Olive oil, native	294035	2
Caelo	Olive oil, native	15112706	16
Fagron	Olive oil, native	15A27-B03-304709	5
Bombastus	Olive oil, native	295283	21
Caelo	Olive oil, native	15112703	3
Caelo	Olive oil, native	15112707	4
Caelo	Olive oil, native	24081507	1
Caelo	Olive oil, native	5891202	1
Noweda	Olive oil, native	5813601	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Olive oil, native		1
Noweda-Henry	Olive oil, native	5891202	1
Bombastus	Olive oil, native	296260	15
Caelo	Olive oil, native	294034	1
Bombastus	Olive oil, native	296259	3
Henry Lamotte Oils GmbH	Olive oil, native	5813601	1
Caelo	Olive oil, native	15216310	4
ACM	Olive oil, native	KNC2225J14	1
Lamotte/Alliance	Olive oil, native	5891202	1
Fagron	Olive oil, native	15A27-B03	1
Bombastus	Olive oil, native	297227	5
Henry Lamotte	Olive oil, native	5813601	1
Phönix Gotha	Olive oil, native	15216308	1
Caelo	Olive oil, native	15216308	13
EuRho	Olive oil, native	1501023-01	1
Raben-Apotheke Mildena	Olive oil, native	5891202	3
Lamotte/Spangro	Olive oil, native	8000652001	1
Henry Lamotte	Olive oil, native	8000652001	1
Caelo	Olive oil, native	15216307	12
Bombastus	Olive oil, native	295282	4
EuRho	Olive oil, native	1503047-01	1
Caelo	Olive oil, native	295282	3
Caelo	Olive oil, native	15311401	4
Henry Lamotte Oils GmbH	Olive oil, native	8000652001	1
Caelo	Olive oil, native	15216309	9
Caelo	Olive oil, native	295283	2
Bombastus	Olive oil, native	297564	4
Caelo	Olive oil, native	15311403	19
anzag	Olive oil, native	15216308	1
Caelo	Olive oil, native	15216305	1
Caeol / Gehe	Olive oil, native	15311401	1
Lamotte/Anzag	Olive oil, native	5813601	1
Caelo	Olive oil, native	1521309	1
Caelo	Olive oil, native	15311404	12
Caeolo/Phönix	Olive oil, native	15311401	2
Caeolo/Phönix	Olive oil, native	15311402	1
Henry Lamotte/Anzag	Olive oil, native	590340003	1
Caelo	Olive oil, native	15311402	5
Caelo	Olive oil, native	90417099	1
Lamotte/Sanacorp	Olive oil, native	8000652001	1
Caesar & Loretz GmbH Hi...	Olive oil, native	15216309	1
Bombastus	Olive oil, native	298007	6
Noweda	Olive oil, native	295282	1
Lamotte/Kehr	Olive oil, native	8000821001	1
Gehe	Olive oil, native	298007	1
Caelo	Olive oil, native	15363302	1
Henry Lamotte	Olive oil, native	5921100001	1
Fagron	Olive oil, native	15216309	1
Bombastus	Olive oil, native	298008	7
Lamotte/Spangro	Olive oil, native	5903400003	1
Caelo	Olive oil, native	297565	1
Henry Lamotte Oils GmbH	Olive oil, native	59211000001	1
Phönix	Olive oil, native	15216308	1
Henry Lamotte/AHD	Olive oil, native	8000821001	1
Anzag	Olive oil, native	297565	1
Caelo	Olive oil, native	15399702	15
Phönix	Olive oil, native	15399702	1
Caesar & Loretz GmbH Hi...	Olive oil, native	15311404	1
Henry Lamotte/Gehe	Olive oil, native	5903400003	1
Bombastus	Olive oil, native	297565	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Noweda	Olive oil, native	8000821001	1
Caelo	Olive oil, native	298008	2
Lamotte	Olive oil, native	5903400003	1
Bombastus	Olive oil, native	15399702	1
Caelo	Olive oil, native	297564	1
Henry Lamotte	Olive oil, native	8000821001	1
Bombastus	Olive oil, native	300219	5
Caelo	Olive oil, native	15399704	19
Bombastus	Olive oil, native	300220	12
Noweda	Olive oil, native	15399702	1
Henry Lamotte/Phoenix	Olive oil, native	8001431001	1
Lamotte	Olive oil, native	8000821001	1
Caelo	Olive oil, native	12388	1
Caelo	Olive oil, native	15399703	17
Henry Lamotte/Sanacorp	Olive oil, native	8000652001	1
Bombastus	Olive oil, native	301100	20
Bombastus	Olive oil, native	301099	8
Caelo	Olive oil, native	16035310	16
Caelo	Olive oil, native	2915A-02000	1
Henry Lamotte/Kehr	Olive oil, native	8000652001	1
Caelo	Olive oil, native	15399706	1
Caelo	Olive oil, native	16035309	5
Caelo	Olive oil, native	1100616	1
Lamotte/Spangro	Olive oil, native	8001648001	1
Bombastus	Olive oil, native	3011000	2
Phoenix	Olive oil, native	16035310	1
Sanacorp	Olive oil, native	5/AKD13	1
Bombastus	Olive oil, native	302523	12
Henry Lamotte	Olive oil, native	5891202	1
hen	Olive oil, native	8001648001	1
Henry Lamotte Oils	Olive oil, native	8000821001	1
Caelo	Olive oil, native	301100	1
Henry Lamotte Oils GmbH	Olive oil, native	8001560001	1
Henry Lamotte/Anzag	Olive oil, native	8001648001	1
Ebert & Jacobi 02.08...	Olive oil, native	15399704	1
Bombastus	Olive oil, native	110816-1	1
Gehe-Henry	Olive oil, native	8002026001	1
Caesar&lorenz,Phoenix,1...	Olive oil, native	15399703	1
Euro OTC	Olive oil, native	1503047-02	1
Henry Lamotte	Olive oil, native	8001648001	1
Anzag	Olive oil, native	15399706	1
Caelo	Olive oil, native	160353010	1
Caelo	Olive oil, native	16035308	6
Caelo	Olive oil, native	16035311	10
Henry Lamotte/Phönix	Olive oil, native	8001648001	1
Lamotte / Phönix	Olive oil, native	8001431001	1
Henry Lamotte	Olive oil, native	8001560001	2
Allianc. Health. /bo	Olive oil, native	302523	1
Henry Lamotte Oils	Olive oil, native	8001648001	1
Caelo	Olive oil, native	16144605	4
Phoenix	Olive oil, native	16035311	1
Caelo	Olive oil, native	6/AKD15	1
Caesar & Loretz GmbH Hi...	Olive oil, native	16212801	1
Bomastus/Phönix	Olive oil, native	302523	1
Caelo	Olive oil, native	16212801	12
Caelo	Olive oil, native	3916I-02000	1
Caelo	Olive oil, native	16212806	25
Bombastus	Olive oil, native	302522	4
Bombastus	Olive oil, native	304113	9
euro-oct	Olive oil, native	1503047-02	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Phoenix	Olive oil, native	8001948002	1
Lamotte Gmbh	Olive oil, native	8001948002	1
Caesar & Loretz GmbH Hi. . .	Olive oil, native	16212806	1
Gehe/henry	Olive oil, native	8001431001	1
Caelo	Olive oil, native	16212802	2
Bombastus	Olive oil, native	305003	16
Caelo	Olive oil, native	16212803	4
Gehe	Olive oil, native	305003	1
Caelo	Olive oil, native	16278806	1
Bombastus	Olive oil, native	305002	9
Caelo	Olive oil, native	16212805	1
Caelo	Olive oil, native	16327402	29
Henry Lamotte/Phönix	Olive oil, native	8001948002	1
PHÖNIX	Olive oil, native	16327402	1
Fagron	Olive oil, native	139812	1
Caelo	Olive oil, native	1621806	1
Caelo	Olive oil, native	300117/A	1
Caelo	Olive oil, native	17020700/16212806	1
Bombastus	Olive oil, native	306950	13
Bombastus	Olive oil, native	304112	1
Anzag	Olive oil, native	16327403	1
GEHE	Olive oil, native	305002	1
Henry Lamotte	Olive oil, native	16327402	1
Caelo	Olive oil, native	25021708	1
Bombastus	Olive oil, native	306949	7
Bombastus	Olive oil, native	307103	8
Caelo	Olive oil, native	16327403	8
Caesar&LoretzGmbH,07,03. . .	Olive oil, native	16327402	1
Caelo	Olive oil, native	17038703	8
Lamotte/Spangro	Olive oil, native	8002366001	2
Caelo	Olive oil, native	9031707	1
Caelo	Olive oil, native	11031706	1
Euro OTC	Olive oil, native	16327406	3
Phönix	Olive oil, native	16327402	1
Phönix	Olive oil, native	16327406	1
Frago/Gehe	Olive oil, native	16K24-B01-329002	2
Caelo	Olive oil, native	307103	1
Henry Lamotte/Noweda	Olive oil, native	8001854001	2
Apotheke am Landrain	Olive oil, native		1
Gehe-Henry	Olive oil, native	8002366001	1
Gehe	Olive oil, native	16212801	1
Gehe	Olive oil, native	305002	1
Caelo	Olive oil, native	306950	1
Fagron	Olive oil, native	329002	1
Henry Lamotte/AHC	Olive oil, native	8002366001	1
Caelo	Olive oil, native	16327406	7
Bombastus	Olive oil, native	308230	37
Caelo	Olive oil, native	8041709	1
Euro OTC	Olive oil, native	1602022-01	1
Caelo	Olive oil, native	20041701	1
Caelo	Olive oil, native	21041714	1
Henry Lamotte Oils	Olive oil, native	8022366001	1
Phönix	Olive oil, native	17038702	1
Caelo	Olive oil, native	17038702	26
lamotte/noweda	Olive oil, native	8001854001	1
Caesar 6 Loretz GmbH	Olive oil, native	16327402	1
Allianz Healthcare	Olive oil, native	16327402	1
Caelo	Olive oil, native	308230	4
Caelo	Olive oil, native	8061712	1
Gehe	Olive oil, native	8002366001	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Noweda	Olive oil, native	8002366001	1
Bombastus	Olive oil, native	308229	7
Bombastus	Olive oil, native	111405	1
Henry Lamotte Oils GmbH...	Olive oil, native	8001854001	1
Caesar&Loretz GmbH, AHC...	Olive oil, native	17038702	1
Caelo	Olive oil, native	27061703	1
Caelo	Olive oil, native	3071714	1
Bombastus	Olive oil, native	308230-20170704Ma13	1
Caelo	Olive oil, native	8002366001	1
Caelo	Olive oil, native	17121603	2
Fagron	Olive oil, native	16K24-B01-329002	2
Caelo	Olive oil, native	14071704	1
GEHE	Olive oil, native	308229	1
Caelo	Olive oil, native	16K24-B01329002	1
Kehr	Olive oil, native	308229	1
Bomastus-Werke AG	Olive oil, native	308230	1
Frago/Noweda	Olive oil, native	16K24-B01	1
Caelo	Olive oil, native	305003	2
Caelo	Olive oil, native	17121602	15
Caelo	Olive oil, native	12081701	1
Caesar&Loretz	Olive oil, native	17038702	2
Caelo	Olive oil, native	8002868001	1
Caelo	Olive oil, native	17121604	5
Sanacorp	Olive oil, native	308229	1
Caelo	Olive oil, native	26081709	1
Euro OTC	Olive oil, native	1602022-02	1
Caelo	Olive oil, native	7091703	1
Lamotte/Noweda	Olive oil, native	8002656001	1
Caelo	Olive oil, native	8002366001	1
Caelo	Olive oil, native	17121606	11
Caesar&Lorenz/Phoenix	Olive oil, native	17121604	4
Caesar & Loretz GmbH,20...	Olive oil, native	17121602	1
Caelo	Olive oil, native	6101706	1
Lamotte/Phoenix	Olive oil, native	8002868001	1
Caelo	Olive oil, native	14101709	1
Caelo	Olive oil, native	23101704	1
Anzag	Olive oil, native	17121604	1
Bombastus	Olive oil, native	308230-20171106Ma7	1
Caelo	Olive oil, native	17121610	9
Henry Lamotte	Olive oil, native	8002656001	1
Bombastus	Olive oil, native	310866	3
Caelo	Olive oil, native	17121607	2
Caelo	Olive oil, native	171211610	1
Fagron	Olive oil, native	16K24-01-329002	1
Caelo	Olive oil, native	28111704	1
Caeolo/Krieger	Olive oil, native	17121606	1
Bombastus	Olive oil, native	30820	1
Bombastus	Olive oil, native	310868	18
Caelo	Olive oil, native	17236502	3
Caelo	Olive oil, native	11121701	1
Caelo	Olive oil, native	17236506	1
Henry Lamotte/Noweda	Olive oil, native	8002827001	1
Euro OTC	Olive oil, native	1608006-02	1
Caelo	Olive oil, native	17121900/17121610	1
Henry Lamotte/Phönix	Olive oil, native	8003420001	2
Henry Lamotte/Noweda	Olive oil, native	8002656001	1
Caelo	Olive oil, native	17236501	9
Sanacorp	Olive oil, native	17236501	1
Lamotte / Gehe	Olive oil, native	8003420001	1
Phönix	Olive oil, native	17121610	1

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Supplier	Substance	Batch	Spectra
Caelo	Olive oil, native	172236501	1
lamotte/noweda	Olive oil, native	8002827001	1
Henry Lamotte/Phönix	Olive oil, native	1000004908	1
Caelo	Olive oil, native	17236505	17
Henry L/Spangro	Olive oil, native	8003420001	1
Caelo	Olive oil, native	310868	1
Caelo	Olive oil, native	60081503	2
Caelo	Olive oil, native	12021822	1
Caelo	Olive oil, native	17236508	3
Henry Lamotte/Sanacorp	Olive oil, native	8003801001	1
Caelo	Olive oil, native	17361101	18
lamotte/noweda	Olive oil, native	1000004908	1
Bombastus	Olive oil, native	17001888	4
Lamotte/Ebert	Olive oil, native	8003420001	1
Bombastus	Olive oil, native	17001926	9
Wolfvital	Olive oil, native	W48B041	1
Henry Lamotte Oils GmbH...	Olive oil, native	8003801001	1
Caelo	Olive oil, native	8003420001	1
Henry Lamotte Oils GmbH	Olive oil, native	8003420001	1
Delta	Olive oil, native	17236505	1
Caelo	Olive oil, native	17361104	2
Caelo	Olive oil, native	23041802	1
Lamotte/Kehr	Olive oil, native	8003580002	1
Caelo	Olive oil, native	3051807	1
AHL	Olive oil, native	8003420001	1
Lamotte/Phoenix	Olive oil, native	8003580002	1
Caelo	Olive oil, native	19051806leber	1
Bombastus	Olive oil, native	18002119	13
Caelo	Olive oil, native	172365025615	1
Bombastus	Olive oil, native	18002118	3
Henry Lamotte Oils GmbH	Olive oil, native	8003801001	1
GEHE	Olive oil, native	18002118	1
Caelo	Olive oil, native	9061810	1
Caelo	Olive oil, native	p070106118	1
Lamotte/Noweda	Olive oil, native	8003580002	1
Allianz	Olive oil, native	17361108	1
Caelo	Olive oil, native	17361106	11
Lamotte	Olive oil, native	8004194001	1
Lamotte/Ebert	Olive oil, native	8003580002	1
Henry Lamotte/Noweda	Olive oil, native	8003580002	1
Krieger	Olive oil, native	17361101	1
Caelo	Olive oil, native	8004194001	1
Cealo/Gehe	Olive oil, native	17361106	1
Caelo	Olive oil, native	16081803	1
Sanacorp	Olive oil, native	18002119	1
Caelo	Olive oil, native	210818B	1
Bombastus	Olive oil, native	18003204	5
Bombastus	Olive oil, native	18003205	11
Caelo	Olive oil, native	12091803	1
Euro OTC	Olive oil, native	18002119	1
Caelo	Olive oil, native	18003205	1
Caelo	Olive oil, native	17361107	3
Lamotte/Noweda	Olive oil, native	8003801001	1
Caelo	Olive oil, native	29091802	1
Euro OTC	Olive oil, native	17391101	1
Caelo	Olive oil, native	20101801	1
Caelo	Olive oil, native	18121101	9
Caelo	Olive oil, native	800067001	1
Lamotte/Spangro	Olive oil, native	8004194001	1
Caelo	Olive oil, native	1812101	1

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Supplier	Substance	Batch	Spectra
Fagron	Olive oil, native	18003205	1
Euro OTC	Olive oil, native	17236501	1
Caelo	Olive oil, native	18208101	6
Caelo	Olive oil, native	46646018208101	1
Anzag	Olive oil, native	18002118	1
Bombastus	Olive oil, native	18005453	6
Caelo	Olive oil, native	15121802	1
Sanacorp	Olive oil, native	18005453	1
Bombastus	Olive oil, native	18005452	1
Caelo	Olive oil, native	18208106	2
Jenne	Olive oil, native	18208106	1
Lamotte/Spangro	Olive oil, native	8004251002	1
Caelo	Peanut oil, refined	11100201	2
Bombastus	Peanut oil, refined	264328	1
Caelo	Peanut oil, refined	11313905	4
Noweda	Peanut oil, refined	11B16-N02	2
Caelo	Peanut oil, refined	11163201	1
Bombastus	Peanut oil, refined	266753	1
Caelo	Peanut oil, refined	11254503	1
Caelo	Peanut oil, refined	11313906	2
Bombastus	Peanut oil, refined	267966	4
Noweda	Peanut oil, refined	5103001	1
Caelo	Peanut oil, refined	12041902	10
Caelo	Peanut oil, refined	6061202	1
Noweda	Peanut oil, refined	123508	1
Caelo	Peanut oil, refined	26061203	1
Caelo	Peanut oil, refined	1207211954	1
Gehe	Peanut oil, refined	12041902	1
Caelo	Peanut oil, refined	12101503	8
Caelo	Peanut oil, refined	12101502	3
Henry Lamotte GmbH/Hold...	Peanut oil, refined	5231601	1
Caelo	Peanut oil, refined	24081208	1
Bombastus	Peanut oil, refined	271512	3
H.Lamotte/Noweda	Peanut oil, refined	5231601	1
Caelo	Peanut oil, refined	9101201	1
Fiebig 02.10.12 ek: 5,13EUR	Peanut oil, refined	5231601	1
Caelo	Peanut oil, refined	466158	1
Caelo	Peanut oil, refined	3112M-01954	1
Caelo	Peanut oil, refined	12203803	15
Caelo	Peanut oil, refined	10208605	1
HenryLamotte/Phoenix	Peanut oil, refined	5231601	1
Caelo	Peanut oil, refined	1211503	1
Anzag 07.12.12	Peanut oil, refined	12203803	1
Caelo	Peanut oil, refined	21121205	1
Fagron	Peanut oil, refined	5012A-01954	1
Caelo	Peanut oil, refined	12274302	21
Caelo	Peanut oil, refined		3
Caelo	Peanut oil, refined	12041092	1
Caelo	Peanut oil, refined	12080802	1
EuRho	Peanut oil, refined	1204018-01	1
Noweda	Peanut oil, refined	12C30-N02	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
Fagron	Peanut oil, refined	12H31-N05	4
Sanacorp	Peanut oil, refined	12274302	2
Lamotte/GEHE	Peanut oil, refined	5204402	1
Anzag	Peanut oil, refined	12c30n02	1
Caelo	Peanut oil, refined	12274032	1
Anzag	Peanut oil, refined	12H31N05	1

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Supplier	Substance	Batch	Spectra
Noweda	Peanut oil, refined	12274302	1
Caelo	Peanut oil, refined	12203806	3
Caelo	Peanut oil, refined	12323204	13
Phönix	Peanut oil, refined	5204402	1
Caelo	Peanut oil, refined	7031307	1
Fagron	Peanut oil, refined	12J23-N01	2
Caelo	Peanut oil, refined	28031304	1
Phönix	Peanut oil, refined	12274302	2
Fagron	Peanut oil, refined	12c30-n02	1
Noweda	Peanut oil, refined	11313905	1
Caelo	Peanut oil, refined	5204402	1
Henry Lamotte oils GmbH	Peanut oil, refined	5204402	2
Caelo	Peanut oil, refined	1224302	1
Caelo	Peanut oil, refined	12274305	3
Purren Apotheke	Peanut oil, refined	11313905	1
AHD, 06.05.2013	Peanut oil, refined	12323204	1
Caesar/Lorenz	Peanut oil, refined	12274302	1
Henry Lamotte	Peanut oil, refined	520442	1
Lamotte	Peanut oil, refined	5204402	2
Caelo	Peanut oil, refined	3061303	1
Caelo	Peanut oil, refined	107063	1
Caelo	Peanut oil, refined	8061303	1
Henry Lamotte/Jenne	Peanut oil, refined	5204402	1
Caelo	Peanut oil, refined	13129203	34
Caelo	Peanut oil, refined	12323205	3
Fagron	Peanut oil, refined	12A05-N05	1
Phönix	Peanut oil, refined	5404101	1
Lamotte / Gehe	Peanut oil, refined	5404101	1
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	12323204	1
Alliance Healthcare	Peanut oil, refined	13129203	1
Bombastus	Peanut oil, refined	276103	2
Caelo	Peanut oil, refined	1013A-01954	2
Anzag	Peanut oil, refined	12323204	1
Caelo	Peanut oil, refined	9091303	1
Bombastus	Peanut oil, refined	263129	1
Caelo	Peanut oil, refined	3813E1954	1
Fagron	Peanut oil, refined	12J23-N01	1
Caelo	Peanut oil, refined	13129202	1
H.Lamotte/Noweda	Peanut oil, refined	1034	1
Sanacorp	Peanut oil, refined	13129203	1
Fagron	Peanut oil, refined	13G30-N05	7
lamotte/Jenne	Peanut oil, refined	5404101	1
Fagron	Peanut oil, refined	13G30-N05	1
Caelo	Peanut oil, refined	30101312	1
Caelo	Peanut oil, refined	13306106	15
Henry Lamotte	Peanut oil, refined	611Erdnuss	1
Bombastus	Peanut oil, refined	80370408	1
Caelo	Peanut oil, refined	5314601	1
Caelo	Peanut oil, refined	13306102	8
Phönix	Peanut oil, refined	5473601	1
Fagron	Peanut oil, refined	13g30-n05	1
Caelo	Peanut oil, refined	13306103	25
Caelo	Peanut oil, refined	13306101	2
Gehe	Peanut oil, refined	13306103	1
Lamotte	Peanut oil, refined	5473601	3
Phönix Gotha	Peanut oil, refined	13306103	1
Gehe	Peanut oil, refined	13306106	1
Henry Lamotte Oils GmbH...	Peanut oil, refined	5473601	2
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	13306106	1
Caelo	Peanut oil, refined	16011403	1

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Supplier	Substance	Batch	Spectra
Phoenix	Peanut oil, refined	13306106	1
Caelo	Peanut oil, refined	13358804	21
Phönix Gotha	Peanut oil, refined	13129202	1
Caelo	Peanut oil, refined	13358803	14
Kastner	Peanut oil, refined	5592601	2
Euro OTC	Peanut oil, refined	1301015	1
Bombastus	Peanut oil, refined	284286	5
Caelo	Peanut oil, refined	28021406	1
Noweda	Peanut oil, refined	13358804	1
Anzag	Peanut oil, refined	13358804	1
H.Lamotte/Noweda	Peanut oil, refined	5473601	1
Lamotte/Phoenix	Peanut oil, refined	5592601	1
Phönix	Peanut oil, refined	13358801	1
Lamotte	Peanut oil, refined	5592601	1
lamotte/Gehe	Peanut oil, refined	5592601	3
Caelo	Peanut oil, refined	14033601	17
Caesar&lorenz,Phoenix	Peanut oil, refined	14033601	1
Caelo	Peanut oil, refined	1232304	1
Caelo	Peanut oil, refined	1358804	1
Caelo	Peanut oil, refined	13051403	1
Euro OTC	Peanut oil, refined	5592601	1
Caelo	Peanut oil, refined	13358801	10
Caesar & Loretz GmbH	Peanut oil, refined	13358803	1
Caelo	Peanut oil, refined	14115404	9
Caelo	Peanut oil, refined	23051406	1
Phoenix	Peanut oil, refined	13358803	1
Fagron	Peanut oil, refined	13J25-B06-291838	4
Caelo	Peanut oil, refined	5592601	3
Bombastus	Peanut oil, refined	286393	5
Henry Lamotte	Peanut oil, refined	5204402	1
H.Lamotte/Noweda	Peanut oil, refined	5699601	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5473601	1
Caelo	Peanut oil, refined	14115405	14
Henry Lamotte	Peanut oil, refined	5699601	2
Caelo	Peanut oil, refined	13J25-B06-291838	1
Fagron	Peanut oil, refined	14033601	1
Henry Lamotte	Peanut oil, refined	5473601	1
Fagron	Peanut oil, refined	14D11-B05-294677	4
Caelo/Phoenix	Peanut oil, refined	14115405	1
Caelo	Peanut oil, refined	3614M-01954	1
Caelo	Peanut oil, refined	25091405	1
Henry Lamotte	Peanut oil, refined	5592601	1
Lamotte	Peanut oil, refined	5699501	1
Caelo	Peanut oil, refined	14115406	13
Caelo	Peanut oil, refined	14246901	14
Fagron	Peanut oil, refined	13J25B06291837	1
Phoenix	Peanut oil, refined	14115405	1
Bombastus	Peanut oil, refined	283866	1
AHD	Peanut oil, refined	14246901	1
Caelo	Peanut oil, refined	14115403	5
Caelo	Peanut oil, refined	13173003	1
Caesar & Loretz GmbH Hi. . .	Peanut oil, refined	14115404	1
Caesar & Loretz GmbH	Peanut oil, refined	14115404	1
Caelo	Peanut oil, refined	14111401	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5699601	1
Lamotte	Peanut oil, refined	5699601	3
Fagron	Peanut oil, refined	13j25b06291837	1
Lamotte/Phoenix	Peanut oil, refined	5699601	2
Caelo	Peanut oil, refined	14246903	18
Bombastus	Peanut oil, refined	288510	2

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Supplier	Substance	Batch	Spectra
Fagron	Peanut oil, refined	P101P102P103	1
Henry Lamotte oils GmbH...	Peanut oil, refined	5699601	2
Caelo	Peanut oil, refined	30121415	1
Fagron	Peanut oil, refined	14246901	1
Caelo	Peanut oil, refined	14246902	5
Fagron	Peanut oil, refined	14D11-B05-294672	2
Caesar&lorenz,Phoenix	Peanut oil, refined	14246903	1
Caelo	Peanut oil, refined	14355904	14
Caelo	Peanut oil, refined	20021502	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5697901	4
Fagron	Peanut oil, refined	14355904	2
Fagron	Peanut oil, refined	130723	1
Sanacorp	Peanut oil, refined	14355904	1
Hedinger	Peanut oil, refined	14355903	1
Caelo	Peanut oil, refined	14355903	6
Caelo	Peanut oil, refined	14355905	13
Caesar&Loretz GmbH/Anzag	Peanut oil, refined	14355905	1
Henry Lamotte	Peanut oil, refined	5697901	2
Bombastus	Peanut oil, refined	291671	4
Phoenix	Peanut oil, refined	14355905	1
Anzag	Peanut oil, refined	15015103	1
Caelo	Peanut oil, refined	15015103	13
Sanacorp;13.05.15; 2,94EUR	Peanut oil, refined	14355905	1
Caelo	Peanut oil, refined	15015104	13
Lamotte	Peanut oil, refined	5697901	2
gehe/ cealo	Peanut oil, refined	15015104	1
lamotte/Phönix	Peanut oil, refined	5697901	1
Caelo	Peanut oil, refined	15015106	4
Fagron	Peanut oil, refined	131943	2
Caelo	Peanut oil, refined	15208505	13
Caelo	Peanut oil, refined	15208506	18
Caleo	Peanut oil, refined	14/10-B07	1
Fagron	Peanut oil, refined	15B11B02304989	2
caesar&lorenz,phönix	Peanut oil, refined	1508506	1
Caelo	Peanut oil, refined	15208501	3
Lamotte/Phoenix	Peanut oil, refined	5904100001	1
Caelo	Peanut oil, refined	15273402	14
Henry Lamotte	Peanut oil, refined	5904100001	2
Bombastus	Peanut oil, refined	295272	10
Caesar & Loretz GmbH	Peanut oil, refined	15208506	1
Caelo	Peanut oil, refined	15273403	13
Fagron	Peanut oil, refined	14I-10B07-300438	1
Noweda	Peanut oil, refined	1410B07300438	1
Phönix Gotha	Peanut oil, refined	15273403	1
Henry Lamotte Oils GmbH	Peanut oil, refined	5904100091	1
Bombastus	Peanut oil, refined	297242	1
Caelo	Peanut oil, refined	15331502	24
Caelo	Peanut oil, refined	15012016	1
Caelo	Peanut oil, refined	15331501	11
Fagron	Peanut oil, refined	15E07-B04	1
Fischar	Peanut oil, refined	5904100001	2
Caesar & Loretz GmbH Hi...	Peanut oil, refined	15331502	1
Caelo	Peanut oil, refined	15331503	12
Caelo	Peanut oil, refined	1531502	1
Bombastus	Peanut oil, refined	299136	7
Fagron	Peanut oil, refined	14/10-B07-300426	1
H.Lamotte/Noweda	Peanut oil, refined	5904100001	1
Fagron	Peanut oil, refined	15331506	1
Caesar & Loretz/Noweda	Peanut oil, refined	15273402	1
Bombastus	Peanut oil, refined	29527	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Peanut oil, refined	8000666005	3
Fagron	Peanut oil, refined	15E07-B04-308779	2
Fagron	Peanut oil, refined	14I10-B07-300438	2
Caelo	Peanut oil, refined	15331506	1
Henry Lamotte	Peanut oil, refined	8000666005	3
Caelo/AHD	Peanut oil, refined	16071101	1
Bombastus	Peanut oil, refined	30100	1
Caelo	Peanut oil, refined	16071101	17
Fagron	Peanut oil, refined	1410-B07-300438	1
Caelo	Peanut oil, refined	16071102	21
caesar &loretz GmbH,Phö...	Peanut oil, refined	16071101	1
Fagron	Peanut oil, refined	133498	1
Nachprüfung	Peanut oil, refined	1426903	1
Caelo	Peanut oil, refined	16071105	17
Caelo	Peanut oil, refined	302017	2
Bombastus	Peanut oil, refined	302017	4
Caelo	Peanut oil, refined	1416A-01954	1
Caelo	Peanut oil, refined	5904100001	1
Caelo	Peanut oil, refined	1671101	1
Caelo	Peanut oil, refined	16071106	2
Fagron	Peanut oil, refined	16071105	2
Ebert KKH 20.09.16	Peanut oil, refined	8001417003	2
Caelo	Peanut oil, refined	160711104	1
Caelo	Peanut oil, refined	16071104	13
Noweda	Peanut oil, refined	16071104	1
Caesar & Loretz/AHC	Peanut oil, refined	16071104	1
Caelo	Peanut oil, refined	16071103	15
Lamotte/Phönix	Peanut oil, refined	16071102	1
Jenne	Peanut oil, refined	16071104	1
Henry Lamotte Oils GmbH	Peanut oil, refined	16071105	1
Henry Lamotte Oils GmbH	Peanut oil, refined	8001417003	3
Caesar & Loretz	Peanut oil, refined	16071103	1
Caelo	Peanut oil, refined	16249502	39
Caelo	Peanut oil, refined	16259502	1
Bombastus	Peanut oil, refined	303460	5
Caelo	Peanut oil, refined	16071103/1160117	1
Caesar & Loretz GmbH	Peanut oil, refined	16249502	1
Bombastus	Peanut oil, refined	307541	2
Bombastus	Peanut oil, refined	16071104	1
Caelo	Peanut oil, refined	160711	1
Caelo	Peanut oil, refined	301000	1
Caelo	Peanut oil, refined	16348001	29
Caelo	Peanut oil, refined	1624502	1
Sanacorp	Peanut oil, refined	16348001	1
Fagron	Peanut oil, refined	16A27-B04-322519	2
Gehe	Peanut oil, refined	16249502	1
Henry Lamotte Oils GmbH	Peanut oil, refined	8001959001	1
Caesar & Loretz/Noweda	Peanut oil, refined	16249502	1
Caesar&Loretz GmbH,PHön...	Peanut oil, refined	16348001	1
Caelo	Peanut oil, refined	17042802	21
Phoenix	Peanut oil, refined	16348001	1
Sanacorp	Peanut oil, refined	17042802	2
Caelo	Peanut oil, refined	170420802	1
GEHE	Peanut oil, refined	17042802	2
Fagron	Peanut oil, refined	17042802	1
Caelo	Peanut oil, refined	19081707	1
Caelo	Peanut oil, refined	17169001	17
Caesar & Loretz	Peanut oil, refined	17169001	2
Caelo	Peanut oil, refined	171690015409	1
Bombastus	Peanut oil, refined	310008	1

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Supplier	Substance	Batch	Spectra
Caelo	Peanut oil, refined	17169010	18
Cealo/Noweda	Peanut oil, refined	17169010	1
Caelo	Peanut oil, refined	17169018	14
Bombastus	Peanut oil, refined	310007	3
gehe	Peanut oil, refined	310007	1
Caelo	Peanut oil, refined	17169020	1
Aponorm/Wepa	Peanut oil, refined	17169018	1
Fagron	Peanut oil, refined	17A10-B01-332760	1
Caelo	Peanut oil, refined	17328601	23
Sanacorp	Peanut oil, refined	17169018	1
Lamotte/Phönix	Peanut oil, refined	8003146001	1
Caesar & Loretz/ Caesar...	Peanut oil, refined	17328601	1
Caelo	Peanut oil, refined	1769018	1
Caelo	Peanut oil, refined	173286015616	1
AHD	Peanut oil, refined	17169001	1
Bombastus	Peanut oil, refined	17001078	1
Caelo	Peanut oil, refined	18014402	19
Caelo	Peanut oil, refined	16071804	1
Caelo	Peanut oil, refined	18014405	5
Caelo	Peanut oil, refined	22091807	1
Bombastus	Peanut oil, refined	18002249	1
Caelo	Peanut oil, refined	18208202	9
Fagron	Peanut oil, refined	18208202	1
Fagron	Peanut oil, refined	17K16-B07-344245	1
Caelo	Peanut oil, refined	18296001	3
Caelo	Peanut oil, refined	18208207	1
Caelo	Grape seed oil, refined	10222901	1
Caelo	Grape seed oil, refined	12149203	1
Gehe	Grape seed oil, refined	12149204	1
Caelo	Grape seed oil, refined	12149204	4
Caelo	Grape seed oil, refined	12149205	1
Holdermann	Grape seed oil, refined	12149212	1
Caelo	Grape seed oil, refined	12149212	2
Caelo	Grape seed oil, refined	12149211	1
Caelo	Grape seed oil, refined	13065302	7
Caelo	Grape seed oil, refined	12149210	1
Caelo	Grape seed oil, refined	13065309	4
Caesar & Lorenz	Grape seed oil, refined	13065310	1
Noweda	Grape seed oil, refined	13065309	1
Caelo	Grape seed oil, refined	13174601	2
Caelo	Grape seed oil, refined	14127902	4
Caelo	Grape seed oil, refined	14127906	1
Caelo	Grape seed oil, refined	14214606	2
Cealo	Grape seed oil, refined	15144505	1
Caelo	Grape seed oil, refined	15144505	1
Caelo	Grape seed oil, refined	15144509	2
Caelo	Grape seed oil, refined	15144502	1
Caelo	Grape seed oil, refined	15294607	2
Fagron	Grape seed oil, refined	16092401	1
Caelo	Grape seed oil, refined	16092402	1
Caelo	Grape seed oil, refined	16092410	2
Caelo	Grape seed oil, refined	16092401	1
Caelo	Grape seed oil, refined	16092409	3
Caelo	Grape seed oil, refined	16339705	2
Caelo	Grape seed oil, refined	16339703	2
Caelo	Grape seed oil, refined	16339706	3
Caelo	Grape seed oil, refined	17206507	4
Caesar & Loretz GmbH	Grape seed oil, refined	17206502	1
Caelo	Grape seed oil, refined	18065207	1
Caelo	Sunflower oil, refined	11000605	2

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Supplier	Substance	Batch	Spectra
Bombastus	Sunflower oil, refined	271457	1
Gehe	Sunflower oil, refined	11126606	1
Caelo	Sunflower oil, refined	12009804	3
Bombastus	Sunflower oil, refined	275830	1
Noweda / Henry Lamotte	Sunflower oil, refined	5422401	1
Bombastus	Sunflower oil, refined	274107	1
Lamotte/L3	Sunflower oil, refined	5422401	1
Caelo	Sunflower oil, refined	13225102	2
Wolf Handelsgesellschaft	Sunflower oil, refined	1692305SK	1
Bombastus	Sunflower oil, refined	285243	1
J.H. Müller	Sunflower oil, refined	140229	1
Bombastus	Sunflower oil, refined	281796	2
Wolf Handelsgesellschaft	Sunflower oil, refined	1822313	1
Bombastus	Sunflower oil, refined	285712	2
Schubert / Phoenix	Sunflower oil, refined	1423F0-2027	2
Caelo	Sunflower oil, refined	14147101	3
Bombastus	Sunflower oil, refined	291278	1
Bombastus	Sunflower oil, refined	292956	1
Bombastus	Sunflower oil, refined	295818	2
Henry Lamotte	Sunflower oil, refined	5738004	1
Caelo	Sunflower oil, refined	14306701	1
Henry Lamotte/Sanacorp	Sunflower oil, refined	5738004	1
Bombastus	Sunflower oil, refined	298487	1
Caelo	Sunflower oil, refined	15422801	1
Henry Lamotte	Sunflower oil, refined	8001230001	1
Bombastus	Sunflower oil, refined	299712	1
ALH	Sunflower oil, refined	15163805	1
Caelo	Sunflower oil, refined	16275804	2
Caelo	Sunflower oil, refined	16275801	1
Caelo	Sunflower oil, refined	17242104	1
Jenne	Sunflower oil, refined	17242101	1
Caelo	Sunflower oil, refined	17073005	1
Caelo	Sunflower oil, refined	17242101	2
Caelo	Sunflower oil, refined	18027004	1
Caelo	Sunflower oil, refined	18027005	1
Jenne	Sunflower oil, refined	18027005	1
Caelo	Jojoba oil, native	11078605	2
Taoasis	Jojoba oil, native	4674401-67053	1
henry lamotte oils	Jojoba oil, native	5055401	1
Bombastus	Jojoba oil, native	267834	1
DAC 2006	Jojoba oil, native	11358102	1
Caelo	Jojoba oil, native	11078606	1
Taoasis	Jojoba oil, native	5225101-108329	1
HenryLamotte	Jojoba oil, native	5172601	9
Caelo	Jojoba oil, native	12114702	1
Taoasis	Jojoba oil, native	5336301-109515	1
Primavera	Jojoba oil, native	19307131	1
Anzag/	Jojoba oil, native	5115601	1
HenryLamotte	Jojoba oil, native	4957101	1
Caelo	Jojoba oil, native	12114708	1
Lamotte/Gehe	Jojoba oil, native	5172601	1
Caelo	Jojoba oil, native	12114701	1
Caelo	Jojoba oil, native	11358103	1
Caelo	Jojoba oil, native	12217009	3
Primavera	Jojoba oil, native	17009133	1
Henry Lamotte	Jojoba oil, native	5194301	1
HenryLamotte	Jojoba oil, native	5194301	1
Caelo	Jojoba oil, native	12217010	4
Caelo	Jojoba oil, native	13011202	5
Caelo	Jojoba oil, native	12217003	1

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Supplier	Substance	Batch	Spectra
Caelo	Jojoba oil, native	12114703	1
wilco	Jojoba oil, native	2480	1
Caelo	Jojoba oil, native	12217008	2
Caelo	Jojoba oil, native	19061307	1
Taoasis	Jojoba oil, native	5406801-111216	1
Taoasis	Jojoba oil, native	5336301-111368	1
Caelo	Jojoba oil, native	11358102	1
Caelo	Jojoba oil, native	3071301	1
Caelo	Jojoba oil, native	10071307	1
Caelo	Jojoba oil, native	13011203	2
Caelo	Jojoba oil, native	13011204	4
Bombastus	Jojoba oil, native	276323	1
Taoasis	Jojoba oil, native	5406801-111877	1
Anzag	Jojoba oil, native	5172601	1
Caelo	Jojoba oil, native	13129006	5
Gehe Laborchemie Apolda...	Jojoba oil, native	13011202	1
Caelo	Jojoba oil, native	13129001	3
Caelo	Jojoba oil, native	2613M-01986	1
Caelo	Jojoba oil, native	13129004	5
Caelo	Jojoba oil, native	25101303	1
Taoasis	Jojoba oil, native	5445301-112580	2
Caelo	Jojoba oil, native	13129005	2
Henry Lamotte	Jojoba oil, native	5429201	3
Bombastus	Jojoba oil, native	281299	1
Caelo	Jojoba oil, native	17121302	1
Taoasis GmbH	Jojoba oil, native	5445301-112580	1
Lamotte/Sanacorp	Jojoba oil, native	5194301	1
Caelo	Jojoba oil, native	15011412	1
Caeöo	Jojoba oil, native	13287702	1
Caelo	Jojoba oil, native	13287701	2
Caelo	Jojoba oil, native	14052201	2
Caelo	Jojoba oil, native	13129008	1
Caelo	Jojoba oil, native	14052206	1
Caelo	Jojoba oil, native	2614A-01986	1
Taoasis/Anzag	Jojoba oil, native	5815901-118834	3
Caelo	Jojoba oil, native	14284204	6
Caelo	Jojoba oil, native	21041504	1
Caelo	Jojoba oil, native	14284202	4
La Cura Wilco	Jojoba oil, native	2481	1
Taoasis/Anzag	Jojoba oil, native	5864501-119639	1
Primavera Wareneingang...	Jojoba oil, native	747A23	1
henry lamotte/Sanacorp	Jojoba oil, native	5756401	7
Spinnrad	Jojoba oil, native	315601031	1
Fagron	Jojoba oil, native	14284202	1
Bombastus	Jojoba oil, native	294112	3
Henry Lamotte	Jojoba oil, native	5404201	1
Lamotte/Sanacorp	Jojoba oil, native	5429201	1
Caelo	Jojoba oil, native	14284208	5
Lamotte	Jojoba oil, native	5732801	1
Taoasis	Jojoba oil, native	2A5890402-121152	2
Caelo	Jojoba oil, native	14284203	2
Caelo	Jojoba oil, native	14284207	6
Lamotte	Jojoba oil, native	5756401	2
Lamotte/Gehe	Jojoba oil, native	5732801	1
Caelo	Jojoba oil, native	15116903	7
Primavera	Jojoba oil, native	241H23	1
Taoasis/Anzag	Jojoba oil, native	2a5890402	1
Henry Lamotte	Jojoba oil, native	5913600001	2
Henry Lamotte/Alliance ...	Jojoba oil, native	5756401	1
Henry Lamotte/ Gehe	Jojoba oil, native	5913600001	1

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Supplier	Substance	Batch	Spectra
Taoasis	Jojoba oil, native	133535-123190	2
Bombastus	Jojoba oil, native	297760	2
Caelo	Jojoba oil, native	15116904	2
Henry Lamotte / AHD	Jojoba oil, native	5756401	1
Taoasis/Anzag	Jojoba oil, native	133535-123190	1
Caelo	Jojoba oil, native	15409902	9
Taoasis	Jojoba oil, native	133535-123399	1
Caelo	Jojoba oil, native	15409903	3
Taoasis	Jojoba oil, native	137640-123934	1
Caelo	Jojoba oil, native	15409904	3
Lamotte Sanacorp	Jojoba oil, native	5913600001	1
Lamotte Sanacorp	Jojoba oil, native	8000469001	6
Taoasis	Jojoba oil, native	151214-125861	2
Bombastus	Jojoba oil, native	301651	1
Taoasis/Anzag	Jojoba oil, native	2a5890402-121152	1
Caelo	Jojoba oil, native	16070602	9
Henry Lamotte GmbH	Jojoba oil, native	8000469001	3
Caelo	Jojoba oil, native	16070601	2
H.Lamotte/anzag 30.12.16	Jojoba oil, native	5913600001	2
H.Lamotte/Anzag 18.11.16	Jojoba oil, native	8000469001	3
Caelo	Jojoba oil, native	16070606	10
Hedinger	Jojoba oil, native	15409903	1
Caelo	Jojoba oil, native	16070608	6
Euro OTC	Jojoba oil, native	8001330001	2
Caelo	Jojoba oil, native	16070607	2
Weltecke /Noweda	Jojoba oil, native	89010416	1
Gehe	Jojoba oil, native	16070602	1
Bombastus	Jojoba oil, native	306279	1
Lamotte/Fiebig	Jojoba oil, native	8002391001	1
Primavera	Jojoba oil, native	63J24	1
Caelo	Jojoba oil, native	16070609	4
Caelo	Jojoba oil, native	16070610	8
Kehr	Jojoba oil, native	8000469001	1
H.Lamotte/Anzag 16.10.17	Jojoba oil, native	8002391001	8
Caelo	Jojoba oil, native		2
Caelo	Jojoba oil, native	14121702	1
Sanacorp	Jojoba oil, native	16070609	1
Sanacorp	Jojoba oil, native	80002391001	2
Spinrad	Jojoba oil, native	617601032	1
Taoasis	Jojoba oil, native	141161-1819	1
Caelo	Jojoba oil, native	17073309	3
Bombastus	Jojoba oil, native	16070610	1
Fiebig	Jojoba oil, native	17073309	2
Caelo	Jojoba oil, native	17073310	2
Caelo	Jojoba oil, native	17073305	4
Henry Lamotte GmbH/ San...	Jojoba oil, native	80002391001	1
Caelo	Jojoba oil, native	17073308	1
Caelo	Jojoba oil, native	23051804	1
Bombastus	Jojoba oil, native	309480	1
Caelo	Jojoba oil, native	18057105	3
Caelo	Jojoba oil, native	18057102	4
Caelo	Jojoba oil, native	18097109	1
Euro OTC	Jojoba oil, native	1609003-01	1
Caelo	Jojoba oil, native	18057103	1
Caelo	Jojoba oil, native	6101802	1
Caelo	Jojoba oil, native	28111810	1
Caelo	Jojoba oil, native	18057108	1
Sanacorp	Jojoba oil, native	8003732001	1
Gehe	Flaxseed oil, native	12041701	1
Caelo	Flaxseed oil, native	263894	1

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Supplier	Substance	Batch	Spectra
Bombastus	Flaxseed oil, native	272528	1
Caelo	Flaxseed oil, native	12217504	2
Caelo	Flaxseed oil, native	12041701	1
Caelo	Flaxseed oil, native	7111204	1
Caelo	Flaxseed oil, native	12217505	2
Bombastus	Flaxseed oil, native	271645	2
Bombastus	Flaxseed oil, native	275487	2
s.Prüfprotokoll	Flaxseed oil, native		1
Caelo	Flaxseed oil, native	23021302	1
Caelo	Flaxseed oil, native	12274205	2
Noweda / Henry Lamotte	Flaxseed oil, native	119529	1
Bombastus	Flaxseed oil, native	276106	1
Bombastus	Flaxseed oil, native	274875	1
Bombastus	Flaxseed oil, native	266111	1
Bombastus	Flaxseed oil, native	276727	2
Caelo	Flaxseed oil, native		2
Bombastus	Flaxseed oil, native	276105	1
Noweda / Henry Lamotte	Flaxseed oil, native	119677	2
Henry Lamotte Oils GMBH...	Flaxseed oil, native	12D05-N02	1
Euro OTC	Flaxseed oil, native	13058506	1
Bombastus	Flaxseed oil, native	281489	2
Caelo	Flaxseed oil, native	13178203	4
Bombastus	Flaxseed oil, native	280711	1
Caelo	Flaxseed oil, native	13178210	1
Caelo	Flaxseed oil, native	13178209	3
Kruger/Lamotte/30.12.13	Flaxseed oil, native	102503	1
Stumpf/Henry Lamotte	Flaxseed oil, native	124116	1
Lamotte	Flaxseed oil, native	124116	2
Caelo	Flaxseed oil, native	13361203	2
Caelo	Flaxseed oil, native	13361202	4
Bombastus	Flaxseed oil, native	282391	1
Henry/AHD	Flaxseed oil, native	124337	2
Bombastus	Flaxseed oil, native	285121	1
Henry/Jenne	Flaxseed oil, native	103277	3
Caelo	Flaxseed oil, native	14087903	1
Henry Lamotte/Noweda	Flaxseed oil, native	124116	1
Euro OTC	Flaxseed oil, native	124116	1
Caelo	Flaxseed oil, native	14087908	4
Bombastus	Flaxseed oil, native	14087902	1
Bombastus	Flaxseed oil, native	14087903	1
Bombastus	Flaxseed oil, native	288025	1
Lamotte/Noweda	Flaxseed oil, native	103229	1
Caesar & Loretz GmbH Hi...	Flaxseed oil, native	289164	1
Caelo	Flaxseed oil, native	14087909	1
Bomb/ Noweda	Flaxseed oil, native	290569	1
Lamotte/Otto	Flaxseed oil, native	5757301	1
Bombastus	Flaxseed oil, native	291900	1
Bombastus	Flaxseed oil, native	291126	1
Caelo	Flaxseed oil, native	14306806	2
Caelo	Flaxseed oil, native	14306811	2
Caelo	Flaxseed oil, native	9062015A	1
Bombastus	Flaxseed oil, native	293950	1
Caelo	Flaxseed oil, native	15116702	5
VDL;2.51EUR;22.06.15	Flaxseed oil, native	15116702	1
Caelo	Flaxseed oil, native	14306808	1
ACM	Flaxseed oil, native	KNC0446J15	1
Caelo	Flaxseed oil, native	15175604	1
Bombastus	Flaxseed oil, native	297286	2
Caelo	Flaxseed oil, native	15175608	4
Henry Lamotte Oils / No...	Flaxseed oil, native	1000000878	1

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Supplier	Substance	Batch	Spectra
Caelo	Flaxseed oil, native	15175602	1
Bombastus	Flaxseed oil, native	296730	1
Caelo	Flaxseed oil, native	15415906	7
Caelo	Flaxseed oil, native	15415904	2
Bombastus	Flaxseed oil, native	302269	2
Bombastus	Flaxseed oil, native	303096	3
Bombastus	Flaxseed oil, native	303440	1
Henry Lamotte Oils GmbH...	Flaxseed oil, native	1000002971	1
Bombastus	Flaxseed oil, native	304454	2
Gehe/Vitalhaus	Flaxseed oil, native	160702	1
Henry Lamotte	Flaxseed oil, native	1000003255	1
Caelo	Flaxseed oil, native	15415911	1
Caelo	Flaxseed oil, native	16321106	5
Bombastus	Flaxseed oil, native	306179	2
Bombastus	Flaxseed oil, native	307988	1
Henry Lamotte	Flaxseed oil, native	1000003598	1
Caelo	Flaxseed oil, native	16321102	2
Henry Lamotte Oils GmbH	Flaxseed oil, native	1000005198	1
Bombastus	Flaxseed oil, native	3079865304	1
Bombastus	Flaxseed oil, native	308634	1
Caelo	Flaxseed oil, native	17046711	1
Lamotte	Flaxseed oil, native	10000047735446	1
Caelo	Flaxseed oil, native	17236408	3
Caelo	Flaxseed oil, native	17236404	1
Bombastus	Flaxseed oil, native	17002089	2
Bombastus	Flaxseed oil, native	170015335500	1
Caelo	Flaxseed oil, native	17236401	1
AHD	Flaxseed oil, native	17001535	1
Caelo	Flaxseed oil, native	17314401	2
Bombastus	Flaxseed oil, native	180017195740	1
Bombastus	Flaxseed oil, native	18001721	1
Caelo	Flaxseed oil, native	17314405	1
Caelo	Flaxseed oil, native	18120901	1
H.Lamotte	Flaxseed oil, native	1000009024	1
Caelo	Wheatgerm oil, refined	11227305	2
Caelo	Wheatgerm oil, refined	12220305	1
Caelo	Wheatgerm oil, refined	12220306	2
Ichthyl Phönix	Wheatgerm oil, refined	12220302	1
Primavera	Wheatgerm oil, refined	3606132	1
Caelo	Wheatgerm oil, refined	12220304	2
Caelo	Wheatgerm oil, refined	W-240513-2	1
Caelo	Wheatgerm oil, refined	13011501	5
Fagron	Wheatgerm oil, refined	13D22-N13	1
Caelo	Wheatgerm oil, refined	12220307	1
Caelo	Wheatgerm oil, refined	13011503	2
Caelo	Wheatgerm oil, refined	13011505	6
Caelo	Wheatgerm oil, refined	213E-02784	1
Caelo	Wheatgerm oil, refined	13011502	1
Caelo	Wheatgerm oil, refined	13011507	3
Euro OTC	Wheatgerm oil, refined	1305015-01	1
Caelo	Wheatgerm oil, refined	13011508	2
Caelo	Wheatgerm oil, refined	13261601	4
Caeöo	Wheatgerm oil, refined	13261601	1
Caelo	Wheatgerm oil, refined	13261604	3
Bombastus	Wheatgerm oil, refined	283449	1
Caelo	Wheatgerm oil, refined	13261603	7
Caelo	Wheatgerm oil, refined	13261605	1
Bombastus	Wheatgerm oil, refined	286986	1
Caelo	Wheatgerm oil, refined	14024501	6
Sanacorp	Wheatgerm oil, refined	1/AKD2	1

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Supplier	Substance	Batch	Spectra
Caelo	Wheatgerm oil, refined	14024502	1
phönix	Wheatgerm oil, refined		1
VDL;	Wheatgerm oil, refined	13261603	1
Caelo	Wheatgerm oil, refined	14272513	2
Caelo	Wheatgerm oil, refined	1427251	1
Caelo	Wheatgerm oil, refined	5011502	1
Caelo	Wheatgerm oil, refined	14272514	3
Caelo	Wheatgerm oil, refined	14272511	2
Noweda	Wheatgerm oil, refined	14356003	1
Caelo	Wheatgerm oil, refined	14356001	5
Caelo	Wheatgerm oil, refined	14366001	1
VDL;3,44EUR;22.05.15	Wheatgerm oil, refined	14356001	1
Caelo	Wheatgerm oil, refined	14356003	2
Caelo	Wheatgerm oil, refined	14356006	4
Bombastus	Wheatgerm oil, refined	289212	1
Caelo	Wheatgerm oil, refined	15111603	4
Caelo	Wheatgerm oil, refined	15111605	2
Caelo	Wheatgerm oil, refined	292513	1
Caelo	Wheatgerm oil, refined	15111602	3
Bombastus	Wheatgerm oil, refined	295374	1
Caelo	Wheatgerm oil, refined	15374101	5
VDL;11.3.16;3,45EUR	Wheatgerm oil, refined	15374101	2
Caelo	Wheatgerm oil, refined	15406201	1
Caelo	Wheatgerm oil, refined	15406205	1
Caelo	Wheatgerm oil, refined	15374104	2
Caelo	Wheatgerm oil, refined	15406206	1
Phoenix	Wheatgerm oil, refined	15374101	1
Caelo	Wheatgerm oil, refined	15405201	1
Caelo	Wheatgerm oil, refined	16137403	3
Phoenix	Wheatgerm oil, refined	16137403	1
Caelo	Wheatgerm oil, refined	16137405	3
Caelo	Wheatgerm oil, refined	16137404	5
Bombastus	Wheatgerm oil, refined	301383	1
Bombastus	Wheatgerm oil, refined	305122	2
Phoenix	Wheatgerm oil, refined	16321301	1
Caelo	Wheatgerm oil, refined	16321301	7
phönix	Wheatgerm oil, refined	16321301	1
Caelo	Wheatgerm oil, refined	17216701	1
Caelo	Wheatgerm oil, refined	6121709	1
Caelo	Wheatgerm oil, refined	14121701	1
Caelo	Wheatgerm oil, refined	17216705	5
Phönix	Wheatgerm oil, refined	17216701	1
Caelo	Wheatgerm oil, refined	17290302	1
Caelo	Wheatgerm oil, refined	17290301	4
Caelo	Wheatgerm oil, refined	18009501	2
Bombastus	Wheatgerm oil, refined	18000536	2
Caelo	Wheatgerm oil, refined	17216702	1
Caelo	Wheatgerm oil, refined	18009505	5
Caelo	Wheatgerm oil, refined	18009506	1
Caelo	Wheatgerm oil, refined	2011904	1
Caelo	Wheatgerm oil, refined	18009510	1
Bombastus	Wheatgerm oil, refined	1800524	1
Caesar & Loretz GmbH	Wheatgerm oil, refined	18241002	1
Caelo	Rapeseed oil, refined	12054406	2
Caelo	Rapeseed oil, refined	13011008	1
Caelo	Rapeseed oil, refined	15214403	1
Caelo	Rapeseed oil, refined	15214407	1
Caelo	Rapeseed oil, refined	15296106	3
Caelo	Rapeseed oil, refined	16185004	3
Caelo	Rapeseed oil, refined	17213901	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils/Sana...	Omega-3-fish oil	123780	1
Lamotte/Sanacorp	Omega-3-fish oil	123883	1
Lamotte/Gehe	Omega-3-fish oil	124247	3
Euro OTC	Omega-3-fish oil	1311028-01	1
Euro OTC	Omega-3-fish oil	1603021-01	1
Henry Lamotte	Omega-3-fish oil	1000002451	1
Fagron	Oleyl oleate (stabilised)	11I08-N03	1
Caelo	Oleyl oleate (stabilised)	26071210	1
Noweda	Oleyl oleate (stabilised)	12067704	3
Caelo	Oleyl oleate (stabilised)	12067704	4
Caelo	Oleyl oleate (stabilised)	11292610	1
Caelo	Oleyl oleate (stabilised)	12067701	1
Caelo	Oleyl oleate (stabilised)	12067705	1
Sanacorp	Oleyl oleate (stabilised)	12067705	1
Caelo	Oleyl oleate (stabilised)	12220205	4
VDL	Oleyl oleate (stabilised)	12220205	2
Caelo	Oleyl oleate (stabilised)	12220204	1
Caelo	Oleyl oleate (stabilised)	12220201	1
Fagron	Oleyl oleate (stabilised)	11I08-N03	1
Caelo	Oleyl oleate (stabilised)	12220210	1
Caelo	Oleyl oleate (stabilised)	12220207	3
Caelo	Oleyl oleate (stabilised)	122202010	1
Gehe	Oleyl oleate (stabilised)	12220207	1
Caelo	Oleyl oleate (stabilised)	13096401	1
Sanacorp	Oleyl oleate (stabilised)	12220208	1
Sanacorp	Oleyl oleate (stabilised)	13096402	1
Caelo	Oleyl oleate (stabilised)	13096801	1
Fagron	Oleyl oleate (stabilised)	7858448	1
Caelo	Oleyl oleate (stabilised)	21061302	1
SysKem Chemie	Oleyl oleate (stabilised)	8002060413	1
SysKem Chemie	Oleyl oleate (stabilised)	35885	1
Caelo	Oleyl oleate (stabilised)	13167109	4
Caelo	Oleyl oleate (stabilised)	13167107	1
Caelo	Oleyl oleate (stabilised)	13144401	1
Caelo	Oleyl oleate (stabilised)	13291607	1
Caelo	Oleyl oleate (stabilised)	13291602	1
Caelo	Oleyl oleate (stabilised)	13291605	1
Fagron	Oleyl oleate (stabilised)	14B14-B03-29295	1
AHD	Oleyl oleate (stabilised)	14129003	1
Phönix	Oleyl oleate (stabilised)	14005001	2
Caelo	Oleyl oleate (stabilised)	14005001	3
Caelo	Oleyl oleate (stabilised)	14129007	9
Fagron	Oleyl oleate (stabilised)	14B14-B03-29219	1
Sanacorp	Oleyl oleate (stabilised)	13378403	1
Phoenix	Oleyl oleate (stabilised)	14129007	1
Caelo	Oleyl oleate (stabilised)	14254603	7
Caelo	Oleyl oleate (stabilised)	14129007(2mal)	1
Caelo	Oleyl oleate (stabilised)	25062015A	1
Caelo	Oleyl oleate (stabilised)	15321701	12
Caesar&Loretz/Noweda	Oleyl oleate (stabilised)	15321702	1
Cae	Oleyl oleate (stabilised)	15321701	1
Caelo	Oleyl oleate (stabilised)	15322703	2
Caelo	Oleyl oleate (stabilised)	15321706	6
Noweda	Oleyl oleate (stabilised)	15321706	1
Caelo	Oleyl oleate (stabilised)	153217	1
Caesar&Loretz GmbH	Oleyl oleate (stabilised)	15410204	1
Caelo	Oleyl oleate (stabilised)	15410204	4
Caelo	Oleyl oleate (stabilised)	15321702	2
Fagron	Oleyl oleate (stabilised)	15410204	1
Caelo	Oleyl oleate (stabilised)	15410207	6

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Supplier	Substance	Batch	Spectra
Caelo	Oleyl oleate (stabilised)	23021714	1
Hubertus Apotheke	Oleyl oleate (stabilised)	15410207	1
Caelo	Oleyl oleate (stabilised)	16104904	2
Caelo	Oleyl oleate (stabilised)	17051700/15410207	1
Caelo	Oleyl oleate (stabilised)	16104907	7
Caelo	Oleyl oleate (stabilised)	4170717	1
Caelo	Oleyl oleate (stabilised)	1614907	1
Caelo	Oleyl oleate (stabilised)	17013008	5
Caelo	Oleyl oleate (stabilised)	28111710	1
Noweda	Oleyl oleate (stabilised)	17013008	1
Caelo	Oleyl oleate (stabilised)	17121500/17013008	1
Caelo	Oleyl oleate (stabilised)	17013009	2
Caelo	Oleyl oleate (stabilised)	17358101	3
Caelo	Oleyl oleate (stabilised)	17013014	2
Caelo	Oleyl oleate (stabilised)	17358103	5
Caelo	Oleyl oleate (stabilised)	17358109	2
Caelo	Oleyl oleate (stabilised)	5121808	1
Caelo	Oleyl oleate (stabilised)	17358104	1
Caelo	Oleyl oleate (stabilised)	18272002	1
Bombastus	Apricot kernel oil, refined	274930	1
Caelo	Apricot kernel oil, refined	13011805	1
Caelo	Apricot kernel oil, refined	13011804	1
Primavera	Apricot kernel oil, refined	3612131	1
Caelo	Apricot kernel oil, refined	13253203	2
Caelo	Apricot kernel oil, refined	13357604	1
taosis/Phönix	Apricot kernel oil, refined	134933-124392	1
Caelo	Evening primrose oil, refined	11019201	1
Caelo	Evening primrose oil, refined	122966	3
Caesar & Loretz GmbH 40...	Evening primrose oil, refined	11150007	1
Noweda	Evening primrose oil, refined	E1106072	1
Taoasis	Evening primrose oil, refined	12096-99883	2
Audor Pharma	Evening primrose oil, refined	AP676-078N	1
Lamotte / Gehe	Evening primrose oil, refined	145553	5
Euro OTC	Evening primrose oil, refined	1109004-01	1
Caelo	Evening primrose oil, refined	12032901	1
Caelo	Evening primrose oil, refined	12032906	2
Gehe	Evening primrose oil, refined	12032908	1
Caelo	Evening primrose oil, refined	12032908	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12032913	1
Taoasis	Evening primrose oil, refined	3723-107968	1
Caelo	Evening primrose oil, refined	12032913	2
Gehe	Evening primrose oil, refined	1109004-02	1
Fagron	Evening primrose oil, refined	12e23-N06	1
Euro OTC	Evening primrose oil, refined	1205023-01	5
Anzag ek:13.04EUR 08.08.12	Evening primrose oil, refined	1205023-01	2
Caelo	Evening primrose oil, refined	12112901	1
noveda	Evening primrose oil, refined	12112901	1
Caelo	Evening primrose oil, refined	1205023-02	2
Gehe	Evening primrose oil, refined	12112906	1
Euro OTC	Evening primrose oil, refined	12112906	1
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12112911	1
Caelo	Evening primrose oil, refined	12112905	3
Audor Pharma	Evening primrose oil, refined	AP191-088N	2
Noweda	Evening primrose oil, refined	1205023-01	5
Caelo	Evening primrose oil, refined	120502302	1
Caelo	Evening primrose oil, refined	12032912	2
Caelo	Evening primrose oil, refined	120543078-13	1
Caelo	Evening primrose oil, refined	12112911	4
Lamotte / Gehe	Evening primrose oil, refined	123121	3
Caelo	Evening primrose oil, refined	12112903	1

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	3112M-03075	1
Audor Pharma	Evening primrose oil, refined	AP191-088/1N	1
allcura	Evening primrose oil, refined	L2641	1
Henry Lamotte	Evening primrose oil, refined	123121	1
Lamotte / Gehe	Evening primrose oil, refined	145675	4
Klenk	Evening primrose oil, refined	12112905	1
Fagron	Evening primrose oil, refined	1205023-02	1
Euro OTC	Evening primrose oil, refined	1205023-1	1
Caelo	Evening primrose oil, refined	12112902	2
Caelo	Evening primrose oil, refined	12112914	1
Caelo	Evening primrose oil, refined	12325103	4
Audor Pharma	Evening primrose oil, refined	AP869-100N	1
Euro OTC	Evening primrose oil, refined	1205023-02	6
Caelo	Evening primrose oil, refined	12112908	5
Audor Pharma	Evening primrose oil, refined	Ap869-100N	1
Caelo	Evening primrose oil, refined	12112912	1
Caelo	Evening primrose oil, refined	20140612-18	1
Caelo	Evening primrose oil, refined	12112906	1
Ichthyl Phönix	Evening primrose oil, refined	12112912	1
Caelo	Evening primrose oil, refined	12112915	2
Caelo	Evening primrose oil, refined	12325106	13
Euro OTC	Evening primrose oil, refined	1210012-01	13
Anzag/Henry Lamotte	Evening primrose oil, refined	145675	1
Gehe	Evening primrose oil, refined	1205023-02	1
Caelo	Evening primrose oil, refined	12325105	7
Andor	Evening primrose oil, refined	AP869-100N	1
Phoenix	Evening primrose oil, refined	AP869100N	1
Caelo	Evening primrose oil, refined	12325101	8
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325106	1
Anzag 30.01.13 ek:16,40EUR	Evening primrose oil, refined	1205023-02	1
Caelo	Evening primrose oil, refined	1235106	1
Caelo	Evening primrose oil, refined	1235101	1
Lamotte / Gehe	Evening primrose oil, refined	123386	7
Gehe	Evening primrose oil, refined	121112906	1
Gehe	Evening primrose oil, refined	12325106	1
Caelo	Evening primrose oil, refined	1210012-01	2
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325113	1
Fagron	Evening primrose oil, refined	12325101	2
Caelo	Evening primrose oil, refined	12325110	1
Caelo	Evening primrose oil, refined	12112910	1
Caelo	Evening primrose oil, refined	12325107	8
weltecke/Noweda	Evening primrose oil, refined	80010212	1
Caelo	Evening primrose oil, refined	12325113	7
Caelo	Evening primrose oil, refined	1235113	1
Caelo	Evening primrose oil, refined	12325109	6
Euro OTC	Evening primrose oil, refined	1210012-02	11
Caesar & Loretz GmbH, 4...	Evening primrose oil, refined	12325101	1
Caelo	Evening primrose oil, refined	12325111	10
J.H.Müller/direkt/17.05...	Evening primrose oil, refined	130127	1
Caesar & Loretz GmbH	Evening primrose oil, refined	12325107	1
Audor Pharma	Evening primrose oil, refined	AP366-108N	3
Audor Pharma	Evening primrose oil, refined	AP869-100/1N	1
Caelo	Evening primrose oil, refined	12325115	3
Caelo	Evening primrose oil, refined	4061305	1
EuRho	Evening primrose oil, refined	1210012-02	3
Caelo	Evening primrose oil, refined	1232516	1
Audor Pharma	Evening primrose oil, refined	869-100N	1
Caelo	Evening primrose oil, refined	145691	14
Sanacorp	Evening primrose oil, refined	12325111	1
Caelo	Evening primrose oil, refined	12325114	4

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	12325116	4
Caelo	Evening primrose oil, refined	12355115	1
Gehe	Evening primrose oil, refined	12325110	1
Jenne	Evening primrose oil, refined	1210012-02	1
Fargron	Evening primrose oil, refined	13E06-N09	1
phönix	Evening primrose oil, refined	1210012-02	1
Audor Pharma	Evening primrose oil, refined	AP920-114N	7
Fagron	Evening primrose oil, refined	13E06-N09	3
Caelo	Evening primrose oil, refined	13121807	7
Caelo	Evening primrose oil, refined	13121804	1
Sanacorp	Evening primrose oil, refined	12325114	1
Fiebig 12.07.13 EK15,38...	Evening primrose oil, refined	1210012-02	1
Caelo	Evening primrose oil, refined	13121808	14
Noweda	Evening primrose oil, refined	13121807	1
Caelo	Evening primrose oil, refined	13121806	2
Andor	Evening primrose oil, refined	AP920-114N	1
Bombastus	Evening primrose oil, refined	13121806	1
Caelo	Evening primrose oil, refined	131211807	1
Fagron	Evening primrose oil, refined	13E06-No9	1
Caelo	Evening primrose oil, refined	13121809	11
Sanacorp	Evening primrose oil, refined	13121809	2
Euro OTC	Evening primrose oil, refined	1304018-01	10
Gehe	Evening primrose oil, refined	12325113	1
Caesar & Loretz	Evening primrose oil, refined	13121809	1
Audor Pharma	Evening primrose oil, refined	AP920-114/1N	1
Euro/Phönix	Evening primrose oil, refined	1304018-01	2
Caelo	Evening primrose oil, refined	13121814	7
Stumpf/Henry Lamotte	Evening primrose oil, refined	145691	1
Euro OTC	Evening primrose oil, refined	130401801	1
Caesar & Loretz GmbH	Evening primrose oil, refined	13121812	1
Caelo	Evening primrose oil, refined	13121812	7
Euro OTC	Evening primrose oil, refined	13040-18-01	1
Caelo	Evening primrose oil, refined	2011409	1
Euro OTC	Evening primrose oil, refined	1304018-02	12
Sanacorp	Evening primrose oil, refined	13121814	1
Weltecke	Evening primrose oil, refined	80011012	1
Lamotte / Gehe	Evening primrose oil, refined	145802	9
Caelo	Evening primrose oil, refined	1312812	1
Caelo	Evening primrose oil, refined	13121813	4
Caelo	Evening primrose oil, refined	13121818	3
Phönix 18.11.2013	Evening primrose oil, refined	13121808	1
Bombastus	Evening primrose oil, refined	12325114	1
celo/phönix	Evening primrose oil, refined	13121814	1
Caelo	Evening primrose oil, refined	13121816	14
Euro/ Phönix	Evening primrose oil, refined	1304018-02	1
Caeol/Phönix	Evening primrose oil, refined	13121814	1
Caelo	Evening primrose oil, refined	1312816	1
Fagron	Evening primrose oil, refined	145691	1
Caelo	Evening primrose oil, refined	160213003	1
Caelo	Evening primrose oil, refined	14002503	4
Cealo / Noweda	Evening primrose oil, refined	13121814	1
Caelo	Evening primrose oil, refined	14002502	2
Phönix 27.01.2014	Evening primrose oil, refined	1304018-01	1
Caelo	Evening primrose oil, refined	14010904	7
Audor Pharma	Evening primrose oil, refined	AP094-115N	1
Audor Pharma	Evening primrose oil, refined	AP273-116N	5
Anzag	Evening primrose oil, refined	130401812	1
Taoasis	Evening primrose oil, refined	120161-93968	1
Gehe	Evening primrose oil, refined	14010904	1
Caelo	Evening primrose oil, refined	AP094-115N	1

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Supplier	Substance	Batch	Spectra
müller	Evening primrose oil, refined	1401332X	1
Anzag	Evening primrose oil, refined	13121818	1
Caelo	Evening primrose oil, refined	14010908	17
Caelo	Evening primrose oil, refined	1210012-02	1
Euro OTC	Evening primrose oil, refined	1401033-01	7
Caelo	Evening primrose oil, refined	14010905	1
PG-Naturpharma/Sanacorp	Evening primrose oil, refined	711-098	1
J.H. Müller	Evening primrose oil, refined	140419	1
Henry Lamotte/Anzag	Evening primrose oil, refined	124363	2
taoasis/Noweda	Evening primrose oil, refined	37282-115267	1
PHOENIX 08.05.2014	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	1401908	1
Caelo	Evening primrose oil, refined	14010903	2
Euro OTC	Evening primrose oil, refined	1401033-02	16
Caelo	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	14010910	9
Lamotte / Gehe	Evening primrose oil, refined	124363	4
Cae	Evening primrose oil, refined	14002501	1
Caelo	Evening primrose oil, refined	14010901	1
Caelo	Evening primrose oil, refined	1401904	1
Bergland/Phönix	Evening primrose oil, refined	H302605	1
Audor Pharma	Evening primrose oil, refined	AP273116N	1
Caelo	Evening primrose oil, refined	14010915	11
Phoenix	Evening primrose oil, refined	14002503	1
Caelo	Evening primrose oil, refined	14010914	2
Noweda	Evening primrose oil, refined	14010904	1
Caesar & Loretz GmbH	Evening primrose oil, refined	14010910	1
Fagron	Evening primrose oil, refined	14C07-801-291800	1
Euro OTC	Evening primrose oil, refined	1813M-03075	1
Audor Pharma	Evening primrose oil, refined	AP294-118N	10
Hedinger	Evening primrose oil, refined	14010915	5
Caelo	Evening primrose oil, refined	14010912	2
Caelo	Evening primrose oil, refined	14010913	10
Primavera	Evening primrose oil, refined	2611142	1
Caelo	Evening primrose oil, refined	14010917	1
Caelo	Evening primrose oil, refined	1407002-01	2
Euro OTC	Evening primrose oil, refined	14C07-B01-291800	1
Caelo	Evening primrose oil, refined	14010907	1
Caelo	Evening primrose oil, refined	14010920	1
Caelo	Evening primrose oil, refined	10101404	1
Phoenix	Evening primrose oil, refined	1401033-01	1
Euro OTC	Evening primrose oil, refined	1407002-01	13
Lamotte / Gehe	Evening primrose oil, refined	150827	4
Caelo	Evening primrose oil, refined	14010918	5
Caelo	Evening primrose oil, refined	14258601	10
Caelo	Evening primrose oil, refined	14258608	11
Fagron	Evening primrose oil, refined	14C07-B01-291800	1
Euro OTC	Evening primrose oil, refined	140103302	1
Phoenix 04.12.14	Evening primrose oil, refined	14010905	1
Caelo	Evening primrose oil, refined	14258603	11
Caelo	Evening primrose oil, refined	15121405	1
Phönix	Evening primrose oil, refined	150827	1
Euro OTC	Evening primrose oil, refined	140700202	2
Euro OTC	Evening primrose oil, refined	1407002-02	21
Caelo	Evening primrose oil, refined	5011508	1
Caelo	Evening primrose oil, refined	7011502	1
Caelo	Evening primrose oil, refined	14258611	3
Euro OTC	Evening primrose oil, refined	140700201	2
Caelo	Evening primrose oil, refined	14258604	4
Taoasis	Evening primrose oil, refined	3788-116147	1

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Supplier	Substance	Batch	Spectra
Fagron	Evening primrose oil, refined	14H18-B04-297707	3
Euro OTC	Evening primrose oil, refined	140133-01	1
Caelo	Evening primrose oil, refined	14258610	20
Phoenix	Evening primrose oil, refined	14258604	1
Caelo	Evening primrose oil, refined	14258607	4
Caelo	Evening primrose oil, refined	14258606	12
Ph.Eur.8.2	Evening primrose oil, refined	14H18B04297708	1
phönix	Evening primrose oil, refined	14010915	1
EuroTOC / Noweda	Evening primrose oil, refined	140700202	1
Lamotte / Noweda	Evening primrose oil, refined	145581	3
henry lamotte	Evening primrose oil, refined	150827	3
Caelo	Evening primrose oil, refined	14258617	12
lamotte	Evening primrose oil, refined	145581	3
Gehe 5.03.15	Evening primrose oil, refined	1407002-02	1
allcura/Noweda	Evening primrose oil, refined		1
Caelo	Evening primrose oil, refined	14258616	15
Spirig /Noweda	Evening primrose oil, refined	1407002-01	1
Audor Pharma	Evening primrose oil, refined	AP396-120N	5
Caesar & Loretz GmbH	Evening primrose oil, refined	14258611	1
Caelo	Evening primrose oil, refined	30031501	1
Caelo	Evening primrose oil, refined	14258615	2
Phoenix	Evening primrose oil, refined	1407002-02	1
Caelo	Evening primrose oil, refined	1428616	1
Caelo	Evening primrose oil, refined	14258612	3
Caelo	Evening primrose oil, refined		4
Caelo	Evening primrose oil, refined	14256810	1
Caelo	Evening primrose oil, refined	1407002-02	1
Caelo	Evening primrose oil, refined	15081402	3
Lamotte//AHD	Evening primrose oil, refined	145581	2
Caelo	Evening primrose oil, refined	15081405	18
Lamotte/AHD	Evening primrose oil, refined	145581	2
Caelo	Evening primrose oil, refined	15081401	4
Caelo	Evening primrose oil, refined	15081403	5
Euro OTC	Evening primrose oil, refined	1503031-01	18
Caelo	Evening primrose oil, refined	15081404	11
Caelo	Evening primrose oil, refined	150081403	1
Euro OTC	Evening primrose oil, refined	150303101	1
Caelo	Evening primrose oil, refined	15081407	12
Caelo	Evening primrose oil, refined	5061505	1
Allianz Healthcare 01.0...	Evening primrose oil, refined	AP562-124N	2
Audor Pharma	Evening primrose oil, refined	AP562-124N	8
Bergland/Anzag	Evening primrose oil, refined	H500690	1
Caelo	Evening primrose oil, refined	15171108	1
Noweda	Evening primrose oil, refined	1407002-02	1
Caelo	Evening primrose oil, refined	15171101	5
Euro OTC	Evening primrose oil, refined	1506001-01	20
Caelo	Evening primrose oil, refined	150303101	1
Caelo	Evening primrose oil, refined	15171105	10
Caelo	Evening primrose oil, refined	150601-01	1
Caelo	Evening primrose oil, refined	15171104	16
Caelo	Evening primrose oil, refined	15171102	20
Fagron	Evening primrose oil, refined	1506001-01	1
EuRho	Evening primrose oil, refined	1506001-01	1
Caelo	Evening primrose oil, refined	1506001-01	1
Euro OTC	Evening primrose oil, refined	1506001	1
Caelo	Evening primrose oil, refined	15171103	7
Euro OTC	Evening primrose oil, refined	1509005-01	22
Bombastus	Evening primrose oil, refined	15171108	1
Primavera 19.10.15	Evening primrose oil, refined	774J232	1
	Evening primrose oil, refined	1503031-01	1

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	1517113	1
Taoasis	Evening primrose oil, refined	3843-121697	2
Caelo	Evening primrose oil, refined	15141102	1
Bergland/Phönix	Evening primrose oil, refined	K501908	1
Rondell Apotheke	Evening primrose oil, refined	1506001-01	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15171104	1
Caelo	Evening primrose oil, refined	15171111	13
Caelo	Evening primrose oil, refined	15171109	11
EuRho	Evening primrose oil, refined	1509005-01	2
dr.r.hahn	Evening primrose oil, refined	1509005-01	1
Caelo	Evening primrose oil, refined	1503031-01	1
Audor Pharma	Evening primrose oil, refined	AP562-124	1
Caelo	Evening primrose oil, refined	15171110	31
	Evening primrose oil, refined	150303101	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15171109	1
Sanacorp	Evening primrose oil, refined	15171109	1
Noweda	Evening primrose oil, refined	15171109	2
Euro OTC	Evening primrose oil, refined	1512005-01	21
Henry Lamotte /AHD	Evening primrose oil, refined	1000001044	1
Audor Pharma	Evening primrose oil, refined	AP-788-128N	1
Fagron	Evening primrose oil, refined	15C02-B99-305094	1
Caesar & Loretz/Noweda	Evening primrose oil, refined	1512005-01	1
Euro OTC	Evening primrose oil, refined	15171109	1
Caelo	Evening primrose oil, refined	15417801	44
Caelo	Evening primrose oil, refined	12031604	1
Audor Pharma	Evening primrose oil, refined	AP788-128N	9
Euro/Sanacorp	Evening primrose oil, refined	1512005-01	1
Noweda	Evening primrose oil, refined	1509005-01	2
Caelo	Evening primrose oil, refined	1512000501	1
Euro OTC	Evening primrose oil, refined	151200	1
Caesar & Loretz GmbH	Evening primrose oil, refined	15417801	1
Caelo	Evening primrose oil, refined	15417802	35
Euro OTC	Evening primrose oil, refined	1512005-02	17
Phoenix	Evening primrose oil, refined	15417803	1
Lamotte/AHD	Evening primrose oil, refined	10000001044	1
Caelo	Evening primrose oil, refined	15417803	14
Euro/Phoenix	Evening primrose oil, refined	1512005-02	2
Caelo	Evening primrose oil, refined	458528	1
Fagron	Evening primrose oil, refined	15417803	3
Caelo	Evening primrose oil, refined	1541801	1
Euro OTC	Evening primrose oil, refined	80616-11	1
Audor Pharma	Evening primrose oil, refined	392-133N	2
Caelo	Evening primrose oil, refined	15417807	1
Wolf-Apotheke	Evening primrose oil, refined	15417802	2
Euro OTC	Evening primrose oil, refined	1603048-01	23
Lamotte/AHD	Evening primrose oil, refined	1000002386	1
Phoenix	Evening primrose oil, refined	15417802	1
Audor Pharma	Evening primrose oil, refined	AP392-133N	6
Euroo/Gehe	Evening primrose oil, refined	1603048-01	1
Caelo	Evening primrose oil, refined	15417806	14
Euro OTC	Evening primrose oil, refined	133339	1
Caelo	Evening primrose oil, refined	1512005-02	1
Caelo	Evening primrose oil, refined	3878-124466	1
Euro OTC	Evening primrose oil, refined	160304801	2
Allcura	Evening primrose oil, refined	1364	1
Caelo	Evening primrose oil, refined	15417805	21
Caelo	Evening primrose oil, refined	154178806	1
Lamotte/Noweda	Evening primrose oil, refined	1000003443	1
Caelo	Evening primrose oil, refined	1547801	1
Bombastus	Evening primrose oil, refined	133339	1

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Supplier	Substance	Batch	Spectra
Bombastus	Evening primrose oil, refined	1000003443	3
Caelo	Evening primrose oil, refined	1603048-01	2
Caelo	Evening primrose oil, refined	15417808	13
Alte Apotheke	Evening primrose oil, refined	15417808	1
Euro OTC	Evening primrose oil, refined	1605027-01	15
Caelo	Evening primrose oil, refined	15417809	6
Phönix	Evening primrose oil, refined	1603048-01	1
Caelo	Evening primrose oil, refined	16281301	12
GEHE	Evening primrose oil, refined	1605027-01	1
Caelo	Evening primrose oil, refined	1605027-01	2
Caelo	Evening primrose oil, refined	16281302	11
Caelo	Evening primrose oil, refined	160502701	1
Bergland	Evening primrose oil, refined	K6013776	1
apomix 004	Evening primrose oil, refined	1605027-01	1
Euro OTC	Evening primrose oil, refined	136734	1
Euro OTC	Evening primrose oil, refined	1608008-01	18
Henry Lamotte	Evening primrose oil, refined	160502701	1
Weltecke GmbH	Evening primrose oil, refined	80011115	1
Caelo	Evening primrose oil, refined	1000003443	1
Noweda	Evening primrose oil, refined	1608008-01	2
Caelo	Evening primrose oil, refined	16281305	6
Caelo	Evening primrose oil, refined	14031701	1
apo ident	Evening primrose oil, refined	1608008-01	3
Gehe	Evening primrose oil, refined	16281306	1
Caelo	Evening primrose oil, refined	16281307	7
Caelo	Evening primrose oil, refined	16281306	11
Caelo	Evening primrose oil, refined	16281303	3
Caelo	Evening primrose oil, refined	21041716	1
Caelo	Evening primrose oil, refined	16281309	30
Lamotte/AHD	Evening primrose oil, refined	1000004385	1
Euro OTC	Evening primrose oil, refined	160800801	1
Caesar&Loretz GmbH/ Gehe	Evening primrose oil, refined	16281306	1
Caelo	Evening primrose oil, refined	16281310	4
Caelo	Evening primrose oil, refined	16281308	18
Finteler Apotheke	Evening primrose oil, refined	1703020-01	1
Audor Pharma	Evening primrose oil, refined	AP140319	2
Euro OTC	Evening primrose oil, refined	1703020-01	26
Euro OTC	Evening primrose oil, refined	700775	1
Caelo	Evening primrose oil, refined	162891302	1
Euro OTC	Evening primrose oil, refined	170302001	1
Spinnrad GmbH	Evening primrose oil, refined	516204552	1
Anzag	Evening primrose oil, refined	16281309	1
Caelo	Evening primrose oil, refined	24061711	1
Gehe	Evening primrose oil, refined	16281309	1
Euro OTC	Evening primrose oil, refined	139798	3
Allcura	Evening primrose oil, refined	L-387	1
Caelo	Evening primrose oil, refined	1703020-01	6
phönix	Evening primrose oil, refined	139798	1
Audor Pharma	Evening primrose oil, refined	AP140319N5300	1
Caelo	Evening primrose oil, refined	7170717	1
Phoenix	Evening primrose oil, refined	1703020-01	1
Kehr	Evening primrose oil, refined	16281308	3
Noweda	Evening primrose oil, refined	16281308	1
Euro OTC	Evening primrose oil, refined	1704018-01	26
Audor Pharma	Evening primrose oil, refined	AP140319N	3
Gehe	Evening primrose oil, refined	1704018-01	3
Kehr	Evening primrose oil, refined	16281313	1
Audor Pharma	Evening primrose oil, refined	AP140319N5341	1
Caelo	Evening primrose oil, refined	16281313	10
Caelo	Evening primrose oil, refined	1628308	1

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Supplier	Substance	Batch	Spectra
Caelo	Evening primrose oil, refined	16281315	3
Caelo	Evening primrose oil, refined	10281314	1
Kehr	Evening primrose oil, refined	1704018-01	4
Euro OTC	Evening primrose oil, refined		1
Caelo	Evening primrose oil, refined	16281314	4
Henry Lamotte /AHD	Evening primrose oil, refined	1000005123	1
Henry Lamotte/Noweda	Evening primrose oil, refined	1000005123	1
Audor Pharma	Evening primrose oil, refined	AP140319N5383	1
Caelo	Evening primrose oil, refined	1628315	1
Caelo	Evening primrose oil, refined	1414201710	1
J.H.Müller	Evening primrose oil, refined	170832	1
Caelo	Evening primrose oil, refined	16281319	2
Caelo	Evening primrose oil, refined	16261313	1
Caelo	Evening primrose oil, refined	16281317	1
Caelo	Evening primrose oil, refined	16281318	4
GEHE	Evening primrose oil, refined	1704018-01	1
Caelo	Evening primrose oil, refined	1281315	1
Euro OTC	Evening primrose oil, refined	16281319	1
Euro OTC	Evening primrose oil, refined	17040118-01	1
Euro OTC	Evening primrose oil, refined	1704018	1
Caelo	Evening primrose oil, refined	6121707	1
Caelo	Evening primrose oil, refined	17255801	17
Sanacorp	Evening primrose oil, refined	16281313	1
Caelo	Evening primrose oil, refined	1704018-01	3
Spinnrad	Evening primrose oil, refined	1116204553	1
SANMARK LIMITED	Evening primrose oil, refined	1704018-01	1
Caelo	Evening primrose oil, refined	17255802	19
Audor Pharma	Evening primrose oil, refined	141023N	1
Caelo	Evening primrose oil, refined	17255803	5
Caelo	Evening primrose oil, refined	1710011-01	1
Euro OTC	Evening primrose oil, refined	1710011-01	9
Phönix	Evening primrose oil, refined	1704018-01	1
J.H.Müller	Evening primrose oil, refined	171220	1
Noweda	Evening primrose oil, refined	1710011-01	1
Audor Pharma	Evening primrose oil, refined	AP141023	1
Audor Pharma	Evening primrose oil, refined	AP141023N	2
Anzag	Evening primrose oil, refined	17255801	1
Gehe	Evening primrose oil, refined	EP713711-1	1
Euro OTC	Evening primrose oil, refined	AP141023N	1
Caelo	Evening primrose oil, refined	18009103	4
Audor Pharma	Evening primrose oil, refined	AP141023N5499	1
Anzag	Evening primrose oil, refined	AP141023N	1
Kehr	Evening primrose oil, refined	1710011-01	1
Sanacorp	Evening primrose oil, refined	17255801	1
Gehe	Evening primrose oil, refined	1710011-01	2
Caelo	Evening primrose oil, refined	18009102	11
Caelo	Evening primrose oil, refined	18009101	20
J.H.Müller	Evening primrose oil, refined	180234	1
Eurho	Evening primrose oil, refined	1710011-01	2
Euro OTC	Evening primrose oil, refined	1710011-02	12
Caelo	Evening primrose oil, refined	1755601	1
Fiebig	Evening primrose oil, refined	17255801	2
Euro OTC	Evening primrose oil, refined	171001101	3
Euro OTC	Evening primrose oil, refined	171001102	2
Noweda	Evening primrose oil, refined	1704018	1
GEHE	Evening primrose oil, refined	1710011-01	1
Caelo	Evening primrose oil, refined	18009107	1
Caelo	Evening primrose oil, refined	18009106	9
Caelo	Evening primrose oil, refined	3051806	1
Lamotte/AHD	Evening primrose oil, refined	1000007046	1

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Supplier	Substance	Batch	Spectra
Sanacorp	Evening primrose oil, refined	18009106	1
Caelo	Evening primrose oil, refined	18001901	1
Caelo	Evening primrose oil, refined	23051821	1
Caelo	Evening primrose oil, refined	18009105	6
Audor Pharma	Evening primrose oil, refined	AP141023N5584	1
Caelo	Evening primrose oil, refined	18009109	13
Caelo	Evening primrose oil, refined	18009110	11
Allianz	Evening primrose oil, refined	18009109	1
Sanacorp	Evening primrose oil, refined	18009109	1
Caelo	Evening primrose oil, refined	1704018-1	1
calo	Evening primrose oil, refined	18009107	1
Delta	Evening primrose oil, refined	1704018-01	1
Caelo	Evening primrose oil, refined	169071803	1
Allianz	Evening primrose oil, refined	18009106	1
Euro OTC	Evening primrose oil, refined	EP713711-1	1
Audor Pharma	Evening primrose oil, refined	AP144330N	1
Caelo	Evening primrose oil, refined	18009117	1
Euro OTC	Evening primrose oil, refined	1803006-02	1
SANMARK LIMITED	Evening primrose oil, refined	EP713711-1	1
Caelo	Evening primrose oil, refined	18009116	2
Audor Pharma	Evening primrose oil, refined	AP144330N5736	1
Euro OTC	Evening primrose oil, refined	1803006-01	7
Audor Pharma	Evening primrose oil, refined	AP144330N5770	1
Caelo	Evening primrose oil, refined	1710011-02	1
Caelo	Evening primrose oil, refined	1800915	1
Caelo	Evening primrose oil, refined	18009115	1
Caelo	Evening primrose oil, refined	18216203	2
Sanacorp	Evening primrose oil, refined	18009114	1
Caelo	Evening primrose oil, refined	18216202	2
Gehe28.12..18	Evening primrose oil, refined	18216202	1
Caelo	Evening primrose oil, refined	18216201	2
Audor Pharma	Evening primrose oil, refined	AP144174N	3
Sanacorp	Evening primrose oil, refined	18216201	1
Euro OTC	Evening primrose oil, refined	1803006	1
Caelo	Evening primrose oil, refined	18216207	1
Caelo	Evening primrose oil, refined	18216206	1
Euro OTC	Evening primrose oil, refined	EP745611-1	1
Caelo	Sesame oil, refined	30051201	1
Caelo	Sesame oil, refined	12054501	1
HenryLamotte/Phoenix	Sesame oil, refined	5135601	1
Caelo	Sesame oil, refined	11224108	2
Phönix 12.12.12	Sesame oil, refined	12054508	1
Caelo	Sesame oil, refined	10241803	1
Henry Lamotte Oils GmbH	Sesame oil, refined	122972	1
Gehe	Sesame oil, refined	122972	1
Henry Lamotte Oils	Sesame oil, refined	122972	1
Lamotte	Sesame oil, refined	4711A-02016	1
Caelo	Sesame oil, refined	12054508	3
Gehe / 23.01.13 Henry L...	Sesame oil, refined	122972	1
Lamotte/Krieger	Sesame oil, refined	5319201	1
Caelo	Sesame oil, refined	5319201	2
Caelo	Sesame oil, refined	21051305	1
Henry Lamotte	Sesame oil, refined	5319201	1
Lamotte	Sesame oil, refined	123826	3
Caelo	Sesame oil, refined	13011104	4
Caelo	Sesame oil, refined	25051305	1
Henry Lamotte Oils	Sesame oil, refined	5319201	2
Henry Lamotte/ 26.06.13...	Sesame oil, refined	123488	1
Henry Lamotte Oils GmbH	Sesame oil, refined	123488	1
Caelo	Sesame oil, refined	13011105	10

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Sesame oil, refined	123826	1
Lamotte/noweda	Sesame oil, refined	170713a	1
Caelo	Sesame oil, refined	13011107	7
Euro OTC	Sesame oil, refined	13011107	1
Caelo	Sesame oil, refined	1301105	1
Caelo	Sesame oil, refined	14101302	1
Lamotte	Sesame oil, refined	123488	2
Caelo	Sesame oil, refined	13011109	1
Lamotte/ Noweda	Sesame oil, refined	123488	1
Caelo	Sesame oil, refined	130111107	1
Henry Lamotte Oils	Sesame oil, refined	5514801	2
Henr	Sesame oil, refined	123826	1
Lamotte	Sesame oil, refined	5514801	3
Henry Lamotte/Sanacorp	Sesame oil, refined	123826	1
Caelo	Sesame oil, refined	13172906	5
Caelo	Sesame oil, refined	17011405	1
Caelo	Sesame oil, refined	123826	1
Henry Lamotte	Sesame oil, refined	5514801	1
Phoenix/Lamotte	Sesame oil, refined	5634501	1
Caelo	Sesame oil, refined	13172908	2
Caelo	Sesame oil, refined	13397402	3
Henry Lamotte / Noweda	Sesame oil, refined	5639301	1
Euro OTC	Sesame oil, refined	124494	1
Lamotte	Sesame oil, refined	124494	2
Fagron	Sesame oil, refined	124494	1
Lamotte über Phoenix	Sesame oil, refined	5639301	2
Caelo	Sesame oil, refined	10011503	1
Caelo	Sesame oil, refined	14170004	6
Henry Lamotte	Sesame oil, refined	124494	1
Lamotte	Sesame oil, refined	5744101	1
Caelo	Sesame oil, refined	14170001	1
Henry Lamotte	Sesame oil, refined	5744101	1
lamotte/ Phoenix	Sesame oil, refined	5744101	1
Caelo	Sesame oil, refined	14170005	3
Caelo	Sesame oil, refined		1
Lamotte über Phoenix	Sesame oil, refined	5821001	1
Lamotte/Sanacorp	Sesame oil, refined	5744101	1
Lamotte	Sesame oil, refined	582001	1
Caelo	Sesame oil, refined	14351804	6
Phoenix	Sesame oil, refined	14170004	1
Lamotte	Sesame oil, refined	5872001	1
Caelo	Sesame oil, refined	11081513	1
Lamotte über Phoenix	Sesame oil, refined	5872001	1
Lamotte	Sesame oil, refined	5872901	1
Lamotte/Phönix	Sesame oil, refined	58772901	1
Lamotte über Phoenix	Sesame oil, refined	5872901	2
Noweda/Henry Lamotte Oils	Sesame oil, refined	5872901	1
Caelo	Sesame oil, refined	1615E-02016	1
Lamotte	Sesame oil, refined	8000531001	2
Henry Lamotte/ NOweda	Sesame oil, refined	5872901	1
Caelo	Sesame oil, refined	15239405	4
Henry Lamotte	Sesame oil, refined	5872901	1
Henry Lamotte/Sanacorp	Sesame oil, refined	8000531001	1
Caelo	Sesame oil, refined	15374001	8
Lamotte über Phoenix	Sesame oil, refined	8000682001	2
Henry Lamotte	Sesame oil, refined	8001557002	3
Henry Lamotte	Sesame oil, refined	8000531001	1
Lamotte	Sesame oil, refined	8001557002	2
Lamotte über Noweda	Sesame oil, refined	1000002705	1
Henry Lamotte/Kehr	Sesame oil, refined	8001557002	1

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Supplier	Substance	Batch	Spectra
Caelo	Sesame oil, refined	15374006	4
Henry Lamotte	Sesame oil, refined	1000002705	2
Caelo	Sesame oil, refined	15422706	3
Euro OTC	Sesame oil, refined	15374001	1
Henry Lamotte/ Noweda	Sesame oil, refined	1000002705	1
Henry Lamotte Oils GmbH	Sesame oil, refined	1000002705	1
Henry Lamotte	Sesame oil, refined	2705	1
Caelo	Sesame oil, refined	16312501	3
Sanacorp	Sesame oil, refined	1000002705	1
Lamotte/Phönix	Sesame oil, refined	84280	1
Henry Lamotte Oils GmbH...	Sesame oil, refined	1000002705	1
Henry Lomoote/Noweda	Sesame oil, refined	1000002705	1
Caelo	Sesame oil, refined	28041709	1
Henry Lamotte Oils GmbH	Sesame oil, refined	1000003864	1
Caelo	Sesame oil, refined	16312505	5
Caelo	Sesame oil, refined	15422707	2
Caelo	Sesame oil, refined	6071715	1
Caelo	Sesame oil, refined	17177701	1
Caelo	Sesame oil, refined	16312507	1
Caesar und Loretz GmbH	Sesame oil, refined	16312505	1
Caelo	Sesame oil, refined	17177703	6
Caelo	Sesame oil, refined	17332102	1
Caelo	Sesame oil, refined	8002939002	1
Hedinger/Noweda	Sesame oil, refined	1000005858	1
H.Lamotte/Ebert	Sesame oil, refined	1000005858	1
Jenne	Sesame oil, refined	17177703	1
Henry Lamotte/ Noweda	Sesame oil, refined	1000005858	1
Caelo	Sesame oil, refined	7071804	1
AHD	Sesame oil, refined	1000007221	1
Caelo	Sesame oil, refined	17332103	4
Henry Lamotte Oils/Ebert	Sesame oil, refined	1000007221	1
Caelo	Sesame oil, refined	1000005858	1
Caelo	Sesame oil, refined	17332106	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	5029205	3
Caelo	Codliver oil (type A)	11315303	1
Caelo	Codliver oil (type A)	5061202	1
Caelo	Codliver oil (type A)	26061202	1
Caelo	Codliver oil (type A)	5228001	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	5228001	2
Henry Lamotte	Codliver oil (type A)	5029207	1
Caelo	Codliver oil (type A)	11081202	1
Lamotte/ Sanacorp	Codliver oil (type A)	5029207	1
Henry Lamotte GmbH/Hold...	Codliver oil (type A)	5228001	1
H.Lamotte/Noweda	Codliver oil (type A)	5228001	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5228004	2
lamotte	Codliver oil (type A)	5029205	1
Anzag	Codliver oil (type A)	5228001	2
Phoenix	Codliver oil (type A)	11315303	1
Noweda	Codliver oil (type A)	5228001	1
Caelo	Codliver oil (type A)	25091210	1
Henry Lamotte Oils	Codliver oil (type A)	2101204	1
Caelo	Codliver oil (type A)	10101207	1
Henry Lamotte	Codliver oil (type A)	5228001	1
Caelo	Codliver oil (type A)	12009302	5
Caelo	Codliver oil (type A)	12009308	2
Lamotte Oils GmbH / G	Codliver oil (type A)	5228004	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	4931805	1
Fagron	Codliver oil (type A)	12H15-N02	1
Lamotte Jenne	Codliver oil (type A)	5228004	2
Caelo	Codliver oil (type A)	21111204	1

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Supplier	Substance	Batch	Spectra
Caelo	Codliver oil (type A)	3121201	1
H.Lamotte/Noweda	Codliver oil (type A)	5228004	1
Klenk	Codliver oil (type A)	5228004	2
Caelo	Codliver oil (type A)	12062501	8
Anzag 17.12.2012	Codliver oil (type A)	12062501	1
H. Lamotte/Noweda	Codliver oil (type A)	119929	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	123108	1
Caelo	Codliver oil (type A)	119929	2
Caelo	Codliver oil (type A)	12126102	1
Lamotte	Codliver oil (type A)	119929	1
Stumpf/Henry Lamotte	Codliver oil (type A)	119929	1
Henry Lamotte	Codliver oil (type A)	13011302	1
Henry Lamotte	Codliver oil (type A)	5228004	1
Caelo	Codliver oil (type A)	6021302	1
Gehe/Henry Lamotte Oils...	Codliver oil (type A)	119929	1
Henry Lamotte	Codliver oil (type A)	119929	1
Caelo	Codliver oil (type A)	12148703	10
Phönix/Lamotte	Codliver oil (type A)		1
Caelo	Codliver oil (type A)	18031308	1
Caelo	Codliver oil (type A)	5437202	13
henry lamotte oils	Codliver oil (type A)	5437202	1
Caelo	Codliver oil (type A)	12009301	1
Caelo	Codliver oil (type A)	11315302	1
Lamotte/GEHE	Codliver oil (type A)	5437202	7
Henry Lamotte GmbH	Codliver oil (type A)	5437202	1
Noweda / Henry Lamotte	Codliver oil (type A)	5437202	1
Caelo	Codliver oil (type A)	30041302	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5437202	3
Lamotte/gehe	Codliver oil (type A)	5437202	4
Caelo	Codliver oil (type A)	12346810	8
Caelo	Codliver oil (type A)	121487703	1
Caelo	Codliver oil (type A)	10061302	1
Caelo	Codliver oil (type A)	14061312	1
Henry Lamotte Oils	Codliver oil (type A)	5228001	1
Lamotte/ Noweda	Codliver oil (type A)	A458	1
Lamotte/ Noweda	Codliver oil (type A)	5437202	4
Noweda	Codliver oil (type A)	4537202	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	123420L900	1
Lamotte Oils GmbH / E	Codliver oil (type A)	5437202	2
Lamotte	Codliver oil (type A)	5437202	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	6082013A	1
Henry Lamotte Oils GmbH...	Codliver oil (type A)	123823	1
Henry Lamotte GmbH	Codliver oil (type A)	5228004	1
Caelo	Codliver oil (type A)	13069201	1
Caelo	Codliver oil (type A)	13065503	4
Caelo	Codliver oil (type A)	5091309	1
Caelo	Codliver oil (type A)	8131-01985	1
Gehe	Codliver oil (type A)	2613A-01985	1
Dr. Paulsen	Codliver oil (type A)	5437202	1
BREMER SCHLÜSSEL/ Noweda	Codliver oil (type A)	5437202	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	280913A	1
Caelo	Codliver oil (type A)	13106201-3392131070	1
Caelo	Codliver oil (type A)	13106201	8
Gehe	Codliver oil (type A)	5437202	1
Henry Lamotte Oils, Anzag	Codliver oil (type A)	123823	2
Henry Lamotte	Codliver oil (type A)	18101303	1
Henry Lamotte oils GmbH	Codliver oil (type A)	123823	3
Henry Lamotte Oils GmbH	Codliver oil (type A)	291013A	1
Henry Lamotte/V.d.L.	Codliver oil (type A)	5437202	1
Lamotte/V.d.L.	Codliver oil (type A)	123823	1

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Supplier	Substance	Batch	Spectra
Lamotte/Phönix	Codliver oil (type A)	123823	1
Henry Lamotte	Codliver oil (type A)	26111303	1
Henry Lamotte/Sanacorp	Codliver oil (type A)	123823	1
Lamotte/L3	Codliver oil (type A)	123823	1
Lamotte	Codliver oil (type A)	5529601	1
Henry Lamotte	Codliver oil (type A)	5529601	4
Caelo	Codliver oil (type A)	13277706	7
Noweda	Codliver oil (type A)	5529601	4
Stumpf/Henry Lamotte	Codliver oil (type A)	123823	1
Caelo	Codliver oil (type A)	5529601	10
lamotte/Gehe	Codliver oil (type A)	5529601	4
Henry Lamotte Oils GmBh	Codliver oil (type A)	16012014A	1
Caelo	Codliver oil (type A)	3021402	1
Henry Lamotte oils GmbH	Codliver oil (type A)	5529601	3
Bremen / Noweda	Codliver oil (type A)	5529601	1
lamotte/Gehe	Codliver oil (type A)	123823	1
Euro OTC	Codliver oil (type A)	5529601	2
Henry Lamotte/Sanacorp	Codliver oil (type A)	5529601	1
Henry Lamotte/Kehr	Codliver oil (type A)	5529601	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5529601	1
Henry Lamotte	Codliver oil (type A)	20021413	1
Lamotte	Codliver oil (type A)	123823	1
Henry Lamotte Oils	Codliver oil (type A)	5529601	2
pHOENIX 18.02.2014	Codliver oil (type A)	5529601	1
Lamotte/V.d.L.	Codliver oil (type A)	5529601	4
Lamotte/Noweda	Codliver oil (type A)	5529601	1
Henry Lamotte/Noweda	Codliver oil (type A)	5529601	1
Henry Lamotte Oils, Gehe	Codliver oil (type A)	5529601	1
Caelo	Codliver oil (type A)	8042014/A	1
Henry Lamotte Oils GmBh	Codliver oil (type A)	30614A	1
Caelo	Codliver oil (type A)	4061403	1
Caelo	Codliver oil (type A)	13277707	1
Caelo	Codliver oil (type A)	13396403	2
Lamotte/Stumpf	Codliver oil (type A)	5529601	1
Henry Lamotte Oils/Noweda	Codliver oil (type A)	5529601	1
lamotte/Gehe	Codliver oil (type A)	5641901	3
Noweda/Henry Lamotte	Codliver oil (type A)	5529601	2
Caelo	Codliver oil (type A)	5081402	1
Henry Lamotte Oils GmbH...	Codliver oil (type A)	5641901	1
Henry Lamotte / Anzag	Codliver oil (type A)	5641901	1
Lamotte über Sanacorp	Codliver oil (type A)	5641901	1
Henry Lamotte Oils GmBh	Codliver oil (type A)	18092014A	1
Caelo	Codliver oil (type A)	13396407	4
Lamotte	Codliver oil (type A)	5693101	5
Caelo	Codliver oil (type A)	21101401	1
Lamotte / Gehe	Codliver oil (type A)	5693101	1
Henry Lamotte Oils	Codliver oil (type A)	5693101	1
Henry Lamotte/Noweda	Codliver oil (type A)	5641901	1
Caelo	Codliver oil (type A)	14075015	3
Henry Lamotte	Codliver oil (type A)	26111402	1
Caelo	Codliver oil (type A)	2121404	1
Henry Lamotte oils GmbH...	Codliver oil (type A)	5641901	1
Henry Lamotte Oils/GEHE	Codliver oil (type A)	5693101	1
Caelo	Codliver oil (type A)	5693101	2
Lamotte/gehe	Codliver oil (type A)	5693101	3
Stumpf/Henry Lamotte	Codliver oil (type A)	5693101	1
Caelo	Codliver oil (type A)	23121414	1
Henry Lamotte Oils GmBh	Codliver oil (type A)	301214a	1
Henry Lamotte Oils GmBh	Codliver oil (type A)		1
Caelo	Codliver oil (type A)	17011503	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Codliver oil (type A)	29012015A	1
anzag, 9,45EUR, 19.11.14	Codliver oil (type A)	5693101	1
Caelo	Codliver oil (type A)	14305701	2
Henry Lamotte Oils	Codliver oil (type A)	5641901	1
Caelo	Codliver oil (type A)	10031501	1
henry lamotte	Codliver oil (type A)	5693101	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5693101	2
Lamotte	Codliver oil (type A)	5878701	3
H.Lamotte/Noweda	Codliver oil (type A)	5878701	1
Caelo	Codliver oil (type A)	15047201	5
Caelo	Codliver oil (type A)	28041507	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5641901	1
VDL	Codliver oil (type A)	5878701	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8062015A	1
Caelo	Codliver oil (type A)	10061501	1
Henry Lamotte Oils/Noweda	Codliver oil (type A)	5878701	1
Caelo	Codliver oil (type A)	14305003	1
Caelo	Codliver oil (type A)	8071504	1
ACM	Codliver oil (type A)	KNC0300J15	1
Stumpf / Hedinger	Codliver oil (type A)	5878701	1
Lamotte/Noweda	Codliver oil (type A)	8000601001	3
Caelo	Codliver oil (type A)	28071504	1
Henry Lamotte	Codliver oil (type A)	8000601001	4
Caelo	Codliver oil (type A)	15056802	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8000601001	3
Caelo	Codliver oil (type A)	80000601001	1
Lamotte	Codliver oil (type A)	8000601001	2
ACM	Codliver oil (type A)	KNC0302J15	1
Henry Lamotte	Codliver oil (type A)	5878701	3
lamotte jenne	Codliver oil (type A)	8000601001	1
Caelo	Codliver oil (type A)	15201201	2
Noweda/Henry Lamotte	Codliver oil (type A)	8000601001	2
Hedinger	Codliver oil (type A)	8000601001	1
Henry Lamotte;VDL; 22,5...	Codliver oil (type A)	8000601001	1
Lam	Codliver oil (type A)	5878701	1
henry lamotte oils gmbh	Codliver oil (type A)	8000918001	1
ACM	Codliver oil (type A)	KNC0303J15	1
Caelo	Codliver oil (type A)	8000601001	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	5878701	1
Caelo	Codliver oil (type A)	8000918001	6
Henry Lamotte Oils GmbH	Codliver oil (type A)	8000918001	2
Caelo	Codliver oil (type A)	15201203	3
henry lamotte	Codliver oil (type A)	5529601	1
Caelo	Codliver oil (type A)	15325201	2
Lamotte	Codliver oil (type A)	8000918001	4
Lamotte/ Noweda	Codliver oil (type A)	8000918001	2
Lamotte/Geibo	Codliver oil (type A)	8000918001	2
Caesar & Loretz/Noweda	Codliver oil (type A)	15325201	1
Lamotte/Anzag	Codliver oil (type A)	8000918001	1
Henry Lamotte / Anzag	Codliver oil (type A)	8000918001	2
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001176004	3
phönix	Codliver oil (type A)	15201201	1
Caelo	Codliver oil (type A)	8001176004	5
Euro OTC	Codliver oil (type A)	1506009-01	1
Henry Lamotte/Phoenix	Codliver oil (type A)	8001176004	1
Lamotte/Phoenix	Codliver oil (type A)	8000918001	1
Henry Lamotte	Codliver oil (type A)	8001176004	2
Henry Lamotte	Codliver oil (type A)	8000918001	1
LaMotte/Spangro	Codliver oil (type A)	80117604	1
henry lamotte oils gmbh	Codliver oil (type A)	8001176004	1

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Supplier	Substance	Batch	Spectra
Lamotte	Codliver oil (type A)	8001176004	1
Caelo	Codliver oil (type A)	8001215002	6
Lamotte/Gehe	Codliver oil (type A)	8001176004	1
Henry Lamotte	Codliver oil (type A)	8001215002	4
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001215002	1
Lamotte/Phönix	Codliver oil (type A)	8001215002	1
Lamotte/Gehe	Codliver oil (type A)	8001215002	1
Lamotte	Codliver oil (type A)	8001215002	1
Caelo	Codliver oil (type A)	16018202	4
HENRY LAMOTTE OIS GmbH	Codliver oil (type A)	800125002	1
Caelo	Codliver oil (type A)	16018301	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8001765001	2
Lamotte/Phönix	Codliver oil (type A)	8000601001	1
Henry Lamotte	Codliver oil (type A)	8001765001	2
Henry Lamotte	Codliver oil (type A)	800765001	1
Caelo	Codliver oil (type A)	16304601	1
AHD	Codliver oil (type A)	8002338002	2
AHD	Codliver oil (type A)	8001765001	1
phönix	Codliver oil (type A)	16074301	1
Lam / Now	Codliver oil (type A)	8001765001	1
Caelo	Codliver oil (type A)	1041704	1
Caelo	Codliver oil (type A)	8001765001	2
Henry Lamotte/Noweda	Codliver oil (type A)	8001215002	1
Caelo	Codliver oil (type A)	16074305	1
Lamotte/Phoenix	Codliver oil (type A)	8002338002	5
Caelo	Codliver oil (type A)	8002338002	1
Gehe	Codliver oil (type A)	8002338002	3
Caelo	Codliver oil (type A)	11051705	1
Henry Lamotte Oils GmbH	Codliver oil (type A)	8002338002	1
Henry Lamotte/Noweda	Codliver oil (type A)	8002338002	1
Caelo	Codliver oil (type A)	2091712	1
Caelo	Codliver oil (type A)	80023380002	1
Lamotte	Codliver oil (type A)	8002338002	1
Gehe/Henry Lamotte	Codliver oil (type A)	8002338002	2
Caelo	Codliver oil (type A)	19101704	1
Caelo	Codliver oil (type A)	17036701	1
Caelo	Codliver oil (type A)	17055303	1
Sanacorp	Codliver oil (type A)	8002468002	1
Fiebig	Codliver oil (type A)	8002468002	4
Gehe/Henry Lamotte	Codliver oil (type A)	8002468002	1
Caelo	Codliver oil (type A)	17295101	2
lamotte/Nowe	Codliver oil (type A)	8002468002	1
Lamotte/Phönix	Codliver oil (type A)	8002338002	1
Henry Lamotte Anzag	Codliver oil (type A)	8002468002	1
Caelo	Codliver oil (type A)	19021808	1
Klenk	Codliver oil (type A)	17344601	1
Caelo	Codliver oil (type A)	17344601	2
Caelo	Codliver oil (type A)	18080801	2
Caelo	Codliver oil (type A)	19051807	1
Lamotte / Sanacorp	Codliver oil (type A)	80024680025600	1
Lamotte/Phönix	Codliver oil (type A)	8003727001	2
AHD	Codliver oil (type A)	8003727001	2
Caelo	Codliver oil (type A)	8003727001	1
Lamotte / Gehe	Codliver oil (type A)	8003727001	1
Caelo	Codliver oil (type A)	3111804	1
Phönix/Henry Lamotte	Codliver oil (type A)	8003906001	1
Henry Lamotte Anzag	Codliver oil (type A)	8003727001	1
Henry Lamotte Oils	Codliver oil (type A)	16011901	1
Caelo	Codliver oil (type A)	18184501	1
Caelo	Safflower oil, refined type I	299143	1

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Supplier	Substance	Batch	Spectra
Caelo	Safflower oil, refined type I	16184901	1
Bombastus	Safflower oil, refined type I	309851	1
Caelo	Safflower oil, refined type I	305902	1
Resana	Corn oil, refined	1208-3678	1
Caelo	Corn oil, refined	12141511	1
Caelo	Corn oil, refined	11267907	1
Caelo	Corn oil, refined	13010707	2
Caelo	Corn oil, refined	13010710	1
Resana	Corn oil, refined	1308-4063	1
Caelo	Corn oil, refined	15296407	5
Bombastus	Corn oil, refined	10032015A	1
Caelo	Corn oil, refined	15050506	1
Caelo	Corn oil, refined	16260309	1
Caelo	Corn oil, refined	17055008	1
Caelo	Corn oil, refined	18244602	1
Gehe	Soy lecithin, liquid	21022111/2	1
Euro OTC	Soy lecithin, liquid	20061209	1
Euro OTC	Soy lecithin, liquid	1204028-01	1
Euro OTC	Soy lecithin, liquid	1305019-01	1
Gehe - Lamotte	Soy lecithin, liquid	1305019-01	1
EUro/AHD	Soy lecithin, liquid	1305019-01	1
Euro OTC	Soy lecithin, liquid	614E3336	1
Euro OTC	Soy lecithin, liquid	1404022-01	2
Euro OTC	Soy lecithin, liquid	14404022-01	1
Fagron	Soy lecithin, liquid	1604034-01	1
Euro OTC	Soy lecithin, liquid	1404022V-02	2
Euro OTC	Soy lecithin, liquid	1503038-02	1
Euro OTC	Soy lecithin, liquid	1503038	1
Euro OTC	Soy lecithin, liquid	1604034-01	8
Caelo	Soy lecithin, liquid	1604034-01	1
Euro OTC	Soy lecithin, liquid	1703001-01	8
Euro OTC	Soy lecithin, liquid	180303001	1
Caelo	Soy lecithin, liquid	1803030-01	1
Gehe	Soy lecithin, liquid	1803030-1	1
Caelo	Laurel oil	14176301	1
Gehe	Laurel oil	14196705	1
Caelo	Laurel oil	14176303	1
Caesar & Loretz/Noweda	Laurel oil	15216401	1
Gehe	Laurel oil	15097501	1
Caelo	Laurel oil	16355701	2
Caelo	Laurel oil	16355702	1
Caelo	Laurel oil	18028203	1
Caelo	Borage oil, refined, stabili...	11260102	2
Caelo	Borage oil, refined, stabili...	11002607	1
Caelo	Borage oil, refined, stabili...	11260106	2
Henry Lamotte GmbH Bremen	Borage oil, refined, stabili...	122791	1
Gehe	Borage oil, refined, stabili...	12027008	1
Caelo	Borage oil, refined, stabili...	12027008	2
Caelo	Borage oil, refined, stabili...	12027004	1
Caelo	Borage oil, refined, stabili...	12161202	7
Anzag 15.10.12	Borage oil, refined, stabili...	965-028	2
Gehe	Borage oil, refined, stabili...	12161203	1
Caelo	Borage oil, refined, stabili...	123118	1
Bergland-Pharma	Borage oil, refined, stabili...	H103019	2
Caelo	Borage oil, refined, stabili...	12161203	1
Caelo	Borage oil, refined, stabili...	12161205	3
Caelo	Borage oil, refined, stabili...	12161207	4
Caesar/Noweda	Borage oil, refined, stabili...	12161202	1
Phönix	Borage oil, refined, stabili...	12161207	1
Henry Lamotte Oils	Borage oil, refined, stabili...	123118	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Borage oil, refined, stabili...	145678	2
Caelo	Borage oil, refined, stabili...	12161209	1
Caelo	Borage oil, refined, stabili...	1713M-02881	1
Caelo	Borage oil, refined, stabili...	12355203	9
Caelo	Borage oil, refined, stabili...	12152108	1
J.H.Müller/direkt/17.05....	Borage oil, refined, stabili...	130302	1
Phoenix	Borage oil, refined, stabili...	12355203	1
Caelo	Borage oil, refined, stabili...	12355205	4
Noweda	Borage oil, refined, stabili...	13136504	1
Caelo	Borage oil, refined, stabili...	1235504	1
Henry Lamotte	Borage oil, refined, stabili...	5402901	3
Caelo	Borage oil, refined, stabili...	13136504	9
	Borage oil, refined, stabili...	123387	1
Caelo	Borage oil, refined, stabili...	13170601	4
Caelo	Borage oil, refined, stabili...	13170604	1
Caelo	Borage oil, refined, stabili...	1316504	1
Caesar/Noweda	Borage oil, refined, stabili...	13136504	1
Caelo	Borage oil, refined, stabili...	13170606	15
Henry Lamotte Oils/Sana...	Borage oil, refined, stabili...	5402901	1
Noweda	Borage oil, refined, stabili...	13170606	1
Caelo	Borage oil, refined, stabili...	13170605	3
Caelo	Borage oil, refined, stabili...	13170603	1
Bergland	Borage oil, refined, stabili...	H300590	2
Caesar/Noweda	Borage oil, refined, stabili...	13136501	1
Caelo	Borage oil, refined, stabili...	13170610	6
	Borage oil, refined, stabili...	13170606	1
Caelo	Borage oil, refined, stabili...	13170613	4
Caelo	Borage oil, refined, stabili...	13372101	2
Caelo	Borage oil, refined, stabili...	13372104	6
Noweda	Borage oil, refined, stabili...	13372104	1
Noweda	Borage oil, refined, stabili...	13372101	1
Caesar/Noweda	Borage oil, refined, stabili...	13372103	1
Caelo	Borage oil, refined, stabili...	13170607	1
Caelo	Borage oil, refined, stabili...	13372106	2
Caelo	Borage oil, refined, stabili...	26041404	1
PHOENIX 15.05.2014	Borage oil, refined, stabili...	13372104	1
Caelo	Borage oil, refined, stabili...	13372107	8
Caelo	Borage oil, refined, stabili...	14161904	4
Henry Lamotte	Borage oil, refined, stabili...	145579	1
Fagron	Borage oil, refined, stabili...	14A20-B03	1
Caelo	Borage oil, refined, stabili...	14161901	4
Caelo	Borage oil, refined, stabili...	14161906	2
Caelo	Borage oil, refined, stabili...	1461906	1
Caelo	Borage oil, refined, stabili...	13372110	1
Aurica/Noweda	Borage oil, refined, stabili...	957-038	1
Phoenix	Borage oil, refined, stabili...	14161906	1
Caelo	Borage oil, refined, stabili...	1416906	1
Caelo	Borage oil, refined, stabili...	14203004	10
Caelo	Borage oil, refined, stabili...	14203005	13
Caelo	Borage oil, refined, stabili...	14203001	2
Sanacorp	Borage oil, refined, stabili...	14203006	1
Lamotte über Sanacorp	Borage oil, refined, stabili...	125354	1
Phönix 14.01.15	Borage oil, refined, stabili...	14203004	1
Caelo	Borage oil, refined, stabili...	14203012	1
Caelo	Borage oil, refined, stabili...	14203011	5
Euro OTC	Borage oil, refined, stabili...	14203012	1
PG-Naturpharm	Borage oil, refined, stabili...	397-045	2
Caelo	Borage oil, refined, stabili...	15063402	12
Caelo	Borage oil, refined, stabili...	15063401	2
Caelo	Borage oil, refined, stabili...	15063406	2

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Supplier	Substance	Batch	Spectra
Lamotte/Alliance	Borage oil, refined, stabili...	125354	1
Aurica Vital	Borage oil, refined, stabili...	28/05/15	1
Henry Lamotte/Anzag	Borage oil, refined, stabili...	125354	1
Caelo	Borage oil, refined, stabili...	15063408	3
Caelo	Borage oil, refined, stabili...	14203009	1
Caelo	Borage oil, refined, stabili...	15063407	15
Caelo	Borage oil, refined, stabili...	15063413	2
Caelo	Borage oil, refined, stabili...	15063411	6
Caelo	Borage oil, refined, stabili...	15063412	2
Caesar & Loretz GmbH / ...	Borage oil, refined, stabili...	15063412	1
Euro OTC	Borage oil, refined, stabili...	15063407	1
Caelo	Borage oil, refined, stabili...	15063409	3
Henry Lamotte/Anzag	Borage oil, refined, stabili...	1000001388	1
Caelo	Borage oil, refined, stabili...	15305001	12
Caelo	Borage oil, refined, stabili...	15305003	5
Caelo	Borage oil, refined, stabili...	15305002	5
Henry Lamotte Oils GmbH	Borage oil, refined, stabili...	130402	1
Caelo	Borage oil, refined, stabili...	1534-08	1
Caelo	Borage oil, refined, stabili...	15305005	3
Caelo	Borage oil, refined, stabili...	15305009	7
Caelo	Borage oil, refined, stabili...	15305006	2
Spinnrad	Borage oil, refined, stabili...	1115204582	1
Caesar/Noweda	Borage oil, refined, stabili...	15305003	1
Nachprüfung	Borage oil, refined, stabili...	1503412	1
Caelo	Borage oil, refined, stabili...	722915305009	1
Caelo	Borage oil, refined, stabili...	5594400002	2
Caelo	Borage oil, refined, stabili...	16052302	4
Caelo	Borage oil, refined, stabili...	16052307	9
Stifts-Apotheke	Borage oil, refined, stabili...	15305002	1
Henry Lamotte GmbH	Borage oil, refined, stabili...	5594400001	1
Caelo	Borage oil, refined, stabili...	15305011	1
Caelo	Borage oil, refined, stabili...	16052301	11
Euro OTC	Borage oil, refined, stabili...	16052301	1
Lamotte / Phönix	Borage oil, refined, stabili...	5594400001	1
Caelo	Borage oil, refined, stabili...	16266007	12
Caelo	Borage oil, refined, stabili...	16266002	4
Henry Lamotte/Anzag	Borage oil, refined, stabili...	5594400001	1
Phönix / Alliance Healt...	Borage oil, refined, stabili...	16266002	1
Aurica	Borage oil, refined, stabili...	Z13902/A	1
Spinnrad GmbH	Borage oil, refined, stabili...	616204581	1
Caelo	Borage oil, refined, stabili...	16266011	7
Caelo	Borage oil, refined, stabili...	16266008	1
Caelo	Borage oil, refined, stabili...	16266009	2
Caelo	Borage oil, refined, stabili...	17055401	11
Aurica Vital	Borage oil, refined, stabili...	Z13902/A	1
Caelo	Borage oil, refined, stabili...	6170717	1
Caelo	Borage oil, refined, stabili...	17055402	3
GEHE	Borage oil, refined, stabili...	16266011	1
Caelo	Borage oil, refined, stabili...	17307802	6
Sanacorp W.E: 01.02.18 ...	Borage oil, refined, stabili...	17307801	2
Caelo	Borage oil, refined, stabili...	17307801	12
Caelo	Borage oil, refined, stabili...	1000006595	1
Euro OTC	Borage oil, refined, stabili...	17307801	1
Caelo	Borage oil, refined, stabili...	17361805	4
Caelo/Anzag	Borage oil, refined, stabili...	17307801	1
Spinnrad / Alliance Hea...	Borage oil, refined, stabili...	1217204583	1
Caelo	Borage oil, refined, stabili...	17361804	8
Caelo	Borage oil, refined, stabili...	18080501	9
Caelo	Borage oil, refined, stabili...	173618805	1
Caelo	Borage oil, refined, stabili...	18080504	5

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Supplier	Substance	Batch	Spectra
Caelo	Borage oil, refined, stabili...	2011906	1
Cealo/Gehe	Borage oil, refined, stabili...	18080501	1
Caelo	Walnut oil, refined	10328802	1
Caelo	Walnut oil, refined	11167103	1
Caelo	Walnut oil, refined	12214902	1
Hepart AG	Walnut oil, refined	12214904	1
Caelo	Walnut oil, refined	24101309	1
Caelo	Walnut oil, refined	12214904	1
Caelo	Walnut oil, refined	13202401	3
Voegele	Walnut oil, refined	2013113013	2
Caelo	Walnut oil, refined	4051702	1
Caelo	Walnut oil, refined	13338302	1
Vögele	Walnut oil, refined	2017113718	1
Stumpf/Henry Lamotte	Almond oil, refined	5748601	2
Henry Lamotte/AHD	Almond oil, refined	8000915001	2
Bombastus	Almond oil, refined	264164	1
Caelo	Almond oil, refined	11227406	1
Noweda	Almond oil, refined	11078806	1
Caelo	Almond oil, refined	11314201	1
Caelo	Almond oil, refined	1602211950	1
Bombastus	Almond oil, refined	267099	2
Caelo	Almond oil, refined	11227407	1
Lamotte/Krieger	Almond oil, refined	5081301	1
Caelo	Almond oil, refined	11314206	2
Holdermann/Henry Lamott...	Almond oil, refined	5162801	2
Caelo	Almond oil, refined	12041801	6
Henry Lamotte	Almond oil, refined	5177001	2
Caelo	Almond oil, refined	2405211950	1
Caelo	Almond oil, refined	4061202	1
Caelo	Almond oil, refined	12041802	1
Eigenherstellung	Almond oil, refined	50612HML01	1
Lamotte/Anzag 12.06.2012	Almond oil, refined	5177001	1
Caelo	Almond oil, refined	11314209	2
Caelo	Almond oil, refined	12041803	3
Noweda	Almond oil, refined	5177001	4
H. Lamotte	Almond oil, refined	5177001	2
Caelo	Almond oil, refined	6081202	1
Bombastus	Almond oil, refined	270829	1
Caelo	Almond oil, refined	12080801	3
Caelo	Almond oil, refined	7091206	1
Caelo	Almond oil, refined	22081205	1
Lamotte/Krieger	Almond oil, refined	5177001	1
Primavera	Almond oil, refined	3808131	2
Henry Lamotte Oils GmbH	Almond oil, refined	5269301	4
Noweda	Almond oil, refined	5269301	4
Caelo	Almond oil, refined	11314208	1
Phönix Gotha	Almond oil, refined	12153501	1
Lamotte/Krieger	Almond oil, refined	5269301	2
Caelo	Almond oil, refined	12080803	7
Caelo	Almond oil, refined	13101203	1
Bombastus	Almond oil, refined	273578	4
Caelo	Almond oil, refined	12080806	6
Eigenherstellung	Almond oil, refined	21112HML01	1
Caelo	Almond oil, refined	5111208	1
Caelo	Almond oil, refined	12080802	3
Klenk	Almond oil, refined	5269301	2
Caelo	Almond oil, refined	21112PML01	1
Henry Lamotte GmbH	Almond oil, refined	5269301	1
Fagron	Almond oil, refined	12A18-N09	1
HenryLamotte/Phoenix	Almond oil, refined	5269301	2

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	1312Q-01950	1
Noweda	Almond oil, refined	12080803	2
H.Lamotte/Noweda	Almond oil, refined	5269301	2
Lamotte	Almond oil, refined	5269301	3
Caelo	Almond oil, refined	12153501	5
Caelo	Almond oil, refined	5214206	3
Caelo	Almond oil, refined	12153502	6
Henry Lamotte	Almond oil, refined	5369301	1
ANZAG	Almond oil, refined	5214206	1
xxx	Almond oil, refined		1
Caelo	Almond oil, refined	31121205	1
Caelo	Almond oil, refined	20150612-2	1
Sanacorp	Almond oil, refined	12080803	1
Caelo	Almond oil, refined	12153505	8
Lamotte/Sanacorp	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	140113PML01	1
Lamotte/gehe	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	12153506	4
Eigenherstellung	Almond oil, refined	140113HML01	1
Fagron	Almond oil, refined	12J26-N05	1
Phoenix (Henry Lamotte ...	Almond oil, refined	5269301	1
Caelo	Almond oil, refined	1601311950	1
Caelo	Almond oil, refined	21011304	1
Lamotte/gehe	Almond oil, refined	5274206	1
Noweda / Henry Lamotte	Almond oil, refined	5214206	3
Caelo	Almond oil, refined	12357103	7
Caelo	Almond oil, refined	2021303	1
Lamotte	Almond oil, refined	5214206	3
Lamotte Phönix	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	12357102	5
Eigenherstellung	Almond oil, refined	80213HJK02	1
Kehr / Lamotte	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	2002311950	1
Phoenix	Almond oil, refined	5269301	1
Caelo	Almond oil, refined	12357101	11
Caelo	Almond oil, refined	21021303	1
H.Lamotte/Noweda	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	12153504	1
Bombastus	Almond oil, refined	274564	1
HenryLamotte/Gehe	Almond oil, refined	130145	3
Caelo	Almond oil, refined	12357111	12
Noweda	Almond oil, refined	12357101	1
Anzag 09.02.2013	Almond oil, refined	12357101	1
Henry Lamotte GmbH, Mer...	Almond oil, refined	130145	1
Sanacorp	Almond oil, refined	5214206	2
Primavera	Almond oil, refined	4811131	1
Sanacorp	Almond oil, refined	12357102	3
Caelo	Almond oil, refined	1131303	1
Fiebig 21.02.13 ek: 2,16EUR	Almond oil, refined	130145	1
Caelo	Almond oil, refined	1113E-01950	1
Anzag	Almond oil, refined	5214206	1
phönix	Almond oil, refined	12153505	1
Henry Lamotte Oils GmbH	Almond oil, refined	5214206	1
Henry Lamotte Oils GmbH	Almond oil, refined	130145	2
Caelo	Almond oil, refined	12357110	1
Eigenherstellung	Almond oil, refined	210313HJK01	2
Caelo	Almond oil, refined	130145	4
Henry Lamotte	Almond oil, refined	130145	3
Fagron	Almond oil, refined	12H23-N01	1
Caelo	Almond oil, refined	12357112	2

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Supplier	Substance	Batch	Spectra
Lamotte/Noweda	Almond oil, refined	130145	3
Phoenix/Lamotte	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	11358910	1
Lamotte/GEHE	Almond oil, refined	5269301	2
Caelo	Almond oil, refined	2204130	1
Caelo	Almond oil, refined	25041303	1
Caelo	Almond oil, refined		2
H.Lamotte/Noweda	Almond oil, refined	130145	2
Henry Lamotte/ 11.05.13...	Almond oil, refined	5438301	1
Caesar & Loretz/ Noweda	Almond oil, refined	12357101	2
Bombastus	Almond oil, refined	277971	4
J.H.Müller/direkt/17.05. ...	Almond oil, refined	130103	1
Henry Lamotte	Almond oil, refined	5438301	4
Taoasis	Almond oil, refined	118979-108698	1
Eigenherstellung	Almond oil, refined	240513HML01	1
Henry Lamotte Oils/Sana...	Almond oil, refined	130145	1
Caelo	Almond oil, refined	2013U01950	1
Henry Lamotte/Sanacorp	Almond oil, refined	130145	1
lamotte/Noweda	Almond oil, refined	74760	1
Taoasis	Almond oil, refined	119249-109910	1
Sanacorp	Almond oil, refined	12357103	1
Phoenix/ Lamotte	Almond oil, refined	5438301	2
Fagron	Almond oil, refined	5438301	2
Bombastus	Almond oil, refined	277912	2
Eigenherstellung	Almond oil, refined	40613PML01	1
Lamotte	Almond oil, refined	130145	6
Eigenherstellung	Almond oil, refined	40613PML02	1
Lamotte/N/31.05.13/PZN:...	Almond oil, refined	5214206	1
Caelo	Almond oil, refined	0-240513-1	1
Eigenherstellung	Almond oil, refined	40613HML01	1
Euro OTC	Almond oil, refined	1207014-01	1
Fagron	Almond oil, refined	13C25-N20	1
Henry Lamotte	Almond oil, refined	12061302	1
Noweda / Henry Lamotte	Almond oil, refined	5438301	3
Caelo	Almond oil, refined	5438301	4
Lamotte	Almond oil, refined	5438301	6
Henry Lamotte/Phönix	Almond oil, refined	5438301	1
Lamotte/Sanacorp	Almond oil, refined	5438301	1
Henry Lamotte	Almond oil, refined	543802	1
Henry Lamotte/N/18.06.1...	Almond oil, refined	5438301	1
Bombastus	Almond oil, refined	279230	1
Phönix	Almond oil, refined	5438301	1
Henry Lamotte Oils	Almond oil, refined	5438302	5
Lamotte/Sanacorp	Almond oil, refined	130145	1
Lamotte/Noweda	Almond oil, refined	5438301	1
Fischar	Almond oil, refined	5438301	2
Caelo	Almond oil, refined	13178002	12
Henry Lamotte Oils GmbH...	Almond oil, refined	130145	1
Lamotte/Anzag	Almond oil, refined	130145	1
Caelo	Almond oil, refined	13178004	15
Caelo	Almond oil, refined	13178003	15
Caelo	Almond oil, refined	2713U1950	1
AHD	Almond oil, refined	130145	1
Gehe	Almond oil, refined	13178004	1
H.Lamotte/Noweda	Almond oil, refined	5438301	2
Phönix	Almond oil, refined	13178004	1
Stumpf/Henry Lamotte	Almond oil, refined	5438302	4
Henry Lamotte Oils	Almond oil, refined	5214206	1
Lamotte/GEHE	Almond oil, refined	5438302	3
Caelo	Almond oil, refined	22071303	1

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Supplier	Substance	Batch	Spectra
Henry Lam./ Phönix	Almond oil, refined	5438302	1
Caesar & Loretz GmbH	Almond oil, refined	13178002	1
Henry Lamotte	Almond oil, refined	5438302	3
GEHE	Almond oil, refined	13178003	1
lamotte	Almond oil, refined	5438301	1
Phönix, 17.06.2013	Almond oil, refined	5438301	1
Lamotte/ Noweda	Almond oil, refined	5438301	1
Noweda	Almond oil, refined	13178003	1
Noweda/Lamotte	Almond oil, refined	5438302	3
J.H.Müller/direkt/01.08...	Almond oil, refined	130327	2
Caelo	Almond oil, refined	5438302	3
Henry Lamotte Oils GmbH...	Almond oil, refined	5438301	1
Lamotte/Noweda	Almond oil, refined	5438302	1
Caelo	Almond oil, refined	20081301	1
Taoasis	Almond oil, refined	5452701-111421	1
Sanacorp	Almond oil, refined	5438302	1
Caelo	Almond oil, refined	10131-01950	1
Phönix , 03.09.13	Almond oil, refined	13178003	1
AHC03.08.13 EK2,36 100ml	Almond oil, refined	5438302	1
Eigenherstellung	Almond oil, refined	60913HJK01	1
Caelo	Almond oil, refined	13178011	12
H.Lamotte/Noweda	Almond oil, refined	5438302	2
Lamotte/Sanacorp	Almond oil, refined	5438302	2
Caelo	Almond oil, refined	13091308	1
Gehe	Almond oil, refined	13236403	1
Henry Lamotte Oils GmbH	Almond oil, refined	16092013B	1
Caelo	Almond oil, refined	13236403	7
Noweda / Henry Lamotte	Almond oil, refined	130145	1
Henry Lamotte Oils / Gehe	Almond oil, refined	548302	1
Lamotte	Almond oil, refined	5438302	7
Henry Lamotte Oils, Gehe	Almond oil, refined	5438302	1
Lamotte / Gehe	Almond oil, refined	3968/V03/14	1
Caelo	Almond oil, refined	13236401	13
Bombastus	Almond oil, refined	281040	5
HenryLamotteOilsGmbH/Ph...	Almond oil, refined	5438302	2
Euro OTC	Almond oil, refined	1301001-02	2
Fagron	Almond oil, refined	281040	2
Taoasis	Almond oil, refined	5511701-1113571	1
Henry Lamotte Oils/Gehe	Almond oil, refined	5438302	2
Noweda	Almond oil, refined	13178011	2
H.Lamotte/Anzag	Almond oil, refined	5438302	1
Phönix	Almond oil, refined	543801	1
Gehe - Lamotte	Almond oil, refined	5438302	1
Caelo	Almond oil, refined	13178009	2
Caelo	Almond oil, refined	132363403	1
Bombastus	Almond oil, refined	281765	1
Caelo	Almond oil, refined	4313E1950	1
Bombastus	Almond oil, refined	282093	3
Taoasis	Almond oil, refined	102235-111893	1
Lamotte/Phoenix	Almond oil, refined	5415901	2
Eigenherstellung	Almond oil, refined	61113HML01	1
Henry Lamotte/N/PZN:731...	Almond oil, refined	5438302	1
Lamotte	Almond oil, refined	548302	1
Phoenix/Lamotte	Almond oil, refined	5415901	1
Henry Lamotte Oils GmbH	Almond oil, refined	5438302	1
Henry Lamotte Oils GmbH	Almond oil, refined	130143	2
noweda/Ichtyol	Almond oil, refined	5438302	2
Henry Lamotte Oils GmbH	Almond oil, refined	5493001	1
Stumpf/Henry Lamotte	Almond oil, refined	5415901	2
Stumpf/Henry Lamotte	Almond oil, refined	5493001	4

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	22111301	1
Sanacorp	Almond oil, refined	13178004	1
Lamotte	Almond oil, refined	5415901	11
Lamotte/ Noweda	Almond oil, refined	5415901	1
Caelo	Almond oil, refined	5415901	6
LAMOTTE/NOWEDA	Almond oil, refined	5415901	4
Lamotte/ Phönix	Almond oil, refined	5438302	1
Caelo	Almond oil, refined	13236402	13
lamotte/Gehe	Almond oil, refined	5415901	3
Caelo	Almond oil, refined	13236404	4
Henry Lamotte	Almond oil, refined	5493001	3
Caelo	Almond oil, refined	13H08-N11	1
Caelo	Almond oil, refined	17121303	1
Sanacorp	Almond oil, refined	5415901	2
Caelo	Almond oil, refined	13236406	8
H.Lamotte / Anzag	Almond oil, refined	5438302	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5493001	1
Lamotte/Gehe	Almond oil, refined	5415901	4
Anzag/Leyh Pharma am	Almond oil, refined	13236404	1
Henry Lamotte Oils GmbH	Almond oil, refined	5415901	2
Spinnrad GmbH	Almond oil, refined	713301223	1
Spinnrad GmbH	Almond oil, refined	913301224	1
Bombastus	Almond oil, refined	282171	1
Kruger/Lamotte/06.01.14	Almond oil, refined	5438302	1
Henry Lamotte	Almond oil, refined	5415901	6
Taoasis	Almond oil, refined	5511701-113571	1
Henry Lamotte/Gehe	Almond oil, refined	5415901	2
Caelo	Almond oil, refined	13350002	11
lamotte/phönix	Almond oil, refined	5438302	1
Caelo	Almond oil, refined	13350001	17
Sanacorp	Almond oil, refined	13236406	1
lamotte/anzag	Almond oil, refined	5415901	3
Lamotte/Ebert	Almond oil, refined	5415901	1
Noweda	Almond oil, refined	13H08-N11	1
Caelo	Almond oil, refined	13236411	7
Henry Lamotte Oils GmbH...	Almond oil, refined	5438302	1
Caesar & Loretz GmbH	Almond oil, refined	13236404	1
Caelo	Almond oil, refined	514Q1950	1
Caelo	Almond oil, refined	3236406	1
Caelo	Almond oil, refined	1326403	1
Henry Lamotte Oils GmbH	Almond oil, refined	5415901	1
Caelo	Almond oil, refined	17021405	1
Primavera	Almond oil, refined	1551041	2
Noweda	Almond oil, refined	13236411	2
Eigenherstellung	Almond oil, refined	240214HJK01	1
Sanacorp	Almond oil, refined	13350007	1
Caelo	Almond oil, refined	914E1950	1
Caelo	Almond oil, refined	13350003	13
Lamotte	Almond oil, refined	5615001	2
Caelo	Almond oil, refined	13350007	4
H.Lamotte/Noweda	Almond oil, refined	5415901	1
Henry Lamotte Oils GmbH	Almond oil, refined	13032014B	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5493001	1
Aliance Hearthcave 11.0...	Almond oil, refined	13236402	1
Bombastus	Almond oil, refined	283800	2
Caelo	Almond oil, refined	13350006	4
Caelo	Almond oil, refined	13350006	1
Henry Lamotte / Noweda	Almond oil, refined	5415901	1
Caelo	Almond oil, refined	1350003	1
Bombastus	Almond oil, refined	284968	1

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Supplier	Substance	Batch	Spectra
Fagron	Almond oil, refined	13350001	2
Caelo	Almond oil, refined	31031403	1
Caelo	Almond oil, refined	14042702	2
Gehe/Henry Lamotte Oils...	Almond oil, refined	5615001	2
Caelo	Almond oil, refined	14042710	1
Primavera	Almond oil, refined	15510141	1
Caelo	Almond oil, refined	5615001	6
Caelo	Almond oil, refined	133500006	1
Bombastus	Almond oil, refined	283801	2
Eigenherstellung	Almond oil, refined	160414HML01	1
Henry Lamotte	Almond oil, refined	5615001	4
Krieger	Almond oil, refined	13350006	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5615001	1
Caelo	Almond oil, refined	13326411	1
Caelo	Almond oil, refined	14042703	7
Caesar & Loretz GmbH	Almond oil, refined	13350007	1
Bombastus	Almond oil, refined	284967	2
Caelo	Almond oil, refined	14042714	1
lamotte noweda,	Almond oil, refined	5615001	1
Henry Lamotte/ Noweda	Almond oil, refined	5615001	3
Fagron	Almond oil, refined	13K28-B01-288270	1
Caelo	Almond oil, refined	14042705	6
Henry Lamotte Oils	Almond oil, refined	5415901	2
H.Lamotte/Noweda	Almond oil, refined	5615001	3
Caelo	Almond oil, refined	14139301	1
Taoasis	Almond oil, refined	3548810	1
lamotte/Noweda	Almond oil, refined	5615001	1
Lamotte/Phönix	Almond oil, refined	5615003	1
Caelo	Almond oil, refined	14042707	5
VDL 21.05;Preis 9,84	Almond oil, refined	13236406//05R05	1
Fagron	Almond oil, refined	13236411	1
Lamotte/Phoenix	Almond oil, refined	5615003	2
Henry Lamotte Oils GmbH...	Almond oil, refined	5415901	1
PHOENIX 03.06.2014	Almond oil, refined	14042705	1
Caelo	Almond oil, refined	14042708	8
Caelo	Almond oil, refined	17061403	1
Lamotte / Gehe	Almond oil, refined	5615001	1
Euro OTC	Almond oil, refined	1310022-01	1
Fagron	Almond oil, refined	5615001	3
Taoasis	Almond oil, refined	12842-116104	1
Bombastus	Almond oil, refined	286253	2
Cealo/ Noweda	Almond oil, refined	14042704	1
Phönix/ Lamotte	Almond oil, refined	5615001	1
Prima Vera	Almond oil, refined	8603152	1
Lamotte	Almond oil, refined	561001	1
Lamotte/Gehe	Almond oil, refined	5615003	2
LAMOTTE/NOWEDA	Almond oil, refined	5615003	4
Bombastus	Almond oil, refined	286254	5
Caelo	Almond oil, refined	15071406	1
Henry Lamotte	Almond oil, refined	5615003	3
lamotte/Gehe	Almond oil, refined	5615001	1
Lamotte/Sanacorp	Almond oil, refined	5615001	2
Caelo	Almond oil, refined	14042704	3
Phönix/ Lamotte	Almond oil, refined	5615003	2
Caelo	Almond oil, refined	14139034	1
Eigenherstellung	Almond oil, refined	290714HJK01	1
Eigenherstellung	Almond oil, refined	290714HJK02	1
Herbasinica	Almond oil, refined	14042707	2
Caelo	Almond oil, refined	14139304	2
Caelo	Almond oil, refined	14042706	8

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	1404206	1
Noweda/Henry Lamotte	Almond oil, refined	5615003	4
Lamotte/Sanacorp	Almond oil, refined	5669601	2
Eigenherstellung	Almond oil, refined	120814HAS01	1
Bombastus	Almond oil, refined	47/2014	1
Caelo	Almond oil, refined	18081402	1
Bombastus	Almond oil, refined	287416	1
Biopräp / GEHE	Almond oil, refined	E1403027	1
lamotte	Almond oil, refined	5615003	1
Lamotte/Gehe	Almond oil, refined	5615001	1
Henry Lamotte Oils GmBH	Almond oil, refined	260814A	1
Caelo	Almond oil, refined	14139305	2
Caelo	Almond oil, refined	29081404	1
Henry Lamotte	Almond oil, refined	5669601	1
Fagron	Almond oil, refined	14F04-B01	2
Lamotte	Almond oil, refined	5615003	4
Caelo	Almond oil, refined	14139310	12
Henry Lamotte Oils GmbH...	Almond oil, refined	5615003	1
Eigenherstellung	Almond oil, refined	120914HAS01	1
Taoasis	Almond oil, refined	130973-116149	1
AHD	Almond oil, refined	14139305	1
Henry Lamotte Oils GmbH	Almond oil, refined	5703001	2
Sanacorp	Almond oil, refined	1413935	1
Lamotte/ Sana	Almond oil, refined	5669601	1
Caelo	Almond oil, refined	2101405	1
Bombastus	Almond oil, refined	14139305	1
Euro OTC	Almond oil, refined	131002202	1
Henry Lamotte Oils GmbH	Almond oil, refined	5615003	1
Lamotte / Noweda	Almond oil, refined	5615001	1
Caelo	Almond oil, refined	14042717	3
Caelo	Almond oil, refined	14139311	9
Henry Lamotte Oils GmbH...	Almond oil, refined	5703001	6
Bombastus	Almond oil, refined	288428	3
Caelo	Almond oil, refined	123test	1
Henry Lamotte Oils / Gehe	Almond oil, refined	5615003	2
Caelo	Almond oil, refined	17111402	1
Lamotte/Phoenix	Almond oil, refined	5615001	1
Eigenherstellung	Almond oil, refined	181114HML01	1
Fagron	Almond oil, refined	14D24-B07	1
Primavera	Almond oil, refined	7708L22	1
Caelo	Almond oil, refined	284968	1
Lamotte/Sanacorp	Almond oil, refined	5703101	1
Caelo	Almond oil, refined	14139309	3
Caelo	Almond oil, refined	14215804	4
Bombastus	Almond oil, refined	288471	3
Hedinger/ Noweda	Almond oil, refined	14139311	1
Caelo	Almond oil, refined	14139306	2
Caelo	Almond oil, refined	141215804	1
Caelo	Almond oil, refined	1439310	1
Lamotte / Noweda	Almond oil, refined	5615003	1
Henry Lamotte Oils GmbH...	Almond oil, refined	5615001	1
Taoasis/Noweda	Almond oil, refined	130973	1
Caelo	Almond oil, refined	14215808	6
Caelo	Almond oil, refined	30121416	1
Kehr / Lamotte	Almond oil, refined	50115PML01	1
Eigenherstellung	Almond oil, refined	50115PML02	1
Lamotte	Almond oil, refined	5713001	1
Caelo	Almond oil, refined	14215809	10
henry lamotte	Almond oil, refined	5675003	1
Gehe 22.12.14	Almond oil, refined	14215808	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Almond oil, refined	5703101	3
Lamotte	Almond oil, refined	5703001	1
Caelo	Almond oil, refined	5703001	1
Taoasis	Almond oil, refined	130973-118607	1
Caelo	Almond oil, refined	14215805	10
Caelo	Almond oil, refined	1421508	1
Caelo	Almond oil, refined	14215807	3
Lamotte/Noweda	Almond oil, refined	5615003	2
Lamotte/Gehe	Almond oil, refined	5703101	2
Lamotte/Sanacorp	Almond oil, refined	8748401	1
Lamotte	Almond oil, refined	5703101	1
Caesar & Loretz GmbH	Almond oil, refined	14215804	1
Ph.Eur.7.0	Almond oil, refined	13350003	1
Caelo	Almond oil, refined	14215806	8
Euro OTC	Almond oil, refined	1407050-01	1
Biopräp / GEHE	Almond oil, refined	E1410088	1
Lamotte/Sanacorp	Almond oil, refined	5748401	1
Caelo	Almond oil, refined	16021510	1
Lamotte / Gehe	Almond oil, refined	5703101	2
Henry Lamotte	Almond oil, refined	5748401	1
Noweda/Henry Lamotte	Almond oil, refined	5748501	1
Eigenherstellung	Almond oil, refined	270215HJK01	1
Lamotte/Phoenix	Almond oil, refined	5703001	1
Caelo	Almond oil, refined	40315PML01	1
Caelo	Almond oil, refined	6031506	1
Apolda/ Sanacorp	Almond oil, refined	14215807	1
Apolda/ Sanacorp	Almond oil, refined	14139309	1
Bombastus	Almond oil, refined	291509	5
Caelo	Almond oil, refined	14215814	4
Gehe Kassel	Almond oil, refined	14215814	1
H. Lamotte/Noweda	Almond oil, refined	5615003	1
Lamotte	Almond oil, refined	5669601	1
Primavera	Almond oil, refined	82B23	2
Caelo	Almond oil, refined	14215817	7
Lamotte/Sanacorp	Almond oil, refined	5703001	1
Lamotte / Noweda	Almond oil, refined	5748601	2
Caelo	Almond oil, refined	230315HML01	1
Caelo	Almond oil, refined	14215815	2
Caelo	Almond oil, refined	14215816	1
Lamotte/Sanacorp	Almond oil, refined	5748601	6
Henry Lamotte Oils GmbH...	Almond oil, refined	5748601	3
Henry Lamotte / Noweda	Almond oil, refined	5703001	1
Caelo	Almond oil, refined	8041501	1
Taoasis	Almond oil, refined	132805-118635	1
Lamotte	Almond oil, refined	5748601	7
Caelo	Almond oil, refined	15078404	11
Lamotte über Phoenix	Almond oil, refined	5703001	1
Euro OTC	Almond oil, refined	1407050-02	2
Caelo	Almond oil, refined	15078401	2
Noweda / Henry Lamotte	Almond oil, refined	5748601	1
14215814	Almond oil, refined	14215814	1
Henry Lamotte	Almond oil, refined	5748601	7
Caelo	Almond oil, refined	15078406	3
Fagron	Almond oil, refined	14J01-B03-302327	2
H.Lamotte/Noweda	Almond oil, refined	5748601	2
Caelo	Almond oil, refined	15078407	3
Caelo	Almond oil, refined	15078405	10
Eig	Almond oil, refined	80515HML01	1
Caelo	Almond oil, refined	5748601	6
Bombastus	Almond oil, refined	292592	6

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Supplier	Substance	Batch	Spectra
Bombastus	Almond oil, refined	290136	1
GEHE 11.05.	Almond oil, refined	15078404	1
Henry Lamotte Oils	Almond oil, refined	5748601	3
Caelo	Almond oil, refined	220515PML01	1
Eigenherstellung	Almond oil, refined	260515HML01	1
Sanacorp	Almond oil, refined	15078401	1
Caelo	Almond oil, refined	15078402	5
Lamotte über Phoenix	Almond oil, refined	5748601	3
Taoasis	Almond oil, refined	133805-120282	1
Sanacorp	Almond oil, refined	15078405	1
Caelo	Almond oil, refined	10061502	1
Caelo	Almond oil, refined	15078403	9
Fagron	Almond oil, refined	14J01-B03	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1714U-01950	1
Primavera Wareneingang...	Almond oil, refined	792D23	1
Lamotte	Almond oil, refined	5919600001	6
VDL;22.05.15;11.47EUR	Almond oil, refined	14215807	1
Bombastus	Almond oil, refined	292591	2
Noweda/Lamotte	Almond oil, refined	5748601	1
Caelo	Almond oil, refined	3714U-01950	1
Lamotte/Phoenix	Almond oil, refined	5748601	2
Eigenherstellung	Almond oil, refined	300615HML01	1
Taoasis	Almond oil, refined	134032-120671	1
Henry Lamotte Oils/GEHE	Almond oil, refined	5748601	1
Henry La Motte	Almond oil, refined	5748601	2
lamotte/Phönix	Almond oil, refined	5748601	1
Caelo	Almond oil, refined	15127308	2
Caelo	Almond oil, refined	15127305	5
Lamotte/ Phoenix	Almond oil, refined	5748601	1
Lamotte/Phoenix	Almond oil, refined	5919600001	1
Bombastus	Almond oil, refined	295615	2
Henry Lamotte	Almond oil, refined	5919600001	10
Caelo	Almond oil, refined	15127307	5
henry lamotte	Almond oil, refined	5748601	1
Caelo	Almond oil, refined	15806001	1
Caelo	Almond oil, refined	15080602	1
Holdermann	Almond oil, refined	15078403	1
Eigenherstellung	Almond oil, refined	180815HJK01	1
Henry Lamotte Oils GmbH	Almond oil, refined	17082015B	1
Stumpf/Henry Lamotte	Almond oil, refined	5919600001	2
Henry Lamotte/Alliance H	Almond oil, refined	5748601	1
Henry Lamotte Oils/Sana...	Almond oil, refined	5919600001	3
Henry Lamotte Olis GmbH...	Almond oil, refined	5919600001	1
Henry Lamotte Oils	Almond oil, refined	5919600001	2
Fagron	Almond oil, refined	15127303	1
Bombastus	Almond oil, refined	294784	4
Eigenherstellung	Almond oil, refined	20915HML01	1
Taoasis	Almond oil, refined	134475-1215919	1
Henry Lamotte Oils / Gehe	Almond oil, refined	5919600001	3
Caelo	Almond oil, refined	15127306	12
Henry Lamotte	Almond oil, refined	8000712001	10
Eigenherstellung	Almond oil, refined	180915HML01	1
Noweda	Almond oil, refined	5748601	2
ACM	Almond oil, refined	KNC1100J15	1
Lamotte/Anzag	Almond oil, refined	8000712001	4
Caelo	Almond oil, refined	15127304	6
lamotte/phönix	Almond oil, refined	5919600001	1
Bombastus	Almond oil, refined	296519	2
ACM	Almond oil, refined	KNC0766J15	1
Caelo	Almond oil, refined	15197401	11

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	15127303	2
Primavera	Almond oil, refined	11G23	2
Lamotte/Sanacorp	Almond oil, refined	8000712001	4
Caelo	Almond oil, refined	15127302	2
Caelo	Almond oil, refined	15197407	9
Lamotte	Almond oil, refined	8000712001	10
Lamotte/Sanacorp 02.11...	Almond oil, refined	5919600001	1
Primavera 19.10.15	Almond oil, refined	944H23	1
Fischer/Gehe	Almond oil, refined	15127306	1
Taoasis	Almond oil, refined	135831-121621	2
Noweda/Lamotte	Almond oil, refined	5919600001	1
Lamotte/Noweda	Almond oil, refined	8000712001	2
Caelo	Almond oil, refined	15197405	3
Lamotte/Gehe	Almond oil, refined	5748601	2
AHD / H.Lamotte	Almond oil, refined	8000712001	1
Bombastus	Almond oil, refined	295616	5
Caelo	Almond oil, refined	15197408	7
Lamotte/PPL	Almond oil, refined	8000712001	2
Henry Lamotte/ Noweda	Almond oil, refined	5919600001	1
Primavera	Almond oil, refined	480K23	1
Euro	Almond oil, refined	1510014-01	1
Caelo	Almond oil, refined	15197402	10
Bombastus	Almond oil, refined	289709	1
Noweda/Lamotte	Almond oil, refined	8000712001	3
Lamotte/Phoenix	Almond oil, refined	8000712001	4
Noweda Lamotte GmbH	Almond oil, refined	5919600001	1
Henry Lamotte Oils GmbH	Almond oil, refined	5919600001	1
Henry lamotte	Almond oil, refined	8000712001	1
lamotte/noweda	Almond oil, refined	8000712001	2
Caelo	Almond oil, refined	15197409	3
Henry Lamotte GmbH	Almond oil, refined	8000712001	3
Fagron	Almond oil, refined	14D24-B07-302332	1
Lamotte über Phoenix	Almond oil, refined	8000712001	2
ACM	Almond oil, refined	KNC1364J15	1
Caelo	Almond oil, refined	15197406	5
Gehe	Almond oil, refined	15197409	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000712001	2
Caelo	Almond oil, refined	8000712001	1
henry lamotte	Almond oil, refined	8000712001	3
Fagron	Almond oil, refined	15F04-B01-309291	3
Caesar & Loretz GmbH Hi...	Almond oil, refined	510014-01	1
Henry Lamotte Oils / No...	Almond oil, refined	8000712001	1
Henry Lamotte/Kehr	Almond oil, refined	8000725001	1
Caelo	Almond oil, refined	15197412	3
Henry Lamotte/ Gehe	Almond oil, refined	8000712001	1
Caelo	Almond oil, refined	15197403	14
H. Lamotte/Noweda	Almond oil, refined	8000712001	2
Caelo	Almond oil, refined	15409706	1
Bombastus	Almond oil, refined	297872	3
Euro OTC	Almond oil, refined	540014-01	1
Henry Lamotte	Almond oil, refined	8000725001	2
Caelo	Almond oil, refined	15409705	9
Caelo	Almond oil, refined	8000915001	5
Lamotte	Almond oil, refined	8000915001	3
Henry Lamotte Olis GmbH...	Almond oil, refined	8000915001	2
Caelo	Almond oil, refined	15197404	4
Caelo	Almond oil, refined	15409702	6
Caelo	Almond oil, refined	15409701	6
Henry Lamotte/ Henry La...	Almond oil, refined	8000915001	16
Fagron	Almond oil, refined	15F04-B01	1

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Supplier	Substance	Batch	Spectra
caesar&loretz,Phönix,11...	Almond oil, refined	15127304	1
Henry Lamotte	Almond oil, refined	8000915001	4
Bombastus	Almond oil, refined	298745	8
Caelo	Almond oil, refined	15409703	8
Noweda / Henry Lamotte	Almond oil, refined	8000725001	1
Lamotte	Almond oil, refined	8000725001	2
Caelo	Almond oil, refined	15409704	13
henry lamotte oils Gmh/N	Almond oil, refined	8000915001	2
Henry Lamotte/Noweda	Almond oil, refined	8000712001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000915001	5
Pharmachem/Noweda	Almond oil, refined	8000712001	1
Henry Lamotte/Noweda	Almond oil, refined	8000725001	1
Lamotte/Gehe	Almond oil, refined	8000725001	1
Alliance H.	Almond oil, refined	15409704	1
Bombastus	Almond oil, refined	15197407	1
henry lamotte	Almond oil, refined	8000915001	1
H.Lamotte/Noweda	Almond oil, refined	5919600001	1
Caelo	Almond oil, refined	15409710	13
Lamotte über Phoenix	Almond oil, refined	8000725001	1
Lamotte/Sanacorp	Almond oil, refined	1000002454	2
Lamotte / Gehe	Almond oil, refined	8000725001	2
Henry Lamotte Oils / No...	Almond oil, refined	8000915001	1
Bombastus	Almond oil, refined	298744	2
Taoasis	Almond oil, refined	31952-123336	1
Lamotte/Gehe	Almond oil, refined	8000712001	1
Lamotte über Sanacorp	Almond oil, refined	8000915001	3
Caelo	Almond oil, refined	15409707	4
Henry Lamotte	Almond oil, refined	1000002454	1
Phönix	Almond oil, refined	8000915001	1
Fagron	Almond oil, refined	12345	1
Henry Lamotte Oils	Almond oil, refined	8000915001	1
Phytocomm	Almond oil, refined	15197406	1
Fagron	Almond oil, refined	15409702	1
H. Lamotte/Noweda	Almond oil, refined	1000002454	1
Caelo	Almond oil, refined	16071008	1
Bombastus	Almond oil, refined	15197409	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8000915002	2
Henry Lamotte Oils GmbH	Almond oil, refined	8000725001	1
Henry Lamotte Oils GmbH	Almond oil, refined	8000725001	3
Caelo	Almond oil, refined	15409714	6
Henry Lamotte Oils / Gehe	Almond oil, refined	1000002454	1
Henry Lamotte Oils / Gehe	Almond oil, refined	8000915002	2
Henry Lamotte/Sanacorp	Almond oil, refined	8000915002	8
Euro OTC	Almond oil, refined	1510014-01	3
Spinnrad	Almond oil, refined	1215048093	1
Euro OTC	Almond oil, refined	1603025-01	3
Henry Lamotte / Allianc...	Almond oil, refined	8000915001	2
Caelo	Almond oil, refined	15409105	1
Primavera	Almond oil, refined	21D24	1
Primavera	Almond oil, refined	218D24	1
Noweda/Lamotte	Almond oil, refined	8000915001	1
Lamotte	Almond oil, refined	8000915002	2
Noweda	Almond oil, refined	15197404	1
Lamotte über Sanacorp	Almond oil, refined	8000915002	1
Henry Lamotte Oils	Almond oil, refined	8000725001	1
Bombastus	Almond oil, refined	300840	1
Caelo	Almond oil, refined	16071009	1
henry lamotte oils Gmh/N	Almond oil, refined	8000915002	1
Bombastus	Almond oil, refined	300841	2
Caelo	Almond oil, refined	16071007	10

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Supplier	Substance	Batch	Spectra
Euro OTC	Almond oil, refined	16071002	1
Caelo	Almond oil, refined	465957	1
Caesar & Loretz/Noweda	Almond oil, refined	15409704	1
Fagron	Almond oil, refined	15409705	1
Caelo	Almond oil, refined	16071002	14
Caelo	Almond oil, refined	8000915002	5
Henry Lamotte/ Henry La...	Almond oil, refined	1000003242	19
Fagron	Almond oil, refined	15H03-B07-314457	3
Henry Lamotte Oils GmbH	Almond oil, refined	8000915002	5
Caelo	Almond oil, refined	15409712	7
Lamotte/AHD	Almond oil, refined	1000003242	2
Henry Lamotte	Almond oil, refined	8000915002	3
Phönix	Almond oil, refined	15409710	1
Lamotte/Gehe	Almond oil, refined	8000915002	2
Bombastus	Almond oil, refined	15197412	1
Caeolo/Noweda	Almond oil, refined	15409703	1
Caelo	Almond oil, refined	15409713	10
Henry Lamotte / Noweda	Almond oil, refined	8000915002	2
Taoasis	Almond oil, refined	33489-124674	1
Lamotte	Almond oil, refined	1000003242	2
AHD/ Henry Lamotte	Almond oil, refined	8000915002	1
Caolo- Noweda	Almond oil, refined	15197404	1
Henry Lamotte/Gehe	Almond oil, refined	1000003242	1
Euro OTC	Almond oil, refined	1000003242	3
Henry Lamotte/Anzag	Almond oil, refined	416E-01950	1
Caelo	Almond oil, refined	15331611	1
Caelo	Almond oil, refined	15409716	1
Henry Lamotte Oils	Almond oil, refined	1000003242	3
WE:Phönix 25.08.2016 EK...	Almond oil, refined	1000003242	2
Henry Lamotte Oil	Almond oil, refined	8000915002	1
Noweda	Almond oil, refined	294784	1
Caelo	Almond oil, refined	16071004	6
Bombastus	Almond oil, refined	16115303	1
Henry Lamotte Oils GmbH	Almond oil, refined	1000003242	2
Lamotte / Noweda	Almond oil, refined	1000003242	2
Henry Lamotte Oils / Gehe	Almond oil, refined	1000003242	1
Henry Lamotte	Almond oil, refined	1000003242	3
Henry Lamotte / Phoenix	Almond oil, refined	8000915002	1
Euro OTC	Almond oil, refined	16071001	2
Bombastus	Almond oil, refined	304024	1
Lamotte / AHC	Almond oil, refined	1000003242	1
Cealo	Almond oil, refined	16071007	3
Caelo	Almond oil, refined	71/AKD15	1
Caesar & Loretz/Noweda	Almond oil, refined	16071002	1
Taoasis	Almond oil, refined	34371-125478	1
Caelo	Almond oil, refined	16071005	7
Henry Lamotte Oil	Almond oil, refined	8000915001	1
Bombastus	Almond oil, refined	302210	3
Lamotte/Phönix	Almond oil, refined	3243	1
Gehe	Almond oil, refined	16071007	1
Henry LAmotte Oils GmbH	Almond oil, refined	8001497001	6
lamotte/gehe	Almond oil, refined	8001497001	2
Phönix	Almond oil, refined	16071006	2
Bombastus	Almond oil, refined	302211	3
Lamotte/Gehe	Almond oil, refined	1000003242	1
Caelo	Almond oil, refined	16071006	12
Henry Lamotte/Noweda	Almond oil, refined	1000003242	1
Henry Lamotte Oils	Almond oil, refined	8001497001	4
Euro OTC	Almond oil, refined	16071006	1
Lamotte/Sanacorp	Almond oil, refined	1000003242	2

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	1000003242	1
Caelo	Almond oil, refined	16149802	1
Henry Lamotte	Almond oil, refined	8001497001	7
Caelo	Almond oil, refined	16071003	16
Caelo	Almond oil, refined	16071001	4
Henry Lamotte Oils Gmbh	Almond oil, refined	8000915002	1
L20/Lamotte	Almond oil, refined	1000003242	1
Caelo	Almond oil, refined	4916A-01950	1
Noweda/Henry Lamotte	Almond oil, refined	8000915001	1
Caesar & Loretz	Almond oil, refined	16071006	1
Caelo	Almond oil, refined	16144403	4
Alte Apotheke	Almond oil, refined	16071007	1
Gehe/henry	Almond oil, refined	8000915002	1
Henry Lamotte Oils / No...	Almond oil, refined	1000003242	1
Caelo	Almond oil, refined	16327302	31
Henry Lamotte Oils GmbH	Almond oil, refined	8001497001	5
Caelo	Almond oil, refined	1632303	1
Anzag, Henry Lamotte	Almond oil, refined	8001497001	1
Caelo	Almond oil, refined	16327303	29
PHÖNIX	Almond oil, refined	16327302	1
Bombastus	Almond oil, refined	16327302	4
Audor Pharma	Almond oil, refined	304023	1
henry lamotte	Almond oil, refined	8001497001	1
Caelo	Almond oil, refined	1633327302	1
Caesar & Loretz GmbH	Almond oil, refined	16327302	1
Lamotte/ Noweda	Almond oil, refined	8001497001	3
Henry Lamotte Oils GmbH	Almond oil, refined	8001497001	1
Lamotte/Gehe	Almond oil, refined	8001497001	2
Taoasis	Almond oil, refined	35171-125735	1
Henry Lamotte Oils / Gehe	Almond oil, refined	8001497001	1
Bombastus	Almond oil, refined	304023	1
Henry Lamotte Sanacorp	Almond oil, refined	8001497001	1
Sanacorp, 4,88EUR, 18.1.17	Almond oil, refined	16327303	1
Caelo	Almond oil, refined	16327304	14
Lamotte	Almond oil, refined	8001497001	2
Caesar & Loretz/Noweda	Almond oil, refined	16071003	1
Henry Lamotte/Sanacorp	Almond oil, refined	8001497001	3
HENRY LAMOTTE OILS GmbH	Almond oil, refined	8001497001	1
Lamotte/Noweda	Almond oil, refined	8000915002	1
Caelo	Almond oil, refined	16144404	1
Henry Lamotte Oils	Almond oil, refined	1000004431	3
Caelo	Almond oil, refined	1637302	1
Sanacorp WE:04.02.2017 ...	Almond oil, refined	8001497001	1
Bombastus	Almond oil, refined	306291	2
Caelo	Almond oil, refined	8001497001	2
Henry Lamotte / Noweda	Almond oil, refined	8001497001	2
Bombastus	Almond oil, refined	306292	3
Caelo	Almond oil, refined	25021707	1
Bahnhof-Apotheke	Almond oil, refined	-30-160809	1
Caelo	Almond oil, refined	74176327302	1
ALH	Almond oil, refined	8001497001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	1000004431	2
Caelo	Almond oil, refined	16327305	6
Caelo	Almond oil, refined	16327308	6
Phoenix	Almond oil, refined	163327303	1
Henry Lamotte Oils GMBH	Almond oil, refined	170316M8001497001	1
Caelo	Almond oil, refined	16327309	3
Sanacorp, 11.03.17, 5,46EUR	Almond oil, refined	16327309	2
Henry Lamotte GmbH	Almond oil, refined	8001497001	1
L 20/ Henry Lamotte	Almond oil, refined	1000004431	1

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Supplier	Substance	Batch	Spectra
GEHE	Almond oil, refined	16327302	1
Caelo	Almond oil, refined	1041703	1
Euro OTC	Almond oil, refined	1701036-01	3
Henry Lamotte	Almond oil, refined	1000004431	2
Henry Lamotte/Noweda	Almond oil, refined	1000004431	1
Gehe	Almond oil, refined	16327308	1
phönix	Almond oil, refined	8001497001	1
Henry Lamotte Oils GmbH	Almond oil, refined	1000004431	2
Gehe/Henry Lamotte	Almond oil, refined	1000004431	1
Caelo	Almond oil, refined	1000004431	3
Caelo	Almond oil, refined	21041713	1
Caesar & Loretz GmbH	Almond oil, refined	16327308	1
Henry Lamotte Oils/Noweda	Almond oil, refined	8002653001	2
Phönix	Almond oil, refined	16327303	1
Caelo	Almond oil, refined	17042206	3
Caelo	Almond oil, refined	28041732	1
Fagron	Almond oil, refined	16A05-B02-320278	1
Caelo	Almond oil, refined	16327311	14
Primavera WE 29.03.17 -...	Almond oil, refined	241C25	1
Lamotte	Almond oil, refined	1000004815	1
ACM	Almond oil, refined	KNC1560J16	1
Caelo	Almond oil, refined	17042203	18
Henry Lamotte/ Noweda	Almond oil, refined	1000004431	1
Caelo	Almond oil, refined	8002653001	6
Bombastus	Almond oil, refined	6862010	2
Caelo	Almond oil, refined	17042204	11
Lamotte/Noweda	Almond oil, refined	1000004431	1
Phoenix	Almond oil, refined	16327304	1
Bombastus	Almond oil, refined	8002653001	2
Caelo	Almond oil, refined	1080517/16327302	1
Gehe	Almond oil, refined	17042204	1
Henry Lamotte Oils	Almond oil, refined	8002653001	1
Hedinger	Almond oil, refined	1000004431	1
Henry Lamotte GmbH/ San...	Almond oil, refined	8002653001	1
Bombastus	Almond oil, refined	307298	4
Henry Lamotte Oils GmbH...	Almond oil, refined	8002653001	1
MPK	Almond oil, refined	36480-127127	1
Henry Lamotte/Noewda	Almond oil, refined	1000004431	1
Henry Lamotte Oils GmbH	Almond oil, refined	8002653001	1
Henry Lamotte/ Noweda	Almond oil, refined	8002653001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8002653001	2
L 20/ Henry Lamotte	Almond oil, refined	8002653001	2
Henry Lamotte Oils / Gehe	Almond oil, refined	8002653001	3
Henry Lamotte / Noweda	Almond oil, refined	8002653001	1
Bombastus	Almond oil, refined	307299	3
GEHE	Almond oil, refined	17042203	1
lamotte/gehe	Almond oil, refined	8002653001	2
Lamotte	Almond oil, refined	8002653001	3
Caelo	Almond oil, refined	72/AKD16	1
Fagron	Almond oil, refined	17042203	1
Finteler Apotheke	Almond oil, refined	8002653001	1
Caesar&Loretz	Almond oil, refined	16327311	1
Gehe/Lamotte	Almond oil, refined	8002653001	1
Henry Lamotte	Almond oil, refined	8002653001	4
Lamotte	Almond oil, refined	8002675001	5
Bombastus	Almond oil, refined	16327311	1
Lamotte/ Noweda	Almond oil, refined	8002675001	1
Caelo	Almond oil, refined	2091708	1
Henry Lamotte Oils/GEHE	Almond oil, refined	8002653001	1
Caelo	Almond oil, refined	17176501	14

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Supplier	Substance	Batch	Spectra
Caelo	Almond oil, refined	1042204	1
Henry Lamotte/ Noweda	Almond oil, refined	8002675001	1
L20/ Henry Lamotte	Almond oil, refined	8002675001	1
Henry Lamotte/Noweda	Almond oil, refined	8002675001	1
Caelo	Almond oil, refined	4017A-01950	1
Caelo	Almond oil, refined	6101708	1
Bombastus	Almond oil, refined	3089195381	1
Henry Lamotte Oils	Almond oil, refined	8002675001	2
Henry Lamotte/Noweda	Almond oil, refined	8002653001	1
Caelo	Almond oil, refined	17042209	6
Bombastus	Almond oil, refined	308919	3
Bombastus	Almond oil, refined	308920	1
Henry Lamotte	Almond oil, refined	8002675001	2
Caelo	Almond oil, refined	17176502	5
Bombastus	Almond oil, refined	310859	1
Caelo	Almond oil, refined	8002675001	1
Phönix/Lamotte	Almond oil, refined	1000003242	1
Caesar & Loretz/Noweda	Almond oil, refined	17176502	1
Lamotte/Noweda	Almond oil, refined	8002675001	1
Gehe/Lamotte	Almond oil, refined	8003167001	1
Sanacorp/Henry Lamotte ...	Almond oil, refined	8003167001	3
Sanacorp	Almond oil, refined	17176502	1
Caelo	Almond oil, refined	17176507	3
Henry Lamotte Oils GmbH...	Almond oil, refined	8002675001	1
Caelo	Almond oil, refined	28111705	1
Henry Lamotte	Almond oil, refined	8003167001	6
L10/HENRY LAMOTTE	Almond oil, refined	8003167001	1
Henry Lamotte Oils GmbH...	Almond oil, refined	8003167001	1
Caelo	Almond oil, refined	7176502	1
Caelo	Almond oil, refined	14121703	1
BioPräp	Almond oil, refined	E1610090	1
Caelo	Almond oil, refined	17207908	1
Lamotte	Almond oil, refined	80031670001	1
Caelo	Almond oil, refined	17176512	2
Caelo	Almond oil, refined	17176506	5
AHL	Almond oil, refined	8003167001	1
Lamotte	Almond oil, refined	8003167001	2
Caelo	Almond oil, refined	1716506	1
Caelo	Almond oil, refined	17176503	4
GEHE	Almond oil, refined	17176501	1
Caelo	Almond oil, refined	17176511	2
Lamotte/Phönix	Almond oil, refined	8003675001	1
Caelo	Almond oil, refined	17176508	2
Lamotte/Ebert	Almond oil, refined	8003167001	1
Bombastus	Almond oil, refined	17000425	1
hennry Lamotte oils	Almond oil, refined	8002675001	1
Fagron	Almond oil, refined	1707007-01	1
Sanacorp	Almond oil, refined	17176507	2
lamotte/gehe	Almond oil, refined	8003167001	1
Caesar & Loretz	Almond oil, refined	17207906	2
Caelo	Almond oil, refined	1716512	1
Fagron	Almond oil, refined	8003167001	1
Caelo	Almond oil, refined	17207906	5
Caelo	Almond oil, refined	17207905	8
Henry Lamotte Oils	Almond oil, refined	8003167001	1
Bombastus	Almond oil, refined	17000426	1
Henry Lamotte GmbH/Phönix	Almond oil, refined	8003167001	1
Lamotte	Almond oil, refined	8003503002	2
Caelo	Almond oil, refined	18015002	7
Caelo	Almond oil, refined	171176512	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Noewda	Almond oil, refined	8003503001	2
Gehe/Henry Lamotte	Almond oil, refined	8003503002	1
Caelo	Almond oil, refined	18015003	6
Lamotte/AHD	Almond oil, refined	8003503002	4
Sanacorp	Almond oil, refined	17176512	2
Sanacorp	Almond oil, refined	8003503002	1
Lamotte/Sanacorp	Almond oil, refined	8003503002	2
AHD	Almond oil, refined	18015002	1
Henry Lamotte/Spangro	Almond oil, refined	8003167001	1
Beiersdorf	Almond oil, refined	17207905	1
Caelo	Almond oil, refined	17207907	4
Sanacoro W.E:16.03.18 ...	Almond oil, refined	8003503002	1
Noweda/Henry	Almond oil, refined	8003503002	1
Caelo	Almond oil, refined	8003503002	2
Lamotte/Gehe	Almond oil, refined	8003503002	1
Lamotte / Noweda	Almond oil, refined	8003167001	1
Lamotte	Almond oil, refined	8003503001	1
Caelo	Almond oil, refined	18015007	12
Caelo	Almond oil, refined	18015008	8
Fargon/Gehe	Almond oil, refined	17207905	1
henry lamotte/gehe	Almond oil, refined	8003503001	1
Caelo	Almond oil, refined	18070604	1
L20/ Henry Lamotte	Almond oil, refined	8003503002	1
Lamotte	Almond oil, refined	8003885002	2
Henry Lamotte/Noweda	Almond oil, refined	8003885002	2
Lamotte / Gehe	Almond oil, refined	8003885002	2
Bombastus	Almond oil, refined	18000342	3
Caelo	Almond oil, refined	18015004	4
Lamotte/Ebert	Almond oil, refined	8003503002	1
Hennry Lamotte/Noweda	Almond oil, refined	8003503001	1
lamotte/noweda	Almond oil, refined	8003503001	1
Bombastus	Almond oil, refined	180003415618	1
Caelo	Almond oil, refined	9061813	1
Henry Lamotte Oils GmbH	Almond oil, refined	8003885002	1
GEHE	Almond oil, refined	18015007	1
hennry Lamotte oils	Almond oil, refined	8003503001	1
EuRho/Noweda	Almond oil, refined	8003885002	1
Caelo	Almond oil, refined	18015008-20180619Ma7	1
Caesar & Loretz/ Noweda	Almond oil, refined	18015007	1
Lamotte	Almond oil, refined	8003885001	1
Bombastus	Almond oil, refined	18000341	1
Henry Lamotte	Almond oil, refined	8003885002	1
Caelo	Almond oil, refined	18070608	6
Lamotte	Almond oil, refined	8003885002	1
Phönix/Fagon	Almond oil, refined	18015003	1
lamotte	Almond oil, refined	8003885002	1
Lamotte	Almond oil, refined	8004039003	2
Henry Lamotte/ Alliance	Almond oil, refined	8003885002	1
Caelo	Almond oil, refined	18070602	10
Henry Lamotte	Almond oil, refined	8004039003	1
Lamotte/Ebert	Almond oil, refined	8004039003	3
Bombastus	Almond oil, refined	18001782	3
Bionorica/Phönix	Almond oil, refined	18070602	1
Caelo	Almond oil, refined	18070603	4
Lamotte/Phönix	Almond oil, refined	8003503001	1
Bombastus	Almond oil, refined	18001781	2
Caelo	Almond oil, refined	18070605	3
Lamotte/Ebert+Jacobi	Almond oil, refined	8004039003	2
Jenne	Almond oil, refined	18070602	1
Caelo	Almond oil, refined	18184102	6

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils GmbH	Almond oil, refined	8004039003	2
henry lamotte oils/noweda	Almond oil, refined	8004390001	1
Lamotte/Sanacorp	Almond oil, refined	8004390001	1
Henry Lamotte Oils/ Gehe	Almond oil, refined	150001526/2	1
Caelo	Almond oil, refined	18184101	5
Caelo	Almond oil, refined	30111803	1
Kehr	Almond oil, refined	8004039003	1
Caelo	Almond oil, refined	18184108	2
Sanacorp	Almond oil, refined	18184113	1
Bombastus	Almond oil, refined	18004502	1
Caelo	Almond oil, refined	18184113	2
Caelo	Almond oil, refined	8004548002	1
Caelo	Almond oil, refined	18184114	1
Henry Lamotte Oils GmbH	Avocado oil, refined	122490	2
Caelo	Avocado oil, refined	5216901	1
Caelo	Avocado oil, refined	11227207	1
Taoasis	Avocado oil, refined	92010-105977	1
Caesar/Noweda	Avocado oil, refined	12064801	1
Bombastus	Avocado oil, refined	2091235000130	1
Lamotte	Avocado oil, refined	122490	1
Caelo	Avocado oil, refined	12064802	2
Caesar/Noweda	Avocado oil, refined	12064812	2
Caesar & Loretz GmbH	Avocado oil, refined	12H24-N02	1
EuRho	Avocado oil, refined	4111M-01960	1
Caelo	Avocado oil, refined	12064812	2
Anzag 16.10.12 ek: 3,90EUR	Avocado oil, refined	1204047-01	1
Caelo	Avocado oil, refined	12064813	3
Fagron	Avocado oil, refined	12H24-N02	1
Caelo	Avocado oil, refined	12064804	2
Bombastus	Avocado oil, refined	268579	1
Bombastus	Avocado oil, refined	274935	1
PVL	Avocado oil, refined	2807133	1
Anzag 06.02.2013	Avocado oil, refined	1208028-01	1
PVL	Avocado oil, refined	2410131	1
Caelo	Avocado oil, refined	12064810	2
Caelo	Avocado oil, refined	13031303	1
Caelo	Avocado oil, refined	12248303	2
Fagron	Avocado oil, refined	12F25-N12	1
Henry Lamotte Oils	Avocado oil, refined	122470	1
Caelo	Avocado oil, refined	11147607	1
Caelo	Avocado oil, refined	12248302	1
Henry Lamotte	Avocado oil, refined	130143	1
Caelo	Avocado oil, refined	12248310	11
Euro OTC	Avocado oil, refined	1112018-01	1
HenryLamotte/Phoenix	Avocado oil, refined	130143	1
Caelo	Avocado oil, refined	4718201	2
Euro OTC	Avocado oil, refined	1301017-01	1
Caesar & Loretz/ Noweda	Avocado oil, refined	12248312	2
Caelo	Avocado oil, refined	12248312	3
Lamotte	Avocado oil, refined	130143	1
Euro OTC	Avocado oil, refined	1304039-01	3
Caelo	Avocado oil, refined	12248315	2
Caelo	Avocado oil, refined	2081303	1
Sanacorp	Avocado oil, refined	1304039-01	1
Euro OTC	Avocado oil, refined	1301039-01	1
Caelo	Avocado oil, refined	13129103	9
Taoasis	Avocado oil, refined		1
Caelo	Avocado oil, refined	1304039-1	1
Noveda	Avocado oil, refined	13129103	1
Caelo	Avocado oil, refined	13129106	3

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Supplier	Substance	Batch	Spectra
Bombastus	Avocado oil, refined	267660	1
Sanacorp	Avocado oil, refined	713301202	1
Caelo	Avocado oil, refined	28111308	1
Euro OTC	Avocado oil, refined	1305046-01	5
Caelo	Avocado oil, refined	13129104	2
Lamotte/Sanacorp	Avocado oil, refined	130193	1
Caelo	Avocado oil, refined	13129108	7
Caelo	Avocado oil, refined	130172	1
Phönix 15.01.2014	Avocado oil, refined	279025	1
gehe 15.01.2014	Avocado oil, refined	1305046-01	1
Lamotte / Gehe	Avocado oil, refined	130193	1
Caelo	Avocado oil, refined	13129111	1
Phoenix 19.03.2014	Avocado oil, refined	13129102	1
Euro OTC	Avocado oil, refined	2041404	1
Caelo	Avocado oil, refined	13361407	2
Euro OTC	Avocado oil, refined	1402027-01	6
Caelo	Avocado oil, refined	13361406	6
VDL 06.05.Preis 6,70	Avocado oil, refined	700325//05R06	1
Lamotte/Sanacorp	Avocado oil, refined	130214	1
Caelo	Avocado oil, refined	13361414	7
Phoenix 29.04.2014	Avocado oil, refined	13361406	1
Fagron	Avocado oil, refined	13361406	1
Holdermann	Avocado oil, refined	13361406	1
Caelo	Avocado oil, refined	13361411	2
Euro OTC	Avocado oil, refined	1405007-01	3
Raben-Apotheke Mildenau	Avocado oil, refined	1402027-01	1
Caelo	Avocado oil, refined	3413M-01960	2
Lamotte/Sanacorp	Avocado oil, refined	124656	1
Euro OTC	Avocado oil, refined	13111404	1
Sanacorp	Avocado oil, refined	14170104	1
Caesar & Loretz GmbH Hi...	Avocado oil, refined	13361414	1
Euro OTC	Avocado oil, refined	1410027-01	4
Caelo	Avocado oil, refined	14170104	10
Euro OTC	Avocado oil, refined	30121424	1
Audor Pharma	Avocado oil, refined	13361414	1
Bombastus	Avocado oil, refined	286519	1
Caelo	Avocado oil, refined	13361441	1
Caelo	Avocado oil, refined	14363702	12
Henry Lamotte Oils GmbH	Avocado oil, refined	130243	1
Henry lamotte Oils GmbH...	Avocado oil, refined	130243	1
Euro OTC	Avocado oil, refined	1501015-01	3
Caelo	Avocado oil, refined	14363705	4
Euro OTC	Avocado oil, refined	28041506	1
Caelo	Avocado oil, refined	14170105	1
Euro OTC	Avocado oil, refined	150101501	1
Caelo	Avocado oil, refined	14363703	10
Bombastus	Avocado oil, refined	289240	1
Caelo	Avocado oil, refined	14363704	1
Henry Lamotte Oils GmbH	Avocado oil, refined	125529	2
Caelo	Avocado oil, refined	19081501	1
Henry Lamotte/Sana	Avocado oil, refined	1000001098	1
Lamotte/Sanacorp	Avocado oil, refined	1000001098	1
Henry Lamotte/Anzag	Avocado oil, refined	1000001098	2
Bombastus	Avocado oil, refined	294183	4
Caelo	Avocado oil, refined	14363706	2
Caelo	Avocado oil, refined	15155203	2
Caelo	Avocado oil, refined	15155207	2
Euro OTC	Avocado oil, refined	1501015V-01	1
Caelo	Avocado oil, refined	1436705	1
Caelo	Avocado oil, refined	15155206	8

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Supplier	Substance	Batch	Spectra
Caelo	Avocado oil, refined	15268203	12
Caelo	Avocado oil, refined	15268205	5
VDL;11.3.16;2,77EUR	Avocado oil, refined	15268203	1
Bombastus	Avocado oil, refined	298491	1
Lamotte GmbH	Avocado oil, refined	1000001451	1
Nachprüfung	Avocado oil, refined	143637021	1
Henry Lamotte Oils GmbH	Avocado oil, refined	1000001098	1
Bombastus	Avocado oil, refined	300403	2
Caesar & Loretz/Noweda	Avocado oil, refined	15268203	1
Caelo	Avocado oil, refined	300403	1
Caelo	Avocado oil, refined	15426305	9
Caelo	Avocado oil, refined	15268213	2
Ebert u. Jacobi 16.0...	Avocado oil, refined	302706	1
HENRY LAMOTTE OILS GmbH	Avocado oil, refined	1000001451	1
Caelo	Avocado oil, refined	1605034-01	1
Caelo	Avocado oil, refined	15426306	2
Caelo	Avocado oil, refined	15426304	6
Caelo	Avocado oil, refined	2515I-01960	1
Caelo	Avocado oil, refined	15426303	2
Euro OTC	Avocado oil, refined	1605034-01	6
Caelo	Avocado oil, refined	16104702	16
Caelo	Avocado oil, refined	16104703	3
Spinnrad GmbH	Avocado oil, refined	916301202	1
phönix	Avocado oil, refined	16185908	1
Sanacorp, 16.02.17, 3,04EUR	Avocado oil, refined	16104702	1
Bombastus	Avocado oil, refined	306789	1
Caelo	Avocado oil, refined	16185907	7
Caelo	Avocado oil, refined	16185908	5
Sanacorp,31.03.17, 5,20EUR	Avocado oil, refined	16185908	1
Caelo	Avocado oil, refined	1618908	1
Lamotte / phönix	Avocado oil, refined	1000004363	1
Caelo	Avocado oil, refined	17038802	18
phönix	Avocado oil, refined	17038802	1
Caelo	Avocado oil, refined	17038804	1
Caelo	Avocado oil, refined	17038803	2
Lamotte /Phönix	Avocado oil, refined	8002616001	1
Caesar & Loretz/Noweda	Avocado oil, refined	17038802	1
Wepa/ Phoenix	Avocado oil, refined	17038802	1
Henry Lamotte/AHD	Avocado oil, refined	1000004363	1
Caesar & Loretz/Noweda	Avocado oil, refined	17038803	1
Caelo	Avocado oil, refined	17038811	3
Phönix / Alliance Healt...	Avocado oil, refined	17038802	1
Caelo	Avocado oil, refined	18007501	5
Euro OTC	Avocado oil, refined	1605034-03	2
Sanacorp	Avocado oil, refined	18007502	1
Caelo	Avocado oil, refined	18044901	9
Caelo	Avocado oil, refined	18044905	1
Caelo	Avocado oil, refined	3071802	1
Caelo	Avocado oil, refined	12091807	1
Caelo	Avocado oil, refined	16081811	1
Caelo	Avocado oil, refined	18044909	1
Caelo	Avocado oil, refined	5121805	1
Caelo	Avocado oil, refined	18044908	2
Caelo	Avocado oil, refined	18044913	1
Caelo	Avocado oil, refined	30011904	1
Spinnrad	Avocado oil, refined	917301202	1
Caelo	Soy oil, refined	14194107	1
Caelo	Soy oil, refined	15239310	3
Caelo	Soy oil, refined	16081309	2
Caelo	Soy oil, refined	17300001	2

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Supplier	Substance	Batch	Spectra
Caelo	Soy oil, refined	16347104	1
Sanacorp	Decyl oleate	13378403	1
Caelo	Decyl oleate	13378403	3
Raben-Apotheke Mildena	Decyl oleate	14814-B03-292195	1
Caelo	Decyl oleate	14005002	1
Caelo	Decyl oleate	13291606	2
Caelo	Decyl oleate	15082206	3
Caelo	Decyl oleate	15047702	2
Caelo	Decyl oleate	14254603	1
Sanacorp	Decyl oleate	15082206	1
Euro OTC	Decyl oleate	1309018-01	1
Caelo	Decyl oleate	15248405	7
Caelo	Decyl oleate	15191502	3
Caelo	Decyl oleate	15191501	1
Caelo	Decyl oleate	15082205	1
Caelo	Decyl oleate	15393704	1
Euro OTC	Decyl oleate	16107101	1
Caelo	Decyl oleate	15248408	1
Caelo	Decyl oleate	16107101	13
Caelo	Decyl oleate	16224302	2
Caelo	Decyl oleate	16224309	1
Caelo	Decyl oleate	16223409	1
Caelo	Decyl oleate	17215601	8
17215601	Decyl oleate	17215601	1
Caelo	Decyl oleate	18069404	1
Caelo	Decyl oleate	18069402	4
Caelo	Decyl oleate	18069407	1
Nachtestung	Decyl oleate	288/18	1

- 98 249 spectra from 582 *Apo-Ident* customers from a total of 28 386 batches from a further 314 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	3340	0	32 495
Type B	0	3500	15	75 063
Type C	0	9637	73	97 989

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 % (> 99.9704 %)	100.0000 % (> 99.8204 %)
Type B	100.0000 % (> 99.9695 %)	99.5733 % (> 99.4879 %)
Type C	100.0000 % (> 99.6528 %)	99.2482 % (> 99.2173 %)

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.

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
30647	31350	1.84	47.80
31215	31215	0.00	48.83
31376	31350	2.83	46.06
30679	31729	2.29	87.94
31178	31729	4.70	85.61
31540	31729	2.79	87.72
31729	31729	0.00	87.75
31792	31729	0.96	86.34
31016	31016	0.00	55.29
31875	31729	7.60	84.14
31274	31274	0.00	52.11
31344	31274	2.22	52.53
31161	31161	0.00	61.45
31384	31161	2.95	61.63
31246	31246	0.00	32.67
33510	30981	4.44	62.75
31346	31801	1.77	33.16
32680	32680	0.00	33.75
33059	33059	0.00	31.04
31250	31250	0.00	29.51
31337	31770	2.04	37.33
31770	31770	0.00	37.12
30754	31496	6.68	31.87
30863	31496	8.23	31.72
31496	31496	0.00	31.64
31375	31375	0.00	28.39
32683	32683	0.00	28.96
33060	33060	0.00	32.17
31172	31172	0.00	74.49
31326	33064	5.02	79.09
30840	33060	4.41	31.67
30855	31708	2.62	69.06
33064	33064	0.00	72.99
31460	31460	0.00	65.95
31034	31523	0.93	31.54
31572	31572	0.00	64.96
31523	31523	0.00	28.72
31589	31572	2.78	66.03

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Sample ID	Reference sample ID	Distance to reference sample	Distance to next foreign sample
31708	31708	0.00	65.47
31775	31775	0.00	67.21
31322	31322	0.00	42.47
33254	31322	6.05	41.52
33876	31322	4.33	40.65
30873	31350	4.79	47.72
31350	31350	0.00	46.17
33313	33313	0.00	46.81
30878	31361	5.44	69.61
31361	31361	0.00	65.40
31332	31332	0.00	49.73
31677	31361	7.11	67.49
31609	31609	0.00	50.98
31825	31361	5.61	64.32
33917	33917	0.00	50.11
31336	31336	0.00	34.98
31662	31801	2.40	33.00
31801	31801	0.00	33.93
33067	33067	0.00	32.74
30981	30981	0.00	65.15
31362	30981	4.64	62.39
31121	31121	0.00	61.47
31210	31210	0.00	57.36
33309	33309	0.00	59.55
32989	30981	6.09	60.07
31491	31491	0.00	53.95
31122	31122	0.00	21.25
31833	31833	0.00	16.27
33255	31122	2.67	19.37
32730	31210	2.14	55.91
31356	32195	1.43	34.41
31382	31382	0.00	41.83
31585	31801	3.31	35.87
31584	31382	1.22	42.63
32195	32195	0.00	32.94
33070	33070	0.00	38.31
32991	31801	3.81	34.81
31378	31491	4.30	55.18
31834	31016	4.69	57.75
31216	31216	0.00	64.54
31380	31216	2.28	63.82
33916	33916	0.00	65.39
31217	31217	0.00	53.31
31374	31274	2.11	51.92
32745	31217	3.14	52.23

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Triglycerides, medium-chain
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	31483-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	AR-14-FG-012976-01
Caelo	Triglycerides, m...	13348507	31484	40	20131028
Euro OTC	Triglycerides, m...	1402019-01	31485	40	20140317
Euro OTC	Triglycerides, m...	1509022	31771	40	20151007*
Euro OTC	Triglycerides, m...	1511011	31804	40	20151125*
Euro OTC	Triglycerides, m...	1601050	31955	40	20160218*

Validation samples

A total of 222872 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 *Triglycerides, medium-chain*. These samples are listed above in the [calibration samples](#) section.
- 35595 spectra from a total of 841 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 520 spectra of 16 reference samples from the substance/substance group *Triglycerides, medium-chain*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Triglycerides, medium-chain	13392404	31483 [†]	20
Caelo	Triglycerides, medium-chain	13348507	31484 [†]	20
Euro OTC	Triglycerides, medium-chain	1402019-01	31485 [†]	20
Euro OTC	Triglycerides, medium-chain	1509022	31771 [†]	20
Euro OTC	Triglycerides, medium-chain	1511011	31804 [†]	20
Euro OTC	Triglycerides, medium-chain	1601050	31955 [†]	20
Caelo	Triglycerides, medium-chain	161243	32204	40
Euro OTC	Triglycerides, medium-chain	1603041	32278	40
Euro OTC	Triglycerides, medium-chain	1606035	32464	40
Caelo	Triglycerides, medium-chain	162385	32697	40
Euro OTC	Triglycerides, medium-chain	1701023	32983	40
Caelo	Triglycerides, medium-chain	170160	33077	40
Caelo	Triglycerides, medium-chain	170784	33312	40
Caelo	Triglycerides, medium-chain	172177	33672	40
Euro OTC	Triglycerides, medium-chain	1709014	33845	40
Euro OTC	Triglycerides, medium-chain	1801034	33997	40

*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.

[†]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*.

- 78558 spectra from a total of 1814 batches from further 350 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.

- 1854 spectra from 431 *Apo-Ident* customers from 408 batches from the substance/substance group *Triglycerides, medium-chain*.

Supplier	Substance	Batch	Spectra
Fagron	Triglycerides, medium-chain	15H03-B03-525120	7
Caelo	Triglycerides, medium-chain	10356205	1
Caelo	Triglycerides, medium-chain	11207501	1
Caelo	Triglycerides, medium-chain	11301106	12
Fiebig	Triglycerides, medium-chain	11207502	1
Noweda	Triglycerides, medium-chain	11207501	1
Fagron	Triglycerides, medium-chain	12A20-N16	1
Fagron	Triglycerides, medium-chain	10K09-0031	1
Fagron	Triglycerides, medium-chain	11G28-N07	1
Euro OTC	Triglycerides, medium-chain	1007009-01	1
Euro OTC	Triglycerides, medium-chain	1105005-01	2
Fagron	Triglycerides, medium-chain	110321	1
Fagron	Triglycerides, medium-chain	11L19-N20	1
EuRho	Triglycerides, medium-chain	1111037-01	1
Caelo	Triglycerides, medium-chain	6061201	1
Caelo	Triglycerides, medium-chain	12078603	12
Caelo	Triglycerides, medium-chain	11D29-N01	1
Caelo	Triglycerides, medium-chain	13081205	1
Caesar/Noweda	Triglycerides, medium-chain	11301104	1
Gehe	Triglycerides, medium-chain	12078603	1
Caelo	Triglycerides, medium-chain	11207502	2
Phönix Gotha	Triglycerides, medium-chain	1205015-01	2
Caelo	Triglycerides, medium-chain	11301109	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	12078603	1
Caelo	Triglycerides, medium-chain	12078604	11
Caelo	Triglycerides, medium-chain	27101202	1
Noweda	Triglycerides, medium-chain	11301109	2
Euro OTC	Triglycerides, medium-chain	1205015-01	3
Fagron	Triglycerides, medium-chain	12C27-N02	1
Anzag	Triglycerides, medium-chain	12078604	2
Phönix 29.10.12	Triglycerides, medium-chain	12078604	1
Fagron	Triglycerides, medium-chain	12I04-N07	8
Anzag 11.10.12	Triglycerides, medium-chain	11301109	1
Euro OTC	Triglycerides, medium-chain	58448	2
Caelo	Triglycerides, medium-chain	41101-01998	1
Caelo	Triglycerides, medium-chain	11154601	1
Sanacorp	Triglycerides, medium-chain	12078604	1
Euro OTC	Triglycerides, medium-chain	67940	2
Caelo	Triglycerides, medium-chain	12078605	2
Bionorica	Triglycerides, medium-chain	58448	11
Fagron	Triglycerides, medium-chain	1210002-01	3
Caelo	Triglycerides, medium-chain	20270312-3	1
Caelo	Triglycerides, medium-chain	1256505	1
Anzag	Triglycerides, medium-chain	12256505	1
Phönix Gotha	Triglycerides, medium-chain	1210002-01	2

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	8011301	1
Caelo	Triglycerides, medium-chain	12256505	22
Euro OTC	Triglycerides, medium-chain	1210002-01	5
Caelo	Triglycerides, medium-chain	12256504	6
Caelo	Triglycerides, medium-chain	11207503	1
Noveda	Triglycerides, medium-chain	12256505	1
Caelo	Triglycerides, medium-chain	1225605	1
Caelo	Triglycerides, medium-chain	1210002-01	1
Phönix	Triglycerides, medium-chain	1210002-01	2
Caelo	Triglycerides, medium-chain	1226505	1
Caelo	Triglycerides, medium-chain	10356208	1
Caelo	Triglycerides, medium-chain	12356901	6
Caelo	Triglycerides, medium-chain	1225604	1
Euro OTC	Triglycerides, medium-chain	1111037-01	1
Caelo	Triglycerides, medium-chain	18031307	1
Caelo	Triglycerides, medium-chain	3113506	1
Eurho	Triglycerides, medium-chain	1205015-01	1
Caelo	Triglycerides, medium-chain	12253802	4
Caelo	Triglycerides, medium-chain	1803111	2
Caelo	Triglycerides, medium-chain	12356903	9
Phönix	Triglycerides, medium-chain	11320508	1
Phönix Gotha	Triglycerides, medium-chain	1302004-01	3
Euro OTC	Triglycerides, medium-chain	130200401	1
Caelo	Triglycerides, medium-chain	11154602	2
BionoricPhoenix	Triglycerides, medium-chain	958448	1
THC Pharma	Triglycerides, medium-chain	2012050379	1
Caelo	Triglycerides, medium-chain	12356909	4
Fagron	Triglycerides, medium-chain	12K07-N22	5
Caelo	Triglycerides, medium-chain	12356904	1
Caelo	Triglycerides, medium-chain	12356908	21
Caelo	Triglycerides, medium-chain		4
Henry Lamotte	Triglycerides, medium-chain	1302004-01	1
Caelo	Triglycerides, medium-chain	2113Q01998	1
Caelo	Triglycerides, medium-chain	1302004-01	1
Caelo	Triglycerides, medium-chain	31051303	1
Euro OTC	Triglycerides, medium-chain	1302004-01	12
Eurho/Phoenix	Triglycerides, medium-chain	13095303	2
Gehe	Triglycerides, medium-chain	12356908	1
Fagron	Triglycerides, medium-chain	13E24-N04	13
Caelo	Triglycerides, medium-chain	1115805	1
Sanacorp	Triglycerides, medium-chain	12356908	1
Sanacorp	Triglycerides, medium-chain	12356903	1
Fagron	Triglycerides, medium-chain	12104-N07	1
Phönix	Triglycerides, medium-chain	12356901	1
Caelo	Triglycerides, medium-chain	13095304	10
Caelo	Triglycerides, medium-chain	50775165	1
Caelo	Triglycerides, medium-chain	13098601	16
Bionorica	Triglycerides, medium-chain	69719	2
Caelo	Triglycerides, medium-chain	AKD5	1
Phönix	Triglycerides, medium-chain	1300204-01	1
Caelo	Triglycerides, medium-chain	3413I-01998	1
Caelo	Triglycerides, medium-chain	23082013B	1
Ebert	Triglycerides, medium-chain	13098601	1
Caelo	Triglycerides, medium-chain	613A-01998	1
Gehe	Triglycerides, medium-chain	1302004-01	1
Phoenix	Triglycerides, medium-chain	13098601	1
Euro OTC	Triglycerides, medium-chain	1302004-02	8
HCT Pharma	Triglycerides, medium-chain	2012100833	1
Caelo	Triglycerides, medium-chain	2101305	1
Gehe	Triglycerides, medium-chain	13177102	3

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Supplier	Substance	Batch	Spectra
Bionorica Ethics	Triglycerides, medium-chain	62424	3
Caelo	Triglycerides, medium-chain	13177102	21
Caelo	Triglycerides, medium-chain	12101303	1
Phönix	Triglycerides, medium-chain	13177102	1
Caelo	Triglycerides, medium-chain	13095306	3
celo/phönix	Triglycerides, medium-chain	13095306	1
Caelo	Triglycerides, medium-chain	13098605	5
	Triglycerides, medium-chain	13E24-N04	3
Alliance Healthcare	Triglycerides, medium-chain	1302004-02	1
Phagron GmbH / Anzag	Triglycerides, medium-chain	12K07-N22	1
Pharimex	Triglycerides, medium-chain	75316	2
Sanacorp	Triglycerides, medium-chain	13177102	1
Caesar & Loretz GmbH	Triglycerides, medium-chain	13098601	1
Caelo	Triglycerides, medium-chain	101001	1
Caelo	Triglycerides, medium-chain	13177101	9
Caelo	Triglycerides, medium-chain	18111309	1
Bionorica Ethics	Triglycerides, medium-chain	75316	1
Fagron	Triglycerides, medium-chain	13H02-N03	1
Phönix Gotha	Triglycerides, medium-chain	1302004-02	1
Caelo	Triglycerides, medium-chain	13348502	7
Fagron	Triglycerides, medium-chain	120604	2
Fagron	Triglycerides, medium-chain	13H02N03	1
Caesar&loretz,Phoenix	Triglycerides, medium-chain	13177102	1
Sanacorp	Triglycerides, medium-chain	130502	1
Caelo	Triglycerides, medium-chain	13210301	1
EuRho/Phönix	Triglycerides, medium-chain	13020004-02	1
Sanacorp	Triglycerides, medium-chain	13348502	2
Euro OTC	Triglycerides, medium-chain	1309025-01	2
EuRho	Triglycerides, medium-chain	4121201	1
Caelo	Triglycerides, medium-chain	614M1998	1
Fagron	Triglycerides, medium-chain	130502	1
Noweda	Triglycerides, medium-chain	101001	1
Caelo	Triglycerides, medium-chain	13348503	8
Caesar/Noweda	Triglycerides, medium-chain	13177109	1
Caelo	Triglycerides, medium-chain	13348501	5
Gehe	Triglycerides, medium-chain	1309025-01	1
Fagron	Triglycerides, medium-chain	13J21-N06	1
Caelo	Triglycerides, medium-chain	13348506	5
Caelo	Triglycerides, medium-chain	13177111	1
Fagron	Triglycerides, medium-chain	13j25-b11	1
Caelo	Triglycerides, medium-chain	13392404	2
Euro OTC	Triglycerides, medium-chain	1402019-01	2
Bionorica	Triglycerides, medium-chain	79406	1
Caelo	Triglycerides, medium-chain	14098306	3
Caelo	Triglycerides, medium-chain	14098305	1
Caesar&loretz,Phoenix	Triglycerides, medium-chain	14219003	1
Caelo	Triglycerides, medium-chain	14219003	10
Fagron	Triglycerides, medium-chain	14G25-B03-296937	6
	Triglycerides, medium-chain	1406016-01	1
Hansen&Rosenthal/Phönix	Triglycerides, medium-chain	1406016-01	1
Sanacorp/Bionorica Ethics	Triglycerides, medium-chain	83204	1
Euro OTC	Triglycerides, medium-chain	1406016-01	3
Caelo	Triglycerides, medium-chain	14219007	10
Caelo	Triglycerides, medium-chain	14219009	8
Phönix Gotha	Triglycerides, medium-chain	1411009-01	2
Sanacorp	Triglycerides, medium-chain	56/AKD3	1
Euro OTC	Triglycerides, medium-chain	1411009-01	8
Sanacorp	Triglycerides, medium-chain	14219003	3
AHD 23.12.2014	Triglycerides, medium-chain	14219003	1
Caelo	Triglycerides, medium-chain	11031502	1

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Supplier	Substance	Batch	Spectra
Gehe	Triglycerides, medium-chain	14D23-B02-293330	1
Euro OTC	Triglycerides, medium-chain	1411009-02	6
THC Pharma/Phönix	Triglycerides, medium-chain		1
Caelo	Triglycerides, medium-chain	14380802	8
Euro OTC	Triglycerides, medium-chain	2614A-01998	1
Fagron	Triglycerides, medium-chain	14G25B03	1
Caelo	Triglycerides, medium-chain	2014030260	1
THC Pharm	Triglycerides, medium-chain		1
Caelo	Triglycerides, medium-chain	14380803	8
Bionorica	Triglycerides, medium-chain	87112	2
Euro OTC	Triglycerides, medium-chain	141100901	1
THC/Phönix	Triglycerides, medium-chain	2014030260	2
Caelo	Triglycerides, medium-chain	6051503	1
Sanacorp	Triglycerides, medium-chain	58/AKD4	1
Euro OTC	Triglycerides, medium-chain	41141312	1
Caelo	Triglycerides, medium-chain	14330503	1
Fagron	Triglycerides, medium-chain	14K28-N01	2
Fagron	Triglycerides, medium-chain	14D11-N01	1
Phönix Gotha	Triglycerides, medium-chain	1411009-02	1
Fagron	Triglycerides, medium-chain	14G25-B03-305014	1
Euro OTC	Triglycerides, medium-chain	1411009-002	1
THC Pharma/Phönix	Triglycerides, medium-chain	85533	1
Caelo	Triglycerides, medium-chain	14380804	24
Bionorica Ethics/Noweda	Triglycerides, medium-chain	85113	3
EuRho/Phönix	Triglycerides, medium-chain	1411009-02	1
Euro OTC	Triglycerides, medium-chain	1504029-01	7
Bionorica	Triglycerides, medium-chain	87113	1
Caelo	Triglycerides, medium-chain	15080603	1
Gehe	Triglycerides, medium-chain	1504029-01	1
Fagron	Triglycerides, medium-chain	12/04-N07	1
Phönix Gotha	Triglycerides, medium-chain	1504029-01	2
ACM	Triglycerides, medium-chain	KNC0254J15	5
Euro OTC	Triglycerides, medium-chain	150402901	1
Fagron	Triglycerides, medium-chain	140514	1
THC/Sana	Triglycerides, medium-chain	2015070139	2
Caelo	Triglycerides, medium-chain	15139607	19
Euro OTC	Triglycerides, medium-chain	1504029-02	11
Fagron	Triglycerides, medium-chain	14D08-N01	1
Caelo	Triglycerides, medium-chain	15139608	27
Fagron	Triglycerides, medium-chain	15D24-B03-525046	2
Fagron	Triglycerides, medium-chain	14G25-B03	3
Fagron	Triglycerides, medium-chain	14G25-B03-302294	12
Caelo	Triglycerides, medium-chain	15139605	14
Anzag/Henry Lamotte	Triglycerides, medium-chain	1504029-02	1
Caelo	Triglycerides, medium-chain	150402902	1
Caelo	Triglycerides, medium-chain	13159607	1
Caelo	Triglycerides, medium-chain	15239802	1
Fagron	Triglycerides, medium-chain	15D24B03525046	1
Euro OTC	Triglycerides, medium-chain	1509022-01	4
THC Pharma/Phönix	Triglycerides, medium-chain	90059	2
Euro OTC	Triglycerides, medium-chain	1509022-01G	1
Caelo	Triglycerides, medium-chain	15272005	21
Caelo	Triglycerides, medium-chain	1411009-02	1
Caelo	Triglycerides, medium-chain	1504029-02	1
Caelo	Triglycerides, medium-chain	59/AKD7	1
Fagron	Triglycerides, medium-chain		2
Euro OTC	Triglycerides, medium-chain	1511011-01	11
Caelo	Triglycerides, medium-chain	15139604	14
Hansen & Rosenthal/Noweda	Triglycerides, medium-chain	1509022-01	1
Caelo	Triglycerides, medium-chain	15272003	27

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Supplier	Substance	Batch	Spectra
Bionorica ethics	Triglycerides, medium-chain	91713	2
Caelo	Triglycerides, medium-chain	15272006	14
Euro OTC	Triglycerides, medium-chain	150902201	1
THC Pharma/Noweda	Triglycerides, medium-chain	2014030260	1
Caelo	Triglycerides, medium-chain	15012016	1
Noweda	Triglycerides, medium-chain	15139608	1
Sanacorp	Triglycerides, medium-chain	15139608	1
Caelo	Triglycerides, medium-chain	1539605	1
Bionorica	Triglycerides, medium-chain	91719	2
Miglyol	Triglycerides, medium-chain	15139605	1
Phoenix	Triglycerides, medium-chain	15139605	1
Caelo	Triglycerides, medium-chain	15270004	1
Sanacorp	Triglycerides, medium-chain		1
Euro OTC	Triglycerides, medium-chain	141100902	1
THC Pharm/Sanacorp	Triglycerides, medium-chain	91714	1
Caelo	Triglycerides, medium-chain	15272004	36
Caelo	Triglycerides, medium-chain	60492256	1
Euro OTC	Triglycerides, medium-chain	160105001	2
Euro OTC	Triglycerides, medium-chain	151101101	1
Fagron	Triglycerides, medium-chain	15H03-B03-312924	5
Noweda	Triglycerides, medium-chain	14219007	1
Bionorica/Noweda	Triglycerides, medium-chain	93566	1
Fagron	Triglycerides, medium-chain	15D24-B03-307759	1
Euro OTC	Triglycerides, medium-chain	1601050-01	32
Fagron	Triglycerides, medium-chain	15H03-B03	3
WE:05.04.2016 Sanacorp	Triglycerides, medium-chain	15272006	1
Cremer Oleo GmbH & Co K...	Triglycerides, medium-chain	15H03-B03-525120	1
Fagron	Triglycerides, medium-chain	150518	2
Caelo	Triglycerides, medium-chain	15379609	12
Bombastus	Triglycerides, medium-chain	15139608	1
Fagron	Triglycerides, medium-chain	15H03-B03-525189	2
/Sanacorp 02.05.2016	Triglycerides, medium-chain	15272004	1
Caelo	Triglycerides, medium-chain	1527003	1
Caelo	Triglycerides, medium-chain	1601050-01	2
THC Pharma/Noweda	Triglycerides, medium-chain	2015070139	1
Fagron	Triglycerides, medium-chain	15H03-B03-312351	9
Bionorica ethics/Sanaco...	Triglycerides, medium-chain	97884	1
THC Pharma / Alliance H...	Triglycerides, medium-chain	93566	1
Bionorica ethics/Sanaco...	Triglycerides, medium-chain	93569	1
Sanacorp	Triglycerides, medium-chain	93574	1
apo-ident/ Phönix	Triglycerides, medium-chain	1601050-01	1
Sanacorp	Triglycerides, medium-chain	6/AKD12	1
Gehe	Triglycerides, medium-chain	1601050-0	1
Bionorica/Sanacorp WE:	Triglycerides, medium-chain	85532	1
Euro OTC	Triglycerides, medium-chain	16030410	1
Caelo	Triglycerides, medium-chain	15379608	17
bionorica	Triglycerides, medium-chain	93574	1
Caelo	Triglycerides, medium-chain	15379611	6
Sanacorp	Triglycerides, medium-chain	15379608	1
THC Pharma/Phönix	Triglycerides, medium-chain	93571	1
Caelo	Triglycerides, medium-chain	15374201	1
Gehe	Triglycerides, medium-chain	1601050-01	1
Bionorica Ethics	Triglycerides, medium-chain	95112	1
Caelo	Triglycerides, medium-chain	1572006	1
Bionorica Ethics/Noweda	Triglycerides, medium-chain	95112	1
Euro OTC	Triglycerides, medium-chain	160105	1
bionorica / Phoenix / 0...	Triglycerides, medium-chain	94874	1
Caolo- Phönix	Triglycerides, medium-chain	14098306	1
THC Pharm	Triglycerides, medium-chain	93571	1
Caelo	Triglycerides, medium-chain	152722007	1

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	15272007	10
Fagron	Triglycerides, medium-chain	15H03-B03-318529	7
Euro OTC	Triglycerides, medium-chain	1603041-01	5
Euro OTC	Triglycerides, medium-chain	700282	1
Euro OTC	Triglycerides, medium-chain	1603041-02	20
Ichthyol/Phönix	Triglycerides, medium-chain	1603041-02	2
Fagron	Triglycerides, medium-chain	15H03-B03-525225	2
Caelo	Triglycerides, medium-chain	15H03-B03-312351	1
Ebert 12.10.16	Triglycerides, medium-chain	15379611	1
Gehe	Triglycerides, medium-chain	1603041-02	1
Caelo	Triglycerides, medium-chain	1537908	1
Fagron	Triglycerides, medium-chain	15H03-B03-525271	3
THC Pharma	Triglycerides, medium-chain	93573	1
Caelo	Triglycerides, medium-chain	15272008	2
Caeolo/Noweda	Triglycerides, medium-chain	15379608	1
THC Pharma/Noweda	Triglycerides, medium-chain	93573	1
Bionorica Ethics	Triglycerides, medium-chain	94875	1
Bionorica Ethics	Triglycerides, medium-chain	94879	1
THC Pharm	Triglycerides, medium-chain	93573	2
Gehe	Triglycerides, medium-chain	1539608	1
Caelo	Triglycerides, medium-chain	15379610	11
Bionorica	Triglycerides, medium-chain	150930	1
Euro OTC	Triglycerides, medium-chain	15379612	1
Bombastus	Triglycerides, medium-chain	1603041-02	1
Caelo	Triglycerides, medium-chain	16124304	5
Euro OTC	Triglycerides, medium-chain	160304102	1
Caelo	Triglycerides, medium-chain	15379612	11
Fagron	Triglycerides, medium-chain	15H03-B03318529	1
Caesar & Loretz GmbH Hi...	Triglycerides, medium-chain	15379610	1
Gehe/EuRo	Triglycerides, medium-chain	1603041-02	2
Phoenix	Triglycerides, medium-chain	15H03-B03-525271	1
Fagron	Triglycerides, medium-chain	15H03-B03-525331	3
bionorica/Phoenix/29.12...	Triglycerides, medium-chain	95080	1
Alliance Healthcare	Triglycerides, medium-chain	1606035-01	1
Euro OTC	Triglycerides, medium-chain	61140578	1
Caelo	Triglycerides, medium-chain	15376911	5
Gehe	Triglycerides, medium-chain	15379612	1
Bionorica ethics	Triglycerides, medium-chain	94875	1
Caelo	Triglycerides, medium-chain	95084	4
Fagron	Triglycerides, medium-chain	15H03-B03-325574	2
GEHE	Triglycerides, medium-chain	1603041-01	1
Caelo	Triglycerides, medium-chain	1603041-02	3
Caelo	Triglycerides, medium-chain	16124307	47
Euro OTC	Triglycerides, medium-chain	15379610	1
Caelo	Triglycerides, medium-chain	16124309	1
Euro OTC	Triglycerides, medium-chain	1606035-01	22
Fagron	Triglycerides, medium-chain	15403-B03-318529	1
Caelo	Triglycerides, medium-chain	16124308	13
Anzag	Triglycerides, medium-chain	16124304	1
bionorica / Phoenix Lei...	Triglycerides, medium-chain	95087	1
Fagron	Triglycerides, medium-chain	15H03-B03-525383	1
Euro OTC	Triglycerides, medium-chain	1600105001	1
Alliance/Fargon	Triglycerides, medium-chain	15H03-B03-525331	1
Caelo	Triglycerides, medium-chain	15379602/170314M	1
Hubertus Apotheke	Triglycerides, medium-chain	15379610	1
EuRho	Triglycerides, medium-chain	1406016-01	1
Fagron	Triglycerides, medium-chain	15H03-Bo3-318529	1
Fagron	Triglycerides, medium-chain	15H03-Bo3-311235	1
Euro/ Phönix	Triglycerides, medium-chain	1117Q-01998	1
GEHE	Triglycerides, medium-chain	95080	1

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Supplier	Substance	Batch	Spectra
Bionorica Ethics	Triglycerides, medium-chain	98570	2
Bionorica	Triglycerides, medium-chain	95080	1
hochhaus-Apotheke	Triglycerides, medium-chain	1606035-01	1
THC Rezeptur-Set	Triglycerides, medium-chain	95084	2
GEHE	Triglycerides, medium-chain	1603041-02	1
Gehe	Triglycerides, medium-chain	16124307	2
Euro OTC	Triglycerides, medium-chain	1606035-02	14
Fargon	Triglycerides, medium-chain	150518	1
Fargon/Phönix	Triglycerides, medium-chain	150518	1
Caelo	Triglycerides, medium-chain	161243047	1
Caelo	Triglycerides, medium-chain	16124307	1
Caelo	Triglycerides, medium-chain	170420MT/16124308	1
THC/Gehe	Triglycerides, medium-chain	98572	1
Caesar/Alliance	Triglycerides, medium-chain	14219007	1
Caelo	Triglycerides, medium-chain	1001008-01	1
Caelo	Triglycerides, medium-chain	16288504	1
THC Pharma	Triglycerides, medium-chain	98572	2
Caelo	Triglycerides, medium-chain	15H03-B03-328583	1
Caelo	Triglycerides, medium-chain	1537961	1
bionorica/ Phoenix Leip. . .	Triglycerides, medium-chain	98569	1
THC/Noweda	Triglycerides, medium-chain	105040	8
Caelo	Triglycerides, medium-chain	11051706	1
Caelo	Triglycerides, medium-chain	15H-B03-525120	1
Caelo	Triglycerides, medium-chain	15H-B03-525331	1
Gehe	Triglycerides, medium-chain	15272004	1
Fagron	Triglycerides, medium-chain	16H18-B01-525420	4
Fagron	Triglycerides, medium-chain	15H03-B03-328583	3
Fagron	Triglycerides, medium-chain	16H18-B01	3
Fagron	Triglycerides, medium-chain	15H03-B03-322735	3
Caelo	Triglycerides, medium-chain	16124306/170518M	1
Bionorica ethics/Kehr	Triglycerides, medium-chain	95082	1
Gehe	Triglycerides, medium-chain	17016001	3
Hedinger	Triglycerides, medium-chain	1606035-02	2
Caelo	Triglycerides, medium-chain	17016001	25
bionorica/ Phoenix Leip. . .	Triglycerides, medium-chain	103900	1
Bionorica ethics/Sanaco. . .	Triglycerides, medium-chain	150930	1
Caelo	Triglycerides, medium-chain	10124307	1
Kehr	Triglycerides, medium-chain	98570	1
Caelo	Triglycerides, medium-chain	1606035-01	1
Bionorica/Krieger	Triglycerides, medium-chain	98569	1
GEHE	Triglycerides, medium-chain	98569	1
Pharmachem	Triglycerides, medium-chain	1606035-02	2
Henry Lamotte GmbH/ San. . .	Triglycerides, medium-chain	16124307	1
Fagron	Triglycerides, medium-chain	16H18-B01-331028	4
Caelo	Triglycerides, medium-chain	17016007	28
Bionorica/Noweda	Triglycerides, medium-chain	98573	1
Caelo	Triglycerides, medium-chain	15H03-B03 (BTM-Set)	1
Euro OTC	Triglycerides, medium-chain	160427	1
Noweda/Bionorica	Triglycerides, medium-chain	103901	1
Caelo	Triglycerides, medium-chain	16124310	1
THC Pharm / Phönix	Triglycerides, medium-chain	95083	1
Caelo	Triglycerides, medium-chain	150518	1
Bionorica/Noweda	Triglycerides, medium-chain	103899	2
Bionorica/Noweda	Triglycerides, medium-chain	103900	1
Anzag	Triglycerides, medium-chain	98569	2
Fagron	Triglycerides, medium-chain	15H03-B03-318530	1
Gehe	Triglycerides, medium-chain	16124310	1
Bionorica / Alliance	Triglycerides, medium-chain	103902	1
Caelo	Triglycerides, medium-chain	17016002	14
GEHE	Triglycerides, medium-chain	17016001	1

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Supplier	Substance	Batch	Spectra
Fagron	Triglycerides, medium-chain	16H18-B01-525477	1
Caelo	Triglycerides, medium-chain	13124310	1
Henry Lamotte Oils GmbH...	Triglycerides, medium-chain	15379602	1
Caelo	Triglycerides, medium-chain	27071702	1
THC/Gehe	Triglycerides, medium-chain	105042	13
Fagron	Triglycerides, medium-chain	16h18-b01-331028	1
Caesar&Lorenz	Triglycerides, medium-chain	17016001	1
Fagron	Triglycerides, medium-chain	16H18-B01-525506	5
Caelo	Triglycerides, medium-chain	1606035-02	1
Bionorica Ethics	Triglycerides, medium-chain	103899	1
Bionorica/Noweda	Triglycerides, medium-chain	103902	1
Bionorica ethics/Noweda	Triglycerides, medium-chain	105039	2
Caelo	Triglycerides, medium-chain	16H18-B01-525506	1
Euro OTC	Triglycerides, medium-chain	1606035-03	6
Gehe	Triglycerides, medium-chain	160427	1
THC Pharma	Triglycerides, medium-chain	105042	1
Bionorica Ethics	Triglycerides, medium-chain	105039	1
Phoenix Leipzig 05.09.2...	Triglycerides, medium-chain	105039	1
Caelo	Triglycerides, medium-chain	1606035-03	1
GEHE	Triglycerides, medium-chain	1606035-03	1
GEHE	Triglycerides, medium-chain	105039	1
Fiebig	Triglycerides, medium-chain	17016007	1
Euro OTC	Triglycerides, medium-chain	GT-8009020616	1
Bionorica	Triglycerides, medium-chain	107078	1
phönix	Triglycerides, medium-chain	1606035	1
THC-Pharm GmbH	Triglycerides, medium-chain	105042	1
Caelo	Triglycerides, medium-chain	16H18-B01	1
Caelo	Triglycerides, medium-chain	17016008	11
Bionorica Ethics	Triglycerides, medium-chain	107079	1
Caesar & Loretz GmbH, P...	Triglycerides, medium-chain	17016001	1
Bionorica/Noweda	Triglycerides, medium-chain	107079	1
Caelo	Triglycerides, medium-chain	14101704	1
GEHE	Triglycerides, medium-chain	107078	1
Noweda	Triglycerides, medium-chain	17016001	1
THC Pharma	Triglycerides, medium-chain	105043	6
Defektur	Triglycerides, medium-chain	1710910-b	1
Apo-Ident/Noweda	Triglycerides, medium-chain	1606035-02	1
Jenne	Triglycerides, medium-chain	107081	1
Bionorica	Triglycerides, medium-chain	107080	2
Fagron	Triglycerides, medium-chain	27101710	1
Bionorica/Noweda	Triglycerides, medium-chain	107080	1
Caelo	Triglycerides, medium-chain	17194901	2
Sanacorp WE:27.09.17 ...	Triglycerides, medium-chain	107077	1
THC-Pharm GmbH	Triglycerides, medium-chain	105043	2
Fagron	Triglycerides, medium-chain	1606035-01	1
Fagron	Triglycerides, medium-chain	15H03-B03322735	1
Phönix/Bionorica	Triglycerides, medium-chain	105042	1
Caelo	Triglycerides, medium-chain	16238508	1
Euro OTC	Triglycerides, medium-chain	1701023-01	5
Bionorica ethics	Triglycerides, medium-chain	103898	1
Caesar und Loretz GmbH	Triglycerides, medium-chain	17016007	1
THC Pharma CPM/Phönix	Triglycerides, medium-chain	105043	4
Gehe	Triglycerides, medium-chain	16H18-B01-525477	1
THC/Gehe	Triglycerides, medium-chain	105043	10
Caelo	Triglycerides, medium-chain	171123M/17016009	1
GEHE	Triglycerides, medium-chain	107077	2
Bionorica/Kehr	Triglycerides, medium-chain	151130	1
Caelo	Triglycerides, medium-chain	4817A-01998	1
Bionorica	Triglycerides, medium-chain	4817A-03960	1
THC Pharm GmbH	Triglycerides, medium-chain	105043	1

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Supplier	Substance	Batch	Spectra
Gehe	Triglycerides, medium-chain	117111	1
Bionorica	Triglycerides, medium-chain	105038	3
Euro OTC	Triglycerides, medium-chain	1709014-01	10
Fagron	Triglycerides, medium-chain	160427	1
Bionorica/Noweda	Triglycerides, medium-chain	105038	1
Sanacorp	Triglycerides, medium-chain	17016007	2
eigene Herstellung	Triglycerides, medium-chain	1712907-a	1
THC	Triglycerides, medium-chain	105041	2
THC Pharma / Alliance H...	Triglycerides, medium-chain	109953	1
Caelo	Triglycerides, medium-chain	18121703	1
Caesar	Triglycerides, medium-chain	17016007	1
Bionorica Ethics	Triglycerides, medium-chain	107080	1
Fagron	Triglycerides, medium-chain	17F16-B02-525622	3
Bionorica ethics	Triglycerides, medium-chain	109951	4
Caelo	Triglycerides, medium-chain	180109M/17236204	1
Gehe	Triglycerides, medium-chain	117113	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109951	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	105038	2
Bionorica/ Noweda	Triglycerides, medium-chain	109950	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109952	1
Bionirca ethics / Allia...	Triglycerides, medium-chain	109951	1
Caelo	Triglycerides, medium-chain	1504029-01	1
Bionorica/Kehr	Triglycerides, medium-chain	109951	1
Euro OTC	Triglycerides, medium-chain	71161992	1
Fiebig	Triglycerides, medium-chain	17236203	3
THC/Gehe	Triglycerides, medium-chain	105041	2
Phönix/Bionorica	Triglycerides, medium-chain	109950	3
THC Pharma/ Phönix	Triglycerides, medium-chain	105041	3
Caelo	Triglycerides, medium-chain	1706007	1
Pharmachem	Triglycerides, medium-chain	109952	2
Caelo	Triglycerides, medium-chain	17236202	18
Caelo	Triglycerides, medium-chain	180206M/17236204	1
Bionorica Ethics	Triglycerides, medium-chain	109951	2
Kehr/THC Pharma	Triglycerides, medium-chain	105041	1
Caelo	Triglycerides, medium-chain	17236203	6
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109950	2
Noweda	Triglycerides, medium-chain	17236202	1
Caelo	Triglycerides, medium-chain	17194902	8
THC	Triglycerides, medium-chain	105043	3
Bionorica Ethics	Triglycerides, medium-chain	16689	1
Phönix/Bionorica	Triglycerides, medium-chain	109949	2
Fagron	Triglycerides, medium-chain	161123	4
Bionorica Ethics	Triglycerides, medium-chain	109709	1
Fagron	Triglycerides, medium-chain	17F16-B02-340113	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	109949	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116689	1
Bionorica Ethics	Triglycerides, medium-chain	109949	1
Bionorica Ethics	Triglycerides, medium-chain	109950	1
Gehe	Triglycerides, medium-chain	1709014-01	1
Fagron	Triglycerides, medium-chain	16H18-B01-525531	1
Gehe	Triglycerides, medium-chain	109951	1
THC Pharm GmbH	Triglycerides, medium-chain	105041	1
THC Pharm GmbH	Triglycerides, medium-chain	105040	1
Bionorica/phoenix	Triglycerides, medium-chain	1318A-03960	1
Caelo	Triglycerides, medium-chain	17361001	29
Bionorica ethics/Phoenix	Triglycerides, medium-chain	109950	1
Fagron	Triglycerides, medium-chain	17F16-B02	1
Kehr	Triglycerides, medium-chain	109949	1
Euro OTC	Triglycerides, medium-chain	1709014-01-20180404M	1
Kehr	Triglycerides, medium-chain	109953	1

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Supplier	Substance	Batch	Spectra
Kehr/THC Pharma	Triglycerides, medium-chain	105040	2
Bionorica/Alliance Heal. ...	Triglycerides, medium-chain	116687	2
THC/Gehe	Triglycerides, medium-chain	VT131217-1	1
Bombastus	Triglycerides, medium-chain	17236202	2
Gehe	Triglycerides, medium-chain	109949	1
Fagron	Triglycerides, medium-chain	17F16-B02-525657	1
Caelo	Triglycerides, medium-chain	17F16-B02-341874	1
Bionorica Dronabinol-Set	Triglycerides, medium-chain	107078	1
GEHE	Triglycerides, medium-chain	116687	1
Euro OTC	Triglycerides, medium-chain	1801034-01	16
Caelo	Triglycerides, medium-chain	17361002	6
Caelo	Triglycerides, medium-chain	23041803	1
Bionorica /Phönix	Triglycerides, medium-chain	116692	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	170517	2
Bionorica Ethics	Triglycerides, medium-chain	109959	1
Sanacorp	Triglycerides, medium-chain	17361001	4
bio	Triglycerides, medium-chain	105038	1
Bombastus	Triglycerides, medium-chain	1801034-01	1
Bionorica Ethics	Triglycerides, medium-chain	116688	3
Caelo	Triglycerides, medium-chain	18118804	1
Fagron	Triglycerides, medium-chain	170517	1
Bionorica/Kehr	Triglycerides, medium-chain	116686	1
Noweda/THC Pharma	Triglycerides, medium-chain	105044	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116646	1
THC/Gehe	Triglycerides, medium-chain	105044	1
THC	Triglycerides, medium-chain	180522PMT0000105043	1
bionoricaEthiks/Phoenix	Triglycerides, medium-chain	116687	1
Kehr	Triglycerides, medium-chain	116586	1
THC Pharma / Phönix	Triglycerides, medium-chain	109948	1
Bionorica	Triglycerides, medium-chain	116693	2
AHD	Triglycerides, medium-chain	17361002	3
Bionorica ethics	Triglycerides, medium-chain	116687	1
THC/Gehe	Triglycerides, medium-chain	109948	2
THC Pharma	Triglycerides, medium-chain	161123	1
THC Pharma / Phönix	Triglycerides, medium-chain	116690	4
Bionorica/Alliance Heal. ...	Triglycerides, medium-chain	116642	2
Bionorica/Phoenix	Triglycerides, medium-chain	171102	1
Fagron	Triglycerides, medium-chain	109948	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116642	1
GEHE	Triglycerides, medium-chain	109949	1
Bombastus	Triglycerides, medium-chain	17361001	1
GEHE	Triglycerides, medium-chain	1801034-01	1
THC Pharma	Triglycerides, medium-chain	116690	2
Fagron	Triglycerides, medium-chain	18A19-B04-525725	3
Fagron	Triglycerides, medium-chain	17F16-B02-341874	1
Sanacorp	Triglycerides, medium-chain	17361002	2
Kehr	Triglycerides, medium-chain	1801034-01	1
Kehr	Triglycerides, medium-chain	11664	1
Bionorica ethics	Triglycerides, medium-chain	170517	1
Bionorica/Phoenix	Triglycerides, medium-chain	116642	1
Fagron	Triglycerides, medium-chain	116638	1
Bionorica Ethics	Triglycerides, medium-chain	116646	2
Bionorica/Alliance Heal. ...	Triglycerides, medium-chain	116639	2
Bionorica/Alliance Heal. ...	Triglycerides, medium-chain	116638	1
Bionorica/Alliance Heal. ...	Triglycerides, medium-chain	116640	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116639	2
Kehr/THC Pharma	Triglycerides, medium-chain	116690	1
THC Pharm GmbH	Triglycerides, medium-chain	116690	2
Bionorica SE/Phönix	Triglycerides, medium-chain	116643	1
Caelo	Triglycerides, medium-chain	21071804	1

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Supplier	Substance	Batch	Spectra
Fagron	Triglycerides, medium-chain	1801034-01	1
Caelo	Triglycerides, medium-chain	18118801	19
THC/Phönix	Triglycerides, medium-chain	116690	1
Bionorica /Phönix	Triglycerides, medium-chain	116640	2
Bionorica ethics/Phoenix	Triglycerides, medium-chain	116641	1
Bionorica Ethics	Triglycerides, medium-chain	116640	1
Caelo	Triglycerides, medium-chain	18118802	6
THC/Gehe	Triglycerides, medium-chain	116690	1
Delta	Triglycerides, medium-chain	17361001	1
Bionorica/Alliance Heal...	Triglycerides, medium-chain	116643	3
Euro OTC	Triglycerides, medium-chain	1805020-01	3
Sanacorp	Triglycerides, medium-chain	18118801	3
BionoricaEthics	Triglycerides, medium-chain	116643	2
Krieger	Triglycerides, medium-chain	17361002	1
Bionorica	Triglycerides, medium-chain	116645	2
THC/Noweda	Triglycerides, medium-chain	116691	2
Fagron	Triglycerides, medium-chain	18A19-B04-345025	3
Kehr	Triglycerides, medium-chain	116639	1
Gehe/Bionorica	Triglycerides, medium-chain	116641	1
THC Pharm	Triglycerides, medium-chain	116691	1
Bionorica	Triglycerides, medium-chain	116688	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	109949	1
Apomix	Triglycerides, medium-chain	116587	1
Noweda/THC Pharma	Triglycerides, medium-chain	109948	1
Kehr/THC Pharma	Triglycerides, medium-chain	116691	1
Bionorica / Phoenix 03...	Triglycerides, medium-chain	116643	1
Fagron	Triglycerides, medium-chain	18A19-B04	2
Fagron	Triglycerides, medium-chain	18A19B04525725	1
Bionorica/Phönix	Triglycerides, medium-chain	116642	1
Allianz	Triglycerides, medium-chain	120015	1
Bionorica/Gehe	Triglycerides, medium-chain	116638	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123014	2
Fagron	Triglycerides, medium-chain	18A19/B04/348506	1
Noweda /THC Pharma	Triglycerides, medium-chain	109709	1
Noweda/Bionorica	Triglycerides, medium-chain	123013	1
Gehe-Eurho 10.09.18	Triglycerides, medium-chain	71143373	1
Bionorica/Phönix	Triglycerides, medium-chain	120015	1
Caelo	Triglycerides, medium-chain	17361003	1
Sanacorp	Triglycerides, medium-chain	18118807	1
Euro OTC	Triglycerides, medium-chain	18118807	2
Bionorica	Triglycerides, medium-chain	180325	1
Fagron	Triglycerides, medium-chain	18A19-B04-525726	1
Caelo	Triglycerides, medium-chain	18118808	6
Euro OTC	Triglycerides, medium-chain	1709014-02	2
Bionorica /Phönix	Triglycerides, medium-chain	120015	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123997	3
Caelo	Triglycerides, medium-chain	181188802	1
Euro OTC	Triglycerides, medium-chain	71143373	1
Fagron	Triglycerides, medium-chain	17F16B02-341874	1
gehe-06.11.18	Triglycerides, medium-chain	12016	1
Caelo	Triglycerides, medium-chain	18118807	15
Bionorica	Triglycerides, medium-chain	123998	6
THC/ KEHR	Triglycerides, medium-chain	116637	1
Bionorica ethics	Triglycerides, medium-chain	123998	3
Euro OTC	Triglycerides, medium-chain	18118801	1
Bionorica/Sanacorp	Triglycerides, medium-chain	123997	1
THC PHARM	Triglycerides, medium-chain	116644	1
Caelo	Triglycerides, medium-chain	1805020-01	1
Jenne	Triglycerides, medium-chain	116646	1
Gehe 07.12.18	Triglycerides, medium-chain	123015	1

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerides, medium-chain	28111806	1
Kehr/THC Pharma	Triglycerides, medium-chain	116644	2
Gehe	Triglycerides, medium-chain	1805020-01	1
Bionorica ethics/Phoenix	Triglycerides, medium-chain	123999	2
Bionorica/Sanacorp	Triglycerides, medium-chain	123999	1
Sanacorp	Triglycerides, medium-chain	18238902	3
Fagron	Triglycerides, medium-chain	18G13-B01-353059	1
Euro OTC	Triglycerides, medium-chain	1801034-02	3
Bionorica/Sanacorp	Triglycerides, medium-chain	125596	1
Kehr/THC Pharma	Triglycerides, medium-chain	VT231118-1	1
Bionorica	Triglycerides, medium-chain	125596	1
Caelo	Triglycerides, medium-chain	18238901	2
Dr. Wolff/Gehe	Triglycerides, medium-chain	1801034-02	1
Bionorica	Triglycerides, medium-chain	127733	1

- 106 105 spectra from 582 *Apo-Ident* customers from a total of 30 276 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 *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	240	0	35 595
Type B	0	520	0	78 558
Type C	0	1841	13	106 105

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 % (> 99.9705 %)	100.0000 % (> 97.5000 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.8462 %)
Type C	100.0000 % (> 99.6449 %)	99.2988 % (> 99.1370 %)

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.

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	22.37
31484	31804	1.86	19.01
31485	31804	2.10	18.99
31771	31771	0.00	21.04
31804	31804	0.00	18.42
31955	31955	0.00	19.72

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Triglycerol diisostearate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30756-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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 222 872 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.
- 35 715 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 80 spectra of 2 reference samples from the substance/substance group *Triglycerol diisostearate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Triglycerol diisostearate	163311	33094	40
Caelo	Triglycerol diisostearate	180592	34073	40

- 78 998 spectra from a total of 1828 batches from further 350 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.

- 185 spectra from 95 *Apo-Ident* customers from 37 batches from the substance/substance group *Triglycerol diisostearate*.

Supplier	Substance	Batch	Spectra
Caelo	Triglycerol diisostearate	11074801	1
Caelo	Triglycerol diisostearate	11162902	1
Caelo	Triglycerol diisostearate	12018501	2
Caelo	Triglycerol diisostearate	12018503	3
Caelo	Triglycerol diisostearate	12133303	5

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Supplier	Substance	Batch	Spectra
Caelo	Triglycerol diisostearate	12359401	3
Gehe	Triglycerol diisostearate	12359401	1
Caelo	Triglycerol diisostearate	12359405	7
Caelo	Triglycerol diisostearate	9082013A	1
Caelo	Triglycerol diisostearate	13081002	4
Caelo	Triglycerol diisostearate	13236704	8
Caelo	Triglycerol diisostearate	13399003	6
Phoenix	Triglycerol diisostearate	14054802	1
Caelo	Triglycerol diisostearate	14054802	2
Caesar & Loretz GmbH	Triglycerol diisostearate	14054802	4
Caelo	Triglycerol diisostearate	14118801	8
Gehe	Triglycerol diisostearate	14118801	2
Audor Pharma	Triglycerol diisostearate	14118801	1
Caelo	Triglycerol diisostearate	14118804	2
Caelo	Triglycerol diisostearate	14193003	4
Fagron	Triglycerol diisostearate	14193003	1
Caelo	Triglycerol diisostearate	14193008	6
Caelo	Triglycerol diisostearate	14380504	7
Noweda	Triglycerol diisostearate	14380504	1
Noweda	Triglycerol diisostearate	14193008	1
Caelo	Triglycerol diisostearate	15137505	12
Sanacorp	Triglycerol diisostearate	15137505	1
Caelo	Triglycerol diisostearate	15283401	1
Caelo	Triglycerol diisostearate	15283404	10
Caelo	Triglycerol diisostearate	15283402	6
Caelo	Triglycerol diisostearate	15283403	1
Caelo	Triglycerol diisostearate	15283406	2
Caesar/Noweda	Triglycerol diisostearate	15283404	1
Caelo	Triglycerol diisostearate	16179202	1
Caelo	Triglycerol diisostearate	15283405	2
Caelo	Triglycerol diisostearate	152835405	1
Caelo	Triglycerol diisostearate	16062502	17
Caelo	Triglycerol diisostearate	16179205	2
Caelo	Triglycerol diisostearate	16331101	12
Phoenix	Triglycerol diisostearate	15283405	1
Gehe	Triglycerol diisostearate	16062502	1
Caesar&Loretz GmbH	Triglycerol diisostearate	16331101	1
Gehe	Triglycerol diisostearate	16331101	1
Caesar & Loretz	Triglycerol diisostearate	16331101	1
Caelo	Triglycerol diisostearate	16331103	7
Caelo	Triglycerol diisostearate	27101713	1
Caelo	Triglycerol diisostearate	16179207	1
Caelo	Triglycerol diisostearate	16331102	1
Caelo	Triglycerol diisostearate	18059201	12
Caelo	Triglycerol diisostearate	16331107	1
Bombastus	Triglycerol diisostearate	18059201	1
Caelo	Triglycerol diisostearate	18059207	3
Caelo	Triglycerol diisostearate	18183802	2

- 107 774 spectra from 582 *Apo-Ident* customers from a total of 30 644 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 *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	35 715
Type B	0	80	0	78 998
Type C	0	182	3	107 774

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 % (> 99.9707 %)	100.0000 % (> 95.0000 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 92.5000 %)
Type C	100.0000 % (> 99.6450 %)	98.3784 % (> 96.7568 %)

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.

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	40.04
31219	31219	0.00	45.40
31338	31219	6.64	44.76

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Verbena oil, nature-identical
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30666-2019-05-24
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	<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>
Appendix F	Addition to the second-stage models

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.

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	40	20150714

Validation samples

A total of 222 872 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 *Verbena oil, nature-identical*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 100 spectra of 3 reference samples from the substance/substance group *Verbena oil, nature-identical*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Verbena oil, nature-identical	15229809	32071 [†]	20
Caelo	Verbena oil, nature-identical	16290903	33604	40
Caelo	Verbena oil, nature-identical	172589	33906	40

- 78 978 spectra from a total of 1827 batches from further 350 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*.

[†]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*.

Supplier	Substance	Batch	Spectra
Caelo	Verbena oil, nature-identical	13141704	1

- 107 958 spectra from 582 *Apo-Ident* customers from a total of 30 679 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 *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	160	0	35 675
Type B	0	100	0	78 978
Type C	0	1	0	107 958

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 94.0000 %)
Type C	100.0000 % (> 99.6537 %)	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.

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	2.37	56.90
31194	31194	0.00	59.07
31399	31194	3.36	58.37
32071	31194	4.34	56.20

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Viscous base solution (NRF p. 20)**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30659-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140124
Caelo	Viscous base sol. ...	14109401	31658	40	AR-15-FG-007904-01
Caelo	Viscous base sol. ...	15265401	31790	40	20150825
Caelo	Viscous base sol. ...	153888	31884	40	20151124*

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Viscous base sol...	153889	31886	40	20151124*
Caelo	Viscous base sol...	154121	31887	40	20151130*
Caelo	Viscous base sol...	153890	31890	40	20151124*
Caelo	Viscous base sol...	153894	31893	40	20151130*
Caelo	Viscous base sol...	153895	31896	40	20151130*
Caelo	Viscous base sol...	153896	31897	40	20151130*
Caelo	Viscous base sol...	153897	31900	40	20151130*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 480 spectra of 12 reference samples from the substance/substance group *Viscous base solution* (NRF p. 20). These samples are listed above in the [calibration samples](#) section.
- 35 355 spectra from a total of 835 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 2480 spectra of 62 reference samples from the substance/substance group *Viscous base solution* (NRF p. 20).

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Viscous base solution (NRF p...	14020401	31354 [†]	20
Caelo	Viscous base solution (NRF p...	14109401	31658 [†]	20
Caelo	Viscous base solution (NRF p...	15265401	31790 [†]	20
Caelo	Viscous base solution (NRF p...	153888	31882	60
Caelo	Viscous base solution (NRF p...	153888	31883	60
Caelo	Viscous base solution (NRF p...	153888	31884 [†]	20
Caelo	Viscous base solution (NRF p...	153889	31885	60
Caelo	Viscous base solution (NRF p...	153889	31886 [†]	20
Caelo	Viscous base solution (NRF p...	154121	31887 [†]	20
Caelo	Viscous base solution (NRF p...	154121	31888	60
Caelo	Viscous base solution (NRF p...	153890	31889	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	Viscous base solution (NRF p...	153890	31890 [†]	20
Caelo	Viscous base solution (NRF p...	153892	31891	60
Caelo	Viscous base solution (NRF p...	153893	31892	60
Caelo	Viscous base solution (NRF p...	153894	31893 [†]	20
Caelo	Viscous base solution (NRF p...	153894	31894	60
Caelo	Viscous base solution (NRF p...	153895	31895	60
Caelo	Viscous base solution (NRF p...	153895	31896 [†]	20
Caelo	Viscous base solution (NRF p...	153896	31897 [†]	20
Caelo	Viscous base solution (NRF p...	153896	31898	60
Caelo	Viscous base solution (NRF p...	153897	31899	60
Caelo	Viscous base solution (NRF p...	153897	31900 [†]	20
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

- 76 598 spectra from a total of 1777 batches from further 350 substances. These spectra were recorded by *HiperScan GmbH*. *Type B* samples are documented within this entire report. If the

[†]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*.

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.

- 872 spectra from 93 *Apo-Ident* customers from 374 batches from the substance/substance group *Viscous base solution (NRF p. 20)*.

Supplier	Substance	Batch	Spectra
Noweda	Viscous base solution (NRF p...	11176201	1
Caelo	Viscous base solution (NRF p...	11140501	1
Gehe	Viscous base solution (NRF p...	12019201	1
Caelo	Viscous base solution (NRF p...	12093901	1
Caelo	Viscous base solution (NRF p...	12019002	2
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
Fagron	Viscous base solution (NRF p...	31101205	1
Noweda	Viscous base solution (NRF p...	12093601	2
Sanacorp	Viscous base solution (NRF p...	12127401	2
Noweda	Viscous base solution (NRF p...	12019401	1
Sanacorp	Viscous base solution (NRF p...	12231301	4
Fagron	Viscous base solution (NRF p...	1206F003	3
Caelo	Viscous base solution (NRF p...	12094101	2
Caelo	Viscous base solution (NRF p...	12231201	1
Fagron	Viscous base solution (NRF p...	1111F003	1
Caelo	Viscous base solution (NRF p...	12127501	1
Fagron	Viscous base solution (NRF p...	1203C004	2
Herstellung	Viscous base solution (NRF p...	20040113-2	1
Herstellung	Viscous base solution (NRF p...	20040113-1	1
Herstellung	Viscous base solution (NRF p...	20090113-1	2
Caelo	Viscous base solution (NRF p...	12127601	2
Caelo	Viscous base solution (NRF p...	1224991	1
Caelo	Viscous base solution (NRF p...	12249901	3
Caelo	Viscous base solution (NRF p...	20250113-1	1
Caelo	Viscous base solution (NRF p...	11176401	1
Caelo	Viscous base solution (NRF p...	12249801	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
Caelo	Viscous base solution (NRF p...	12309101	11
Herstellung	Viscous base solution (NRF p...	20220213-2	1
Herstellung	Viscous base solution (NRF p...	20220213-1	1
Herstellung	Viscous base solution (NRF p...	20080313-1	1
Caelo	Viscous base solution (NRF p...	12309202	3
Herstellung	Viscous base solution (NRF p...	20130313-1	1
Herstellung	Viscous base solution (NRF p...	2150313-1	1
Herstellung	Viscous base solution (NRF p...	20210313-2	1
Herstellung	Viscous base solution (NRF p...	20210313-1	1
Fagron	Viscous base solution (NRF p...	1301F003	3
Caelo	Viscous base solution (NRF p...	13006401	6
Herstellung	Viscous base solution (NRF p...	20260313-2	1
Herstellung	Viscous base solution (NRF p...	20260313-1	1
Fagron	Viscous base solution (NRF p...	22041304	1
Caelo	Viscous base solution (NRF p...	13006201	3

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Supplier	Substance	Batch	Spectra
Herstellung	Viscous base solution (NRF p...	20190413-1	1
Herstellung	Viscous base solution (NRF p...	20190413-2	1
Caelo	Viscous base solution (NRF p...	13006001	3
Herstellung	Viscous base solution (NRF p...	20030513-1	1
Caelo	Viscous base solution (NRF p...	12019001	1
Herstellung	Viscous base solution (NRF p...	20100513-1	1
Herstellung	Viscous base solution (NRF p...	20160513-2	1
Fagron	Viscous base solution (NRF p...	1301F002	1
Caelo	Viscous base solution (NRF p...	13006501	1
Herstellung	Viscous base solution (NRF p...	20220513-2	1
Herstellung	Viscous base solution (NRF p...	20280513-1	1
Caelo	Viscous base solution (NRF p...	13096101	6
Herstellung	Viscous base solution (NRF p...	20050613-1	1
Herstellung	Viscous base solution (NRF p...	20130613-1	1
Herstellung	Viscous base solution (NRF p...	20100613-1	1
Herstellung	Viscous base solution (NRF p...	20140613-1	1
Caelo	Viscous base solution (NRF p...	13150801	3
Caelo	Viscous base solution (NRF p...	12309201	6
Caelo	Viscous base solution (NRF p...	13151101	5
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
Caelo	Viscous base solution (NRF p...	13071302	1
Caelo	Viscous base solution (NRF p...	13150802	2
Caelo	Viscous base solution (NRF p...	13096001	2
Herstellung	Viscous base solution (NRF p...	20120713-1	1
Herstellung	Viscous base solution (NRF p...	20260713-1	1
Herstellung	Viscous base solution (NRF p...	20260713-2	1
Herstellung	Viscous base solution (NRF p...	20300713-2	1
Fagron	Viscous base solution (NRF p...	1111F001	1
Caelo	Viscous base solution (NRF p...	13158002	2
Caelo	Viscous base solution (NRF p...	13151201	4
Herstellung	Viscous base solution (NRF p...	20150813-3	1
Caesar & Loretz GmbH	Viscous base solution (NRF p...	13158201	1
Herstellung	Viscous base solution (NRF p...	20150813-4	1
Caelo	Viscous base solution (NRF p...	3013A-03142	1
Caelo	Viscous base solution (NRF p...	13158101	2
Anzag	Viscous base solution (NRF p...	13158201	2
Herstellung	Viscous base solution (NRF p...	20060913-1	1
Caelo	Viscous base solution (NRF p...	13158001	10
Herstellung	Viscous base solution (NRF p...	20060913-2	1
Caelo	Viscous base solution (NRF p...	13158201	2
Herstellung	Viscous base solution (NRF p...	2030913-1	1
Caelo	Viscous base solution (NRF p...	13246901	1
Herstellung	Viscous base solution (NRF p...	20200913-1	1
Caelo	Viscous base solution (NRF p...	13229001	4
Caelo	Viscous base solution (NRF p...	13228901	8
Herstellung	Viscous base solution (NRF p...	20270913-2	1
Herstellung	Viscous base solution (NRF p...	131018001	1
Herstellung	Viscous base solution (NRF p...	20041013-1	1
Herstellung	Viscous base solution (NRF p...	131018004	1
Herstellung	Viscous base solution (NRF p...	131030005	1
Herstellung	Viscous base solution (NRF p...	131030004	1
Herstellung	Viscous base solution (NRF p...	131025001	1
Caelo	Viscous base solution (NRF p...	13220101	1
Fagron	Viscous base solution (NRF p...	1214509	1
Caelo	Viscous base solution (NRF p...	13229101	1
Caelo	Viscous base solution (NRF p...	13246401	5
Herstellung	Viscous base solution (NRF p...	131115001	1

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Supplier	Substance	Batch	Spectra
Herstellung	Viscous base solution (NRF p...	131126002	1
Caelo	Viscous base solution (NRF p...	13229201	2
Herstellung	Viscous base solution (NRF p...	131203012	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	91213	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
Caelo	Viscous base solution (NRF p...	13246701	4
Caelo	Viscous base solution (NRF p...	13229501	4
Herstellung	Viscous base solution (NRF p...	131220001	1
Herstellung	Viscous base solution (NRF p...	131218006	1
Caelo	Viscous base solution (NRF p...	13246501	6
Apomix / 11	Viscous base solution (NRF p...	12309201	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	60114	1
Herstellung	Viscous base solution (NRF p...	140108002	1
Herstellung	Viscous base solution (NRF p...	140108003	1
Herstellung	Viscous base solution (NRF p...	140117001	1
Caelo	Viscous base solution (NRF p...	13229502	3
Post Aptotheke	Viscous base solution (NRF p...	1306F002	2
Herstellung	Viscous base solution (NRF p...	240114	1
Fagron	Viscous base solution (NRF p...	1302F002	1
Caelo	Viscous base solution (NRF p...	14000901	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100214	1
Caelo	Viscous base solution (NRF p...	14020402	5
Caelo	Viscous base solution (NRF p...	14000801	7
Caelo	Viscous base solution (NRF p...	13246101	1
Caelo	Viscous base solution (NRF p...	14020601	3
Alliance Health 21.02.2...	Viscous base solution (NRF p...	13229502	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100314	1
Caelo	Viscous base solution (NRF p...	14020502	5
Caelo	Viscous base solution (NRF p...	14020401	10
Caelo	Viscous base solution (NRF p...	14020301	5
Gutenberg-Apotheke	Viscous base solution (NRF p...	14020502	1
Fagron	Viscous base solution (NRF p...	1310F006	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	90414	1
Aliance am 08.04.2014	Viscous base solution (NRF p...	1306F002	1
Caelo	Viscous base solution (NRF p...	12127301	1
Fagron	Viscous base solution (NRF p...	1301F001	1
Caelo	Viscous base solution (NRF p...	14059001	2
Fagron	Viscous base solution (NRF p...	13J22-T05-007729	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	70514	1
Caelo	Viscous base solution (NRF p...	14058901	3
Gutenberg-Apotheke	Viscous base solution (NRF p...	14059101	3
Fagron	Viscous base solution (NRF p...	14059001	2
GEHE am 27.05.2014	Viscous base solution (NRF p...	14020502	1
VDL 24.05.14	Viscous base solution (NRF p...	14020401	2
Caelo	Viscous base solution (NRF p...	14059101	4
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110614	1
Apomix / 11ol	Viscous base solution (NRF p...	13229501	1
Caelo	Viscous base solution (NRF p...	14109901	11
Caelo	Viscous base solution (NRF p...	14059301	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	90714	1
Phoenix 08.07.2014	Viscous base solution (NRF p...	14110001	1
Caelo	Viscous base solution (NRF p...	14109402	3
Caelo	Viscous base solution (NRF p...	14110001	2
Sanacorp	Viscous base solution (NRF p...	14109402	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	10814	1
Caelo	Viscous base solution (NRF p...	14187701	1
Caelo	Viscous base solution (NRF p...	14188001	5
Fagron	Viscous base solution (NRF p...	13J22-T05-007720	1

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	14109501	5
Caelo	Viscous base solution (NRF p...	3x14058901	1
Caelo	Viscous base solution (NRF p...	14187801	12
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100914	1
Caelo	Viscous base solution (NRF p...	14187901	3
Alliance Health.18.09.2...	Viscous base solution (NRF p...	14109901	1
Caelo	Viscous base solution (NRF p...	14187201	9
Sonnenberg-Apotheke	Viscous base solution (NRF p...	131014	1
Caelo	Viscous base solution (NRF p...	14109401	6
Caelo	Viscous base solution (NRF p...	14187501	1
VDL 17.10.14	Viscous base solution (NRF p...	14109401	2
Caelo	Viscous base solution (NRF p...	14266101	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	111114	1
Caelo	Viscous base solution (NRF p...	14187301	8
Caelo	Viscous base solution (NRF p...	14187601	5
Fagron	Viscous base solution (NRF p...	28111402	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	11214	1
Caelo	Viscous base solution (NRF p...	14266601	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	2012015	2
Caelo	Viscous base solution (NRF p...	14354401	5
Gehe 19.12.14	Viscous base solution (NRF p...	14187601	1
Caelo	Viscous base solution (NRF p...	14266501	7
Caelo	Viscous base solution (NRF p...	14354501	1
Caelo	Viscous base solution (NRF p...	14354304	3
Sonnenberg-Apotheke	Viscous base solution (NRF p...	260115	1
Caelo	Viscous base solution (NRF p...	14109701	1
Caelo	Viscous base solution (NRF p...	1418730	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	250215	1
Caelo	Viscous base solution (NRF p...	14368401	5
Fagron	Viscous base solution (NRF p...	10031502	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	230315	1
Caelo	Viscous base solution (NRF p...	14368601	8
Sonnenberg-Apotheke	Viscous base solution (NRF p...	160415	1
Caelo	Viscous base solution (NRF p...	15093301	10
Caelo	Viscous base solution (NRF p...	14368801	1
Caelo	Viscous base solution (NRF p...	15093501	2
Caelo	Viscous base solution (NRF p...	5051502	1
Caelo	Viscous base solution (NRF p...	14368701	3
Sonnenberg Apotheke	Viscous base solution (NRF p...	270515	1
Caelo	Viscous base solution (NRF p...	15093401	4
Caelo	Viscous base solution (NRF p...	15093601	4
Caelo	Viscous base solution (NRF p...	15093801	2
Caelo	Viscous base solution (NRF p...	15093701	3
Caelo	Viscous base solution (NRF p...	15093602	4
Sonnenberg Apotheke	Viscous base solution (NRF p...	300615	1
Caelo	Viscous base solution (NRF p...	1071501	1
Caelo	Viscous base solution (NRF p...	15105701	4
Sonnenberg-Apotheke	Viscous base solution (NRF p...	100715	1
Caelo	Viscous base solution (NRF p...	15142001	1
Caelo	Viscous base solution (NRF p...	18071502	1
Caelo	Viscous base solution (NRF p...	15196701	2
Caelo	Viscous base solution (NRF p...	15180101	3
Caelo	Viscous base solution (NRF p...	15141601	2
Caelo	Viscous base solution (NRF p...	15141901	2
Caelo	Viscous base solution (NRF p...	20081501	1
Caelo	Viscous base solution (NRF p...	15265501	7
Euro OTC	Viscous base solution (NRF p...	15141601	1
Caelo	Viscous base solution (NRF p...	15264801	7
Sonnenberg Apotheke	Viscous base solution (NRF p...	90915	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	71015	1

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	15264901	1
Bombastus	Viscous base solution (NRF p...	15265501	1
Caelo	Viscous base solution (NRF p...	15196601	1
Caelo	Viscous base solution (NRF p...	15265301	9
Caelo	Viscous base solution (NRF p...	15265701	10
Caelo	Viscous base solution (NRF p...		1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	111115	1
Caelo	Viscous base solution (NRF p...	15265101	2
Caelo	Viscous base solution (NRF p...	152364901	1
Caelo	Viscous base solution (NRF p...	15265201	4
Caelo	Viscous base solution (NRF p...	15265402	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	161215	1
Caelo	Viscous base solution (NRF p...	15265601	2
Caelo	Viscous base solution (NRF p...	15389401	3
Caesar und Loretz	Viscous base solution (NRF p...	14109401	1
Caelo	Viscous base solution (NRF p...	15265801	3
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110116	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	30216	1
Caelo	Viscous base solution (NRF p...	15412101	2
Caelo	Viscous base solution (NRF p...	15265001	1
Caelo	Viscous base solution (NRF p...	15265901	6
Sonnenberg-Apotheke	Viscous base solution (NRF p...	220216	1
Caelo	Viscous base solution (NRF p...	15389501	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	160316	1
Sanacorp	Viscous base solution (NRF p...	15265201	1
Caelo	Viscous base solution (NRF p...	15389701	7
Caesar&Loretz GmbH	Viscous base solution (NRF p...	15265701	1
Fagron	Viscous base solution (NRF p...	14K24-T03-031283	2
Sonnenberg-Apotheke	Viscous base solution (NRF p...	130416	1
Caelo	Viscous base solution (NRF p...	16108101	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	110516	1
Caelo	Viscous base solution (NRF p...	16108001	3
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16108901	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	20516	1
Caelo	Viscous base solution (NRF p...	16108601	4
Caelo	Viscous base solution (NRF p...	16108701	1
Caelo	Viscous base solution (NRF p...	15265401	9
Caelo	Viscous base solution (NRF p...	16108901	10
Caelo	Viscous base solution (NRF p...	16108501	3
Caelo	Viscous base solution (NRF p...	16108301	3
Sonnenberg Apotheke	Viscous base solution (NRF p...	150616	1
Sonnenberg Apotheke	Viscous base solution (NRF p...	220616	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16107601	3
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160630007	1
Caelo	Viscous base solution (NRF p...	16108201	2
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160630008	1
Caelo	Viscous base solution (NRF p...	16108401	2
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160718007	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160719002	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	250716	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	290716	1
Caelo	Viscous base solution (NRF p...	16107601	5
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160805001	1
Defektur Bahnhof Apotheke	Viscous base solution (NRF p...	160805002	1
Bahnhof Apotheke	Viscous base solution (NRF p...	160818001	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	290716-2	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
Caelo	Viscous base solution (NRF p...	16109001	1

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Supplier	Substance	Batch	Spectra
Bahnhof-Apotheke	Viscous base solution (NRF p...	160825002	1
Jenne	Viscous base solution (NRF p...	16108901	1
Fishar	Viscous base solution (NRF p...	15265401	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	70916	1
sanacorp, 32,14EUR, 15.09...	Viscous base solution (NRF p...	16108601	1
Caelo	Viscous base solution (NRF p...	16217301	8
Sonnenberg-Apotheke	Viscous base solution (NRF p...	280916	1
Caelo	Viscous base solution (NRF p...	16159401	1
Sanacorp	Viscous base solution (NRF p...	15265601	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	121016	1
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16217301	1
Caelo	Viscous base solution (NRF p...	16107901	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
Caelo	Viscous base solution (NRF p...	16217602	10
Caesar&Loretz GmbH	Viscous base solution (NRF p...	16229701	1
Sonnenberg-Apotheke	Viscous base solution (NRF p...	71216	1
Caelo	Viscous base solution (NRF p...	16217201	1
Caelo	Viscous base solution (NRF p...	16229901	8
Sonnenberg-Apotheke	Viscous base solution (NRF p...	211216	1
Caelo	Viscous base solution (NRF p...	16217601	5
Sonnenberg-Apotheke	Viscous base solution (NRF p...	40117	1
Apomix/Phönix	Viscous base solution (NRF p...	16217601	1
Fagron	Viscous base solution (NRF p...	1604682	3
Caelo	Viscous base solution (NRF p...	16315201	5
Caelo	Viscous base solution (NRF p...	16230001	2
Caelo	Viscous base solution (NRF p...	16265001	7
Caelo	Viscous base solution (NRF p...	16265201	2
Caelo	Viscous base solution (NRF p...	16159101	1
Caelo	Viscous base solution (NRF p...	16230101	1
Caelo	Viscous base solution (NRF p...	16265101	1
Sanacorp, 22.02.17, 32,...	Viscous base solution (NRF p...	16265101	1
Caelo	Viscous base solution (NRF p...	11031709	1
Caelo	Viscous base solution (NRF p...	16315301	6
Caelo	Viscous base solution (NRF p...	17017801	4
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...	16315202	1
Caelo	Viscous base solution (NRF p...	17098102	5
Caelo	Viscous base solution (NRF p...	17097801	3
Caelo	Viscous base solution (NRF p...	17098302	1
Caelo	Viscous base solution (NRF p...	17023901	1
Caelo	Viscous base solution (NRF p...	17018001	2
Caelo	Viscous base solution (NRF p...	17098501	1
Caelo	Viscous base solution (NRF p...	17098101	2
Caelo	Viscous base solution (NRF p...	16265501	1
Caelo	Viscous base solution (NRF p...	21081704	1
Caelo	Viscous base solution (NRF p...	17138701	3
Fagron	Viscous base solution (NRF p...	17098302	1
Anzag	Viscous base solution (NRF p...	17098401	2
Caelo	Viscous base solution (NRF p...	17138801	1
Caelo	Viscous base solution (NRF p...	17097901	1
Caelo	Viscous base solution (NRF p...	16091702	1
gehe	Viscous base solution (NRF p...	17097801	1
Caelo	Viscous base solution (NRF p...	17138601	1
Caelo	Viscous base solution (NRF p...	6101705	1
Caelo	Viscous base solution (NRF p...	17194001	3

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Supplier	Substance	Batch	Spectra
gehe	Viscous base solution (NRF p...	17194101	1
Klosterring	Viscous base solution (NRF p...	17098102	1
Klosterring	Viscous base solution (NRF p...	17138401	2
Caelo	Viscous base solution (NRF p...	17194101	3
Caelo	Viscous base solution (NRF p...	4111704	1
Caelo	Viscous base solution (NRF p...	17193501	2
Caelo	Viscous base solution (NRF p...	17138401	2
Caelo	Viscous base solution (NRF p...	17138501	1
Klosterring	Viscous base solution (NRF p...	19098302	1
Noweda	Viscous base solution (NRF p...	17098101	3
Caelo	Viscous base solution (NRF p...	17231510	1
Caelo	Viscous base solution (NRF p...	17193502	2
Caeolo/Gehe	Viscous base solution (NRF p...	17194101	1
Caelo	Viscous base solution (NRF p...	17194401	2
Caelo	Viscous base solution (NRF p...	27121703	1
Caelo	Viscous base solution (NRF p...	17194301	1
Caelo	Viscous base solution (NRF p...	17231601	6
Caelo	Viscous base solution (NRF p...	1723001	1
Caelo	Viscous base solution (NRF p...	17232001	3
Caelo	Viscous base solution (NRF p...	13011807	1
Caelo	Viscous base solution (NRF p...	17231501	5
gehe	Viscous base solution (NRF p...	17194401	2
Euro OTC	Viscous base solution (NRF p...	17231801	1
Caelo	Viscous base solution (NRF p...	17231201	4
Caelo	Viscous base solution (NRF p...	177232001	1
Fagron	Viscous base solution (NRF p...	1509255	2
Caelo	Viscous base solution (NRF p...	17232101	5
Caelo	Viscous base solution (NRF p...	17194201	2
Caelo	Viscous base solution (NRF p...	17193901	2
Caelo	Viscous base solution (NRF p...	17193801	1
Caelo	Viscous base solution (NRF p...	15031804	1
Fagron	Viscous base solution (NRF p...	1705701	2
Caelo	Viscous base solution (NRF p...	17231301	1
Euro OTC	Viscous base solution (NRF p...	17232001	1
Caelo	Viscous base solution (NRF p...	17289501	1
Caelo	Viscous base solution (NRF p...	17231401	1
Caelo	Viscous base solution (NRF p...	17231901	4
Caelo	Viscous base solution (NRF p...	25041801	1
Caelo	Viscous base solution (NRF p...	17231701	1
Caelo	Viscous base solution (NRF p...	17289201	1
Caelo	Viscous base solution (NRF p...	1789201	1
Caelo	Viscous base solution (NRF p...	26051801	1
Caelo	Viscous base solution (NRF p...	17289301	2
Caelo	Viscous base solution (NRF p...	23061811	1
Caelo	Viscous base solution (NRF p...	17289401	1
Caelo	Viscous base solution (NRF p...	17232010	1
Caelo	Viscous base solution (NRF p...	17290101	1
Caelo	Viscous base solution (NRF p...	18031101	1
Caelo	Viscous base solution (NRF p...	16081804	1
Caelo	Viscous base solution (NRF p...	17194501	1
Caelo	Viscous base solution (NRF p...	18030602	3
Caelo	Viscous base solution (NRF p...	18031201	2
Caelo	Viscous base solution (NRF p...	18031301	1
Caelo	Viscous base solution (NRF p...	8091809	1
Caelo	Viscous base solution (NRF p...	18031401	2
Caelo	Viscous base solution (NRF p...	18124403	1
Caelo	Viscous base solution (NRF p...	18124501	2
Caelo	Viscous base solution (NRF p...	18124301	3
Caelo	Viscous base solution (NRF p...	18030601	2
Caelo	Viscous base solution (NRF p...	20101802	1

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Supplier	Substance	Batch	Spectra
Caelo	Viscous base solution (NRF p...	7111803	1
Caelo	Viscous base solution (NRF p...	18206101	1
Fagron	Viscous base solution (NRF p...	1820601	1
Caelo	Viscous base solution (NRF p...	22121809	1
Caelo	Viscous base solution (NRF p...	19011901	1
Caelo	Viscous base solution (NRF p...	18206201	1

- 107 087 spectra from 582 *Apo-Ident* customers from a total of 30 312 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 *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	480	0	35 355
Type B	0	2479	1	76 598
Type C	0	838	34	107 087

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 % (> 99.9705 %)	100.0000 % (> 98.7500 %)
Type B	100.0000 % (> 99.9688 %)	99.9597 % (> 99.8387 %)
Type C	100.0000 % (> 99.6449 %)	96.1009 % (> 95.7569 %)

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.

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
31790	31893	4.13	27.07
30659	30659	0.00	25.55
31354	31900	1.60	23.37
31884	31884	0.00	27.23
31886	31886	0.00	26.84
31887	31887	0.00	27.83
31890	31890	0.00	27.32
31893	31893	0.00	28.37
31658	31658	0.00	27.06
31896	31896	0.00	26.78
31897	31897	0.00	26.41
31900	31900	0.00	27.44

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Water and aqueous solutions
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30869-2019-05-24
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>
Appendix F	Addition to the second-stage models

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.

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	Water	13176101	31057	40	20130627
Fagron	Chlorhexidine di...	13H19-B01	31240	30	20130906

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Aluminium acetot...	13378704	31342	40	AR-14-FG-012698-01
Caelo	Chlorhexidine di...	14011009	31463	40	AR-15-FG-010164-03
Caelo	Water	14253301	31624	40	20140923
Fagron	Water	14K05-T02-016775	31676	40	20150225
Caelo	Chlorhexidine di...	15131504	31705	40	20150424
Caelo	Water	15142501	31718	40	1510212
Euro OTC	Chlorhexidine di...	1508022	31735	40	20150916*
Fagron	Water	15D01-C20-16500	31809	40	20151105
Fagron	Chlorhexidine di...	15I03-B02-315213	31829	30	20151027
Euro OTC	Chlorhexidine di...	1511039	31846	40	20160114*
Caelo	Aluminium acetot...	15299901	31959	40	20151001
Caelo	Chlorhexidine di...	15292508	32308	40	20151109
Caelo	Water	161975	32354	30	20160725*
Euro OTC	Chlorhexidine di...	1511033-01	32732	40	20160114
Euro OTC	Chlorhexidine di...	1610021	32831	40	20161121*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 690 spectra of 18 reference samples from the substance/substance group *Water and aqueous solutions*. These samples are listed above in the [calibration samples](#) section.
- 35 145 spectra from a total of 829 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 1555 spectra of 44 reference samples from the substance/substance group *Water and aqueous solutions*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Chlorhexidine digluconate so...	14011009	31463 [†]	20
Caelo	Water	14253301	31624 [†]	20
Fagron	Water	14K05-T02-016775	31676 [†]	20

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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	Chlorhexidine digluconate so...	15131504	31705 [†]	20
Caelo	Water	15142501	31718 [†]	20
Euro OTC	Chlorhexidine digluconate so...	1508022	31735 [†]	20
Fagron	Water	15D01-C20-16500	31809 [†]	20
Fagron	Chlorhexidine digluconate so...	15I03-B02-315213	31829 [†]	15
Euro OTC	Chlorhexidine digluconate so...	1511039	31846 [†]	20
Caelo	Aluminium acetotartrate solu...	15299901	31959 [†]	20
Caelo	Water	153714	32080	40
Caelo	Water	153945	32082	40
Caelo	Water	162119	32353	40
Caelo	Water	162230	32355	40
Euro OTC	Chlorhexidine digluconate so...	1610022	32832	40
Caelo	Water	163133	32893	40
Caelo	Water	162554	32894	40
Hedinger	Aluminium acetotartrate solu...	020160B	32921	40
Fagron	Water	16K25-C20-17409	32963	40
Caelo	Chlorhexidine digluconate so...	163088	33089	40
Caelo	Water	170020	33178	40
Caelo	Water	170324	33179	40
Euro OTC	Chlorhexidine digluconate so...	1701037	33230	40
Caelo	Aluminium acetotartrate solu...	16004505	33490	40
Caelo	Water	171731	33575	40
Caelo	Water	171451	33576	40
Caelo	Water	171773	33577	40
Caelo	Chlorhexidine digluconate so...	172101	33693	40
Caelo	Water	172534	33738	40
Caelo	Water	172535	33739	40
Caelo	Water	172532	33740	40
Euro OTC	Chlorhexidine digluconate so...	1708006	33843	40
Euro OTC	Chlorhexidine digluconate so...	1712002	33927	40
Caelo	Water	170988	33976	40
Caelo	Water	172958	33979	40
Caelo	Water	180004	34135	40
Caelo	Water	181355	34138	40
Euro OTC	Chlorhexidine digluconate so...	1807014	34191	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
Euro OTC	Chlorhexidine digluconate so...	1811026	34351	40

- 77 523 spectra from a total of 1786 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.

[†]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*.

- 3198 spectra from 463 *Apo-Ident* customers from 861 batches from the substance/substance group *Water and aqueous solutions*.

Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	10200303	1
Fagron	Chlorhexidine digluconate so...	11L05-N08	5
Caelo	Chlorhexidine digluconate so...	11135114	1
Fagron	Chlorhexidine digluconate so...	204211262	1
Noweda	Chlorhexidine digluconate so...	11353004	1
Fagron	Chlorhexidine digluconate so...	12A02-N11	6
Caelo	Chlorhexidine digluconate so...	11135107	1
Fagron	Chlorhexidine digluconate so...	11K09-N05	4
Caelo	Chlorhexidine digluconate so...	11353004	2
Euro OTC	Chlorhexidine digluconate so...	1110012-01	1
Euro OTC	Chlorhexidine digluconate so...	1202010-01	8
Fiebig	Chlorhexidine digluconate so...	1110012-01	1
Fagron	Chlorhexidine digluconate so...	12F01-N21	37
Fagron	Chlorhexidine digluconate so...	13081204	1
Phönix Gotha	Chlorhexidine digluconate so...	12A02-N11	1
Phönix	Chlorhexidine digluconate so...	11353004	1
Caelo	Chlorhexidine digluconate so...	11353001	3
Noweda	Chlorhexidine digluconate so...	1202010-01	3
Caelo	Chlorhexidine digluconate so...	11L05-N080040	1
Caelo	Chlorhexidine digluconate so...	11353009	2
Fagron	Chlorhexidine digluconate so...	6111210	1
EuRho	Chlorhexidine digluconate so...	1105012-01	1
Phönix/EuRho	Chlorhexidine digluconate so...	1206023-01	2
ANZAG	Chlorhexidine digluconate so...	11353012	1
Fagron	Chlorhexidine digluconate so...	12H14-N06	19
Fagron	Chlorhexidine digluconate so...	20200112-1	1
Fargon	Chlorhexidine digluconate so...	12F01-N21	1
Caelo	Chlorhexidine digluconate so...	12H14-N06	2
Caelo	Chlorhexidine digluconate so...	11353013	2
Fagron	Chlorhexidine digluconate so...	12H14-No6	4
Caelo	Chlorhexidine digluconate so...	11353012	3
Euro OTC	Chlorhexidine digluconate so...	1206023-01	14
Fagron	Chlorhexidine digluconate so...	17011310	1
Sanacorp	Chlorhexidine digluconate so...	1206023-01	4
Caelo	Chlorhexidine digluconate so...	1202010-01	1
Fagron	Chlorhexidine digluconate so...	2612M01262	1
Caelo	Chlorhexidine digluconate so...	12114001	4
Fagron	Chlorhexidine digluconate so...	12A02-11	1
Anzag	Chlorhexidine digluconate so...	1206023-01	2
Euro OTC	Chlorhexidine digluconate so...	120602301	3
Fagron	Chlorhexidine digluconate so...	12F01-N021	1
Fagron	Chlorhexidine digluconate so...	2512M01262	1
Fagron	Chlorhexidine digluconate so...	103311262	1
Caelo	Chlorhexidine digluconate so...	12114008	4
Fagron	Chlorhexidine digluconate so...	12H-14-N06	1
Phönix	Chlorhexidine digluconate so...	1206023-01	1
Caelo	Chlorhexidine digluconate so...	12114007	1
Caelo	Chlorhexidine digluconate so...	20031301	1
Fagron	Chlorhexidine digluconate so...	1213E-01262	1
Phönix	Chlorhexidine digluconate so...	12H14-N06	1
Fagron	Chlorhexidine digluconate so...	12H14-No06	1
Fagron	Chlorhexidine digluconate so...	12114007	1
Caelo	Chlorhexidine digluconate so...	12114012	9
Phönix Gotha	Chlorhexidine digluconate so...	12H14-N06	1
Sanacorp	Chlorhexidine digluconate so...	12K22-N09	1
Caelo	Chlorhexidine digluconate so...	1206023-01	1
Fagron	Chlorhexidine digluconate so...	120201001	1

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Supplier	Substance	Batch	Spectra
Fagron	Chlorhexidine digluconate so...	12K22-N09	20
Gehe	Chlorhexidine digluconate so...	12h14-n06	1
Caelo	Chlorhexidine digluconate so...	12114013	2
Caelo	Chlorhexidine digluconate so...	32/AD1	1
Fagron	Chlorhexidine digluconate so...	13A29-N06	14
Caelo	Chlorhexidine digluconate so...	12H14-N016	1
Fagron	Chlorhexidine digluconate so...	12H14N06	1
Fagron	Chlorhexidine digluconate so...	25051304	1
Noweda	Chlorhexidine digluconate so...	12114012	1
Alliance Healthcare	Chlorhexidine digluconate so...	1206023	1
Caelo	Chlorhexidine digluconate so...	12k22-n09	1
Caelo	Chlorhexidine digluconate so...	13A29-N06	1
Caelo	Chlorhexidine digluconate so...	12114015	2
Fagron	Chlorhexidine digluconate so...	12K22-0005	1
AHD	Chlorhexidine digluconate so...	12114012	1
Fagron	Chlorhexidine digluconate so...	11L05-N080069/262	1
Fagron	Chlorhexidine digluconate so...	120355-ooo4	1
Caelo	Chlorhexidine digluconate so...	12114014	3
Euro OTC	Chlorhexidine digluconate so...	1206023-02	24
Fargon/ Noweda	Chlorhexidine digluconate so...	12f01n21	1
Caelo	Chlorhexidine digluconate so...	12122222	1
Gehe	Chlorhexidine digluconate so...	1206023-02	2
Fagron	Chlorhexidine digluconate so...	13A29-N060155/228	1
Caelo	Chlorhexidine digluconate so...	12114019	3
Fagron	Chlorhexidine digluconate so...	9081302	1
Caelo	Chlorhexidine digluconate so...	13136103	11
Fagron	Chlorhexidine digluconate so...	12f01-N21	1
Fagron	Chlorhexidine digluconate so...	13d16-N04	2
Klenk	Chlorhexidine digluconate so...	13D16-N04	1
Euro OTC	Chlorhexidine digluconate so...	1105012-01	1
AHD	Chlorhexidine digluconate so...	1206023-02	3
Fagron	Chlorhexidine digluconate so...	13D16-N04	9
Caelo	Chlorhexidine digluconate so...	13136101	4
Caelo	Chlorhexidine digluconate so...	1206023-02-335731907	1
Caelo	Chlorhexidine digluconate so...	1316103	1
Euro OTC	Chlorhexidine digluconate so...	12K22-N09	1
Caelo	Chlorhexidine digluconate so...	1206023-02	3
Caelo	Chlorhexidine digluconate so...	13H19-B01-285451	1
Phönix	Chlorhexidine digluconate so...	1206023-02	2
Fagron	Chlorhexidine digluconate so...	1112013D	1
Fagron	Chlorhexidine digluconate so...	13H19-801	1
Fagron	Chlorhexidine digluconate so...	4111303	1
EuRho	Chlorhexidine digluconate so...	1206023-02	2
Fagron	Chlorhexidine digluconate so...	4513U1262	1
Caelo	Chlorhexidine digluconate so...	13136105	5
Caelo	Chlorhexidine digluconate so...	13136112	4
Fagron	Chlorhexidine digluconate so...	13H19-B01-285448	3
Fagron	Chlorhexidine digluconate so...	13H19-B01-285453	9
Euro OTC	Chlorhexidine digluconate so...	1308002-01	25
Sanacorp	Chlorhexidine digluconate so...	12114001	1
Fagron	Chlorhexidine digluconate so...	23121307	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285447	2
Fagron	Chlorhexidine digluconate so...	13H19B01	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285451	6
Fagron	Chlorhexidine digluconate so...	13H19-B01	5
Phönix Gotha	Chlorhexidine digluconate so...	13A29-N06	1
Fagron	Chlorhexidine digluconate so...	13H19B01285451	1
Sanacorp	Chlorhexidine digluconate so...	13136103	1
Euro OTC	Chlorhexidine digluconate so...	13D16-N04	1
Caelo	Chlorhexidine digluconate so...	13136015	1

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Supplier	Substance	Batch	Spectra
Cael/Nowda	Chlorhexidine digluconate so...	13136115	1
Caelo	Chlorhexidine digluconate so...	BK13-CG-011	1
Phönix 28.01.2014	Chlorhexidine digluconate so...	1206023-02	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-285452	4
Fagron	Chlorhexidine digluconate so...	BK13-CG-011	3
Caelo	Chlorhexidine digluconate so...	13136114	6
Sanacorp	Chlorhexidine digluconate so...	13136115	2
Euro OTC	Chlorhexidine digluconate so...	282215	1
Gehe	Chlorhexidine digluconate so...	13136105	1
Euro OTC	Chlorhexidine digluconate so...	106023-02	1
Euro OTC	Chlorhexidine digluconate so...	3896220404	1
Evonik	Chlorhexidine digluconate so...	3896220404	1
Fagron	Chlorhexidine digluconate so...	13h19b01285447	1
Gehe	Chlorhexidine digluconate so...	13136114	4
Gehe	Chlorhexidine digluconate so...	13136109	1
Fagron	Chlorhexidine digluconate so...	13H19-B01-CG-011	1
VDL	Chlorhexidine digluconate so...	130800201	1
Berkel AHK	Chlorhexidine digluconate so...	13136115	1
Phoenix	Chlorhexidine digluconate so...	13H19-B01-285452	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-288853	3
Fagron	Chlorhexidine digluconate so...	13K26-B06	8
Caelo	Chlorhexidine digluconate so...	13K26-B06-288849	2
Hedinger/Sanacorp6.5.2014	Chlorhexidine digluconate so...	1234	1
Euro OTC	Chlorhexidine digluconate so...	130800201	4
Fagron	Chlorhexidine digluconate so...	BK13-CG-018	2
Caelo	Chlorhexidine digluconate so...	13136115	2
Fagron	Chlorhexidine digluconate so...	13K26-B06289365	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-288849	1
GEHE 20.05.2014	Chlorhexidine digluconate so...	13136114	1
Fagron	Chlorhexidine digluconate so...	13K-26-B06-288853	1
Fagron	Chlorhexidine digluconate so...	13k26-b06	1
	Chlorhexidine digluconate so...	13K26B06289365	1
Fagron	Chlorhexidine digluconate so...	13K16B06288853	1
AHD	Chlorhexidine digluconate so...	13136115	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-289365	6
Fagron	Chlorhexidine digluconate so...	13H19-B01-285449	1
Euro OTC	Chlorhexidine digluconate so...	130002-01	1
Fagron	Chlorhexidine digluconate so...	13K26-B06-288848	2
Caelo	Chlorhexidine digluconate so...	140111009	1
Euro OTC	Chlorhexidine digluconate so...	1308002-02	27
PHOENIX 25.07.2014	Chlorhexidine digluconate so...	13k26-b06-288849	1
Caelo	Chlorhexidine digluconate so...	1308002	1
Fagron	Chlorhexidine digluconate so...	1081403	1
Noweda	Chlorhexidine digluconate so...	1308002-01	2
Audor Pharma	Chlorhexidine digluconate so...	13K26-B06-289365	2
Caelo	Chlorhexidine digluconate so...	14011011	3
Caelo	Chlorhexidine digluconate so...	13K26-B06	1
Fagro/ Noweda	Chlorhexidine digluconate so...	13K26-B06-289365	1
Caelo	Chlorhexidine digluconate so...	14011013	5
Caelo	Chlorhexidine digluconate so...	14011009	1
Caelo	Chlorhexidine digluconate so...	14011004	1
Caelo	Chlorhexidine digluconate so...	1308002-01	1
Sanacorp	Chlorhexidine digluconate so...	14011004	1
sanacorp	Chlorhexidine digluconate so...	14011015	1
Caelo	Chlorhexidine digluconate so...	1308002-02	7
Fagron	Chlorhexidine digluconate so...	26091402	1
Fagron	Chlorhexidine digluconate so...	2614Q-01262	1
Fagron	Chlorhexidine digluconate so...	14D25-B04	4
EuRho	Chlorhexidine digluconate so...	1308002-02	1
Fagron	Chlorhexidine digluconate so...	14D25-B04-294673	4

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Supplier	Substance	Batch	Spectra
Euro OTC	Chlorhexidine digluconate so...	1308002	1
Fagron	Chlorhexidine digluconate so...	13K26B06289366	1
Caelo	Chlorhexidine digluconate so...	14011015	5
Caelo	Chlorhexidine digluconate so...	1401105	1
Phönix Gotha	Chlorhexidine digluconate so...	13K26-B06-288853	1
Phönix	Chlorhexidine digluconate so...	13K26-B06-28965	1
Fagron	Chlorhexidine digluconate so...	BK14-CG-003	2
Lamotte / Gehe	Chlorhexidine digluconate so...	14011017	1
Caelo	Chlorhexidine digluconate so...	140111011	1
Caelo	Chlorhexidine digluconate so...	14011017	4
Euro OTC	Chlorhexidine digluconate so...	13KB062888448	1
Caelo	Chlorhexidine digluconate so...	10213441	1
Caelo	Chlorhexidine digluconate so...	14011018	3
Evonic	Chlorhexidine digluconate so...	1308002-02	2
Industries AG / Phoenix	Chlorhexidine digluconate so...	1308002-02	1
Fagron	Chlorhexidine digluconate so...	14D25-B04-294674	3
Fagron	Chlorhexidine digluconate so...	13K26-B06-289366	1
GEHE 08.12.2014	Chlorhexidine digluconate so...	BK14-CG-003	1
Fagron	Chlorhexidine digluconate so...	15121406	1
Caelo	Chlorhexidine digluconate so...	14011020	1
Euro OCT	Chlorhexidine digluconate so...	3-8962-3-01-24	1
Noweda18.12.2014	Chlorhexidine digluconate so...	14331303	1
Caelo	Chlorhexidine digluconate so...	14331308	2
Caelo	Chlorhexidine digluconate so...	14331301	7
Fagron	Chlorhexidine digluconate so...	14D25-B04-299288	1
Caelo	Chlorhexidine digluconate so...	14331307	8
Fagron	Chlorhexidine digluconate so...	14D25-B04-294675	1
Euro OTC	Chlorhexidine digluconate so...	130800202	1
Caelo	Chlorhexidine digluconate so...	14331303	2
Caelo	Chlorhexidine digluconate so...	14331306	4
Phoenix	Chlorhexidine digluconate so...	14331307	1
Cealo	Chlorhexidine digluconate so...	14331307	1
Caelo	Chlorhexidine digluconate so...	14331309	3
Fagron	Chlorhexidine digluconate so...	BK13-CG-285447	1
Fagron	Chlorhexidine digluconate so...	10031503	1
Gehe	Chlorhexidine digluconate so...	14331309	1
Fagron	Chlorhexidine digluconate so...	14332309	1
Caelo	Chlorhexidine digluconate so...	14331312	8
Caelo	Chlorhexidine digluconate so...	14331310	1
Caelo	Chlorhexidine digluconate so...	14331313	9
EuRho	Chlorhexidine digluconate so...	141201801	1
Euro OTC	Chlorhexidine digluconate so...	1412018-01	23
Euro	Chlorhexidine digluconate so...	1412018-0	1
sanacorp	Chlorhexidine digluconate so...	14331312	1
Sanacorp	Chlorhexidine digluconate so...	14331312	1
EuroPTC/Phönix	Chlorhexidine digluconate so...	1412018-01	1
Caelo	Chlorhexidine digluconate so...	15109202	5
Phönix Gotha	Chlorhexidine digluconate so...	14120189-01	1
Euro OTC	Chlorhexidine digluconate so...	1412018801	1
Caelo	Chlorhexidine digluconate so...	15109201	10
Euro OTC	Chlorhexidine digluconate so...	141218-01	1
Caelo	Chlorhexidine digluconate so...	1412018-01	3
Caelo	Chlorhexidine digluconate so...	15131505	14
Phönix Gotha	Chlorhexidine digluconate so...	1412018-01	1
Caelo	Chlorhexidine digluconate so...	15131502	6
Caelo	Chlorhexidine digluconate so...	15131504	11
Fagron	Chlorhexidine digluconate so...	14D25-B04-299289	1
anzag	Chlorhexidine digluconate so...	15131504	1
Caelo	Chlorhexidine digluconate so...	10213458	1
Caelo	Chlorhexidine digluconate so...	26A080415	1

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Supplier	Substance	Batch	Spectra
	Chlorhexidine digluconate so...	1308002-02	1
Euro OTC	Chlorhexidine digluconate so...	141201801	1
Sanacorp 17.07.2015	Chlorhexidine digluconate so...	15131504	1
Caelo	Chlorhexidine digluconate so...	151361503	1
VDL; 13.7.15; 3,83EUR	Chlorhexidine digluconate so...	1412018-01	1
Euro OTC	Chlorhexidine digluconate so...	1412018-02	26
Fagron	Chlorhexidine digluconate so...	15C03-B02-306308	2
Caelo	Chlorhexidine digluconate so...	15131503	12
Fagron	Chlorhexidine digluconate so...	11081502	1
Caelo	Chlorhexidine digluconate so...	13081502	1
Fagron	Chlorhexidine digluconate so...	15C03B02	2
Fagron	Chlorhexidine digluconate so...	15F30-B05	3
Caelo	Chlorhexidine digluconate so...	141201802	2
Fagron	Chlorhexidine digluconate so...	15131505	2
Fragon/ Phönix	Chlorhexidine digluconate so...	15C03-B02-306308	1
Fagro/AHD	Chlorhexidine digluconate so...	1412018-02	1
Fagron	Chlorhexidine digluconate so...	15F30B05	1
Caelo	Chlorhexidine digluconate so...	15131509	22
Fagron	Chlorhexidine digluconate so...	15F30-B05-309829	3
Caelo	Chlorhexidine digluconate so...	15f30-b05-309829	1
Caelo	Chlorhexidine digluconate so...	1412018-02	2
Geilenkirchen	Chlorhexidine digluconate so...	15131503	1
Caelo	Chlorhexidine digluconate so...	15131512	7
Eu Rho/ Gehe	Chlorhexidine digluconate so...	1412018-02	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-30929	1
EuRho	Chlorhexidine digluconate so...	1412018-02	1
Anzag; 3.80EUR; 7.10.2015	Chlorhexidine digluconate so...	1412018-02	1
Fagron	Chlorhexidine digluconate so...	15E13-B07-309826	5
Bombastus	Chlorhexidine digluconate so...	1412018-02	1
Euro OTC	Chlorhexidine digluconate so...	1508022-01	24
Caelo	Chlorhexidine digluconate so...	15131508	3
Fagron	Chlorhexidine digluconate so...	BK14-CG-023	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-311700	5
Caelo	Chlorhexidine digluconate so...	15131510	13
Caelo	Chlorhexidine digluconate so...	15292504	18
Caelo	Chlorhexidine digluconate so...		1
Fagron	Chlorhexidine digluconate so...	15E13B07309826	1
Sanacorp	Chlorhexidine digluconate so...	15131509	1
Euro OTC	Chlorhexidine digluconate so...	150802201	3
Schütz Dishman Biotech ...	Chlorhexidine digluconate so...	15E13-B07	1
Euro OTC	Chlorhexidine digluconate so...	15008022-01	1
Caelo	Chlorhexidine digluconate so...	1508022-01	3
Fagron	Chlorhexidine digluconate so...	15103-B02-313663	1
Fagron	Chlorhexidine digluconate so...	15103-B02-315213	1
Noweda	Chlorhexidine digluconate so...	1508022-01	1
Fagron	Chlorhexidine digluconate so...	15I03-B02-313663	4
Fagron	Chlorhexidine digluconate so...	15I03-B02-315552	5
Fagron	Chlorhexidine digluconate so...	15I31-B02-313663	1
Fagron	Chlorhexidine digluconate so...	15I03-B02-314177	1
Fagron	Chlorhexidine digluconate so...	15I03-B02	1
Caelo	Chlorhexidine digluconate so...	1508022-22	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-315213	2
Fagron	Chlorhexidine digluconate so...	BK15-CG-001	3
Frau Brinn-Holtz	Chlorhexidine digluconate so...	15292507	1
Fagron	Chlorhexidine digluconate so...	15F30-B05-309827	1
Euro OTC	Chlorhexidine digluconate so...	1508022-02	11
Fagron	Chlorhexidine digluconate so...	15J03-B02	1
Fagron	Chlorhexidine digluconate so...	1503B02314176	1
Caelo	Chlorhexidine digluconate so...	15I03-B02-315213	4
Fagron	Chlorhexidine digluconate so...	15/03-B02-313663	1

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	15292507	5
Fagron	Chlorhexidine digluconate so...	15I03-B01-314176	1
Caleo/Sanacorp	Chlorhexidine digluconate so...	15292507	1
Symbiotica	Chlorhexidine digluconate so...	1412018-02	1
Euro OTC	Chlorhexidine digluconate so...	150822-02	1
Fagron	Chlorhexidine digluconate so...	15L03-B02-315552	1
Fagron	Chlorhexidine digluconate so...	15103B02-315212	1
Caelo	Chlorhexidine digluconate so...	15292508	14
Noweda	Chlorhexidine digluconate so...	15131510	1
Euro OTC	Chlorhexidine digluconate so...	1508022-22	1
Fagron	Chlorhexidine digluconate so...	15I03B02314176	1
Caelo	Chlorhexidine digluconate so...	15292509	6
Apo-ident	Chlorhexidine digluconate so...	1508022-01	1
Fagron	Chlorhexidine digluconate so...	1511033-01	2
Fagron	Chlorhexidine digluconate so...	BK15CG001	1
Caelo	Chlorhexidine digluconate so...	15F30-B05-311700	1
Fagron	Chlorhexidine digluconate so...	15I03B02	1
Fagron	Chlorhexidine digluconate so...	15I03-B02-315213	1
Euro OTC	Chlorhexidine digluconate so...	1508072-02	1
Fagron	Chlorhexidine digluconate so...	15/03-B02-315212	1
Euro OTC	Chlorhexidine digluconate so...	1511033-01	52
Euro OTC	Chlorhexidine digluconate so...	3896250214	1
Caelo	Chlorhexidine digluconate so...	15/03-B02-315552	1
Sanacorp	Chlorhexidine digluconate so...	15292508	2
Fagron	Chlorhexidine digluconate so...	1503-B02-316428	1
Euro OTC	Chlorhexidine digluconate so...	151103-01	1
Laborchemie Apolda	Chlorhexidine digluconate so...	1511033-01	2
Schütz Dishman Biotech ...	Chlorhexidine digluconate so...	15I03-B02	1
Gehe	Chlorhexidine digluconate so...	151103301	1
Caelo	Chlorhexidine digluconate so...	16002502	3
Fagron	Chlorhexidine digluconate so...	1503B02316428	1
Caelo	Chlorhexidine digluconate so...	1592509	1
apo-ident.	Chlorhexidine digluconate so...	1511033-01	6
Fagron	Chlorhexidine digluconate so...	15I03B02317319	2
Fagron	Chlorhexidine digluconate so...	5x15I03-B02-3152120	1
Noweda	Chlorhexidine digluconate so...	15292508	1
Fagron	Chlorhexidine digluconate so...	16b25-b98-318800	1
Fagron	Chlorhexidine digluconate so...	15I03-B02-0006	1
Caelo	Chlorhexidine digluconate so...	141201801	1
Caesar & Loretz GmbH/ A...	Chlorhexidine digluconate so...	15292508	1
Celo	Chlorhexidine digluconate so...	110816-7	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-320996	3
Caelo	Chlorhexidine digluconate so...	15292512	5
Fagron	Chlorhexidine digluconate so...	15I03-B02-317320	1
Fagron	Chlorhexidine digluconate so...	BK16-CG-005	1
Fagron	Chlorhexidine digluconate so...	16B25-B98-318800	4
Sonnen-Apotheke Wefensl...	Chlorhexidine digluconate so...	16002501	1
Euro OTC	Chlorhexidine digluconate so...	150802202	1
Bombastus	Chlorhexidine digluconate so...	1508022-02	1
Caelo	Chlorhexidine digluconate so...	16002501	11
Fagron	Chlorhexidine digluconate so...	16B25-B98-318799	1
Caelo	Chlorhexidine digluconate so...	1529511	1
Caelo	Chlorhexidine digluconate so...	151103301	1
Fagron	Chlorhexidine digluconate so...	16B25-B98	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-320995	5
Caelo	Chlorhexidine digluconate so...	15292511	2
Caelo	Chlorhexidine digluconate so...	16002506	7
Caelo	Chlorhexidine digluconate so...	1529509	1
Caelo	Chlorhexidine digluconate so...	1529504	1
Fagron	Chlorhexidine digluconate so...	16002501	1

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Supplier	Substance	Batch	Spectra
Ichthyl/Phönix	Chlorhexidine digluconate so...	16002506	2
Sanacorp	Chlorhexidine digluconate so...	16002501	2
Fagron	Chlorhexidine digluconate so...	16E09-B03	5
phönix	Chlorhexidine digluconate so...	1511033-01	2
Euro OTC	Chlorhexidine digluconate so...	151103301	1
Caelo	Chlorhexidine digluconate so...	1511033-01	3
Caelo	Chlorhexidine digluconate so...	15/03-B02-315213	1
Caelo	Chlorhexidine digluconate so...	15103-b02-317319	1
Phoenix	Chlorhexidine digluconate so...	1511033-01	1
Fagron	Chlorhexidine digluconate so...	16e09-b03	1
Caelo	Chlorhexidine digluconate so...	16002505	14
Caelo	Chlorhexidine digluconate so...	16002510	5
Caelo/Noweda	Chlorhexidine digluconate so...	15292508	2
Caelo	Chlorhexidine digluconate so...	16E09-B03	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-322465	1
Caesar & Loretz	Chlorhexidine digluconate so...	16002510	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-322382	2
Caelo	Chlorhexidine digluconate so...	16308802	17
Caelo	Chlorhexidine digluconate so...	1511033-02	2
Caelo	Chlorhexidine digluconate so...	16E09-B03-324024	1
Caelo	Chlorhexidine digluconate so...	16308801	33
Fagron	Chlorhexidine digluconate so...	16E09-B03-324024	1
Fagron	Chlorhexidine digluconate so...	16E09-B03-323873	1
Euro OTC	Chlorhexidine digluconate so...	1511033-02	9
Fagron	Chlorhexidine digluconate so...	16002510	2
Euro OTC	Chlorhexidine digluconate so...	15131505	1
Caelo	Chlorhexidine digluconate so...	1511033/02	1
Caelo	Chlorhexidine digluconate so...	16309902	1
Fagron	Chlorhexidine digluconate so...	16H-23-B03-329123	1
ALH	Chlorhexidine digluconate so...	1610021-01	1
Euro OTC	Chlorhexidine digluconate so...	151103	1
Euro OTC	Chlorhexidine digluconate so...	1610021-01	17
Fagron	Chlorhexidine digluconate so...	16E09-B03-322464	2
hochhaus-Apotheke	Chlorhexidine digluconate so...	16002510	1
Fagron	Chlorhexidine digluconate so...	16H23-B03-329123	1
Phönix	Chlorhexidine digluconate so...	1610021-01	1
Gehe	Chlorhexidine digluconate so...	16308801	2
Fagron	Chlorhexidine digluconate so...	8041712	1
Evonik Technochem. GmbH	Chlorhexidine digluconate so...	1610021-01	1
Caelo	Chlorhexidine digluconate so...	16308812	11
Fagron	Chlorhexidine digluconate so...	BK16-CG-011	1
Euro/ Phönix	Chlorhexidine digluconate so...	1610021-01	1
apo-ident.	Chlorhexidine digluconate so...	1610021-01	1
Caelo	Chlorhexidine digluconate so...	16308811	19
Euro/Phönix	Chlorhexidine digluconate so...	161002101	2
Euro OTC	Chlorhexidine digluconate so...	161002101	1
Phönix	Chlorhexidine digluconate so...	16308812	1
Phönix	Chlorhexidine digluconate so...	1610022-01	2
Euro OTC	Chlorhexidine digluconate so...	1610022-01	10
Fagron	Chlorhexidine digluconate so...	16H23-B03	1
Euro OTC	Chlorhexidine digluconate so...	1701037-01	7
Caelo	Chlorhexidine digluconate so...	1630881	1
GEHE	Chlorhexidine digluconate so...	1610022-01	1
Fagron	Chlorhexidine digluconate so...	10071703	1
Noweda	Chlorhexidine digluconate so...	16308811	1
Fagron	Chlorhexidine digluconate so...	1610022-01	1
Caelo	Chlorhexidine digluconate so...	160308811	1
Fagron	Chlorhexidine digluconate so...	17E09-B01-335136	2
Sanacorp EK:5,70 EUR...	Chlorhexidine digluconate so...	1701037	1
Fagron	Chlorhexidine digluconate so...	17E09-B01-335140	9

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	17210105	18
Caelo	Chlorhexidine digluconate so...	17210106	8
Euro OTC	Chlorhexidine digluconate so...	1701037-02	20
Phoenix WE: 01.09.17 E...	Chlorhexidine digluconate so...	1701037-02	3
Euro OTC	Chlorhexidine digluconate so...	s-8962-6-03-21	1
Finteler Apotheke	Chlorhexidine digluconate so...	1701037-01	1
Euro OTC	Chlorhexidine digluconate so...	1701037	3
Caelo	Chlorhexidine digluconate so...	17210102	3
Euro OTC	Chlorhexidine digluconate so...	3-8962-6-03-21	1
Caelo	Chlorhexidine digluconate so...	17210101	1
Noweda	Chlorhexidine digluconate so...	17210105	1
Caelo	Chlorhexidine digluconate so...	17210110	5
Caelo	Chlorhexidine digluconate so...	17E09-B01-335140	1
Caelo	Chlorhexidine digluconate so...	171027CDG/17210105	1
Fagron	Chlorhexidine digluconate so...	17E09-B01	2
Phönix	Chlorhexidine digluconate so...	17001037-02	1
Fagron	Chlorhexidine digluconate so...	1701037-01	1
Fagron	Chlorhexidine digluconate so...	13111704	1
Caelo	Chlorhexidine digluconate so...	1610022-01	1
Fagron	Chlorhexidine digluconate so...	17e09-b01-335140	1
Caelo	Chlorhexidine digluconate so...	17230801	27
Allianz Healthcare	Chlorhexidine digluconate so...	1721110	1
Klosterring	Chlorhexidine digluconate so...	17210110	1
Caelo	Chlorhexidine digluconate so...	1701037-02	2
Euro OTC	Chlorhexidine digluconate so...	1708006-01	14
P.W. Beyvers / Noweda	Chlorhexidine digluconate so...	17210106	1
Euro OTC	Chlorhexidine digluconate so...	3896260321	1
Apomix / Phönix	Chlorhexidine digluconate so...	17210105	1
Kehr	Chlorhexidine digluconate so...	1610022-01	1
EuRho/Phönix	Chlorhexidine digluconate so...	1708006-01	3
Noweda	Chlorhexidine digluconate so...	17210112	2
Fagron	Chlorhexidine digluconate so...	12021823	1
EuRho/Gehe	Chlorhexidine digluconate so...	1708006-01	1
Krieger	Chlorhexidine digluconate so...	17210105	1
Caelo	Chlorhexidine digluconate so...	17210112	12
Fagron	Chlorhexidine digluconate so...	17G04-B01-341690	1
Fagron	Chlorhexidine digluconate so...	17G04-B01	1
AHD	Chlorhexidine digluconate so...	17210112	1
Euro OTC	Chlorhexidine digluconate so...	1708006-02	10
Galderma	Chlorhexidine digluconate so...	1511033-02	1
Caelo	Chlorhexidine digluconate so...	170103702	1
Caesar & Lorenz GmbH	Chlorhexidine digluconate so...	17230801	2
GEHE	Chlorhexidine digluconate so...	17210110	1
Sanacorp	Chlorhexidine digluconate so...	17230801	2
Fagron	Chlorhexidine digluconate so...	7051804	1
Fagron	Chlorhexidine digluconate so...	8051814	1
Fagron	Chlorhexidine digluconate so...	18A09-B05-344605	1
Euro OTC	Chlorhexidine digluconate so...	17080006-02	1
Caelo	Chlorhexidine digluconate so...	18045903	18
Caelo	Chlorhexidine digluconate so...	18A09-B05-344603	1
Euro OTC	Chlorhexidine digluconate so...	1712002-01	7
Fagron	Chlorhexidine digluconate so...	18A09-B05-344604	4
EuRho/Noweda	Chlorhexidine digluconate so...	17230801	1
Krieger	Chlorhexidine digluconate so...	18045903	1
Euro OTC	Chlorhexidine digluconate so...	3-8962-7-02-39	1
Euro OTC	Chlorhexidine digluconate so...	3896270218	2
Caelo	Chlorhexidine digluconate so...	18045909	4
Fagron	Chlorhexidine digluconate so...	18A09-B05-344604	1
EuRho	Chlorhexidine digluconate so...	1712002-01	1
Caesar & Loretz GmbH	Chlorhexidine digluconate so...	18045903	1

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Supplier	Substance	Batch	Spectra
Caelo	Chlorhexidine digluconate so...	18A09-B05-344604	1
Caelo	Chlorhexidine digluconate so...	180459035663	1
euro//Noweda	Chlorhexidine digluconate so...	1708006-02	1
Caelo	Chlorhexidine digluconate so...	17230811	1
Gehe/EuRo	Chlorhexidine digluconate so...	1712002-01	1
Caelo	Chlorhexidine digluconate so...	18045906	7
Euro OTC	Chlorhexidine digluconate so...	1712002-02	4
Fagron	Chlorhexidine digluconate so...	6101801	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-351140	3
Fagron	Chlorhexidine digluconate so...	18045907	1
Caelo	Chlorhexidine digluconate so...	18215601	5
Caelo	Chlorhexidine digluconate so...	18045911	2
Anzag	Chlorhexidine digluconate so...	1708006-02	1
apomix	Chlorhexidine digluconate so...	18215601	1
Fagron	Chlorhexidine digluconate so...	18C05-B04-352123	1
Fagron	Chlorhexidine digluconate so...	18C05-804	1
Caelo	Aluminium acetotartrate solu...	10114803	1
Hedinger	Aluminium acetotartrate solu...	402211793	1
Hedinger	Aluminium acetotartrate solu...	1002211793	1
Hedinger	Aluminium acetotartrate solu...	20149B	1
Hedinger, Heiligenwiese...	Aluminium acetotartrate solu...	20150B	1
Caelo	Aluminium acetotartrate solu...	11315007	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu...	20150B	1
Caelo	Aluminium acetotartrate solu...	20150B	2
Caelo	Aluminium acetotartrate solu...	4071201	1
Caelo	Aluminium acetotartrate solu...	12116803	3
Sanacorp	Aluminium acetotartrate solu...	20150B	2
Caelo	Aluminium acetotartrate solu...	12116804	4
Caelo	Aluminium acetotartrate solu...	17081201	1
Hedinger	Aluminium acetotartrate solu...	20150B	4
Noweda	Aluminium acetotartrate solu...	20150B	1
Caesar&loretz,Phoenix	Aluminium acetotartrate solu...	12116804	1
Hedinger/Holdermann	Aluminium acetotartrate solu...	20150B	1
Caelo	Aluminium acetotartrate solu...	12233501	3
Hedinger	Aluminium acetotartrate solu...	20150B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20149B	1
Hedinger	Aluminium acetotartrate solu...	20151B	1
Stumpf	Aluminium acetotartrate solu...	20151B	1
Caelo	Aluminium acetotartrate solu...	12233502	4
hedinger	Aluminium acetotartrate solu...	20151B	1
Hedinger	Aluminium acetotartrate solu...	2015B	1
Hedinger	Aluminium acetotartrate solu...	20151B	8
Anzag/	Aluminium acetotartrate solu...	20151B	1
Caelo	Aluminium acetotartrate solu...	12233503	1
HEDINGER	Aluminium acetotartrate solu...	20151B	1
Athenstaedt	Aluminium acetotartrate solu...	900108	3
Hedinger	Aluminium acetotartrate solu...	1111	1
Hedinger	Aluminium acetotartrate solu...	2021302	1
athenstaedt GmbH	Aluminium acetotartrate solu...	900107	2
Hedinger/Phönix	Aluminium acetotartrate solu...	20152B	2
Hedinger Phönix	Aluminium acetotartrate solu...	201528	1
Phönix	Aluminium acetotartrate solu...	12116805	1
Anzag	Aluminium acetotartrate solu...	20152B	2
Hedinger	Aluminium acetotartrate solu...	20152B	6
Phönix Gotha	Aluminium acetotartrate solu...	900108	2
Caelo	Aluminium acetotartrate solu...	12318701	5
Caelo	Aluminium acetotartrate solu...	20151B	1
Caelo	Aluminium acetotartrate solu...	11315004	1
Sanacorp	Aluminium acetotartrate solu...	20152B	1
Anzag 17.04.13 ek: 5,43EUR	Aluminium acetotartrate solu...	20152B	1

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Supplier	Substance	Batch	Spectra
Hedinger	Aluminium acetotartrate solu...	26041301	1
Caelo	Aluminium acetotartrate solu...	20152b	1
Hedinger/AHD	Aluminium acetotartrate solu...	20152B	2
Caesar & Lorenz	Aluminium acetotartrate solu...	12318703	1
hedinger	Aluminium acetotartrate solu...	201528	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20151B	1
Hedinger/Otto	Aluminium acetotartrate solu...	201538	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20152B	1
Gehe/Hedinger	Aluminium acetotartrate solu...	20153B	1
Hedinger Phönix	Aluminium acetotartrate solu...	20153B	1
Caelo	Aluminium acetotartrate solu...	12318702	1
Gehe	Aluminium acetotartrate solu...	201528	1
Hedinger	Aluminium acetotartrate solu...	2153B	1
Phönix	Aluminium acetotartrate solu...	12318705	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20153B	2
Hedinger , Noweda	Aluminium acetotartrate solu...	20153B	1
Alliance Healthcare	Aluminium acetotartrate solu...	12318705	2
Phönix	Aluminium acetotartrate solu...	12318703	1
Caelo	Aluminium acetotartrate solu...	2713M-01793	1
Hedinger	Aluminium acetotartrate solu...	20153B	9
Dr. Seeger GmbH/Noweda	Aluminium acetotartrate solu...	20146B	1
Franz GmbH/Phönix	Aluminium acetotartrate solu...	20151B	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20153B	2
Caelo	Aluminium acetotartrate solu...	20152B	1
hedinger/anzag	Aluminium acetotartrate solu...	20152B	1
Gehe	Aluminium acetotartrate solu...	20153B	1
Fischar/Anzag	Aluminium acetotartrate solu...	20152B	1
Hedinger	Aluminium acetotartrate solu...	201538	2
Caelo	Aluminium acetotartrate solu...	13101101	2
Caelo	Aluminium acetotartrate solu...	12318705	2
Anzag/ Hedinger	Aluminium acetotartrate solu...	20153B	1
Caelo	Aluminium acetotartrate solu...	20153B	3
Caelo	Aluminium acetotartrate solu...	12318704	3
Hedinger/Gehe	Aluminium acetotartrate solu...	20152B	1
franz gmbh	Aluminium acetotartrate solu...	201538	1
Hedinger/Phönix	Aluminium acetotartrate solu...	(020)020	1
hedinger/anzag	Aluminium acetotartrate solu...	20153b	1
Hedinger/AHD	Aluminium acetotartrate solu...	201153B	1
Franz GmbH	Aluminium acetotartrate solu...	20153B	1
Dr.Seeger GmbH	Aluminium acetotartrate solu...		1
Hedinger/Gehe	Aluminium acetotartrate solu...	20153B	4
Dr.Seeger GmbH	Aluminium acetotartrate solu...	20153B	1
Dr. Seeger	Aluminium acetotartrate solu...	20153B	1
Phönix	Aluminium acetotartrate solu...	20153b	1
Caelo	Aluminium acetotartrate solu...	13101102	5
Caelo	Aluminium acetotartrate solu...	201538	1
Phönix	Aluminium acetotartrate solu...	13101101	1
Hedinger	Aluminium acetotartrate solu...	20154B	10
Franz GmbH / Phoenix	Aluminium acetotartrate solu...	201538	1
Hedinger/AHD	Aluminium acetotartrate solu...	20146B	1
geile	Aluminium acetotartrate solu...	20154B	1
Spangr/Hedinger	Aluminium acetotartrate solu...	201538	1
Caelo	Aluminium acetotartrate solu...	13101104	5
Calo/AHD	Aluminium acetotartrate solu...	13101105	1
Hedinger / Gehe	Aluminium acetotartrate solu...	3958/V09/15	1
Caelo	Aluminium acetotartrate solu...	20154B	4
Hedinger/Gehe	Aluminium acetotartrate solu...	201548	1
Hedinger/V.d.L.	Aluminium acetotartrate solu...	20154B	1
Caelo	Aluminium acetotartrate solu...	13261301	3
hedinger/gehe	Aluminium acetotartrate solu...	20154B	1

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Supplier	Substance	Batch	Spectra
Caelo	Aluminium acetotartrate solu. . .	13101105	1
Hedinger / Gehe	Aluminium acetotartrate solu. . .	20154B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu. . .	20154B	1
Hedinger/Phoenix	Aluminium acetotartrate solu. . .	20154B	1
Hedinger	Aluminium acetotartrate solu. . .	20155B	9
Caelo	Aluminium acetotartrate solu. . .	13261304	3
Noweda/Hedinger	Aluminium acetotartrate solu. . .	20153B	1
Hedinger/Phönix	Aluminium acetotartrate solu. . .	2015B	1
Caesar&Loretz GmbH/Anzag	Aluminium acetotartrate solu. . .	13101105	1
hedinger/Gehe	Aluminium acetotartrate solu. . .	20155B	1
Hedinger	Aluminium acetotartrate solu. . .	201548	1
Hedinger, Noweda	Aluminium acetotartrate solu. . .	20154B	1
Caelo	Aluminium acetotartrate solu. . .	13261302	2
Hedinger , Stuttgart	Aluminium acetotartrate solu. . .	20154B	1
Caelo	Aluminium acetotartrate solu. . .	6031415	1
Hedinger/Sanacorp	Aluminium acetotartrate solu. . .	20154B	1
Phönix/Hedinger	Aluminium acetotartrate solu. . .	20155B	3
Caelo	Aluminium acetotartrate solu. . .	13261303	1
Hedinger/Phönix	Aluminium acetotartrate solu. . .	20155B	1
Sanacorp	Aluminium acetotartrate solu. . .	20155B	1
Caelo	Aluminium acetotartrate solu. . .	20155B	4
Franz GmbH	Aluminium acetotartrate solu. . .	20155B	3
Hedinger / Gehe	Aluminium acetotartrate solu. . .	20155B	1
Caelo	Aluminium acetotartrate solu. . .	13378701	2
Caelo	Aluminium acetotartrate solu. . .	19052014A	1
Gehe	Aluminium acetotartrate solu. . .	20155B	1
franz GmbH	Aluminium acetotartrate solu. . .	20155B	1
Hedinger/GEHE	Aluminium acetotartrate solu. . .	20155B	1
Caelo	Aluminium acetotartrate solu. . .	13261306	1
hedinger/phönix	Aluminium acetotartrate solu. . .	20155B	1
Caelo	Aluminium acetotartrate solu. . .	13378702	1
Euro OTC	Aluminium acetotartrate solu. . .	13378701	1
Hedinger / Sanacorp	Aluminium acetotartrate solu. . .	20155B	1
Caelo	Aluminium acetotartrate solu. . .	201563	1
Hedinger	Aluminium acetotartrate solu. . .	20156B	13
hedinger	Aluminium acetotartrate solu. . .	20156B	3
Hedinger/ Noweda	Aluminium acetotartrate solu. . .	20156B	1
Raben-Apotheke Mildenau	Aluminium acetotartrate solu. . .	20156B	5
Hedinger/Noweda	Aluminium acetotartrate solu. . .	20156B	3
Caelo	Aluminium acetotartrate solu. . .	13378704	1
Caelo	Aluminium acetotartrate solu. . .	13378703	1
Hedinger / Gehe	Aluminium acetotartrate solu. . .	20156B	4
Hedinger	Aluminium acetotartrate solu. . .	5081403	1
Caelo	Aluminium acetotartrate solu. . .	13378708	2
Hedinger	Aluminium acetotartrate solu. . .	201568	1
Caelo	Aluminium acetotartrate solu. . .	20156B	3
heidinger/noweda	Aluminium acetotartrate solu. . .	20156B	1
Hedinger/Jenne 16.08.14	Aluminium acetotartrate solu. . .	20156B	1
hedinger/Gehe	Aluminium acetotartrate solu. . .	20156B	1
Caelo	Aluminium acetotartrate solu. . .	13378709	4
Hedinger über Phoenix	Aluminium acetotartrate solu. . .	20155B	1
Hediger/Phönix	Aluminium acetotartrate solu. . .	20156B	1
athenstaedt GmbH / Noweda	Aluminium acetotartrate solu. . .	110024	1
Caesar u Loretz	Aluminium acetotartrate solu. . .	14252005	1
Hedinger / Sanacorp	Aluminium acetotartrate solu. . .	20156B	1
Caelo	Aluminium acetotartrate solu. . .	110024	1
Hedinger/Phönix	Aluminium acetotartrate solu. . .	20156B	1
Franz GmbH	Aluminium acetotartrate solu. . .	20152B	2
Hedinger/Phönix	Aluminium acetotartrate solu. . .	20157B	3
Caelo	Aluminium acetotartrate solu. . .	12318703	1

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Supplier	Substance	Batch	Spectra
athenstedt	Aluminium acetotartrate solu...	110029	1
sanacorp/Hedinger	Aluminium acetotartrate solu...	20157B	1
Hedinger	Aluminium acetotartrate solu...	20157B	8
Caelo	Aluminium acetotartrate solu...	14252004	1
Caelo	Aluminium acetotartrate solu...	13378706	3
Hedinger / Gehe	Aluminium acetotartrate solu...	20157B	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20157B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	201578	1
hedinger/phönix	Aluminium acetotartrate solu...	20157B	1
Noweda/Hedinger	Aluminium acetotartrate solu...	20156B	1
Gehe Kassel	Aluminium acetotartrate solu...	201568B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20157B	1
Phönix Gotha	Aluminium acetotartrate solu...	13261304	1
Caelo	Aluminium acetotartrate solu...	110029	1
hedinger	Aluminium acetotartrate solu...	20157B	2
Hedinger über Phoenix	Aluminium acetotartrate solu...	20157B	1
Caelo	Aluminium acetotartrate solu...	1425006	1
GEHE 08.05	Aluminium acetotartrate solu...	20157B	1
Caelo	Aluminium acetotartrate solu...	14252009	2
Hedinger	Aluminium acetotartrate solu...	20158B	4
Spangro/Hedinger	Aluminium acetotartrate solu...	20158B	1
hedinger	Aluminium acetotartrate solu...	20158B	3
Euro OTC	Aluminium acetotartrate solu...	20157B	1
Caelo	Aluminium acetotartrate solu...	14252010	7
Sanacorp/Hedinger	Aluminium acetotartrate solu...	20157B	1
Caelo	Aluminium acetotartrate solu...	14252007	1
Caelo	Aluminium acetotartrate solu...	14252008	2
Caelo	Aluminium acetotartrate solu...	14071503	1
Caelo	Aluminium acetotartrate solu...	14252011	1
Noweda	Aluminium acetotartrate solu...	13261304	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20158B	1
Hedinger/Anzag	Aluminium acetotartrate solu...	20157B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20158B	2
Hedinger/ Sanacorp WE...	Aluminium acetotartrate solu...	20158B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20159B	3
hedinger	Aluminium acetotartrate solu...	201598	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20158B	2
Hedinger/Gehe	Aluminium acetotartrate solu...	20158B	2
Caelo	Aluminium acetotartrate solu...	15045403	4
Caesar&Loretz GmbH/Anzag	Aluminium acetotartrate solu...	14252010	1
Caelo	Aluminium acetotartrate solu...	20158B	1
Hedinger/ Phönix	Aluminium acetotartrate solu...	20159B	1
Caelo	Aluminium acetotartrate solu...	15045406	11
Caelo	Aluminium acetotartrate solu...	20159B	1
Caelo	Aluminium acetotartrate solu...	20159b	1
Caelo	Aluminium acetotartrate solu...	15045405	4
Hedinger/Alliance Healt...	Aluminium acetotartrate solu...	20159B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20159B	4
Hedinger	Aluminium acetotartrate solu...	20159B	5
Caelo	Aluminium acetotartrate solu...	1504506	1
athenstaedt	Aluminium acetotartrate solu...	110024	1
Hedinger/Sana	Aluminium acetotartrate solu...	20159B	1
Hedinger/ Noweda	Aluminium acetotartrate solu...	20159B	1
Gehe	Aluminium acetotartrate solu...	15045406	1
HEDINGER/NOWEDA	Aluminium acetotartrate solu...	20159B	1
heidinger/phönix	Aluminium acetotartrate solu...	20159B	2
AHD/Hedinger	Aluminium acetotartrate solu...	20159B	1
Caelo	Aluminium acetotartrate solu...	15054405	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20159B	1
Gehe	Aluminium acetotartrate solu...	15045403	1

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Supplier	Substance	Batch	Spectra
Caelo	Aluminium acetotartrate solu. . .	1425010	1
Hedinger/ Anzag	Aluminium acetotartrate solu. . .	20159B	1
Hedinger	Aluminium acetotartrate solu. . .	20160B	11
Hedinger/Phoenix	Aluminium acetotartrate solu. . .	20160B	3
Caelo	Aluminium acetotartrate solu. . .	15299901	16
Caelo	Aluminium acetotartrate solu. . .	20160B	3
FA.Hedinger	Aluminium acetotartrate solu. . .	20159B	1
Kehr/gepepharm	Aluminium acetotartrate solu. . .	20160B	1
Hedinger/ Sanacorp	Aluminium acetotartrate solu. . .	20159B	1
WE:21.03.2016 Sanacor. . .	Aluminium acetotartrate solu. . .	20160B	1
Hedinger/Phönix	Aluminium acetotartrate solu. . .		1
Hedinger / Anzag	Aluminium acetotartrate solu. . .	20160B	1
Hedinger / Noweda	Aluminium acetotartrate solu. . .	201598	1
Haedinger	Aluminium acetotartrate solu. . .	20160B	1
Gehe	Aluminium acetotartrate solu. . .	20160B	2
Caelo	Aluminium acetotartrate solu. . .	15299902	4
athenstaedt/AllianceHC	Aluminium acetotartrate solu. . .	160029	1
Hedinger	Aluminium acetotartrate solu. . .	201608	1
Hedinger/Gehe	Aluminium acetotartrate solu. . .	20160B	1
Caelo	Aluminium acetotartrate solu. . .	20161B	8
Hedinger/Noweda	Aluminium acetotartrate solu. . .	20160B	2
Jenne	Aluminium acetotartrate solu. . .	20161B	1
heidinger/gehe	Aluminium acetotartrate solu. . .	201618	1
Franz GmbH / Phoenix	Aluminium acetotartrate solu. . .	20161B	1
hedinger	Aluminium acetotartrate solu. . .	20160B	1
Hedinger/Noweda	Aluminium acetotartrate solu. . .	200161B	1
Hedinger	Aluminium acetotartrate solu. . .	20161B	17
Athenstaedt	Aluminium acetotartrate solu. . .	160036	2
Caelo	Aluminium acetotartrate solu. . .	15299904	3
Hedinger/Phoenix	Aluminium acetotartrate solu. . .	20020	1
Bombastus	Aluminium acetotartrate solu. . .	160029	1
Hedinger / Noweda	Aluminium acetotartrate solu. . .	20161B	1
Hedinger	Aluminium acetotartrate solu. . .	2016b	1
Hedinger/Phönix	Aluminium acetotartrate solu. . .	20160B	1
Hedinger GmbH	Aluminium acetotartrate solu. . .	20160B	1
Caelo	Aluminium acetotartrate solu. . .	15299909	7
Caelo	Aluminium acetotartrate solu. . .	16004501	3
Hedinger/ Sanacorp	Aluminium acetotartrate solu. . .	20161B	2
Hedinger/Fiebig	Aluminium acetotartrate solu. . .	20161B	1
Hedinger / Gehe	Aluminium acetotartrate solu. . .	20161B	1
Franz GmbH	Aluminium acetotartrate solu. . .	20161B	2
Hedinger/ Sanacorp	Aluminium acetotartrate solu. . .	20161B	1
Aug. Hedinger GmbH & Co. . .	Aluminium acetotartrate solu. . .	20161B	1
Hedinger/Gehe	Aluminium acetotartrate solu. . .	20161B	3
Franz / Anzag	Aluminium acetotartrate solu. . .	(020)020	1
Caelo	Aluminium acetotartrate solu. . .	16004505	11
Cealo/AHD	Aluminium acetotartrate solu. . .	15299909	1
athenstaedt	Aluminium acetotartrate solu. . .	160036	1
L 20/Hedinger	Aluminium acetotartrate solu. . .	201618	1
Caelo	Aluminium acetotartrate solu. . .	1031706	1
Hedinger GmbH	Aluminium acetotartrate solu. . .	20161B	1
Caelo	Aluminium acetotartrate solu. . .	2016B	1
Phoenix WE 11.03.17 EK. . .	Aluminium acetotartrate solu. . .	20161B	1
hedinger	Aluminium acetotartrate solu. . .	20161B	1
athenstaedt / Gehe	Aluminium acetotartrate solu. . .	160036	1
Cealo/Anzag	Aluminium acetotartrate solu. . .	15299901	1
Hedinger / Noweda	Aluminium acetotartrate solu. . .	20160B	1
Caelo	Aluminium acetotartrate solu. . .	16004525	1
GEHE	Aluminium acetotartrate solu. . .	20161B	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu. . .	16004505	1

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Supplier	Substance	Batch	Spectra
Hedinger/Fiebig	Aluminium acetotartrate solu...	20162B	3
Hedinger/Anzag	Aluminium acetotartrate solu...	20161B	1
Hedinger/VDL	Aluminium acetotartrate solu...	20161B	1
Henry Lamotte GmbH/ San...	Aluminium acetotartrate solu...	16004505	1
Hedinger GmbH, Phoenix	Aluminium acetotartrate solu...	20162B	2
AHD	Aluminium acetotartrate solu...	20162B	1
Hedinger	Aluminium acetotartrate solu...	20162B	1
Caelo	Aluminium acetotartrate solu...	16004504	2
Athenstaedt	Aluminium acetotartrate solu...	160029	1
Hedinger/Noweda	Aluminium acetotartrate solu...	20161B	1
Caelo	Aluminium acetotartrate solu...	16004512	8
Hedinger Phönix	Aluminium acetotartrate solu...	20162B	1
hedinger/gehe	Aluminium acetotartrate solu...	20162B	1
A. Hedinger/Noweda	Aluminium acetotartrate solu...	201628	1
Caelo	Aluminium acetotartrate solu...	20162B	1
Hedinger/ Gehe	Aluminium acetotartrate solu...	20162B	1
Caelo	Aluminium acetotartrate solu...	2058179	1
Hedinger/Ebert	Aluminium acetotartrate solu...	20162B	1
Caesar & Loretz GmbH	Aluminium acetotartrate solu...	16004504	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20162B	1
Caelo	Aluminium acetotartrate solu...	16091704	1
Caelo	Aluminium acetotartrate solu...	(020)020	1
Fagron	Aluminium acetotartrate solu...	20163B	1
Caelo	Aluminium acetotartrate solu...	16342001	8
Hedinger/Gehe	Aluminium acetotartrate solu...	20162B	1
Jenne	Aluminium acetotartrate solu...	20162B	1
athenstaedt GmbH	Aluminium acetotartrate solu...	160030	1
Hedinger/Sanacorp	Aluminium acetotartrate solu...	20163B	4
Hedinger	Aluminium acetotartrate solu...	20163B	3
athenstaedt GmbH/Phönix	Aluminium acetotartrate solu...	160030	1
Hedinger/Gehe	Aluminium acetotartrate solu...	20163B	2
Phoenix/Cealo	Aluminium acetotartrate solu...	20155B	1
Caelo	Aluminium acetotartrate solu...	16342005	3
Caelo	Aluminium acetotartrate solu...	160030	1
Caelo	Aluminium acetotartrate solu...	20163B	2
Hedinger	Aluminium acetotartrate solu...	20163b	1
Hedinger / Gehe	Aluminium acetotartrate solu...	20163B	2
Caelo	Aluminium acetotartrate solu...	17051804	1
athenstaedt/GEHE	Aluminium acetotartrate solu...	160030	1
hedinger/gehe	Aluminium acetotartrate solu...	20163B	1
Caelo	Aluminium acetotartrate solu...	16342006	7
Gehe	Aluminium acetotartrate solu...	20163B	4
Caelo	Aluminium acetotartrate solu...	163420006	1
Hedinger Phönix	Aluminium acetotartrate solu...	20163B	1
Hedinger/Phönix	Aluminium acetotartrate solu...	20163B	1
Hedinger/Phoenix	Aluminium acetotartrate solu...	20163B	1
hedinger/ Sanacorp	Aluminium acetotartrate solu...	20163B5693	1
Caelo	Aluminium acetotartrate solu...	18078602	3
Athenstaedt	Aluminium acetotartrate solu...	180044	1
Cealo/Gehe	Aluminium acetotartrate solu...	1800041	1
Hedinger Phönix	Aluminium acetotartrate solu...	20164B	2
athenstaedtFiebig	Aluminium acetotartrate solu...	180044	1
Caelo	Aluminium acetotartrate solu...	20164B	1
Caelo	Aluminium acetotartrate solu...	18078606	2
Hedinger/Ebert	Aluminium acetotartrate solu...	20163B	1
Hedinger	Aluminium acetotartrate solu...		1
Hedinger/Gehe	Aluminium acetotartrate solu...	201638	1
Cealo/Anzag	Aluminium acetotartrate solu...	18078606	1
Hedinger/ Gehe	Aluminium acetotartrate solu...	20163B	1
Fagron	Water	14L03-T03-017773	1

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Supplier	Substance	Batch	Spectra
Fagron	Water	14L03-T09-017794	2
Fagron	Water	14J16-T24-016261	1
Fagron	Water	14L03T13017804	1
Phönix Gotha	Water	15019101	3
Fagron	Water	14K05-T03-016779	1
Fagron	Water	14L03-T07-017788	3
Fagron	Water	14L03T09017794	1
Fagron	Water	14K05-T02-016775	2
Caelo	Water	15025501	1
Fagron	Water	14L03-T11-017800	1
Caelo	Water	15068701	1
Fagron	Water	15D14-T05	2
Fagron	Water	15D13-T09-021469	6
Rabenapotheke	Water	14L03-T11-017800	1
Fagron	Water	15D14-T05-021481	3
Phönix Gotha	Water	15142501	1
Fagron	Water	15D14-T10-021493	4
Caelo	Water	15068702	4
Phönix Gotha	Water	14K05-T02-016775	2
Fagron	Water	15D14-T09-021490	4
Caelo	Water	14364201	1
Caelo	Water	15220602	7
Fagron	Water	15D14-T13-021499	2
Phönix Gotha	Water	15253901	1
Wasser, gereinigt	Water	15D14T09021490	1
Caelo	Water	14321201	1
WEPA	Water	LOTAP0012	2
Caelo	Water	15253901	4
Fagron	Water	13K13-T08-008092	1
Fagron	Water	14L03-T13-017804	1
Fagron	Water	14K06-C20-16125	2
Klenk	Water	15D14-T-021499	1
Fagron	Water	15D14-T06-021484	3
Caelo	Water	15220601	3
Caelo	Water	15287401	2
Phönix Gotha	Water	15235201	2
Fagron	Water	15D14-T14-021502	6
Fagron	Water	15D13-T07-021465	2
Caelo	Water	15235201	1
Wepa	Water	LOTAP0013	1
Caelo	Water	15235301	2
Fagron	Water	15F04-T05-023263	2
Caelo	Water	1524101	1
Fargon/Kehr	Water	15F04-T05-023263	1
Caelo	Water	15287501	2
Caelo	Water	15336501	5
Fargon / Gehe	Water	15D14-T13-021499	1
Fagron	Water	15F24-T01-023879	9
Rondell Apotheke	Water	LOTAP0016	1
Fagron	Water	15I10-T08-025964	2
Caelo	Water	15287302	3
Fagron	Water	15F04-T03-023259	1
Caelo	Water	15254101	3
Wepa	Water	LOTAP0017	1
Fagron	Water	15F24T03-023883	1
Caelo	Water	15394501	2
Fagron	Water	15H25-T14-025670	9
Fagron	Water	1509-T02-024364	1
Fagron	Water	15D14-To5-021481	1
Fagron	Water	15G09-T02-024364	4

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Supplier	Substance	Batch	Spectra
Caelo	Water	17011603	1
Caelo	Water	15355201	1
Serumwerk Bernburg AG	Water		2
Fagron	Water	15F-24-023883	1
Wepa	Water	LOTAP0020	1
Fagron	Water	15H25-T16-025674	4
Caelo	Water	15317401	1
Fagron	Water	15F24-T03-023883	3
Caelo	Water	15F24-T03-023883	2
Caelo	Water	15427201	5
Caelo	Water	15355301	2
Caelo	Water	15355401	1
Caelo	Water	15336502	1
Fagron	Water	15E18-C20-16520	3
Hedinger/ Sanacorp	Water	AP0022	1
Caelo	Water	16006001	3
Fagron	Water	15H25-T18-025678	4
Caelo	Water	15394202	11
Fagron	Water	15G09-T04-024368	5
Caelo	Water	15G09-T04-024368	2
Caelo	Water	15H25-T18-025678	1
Fagron	Water	15H25-T21-025683	5
Caelo	Water	15I10-T08-025964	1
Fagron	Water	15L14-T14-028664	7
Caelo	Water	16002901	1
Caelo	Water	15H25-T21-025683	2
Caelo	Water	15H25T18025678	1
Wepa	Water	LOTAP0015	1
Caelo	Water	15406801	2
Fagron	Water	15/10-T08-025964	1
Wepa	Water	AP0024	1
wepa	Water	LOTAP0024	1
Caelo	Water	15394201	2
Fagron	Water	15L15-T01-028672	6
Caelo	Water	1542701	1
Fagron	Water	15L15-T01-0208672	1
Fagron	Water	15F04-T03-023529	1
Caelo	Water	15371202	4
Caesar & Loretz GmbH Hi...	Water	15394202	1
Caelo	Water	16065001	1
Fagron	Water	15L15-T03-0286761042	1
Fagron	Water	15k10-t04-027614	1
Fresenius Kabi/Phönix	Water	14IL38	2
Fagron	Water	15L15-T03-028676	3
Fagron	Water	15L14-T12-028660	3
Fragron	Water	15L15-T01-028672	1
Wepa	Water	LOTAP0025	1
Caelo	Water	15D13-T09-021469	1
Caelo	Water	16093301	3
WEPA	Water	LOTAP0025	2
Fagron	Water	15L15-T05-028681	2
Fargon/Noweda	Water	15L15-T028676	1
Fagron	Water	15h0-T09-025968	1
wepa/Sanaco	Water	LOTAP0028	1
Caelo	Water	16041701	1
Wepa	Water	LOTAP0021	1
Caelo	Water	1615201	1
Caelo	Water	16065601	1
Phoenix	Water	15L14-T14	1
Fagron	Water	16C22-T09-031414	4

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Supplier	Substance	Batch	Spectra
Caelo	Water	LOTAP0029	1
Caelo	Water	16127901	3
Fragon/Phoenix	Water	15L14-T12-028660	1
Caelo	Water	16002601	1
Caelo	Water	15L15-T05-028681	1
Noweda	Water	15F04-T03-023259	1
Hedinger/Phönix	Water	219124	1
Henry Lamotte	Water	15L14-T12-028660	1
wepa/Sanacorp	Water	AP0027	1
Phönix	Water	16127901	1
Fagron	Water	15K10-T04-027614	7
Caelo	Water	16178101	1
wepa	Water	LOTAP0031	1
Caelo	Water	15F04-T05-023263	1
Fagron	Water	16C23-T06-031423	5
Fagron	Water	16C23-T06-31423	1
Caelo	Water	15K10-T06-027620	1
Fagron	Water	15h25-t21-025683	1
Caelo	Water	23081606	1
Ebert 04.04.2014	Water	15K10-T04-027614	1
Fragon/Phoenix	Water	15L4-T14-028664	1
Caelo	Water	16211901	3
Fagron	Water	15K10-T06-027620	3
Caelo	Water	16C23-/08031427	1
Phoenix	Water	15L15-T07	1
Caelo	Water	16151201	2
Fagron	Water	16C23-T08-031427	2
Fagron	Water	15L15-T07-028685	6
Caelo	Water	16065101	1
Noweda	Water	15K10-T05-027617	1
wepa	Water	LOTAP0033	3
Caelo	Water	16127902	3
Caelo	Water	16223501	1
Caelo	Water	16223801	13
Hedinger	Water	219116	1
Caelo	Water	16C23-T16-031436	2
Caelo	Water	16223601	3
Caelo	Water		3
Hedinger	Water	219133	1
Caelo	Water	16223901	1
Wepa	Water	LOTAP0030	1
Euro OTC	Water	15L15-T07-028685	1
Fagron	Water	16F13-T11-034264	8
WE:Sanacorp 12.09.2016 ...	Water	16C23-T08-031427	1
Caelo	Water	16340201	2
Fagron	Water	15K10-T05-027617	1
WEPA	Water	LOTAP0036	1
wepa	Water	LOTAP0038	1
Fagron	Water	16C23-C20-17151	3
Fagron	Water	15L14T14028664	2
Hedinger	Water	219132	1
Fagron	Water	16F13-T16-034297	3
Fagron	Water	16F13-T14-034274	4
Fagron	Water	16F13-T18-034301	12
Fagron	Water	16F13T11034264	1
Alte Apotheke	Water	16022202	1
Fargon GmbH & Co.KG	Water	16F13-T16-034297	1
Caelo	Water	16255101	2
WEPA	Water	LOTAP0038	2
WEPA-WEPA	Water	LOTAP0028	1

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Supplier	Substance	Batch	Spectra
Fagron	Water	16C23-T-16-031436	1
Caelo	Water	16255201	3
Caelo	Water	16F14-T05-034321	1
Fargon	Water	303429	1
Fagron	Water	15L-15T07028685	1
Euro OTC	Water	16F13-T18-034301	1
Fagron	Water	16F14-T07-034326	12
Caesar & Loretz GmbH Hi...	Water	16127902	1
Wepa	Water	LOTAP0040	2
Fagron	Water	16286801	2
Alte Apotheke	Water	16223601	1
Wepa	Water	LOTAP0035	1
Fresenius	Water	14KB1003	1
Fagron	Water	16H02T01035743	1
Fagron	Water	16f14-t07-034326	1
Fagron	Water	16F14-T03-034317	5
Caelo	Water	LOTAP0039	1
Caelo	Water	16F13-T11-34264	1
Wepa Apothekenbedarf	Water	LOTAP0037	3
Caelo	Water	16286801	4
wepa	Water	LOTAP0040	1
Fargon GmbH & Co.KG	Water	15K10-To4-027614	1
Wepa	Water	LOTAP0046	2
hedinger	Water	219135	1
WEPA	Water	LOTAP0039	1
Fagron	Water	15L15T07-028685	1
Fagron	Water	16F14-t03-034317	1
Caelo	Water	16F14-T03-034317	1
Fresenius Kabi/Phönix	Water	14KI21	4
Caelo	Water	16313201	4
Caelo	Water	16F14-T07-034326	1
Fagron	Water	T14-031432	1
Fargon GmbH & Co.KG	Water	15K10-T07-027623	2
Fagron	Water		2
Fagron	Water	16F14-T09-034330	3
Caelo	Water	16313202	1
Euro OTC	Water	16307601	1
Caelo	Water	16218601	1
Fagron	Water	16F14T05-034321	1
Fagron	Water	16F14-T05-034321	6
Caelo	Water	16307501	2
Caelo	Water	17032401	3
Fagron	Water	16F13T18034301	2
wepa	Water	LOTAP0045	1
Caelo	Water	16353303	6
Fagron	Water	16C23-T14-031432	2
Fargon GmbH & Co.KG	Water	16F14-T07-034326	1
Fagron	Water	16L12-T11-039624	5
Caelo	Water	17002001	4
Hedinger	Water	219140	1
Hedinger	Water	219143	2
Hedinger	Water	219147	1
Wepa / Wepa	Water	LOTAP0045	1
Caelo	Water	LOTAP0044	2
Caelo	Water	16334301	1
Caelo	Water	17002101	4
Fagron	Water	16C23-T16-031436	2
Fagron	Water	16K25-C20-17409	1
Caelo	Water	16215202	1
Fagron	Water	16L12-T27-039646	6

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Supplier	Substance	Batch	Spectra
Fagron	Water	16L1-T27-039646	1
Fagron	Water	16L12T16039628	1
Wepa / Wepa	Water	LOTAP0048	2
Fagron	Water	16L12-T29-039657	2
Wepa/ wepa	Water	LOTAP0048	1
Caelo	Water	16B10T04030213	1
Caelo	Water	17098701	4
Wepa Apothekenbedarf	Water	LOTAP0042	2
Caelo	Water	16L12-T11-039624	1
Phoenix WE28.04.17 -7,9...	Water	16H02-T01-035743	1
Sanacorp /Wepa	Water	LOTAp0042	1
Fagron	Water	16L12T29039657	2
Fagron	Water	16L12-t29-039657	1
Fagron	Water	16L12-T16-039628	4
Fagron	Water	16B10-T02-030206	2
Fagron	Water	LOTAP0048	1
Wepa/ wepa	Water		6
Caelo	Water	LOTAP0050	1
Wepa/Sanacorp	Water	LOTAP0047	1
Caelo	Water	LOTAP0042	1
Fagron	Water	Ap0048	1
Fagron	Water	16B10-T05-03026	1
Fagron	Water	16B10-T04-030213	1
WEPA	Water	LOTAP00500	1
Caelo	Water	16K25-C20-17409	1
Fresenius Kabi/Phoenix	Water	145I21	1
WEPA Apothekenbedarf	Water	LOTAP0042	1
Wepa/ Wepa	Water	LOTAP0051	1
WEPA	Water	LOTAP0051	1
Fagron	Water	17B10-T27-041575	2
Hedinger	Water	219147(2x)	1
Fargon GmbH & Co.KG	Water	17B10-T20-041571	1
Caelo	Water	17035201	1
Fargon GmbH & Co.KG	Water	16B10-T04-030213	3
Fagron	Water	16L12-T25-039642	5
Wepa	Water	LOTAP0048	1
Fagron	Water	15K10-T08-027626	1
WEPA	Water	LOTAP0047	1
Caelo	Water	17098901	6
Fargon / Gehe	Water	17B10-T27-041575	1
Caelo	Water	16L12T16039628	1
Fagron	Water	17C06-T09-042290	1
Fagron	Water	16F14T05034321	1
wepa	Water	LOTAP0048	1
Fagron	Water	16H02-T01-035743	2
Caelo	Water	17089101	2
Caelo	Water	17114501	5
Fargon	Water	16L12T11039624	1
Fagron	Water	17B13-T04-041608	7
Wepa	Water	LOTAP0054	2
Caelo	Water	17B10-T20-041571	1
Caelo	Water	14170717	1
Wepa/Anzag 11.07.2017	Water	LOTAP0055	3
Caelo	Water	17034901	1
Caelo	Water	16L12-T31-039661	1
Caelo	Water	17114701	3
apomix/Noweda	Water	17114501	1
Fagron	Water	16f14-t09-034330	1
Caelo	Water	16B10-T05-030216	2
Caelo	Water	17B13-T02-041604	1

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Supplier	Substance	Batch	Spectra
Kehr	Water	17114501	1
Kehr	Water	17114801	1
Caelo	Water	17012002	1
Noweda/Wepa	Water	LOTAP0053	1
Caelo	Water	17089301	1
Fagron	Water	17B13-T02-041604	6
Fagron	Water	15K10-T07-027623	1
Caelo	Water	17145002	1
Fagron	Water	17810-T18-041564	1
Fagron	Water	17114801	1
Wepa	Water	AP0054	1
Fagron	Water	16K25C20-17409	1
Fagron	Water	17E05-T01-044045	7
Wepa/ Phoenix	Water	LOTAP0059	2
GEHE	Water	17B10-T27-041575	2
Fagron	Water	17E05-T03-044051	5
WEPA	Water	LOTAP0054	1
Fagron	Water	2050917/17B10-T18-04	1
Fagron	Water	16B10-T05-030216	2
Caelo	Water	17114801	1
Klenk	Water	17173001	2
Fagron	Water	16810-T02-030206	1
Caelo	Water	39628	1
Caesar & Loretz	Water	17145001	3
Caelo	Water	17145001	7
Fargon GmbH & Co.KG	Water	17E05-T03-044051	1
Caelo	Water	16F13-T11-034264	1
Caelo	Water	17173001	2
Fresenius Kabi/Phoenix	Water	14LE20	3
Fargon/Kehr	Water	17B10-T20-041571	1
Caesar & Loretz	Water	17173001	1
Wepa	Water	LOTAP0060	1
Caelo	Water	17E05-T03-044051	1
Fagron	Water	17E05-T05-044063	6
Fagron	Water	16B10-T03-030210	1
Hedinger	Water	219164	1
Wepa	Water	LOTAP0059	1
Caelo	Water	17173101	1
Fargon	Water	17e05-t07-044067	1
Fargon	Water	16112-t31-039661	1
Jenne	Water	17E05-T11-044076	1
Caelo	Water	17179001	3
Caelo	Water	16L12T25039642	1
Caelo	Water	17E05T11044076	1
Wepa	Water	LOTAP0065	1
Caelo	Water	17177301	9
Caelo	Water	17219101	4
Fagron	Water	17C31-T05-043064	1
Klenk	Water	17F23-T06-045760	2
Fagron	Water	17E05-T11-044076	4
Caelo	Water	17179101	4
Fagron	Water	17H24-T09-047709	2
Caelo	Water	17277102	4
WEPA	Water	LOTAP0062	1
Fagron	Water	B17C31-T05-043064	1
Caelo	Water	17282701	7
Caelo	Water	17233001	4
Jenne	Water	17H24-T09-047709	2
Fagron	Water	17H14-T09-047709	1
Fagron	Water	17E05T05044063	1

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Supplier	Substance	Batch	Spectra
Fagron	Water	17B10-T18-041564	1
Wepa	Water	LOTAP0067	2
Caelo	Water	17249101	1
Fagron	Water	16B10T02030207	1
Phönix WE:08.12.17 E...	Water	17C31-T05-043064	2
Fagron	Water	17h24-709-047709	1
Fagron	Water	17K01-T01-048440	4
Hedinger	Water	219167	2
Caelo	Water	17233101	3
Fagron	Water	17H24-T11-047713	2
Caelo	Water	17319901	3
Fagron	Water	17F23-T06045760	1
Caelo	Water	17291301	2
Caelo	Water	17H24-T09-047709	1
Fargon/Kehr	Water	17H24-T09-047709	1
WEPA/WEPA	Water	LOTAP0056	1
Fagron	Water	16F23-T06-045760	1
Fagron	Water	17H24-T15-047721	3
Caelo	Water	17295701	7
Caelo	Water	17H24T11047713	1
Fargon/Kehr	Water	17L20-T02-051255	4
Caelo	Water	17E05-T11-044076	2
Wepa	Water	LOTAP0072	3
Caelo	Water	1723311	1
Fagron	Water	17E05-T13-044080	4
Fagron	Water	17L20-T02-051255	4
Fagron	Water	17K27-T09-050544	4
Fagron	Water	17E05-T01-044045	1
Wepa-Apothekenbedarf	Water	LOTAP0069	1
Fagron	Water	17K27-T09-050544/107	1
Fagron	Water	219167	1
WEPA	Water	LOTAP0069	1
Phönix/Wepa	Water	LOTAP0073	1
Caelo	Water	17320001	4
Caelo	Water	17K27-T09-050544	2
Caelo	Water	17317301	1
Gehe	Water	17H24-T15-047721	1
Caelo	Water	17304101	1
Gehe	Water	17319901	2
WEPA	Water	LOTAP0071	1
Caelo	Water	17H24-T15-047721	1
Caelo	Water	17E05-T13-044080	1
Fagron	Water	17F23-T06-045760	1
Wepa	Water	LOTAP0073	1
AHL	Water	17291301	2
Wepa/Sanacorp	Water	LOTAP0076	1
Wepa	Water	AP0074	1
Gehe	Water	17H24-T11-047713	1
Caelo	Water	18061901	3
Caelo	Water	17149601	1
WEPA	Water	LOTAP0075	2
Caelo	Water	18000401	1
Henry Lamotte Oils GmbH...	Water	17K27-T09-050544	1
Euro OTC	Water	17295701	1
GEHE	Water	17H27-T10-050547	1
GEHE	Water	17H24-T13-047717	1
Wepa	Water	ap0069	1
Fagron	Water	17H24-Tn-047713	1
Hedinger	Water	219173	1
Caelo	Water	18019501	1

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Supplier	Substance	Batch	Spectra
Fagron	Water	17K27-T14-050581	1
Gehe	Water	17H24-T13-047717	1
Fagron	Water	17L20-T02-051254	1
Caelo	Water	18030402	9
Fagron	Water	17K27-T10-050547	3
Wepa	Water	LOTAP0078	1
Fagron	Water	17k27-T09-050544	1
Wepa	Water	LOTAP0079	2
Hedinger/Noweda	Water	219177	1
Fagron	Water	17j20-T03-051260	1
Fagron	Water	18C13-T14-053737	6
Fagron	Water	17L20-T03-051259	1
Fagron	Water	17K27-T09-050544	1
Fagron	Water	17K27-T11-050552	2
wepa	Water	LOTAP0081	1
WEPA	Water	LOTAP00812ma151	1
Fagron	Water	18C13-T14-053757	1
Caelo	Water	17K27T14050581	1
Caelo	Water	18065601	3
Wepa	Water	AP0080	1
Wepa	Water	LOTAP0074	1
Sophien AM/Wepa	Water	LOTAP0077	1
Fagron	Water	17L20-T02-51254	1
Caelo	Water	18138601	2
Caelo	Water	17339801	2
Caelo	Water	18109201	1
Wepa	Water	LOTAP-SP0001	4
WEPA	Water	AP0076	1
Fagron	Water	17K27-T13-050577	1
Sanacorp/Wepa	Water	LOTAP0083	1
WEPA	Water	LOTAP0078	1
Fagron	Water	17K27T15050585	2
Caelo	Water	18093501	1
Sanacorp	Water	17339801	1
Caelo	Water	14LL26	3
Fagron	Water	17K27-T15-050585	2
Fagron	Water	LOTAP0083	2
Caelo	Water	18109101	1
Fagron	Water	18C19-T25-05399	1
Wepa	Water	LOTAP0080	1
Caelo	Water	18146801	1
Wepa/Sanacorp	Water	LOTAP0084	1
Caelo	Water	18093601	5
Caelo/Gehe	Water	LOTAP0086	1
Anzag/Anzag 31.08.18	Water	LOTAP0083	1
Caelo	Water	18210601	4
WEPA	Water	LOTAP0081	1
Fagron	Water	18C19-T28-054003	1
Fagron	Water	18C19-T26-053995	5
Wepa	Water	LOTAP0085	1
Wepa	Water	LOTAP0082	1
Sanacorp	Water	17K27-T14-050581	1
Hedinger	Water	219184	1
Caelo	Water	1814801	1
Caelo	Water	18156201	1
Caelo	Water	LOTAP0088	1
Sanacorp	Water	18138601	1
Wepa/Sanacorp	Water	LOTAP0089	1
Fagron	Water	18C19T29054007	1
Caelo	Water	18C19-T25-053991	1

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Supplier	Substance	Batch	Spectra
Caelo	Water	18156301	1
Fagron	Water	18c13T15053743	1
Fagron	Water	18E07T08055699	1
Caelo	Water	18110401	3
Caelo	Water	LOTAP-SP0001	1
Fagron	Water	18E07-T08-055699	2
Caelo	Water	18178302	2
Sanacorp	Water	18210601	1
Caelo	Water	LOTAP0089	1
Fagron	Water	18E28-T01-056486	1
Fagron	Water	18C19-T25-053991	1
Caelo	Water	LotAP0083	1
Hedinger/Gehe	Water	219181	1
WEPA	Water	LOTAP0089	1
Caelo	Water	18228701	1
Bombastus	Water	AP0093	1
Fagron	Water	18C13-T16-053745	1
Caelo	Water	18226601	1
Fagron	Water	18C19-T31-054017	1
Sanacorp	Water	LOTAP0090	1
Fagron	Water	18C13-T14-053736	1
Fagron	Water	18C19-T30-054012	1
Fagron	Water	18C19T31054017	1
Fagron	Water	18G16-To1-058118	1
Fagron	Water	18C19-T27-053999	1
WEPA	Water	LOTAP0095	1
Caelo	Water	18226701	1
Sanacorp	Water	18C19-T30-054012	1
Fagron	Water	18G16-T01-058118	1
Fagron	Water	18G16-T04-058129	1

- 104 761 spectra from 582 *Apo-Ident* customers from a total of 29 828 batches from a further 335 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	690	0	35 145
Type B	0	1553	2	77 006
Type C	0	3039	159	104 509

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 % (> 99.9705 %)	100.0000 % (> 99.1304 %)
Type B	100.0000 % (> 99.9708 %)	99.8714 % (> 99.6785 %)
Type C	100.0000 % (> 99.6658 %)	95.0281 % (> 94.9343 %)

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.

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
31240	31735	3.37	41.75
31463	31463	0.00	42.86
31735	31735	0.00	43.31
31829	31463	4.58	40.46
31846	31846	0.00	41.49
32732	31735	2.92	42.24
32354	32354	0.00	36.16
30869	31342	5.63	20.49
31342	31342	0.00	25.68
31959	31342	5.79	23.73
32831	32831	0.00	35.73
31057	32354	2.88	34.21
31624	31718	1.91	38.44
31676	32354	3.93	33.37
31718	31718	0.00	38.01
31809	31718	4.66	41.06
31705	31718	9.67	34.29
32308	31718	9.67	35.43

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Wines
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30641-2019-05-24
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; 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	<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>
Appendix F	Addition to the second-stage models

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.

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
Audor	Gel basis Audor®	AP111500	30641	40	20101104
Caelo	Condurango wine	11239009	30901	50	20110909
Audor	Gel basis Audor®	AP103113G	31108	40	1404231
Caelo	Fortified wine	13208302	31127	40	1403400

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Chest elixir	13003109	31213	40	1405332
Caelo	Fortified wine	13208306	31222	70	20130822
Caelo	Fortified wine	13397204	31466	40	20131216
Caelo	Condurango wine	14345603	31581	40	1505325
Caelo	Chest elixir	14182707	31615	40	20140709
Caelo	Liquorice juice,...	14203111	31652	40	20140711
Caelo	Liquorice juice,...	162291	32700	40	20160824*
Audor	Gel basis Audor®	AP53801G	32724	40	20151012
Audor	Gel basis Audor®	AP63101G	32751	40	20160906
Caelo	Liquorice juice,...	171695	33330	40	20170621*
Caelo	Chest elixir	17013603	33619	40	20170125

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 640 spectra of 15 reference samples from the substance/substance group *Wines*. These samples are listed above in the [calibration samples](#) section.
- 35 195 spectra from a total of 832 batches from further 209 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 570 spectra of 17 reference samples from the substance/substance group *Wines*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Condurango wine	11239009	30901 [†]	10
Caelo	Fortified wine	13397204	31466 [†]	20
Caelo	Condurango wine	14345603	31581 [†]	20
Caelo	Chest elixir	14182707	31615 [†]	20
Caelo	Liquorice juice, purified	14203111	31652 [†]	20
Caelo	Liquorice juice, purified	161241	32200	40
Caelo	Fortified wine	161795	32336	40
Audor Pharma	Gel basis Audor®	AP63101G	32752	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
Caelo	Chest elixir	15379113	32956	40
Caelo	Condurango wine	15341903	32957	40
Caelo	Liquorice juice, purified	16316201	33463	40
Audor Pharma	Gel basis Audor [®]	AP72301G	33626	40
Caelo	Fortified wine	171984	33712	40
Caelo	Condurango wine	15341901	33836	40
Caelo	Condurango wine	180781	34074	40
Caelo	Chest elixir	181495	34228	40
Caelo	Liquorice juice, purified	182598	34336	40

- 78508 spectra from a total of 1813 batches from further 346 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 45 *Apo-Ident* customers from 55 batches from the substance/substance group *Wines*.

Supplier	Substance	Batch	Spectra
Caelo	Fortified wine	12059809	2
Caelo	Fortified wine	15175501	2
Caelo	Fortified wine	16179505	1
phönix	Fortified wine	16179508	1
Noweda	Fortified wine	16179509	1
Breko	Fortified wine	201701v13	1
Breko	Fortified wine	201701v12	1
Caelo	Liquorice juice, purified	11293208	1
Caelo	Liquorice juice, purified	12061203	1
Caelo	Liquorice juice, purified	12116703	4
Caelo	Liquorice juice, purified	12116704	2
VDL	Liquorice juice, purified	11293210	1
Caelo	Liquorice juice, purified	12116709	1
Caelo	Liquorice juice, purified	13067602	2
Caelo	Liquorice juice, purified	13067604	1
Caelo	Liquorice juice, purified	13067606	3
Caelo	Liquorice juice, purified	13133801	5
Caelo	Liquorice juice, purified	14002602	4
Caelo	Liquorice juice, purified	14203104	2
Caelo	Liquorice juice, purified	14203105	3
Caelo	Liquorice juice, purified	14203107	1
Fagron	Liquorice juice, purified	15155302	2
Caelo	Liquorice juice, purified	15155302	1
Caelo	Liquorice juice, purified	15144207	2
Caelo	Liquorice juice, purified	15144203	1
Caelo	Liquorice juice, purified	16124103	5

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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
Jenne	Liquorice juice, purified	16124103	1
Caelo	Liquorice juice, purified	16124109	1
Caelo	Liquorice juice, purified	16124108	2
Caelo	Liquorice juice, purified	16316202	1
Caelo	Liquorice juice, purified	16316201	1
Caelo	Liquorice juice, purified	17169508	1
Caelo	Liquorice juice, purified	16316208	1
Caelo	Liquorice juice, purified	117169505	1
Anzag	Gel basis Audor [®]	103081G	1
Audor Pharma	Gel basis Audor [®]	AP103081G	2
Caelo	Gel basis Audor [®]	18041301	1
Audor Pharma	Gel basis Audor [®]	Ap103081G	1
Audor Pharma	Gel basis Audor [®]	AP100852G	2
Audor Pharma	Gel basis Audor [®]	AP100852	1
Audor Pharma	Gel basis Audor [®]	AP103113G	1
Audor Pharma	Gel basis Audor [®]	AP103993G	3
Audor Pharma	Gel basis Audor [®]	ap103113g	1
Fagron	Gel basis Audor [®]	AP103993G	1
Audor Pharma	Gel basis Audor [®]	AP102464G	4
Audor Pharma	Gel basis Audor [®]	102464	3
Audor Pharma	Gel basis Audor [®]		12
Audor Pharma	Gel basis Audor [®]	AP102464	1
Audor Pharma	Gel basis Audor [®]	AP53801G	5
Caelo	Gel basis Audor [®]	AP53801G	3
Audor Pharma	Gel basis Audor [®]	AP72301G	7
Audor Pharma	Gel basis Audor [®]	AP80601G	4
Caelo	Condurango wine	14345604	1
Caelo	Chest elixir	18101306	1
Fiebig	Chest elixir	11019106	1
Caelo	Chest elixir	19071402	1
Caelo	Chest elixir	12091406	1
Caelo	Chest elixir	3031506	1
Caelo	Chest elixir	13121719	1

- 107 839 spectra from 582 *Apo-Ident* customers from a total of 30 625 batches from a further 333 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	640	0	35 195
Type B	0	570	0	78 303
Type C	0	107	13	107 796

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 % (> 99.9705 %)	100.0000 % (> 99.0625 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 98.9474 %)
Type C	100.0000 % (> 99.6451 %)	89.1667 % (> 86.6667 %)

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.

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
32751	31127	9.04	22.04
30641	31108	6.55	24.76
32724	31127	9.45	28.29
32700	32700	0.00	46.84
30901	31581	10.62	25.61
31581	31581	0.00	30.65
31108	31108	0.00	30.87
31652	33330	10.71	34.49
33330	33330	0.00	36.61
31213	31213	0.00	36.31
31127	31127	0.00	23.78
31615	31213	8.95	31.94
31222	31127	2.24	23.35
33619	31213	6.15	34.79
31466	31127	3.34	22.76

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Wood oils
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30710-2019-05-24
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; Oleum terebinthinae rectificat.; 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	<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>
Appendix F	Addition to the second-stage models

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.

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	Juniper wood oil	11363504	30710	40	20111221
Caelo	Juniper wood oil	11363507	30860	40	20111221
Caelo	Juniper wood oil	13196208	31201	40	1405102
Caelo	Turpentine oil	12383210	31214	40	1407275

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Euro OTC	Turpentine oil	1312026-01	31531	40	20140113
Euro OTC	Turpentine oil	1511012	31815	40	20151214*
Caelo	Cypress oil	13349109	31837	40	1606484
Caelo	Cypress oil	16130501	32183	40	9464
Euro OTC	Turpentine oil	1703005	33232	40	20170327*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 360 spectra of 9 reference samples from the substance/substance group *Wood oils*. These samples are listed above in the [calibration samples](#) section.
- 35 475 spectra from a total of 838 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 420 spectra of 12 reference samples from the substance/substance group *Wood oils*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Turpentine oil	1312026-01	31531 [†]	20
Euro OTC	Turpentine oil	1511012	31815 [†]	20
Caelo	Cypress oil	13349109	31837 [†]	20
Caelo	Turpentine oil	161997	32317	40
Caelo	Turpentine oil	171509	33310	40
Caelo	Juniper wood oil	16055410	33506	40
Caelo	Cypress oil	17017101	33602	40
Caelo	Cypress oil	17017101	33603	40
Caelo	Cypress oil	173150	33905	40
Caelo	Juniper wood oil	171964	33914	40
Caelo	Turpentine oil	181108	34060	40
Euro OTC	Turpentine oil	1806017	34188	40

*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.

[†]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*.

- 78 658 spectra from a total of 1819 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.

- 100 spectra from 61 *Apo-Ident* customers from 45 batches from the substance/substance group *Wood oils*.

Supplier	Substance	Batch	Spectra
Caelo	Turpentine oil	11127905	1
Caelo	Turpentine oil	14071201	1
Caelo	Turpentine oil	11127908	2
Caelo	Turpentine oil	11358903	4
Caelo	Turpentine oil	412M-02022	1
Caelo	Turpentine oil	10296303	1
Caelo	Turpentine oil	11358910	7
Caelo	Turpentine oil	13106701	7
Euro OTC	Turpentine oil	711Q-03557	2
Caelo	Turpentine oil	19061310	1
Sanacorp	Turpentine oil	13106701	1
Euro OTC	Turpentine oil	1210016-01	4
AHC 20.07 13 250ml	Turpentine oil	13106701	1
Caelo	Turpentine oil	12383201	1
Sanacorp	Turpentine oil	12383210	1
Caelo	Turpentine oil	12383210	3
Caelo	Turpentine oil	14012601	2
Phönix	Turpentine oil	13378804	1
Caelo	Turpentine oil	13378804	2
Schiele	Turpentine oil	55379	1
Euro OTC	Turpentine oil	1407037-01	1
Caelo	Turpentine oil	1424703	1
Caelo	Turpentine oil	14242703	1
Caelo	Turpentine oil	15084003	2
Euro OTC	Turpentine oil	1503007-01	1
Caelo	Turpentine oil	24544454	1
Caelo	Turpentine oil	15185101	4
Caelo	Turpentine oil	15185106	3
Euro OTC	Turpentine oil	1511012-01	1
Sanacorp WE:12.01.2017 ...	Turpentine oil	16199701	1
Caelo	Turpentine oil	16199705	3
Gehe	Turpentine oil	16199705	1
Caelo	Turpentine oil	16199701	1
Euro OTC	Turpentine oil	981772	2
Schiele/Phönix	Turpentine oil		1
Caelo	Turpentine oil	161990709	1
Sanacorp	Turpentine oil	16199712	2
Caelo	Turpentine oil	16199172	1
Caelo	Turpentine oil	16199712	1
Taoasis GmbH	Juniper wood oil	604898-109389	1
Caelo	Juniper wood oil	12342604	1
Taoasis GmbH	Juniper wood oil	736525-110967	1

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Supplier	Substance	Batch	Spectra
Caelo	Juniper wood oil	14008303	2
Caelo	Juniper wood oil	14008307	3
Caelo	Juniper wood oil	14008306	1
Caelo	Juniper wood oil	14008301	1
Caelo	Juniper wood oil	15149502	1
Caelo	Juniper wood oil	15149511	1
Caelo	Cypress oil	16130501	1
Caelo	Cypress oil	16130505	12
Caelo	Cypress oil		1
Caelo	Cypress oil	17017101	1

- 107 859 spectra from 582 *Apo-Ident* customers from a total of 30 637 batches from a further 335 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	360	0	35 475
Type B	0	420	0	78 658
Type C	0	91	9	107 859

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 % (> 99.9705 %)	100.0000 % (> 98.3333 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.5714 %)
Type C	100.0000 % (> 99.6450 %)	91.0000 % (> 88.0000 %)

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.

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	26.61
33232	33232	0.00	30.74
30860	31201	4.86	31.61
31201	31201	0.00	32.54
31837	31837	0.00	26.62
30710	31201	3.18	31.82
32183	32183	0.00	26.14
31531	31214	2.77	31.03
31214	31214	0.00	29.65

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group	Wool alcohol cream DAB/SR
Substance class	APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date	24/05/2019
Report number	30425-2019-05-24
Executing company	HiperScan GmbH Weißeritzstraße 3 01067 Dresden Germany

Relevant substance names

Wool alcohol cream DAB/SR; Unguentum alcoholum lanae aquosum DAB/SR

Special notes

When selecting the *Wool alcohol cream DAB/SR* substance/substance group, the following information is displayed to the user:

no information

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>
Appendix F	Addition to the second-stage models

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.

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 alcohol cream DAB/SR*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Wool alcohol cre...	13272603	31229	70	20130829
Caelo	Wool alcohol cre...	13369401	31248	40	20131111
Bombastus	Wool alcohol cre...	284945	31271	40	1406054
Caelo	Wool alcohol cre...	13369401	31287	40	1406055
Caelo	Wool alcohol cre...	14031601	31447	40	1512182

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Wool alcohol cre...	13394101	31455	30	1509376
Caelo	Wool alcohol cre...	14126801	31481	40	20140415
Caelo	Wool alcohol cre...	153608	31923	40	20151029*
Caelo	Wool alcohol cre...	153609	31926	40	20151103*
Caelo	Wool alcohol cre...	153611	31928	40	20151106*
Caelo	Wool alcohol cre...	153613	31930	40	20151106*
Caelo	Wool alcohol cre...	153615	31933	40	20151029*
Caelo	Wool alcohol cre...	153616	31934	40	20151029*
Caelo	Wool alcohol cre...	153617	31937	40	20151103*
Caelo	Wool alcohol cre...	160901	32160	40	20160414*
Caelo	Wool alcohol cre...	170394	33115	40	20170214*
Caelo	Wool alcohol cre...	170396	33140	40	20170214*

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 700 spectra of 17 reference samples from the substance/substance group *Wool alcohol cream DAB/SR*. These samples are listed above in the [calibration samples](#) section.
- 35 135 spectra from a total of 831 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 3900 spectra of 97 reference samples from the substance/substance group *Wool alcohol cream DAB/SR*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wool alcohol cream DAB/SR	12066202	30614	40
Bombastus	Wool alcohol cream DAB/SR	00270036	30625	40
Bombastus	Wool alcohol cream DAB/SR	00265302	30627	40
Caelo	Wool alcohol cream DAB/SR	12205402	30655	40
Caelo	Wool alcohol cream DAB/SR	12036401	30656	40
Caelo	Wool alcohol cream DAB/SR	153608	31923 [†]	20

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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	Wool alcohol cream DAB/SR	153608	31924	60
Caelo	Wool alcohol cream DAB/SR	153608	31925	60
Caelo	Wool alcohol cream DAB/SR	153609	31926 [†]	20
Caelo	Wool alcohol cream DAB/SR	153610	31927	60
Caelo	Wool alcohol cream DAB/SR	153611	31928 [†]	20
Caelo	Wool alcohol cream DAB/SR	153612	31929	60
Caelo	Wool alcohol cream DAB/SR	153613	31930 [†]	20
Caelo	Wool alcohol cream DAB/SR	153614	31931	60
Caelo	Wool alcohol cream DAB/SR	153615	31932	60
Caelo	Wool alcohol cream DAB/SR	153615	31933 [†]	20
Caelo	Wool alcohol cream DAB/SR	153616	31934 [†]	20
Caelo	Wool alcohol cream DAB/SR	153616	31935	60
Caelo	Wool alcohol cream DAB/SR	153617	31936	60
Caelo	Wool alcohol cream DAB/SR	153617	31937 [†]	20
Caelo	Wool alcohol cream DAB/SR	160078	32157	40
Caelo	Wool alcohol cream DAB/SR	160899	32158	40
Caelo	Wool alcohol cream DAB/SR	160900	32159	40
Caelo	Wool alcohol cream DAB/SR	160902	32161	40
Caelo	Wool alcohol cream DAB/SR	160903	32162	40
Caelo	Wool alcohol cream DAB/SR	160904	32163	40
Caelo	Wool alcohol cream DAB/SR	160905	32164	40
Caelo	Wool alcohol cream DAB/SR	160906	32165	40
Caelo	Wool alcohol cream DAB/SR	160907	32166	40
Caelo	Wool alcohol cream DAB/SR	161122	32167	40
Caelo	Wool alcohol cream DAB/SR	160143	32295	40
Caelo	Wool alcohol cream DAB/SR	161208	32296	40
Caelo	Wool alcohol cream DAB/SR	161578	32361	40
Caelo	Wool alcohol cream DAB/SR	161578	32362	40
Caelo	Wool alcohol cream DAB/SR	161577	32363	40
Caelo	Wool alcohol cream DAB/SR	161579	32364	40
Caelo	Wool alcohol cream DAB/SR	161580	32365	40
Caelo	Wool alcohol cream DAB/SR	161580	32366	40
Caelo	Wool alcohol cream DAB/SR	161581	32367	40
Caelo	Wool alcohol cream DAB/SR	161577	32379	40
Caelo	Wool alcohol cream DAB/SR	161776	32380	40
Caelo	Wool alcohol cream DAB/SR	161774	32381	40
Caelo	Wool alcohol cream DAB/SR	161778	32513	40
Caelo	Wool alcohol cream DAB/SR	162490	32514	40
Caelo	Wool alcohol cream DAB/SR	161578	32630	40
Caelo	Wool alcohol cream DAB/SR	161579	32631	40
Caelo	Wool alcohol cream DAB/SR	161992	32632	40
Caelo	Wool alcohol cream DAB/SR	161992	32633	40
Caelo	Wool alcohol cream DAB/SR	161992	32634	40
Caelo	Wool alcohol cream DAB/SR	161993	32635	40
Caelo	Wool alcohol cream DAB/SR	161993	32636	40
Caelo	Wool alcohol cream DAB/SR	161993	32637	40
Caelo	Wool alcohol cream DAB/SR	161994	32638	40
Caelo	Wool alcohol cream DAB/SR	161994	32639	40
Caelo	Wool alcohol cream DAB/SR	161994	32640	40
Caelo	Wool alcohol cream DAB/SR	161989	32641	40
Caelo	Wool alcohol cream DAB/SR	163129	32848	40
Caelo	Wool alcohol cream DAB/SR	163131	32849	40
Caelo	Wool alcohol cream DAB/SR	162779	32850	40
Caelo	Wool alcohol cream DAB/SR	162782	32851	40
Caelo	Wool alcohol cream DAB/SR	162783	32852	40
Caelo	Wool alcohol cream DAB/SR	162781	32853	40
Caelo	Wool alcohol cream DAB/SR	162823	32854	40
Caelo	Wool alcohol cream DAB/SR	163130	32887	40
Caelo	Wool alcohol cream DAB/SR	170392	33114	40

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Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wool alcohol cream DAB/SR	170395	33116	40
Caelo	Wool alcohol cream DAB/SR	170398	33117	40
Caelo	Wool alcohol cream DAB/SR	170399	33118	40
Caelo	Wool alcohol cream DAB/SR	170400	33119	40
Caelo	Wool alcohol cream DAB/SR	170401	33120	40
Caelo	Wool alcohol cream DAB/SR	170397	33121	40
Caelo	Wool alcohol cream DAB/SR	163407	33141	40
Caelo	Wool alcohol cream DAB/SR	163409	33142	40
Caelo	Wool alcohol cream DAB/SR	163410	33143	40
Caelo	Wool alcohol cream DAB/SR	163441	33186	40
Caelo	Wool alcohol cream DAB/SR	170941	33372	40
Caelo	Wool alcohol cream DAB/SR	171028	33405	40
Caelo	Wool alcohol cream DAB/SR	171027	33406	40
Caelo	Wool alcohol cream DAB/SR	171026	33407	40
Caelo	Wool alcohol cream DAB/SR	171487	33518	40
Caelo	Wool alcohol cream DAB/SR	171490	33519	40
Caelo	Wool alcohol cream DAB/SR	171492	33520	40
Caelo	Wool alcohol cream DAB/SR	171876	33521	40
Caelo	Wool alcohol cream DAB/SR	171877	33522	40
Caelo	Wool alcohol cream DAB/SR	171878	33523	40
Caelo	Wool alcohol cream DAB/SR	171879	33524	40
Caelo	Wool alcohol cream DAB/SR	171880	33525	40
Caelo	Wool alcohol cream DAB/SR	171783	33549	40
Caelo	Wool alcohol cream DAB/SR	171782	33758	40
Caelo	Wool alcohol cream DAB/SR	172844	33762	40
Caelo	Wool alcohol cream DAB/SR	172845	33763	40
Caelo	Wool alcohol cream DAB/SR	172846	33764	40
Caelo	Wool alcohol cream DAB/SR	172847	33765	40
Caelo	Wool alcohol cream DAB/SR	172848	33766	40
Caelo	Wool alcohol cream DAB/SR	172287	33770	40
Caelo	Wool alcohol cream DAB/SR	180234	34156	40
Caelo	Wool alcohol cream DAB/SR	180863	34157	40

- 75178 spectra from a total of 1749 batches from further 350 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.

- 4058 spectra from 462 *Apo-Ident* customers from 1251 batches from the substance/substance group *Wool alcohol cream DAB/SR*.

Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	11228001	2
Bombastus	Wool alcohol cream DAB/SR	267154	2
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	11276102	2

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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	Wool alcohol cream DAB/SR	11356201	1
Bombastus	Wool alcohol cream DAB/SR	265303	2
Bombastus	Wool alcohol cream DAB/SR	267043	1
Caelo	Wool alcohol cream DAB/SR	11356501	1
Gehe	Wool alcohol cream DAB/SR	11276102	2
Anzag	Wool alcohol cream DAB/SR	11226402	1
Apomix	Wool alcohol cream DAB/SR	20A070212	1
Ichthyol-Gesellschaft	Wool alcohol cream DAB/SR	11288302	1
Caelo	Wool alcohol cream DAB/SR	11356301	1
Caelo	Wool alcohol cream DAB/SR	12001301	1
Apomix	Wool alcohol cream DAB/SR	21A070212	1
Gehe	Wool alcohol cream DAB/SR	267155	2
Apomix	Wool alcohol cream DAB/SR	32A070312	1
Bombastus	Wool alcohol cream DAB/SR	267046	1
Caelo	Wool alcohol cream DAB/SR	12056402	1
Bombastus	Wool alcohol cream DAB/SR	267799	1
Caelo	Wool alcohol cream DAB/SR	12001201	1
Caelo	Wool alcohol cream DAB/SR	12106001	1
Caelo	Wool alcohol cream DAB/SR	12030601	2
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	12000201	1
Apomix	Wool alcohol cream DAB/SR	33A070312	1
Caelo	Wool alcohol cream DAB/SR	1117601	1
Bombastus	Wool alcohol cream DAB/SR	269832	1
Bombastus	Wool alcohol cream DAB/SR	268902	1
Caelo	Wool alcohol cream DAB/SR	12056301	1
Caelo	Wool alcohol cream DAB/SR	11356601	1
Bombastus	Wool alcohol cream DAB/SR	270035	2
Caelo	Wool alcohol cream DAB/SR	12056401	2
Caelo	Wool alcohol cream DAB/SR	11226401	1
Caelo	Wool alcohol cream DAB/SR	11276102	1
Gehe	Wool alcohol cream DAB/SR	270032	1
Euro OTC	Wool alcohol cream DAB/SR	2507217035	1
Bombastus	Wool alcohol cream DAB/SR	270037	2
Caelo	Wool alcohol cream DAB/SR	12106401	3
Caelo	Wool alcohol cream DAB/SR	120307010	1
Caelo	Wool alcohol cream DAB/SR	12106102	2
Gehe	Wool alcohol cream DAB/SR	270037	1
Caelo	Wool alcohol cream DAB/SR	11226301	1
Caelo	Wool alcohol cream DAB/SR	1211901	1
Caelo	Wool alcohol cream DAB/SR	12122002	3
Caelo	Wool alcohol cream DAB/SR	12036501	5
Caelo	Wool alcohol cream DAB/SR	12122101	4
Apomix	Wool alcohol cream DAB/SR	51A070512	1
Caelo	Wool alcohol cream DAB/SR	12106701	2
Caelo	Wool alcohol cream DAB/SR	12000201	1
Gehe	Wool alcohol cream DAB/SR	12036501	1
Caelo	Wool alcohol cream DAB/SR	12208902	7
Bombastus	Wool alcohol cream DAB/SR	270730	1
Bombastus	Wool alcohol cream DAB/SR	269924	1
Bombastus	Wool alcohol cream DAB/SR	270038	1
Caelo	Wool alcohol cream DAB/SR	12000301	1
Bombastus	Wool alcohol cream DAB/SR	272259	2
Caelo	Wool alcohol cream DAB/SR	11356001	1
Bombastus	Wool alcohol cream DAB/SR	270725	2
Anzag	Wool alcohol cream DAB/SR	12122201	1
Caelo	Wool alcohol cream DAB/SR	25091204	1
Caelo	Wool alcohol cream DAB/SR	1212202	1
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	12036501	1
Bombastus	Wool alcohol cream DAB/SR	270033	2
Caelo	Wool alcohol cream DAB/SR	12205701	4

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Supplier	Substance	Batch	Spectra
Apomix	Wool alcohol cream DAB/SR	69A100712	1
Caelo	Wool alcohol cream DAB/SR	12269201	3
Phönix Gotha	Wool alcohol cream DAB/SR	12036403	1
Caelo	Wool alcohol cream DAB/SR	12205401	1
Anzag	Wool alcohol cream DAB/SR	12269201	1
Caelo	Wool alcohol cream DAB/SR	1226901	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	12209101	1
Caelo	Wool alcohol cream DAB/SR	12205801	3
Caelo	Wool alcohol cream DAB/SR	12036401	1
Caelo	Wool alcohol cream DAB/SR	12036402	1
Gehe	Wool alcohol cream DAB/SR	80A010812	1
Caelo	Wool alcohol cream DAB/SR	12259702	3
Caelo	Wool alcohol cream DAB/SR	11171501	1
Caelo	Wool alcohol cream DAB/SR	12036601	5
Caelo	Wool alcohol cream DAB/SR	12101602	1
Caelo	Wool alcohol cream DAB/SR	12209101	1
Gehe	Wool alcohol cream DAB/SR	269933	2
Caelo	Wool alcohol cream DAB/SR	12205402	1
Apomix	Wool alcohol cream DAB/SR	62A200612	1
Caelo	Wool alcohol cream DAB/SR	12259901	3
Caelo	Wool alcohol cream DAB/SR	12260002	6
Bombastus	Wool alcohol cream DAB/SR	270723	1
Bombastus	Wool alcohol cream DAB/SR	272127	1
Bombastus	Wool alcohol cream DAB/SR	273631	2
Caelo	Wool alcohol cream DAB/SR	12260402	13
Caelo	Wool alcohol cream DAB/SR	12205501	1
Caelo	Wool alcohol cream DAB/SR	12123501	6
Caelo	Wool alcohol cream DAB/SR	12260101	2
Caelo	Wool alcohol cream DAB/SR	12307401	6
Anzag 21.11.12	Wool alcohol cream DAB/SR	12269201	1
Bombastus	Wool alcohol cream DAB/SR	269927	1
Caelo	Wool alcohol cream DAB/SR	2112217035	1
Bombastus	Wool alcohol cream DAB/SR	271811	1
Caelo	Wool alcohol cream DAB/SR	12307201	7
Caelo	Wool alcohol cream DAB/SR	20101112-1	1
Sanacorp	Wool alcohol cream DAB/SR	12260101	1
Bombastus	Wool alcohol cream DAB/SR	273637	1
anzag	Wool alcohol cream DAB/SR	12036601	1
Sanacorp	Wool alcohol cream DAB/SR	12260002	1
Caelo	Wool alcohol cream DAB/SR	12259701	3
Bombastus	Wool alcohol cream DAB/SR	270721	1
Caelo	Wool alcohol cream DAB/SR	12209001	1
Caelo	Wool alcohol cream DAB/SR	12056202	1
Gehe	Wool alcohol cream DAB/SR	272254	1
Caelo	Wool alcohol cream DAB/SR	12307103	4
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	12123501	1
Caelo	Wool alcohol cream DAB/SR	12307501	2
Bombastus	Wool alcohol cream DAB/SR	273636	1
Bombastus	Wool alcohol cream DAB/SR	272257	2
Anzag 04.12.12	Wool alcohol cream DAB/SR	12205402	1
Anzag 27.12.12 ek:9,46	Wool alcohol cream DAB/SR	12260101	1
Caelo	Wool alcohol cream DAB/SR	12307601	5
Bombastus	Wool alcohol cream DAB/SR	273634	2
Bombastus	Wool alcohol cream DAB/SR	273633	1
Bombastus	Wool alcohol cream DAB/SR	271812	1
Gehe	Wool alcohol cream DAB/SR	272253	1
Caelo	Wool alcohol cream DAB/SR	12122001	4
Apomix	Wool alcohol cream DAB/SR	96A161012	1
Sanacorp	Wool alcohol cream DAB/SR	12307201	1
Bombastus	Wool alcohol cream DAB/SR	274629	1

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Supplier	Substance	Batch	Spectra
12370401	Wool alcohol cream DAB/SR	12370401	1
Apomix	Wool alcohol cream DAB/SR	104A291012	1
Caelo	Wool alcohol cream DAB/SR	12307701	5
Caelo	Wool alcohol cream DAB/SR	12308001	7
Bombastus	Wool alcohol cream DAB/SR	272263	1
Bombastus	Wool alcohol cream DAB/SR	274849	1
Caelo	Wool alcohol cream DAB/SR	12370601	9
Caelo	Wool alcohol cream DAB/SR	12036403	1
Bombastus	Wool alcohol cream DAB/SR	275987	1
Bombastus	Wool alcohol cream DAB/SR	274628	1
Caelo	Wool alcohol cream DAB/SR	12240502	1
Caelo	Wool alcohol cream DAB/SR	12370401	11
Bombastus	Wool alcohol cream DAB/SR	274630	1
Apomix	Wool alcohol cream DAB/SR	103A291012	3
Gehe	Wool alcohol cream DAB/SR	103A291012	1
Gehe	Wool alcohol cream DAB/SR	95A161012	1
Caelo	Wool alcohol cream DAB/SR	23021303	1
Krieger	Wool alcohol cream DAB/SR	12307601	1
Caelo	Wool alcohol cream DAB/SR	12351901	5
Fagron	Wool alcohol cream DAB/SR	12370202	1
Apomix	Wool alcohol cream DAB/SR	101A291012	1
Phönix Gotha	Wool alcohol cream DAB/SR	12352001	1
Bombastus	Wool alcohol cream DAB/SR	274349	1
Caelo	Wool alcohol cream DAB/SR	12307901	2
Caelo	Wool alcohol cream DAB/SR	13029503	5
Bombastus	Wool alcohol cream DAB/SR	274631	1
Bombastus	Wool alcohol cream DAB/SR	274347	1
Caelo	Wool alcohol cream DAB/SR	12352001	2
Caelo	Wool alcohol cream DAB/SR	13013202	8
Apomix	Wool alcohol cream DAB/SR	3A160113	1
Bombastus	Wool alcohol cream DAB/SR	275917	1
Bombastus	Wool alcohol cream DAB/SR	276219	2
Sanacorp	Wool alcohol cream DAB/SR	12307501	1
Anzag	Wool alcohol cream DAB/SR	13029503	1
Caelo	Wool alcohol cream DAB/SR	12307301	1
Caelo	Wool alcohol cream DAB/SR	12036301	2
Sanacorp	Wool alcohol cream DAB/SR	12307801	1
Caelo	Wool alcohol cream DAB/SR	13029504	1
Bombastus	Wool alcohol cream DAB/SR	275911	1
Caelo	Wool alcohol cream DAB/SR	12307102	1
Apomix	Wool alcohol cream DAB/SR	90A021012	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	12307901	1
Caelo	Wool alcohol cream DAB/SR	13061402	3
Caelo	Wool alcohol cream DAB/SR	12370203	1
Gehe	Wool alcohol cream DAB/SR	274686	1
Bombastus	Wool alcohol cream DAB/SR	277093	1
Bombastus	Wool alcohol cream DAB/SR	276216	1
Finze	Wool alcohol cream DAB/SR	13029503	1
Caelo	Wool alcohol cream DAB/SR	13061701	2
Caelo	Wool alcohol cream DAB/SR	13068503	3
Alliance Healthcare	Wool alcohol cream DAB/SR	275909	1
Caelo	Wool alcohol cream DAB/SR	13061501	12
Caelo	Wool alcohol cream DAB/SR	12370202	2
Bombastus	Wool alcohol cream DAB/SR	274634	1
Bombastus	Wool alcohol cream DAB/SR	275990	1
Caelo	Wool alcohol cream DAB/SR	11226201	1
Caelo	Wool alcohol cream DAB/SR	13068601	7
Caelo	Wool alcohol cream DAB/SR	12259802	2
Caelo	Wool alcohol cream DAB/SR	275988	1
Caelo	Wool alcohol cream DAB/SR	115A171212	1

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Supplier	Substance	Batch	Spectra
Devesa	Wool alcohol cream DAB/SR	12106601	1
Apomix	Wool alcohol cream DAB/SR	98A241012	1
Bombastus	Wool alcohol cream DAB/SR	277769	3
Caelo	Wool alcohol cream DAB/SR	13061601	3
Phoenix (Pharmachem Pöb...	Wool alcohol cream DAB/SR	260712	1
Fagron	Wool alcohol cream DAB/SR	13061701	1
Phoenix	Wool alcohol cream DAB/SR	13068601	1
AHD 09.04.2013	Wool alcohol cream DAB/SR	13029504	1
Caelo	Wool alcohol cream DAB/SR	1913Q-01371	1
Apomix	Wool alcohol cream DAB/SR	20A120213	1
Caelo	Wool alcohol cream DAB/SR	13061901	6
Sanacorp	Wool alcohol cream DAB/SR	12307701	1
Apomix	Wool alcohol cream DAB/SR	109A191112	1
Caelo	Wool alcohol cream DAB/SR	12307801	2
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	13061901	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	12307801	1
Bombastus	Wool alcohol cream DAB/SR	275913	1
Gehe	Wool alcohol cream DAB/SR	13061501	1
Caelo	Wool alcohol cream DAB/SR	13062101	13
Caelo	Wool alcohol cream DAB/SR	13029502	3
Caesar&loretz,Phoenix	Wool alcohol cream DAB/SR	13013202	1
Bombastus	Wool alcohol cream DAB/SR	275918	1
Caelo	Wool alcohol cream DAB/SR	273635	1
Caelo	Wool alcohol cream DAB/SR	274635	1
Caelo	Wool alcohol cream DAB/SR	13062301	4
Caelo	Wool alcohol cream DAB/SR	13062201	2
Sanacorp	Wool alcohol cream DAB/SR	13062101	2
Fagron	Wool alcohol cream DAB/SR	13061501	1
Caelo	Wool alcohol cream DAB/SR	E-090413-3	1
Fagron	Wool alcohol cream DAB/SR	13068601	1
Gehe	Wool alcohol cream DAB/SR	277207	1
Gehe/PKH	Wool alcohol cream DAB/SR	3A160113	1
Caelo	Wool alcohol cream DAB/SR	13145202	6
Caelo	Wool alcohol cream DAB/SR	13061801	3
Caelo	Wool alcohol cream DAB/SR	12260401	1
Bombastus	Wool alcohol cream DAB/SR	272254	1
Bombastus	Wool alcohol cream DAB/SR	277096	1
Caelo	Wool alcohol cream DAB/SR	13008202	1
Bombastus	Wool alcohol cream DAB/SR	277770	2
Bombastus	Wool alcohol cream DAB/SR	277854	1
Caesar&loretz,Phoenix	Wool alcohol cream DAB/SR	13068504	1
Bombastus	Wool alcohol cream DAB/SR	278749	1
ANZAG	Wool alcohol cream DAB/SR	13068504	6
Caelo	Wool alcohol cream DAB/SR	13068701	9
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	12352001	1
Bombastus	Wool alcohol cream DAB/SR	278742	1
Bombastus	Wool alcohol cream DAB/SR	278745	1
Bombastus	Wool alcohol cream DAB/SR	277206	1
A.H. 25.06.13 ek: 9,75EUR	Wool alcohol cream DAB/SR	13145501	1
Caelo	Wool alcohol cream DAB/SR	13145501	5
Phönix	Wool alcohol cream DAB/SR	13062301	1
Caesar & Loretz/ Noweda	Wool alcohol cream DAB/SR	13145202	1
Caelo	Wool alcohol cream DAB/SR	13145701	2
Euro OTC	Wool alcohol cream DAB/SR	275917	1
apomix/GEHE/04.04.2013	Wool alcohol cream DAB/SR	108A191112	1
apomix	Wool alcohol cream DAB/SR	22A200213	1
apomix/ANZAG/04.07.2013	Wool alcohol cream DAB/SR	4546233	1
Caelo	Wool alcohol cream DAB/SR	9071301	1
Bombastus	Wool alcohol cream DAB/SR	277097	2
Bombastus	Wool alcohol cream DAB/SR	276212	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	13145601	14
Bombastus	Wool alcohol cream DAB/SR	278833	1
Apomix/Phönix	Wool alcohol cream DAB/SR	47A040613	1
Apomix	Wool alcohol cream DAB/SR	39A180413	3
Caelo	Wool alcohol cream DAB/SR	1314570	1
Caelo	Wool alcohol cream DAB/SR	13145401	4
Gehe	Wool alcohol cream DAB/SR	13062101	1
Caelo	Wool alcohol cream DAB/SR	13172001	7
Bombastus	Wool alcohol cream DAB/SR	27771	1
Anzag	Wool alcohol cream DAB/SR	13145801	2
Bombastus	Wool alcohol cream DAB/SR	278824	2
Bombastus	Wool alcohol cream DAB/SR	278828	2
Bombastus	Wool alcohol cream DAB/SR	274683	2
Apomix	Wool alcohol cream DAB/SR	47A040613	1
Caelo	Wool alcohol cream DAB/SR	13145301	7
Caelo	Wool alcohol cream DAB/SR	13061401	2
Bombastus	Wool alcohol cream DAB/SR	278829	1
Caelo	Wool alcohol cream DAB/SR	1306804	1
All..Healthc./Apomix	Wool alcohol cream DAB/SR	41A020513	1
Caelo	Wool alcohol cream DAB/SR	13145801	6
Caelo	Wool alcohol cream DAB/SR	13081303	1
Bombastus	Wool alcohol cream DAB/SR	277204	1
PharmaChem	Wool alcohol cream DAB/SR	260712	2
Caelo	Wool alcohol cream DAB/SR	13145901	5
Sanacorp	Wool alcohol cream DAB/SR	13145601	1
Phönix Gotha	Wool alcohol cream DAB/SR	13062101	1
Phönix Gotha	Wool alcohol cream DAB/SR	13172001	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	13062201	1
Caelo	Wool alcohol cream DAB/SR	13145201	5
Caelo	Wool alcohol cream DAB/SR	13146001	2
Apomix	Wool alcohol cream DAB/SR	56A300713	1
Gehe	Wool alcohol cream DAB/SR	13145801	1
Euro OTC	Wool alcohol cream DAB/SR	13145801	1
Bombastus	Wool alcohol cream DAB/SR	278827	1
Caelo	Wool alcohol cream DAB/SR	29131-01371	1
Caelo	Wool alcohol cream DAB/SR	1113E-01371	1
Caelo	Wool alcohol cream DAB/SR	13068504	8
Caelo	Wool alcohol cream DAB/SR	13261801	12
Gehe	Wool alcohol cream DAB/SR	32A080413	1
Bombastus	Wool alcohol cream DAB/SR	278831	2
Caelo	Wool alcohol cream DAB/SR	13171901	6
Caelo	Wool alcohol cream DAB/SR	13261701	12
Noweda	Wool alcohol cream DAB/SR	278745	1
Gehe	Wool alcohol cream DAB/SR	274684	1
Bombastus	Wool alcohol cream DAB/SR	281504	2
All..Healthc./Apomix	Wool alcohol cream DAB/SR	47A040613	1
Caelo	Wool alcohol cream DAB/SR	12351801	1
Bombastus	Wool alcohol cream DAB/SR	279870	2
Caelo	Wool alcohol cream DAB/SR	13066501	1
Bombastus	Wool alcohol cream DAB/SR	277208	1
Caelo	Wool alcohol cream DAB/SR	277855	1
Gehe	Wool alcohol cream DAB/SR	279876	1
Pharmachem Anzag	Wool alcohol cream DAB/SR	260413	2
Gehe	Wool alcohol cream DAB/SR	13279002	1
Apomix	Wool alcohol cream DAB/SR	19A120213	1
Caelo	Wool alcohol cream DAB/SR	12101304	1
Bombastus	Wool alcohol cream DAB/SR	278744	2
Caelo	Wool alcohol cream DAB/SR	269213261801	1
Noweda	Wool alcohol cream DAB/SR	278829	1
Bombastus	Wool alcohol cream DAB/SR	279875	2

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Supplier	Substance	Batch	Spectra
Apomix	Wool alcohol cream DAB/SR	33A080413	1
Caelo	Wool alcohol cream DAB/SR	13279002	2
Caelo	Wool alcohol cream DAB/SR	13172103	10
Caelo	Wool alcohol cream DAB/SR	13279101	4
Bombastus	Wool alcohol cream DAB/SR	279020	1
Caelo	Wool alcohol cream DAB/SR	13279201	3
Gehe/Apomix/25.10.2013	Wool alcohol cream DAB/SR	28A210313	2
Caelo	Wool alcohol cream DAB/SR	13190202	1
Bombastus	Wool alcohol cream DAB/SR	280390	2
Caelo	Wool alcohol cream DAB/SR	13322801	20
Euro OTC	Wool alcohol cream DAB/SR	279873	1
Bombastus	Wool alcohol cream DAB/SR	279876	1
Caelo	Wool alcohol cream DAB/SR	13172105	2
Caelo	Wool alcohol cream DAB/SR	13279001	5
Noweda/apomix	Wool alcohol cream DAB/SR	5A290113	2
Caelo	Wool alcohol cream DAB/SR	13172104	1
Bombastus	Wool alcohol cream DAB/SR	279877	2
Phönix	Wool alcohol cream DAB/SR	13279301	1
Caelo	Wool alcohol cream DAB/SR	13279201-3433311180	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	13261701	1
Bombastus	Wool alcohol cream DAB/SR	282239	2
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	13279301	1
Gehe	Wool alcohol cream DAB/SR	72A270813	1
Caelo	Wool alcohol cream DAB/SR	13279401	3
Bombastus	Wool alcohol cream DAB/SR	281506	1
Noweda	Wool alcohol cream DAB/SR	13322801	1
Bombastus	Wool alcohol cream DAB/SR	282242	2
Caelo	Wool alcohol cream DAB/SR	13289301	9
apomix	Wool alcohol cream DAB/SR	41A020513	1
Caelo	Wool alcohol cream DAB/SR	13279601	2
Bombastus	Wool alcohol cream DAB/SR	282754	6
Apomix	Wool alcohol cream DAB/SR	72A270913	1
Caelo	Wool alcohol cream DAB/SR	13068501	1
Caelo	Wool alcohol cream DAB/SR	13279301	4
Bombastus	Wool alcohol cream DAB/SR	279019	2
Caesar & Loretz GmbH, 4...	Wool alcohol cream DAB/SR	13171901	1
Gehe	Wool alcohol cream DAB/SR	282242	1
Caelo	Wool alcohol cream DAB/SR	13272601	4
Caelo	Wool alcohol cream DAB/SR	13369601	12
Gehe	Wool alcohol cream DAB/SR	282240	1
Noweda	Wool alcohol cream DAB/SR	282241	1
Bombastus	Wool alcohol cream DAB/SR	280386	1
Apomix	Wool alcohol cream DAB/SR	56A270613	1
Caelo	Wool alcohol cream DAB/SR	13289403	7
Caelo/ Noweda	Wool alcohol cream DAB/SR	13068504	2
Caelo	Wool alcohol cream DAB/SR	13279502	4
Bombastus	Wool alcohol cream DAB/SR	282685	1
Fagron	Wool alcohol cream DAB/SR	13289301	1
Caelo	Wool alcohol cream DAB/SR	13369401	6
Caelo	Wool alcohol cream DAB/SR	13280801	2
Gehe	Wool alcohol cream DAB/SR	282245	1
Sanacorp	Wool alcohol cream DAB/SR	13369601	1
Bombastus	Wool alcohol cream DAB/SR	278832	1
Caelo	Wool alcohol cream DAB/SR	1118962	1
Caelo	Wool alcohol cream DAB/SR	2x13279201	1
Caelo	Wool alcohol cream DAB/SR	9011407	1
Caelo	Wool alcohol cream DAB/SR	13280601	1
Caelo	Wool alcohol cream DAB/SR	13369402	2
Gehe	Wool alcohol cream DAB/SR	280493	1
Alliance Health 07.01.2...	Wool alcohol cream DAB/SR	13369701	1

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Supplier	Substance	Batch	Spectra
Gehe	Wool alcohol cream DAB/SR	47a040613	1
Bombastus	Wool alcohol cream DAB/SR	282246	1
Caelo	Wool alcohol cream DAB/SR	PE113	1
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	88A231013	1
Bombastus	Wool alcohol cream DAB/SR	284446	1
Caelo	Wool alcohol cream DAB/SR	13369801	5
Caelo	Wool alcohol cream DAB/SR	13169401	1
Caelo	Wool alcohol cream DAB/SR	13394103	2
Caelo	Wool alcohol cream DAB/SR	13280701	4
Bombastus	Wool alcohol cream DAB/SR	284447	1
Caelo	Wool alcohol cream DAB/SR	13394101	10
Caelo	Wool alcohol cream DAB/SR	13369701	4
Bombastus	Wool alcohol cream DAB/SR	277856	3
Gehe am 14.01.2014	Wool alcohol cream DAB/SR	13289403	1
Bombastus	Wool alcohol cream DAB/SR	284579	4
Caelo	Wool alcohol cream DAB/SR	22/AKD52	1
Sanacorp	Wool alcohol cream DAB/SR	14002801	1
Bombastus	Wool alcohol cream DAB/SR	282751	4
Caesar&loretz,Phoenix	Wool alcohol cream DAB/SR	13172103	1
Caelo	Wool alcohol cream DAB/SR	614E1371	1
Noweda	Wool alcohol cream DAB/SR	14002801	2
Bombastus	Wool alcohol cream DAB/SR	283575	2
Caelo	Wool alcohol cream DAB/SR	1336901	1
Bombastus	Wool alcohol cream DAB/SR	284445	1
Caelo	Wool alcohol cream DAB/SR	13373701	9
Bombastus	Wool alcohol cream DAB/SR	284451	3
Caelo	Wool alcohol cream DAB/SR	13279701	2
Caelo	Wool alcohol cream DAB/SR	13190201	1
Gehe am 03.02.2014	Wool alcohol cream DAB/SR	13289301	1
apomix/Anzag	Wool alcohol cream DAB/SR	89A041113	1
Noweda	Wool alcohol cream DAB/SR	282244	1
Caelo	Wool alcohol cream DAB/SR	13373801	8
Apomix/Noweda	Wool alcohol cream DAB/SR	81A260913	1
Caelo	Wool alcohol cream DAB/SR	14362201	19
Caelo	Wool alcohol cream DAB/SR	13281003	4
Bombastus	Wool alcohol cream DAB/SR	282748	2
Caelo	Wool alcohol cream DAB/SR	1118956	1
Pharmachem/Phönix	Wool alcohol cream DAB/SR	260413	1
Caelo	Wool alcohol cream DAB/SR	14002801	9
PHOENIX 21.02.2014	Wool alcohol cream DAB/SR	13369402	1
Caelo	Wool alcohol cream DAB/SR	13373903	3
Caelo	Wool alcohol cream DAB/SR	13394102	21
Caelo	Wool alcohol cream DAB/SR	13373601	5
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	13373601	1
Caelo	Wool alcohol cream DAB/SR	14033202	7
GEHE 24.02.2014	Wool alcohol cream DAB/SR	13373801	1
Apomix	Wool alcohol cream DAB/SR	101A191213	1
Anzag	Wool alcohol cream DAB/SR	282749	1
Taoasis	Wool alcohol cream DAB/SR	81/12	1
Bombastus	Wool alcohol cream DAB/SR	284577	1
Bombastus	Wool alcohol cream DAB/SR	284951	4
Caelo	Wool alcohol cream DAB/SR	13394201	7
GEHE/Apomix/31.01.14	Wool alcohol cream DAB/SR	82A260913	1
Bombastus	Wool alcohol cream DAB/SR	284580	1
Bombastus	Wool alcohol cream DAB/SR	284450	1
Bombastus	Wool alcohol cream DAB/SR	281503	2
Caelo	Wool alcohol cream DAB/SR	13373501	3
apomix / Alliance	Wool alcohol cream DAB/SR	100A191213	1
Gehe	Wool alcohol cream DAB/SR	13394201	1
Caelo	Wool alcohol cream DAB/SR	13369501	2

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	13172102	1
Bombastus	Wool alcohol cream DAB/SR	283574	1
Gehe/Apomix	Wool alcohol cream DAB/SR	8A290114	1
Apomix / Phönix	Wool alcohol cream DAB/SR	101A191213	1
Caelo	Wool alcohol cream DAB/SR	13013201	1
Bombastus	Wool alcohol cream DAB/SR	282749	1
Bombastus	Wool alcohol cream DAB/SR	284582	1
Pharmachem GmbH	Wool alcohol cream DAB/SR	110913	1
Bombastus	Wool alcohol cream DAB/SR	282753	2
Phoenix	Wool alcohol cream DAB/SR	14A180214	1
Caelo	Wool alcohol cream DAB/SR	14045702	3
Bombastus	Wool alcohol cream DAB/SR	285868	2
Apomix/Noweda	Wool alcohol cream DAB/SR	12A040214	1
Apomix/Noweda	Wool alcohol cream DAB/SR	20A270214	1
Caelo	Wool alcohol cream DAB/SR	14046101	2
Caelo	Wool alcohol cream DAB/SR	9041402	1
Bombastus	Wool alcohol cream DAB/SR	279021	1
Caelo	Wool alcohol cream DAB/SR	14046501	5
Gehe/Apomix	Wool alcohol cream DAB/SR	19A270214	1
GEHE/B0mbastus/04.14	Wool alcohol cream DAB/SR	285870	1
Caelo	Wool alcohol cream DAB/SR	14092601	6
apomix/Holdermann	Wool alcohol cream DAB/SR	78A160913	1
Noweda	Wool alcohol cream DAB/SR	285870	1
Caelo	Wool alcohol cream DAB/SR	14045801	12
Caelo	Wool alcohol cream DAB/SR	14092502	7
Apomix / Phönix	Wool alcohol cream DAB/SR	21A280214	2
VDL 28.04;Preis:4,34	Wool alcohol cream DAB/SR		1
Pharmachem GmbH / Anzag	Wool alcohol cream DAB/SR	110913	1
Bombastus	Wool alcohol cream DAB/SR	284947	3
Caelo	Wool alcohol cream DAB/SR	14046201	5
Caelo	Wool alcohol cream DAB/SR	14045901	4
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	14046201	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	14045702	1
Sanacorp	Wool alcohol cream DAB/SR	22/AKD2	1
Phönix	Wool alcohol cream DAB/SR	14046101	1
Bombastus	Wool alcohol cream DAB/SR	285817	1
Caelo	Wool alcohol cream DAB/SR	284638	1
Bombastus	Wool alcohol cream DAB/SR	284636	3
apomix/GEHE23.04.14	Wool alcohol cream DAB/SR	5A200114	1
Bombastus	Wool alcohol cream DAB/SR	285867	1
Bombastus	Wool alcohol cream DAB/SR	285872	2
Apomix	Wool alcohol cream DAB/SR	1A020114	1
Ichthyol Gesellschaft	Wool alcohol cream DAB/SR	14045801	1
Apomix / Phönix	Wool alcohol cream DAB/SR	33A010414	1
Bombastus	Wool alcohol cream DAB/SR	285874	2
Bombastus	Wool alcohol cream DAB/SR	47/14	1
Bombastus	Wool alcohol cream DAB/SR	287093	3
Caelo	Wool alcohol cream DAB/SR	14046401	4
Caelo	Wool alcohol cream DAB/SR	1373801	1
Bombastus	Wool alcohol cream DAB/SR	284943	1
Caelo	Wool alcohol cream DAB/SR	14046001	1
Caelo	Wool alcohol cream DAB/SR	14046502	3
Apomix /Alliance	Wool alcohol cream DAB/SR	13A180214	1
Bombastus	Wool alcohol cream DAB/SR	285869	1
Bombastus	Wool alcohol cream DAB/SR	287085	1
Caelo	Wool alcohol cream DAB/SR	14126801	15
Caesar & Loretz GmbH Hi...	Wool alcohol cream DAB/SR	13373701	1
Bombastus	Wool alcohol cream DAB/SR	286236	2
Caelo	Wool alcohol cream DAB/SR	14164101	2
Caelo	Wool alcohol cream DAB/SR	14092501	16

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	14046002	1
Apomix	Wool alcohol cream DAB/SR	41A150515	1
Bombastus	Wool alcohol cream DAB/SR	286237	2
Apomix	Wool alcohol cream DAB/SR	41A150514	2
Bombastus	Wool alcohol cream DAB/SR	285875	1
Bombastus	Wool alcohol cream DAB/SR	284948	2
Caelo	Wool alcohol cream DAB/SR	14164001	2
Bombastus	Wool alcohol cream DAB/SR	286235	1
Bombastus	Wool alcohol cream DAB/SR	28/7175	1
Vdl 10.07.14	Wool alcohol cream DAB/SR	14126801	1
Leyh Pharma/Sanacorp	Wool alcohol cream DAB/SR	142031	1
Caelo	Wool alcohol cream DAB/SR	14166901	4
Bombastus	Wool alcohol cream DAB/SR	285870	1
Sanacorp	Wool alcohol cream DAB/SR	14046401	1
Raben-Apotheke Mildenau	Wool alcohol cream DAB/SR	38A150514	1
Bombastus	Wool alcohol cream DAB/SR	286238	1
Caelo	Wool alcohol cream DAB/SR	1339401	1
Caelo	Wool alcohol cream DAB/SR	14164201	17
Caelo	Wool alcohol cream DAB/SR	14113201	7
Caelo	Wool alcohol cream DAB/SR	14045602	1
Bombastus	Wool alcohol cream DAB/SR	287087	2
Bombastus	Wool alcohol cream DAB/SR	288259	4
Raben-Apotheke Mildenau	Wool alcohol cream DAB/SR	45A260514	3
Caelo	Wool alcohol cream DAB/SR		4
Caelo	Wool alcohol cream DAB/SR	14167001	4
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	57A300614	1
Caelo	Wool alcohol cream DAB/SR	14162503	4
Bombastus	Wool alcohol cream DAB/SR	2846336	1
Sana	Wool alcohol cream DAB/SR	14092502	1
Caelo	Wool alcohol cream DAB/SR	14162502	11
Apomix / Phönix	Wool alcohol cream DAB/SR	48A110614	1
Caelo	Wool alcohol cream DAB/SR	14166901ok	1
Noweda	Wool alcohol cream DAB/SR	287093	1
Bombastus	Wool alcohol cream DAB/SR	287179	2
Bombastus	Wool alcohol cream DAB/SR	280391	1
Sanacorp	Wool alcohol cream DAB/SR	14164101	1
Caelo	Wool alcohol cream DAB/SR	14107602	1
Caesar&lloretz,Phoenix	Wool alcohol cream DAB/SR	14092501	2
Bombastus	Wool alcohol cream DAB/SR	288446	4
Phönix	Wool alcohol cream DAB/SR	14164201	2
Caelo	Wool alcohol cream DAB/SR	14169201	4
Euro OTC	Wool alcohol cream DAB/SR	39A150514	1
Euro OTC	Wool alcohol cream DAB/SR	14092601	1
Gehe 21.08.14	Wool alcohol cream DAB/SR	287175	1
Gehe/20.08.14/Apomix	Wool alcohol cream DAB/SR	48A110614	1
Caelo	Wool alcohol cream DAB/SR	288265	1
Caelo	Wool alcohol cream DAB/SR	37A090414	1
Caelo	Wool alcohol cream DAB/SR	14246501	10
Caelo	Wool alcohol cream DAB/SR	14216601	7
Caelo	Wool alcohol cream DAB/SR	14169101	10
Caelo	Wool alcohol cream DAB/SR	14170801	3
Phoenix	Wool alcohol cream DAB/SR	14164201	1
Caelo	Wool alcohol cream DAB/SR	14246401	6
Gehe/apomix/23.09.14	Wool alcohol cream DAB/SR	62A090714	1
Caelo	Wool alcohol cream DAB/SR	14163901	1
Phönix	Wool alcohol cream DAB/SR	14170801	1
Caelo	Wool alcohol cream DAB/SR	14167101	4
Bombastus	Wool alcohol cream DAB/SR	289087	1
Caelo	Wool alcohol cream DAB/SR	14170901	1
apomix / Anzag	Wool alcohol cream DAB/SR	64A300714	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	14259601	11
Alliance Healthcare/Apo...	Wool alcohol cream DAB/SR	39A150514	2
apomix/Holdermann	Wool alcohol cream DAB/SR	62A090714	1
Phönix	Wool alcohol cream DAB/SR	14169101	3
Bombastus	Wool alcohol cream DAB/SR	286234	2
Apomix	Wool alcohol cream DAB/SR	39A150514	1
Caelo	Wool alcohol cream DAB/SR	289089	1
Caelo	Wool alcohol cream DAB/SR	14246301	7
Bombastus	Wool alcohol cream DAB/SR	288441	1
Caelo	Wool alcohol cream DAB/SR	23101405	1
Bombastus	Wool alcohol cream DAB/SR	288261	1
Bombastus	Wool alcohol cream DAB/SR	288442	2
Caelo	Wool alcohol cream DAB/SR	14216901	2
Caelo	Wool alcohol cream DAB/SR	114163901	1
Apomix	Wool alcohol cream DAB/SR	61A080714	2
Caelo	Wool alcohol cream DAB/SR	14246101	5
Bombastus	Wool alcohol cream DAB/SR	287176	1
Bombastus	Wool alcohol cream DAB/SR	288260	2
Euro OTC	Wool alcohol cream DAB/SR	14170901	1
Bombastus	Wool alcohol cream DAB/SR	288355	2
Bombastus	Wool alcohol cream DAB/SR	288350	1
Bombastus	Wool alcohol cream DAB/SR	289384	1
Bombastus	Wool alcohol cream DAB/SR	289091	3
Caelo	Wool alcohol cream DAB/SR	14259402	1
Caelo	Wool alcohol cream DAB/SR	14216902	15
Caelo	Wool alcohol cream DAB/SR	14246102	1
Caelo	Wool alcohol cream DAB/SR	14216701	3
Bombastus	Wool alcohol cream DAB/SR	288443	5
Caelo	Wool alcohol cream DAB/SR	288446	1
Phönix	Wool alcohol cream DAB/SR	14246301	1
Caelo	Wool alcohol cream DAB/SR	14246201	4
Bombastus	Wool alcohol cream DAB/SR	289390	1
Apomix/Gehe	Wool alcohol cream DAB/SR	50A110614	1
Caelo	Wool alcohol cream DAB/SR	14259401	5
Apomix	Wool alcohol cream DAB/SR	83A290914	2
Caelo	Wool alcohol cream DAB/SR	14259701	2
Caelo	Wool alcohol cream DAB/SR	14092401	3
Bombastus	Wool alcohol cream DAB/SR	289394	1
Apomix / Phönix	Wool alcohol cream DAB/SR	85A300914	1
Apomix	Wool alcohol cream DAB/SR	85A300914	1
Bombastus	Wool alcohol cream DAB/SR	289395	2
Bombastus	Wool alcohol cream DAB/SR	289088	2
Caelo	Wool alcohol cream DAB/SR	14259801	11
Bombastus	Wool alcohol cream DAB/SR	280988	1
Gehe	Wool alcohol cream DAB/SR	288442	1
Pharmachem/Phönix	Wool alcohol cream DAB/SR	110614	1
Caelo	Wool alcohol cream DAB/SR	14216801	5
Gehe/apomix/17.12.2014	Wool alcohol cream DAB/SR	87A141014	1
Alliance Healthcare/Apo...	Wool alcohol cream DAB/SR	69A080814	1
Apomix/Noweda	Wool alcohol cream DAB/SR	81A290914	1
Sanacorp	Wool alcohol cream DAB/SR	287183	1
Bombastus	Wool alcohol cream DAB/SR	289396	1
Phönix	Wool alcohol cream DAB/SR	14162502	1
Bombastus	Wool alcohol cream DAB/SR	288351	1
Bombastus	Wool alcohol cream DAB/SR	289623	3
Sanacorp	Wool alcohol cream DAB/SR	288264	1
Bombastus	Wool alcohol cream DAB/SR	289622	2
apomix/Noweda	Wool alcohol cream DAB/SR	90A221014	1
Apomix	Wool alcohol cream DAB/SR	96A181114	4
Apomix	Wool alcohol cream DAB/SR	92A281014	1

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Supplier	Substance	Batch	Spectra
Ichthyol	Wool alcohol cream DAB/SR	14246501	1
Apomix Anzag	Wool alcohol cream DAB/SR	69A080814	1
Euro OTC	Wool alcohol cream DAB/SR	221014	1
Noweda	Wool alcohol cream DAB/SR	14295402	1
Caelo	Wool alcohol cream DAB/SR	1426401	1
Bombastus	Wool alcohol cream DAB/SR	289490	1
Caelo	Wool alcohol cream DAB/SR	15011504	1
Bombastus	Wool alcohol cream DAB/SR	289393	1
Caelo	Wool alcohol cream DAB/SR	14295901	3
Caelo	Wool alcohol cream DAB/SR	14295402	1
Caelo	Wool alcohol cream DAB/SR	415A-01371	1
Caelo	Wool alcohol cream DAB/SR	21105102	1
Caelo	Wool alcohol cream DAB/SR	14295502	6
Euro OTC	Wool alcohol cream DAB/SR	14295402	1
Bombastus	Wool alcohol cream DAB/SR	289489	2
Bombastus	Wool alcohol cream DAB/SR	289620	2
Caelo	Wool alcohol cream DAB/SR	14200702	1
Caelo	Wool alcohol cream DAB/SR	14259501	1
Caelo	Wool alcohol cream DAB/SR	14295701	4
apomix/Gehe	Wool alcohol cream DAB/SR	104A111214	1
Caelo	Wool alcohol cream DAB/SR	14296001	8
Leyh Pharma/Sanacorp	Wool alcohol cream DAB/SR	144951	1
Bombastus	Wool alcohol cream DAB/SR	289487	2
Bombastus	Wool alcohol cream DAB/SR	289632	1
Apomix/Noweda	Wool alcohol cream DAB/SR	105A301214	1
Caelo	Wool alcohol cream DAB/SR	14216903	2
Alliance10.02.2015	Wool alcohol cream DAB/SR	14295502	2
Phönix	Wool alcohol cream DAB/SR		1
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	6A220115	1
Caelo	Wool alcohol cream DAB/SR	1424501	1
Caelo	Wool alcohol cream DAB/SR	14362301	5
Caelo	Wool alcohol cream DAB/SR	14295401	5
Caesar&lorenz,Phoenix	Wool alcohol cream DAB/SR	14200702	1
Apomix	Wool alcohol cream DAB/SR	100A021214	1
apomix / Anzag	Wool alcohol cream DAB/SR	4A220115	1
Bombastus	Wool alcohol cream DAB/SR	291272	1
Fagron	Wool alcohol cream DAB/SR	14216902	1
Caelo	Wool alcohol cream DAB/SR	14356302	17
Caelo	Wool alcohol cream DAB/SR	14295801	5
Caelo	Wool alcohol cream DAB/SR	14295601	6
Apomix Anzag	Wool alcohol cream DAB/SR	9A050215	1
Apomix	Wool alcohol cream DAB/SR	108A301214	1
Caelo	Wool alcohol cream DAB/SR	14356303	1
Bombastus	Wool alcohol cream DAB/SR	291352	3
Bombastus	Wool alcohol cream DAB/SR	291348	2
Sanacorp	Wool alcohol cream DAB/SR	25/AKD3	1
Bombastus	Wool alcohol cream DAB/SR	291432	1
Caelo	Wool alcohol cream DAB/SR	14295301	2
Bombastus	Wool alcohol cream DAB/SR	288354	2
Caelo	Wool alcohol cream DAB/SR	15017501	4
P.W.Beyvers GmbH,Phönix	Wool alcohol cream DAB/SR	15A230215	1
Alliance Health 06.03.2...	Wool alcohol cream DAB/SR	14362102	1
Caelo	Wool alcohol cream DAB/SR	1416903	1
Bombastus	Wool alcohol cream DAB/SR	291433	1
Sanacorp	Wool alcohol cream DAB/SR	13172102	1
Bombastus	Wool alcohol cream DAB/SR	291265	1
Apomix	Wool alcohol cream DAB/SR	13A050215	1
Caelo	Wool alcohol cream DAB/SR	14362102	3
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	14295901	1
Caelo	Wool alcohol cream DAB/SR	14356402	6

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	15022201	6
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	72-A190814	1
Noweda	Wool alcohol cream DAB/SR	291431	1
Bombastus	Wool alcohol cream DAB/SR	291479	3
Caelo	Wool alcohol cream DAB/SR	14356501	2
Bombastus	Wool alcohol cream DAB/SR	291350	1
Bombastus	Wool alcohol cream DAB/SR	291476	4
Apomix/Gehe	Wool alcohol cream DAB/SR	15A230215	1
Apomix/Sana	Wool alcohol cream DAB/SR	14A180215	3
Caelo	Wool alcohol cream DAB/SR	14362401	3
Bombastus	Wool alcohol cream DAB/SR	291264	1
Phoenix Goettin	Wool alcohol cream DAB/SR	14362401	2
Caelo	Wool alcohol cream DAB/SR	14356301	3
Caelo	Wool alcohol cream DAB/SR	15017601	21
Phönix	Wool alcohol cream DAB/SR	14362102	1
Bombastus	Wool alcohol cream DAB/SR	291349	1
Leyh Pharma/Sanacorp	Wool alcohol cream DAB/SR	150411	1
Caelo	Wool alcohol cream DAB/SR	1429501	2
Bombastus	Wool alcohol cream DAB/SR	291347	1
Bombastus	Wool alcohol cream DAB/SR	291267	1
Caelo	Wool alcohol cream DAB/SR	15017701	2
Noweda	Wool alcohol cream DAB/SR	291478	1
Sanacorp	Wool alcohol cream DAB/SR	15017601	1
Anzag	Wool alcohol cream DAB/SR	289091	1
Caelo	Wool alcohol cream DAB/SR	15073502	4
Apomix/Noweda	Wool alcohol cream DAB/SR	17A230215	1
Phoenix	Wool alcohol cream DAB/SR	14362501	2
Caelo	Wool alcohol cream DAB/SR	14356601	4
Phoenix Goettin	Wool alcohol cream DAB/SR	15017801	1
Caelo	Wool alcohol cream DAB/SR	15017502	5
Caelo	Wool alcohol cream DAB/SR	14362501	8
Bombastus	Wool alcohol cream DAB/SR	14356302	5
Caelo	Wool alcohol cream DAB/SR	15017801	2
Bombastus	Wool alcohol cream DAB/SR	292693	2
Bombastus	Wool alcohol cream DAB/SR	293067	1
Bombastus	Wool alcohol cream DAB/SR	289391	1
Bombastus	Wool alcohol cream DAB/SR	292694	1
Allianc.Healthc../Apomix	Wool alcohol cream DAB/SR	14A180215	1
AHD	Wool alcohol cream DAB/SR	14356301	1
Caelo	Wool alcohol cream DAB/SR	1456302	1
Sanacorp	Wool alcohol cream DAB/SR	14295701	1
apomix	Wool alcohol cream DAB/SR	27A180315	1
Bombastus	Wool alcohol cream DAB/SR	294271	2
Bombastus	Wool alcohol cream DAB/SR	40/14	1
Bombastus	Wool alcohol cream DAB/SR	294270	4
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	14362301	1
Bombastus	Wool alcohol cream DAB/SR	291477	1
Caelo	Wool alcohol cream DAB/SR	15017901	7
Apomix/Phönix	Wool alcohol cream DAB/SR	5A220115	1
Leyh Pharma GmbH	Wool alcohol cream DAB/SR	151831	1
Bombastus	Wool alcohol cream DAB/SR	60080302	2
Bombastus	Wool alcohol cream DAB/SR	294272	3
Caelo	Wool alcohol cream DAB/SR	15150002	2
Bombastus	Wool alcohol cream DAB/SR	293064	1
Caelo	Wool alcohol cream DAB/SR	15132101	10
Caelo	Wool alcohol cream DAB/SR	15073601	16
Bombastus	Wool alcohol cream DAB/SR	293069	3
Caelo	Wool alcohol cream DAB/SR	14356401	2
Sanacorp	Wool alcohol cream DAB/SR	27/AKD4	1
Phönix Gotha	Wool alcohol cream DAB/SR	151831	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DAB/SR	294273	1
VDL;4,87EUR;12.06.15	Wool alcohol cream DAB/SR	15073601	1
Caelo	Wool alcohol cream DAB/SR	15149801	15
Apomix/Gehe	Wool alcohol cream DAB/SR	37A220415	2
Caelo	Wool alcohol cream DAB/SR	15132301	4
Caelo	Wool alcohol cream DAB/SR	1071503	1
Leyh/Noweda	Wool alcohol cream DAB/SR	152321	2
apomix/Phönix	Wool alcohol cream DAB/SR	43A200515	1
Bombastus	Wool alcohol cream DAB/SR	294527	2
Bombastus	Wool alcohol cream DAB/SR	292697	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	15017801	1
Bombastus	Wool alcohol cream DAB/SR	294532	2
Caelo	Wool alcohol cream DAB/SR	15073301	1
Caelo	Wool alcohol cream DAB/SR	15150001	7
Bombastus	Wool alcohol cream DAB/SR	292769	1
Ichthyol Gesellschaft C...	Wool alcohol cream DAB/SR	14362501	1
Caelo	Wool alcohol cream DAB/SR	15174201	8
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	41A230415	1
Bombastus	Wool alcohol cream DAB/SR	293066	1
Bombastus	Wool alcohol cream DAB/SR	289491	1
Caelo	Wool alcohol cream DAB/SR	15174301	5
Caelo	Wool alcohol cream DAB/SR	1515101	1
Caelo	Wool alcohol cream DAB/SR	15073701	3
Caelo	Wool alcohol cream DAB/SR	15073801	2
Caelo	Wool alcohol cream DAB/SR	1015E-01371	1
Caelo	Wool alcohol cream DAB/SR	15226301	8
Caelo	Wool alcohol cream DAB/SR	15149802	2
Otto Fischar GmbH & Co.KG	Wool alcohol cream DAB/SR	294533	5
Bombastus	Wool alcohol cream DAB/SR	294533	5
Caelo	Wool alcohol cream DAB/SR	15174104	19
Apomix/Noweda	Wool alcohol cream DAB/SR	62A250615	1
Caelo	Wool alcohol cream DAB/SR	15149902	2
Bombastus	Wool alcohol cream DAB/SR	293063	1
Bombastus	Wool alcohol cream DAB/SR	292695	2
Bombastus	Wool alcohol cream DAB/SR	295463	2
All. Healthc. /Apomix	Wool alcohol cream DAB/SR	33A150415	1
Caelo	Wool alcohol cream DAB/SR	15150101	7
apomix	Wool alcohol cream DAB/SR	58A100615	1
Fagron	Wool alcohol cream DAB/SR	15073701	1
Noweda	Wool alcohol cream DAB/SR	294529	1
Bombastus	Wool alcohol cream DAB/SR	294529	1
Bombastus	Wool alcohol cream DAB/SR	291478	1
Caelo	Wool alcohol cream DAB/SR	15260102	20
Caelo	Wool alcohol cream DAB/SR	15259901	5
Bombastus	Wool alcohol cream DAB/SR	294332	1
Caelo	Wool alcohol cream DAB/SR	15260001	16
Bombastus	Wool alcohol cream DAB/SR	294333	1
Apomix	Wool alcohol cream DAB/SR	64A250715	1
Caelo	Wool alcohol cream DAB/SR	15266001	6
Caelo	Wool alcohol cream DAB/SR	15174302	6
Caelo	Wool alcohol cream DAB/SR	15174103	10
Caelo	Wool alcohol cream DAB/SR	15259701	19
Bombastus	Wool alcohol cream DAB/SR	294330	2
Bombastus	Wool alcohol cream DAB/SR	296127	2
AHD / Leyh	Wool alcohol cream DAB/SR	153711	1
Caelo	Wool alcohol cream DAB/SR	1526601	1
Leyh Pharma/Sanacorp	Wool alcohol cream DAB/SR	151831	1
Bombastus	Wool alcohol cream DAB/SR	296134	2
Caelo	Wool alcohol cream DAB/SR	296128	1
apomix 004	Wool alcohol cream DAB/SR	65A060715	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	15268303	2
PKH GmbH,Phönix	Wool alcohol cream DAB/SR	57A100615	1
Gehe	Wool alcohol cream DAB/SR	15226301	1
Bombastus	Wool alcohol cream DAB/SR	295528	1
Caelo	Wool alcohol cream DAB/SR	15266201	7
Bombastus	Wool alcohol cream DAB/SR	295462	3
Caelo	Wool alcohol cream DAB/SR	15259802	1
Apomix/Alliance Healthc...	Wool alcohol cream DAB/SR	66A060715	1
Bombastus	Wool alcohol cream DAB/SR	295460	2
Bombastus	Wool alcohol cream DAB/SR	295529	6
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	46A27515	1
Caelo	Wool alcohol cream DAB/SR	15174105	2
apomix/Noweda	Wool alcohol cream DAB/SR	75A130815	1
Caelo	Wool alcohol cream DAB/SR	295463	1
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	69A120815	1
Caesar&Loretz/Caesar&Lo...	Wool alcohol cream DAB/SR	15266301	1
Caelo	Wool alcohol cream DAB/SR	15266101	2
Bombastus	Wool alcohol cream DAB/SR	296131	1
Bombastus	Wool alcohol cream DAB/SR	295536	8
Caelo	Wool alcohol cream DAB/SR	15266301	5
Bombastus	Wool alcohol cream DAB/SR	296132	2
Bombastus	Wool alcohol cream DAB/SR	296128	1
Noweda	Wool alcohol cream DAB/SR	295530	2
Apomix/Sana	Wool alcohol cream DAB/SR	89A291015	1
Noweda	Wool alcohol cream DAB/SR	294333	2
Apomix	Wool alcohol cream DAB/SR	74A130815	1
Bombastus	Wool alcohol cream DAB/SR	296133	3
Caelo	Wool alcohol cream DAB/SR	15266501	6
Caelo	Wool alcohol cream DAB/SR	296131	2
Caelo	Wool alcohol cream DAB/SR	1529701	1
Euro OTC	Wool alcohol cream DAB/SR	295536	1
Caelo	Wool alcohol cream DAB/SR	15259801	6
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	15073701	1
Bombastus	Wool alcohol cream DAB/SR	297413	4
Caelo	Wool alcohol cream DAB/SR	15361402	13
Bombastus	Wool alcohol cream DAB/SR	295218	1
Apomix/Gehe	Wool alcohol cream DAB/SR	87A061015	1
Caelo	Wool alcohol cream DAB/SR	15360901	16
Sanacorp /Caelo 7.12.15	Wool alcohol cream DAB/SR	15259701	1
Bombastus	Wool alcohol cream DAB/SR	297531	6
Bombastus	Wool alcohol cream DAB/SR	297528	3
Bombastus	Wool alcohol cream DAB/SR	295534	1
Bombastus	Wool alcohol cream DAB/SR	297527	3
Allianc. Health. /Apomix	Wool alcohol cream DAB/SR	89A291015	1
Caelo	Wool alcohol cream DAB/SR	15361601	4
Caelo	Wool alcohol cream DAB/SR	15268501	9
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	89A291015	1
Caesar & Loretz GmbH Hi...	Wool alcohol cream DAB/SR	15361001	2
Caelo	Wool alcohol cream DAB/SR	15266401	3
Caelo	Wool alcohol cream DAB/SR	15361001	1
Apomix/Noweda	Wool alcohol cream DAB/SR	77A260815	1
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	15266501	1
Apomix/Sana	Wool alcohol cream DAB/SR	90A291015	1
Bombastus	Wool alcohol cream DAB/SR	295464	1
Caelo	Wool alcohol cream DAB/SR	15360801	6
unisan	Wool alcohol cream DAB/SR	15266501	2
Caeolo/Noweda	Wool alcohol cream DAB/SR	15259901	1
Bombastus	Wool alcohol cream DAB/SR	297529	4
Apomix	Wool alcohol cream DAB/SR	92A111115	1
Apomix / Anzag	Wool alcohol cream DAB/SR	81A100915	1

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Supplier	Substance	Batch	Spectra
apomix/Phönix	Wool alcohol cream DAB/SR	74A130815	1
Sanacorp	Wool alcohol cream DAB/SR	15266201	2
Caelo	Wool alcohol cream DAB/SR	15361101	4
Caelo	Wool alcohol cream DAB/SR	15361701	1
Caelo	Wool alcohol cream DAB/SR	15268302	23
Bombastus	Wool alcohol cream DAB/SR	297533	1
Caelo	Wool alcohol cream DAB/SR	15329403	1
Caelo	Wool alcohol cream DAB/SR	15268/601	1
Caelo	Wool alcohol cream DAB/SR	15268601	12
Caelo	Wool alcohol cream DAB/SR	15360902	4
Apomix/Gehe	Wool alcohol cream DAB/SR	104A091215	1
Bombastus	Wool alcohol cream DAB/SR	298679	3
Caelo	Wool alcohol cream DAB/SR	15360802	5
Caelo	Wool alcohol cream DAB/SR	20161102-2	1
Caelo	Wool alcohol cream DAB/SR	15268402	3
apomix	Wool alcohol cream DAB/SR	96A111115	3
Caelo	Wool alcohol cream DAB/SR	15361201	10
Bombastus	Wool alcohol cream DAB/SR	297526	1
Bombastus	Wool alcohol cream DAB/SR	298816	4
WE:17.02.2016	Wool alcohol cream DAB/SR	15361601	1
Caelo	Wool alcohol cream DAB/SR	1608001	1
Bombastus	Wool alcohol cream DAB/SR	298813	1
Bumbastus	Wool alcohol cream DAB/SR	298679	1
Caelo	Wool alcohol cream DAB/SR	16007701	12
Bombastus	Wool alcohol cream DAB/SR	298678	2
Apomix/ Gehe	Wool alcohol cream DAB/SR	13A150216	1
Caelo	Wool alcohol cream DAB/SR	16008103	21
apomix/Holdermann	Wool alcohol cream DAB/SR	93A111115	1
Caelo	Wool alcohol cream DAB/SR	298675	2
Caelo	Wool alcohol cream DAB/SR	16024501	6
Sanacorp	Wool alcohol cream DAB/SR		1
Caelo	Wool alcohol cream DAB/SR	15361301	6
apomix/AHD	Wool alcohol cream DAB/SR	102A091215	1
Caelo	Wool alcohol cream DAB/SR	16014302	6
Bombastus	Wool alcohol cream DAB/SR	298674	1
Noweda	Wool alcohol cream DAB/SR	15268601	1
Caelo	Wool alcohol cream DAB/SR	297526	1
Noweda/ Caesar & Loretz...	Wool alcohol cream DAB/SR	16007901	1
Noweda	Wool alcohol cream DAB/SR	298673	1
Caelo	Wool alcohol cream DAB/SR	15361501	9
Bombastus	Wool alcohol cream DAB/SR	295465	1
Caelo	Wool alcohol cream DAB/SR	16007901	15
Fiebig	Wool alcohol cream DAB/SR	16008201	1
Bombastus	Wool alcohol cream DAB/SR	297411	1
Caelo	Wool alcohol cream DAB/SR	16024301	2
Bombastus	Wool alcohol cream DAB/SR	299784	4
apomix AHD	Wool alcohol cream DAB/SR	15A160216	1
Bombastus	Wool alcohol cream DAB/SR	298815	2
Caelo	Wool alcohol cream DAB/SR	15268401	3
Leyh /Sanacorp	Wool alcohol cream DAB/SR	154421	1
WE:05.04.2016 Sanacorp	Wool alcohol cream DAB/SR	15361501	1
Fagron	Wool alcohol cream DAB/SR	16007901	1
Allianc. Health. / Apomix	Wool alcohol cream DAB/SR	15A160216	1
Bombastus	Wool alcohol cream DAB/SR	297530	2
Bombastus	Wool alcohol cream DAB/SR	300583	4
Bombastus	Wool alcohol cream DAB/SR	299233	3
ichthyol	Wool alcohol cream DAB/SR	297414	1
Bombastus	Wool alcohol cream DAB/SR	299234	7
Caelo	Wool alcohol cream DAB/SR	16008201	5
Caelo	Wool alcohol cream DAB/SR	16007802	2

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DAB/SR	299231	4
Bombastus	Wool alcohol cream DAB/SR	299230	4
Caelo	Wool alcohol cream DAB/SR	299782	4
Bombastus	Wool alcohol cream DAB/SR	299787	1
Caelo	Wool alcohol cream DAB/SR	153671601	1
Caelo	Wool alcohol cream DAB/SR	160245	1
Anzag	Wool alcohol cream DAB/SR	15268302	1
Bombastus	Wool alcohol cream DAB/SR	15266001	1
Bombastus	Wool alcohol cream DAB/SR	298677	1
Bombastus	Wool alcohol cream DAB/SR	298812	1
Caelo	Wool alcohol cream DAB/SR	16007702	3
apomix	Wool alcohol cream DAB/SR	20A010316	2
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	160551	2
Caelo	Wool alcohol cream DAB/SR	16008301	7
Bombastus	Wool alcohol cream DAB/SR	299232	2
Bombastus	Wool alcohol cream DAB/SR	299783	2
Phoenix	Wool alcohol cream DAB/SR	16024501	1
Bombastus	Wool alcohol cream DAB/SR	300837	2
Bombastus	Wool alcohol cream DAB/SR	298676	1
Bombastus	Wool alcohol cream DAB/SR	299228	2
Caelo	Wool alcohol cream DAB/SR	16024601	6
apomix	Wool alcohol cream DAB/SR	3A270116	1
Bombastus	Wool alcohol cream DAB/SR	299782	2
Bombastus	Wool alcohol cream DAB/SR	299226	2
Bombastus	Wool alcohol cream DAB/SR	299786	2
Bombastus	Wool alcohol cream DAB/SR	299227	1
Caelo	Wool alcohol cream DAB/SR	16007801	1
Noweda	Wool alcohol cream DAB/SR	16024601	1
Caelo	Wool alcohol cream DAB/SR	298677	1
Bombastus	Wool alcohol cream DAB/SR	297523	1
Caelo	Wool alcohol cream DAB/SR	16090501	24
Phoenix	Wool alcohol cream DAB/SR	300583	1
apomix / Anzag	Wool alcohol cream DAB/SR	15A160216	1
Bombastus	Wool alcohol cream DAB/SR	300578	3
Bombastus	Wool alcohol cream DAB/SR	300577	6
Bombastus	Wool alcohol cream DAB/SR	300831	1
Caelo	Wool alcohol cream DAB/SR	16024403	8
apomix/Holdermann	Wool alcohol cream DAB/SR	34A250516	2
apomix	Wool alcohol cream DAB/SR	34A250516	1
Apomix /Noweda	Wool alcohol cream DAB/SR	25a170316	1
Caelo	Wool alcohol cream DAB/SR	16024502	1
Bombastus	Wool alcohol cream DAB/SR	298814	1
Caelo	Wool alcohol cream DAB/SR	16090702	19
Apomix	Wool alcohol cream DAB/SR	32A120416	1
Caelo	Wool alcohol cream DAB/SR	80616-10	1
Bombastus	Wool alcohol cream DAB/SR	301891	5
Caelo	Wool alcohol cream DAB/SR	16089902	8
Bombastus	Wool alcohol cream DAB/SR	300835	2
Bombastus	Wool alcohol cream DAB/SR	301310	3
Bombastus	Wool alcohol cream DAB/SR	301312	3
Caelo	Wool alcohol cream DAB/SR	16090301	4
Bombastus	Wool alcohol cream DAB/SR	298672	1
Bombastus	Wool alcohol cream DAB/SR	299229	1
Bombastus	Wool alcohol cream DAB/SR	300579	2
Bombastus	Wool alcohol cream DAB/SR	300581	3
Caelo	Wool alcohol cream DAB/SR	16090401	8
Caelo	Wool alcohol cream DAB/SR	16157901	16
Apomix	Wool alcohol cream DAB/SR	5A280116	1
Celo	Wool alcohol cream DAB/SR	16008301	1
Caelo	Wool alcohol cream DAB/SR	16090601	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DAB/SR	301308	2
Bombastus	Wool alcohol cream DAB/SR	300833	3
Phoenix	Wool alcohol cream DAB/SR	16007701	1
Bombastus	Wool alcohol cream DAB/SR	300836	1
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	161211	1
Caelo	Wool alcohol cream DAB/SR	16008401	1
Bombastus	Wool alcohol cream DAB/SR	302030	2
Bombastus	Wool alcohol cream DAB/SR	299785	2
Bombastus	Wool alcohol cream DAB/SR	301885	2
Bombastus	Wool alcohol cream DAB/SR	301309	4
Caelo	Wool alcohol cream DAB/SR	16024401	7
apomix/Noweda	Wool alcohol cream DAB/SR	31A110416	1
Caelo	Wool alcohol cream DAB/SR	300581	1
Sonnen-Apotheke Wefensl...	Wool alcohol cream DAB/SR	16090101	1
Bombastus	Wool alcohol cream DAB/SR	300576	1
Phönix	Wool alcohol cream DAB/SR	301312	1
Caelo	Wool alcohol cream DAB/SR	16177701	9
Caesar & Loretz GmbH Hi...	Wool alcohol cream DAB/SR	16157901	1
Bombastus	Wool alcohol cream DAB/SR	298668	1
Bombastus	Wool alcohol cream DAB/SR	302033	4
Caelo	Wool alcohol cream DAB/SR	201310	1
Aallianc. Healthc. / Ap...	Wool alcohol cream DAB/SR	35A260516	1
Bombastus	Wool alcohol cream DAB/SR	3020333	1
Caesar & Loretz/Noweda	Wool alcohol cream DAB/SR	16008401	1
Caelo	Wool alcohol cream DAB/SR	29/AKD12	1
Caelo	Wool alcohol cream DAB/SR	1608992	1
Bombastus	Wool alcohol cream DAB/SR	300834	1
Leyh Pharma GmbH, 15.08...	Wool alcohol cream DAB/SR	162411	1
Caelo	Wool alcohol cream DAB/SR	16090101	2
Apomix/Noweda	Wool alcohol cream DAB/SR	301311	1
Apomix/Noweda	Wool alcohol cream DAB/SR	299230	1
Phoenix	Wool alcohol cream DAB/SR	16177701	1
Noweda	Wool alcohol cream DAB/SR	16024403	1
Bombastus	Wool alcohol cream DAB/SR	302031	4
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	162411	1
Bombastus	Wool alcohol cream DAB/SR	301883	3
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	161531	1
Caelo	Wool alcohol cream DAB/SR	16158102	3
Bombastus	Wool alcohol cream DAB/SR	16158001	2
Bombastus	Wool alcohol cream DAB/SR	303010	1
apomix PKH GmbH Halle	Wool alcohol cream DAB/SR	32A120416	1
Sanacorp	Wool alcohol cream DAB/SR	16090703	1
Caelo	Wool alcohol cream DAB/SR	161177701	1
Caelo	Wool alcohol cream DAB/SR	293069	1
Caelo	Wool alcohol cream DAB/SR	16158001	14
Apomix	Wool alcohol cream DAB/SR	37A040716	1
pharmachem gmbh co kg,p...	Wool alcohol cream DAB/SR	31215	1
Caelo	Wool alcohol cream DAB/SR	16157802	6
Bombastus	Wool alcohol cream DAB/SR	299235	1
Apomix 001	Wool alcohol cream DAB/SR	32A120416	1
Caelo	Wool alcohol cream DAB/SR	16090201	1
Bombastus	Wool alcohol cream DAB/SR	301305	1
Bombastus	Wool alcohol cream DAB/SR	301890	2
Bombastus	Wool alcohol cream DAB/SR	295532	1
Caelo	Wool alcohol cream DAB/SR	16157801	10
Bombastus	Wool alcohol cream DAB/SR	301889	2
Bombastus	Wool alcohol cream DAB/SR	302029	4
WE:Sanacorp26.09.2016 ...	Wool alcohol cream DAB/SR	16090002	1
Noweda	Wool alcohol cream DAB/SR	302030	2
Caelo	Wool alcohol cream DAB/SR	16112201	9

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	16158101	13
Bombastus	Wool alcohol cream DAB/SR	301880	1
Bombastus	Wool alcohol cream DAB/SR	302966	6
Caelo	Wool alcohol cream DAB/SR	16177401	9
Bombstus	Wool alcohol cream DAB/SR	302031	1
Bombstus	Wool alcohol cream DAB/SR	302032	1
Caelo	Wool alcohol cream DAB/SR	16120801	2
Caelo	Wool alcohol cream DAB/SR	160912ECA	1
Gehe	Wool alcohol cream DAB/SR	16177401	2
Bombastus	Wool alcohol cream DAB/SR	302968	1
Caelo	Wool alcohol cream DAB/SR	16090703	1
Bombastus	Wool alcohol cream DAB/SR	302032	3
Bombastus	Wool alcohol cream DAB/SR	303528	3
Bombastus	Wool alcohol cream DAB/SR	301887	5
Bombastus	Wool alcohol cream DAB/SR	303529	1
Caelo	Wool alcohol cream DAB/SR	16157501	1
Caelo	Wool alcohol cream DAB/SR	16177602	11
PKH GmbH	Wool alcohol cream DAB/SR	40A080816	1
Bombastus	Wool alcohol cream DAB/SR	301888	1
Caelo	Wool alcohol cream DAB/SR	16199004	11
Caesar & Loretz/AHD	Wool alcohol cream DAB/SR	301311	1
Bumbastus	Wool alcohol cream DAB/SR	302972	1
Bombastus	Wool alcohol cream DAB/SR	302972	5
Apomix	Wool alcohol cream DAB/SR	19A010316	1
Apomix	Wool alcohol cream DAB/SR	36A250516	1
Apomix	Wool alcohol cream DAB/SR	39A050716	2
Caelo	Wool alcohol cream DAB/SR	303524	1
Apomix PKH GmbH	Wool alcohol cream DAB/SR	40A080816	1
Caelo	Wool alcohol cream DAB/SR	16157801/1041016	1
apomix/Noweda	Wool alcohol cream DAB/SR	42a290816	1
Bombastus	Wool alcohol cream DAB/SR	3029972	1
Bombastus	Wool alcohol cream DAB/SR	302969	3
apomix/Phönix	Wool alcohol cream DAB/SR	39A050716	1
Apomix/Noweda	Wool alcohol cream DAB/SR	38A050716	1
Alliance Healthcare	Wool alcohol cream DAB/SR	302966	1
Allianc. Health. /Apomix	Wool alcohol cream DAB/SR	40A080816	1
Sanacorp/AHD	Wool alcohol cream DAB/SR	16157801	1
Caelo	Wool alcohol cream DAB/SR	16199101	6
Bombastus	Wool alcohol cream DAB/SR	30297	1
Celo	Wool alcohol cream DAB/SR	16199004	1
Caelo	Wool alcohol cream DAB/SR	16199201	6
Caelo	Wool alcohol cream DAB/SR	16120802	1
Caelo	Wool alcohol cream DAB/SR	16177601	4
Bombastus	Wool alcohol cream DAB/SR	304437	2
Leyh /Sanacorp	Wool alcohol cream DAB/SR	162631	1
Euro OTC	Wool alcohol cream DAB/SR	43A041016	1
Bombastus	Wool alcohol cream DAB/SR	302970	3
Bombastus	Wool alcohol cream DAB/SR	301306	1
Bombastus	Wool alcohol cream DAB/SR	304435	7
Caelo	Wool alcohol cream DAB/SR	302972	1
Euro OTC	Wool alcohol cream DAB/SR	16199101	3
Caelo	Wool alcohol cream DAB/SR	16282301	25
Caelo	Wool alcohol cream DAB/SR	304435	1
Caelo	Wool alcohol cream DAB/SR	16199301	6
Bombastus	Wool alcohol cream DAB/SR	304436	7
Bombastus	Wool alcohol cream DAB/SR	6862317	1
Leyh Pharma GmbH	Wool alcohol cream DAB/SR	163741	1
Allianc. Health. /Apomix	Wool alcohol cream DAB/SR	49A031116	2
apomix	Wool alcohol cream DAB/SR	13A150216	1
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	162631	2

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Supplier	Substance	Batch	Spectra
Euro OTC	Wool alcohol cream DAB/SR	16199004	1
Caelo	Wool alcohol cream DAB/SR	116282301	1
Caelo	Wool alcohol cream DAB/SR	16177502	8
Bombastus	Wool alcohol cream DAB/SR	304429	3
Bombastus	Wool alcohol cream DAB/SR	302967	2
Apomix	Wool alcohol cream DAB/SR	40A080816	1
Alte Apotheke	Wool alcohol cream DAB/SR	16177401	1
Bombastus	Wool alcohol cream DAB/SR	304428	1
Bombastus	Wool alcohol cream DAB/SR	305255	4
Apomix	Wool alcohol cream DAB/SR	49A031116	1
Caelo	Wool alcohol cream DAB/SR	16277903	7
Bombastus	Wool alcohol cream DAB/SR	16199201	1
Bombastus	Wool alcohol cream DAB/SR	303525	1
PHÖNIX	Wool alcohol cream DAB/SR	16177502	1
Caelo	Wool alcohol cream DAB/SR	16277902	7
GEHE	Wool alcohol cream DAB/SR	305253	1
Caelo	Wool alcohol cream DAB/SR	161776	1
29.06.2016 Phoenix 3,77EUR	Wool alcohol cream DAB/SR	16090702	1
Caesar & Loretz/Noweda	Wool alcohol cream DAB/SR	16199401	1
Caelo	Wool alcohol cream DAB/SR	16199401	1
Alliance Healthcare	Wool alcohol cream DAB/SR	304428	1
Bombastus	Wool alcohol cream DAB/SR	304432	4
Allianc. Health. / Apomix	Wool alcohol cream DAB/SR	46A011116	2
Apomix/Noweda	Wool alcohol cream DAB/SR	44A041016	1
Fagron	Wool alcohol cream DAB/SR	16199003	1
Bombastus	Wool alcohol cream DAB/SR	305257	4
Caelo	Wool alcohol cream DAB/SR	16199003	1
Caelo	Wool alcohol cream DAB/SR	16177603	5
Caelo	Wool alcohol cream DAB/SR	16198401	1
Bombastus	Wool alcohol cream DAB/SR	301892	1
Alliance Healthcare	Wool alcohol cream DAB/SR	302970	1
Bombastus	Wool alcohol cream DAB/SR	303527	1
Bombastus	Wool alcohol cream DAB/SR	303526	1
Bombastus	Wool alcohol cream DAB/SR	306211	5
Caelo	Wool alcohol cream DAB/SR	16312901	6
Caelo	Wool alcohol cream DAB/SR	417A-01371	1
Caelo	Wool alcohol cream DAB/SR	16278201	2
Caelo	Wool alcohol cream DAB/SR	16313101	18
Apomix	Wool alcohol cream DAB/SR	50A011216	1
Caelo	Wool alcohol cream DAB/SR	16344202	1
Gehe	Wool alcohol cream DAB/SR	16282301	1
apomix 004	Wool alcohol cream DAB/SR	46A011116	1
Bombastus	Wool alcohol cream DAB/SR	304433	2
Caelo	Wool alcohol cream DAB/SR	304436	1
Apomix/Gehe	Wool alcohol cream DAB/SR	43A041016	1
Caelo	Wool alcohol cream DAB/SR	16278101	2
Bombastus	Wool alcohol cream DAB/SR	306082	2
Gehe	Wool alcohol cream DAB/SR	16277903	1
Caelo	Wool alcohol cream DAB/SR	16249003	2
Bombastus	Wool alcohol cream DAB/SR	305253	5
	Wool alcohol cream DAB/SR	304428	1
Caelo	Wool alcohol cream DAB/SR	16340801	27
Caelo	Wool alcohol cream DAB/SR	16340701	6
Caelo	Wool alcohol cream DAB/SR	16278301	3
Caelo	Wool alcohol cream DAB/SR	16312902	8
Caelo	Wool alcohol cream DAB/SR	16344301	14
Caelo	Wool alcohol cream DAB/SR	2716Q-01371	1
Bombastus	Wool alcohol cream DAB/SR	304431	4
Bombastus	Wool alcohol cream DAB/SR	60089704	1
Bombastus	Wool alcohol cream DAB/SR	306090	6

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Supplier	Substance	Batch	Spectra
SanacorpWE:11.01.2017 ...	Wool alcohol cream DAB/SR	16199201	1
Pharmachemie	Wool alcohol cream DAB/SR	31215	1
Bombastus	Wool alcohol cream DAB/SR	305256	1
Apomix/Noweda	Wool alcohol cream DAB/SR	2A120117	2
apomix/Holdermann	Wool alcohol cream DAB/SR	45A041016	1
Allianc. Health. / Apomix	Wool alcohol cream DAB/SR	2A120117	1
Bombastus	Wool alcohol cream DAB/SR	305260	3
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	16344301	1
Caelo	Wool alcohol cream DAB/SR	16344102	7
GEHE	Wool alcohol cream DAB/SR	303523	1
Pharmachem GmbH & Co.KG	Wool alcohol cream DAB/SR	190816	1
Bombastus	Wool alcohol cream DAB/SR	306214	3
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	16313101	1
Phönix	Wool alcohol cream DAB/SR	1098283	1
Caelo	Wool alcohol cream DAB/SR	16341001	9
Bombastus	Wool alcohol cream DAB/SR	307624	5
Caelo	Wool alcohol cream DAB/SR	16344201	15
Caelo	Wool alcohol cream DAB/SR	19199004	1
Bombastus	Wool alcohol cream DAB/SR	306088	2
Caelo	Wool alcohol cream DAB/SR	16345801	5
Bombastus	Wool alcohol cream DAB/SR	306215	3
Bombastus	Wool alcohol cream DAB/SR	306213	1
Caelo	Wool alcohol cream DAB/SR	16340703	3
Bombastus	Wool alcohol cream DAB/SR	306218	4
Bombastus	Wool alcohol cream DAB/SR	306217	3
hochhaus-Apotheke	Wool alcohol cream DAB/SR	16177601	1
Bombastus	Wool alcohol cream DAB/SR	305259	3
Bombastus	Wool alcohol cream DAB/SR	306085	1
Caelo	Wool alcohol cream DAB/SR	306086	2
Bombastus	Wool alcohol cream DAB/SR	306084	3
Bombastus	Wool alcohol cream DAB/SR	307285	1
Bombastus	Wool alcohol cream DAB/SR	306089	2
Bombastus	Wool alcohol cream DAB/SR	306083	1
Caelo	Wool alcohol cream DAB/SR	16313002	8
Caelo	Wool alcohol cream DAB/SR	16340902	3
apomix / Anzag	Wool alcohol cream DAB/SR	42A290816	1
apomix/Noweda	Wool alcohol cream DAB/SR	2A120117	1
Caelo	Wool alcohol cream DAB/SR	17039301	16
Bombastus	Wool alcohol cream DAB/SR	299780	1
Bumbastus	Wool alcohol cream DAB/SR	305260	2
Caelo	Wool alcohol cream DAB/SR	1230317	1
Bumbastus	Wool alcohol cream DAB/SR	304435	1
Leyh /Sanacorp	Wool alcohol cream DAB/SR	170231	1
Caelo	Wool alcohol cream DAB/SR	306819	1
Apomix	Wool alcohol cream DAB/SR	6A230217	1
Bombastus	Wool alcohol cream DAB/SR	303523	1
Caelo	Wool alcohol cream DAB/SR	17039201	8
Phoenix	Wool alcohol cream DAB/SR	16341001	1
Caelo	Wool alcohol cream DAB/SR	163123101	1
Caelo	Wool alcohol cream DAB/SR	304431	1
Euro OTC	Wool alcohol cream DAB/SR	16344201	1
Caelo	Wool alcohol cream DAB/SR	20170419ECA/16312902	1
Bombastus	Wool alcohol cream DAB/SR	306087	1
Caelo	Wool alcohol cream DAB/SR	16344101	10
Caelo	Wool alcohol cream DAB/SR	306083	1
Bombastus	Wool alcohol cream DAB/SR	308301	7
Apomix /Noweda	Wool alcohol cream DAB/SR	6a230217	1
Leyh Pharma GmbH	Wool alcohol cream DAB/SR	171311	1
Bombastus	Wool alcohol cream DAB/SR	307613	3
Caelo	Wool alcohol cream DAB/SR	170390301	1

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Supplier	Substance	Batch	Spectra
Allianc. Health. / Apomix	Wool alcohol cream DAB/SR	5A220217	1
Caelo	Wool alcohol cream DAB/SR	17039601	5
Noweda	Wool alcohol cream DAB/SR	16313101	1
Bombastus	Wool alcohol cream DAB/SR	3068180	2
Gehe	Wool alcohol cream DAB/SR	305257	1
GEHE	Wool alcohol cream DAB/SR	306215	4
Caelo	Wool alcohol cream DAB/SR	17039701	3
Caelo	Wool alcohol cream DAB/SR	16345802	2
Bombastus	Wool alcohol cream DAB/SR	307619	1
Caelo	Wool alcohol cream DAB/SR	16353902	1
Bombastus	Wool alcohol cream DAB/SR	3083301	1
Bombastus	Wool alcohol cream DAB/SR	308302	2
Caelo	Wool alcohol cream DAB/SR	17039202	2
Allianz Healthcare	Wool alcohol cream DAB/SR	16312901	1
Bombastus	Wool alcohol cream DAB/SR	305254	1
apomix	Wool alcohol cream DAB/SR	5A220217	1
Pharmachem GmbH & Co.KG	Wool alcohol cream DAB/SR	31215	1
Finteler Apotheke	Wool alcohol cream DAB/SR	17039301	1
Bombastus	Wool alcohol cream DAB/SR	306822	3
Bombastus	Wool alcohol cream DAB/SR	306818	2
Bombastus	Wool alcohol cream DAB/SR	307282	2
Cealo	Wool alcohol cream DAB/SR	17039401	1
Gehe	Wool alcohol cream DAB/SR	16313002	1
Caelo	Wool alcohol cream DAB/SR	17094002	6
Caelo	Wool alcohol cream DAB/SR	16177801	1
Bombastus	Wool alcohol cream DAB/SR	307617	3
Phoenix	Wool alcohol cream DAB/SR	17039801	1
Leyh Pharma/Noweda	Wool alcohol cream DAB/SR	170651	1
Bombastus	Wool alcohol cream DAB/SR	306817	1
Caelo	Wool alcohol cream DAB/SR	17040001	7
Bombastus	Wool alcohol cream DAB/SR	306820	1
Bombastus	Wool alcohol cream DAB/SR	306816	5
Caelo	Wool alcohol cream DAB/SR	17039401	12
Euro OTC	Wool alcohol cream DAB/SR	16340801	1
Caelo	Wool alcohol cream DAB/SR	17039801	5
Caesar&Loretz	Wool alcohol cream DAB/SR	17040101	1
Bombastus	Wool alcohol cream DAB/SR	307286	2
Bombastus	Wool alcohol cream DAB/SR	307621	3
Caelo	Wool alcohol cream DAB/SR	170394015292	1
Caelo	Wool alcohol cream DAB/SR	17039901	2
Gehe	Wool alcohol cream DAB/SR	16344202	1
Bombastus	Wool alcohol cream DAB/SR	308303	2
apomix	Wool alcohol cream DAB/SR	50A011216	1
GEHE	Wool alcohol cream DAB/SR	308303	2
Caelo	Wool alcohol cream DAB/SR	306820	1
Fagron	Wool alcohol cream DAB/SR	17040101	1
Noweda	Wool alcohol cream DAB/SR	16340801	1
Bombastus	Wool alcohol cream DAB/SR	307622	4
Apomix/Gehe	Wool alcohol cream DAB/SR	10A270417	1
Bombastus	Wool alcohol cream DAB/SR	307284	5
Bombastus	Wool alcohol cream DAB/SR	308304	1
Caelo	Wool alcohol cream DAB/SR	17104702	4
Euro OTC	Wool alcohol cream DAB/SR	17102701	1
Caelo	Wool alcohol cream DAB/SR	17102701	14
Caelo	Wool alcohol cream DAB/SR	171851	1
Bombastus	Wool alcohol cream DAB/SR	308306	5
Bombastus	Wool alcohol cream DAB/SR	308684	3
phoenix	Wool alcohol cream DAB/SR	307621	1
Caelo	Wool alcohol cream DAB/SR	1640801	1
Caelo	Wool alcohol cream DAB/SR	170400001	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DAB/SR	308688	5
Caesar & Loretz GmbH	Wool alcohol cream DAB/SR	17094201	1
leyh Pharma	Wool alcohol cream DAB/SR	172411	1
Noweda	Wool alcohol cream DAB/SR	17039201	1
Caelo	Wool alcohol cream DAB/SR	5081702	1
Caelo	Wool alcohol cream DAB/SR	163441	1
GEHE	Wool alcohol cream DAB/SR	308302	1
Bombastus	Wool alcohol cream DAB/SR	307618	4
Caelo	Wool alcohol cream DAB/SR	17094201	12
Bombastus	Wool alcohol cream DAB/SR	306212	2
Caelo	Wool alcohol cream DAB/SR	17102603	3
Caelo	Wool alcohol cream DAB/SR	17102602	2
apomix/Holdermann	Wool alcohol cream DAB/SR	11A270417	1
Bombastus	Wool alcohol cream DAB/SR	60080303	1
Pharmachemie Pößneck	Wool alcohol cream DAB/SR	190816	2
Caelo	Wool alcohol cream DAB/SR	17104703	3
Caelo	Wool alcohol cream DAB/SR	2120817/17039401	1
Bombastus	Wool alcohol cream DAB/SR	307623	3
Noweda	Wool alcohol cream DAB/SR	17102701	1
Bombastus	Wool alcohol cream DAB/SR	310578	3
Sanacorp	Wool alcohol cream DAB/SR	17102701	1
Apomix	Wool alcohol cream DAB/SR	15A280617	1
Apomix Anzag	Wool alcohol cream DAB/SR	13A010617	3
Caelo	Wool alcohol cream DAB/SR	17148701	8
Caelo	Wool alcohol cream DAB/SR	17102901	5
Sanacorp WE: 04.09.17 ...	Wool alcohol cream DAB/SR	17102603	1
Bombastus	Wool alcohol cream DAB/SR	308316	2
Bombastus	Wool alcohol cream DAB/SR	310579	1
phönix	Wool alcohol cream DAB/SR	16344101	1
Bombastus	Wool alcohol cream DAB/SR	308313	3
Caelo	Wool alcohol cream DAB/SR	17155901	11
Bombastus	Wool alcohol cream DAB/SR	308307	6
Kehr	Wool alcohol cream DAB/SR	17155901	1
Bombastus	Wool alcohol cream DAB/SR	308314	4
Caelo	Wool alcohol cream DAB/SR	17094102	2
Pharmachem GmbH Co.KG,2...	Wool alcohol cream DAB/SR	190816	1
Sanacorp	Wool alcohol cream DAB/SR	17155901	2
Apomix/Gehe	Wool alcohol cream DAB/SR	16A290617	1
Leyh Pharma/Sanacorp	Wool alcohol cream DAB/SR	172411	1
Caelo	Wool alcohol cream DAB/SR	17149002	5
Caelo	Wool alcohol cream DAB/SR	171559015364	1
Wepa/ Phoenix	Wool alcohol cream DAB/SR	17039401	1
Caelo	Wool alcohol cream DAB/SR	17128502	4
Bombastus	Wool alcohol cream DAB/SR	308683	2
Caelo	Wool alcohol cream DAB/SR	17178301	11
Bombastus	Wool alcohol cream DAB/SR	308686	3
Caelo	Wool alcohol cream DAB/SR	17094001	4
Caelo	Wool alcohol cream DAB/SR	17149201	4
Sanacorp	Wool alcohol cream DAB/SR	17178301	1
Bombastus	Wool alcohol cream DAB/SR	310582	3
Bombastus	Wool alcohol cream DAB/SR	310580	1
Bombastus	Wool alcohol cream DAB/SR	308685	1
Caelo	Wool alcohol cream DAB/SR	17148201	1
Bombastus	Wool alcohol cream DAB/SR	309636	1
Caelo	Wool alcohol cream DAB/SR	17104701	1
Caelo	Wool alcohol cream DAB/SR	307617	1
Bombastus	Wool alcohol cream DAB/SR	310581	1
Euro OTC	Wool alcohol cream DAB/SR	17156002	1
Bombastus	Wool alcohol cream DAB/SR	308310	3
Noweda	Wool alcohol cream DAB/SR	17156001	2

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Supplier	Substance	Batch	Spectra
Bombastus	Wool alcohol cream DAB/SR	308689	1
Apomix/Gehe	Wool alcohol cream DAB/SR	16A070817	2
Caelo	Wool alcohol cream DAB/SR	1703401	1
Bombastus	Wool alcohol cream DAB/SR	308309	3
Sanacorp	Wool alcohol cream DAB/SR	17156001	1
Phönix	Wool alcohol cream DAB/SR	17148901	1
Caelo	Wool alcohol cream DAB/SR	1241017/17155901	1
Caelo	Wool alcohol cream DAB/SR	17148901	3
Caelo	Wool alcohol cream DAB/SR	17156002	5
Bombastus	Wool alcohol cream DAB/SR	310583	1
Caelo	Wool alcohol cream DAB/SR	17156001	10
GEHE	Wool alcohol cream DAB/SR	308308	1
Caelo	Wool alcohol cream DAB/SR	17197303	2
Bombastus	Wool alcohol cream DAB/SR	308315	2
Bombastus	Wool alcohol cream DAB/SR	308312	3
Caelo	Wool alcohol cream DAB/SR	171128ECA/17149002	1
Bombastus	Wool alcohol cream DAB/SR	308687	3
Caelo	Wool alcohol cream DAB/SR	17187701	12
Caelo	Wool alcohol cream DAB/SR	17197903	2
Sanacorp	Wool alcohol cream DAB/SR	17187701	3
Caelo	Wool alcohol cream DAB/SR	17149101	4
Caelo	Wool alcohol cream DAB/SR	17197302	15
Bombastus	Wool alcohol cream DAB/SR	311448	4
apomix / Noweda	Wool alcohol cream DAB/SR	15A280617	1
Caesar und Loretz GmbH	Wool alcohol cream DAB/SR	17197302	2
Caelo	Wool alcohol cream DAB/SR	19A070817	2
Caelo	Wool alcohol cream DAB/SR	17228702	2
Caelo	Wool alcohol cream DAB/SR	308305	1
Caelo	Wool alcohol cream DAB/SR	171973202	1
Bombastus	Wool alcohol cream DAB/SR	307616	1
Caelo	Wool alcohol cream DAB/SR	17187601	5
Bombastus	Wool alcohol cream DAB/SR	311452	3
Bombastus	Wool alcohol cream DAB/SR	311449	2
PKH Halle/Noweda	Wool alcohol cream DAB/SR	21A290817	1
Beiersdorf/Alliance	Wool alcohol cream DAB/SR	51630108WA	1
Caelo	Wool alcohol cream DAB/SR	17227401	7
Leyh Pharma GmbH	Wool alcohol cream DAB/SR	174511	1
PKH Halle/AHD	Wool alcohol cream DAB/SR	23A181017	1
Bombastus	Wool alcohol cream DAB/SR	307281	1
Caelo	Wool alcohol cream DAB/SR	17187902	1
Caelo	Wool alcohol cream DAB/SR	17187801	21
Kehr	Wool alcohol cream DAB/SR	17178301	1
Caelo	Wool alcohol cream DAB/SR	17188001	6
Caelo	Wool alcohol cream DAB/SR	308685	1
Bombastus	Wool alcohol cream DAB/SR	309640	3
Fiebig	Wool alcohol cream DAB/SR	17187701	1
Bombastus	Wool alcohol cream DAB/SR	311458	4
Caelo	Wool alcohol cream DAB/SR	17179301	1
Apomix	Wool alcohol cream DAB/SR	25A231117	1
Bombastus	Wool alcohol cream DAB/SR	310584	3
Bombastus	Wool alcohol cream DAB/SR	311529	2
Sanacorp	Wool alcohol cream DAB/SR	17227401	3
Leyh Pharma	Wool alcohol cream DAB/SR	173821	1
Bombastus	Wool alcohol cream DAB/SR	311451	4
apomix / Noweda	Wool alcohol cream DAB/SR	23A181017	1
Sanacorp	Wool alcohol cream DAB/SR	17187801	1
Caelo	Wool alcohol cream DAB/SR	17156102	1
Sanacorp	Wool alcohol cream DAB/SR	17197302	6
Caelo	Wool alcohol cream DAB/SR	17284301	14
Bombastus	Wool alcohol cream DAB/SR	308308	1

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Supplier	Substance	Batch	Spectra
Sanacorp W.E: 24.10.18 ...	Wool alcohol cream DAB/SR	17188001	1
Caelo	Wool alcohol cream DAB/SR	17178402	1
Bombastus	Wool alcohol cream DAB/SR	311454	3
Caelo	Wool alcohol cream DAB/SR	17187701	1
Caelo	Wool alcohol cream DAB/SR	17197301	7
Bombastus	Wool alcohol cream DAB/SR	311525	2
Bombastus	Wool alcohol cream DAB/SR	311524	4
Caelo	Wool alcohol cream DAB/SR	1728701	1
Caelo	Wool alcohol cream DAB/SR	311524	1
Noweda	Wool alcohol cream DAB/SR	17187701	1
Bombastus	Wool alcohol cream DAB/SR	17197320	1
Caelo	Wool alcohol cream DAB/SR	17284802	3
Caelo	Wool alcohol cream DAB/SR	17284801	4
Apomix/Gehe	Wool alcohol cream DAB/SR	25A231117	1
Caelo	Wool alcohol cream DAB/SR	171877015454	1
Bombastus	Wool alcohol cream DAB/SR	311453	1
Caelo	Wool alcohol cream DAB/SR	17284402	1
Caelo	Wool alcohol cream DAB/SR	18012201	18
Bombastus	Wool alcohol cream DAB/SR	17002206	3
Caelo	Wool alcohol cream DAB/SR	17284701	1
Caelo	Wool alcohol cream DAB/SR	18012501	9
Bombastus	Wool alcohol cream DAB/SR	311447	1
18023501	Wool alcohol cream DAB/SR	18023501	1
Bombastus	Wool alcohol cream DAB/SR	311527	2
Bombastus	Wool alcohol cream DAB/SR	311455	2
Caelo	Wool alcohol cream DAB/SR	18012302	1
Caelo	Wool alcohol cream DAB/SR	18012301	5
Caelo	Wool alcohol cream DAB/SR	17228703	2
Bombastus	Wool alcohol cream DAB/SR	17002208	5
Bombastus	Wool alcohol cream DAB/SR	311457	2
Kehr	Wool alcohol cream DAB/SR	18012201	1
Bombastus	Wool alcohol cream DAB/SR	17002209	1
Caelo	Wool alcohol cream DAB/SR	311528	1
Caelo	Wool alcohol cream DAB/SR	18023501	4
Caelo	Wool alcohol cream DAB/SR	17284601	4
Bombastus	Wool alcohol cream DAB/SR	17002148	1
Fiebig	Wool alcohol cream DAB/SR	18012302	1
Apomix/Noweda	Wool alcohol cream DAB/SR	3A1101118	1
Apomix/GEHE	Wool alcohol cream DAB/SR	6A120218	2
Leyh Phama	Wool alcohol cream DAB/SR	180231	1
Caelo	Wool alcohol cream DAB/SR	18012303	1
Ichthyol-Gesellschaft	Wool alcohol cream DAB/SR	311523	2
Bombastus	Wool alcohol cream DAB/SR	17002147	3
Bombastus	Wool alcohol cream DAB/SR	18000765	2
Caelo	Wool alcohol cream DAB/SR	17178201	7
Noweda	Wool alcohol cream DAB/SR	17187801	1
Sanacorp W.E:26.03.18 ...	Wool alcohol cream DAB/SR	18012501	1
Caelo	Wool alcohol cream DAB/SR	17352401	2
GEHE	Wool alcohol cream DAB/SR	311525	1
Caelo	Wool alcohol cream DAB/SR	1728402	1
Caelo	Wool alcohol cream DAB/SR	17197301/5580	1
Bombastus	Wool alcohol cream DAB/SR	17002145	1
Caelo	Wool alcohol cream DAB/SR	18069601	8
Caelo	Wool alcohol cream DAB/SR	18012601	3
Caelo	Wool alcohol cream DAB/SR	18023403	4
Bombastus	Wool alcohol cream DAB/SR	17002205	1
Apomix	Wool alcohol cream DAB/SR	11A050418	2
Caelo	Wool alcohol cream DAB/SR	17284502	1
Caelo	Wool alcohol cream DAB/SR	18012201/2110418	1
Caelo	Wool alcohol cream DAB/SR	3051810	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	11A050418	1
Bombastus	Wool alcohol cream DAB/SR	18000762	2
Bombastus	Wool alcohol cream DAB/SR	18000763	1
Caelo	Wool alcohol cream DAB/SR	18069602	4
Bombastus	Wool alcohol cream DAB/SR	308311	1
Bombastus	Wool alcohol cream DAB/SR	18000769	1
Caelo	Wool alcohol cream DAB/SR	18012701	6
Bombastus	Wool alcohol cream DAB/SR	17002207	2
Bombastus	Wool alcohol cream DAB/SR	17002150	1
Caelo	Wool alcohol cream DAB/SR	17198302	1
Bombastus	Wool alcohol cream DAB/SR	17002210	1
Bombastus	Wool alcohol cream DAB/SR	18000757	2
Bombastus	Wool alcohol cream DAB/SR	18002416	1
Bombastus	Wool alcohol cream DAB/SR	18000766	1
Bombastus	Wool alcohol cream DAB/SR	18000764	3
Bombastus	Wool alcohol cream DAB/SR	18000768	1
Caelo	Wool alcohol cream DAB/SR	18086401	6
Leyh Phama	Wool alcohol cream DAB/SR	181541	2
Sanacorp	Wool alcohol cream DAB/SR	18023402	2
Kehr	Wool alcohol cream DAB/SR	18069601	1
Bombastus	Wool alcohol cream DAB/SR	18001373	2
Caelo	Wool alcohol cream DAB/SR	18023402	6
Bombastus	Wool alcohol cream DAB/SR	18002542	3
Bombastus	Wool alcohol cream DAB/SR	18001375	1
Sanacorp	Wool alcohol cream DAB/SR	18086302	5
Fiebig	Wool alcohol cream DAB/SR	18094502	2
Caelo	Wool alcohol cream DAB/SR	18094502	16
Caelo	Wool alcohol cream DAB/SR	18094301	9
Pharmachern GmbH	Wool alcohol cream DAB/SR	291217	2
Caelo	Wool alcohol cream DAB/SR	17352402	1
Caelo	Wool alcohol cream DAB/SR	17352403	2
Bombastus	Wool alcohol cream DAB/SR	18002413	2
Caelo	Wool alcohol cream DAB/SR	18098001	9
Bombastus	Wool alcohol cream DAB/SR	18002545	1
Bombastus	Wool alcohol cream DAB/SR	18002546	2
Bombastus	Wool alcohol cream DAB/SR	18001377	2
Caelo	Wool alcohol cream DAB/SR	180696015657	2
Apomix	Wool alcohol cream DAB/SR	12A070518	1
Caelo	Wool alcohol cream DAB/SR	18098201	5
Caelo	Wool alcohol cream DAB/SR	18096001	1
Bombastus	Wool alcohol cream DAB/SR	230718A	1
Bombastus	Wool alcohol cream DAB/SR	311459	2
Phoenix	Wool alcohol cream DAB/SR	18012401	1
Bombastus	Wool alcohol cream DAB/SR	250718A	1
Bombastus	Wool alcohol cream DAB/SR	18002410	3
apomix	Wool alcohol cream DAB/SR	10A040418	1
Bombastus	Wool alcohol cream DAB/SR	17002211	1
Bombastus	Wool alcohol cream DAB/SR	18001380	1
Caelo	Wool alcohol cream DAB/SR	18002414	1
Caelo	Wool alcohol cream DAB/SR	18098301	6
Apomix/GEHE	Wool alcohol cream DAB/SR	14A130618	1
Bombastus	Wool alcohol cream DAB/SR	18002412	1
Caelo	Wool alcohol cream DAB/SR	18098101	3
Caelo	Wool alcohol cream DAB/SR	18086303	3
Bombastus	Wool alcohol cream DAB/SR	18002547	1
Caelo	Wool alcohol cream DAB/SR	17284401	1
Caelo	Wool alcohol cream DAB/SR	18144001	4
Fagron	Wool alcohol cream DAB/SR	18098201	1
Caelo	Wool alcohol cream DAB/SR	18023401	1
Caelo	Wool alcohol cream DAB/SR	18104002	2

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	18086902	1
Caelo	Wool alcohol cream DAB/SR	60080302	1
Bombastus	Wool alcohol cream DAB/SR	18001378	1
Caelo	Wool alcohol cream DAB/SR	18002548	1
Caelo	Wool alcohol cream DAB/SR	18086502	2
Caelo	Wool alcohol cream DAB/SR	18086302	7
Caelo	Wool alcohol cream DAB/SR	180983015714	1
Bombastus	Wool alcohol cream DAB/SR	18004000	1
Bombastus	Wool alcohol cream DAB/SR	18002550	2
Caelo	Wool alcohol cream DAB/SR	18147502	1
Caelo	Wool alcohol cream DAB/SR	18104201	5
Bombastus	Wool alcohol cream DAB/SR	18000767	1
Bombastus	Wool alcohol cream DAB/SR	18004002	3
Bombastus	Wool alcohol cream DAB/SR	18004059	1
Caelo	Wool alcohol cream DAB/SR	18104302	7
Bombastus	Wool alcohol cream DAB/SR	18004057	1
PKH Halle	Wool alcohol cream DAB/SR	19A240718	1
Caelo	Wool alcohol cream DAB/SR	18170303	2
Sanacorp	Wool alcohol cream DAB/SR	18086401	1
Caelo	Wool alcohol cream DAB/SR	18104401	3
Bombastus	Wool alcohol cream DAB/SR	18002544	1
Caelo	Wool alcohol cream DAB/SR	18189602	2
Caelo	Wool alcohol cream DAB/SR	18104101	2
Bombastus	Wool alcohol cream DAB/SR	18004718	1
Apo Ident/ Noweda	Wool alcohol cream DAB/SR	18086502	1
Bombastus	Wool alcohol cream DAB/SR	18003999	1
Bombastus	Wool alcohol cream DAB/SR	18004058	2
Bombastus	Wool alcohol cream DAB/SR	18002411	1
Sanacorp	Wool alcohol cream DAB/SR	18086303	1
Bombastus	Wool alcohol cream DAB/SR	17002203	1
Caelo	Wool alcohol cream DAB/SR	18189603	1
Kehr	Wool alcohol cream DAB/SR	18000771	1
Bombastus	Wool alcohol cream DAB/SR	18002408	1
Caelo	Wool alcohol cream DAB/SR	18241402	1
Bombastus	Wool alcohol cream DAB/SR	18004001	2
Anzag	Wool alcohol cream DAB/SR	18094301	1
Caelo	Wool alcohol cream DAB/SR	18144003	1
Caelo	Wool alcohol cream DAB/SR	18170401	3
Gehe 28.12..18	Wool alcohol cream DAB/SR	18143901	1
Bombastus	Wool alcohol cream DAB/SR	18004725	1
Caelo	Wool alcohol cream DAB/SR	18005985	1
Sanacorp	Wool alcohol cream DAB/SR	18241602	2
Caelo	Wool alcohol cream DAB/SR	18144101	3
Caelo	Wool alcohol cream DAB/SR	18241602	1
Bombastus	Wool alcohol cream DAB/SR	18003998	1
Bombastus	Wool alcohol cream DAB/SR	18003997	1
Caelo	Wool alcohol cream DAB/SR	18258202	1
Apomix/GEHE	Wool alcohol cream DAB/SR	20A240718	1
Apomix/Noweda	Wool alcohol cream DAB/SR	13A070518	1
Caelo	Wool alcohol cream DAB/SR	18143901	2
Caelo	Wool alcohol cream DAB/SR	18258203	2
Bombastus	Wool alcohol cream DAB/SR	18002415	1
Bombastus	Wool alcohol cream DAB/SR	18006644	1
Caelo	Wool alcohol cream DAB/SR	18192401	1
Sanacorp	Wool alcohol cream DAB/SR	18170501	1
Caelo	Wool alcohol cream DAB/SR	18192303	1
Leyh Phama	Wool alcohol cream DAB/SR	184511	1
bomastus-Werke AG	Wool alcohol cream DAB/SR	18006642	1
Sanacorp	Wool alcohol cream DAB/SR	18170303	1
Caelo	Wool alcohol cream DAB/SR	18170501	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool alcohol cream DAB/SR	18241401	1
Bombastus	Wool alcohol cream DAB/SR	18006840	1
Bombastus	Wool alcohol cream DAB/SR	18006642	1
Caelo	Wool alcohol cream DAB/SR	18262404	1
Bombastus	Wool alcohol cream DAB/SR	18006838	1
Bombastus	Wool alcohol cream DAB/SR	18006839	1
Caelo	Wool alcohol cream DAB/SR	18241302	1

- 103 901 spectra from 582 *Apo-Ident* customers from a total of 29 447 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 *Wool alcohol cream DAB/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 *Wool alcohol cream DAB/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	700	0	35 135
Type B	0	3900	0	75 178
Type C	0	3942	116	103 901

The substance/substance group *Wool alcohol cream DAB/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 % (> 99.9705 %)	100.0000 % (> 99.1429 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 99.8462 %)
Type C	100.0000 % (> 99.6449 %)	97.1414 % (> 97.0675 %)

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.

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
31447	31447	0.00	28.26
31455	31455	0.00	32.47
31229	32160	6.29	26.54
31481	31926	2.45	33.07
31923	31923	0.00	27.98
31926	31926	0.00	30.14
31928	31928	0.00	27.99
31930	31930	0.00	22.22
31933	31933	0.00	27.12
31248	31287	1.70	27.89
31934	31934	0.00	26.00
31937	31937	0.00	22.65
32160	32160	0.00	32.37
31271	31271	0.00	23.43
31287	31287	0.00	26.69
33115	33115	0.00	27.64
33140	33140	0.00	28.14

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Wool fat**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30743-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

Wool fat; Adeps lanae

Special notes

When selecting the *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*
Appendix F [Addition to the second-stage models](#)

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.

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 fat*:

Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Caelo	Wool fat	12122403	30743	40	20120514
Henry Lamotte	Wool fat	5320900	30925	40	20120608
Caelo	Wool fat	14086904	31479	40	20140321
Euro OTC	Wool fat	1403023-01	31533	40	AR-14-FG-012696-01
Caelo	Wool fat	15050902	31742	40	20150223

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Supplier	Substance	Batch	Sample ID	Spectra	Certificate
Euro OTC	Wool fat	1502024-01	31743	40	AR-16-FG-003762-01
Euro OTC	Wool fat	1601040	31847	40	20160127*
Caelo	Wool fat	15198802	31952	40	20150625
Henry Lamotte	Wool fat	8003158002	33939	40	20170628

Validation samples

A total of 222 872 spectra were provided for validation. The results were evaluated separately according to the following sample categories:

Type A All calibration spectra.

- 360 spectra of 9 reference samples from the substance/substance group *Wool fat*. These samples are listed above in the [calibration samples](#) section.
- 35 475 spectra from a total of 838 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 340 spectra of 11 reference samples from the substance/substance group *Wool fat*.

Supplier	Substance	Batch	Sample ID	Spectra
Euro OTC	Wool fat	1403023-01	31533 [†]	20
Caelo	Wool fat	15050902	31742 [†]	20
Euro OTC	Wool fat	1502024-01	31743 [†]	20
Euro OTC	Wool fat	1601040	31847 [†]	20
Caelo	Wool fat	15198802	31952 [†]	20
Caelo	Wool fat	152923	31998	40
Euro OTC	Wool fat	1607001	32459	40
Caelo	Wool fat	16221907	33111	40
Euro OTC	Wool fat	1701051	33245	40
Caelo	Wool fat	173075	34017	40
Euro OTC	Wool fat	1807008-01	34212	40

*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.

[†]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*.

- 78 738 spectra from a total of 1819 batches from further 350 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.

- 2275 spectra from 440 *Apo-Ident* customers from 374 batches from the substance/substance group *Wool fat*.

Supplier	Substance	Batch	Spectra
Caelo	Wool fat	15292316	12
Caelo	Wool fat	11261102	1
Caelo	Wool fat	11261103	1
Bombastus	Wool fat	260535	1
Caelo	Wool fat	11097402	1
Hedinger	Wool fat	11261105	2
Caelo	Wool fat	11261106	2
Caelo	Wool fat	11203902	2
Caelo	Wool fat	1603211056	1
Caelo	Wool fat	11203903	1
Caelo	Wool fat	12015605	5
Caelo	Wool fat	12015603	6
Phönix	Wool fat	5100700	1
Bombastus	Wool fat	268668	2
Lamotte/ Sanacorp	Wool fat	5198200	2
Lamotte	Wool fat	5198200	1
Noweda	Wool fat	11203903	2
Caelo	Wool fat	26061205	1
Bombastus	Wool fat	267377	2
Caelo	Wool fat	12015604	3
Lamotte/Krieger	Wool fat	5264700	2
Gehe	Wool fat	12036703	2
Caelo	Wool fat	13081206	1
Caelo	Wool fat	12074502	4
Henry Lamotte Oils GmbH	Wool fat	5264700	1
Henry Lamotte Oils	Wool fat	5198200	2
Finze	Wool fat	5264700	2
Caelo	Wool fat	12036702	4
Cordes	Wool fat	11203908	1
Caelo	Wool fat	1309211056	1
Caelo	Wool fat	12036703	6
Caelo	Wool fat	27091204	1
Phoenix	Wool fat	5216400	1
Caelo	Wool fat	1206702	1
Lamotte/Sanacorp	Wool fat	5253400	1
Noweda	Wool fat	12036702	1
Caelo	Wool fat	6111212	1
Caesar & Loretz GmbH	Wool fat	12036703	1
Caesar & Loretz GmbH, 4...	Wool fat	12036703	1
Caelo	Wool fat	1206703	1
Caelo	Wool fat	5163200	1
Caelo	Wool fat	5211E-01056	1
Fagron	Wool fat	11L07-T01	1
Bombastus	Wool fat	254683	1

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Supplier	Substance	Batch	Spectra
henry lamotte oils	Wool fat	5264700	1
Caelo	Wool fat	12074501	2
Caelo	Wool fat	24422111203903	1
Caelo	Wool fat	12122404	17
Bombastus	Wool fat	272421	1
Caelo	Wool fat	612211056	1
Caesar & Loretz GmbH	Wool fat	12122403	1
Sanacorp	Wool fat	12122404	3
Caelo	Wool fat	12122403	10
Caelo	Wool fat	12036704	6
Caelo	Wool fat	14121204	1
Caelo	Wool fat	12006702	1
Caelo	Wool fat	5212Q-01056	1
Caelo	Wool fat	5253400	1
Caelo	Wool fat	12122406	7
Lamotte Sanacorp	Wool fat	5264700	1
Caelo	Wool fat	12224405	14
Caelo	Wool fat	12224404	18
Gehe	Wool fat	1230113	1
Lamotte/Otto	Wool fat	5264700	1
Lamotte	Wool fat	5320900	1
Caelo	Wool fat	31011302	1
Caelo	Wool fat	5264700	3
Fagron	Wool fat	5264700	1
Gehe/ Lamotte	Wool fat	5375400	1
Gehe	Wool fat	12224404	1
Caelo	Wool fat	12321802	8
Caelo	Wool fat	12224402	1
Noweda	Wool fat	5375400	1
lamotte/anzag	Wool fat	5264700	1
Noweda/ 18.06.12 Caela	Wool fat	12015605	1
Caelo	Wool fat	11031302	1
Caelo	Wool fat	5375400	2
Anzag 25.02.13 ek: 14,44EUR	Wool fat	5264700	1
Sanacorp	Wool fat	12224405	1
Caelo	Wool fat	12224403	4
Bombastus	Wool fat	275701	3
Anzag/13.02.2013	Wool fat	12122403	1
Caelo	Wool fat	12321805	8
Caelo	Wool fat	15041306	1
Caelo	Wool fat		2
Gehe	Wool fat	5375400	2
vdl	Wool fat	12224404	1
Purren Apotheke	Wool fat	11261106	1
Noweda	Wool fat	12224404	4
Henry Lamotte Oils	Wool fat	5253400	1
Bombastus	Wool fat	273197	1
Anzag	Wool fat	5375400	2
Phoenix	Wool fat	5375400	2
Caelo	Wool fat	13039403	27
Alliance Healthcare	Wool fat	12224404	1
Caelo	Wool fat	13039402	15
Bombastus	Wool fat	275889	3
Caelo	Wool fat	1303403	1
Caelo	Wool fat	12321803	11
Caelo	Wool fat	2113U01056	1
Lamotte/Otto	Wool fat	5375400	3
Noweda	Wool fat	5448200	1
Caesar & Loretz GmbH, 4...	Wool fat	13039402	1
Caelo	Wool fat	8061304	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Wool fat	5448200	4
Alliance Healthcare	Wool fat	13039403	1
Caelo	Wool fat	12321807	2
Fagron	Wool fat	12H31-T01	1
Henry Lamotte/GEHE	Wool fat	5375400	1
Fagron	Wool fat	12K07-T51-00357	1
Lamotte	Wool fat	5375400	2
Sanacorp	Wool fat	5448200	3
Bombastus	Wool fat	275888	2
Bombastus	Wool fat	272422	1
Caelo	Wool fat	12321801	2
Phoenix	Wool fat	13039403	1
Caelo	Wool fat	140713c	1
Caelo	Wool fat	13039405	10
Henry Lamotte	Wool fat	5264700	1
Lamotte/Phoenix	Wool fat	5448200	1
Caelo	Wool fat	13094905	17
Ichthyol/Sanacorp	Wool fat	5448200	7
Lamotte/Sanacorp	Wool fat	5448200	1
Caelo	Wool fat	13094903	13
Gehe	Wool fat	13039403	1
Caelo	Wool fat	3112U-01056	1
Caelo	Wool fat	1213E-01056	1
cesar&lorenz/Phönix	Wool fat	12321805	1
NW/ Lamotte	Wool fat	5375400	1
Caelo	Wool fat	1231802	1
Henry Lamotte Oils/Sana...	Wool fat	5320900	1
Henry Lamotte Oils GmbH	Wool fat	5448200	2
Caelo	Wool fat	13213106	15
Caelo	Wool fat	12091301	1
Caelo	Wool fat	4013Q1056	1
Caelo	Wool fat	1309405	1
Bombastus	Wool fat	277470	1
Lamotte/Anzag	Wool fat	5264700-3384310110	1
Phönix	Wool fat	13213104	1
Lamotte Sanacorp	Wool fat	5448200	1
Caelo	Wool fat	13094902	2
Caelo	Wool fat	16102013D	1
Henry Lamotte Oils/ Gehe	Wool fat	5520800	2
Bombastus	Wool fat	279840	1
Caelo	Wool fat	30101311	1
Caelo	Wool fat	13213104	16
Sanacorp	Wool fat	13213104	1
Sanacorp	Wool fat	13039405	1
Caesar & Loretz GmbH	Wool fat	13213104	1
Caelo	Wool fat	13213108	19
Caelo	Wool fat	13213105	7
Bombastus	Wool fat	280167	2
Caelo	Wool fat	13213107	17
Caelo	Wool fat	132131104	1
Henry Lamotte	Wool fat	5520800	1
Caelo	Wool fat	82325376	1
Caelo	Wool fat	16121308	1
Lamotte/Nowed	Wool fat	5520800	1
Caesar&Loretz GmbH/Anzag	Wool fat	13213105	1
Bombastus	Wool fat	281850	3
Caelo	Wool fat	5520800	4
Caelo	Wool fat	13306204	6
Bombastus	Wool fat	283526	3
Henry Lamotte Oils GmbH...	Wool fat	5520800	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	1321308	1
Lamotte/Sanacorp	Wool fat	5520800	1
Phönix	Wool fat	5520800	1
Caelo	Wool fat	1321307	1
Caelo	Wool fat	13306208	15
Caelo	Wool fat	13306206	18
Caelo	Wool fat	14022014A	1
Caelo	Wool fat	13306203	12
Henry Lamotte Oils	Wool fat	5448200	1
Caelo	Wool fat	13306207	16
Caelo	Wool fat	412062-1-P	1
Caelo	Wool fat	13306205	7
Henry Lamotte Oils	Wool fat	5520800	1
Henry Lamotte Oils GmbH	Wool fat	5528000	2
Noweda	Wool fat	13213107	1
Bombastus	Wool fat	281849	1
Caelo	Wool fat	13303208	1
Caelo	Wool fat	13398202	7
Sanacorp	Wool fat	13398202	1
Gehe 26.2.14	Wool fat	13306205	2
Phönix	Wool fat	1336206	1
Caelo	Wool fat	15031401	1
Alliance healthcare	Wool fat	5528000	1
Henry Lamotte Oils GmbH...	Wool fat	5528000	1
Caelo	Wool fat	1336205	1
Caelo	Wool fat	13398201	15
Caelo	Wool fat	14086904	13
Caelo	Wool fat	3x13398202	1
Caelo	Wool fat	29041407	1
Caelo	Wool fat	5052014A	1
Caelo	Wool fat	14086905	16
Phönix	Wool fat	13306205	1
Caelo	Wool fat	7051401	1
Phoenix	Wool fat	13398201	1
Caelo	Wool fat	1914M1056	1
Caelo	Wool fat	13094904	1
VDL 17.04.14;Preis 4,50	Wool fat		1
Caesar & Loretz GmbH	Wool fat	13306205	1
Sanacorp	Wool fat	46/AKD1	1
Henry Lamotte	Wool fat	5528000	1
Caelo	Wool fat	4061402	1
Henry Lamotte/Noweda	Wool fat	5520800	1
Henry Lamotte Oils GmbH...	Wool fat	5528000	1
Henry Lamotte / Anzag	Wool fat	5690800	3
Henry Lamotte/Sanacorp	Wool fat	5528000	1
Caelo	Wool fat	13389202	1
Caelo	Wool fat	13398291	1
Bombastus	Wool fat	286361	1
Caelo	Wool fat	133062707	1
Caelo	Wool fat	3513U-01056	1
Caelo	Wool fat	14086906	18
Bergchemie	Wool fat	14086904	1
Caelo	Wool fat	14086903	15
noweda	Wool fat	13398202	1
Caesar & Loretz GmbH	Wool fat	14086903	1
Noweda	Wool fat	14086905	1
Sanacorp	Wool fat	14086904	1
Caelo	Wool fat	14086907	7
Caelo	Wool fat	5081406	1
Fagron	Wool fat	14086906	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte	Wool fat	5650500	1
Henry Lamotte Olis GmbH...	Wool fat	5650500	1
Caelo	Wool fat	5528000	1
Caelo	Wool fat	14147902	17
Caelo	Wool fat	14147903	18
Phoenix	Wool fat	13398202	1
Lamotte	Wool fat	5528000	3
Euro OTC	Wool fat	1403023-01	1
Caelo	Wool fat	14147901	13
Caelo	Wool fat	14086902	1
Caelo	Wool fat	4101404	1
Caelo	Wool fat	6102014C	1
Euro OTC	Wool fat	13398201	1
GEHE	Wool fat	14086903	1
Caelo	Wool fat	5763900	2
Gehe	Wool fat	14147901	1
Lamotte	Wool fat	5650500	1
Henry Lamotte / Anzag	Wool fat	5650500	1
Henry Lamotte/Sanacorp	Wool fat	5727500	2
Caelo	Wool fat	14238002	11
Lamotte/Jenne 30.10.2014	Wool fat	5528000	1
Henry Lamotte	Wool fat	5690800	2
Euro OTC	Wool fat	14147902	3
Caelo	Wool fat	14111402	1
Lamotte/gehe	Wool fat	5528000	1
Bombastus	Wool fat	14147902	1
Henry Lamotte Oils GmbH	Wool fat	56908000	1
Bombastus	Wool fat	288712	4
Caelo	Wool fat	286362	1
GEHE 02.12.2014	Wool fat	5528000	1
Caelo	Wool fat	14147905	1
Caelo	Wool fat	14238003	6
Caelo	Wool fat	14238006	16
Henry Lamotte Oils GmbH	Wool fat	5763900	5
Caesar&lorenz,AHC	Wool fat	14238002	1
Caelo	Wool fat	1423006	1
Euro OTC	Wool fat	1305037-01	1
Caelo	Wool fat	46/AKD3	1
AHD;15.12.14;4,82EUR	Wool fat	14238002	2
Henry Lamotte	Wool fat	5763900	2
Bombastus	Wool fat	288711	2
Caelo	Wool fat	14238009	18
Caelo	Wool fat	142383	1
Caelo	Wool fat	14238004	15
Caelo	Wool fat	8011509	1
Lamotte/Otto	Wool fat	5787700	1
Bombastus	Wool fat	286362	3
Caelo	Wool fat	23012015A	1
Gehe	Wool fat	5763900	1
Caelo	Wool fat	14238007	6
Lamotte/Phönix	Wool fat	5650500	1
AHD 29.01.15 EK 7,67	Wool fat	14238006	1
Caelo	Wool fat	14238008	22
Caelo	Wool fat	14238010	6
Caelo	Wool fat	14238001	2
Henry Lamotte Oils / No...	Wool fat	5763900	1
AHD	Wool fat	14238002	2
Caelo	Wool fat	18021502	1
Euro OTC	Wool fat	14238007	1
Caelo	Wool fat	4032015A	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte Oils	Wool fat	5787700	1
Caelo	Wool fat	14238005	7
Lamotte/Fiebig	Wool fat	5528000	1
Sanacorp	Wool fat	14238004	1
Henry Lamotte Oils GmbH	Wool fat	5650500	1
Sanacorp	Wool fat	13306206	1
Fagron	Wool fat	14B14-T03	1
Caesar & Loretz GmbH	Wool fat	14238002	1
Henry Lamotte/Noweda	Wool fat	5787700	1
Caelo	Wool fat	1321305	1
Caelo	Wool fat	14304501	22
Caelo	Wool fat	18041503	1
caesar	Wool fat	14304501	1
Caelo	Wool fat	14304502	15
Berkel AHK	Wool fat	14086905	1
Bombastus	Wool fat	291336	2
Caelo	Wool fat	5727500	1
Caelo	Wool fat	15050906	14
Caelo	Wool fat	1434502	1
Henry Lamotte Oils GmbH	Wool fat	5860600	1
Caelo	Wool fat	14304504	7
Fagron	Wool fat	14304502	1
Caesar & Loretz GmbH	Wool fat	14304501	1
Caelo	Wool fat	2061509	1
Lamotte/Fiebig	Wool fat	5787700	1
HenryLamotte	Wool fat	5860700	1
Allianz Healthcare 22.0...	Wool fat	14238008	1
Caelo	Wool fat	15050904	11
AHDE 19,05.,2015	Wool fat	14238002	1
Caelo	Wool fat	15050902	10
Lamotte / Gehe	Wool fat	5763900	1
Henry Lamotte	Wool fat	5908900	2
Caelo	Wool fat	1505090	1
Caesar & Loretz GmbH	Wool fat	15050902	1
Fagron	Wool fat	15050904	1
Caelo	Wool fat	15050903	15
Lamotte/Sanacorp	Wool fat	5860700	4
Caelo	Wool fat	21071502	1
AHD;9.7.15; 4,78EUR	Wool fat	15050902	1
Anzag/Beiersdorf	Wool fat	15050902	1
Sanacorp	Wool fat	14304502	1
Lamotte/Fiebig	Wool fat	5860600	1
Caelo	Wool fat	15158405	15
Henry Lamotte / Phoenix	Wool fat	5860600	2
ACM	Wool fat	KNC1879J13	2
Caelo	Wool fat	5860600	1
Bombastus	Wool fat	294438	3
Caleo	Wool fat	15050903	1
Sanacorp	Wool fat	46/AKD6	1
Caelo	Wool fat	15158402	44
Bombastus	Wool fat	291339	1
Henry Lamotte/Sanacorp	Wool fat	60160	1
Anzag	Wool fat	15050906	1
Euro OTC	Wool fat	1502024-01	2
Caelo	Wool fat	1518401	1
henry lamotte oils Gmh/N	Wool fat	5908900	1
Caelo	Wool fat	15158401	25
Bombastus	Wool fat	295371	1
Lamotte/Fiebig	Wool fat	5909000	2
Henry Lamotte/Anzag	Wool fat	2908900	1

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Supplier	Substance	Batch	Spectra
Caelo	Wool fat	15198804	19
Bombastus	Wool fat	290972	1
Lamotte	Wool fat	5909000	1
Caesar & Loretz GmbH	Wool fat	15050903	1
Henry Lamotte/ Gehe	Wool fat	5908900	1
Bombastus	Wool fat	290878	1
Caelo	Wool fat	294643	1
Caelo	Wool fat	15198803	20
Caelo	Wool fat	2814U-01056	1
Henry Lamotte	Wool fat	5909000	2
Lamotte/Ebert	Wool fat	5787700	1
Henry Lamotte/Kehr	Wool fat	5909000	2
HenryLamotte	Wool fat	5909100	2
EuRho	Wool fat	15198803	2
Caelo	Wool fat	15198802	19
Bomastus direkt	Wool fat	60081303	1
Henry Lamotte	Wool fat	5860600	1
noweda/lamotte	Wool fat	5763900	1
Caesar&Loretz	Wool fat	15050903	1
Caesar&Loretz/Noweda	Wool fat	15198802	1
Caesar&Loretz	Wool fat	15198802	1
Gehe	Wool fat	5908900	1
Henry Lamotte/Sanacorp	Wool fat	5909100	5
Anzag	Wool fat	15198804	1
Caelo	Wool fat	1518405	1
Henry Lamotte	Wool fat	6001861002	2
Caelo	Wool fat	151458402	1
Henry Lamotte	Wool fat	59090000	1
Bombastus	Wool fat	296321	4
Lamotte/Jenne	Wool fat	5909000	1
Henry Lamotte/Anzag	Wool fat	5908900	1
Caelo	Wool fat	15292313	1
Caelo	Wool fat	15292309	5
Caelo	Wool fat	15421401	1
Sanacorp	Wool fat		1
Henry Lamotte	Wool fat	55908900	1
Noweda/Caesar & Loretz ...	Wool fat	15198802	1
Lamotte/Sanacorp	Wool fat	6001861002	2
Henry Lamotte / Phoenix	Wool fat	5909000	1
Caelo	Wool fat	16003902	29
Caelo	Wool fat	75798803	1
Caelo	Wool fat	16003901	27
Caelo	Wool fat	15292311	4
Bombastus	Wool fat	299568	1
Caelo	Wool fat	15158404	1
Caesar&Loretz GmbH	Wool fat	16003901	1
Bombastus	Wool fat	297572	1
henry lamotte oils	Wool fat	6001861002	1
Lamotte/Noweda	Wool fat	5860700	1
Lamotte	Wool fat	6001861001	1
Henry Lamotte Oils/Phönix	Wool fat	6001861001	1
Sanocorp WE:18.04.16 EK...	Wool fat	16003902	2
Lamotte/Gehe	Wool fat	5909000	1
Fagron	Wool fat	6001861002	1
Euro OTC	Wool fat	1601040-01	2
Henry Lamotte/Kehr	Wool fat	5860700	1
Caelo	Wool fat	16003905	18
Noweda	Wool fat	16003901	1
Hubertus Apotheke	Wool fat	29022016	1
Phoenix	Wool fat	15292316	1

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Supplier	Substance	Batch	Spectra
Henry Lamotte / Phoenix	Wool fat	6001861002	1
Fagron	Wool fat	15B27-T27-023866	1
Caelo	Wool fat	16044302	45
Henry Lamotte/ Phönix	Wool fat	6001861002	3
henry lamotte oils	Wool fat	6991861002	1
Caelo	Wool fat	16044304	1
Lamotte/Anzag	Wool fat	6001861001	2
Caelo	Wool fat	316E-01056	1
Caelo	Wool fat	16044303	25
Spirig (Galderma)	Wool fat	16044302	1
Henry Lamotte	Wool fat	6001861001	1
Lamotte	Wool fat	6001861002	1
Henry Lamotte/Phönix	Wool fat	6001861002	1
Henry Lamotte/Anzag	Wool fat	6001861001	1
Caelo	Wool fat	20160727Ma6	1
Caelo	Wool fat	16044306	7
Hennry Lamotte/Krieger	Wool fat	6001861002	2
Henry Lamotte	Wool fat	8002112001	2
Phönix	Wool fat	16003905	1
Caelo	Wool fat	1613006	1
Henry Lamotte/Anzag	Wool fat	8002112001	3
Henry Lamotte Oils GmbH...	Wool fat	5908900	1
Caelo	Wool fat	16163002	12
Caelo	Wool fat	16163006	22
Anzag	Wool fat	16003905	1
Bombastus	Wool fat	299653	2
Caelo	Wool fat	16163001	18
phönix	Wool fat	8002112001	2
Caelo	Wool fat	1613001	1
Caelo	Wool fat	16221904	23
caesar	Wool fat	16044302	1
Bombastus	Wool fat	303928	9
Henry Lamotte Oils GMBH	Wool fat	160915ALA	1
lamotte/anzag	Wool fat	6001861003	1
Caelo	Wool fat	1094641	1
Gehe	Wool fat	16044306	1
Bombastus	Wool fat	301844	2
Henry Lamotte Oils GmbH	Wool fat	8002112002	3
Henry Lamotte	Wool fat	8002144001	4
Gehe/Lamotte	Wool fat	8002112002	3
Caelo	Wool fat	16221902	8
Caelo	Wool fat	161630	1
Lamotte	Wool fat	8002112003	1
Lamotte/Sanacorp	Wool fat	8002112003	2
Euro OTC	Wool fat	16003905	1
Alte Apotheke	Wool fat	16221904	1
Caelo	Wool fat	16221905	7
Lamotte	Wool fat	8002112001	1
Anzag	Wool fat	8002112003	1
Caesar & Loretz GmbH Hi...	Wool fat	16163001	1
Henry Lamotte/Noweda	Wool fat	8002112002	2
Gehe	Wool fat	8002112002	3
Fagron	Wool fat	8002112002	1
Caelo	Wool fat	16221903	17
GEHE	Wool fat	16221905	2
Henry Lamotte/Noweda	Wool fat	8002144001	1
Lamotte/Fiebig	Wool fat	8002112002	1
GEHE	Wool fat	16163006	1
Caelo	Wool fat	16221907	28
Caelo	Wool fat	6221903	1

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Supplier	Substance	Batch	Spectra
Bombastus	Wool fat	305552	5
Lamotte/Noweda	Wool fat	8002144002	2
Lamotte/Gehe	Wool fat	8002320011	1
Caelo	Wool fat	16267201	37
Caelo/Sanacorp	Wool fat	16221905	2
Caelo	Wool fat	16221906	12
Lamotte	Wool fat	8002112002	3
Henry Lamotte / Phoenix	Wool fat	8002112002	1
Euro OTC	Wool fat	16221903	3
Bombastus	Wool fat	303926	3
HenryLamotte	Wool fat	8002320011	1
Henry LAmotte Oils GmbH...	Wool fat	8002112002	1
Ichthyol-Gesellschaft	Wool fat	16221907	2
Caelo	Wool fat	16163005	1
Lamotte/Gehe	Wool fat	8002112002	1
Sana 31.01.17	Wool fat	16267201	1
Caelo	Wool fat	16221907/1160117	1
Bombastus	Wool fat	303927	1
Lamotte/Noweda	Wool fat	8002112002	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	2
Henry Lamotte Oils GmbH	Wool fat	8002144001	2
Sanacorp	Wool fat	16221906	1
Henry Lamotte / Noweda	Wool fat	8002112002	1
Henry Lamotte/ Phönix	Wool fat	8002112002	1
Caelo	Wool fat	23021709	1
Lamotte / Alliance Heal...	Wool fat	8002144001	1
Henry Lamotte Oils/ San...	Wool fat	8002112002	1
Henry Lamotte/VDL	Wool fat	8002112002	1
Caelo	Wool fat	8002112001	1
Bombastus	Wool fat	301843	1
Henry Lamotte Oils GMBH...	Wool fat	170303AL/800232001	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Hubertus Apotheke	Wool fat	165221907	1
Henry Lamotte/Anzag	Wool fat	8002144001	1
Phönix	Wool fat	16221907	1
Caelo	Wool fat	8002144001	3
Henry Lamotte/ Noweda	Wool fat	8002320010	7
Henry Lamotte/Anzag	Wool fat	800244001	1
Bombastus	Wool fat	305553	5
Noweda	Wool fat	16267201	2
phönix	Wool fat	8002112002	1
Gehe	Wool fat	16267201	1
phönix	Wool fat	8002144001	2
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Caelo	Wool fat	9041706	1
Kehr / Lamotte	Wool fat	8002320010	4
Caelo	Wool fat	16267203	2
Caelo	Wool fat	16267204	9
Caelo	Wool fat	16345104	45
Henry Lamotte/VDL	Wool fat	8002144002	1
Henry Lamotte/ Krieger	Wool fat	8002112002	1
Caesar&Loretz GmbH,25.0...	Wool fat	16267201	2
Gehe	Wool fat	8002320010	3
Lamotte/Noweda	Wool fat	8002320010	2
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Caelo	Wool fat	16328201	1
Henry Lamotte Oils / Gehe	Wool fat	8002144001	1
Henry Lamotte	Wool fat	8002320010	1
Caelo	Wool fat	16051701	1
Lamotte	Wool fat	8002320011	1

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Supplier	Substance	Batch	Spectra
Euro OTC	Wool fat	301843	1
Henry Lamotte Oils GmbH...	Wool fat	8002144001	1
Anzag	Wool fat	8002320010	1
Henry Lamotte/Phönix	Wool fat	8002320010	1
Gehe	Wool fat	16221906	1
Phoenix	Wool fat	16221907	1
Henry Lamotte Oils	Wool fat	8002320010	2
lamotte/ Phoenix	Wool fat	8002320011	1
Gehe	Wool fat	16163006	1
Euro OTC	Wool fat	1701051-01	1
Caesar & Loretz/Noweda	Wool fat	16345104	1
Sanaorp	Wool fat	305553	1
Anzag	Wool fat	8002760003	1
Caelo	Wool fat	16345106	9
Caelo	Wool fat	16345107	13
Henry Lamotte/ Phoenix	Wool fat	8002320010	1
Krieger	Wool fat	16345106	1
Caelo	Wool fat	15071705	1
Henry Lamotte Oils GmbH...	Wool fat		1
Noweda	Wool fat	16345107	1
Phönix/Phönix	Wool fat	16221907	1
Caesar & Loretz GmbH	Wool fat	16345106	1
Noweda	Wool fat	16345104	1
Bombastus	Wool fat	303929	1
Caelo	Wool fat	AKD17	1
GEHE	Wool fat	16221902	1
Sanacorp	Wool fat	8002320010	1
Sanacorp EK:8,10 EUR...	Wool fat	16345107	2
Caelo	Wool fat	1267201	2
Sanacorp	Wool fat	17139303	1
Henry Lamotte	Wool fat	8002760001	2
Caelo	Wool fat	17139302	8
Fiebig	Wool fat	16345106	1
Krieger/ Lamotte	Wool fat	8002760003	2
Caelo	Wool fat	23091704	1
Henry Lamotte/Noweda	Wool fat	8002760001	2
Henry Lamotte Oils GmbH...	Wool fat	8002760001	1
Caelo	Wool fat	163451045377	1
Caelo	Wool fat	17139303	25
Henry Lamotte Oils GmbH	Wool fat	8002320010	1
Gehe/Lamotte	Wool fat	8002760002	1
Noweda	Wool fat	17167702	1
Sanacorp	Wool fat	8003158002	7
Caelo	Wool fat	23101703	1
Caelo	Wool fat	17139301	19
Sanacorp	Wool fat	17167702	1
Caelo	Wool fat	17167702	3
Caelo	Wool fat	17139301-20171106Ma4	1
Lamotte	Wool fat	8002320010	1
Caelo	Wool fat	171339301	1
Henry Lamotte Oils/ Gehe	Wool fat	8002760002	1
Lamotte/AHD	Wool fat	8002760001	1
Caelo	Wool fat	17167701	10
henry lamotte/gehe	Wool fat	16345104	1
Klosterring	Wool fat	17139303	1
Lamotte/Noweda	Wool fat	8002760002	1
Noweda	Wool fat	17139303	1
Caesar und Loretz GmbH	Wool fat	17167701	1
Caelo	Wool fat	8002760001	1
Henry Lamotte/ Noweda	Wool fat	8003158002	3

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Supplier	Substance	Batch	Spectra
Henry Lamotte/Alliance	Wool fat	8002760001	1
Caelo	Wool fat	1713901	2
Caelo	Wool fat	17248103	23
Henry Lamotte Oils GmbH	Wool fat	8002760001	1
Bombastus	Wool fat	308893	2
Gehe/Lamotte	Wool fat	8003158002	1
Henry Lamotte Oils GmbH...	Wool fat	180109AL/8003158003	1
Henry Lamotte /Phoenix	Wool fat	8003158002	1
Caelo	Wool fat	1713903	1
Caelo	Wool fat	17167704	6
Caelo	Wool fat	13011801	1
Gehe / Lamotte	Wool fat	8002760002	1
Caelo	Wool fat	1739301	1
Kehr	Wool fat	17248103	1
Anzag	Wool fat	8003158003	1
Caelo	Wool fat	1167701	1
Noweda	Wool fat	17248103	1
chaelo/gehe	Wool fat	17248103	1
Noweda	Wool fat	17248104	2
Caelo	Wool fat	19021801	1
Gehe	Wool fat	17248104	1
Caelo	Wool fat	17248104	11
Jenne	Wool fat	17248104	2
Caelo	Wool fat	17248105	4
Henry Lamotte/Noweda	Wool fat	8003158002	1
Caelo	Wool fat	17307503	8
Caelo	Wool fat	17248107	10
apomix/Noweda	Wool fat	311019	1
Bombastus	Wool fat	311019	1
Henry Lamotte Oils GmbH...	Wool fat	180320AL/8003158003	1
Caelo	Wool fat	1716701	1
Caelo	Wool fat	17307505	10
Fiebig	Wool fat	17248104	1
Bombastus	Wool fat	17000437	3
Caelo	Wool fat	17248102	1
Caelo	Wool fat	17307502	12
Bombastus	Wool fat	17307503	1
Lamotte/AHD	Wool fat	8003158001	2
Caelo	Wool fat	23041801	1
Caelo	Wool fat	1767704	1
Henry Lamotte Oils GmbH	Wool fat	8003158001	1
Fagron	Wool fat	17248106	1
Caelo	Wool fat	18029902	11
Caelo	Wool fat	17307501	4
Caelo	Wool fat	17284103	1
Bombastus	Wool fat	17248107	1
Krieger	Wool fat	8003158003	1
Caelo	Wool fat	17307506	13
Caelo	Wool fat	24051801	1
Caelo	Wool fat	171677045622	1
Jenne	Wool fat	17248106	1
Lamotte/Spangro	Wool fat	8003158002	1
Caelo	Wool fat	17248106	2
Caelo	Wool fat	29061802	1
Caelo	Wool fat	17307906	1
Caelo	Wool fat	17307507	15
Caelo	Wool fat	1730750	1
GEHE	Wool fat	18029902	1
Jenne	Wool fat	17307506	2
Caelo	Wool fat	17307508	9

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Supplier	Substance	Batch	Spectra
Sanacorp	Wool fat	8004134002	1
Cealo/Gehe	Wool fat	18029902	1
Lamotte	Wool fat	8003158002	1
Caelo	Wool fat	22091801	1
Caelo	Wool fat	18139302	4
Sanacorp	Wool fat	17307505	1
Caelo	Wool fat	18139306	6
Bombastus	Wool fat	18002044	1
Euro OTC	Wool fat	1807008-01	1
Caelo	Wool fat	8004134001	1
Caelo	Wool fat	173057506	1
Caelo	Wool fat	18139307	4
Bombastus	Wool fat	18002043	1
Caelo	Wool fat	173075025782	1
Apo Ident/ Noweda	Wool fat	18139302	2
Caelo	Wool fat	18139306-W20181115Ma	1
Caelo	Wool fat	17111802	1
Jenne	Wool fat	18139303	1
Caelo	Wool fat	18224301	6
Caelo	Wool fat	18139308	6
Caelo	Wool fat	18139303	5
Henry Lamotte Oils GmbH	Wool fat	8004134001	1
Caelo	Wool fat	18139304	3
Caelo	Wool fat	8004134015	1
Caelo	Wool fat	9011901	1
Caelo	Wool fat	18029901	1
Henry Lamotte/Phönix	Wool fat	8004134002	1
Caelo	Wool fat	18224302	5
Caelo	Wool fat	18131302	1
Caelo	Wool fat	8004748002	1
Caelo	Wool fat	18003426	1

- 105 684 spectra from 582 *Apo-Ident* customers from a total of 30 313 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 *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 *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	360	0	35 475
Type B	0	340	0	78 738
Type C	0	2253	22	105 684

The substance/substance group *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 % (> 99.9705 %)	100.0000 % (> 98.3333 %)
Type B	100.0000 % (> 99.9688 %)	100.0000 % (> 98.2353 %)
Type C	100.0000 % (> 99.6449 %)	99.0330 % (> 98.9011 %)

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.

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
31743	31743	0.00	24.42
30743	31743	4.89	19.20
31847	31847	0.00	24.58
30925	31847	5.04	19.34
31952	31743	2.05	23.01
31479	31743	1.95	27.53
33939	31743	3.55	23.11
31533	31533	0.00	23.80
31742	31743	3.18	22.35

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Wormwood oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30846-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20131028
Caelo	Wormwood oil	13347704	31424	40	20131028

Validation samples

A total of 222 872 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 *Wormwood oil*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 120 spectra of 4 reference samples from the substance/substance group *Wormwood oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Wormwood oil	13347704	31423 [†]	20
Caelo	Wormwood oil	13347704	31424 [†]	20
Caelo	Wormwood oil	15316909	33508	40
Caelo	Wormwood oil	170389	33904	40

- 78 958 spectra from a total of 1827 batches from further 350 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 3 *Apo-Ident* customers from 3 batches from the substance/substance group *Wormwood oil*.

[†]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*.

Supplier	Substance	Batch	Spectra
Voegele	Wormwood oil	2013109402	3
Caelo	Wormwood oil	12197809	1
Caelo	Wormwood oil	2017115182	2

- 107 953 spectra from 582 *Apo-Ident* customers from a total of 30 677 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 *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	160	0	35 675
Type B	0	120	0	78 958
Type C	0	6	0	107 953

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 95.0000 %)
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.

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	4.91	77.99
31198	31198	0.00	77.28
31423	31198	2.20	78.56
31424	31198	1.69	78.49

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **Ylang-ylang oil**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 31300-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	9203
Caelo	Ylang-ylang oil	15101104	31860	40	20150330
Caelo	Ylang-ylang oil	15101109	32175	40	20150330
Caelo	Ylang-ylang oil	163148	33079	40	20161213*

Validation samples

A total of 222872 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 *Ylang-ylang oil*. These samples are listed above in the [calibration samples](#) section.
- 35675 spectra from a total of 844 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 220 spectra of 6 reference samples from the substance/substance group *Ylang-ylang oil*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	Ylang-ylang oil	12040606	31300	40
Caelo	Ylang-ylang oil	14192905	31733	60
Caelo	Ylang-ylang oil	15101104	31791 [†]	20
Caelo	Ylang-ylang oil	15101104	31860 [†]	20
Caelo	Ylang-ylang oil	15101109	32350	40
Caelo	Ylang-ylang oil	16314804	33606	40

- 78858 spectra from a total of 1825 batches from further 350 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.

*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.

[†]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*.

- 1 spectra from 1 *Apo-Ident* customers from 1 batches from the substance/substance group *Ylang-ylang oil*.

Supplier	Substance	Batch	Spectra
Caelo	Ylang-ylang oil	23011502	1

- 107 958 spectra from 582 *Apo-Ident* customers from a total of 30 679 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 *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	160	0	35 675
Type B	0	120	100	78 858
Type C	0	0	1	107 958

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9688 %)	54.5455 % (> 53.1818 %)
Type C	100.0000 % (> 99.6537 %)	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.

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	55.34
31860	31791	2.70	57.13
32175	31791	5.67	58.96
33079	33079	0.00	48.03

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **1,3-butanediol**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30851-2019-05-24
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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140804

Validation samples

A total of 222 872 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 *1,3-butanediol*. These samples are listed above in the [calibration samples](#) section.
- 35 755 spectra from a total of 845 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 60 spectra of 2 reference samples from the substance/substance group *1,3-butanediol*.

Supplier	Substance	Batch	Sample ID	Spectra
Fagron	1,3-butanediol	14G16-B01-296698	31594 [†]	20
Fagron	1,3-butanediol	15E15-B02-332109	33788	40

- 79 018 spectra from a total of 1828 batches from further 350 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 *1,3-butanediol*.

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

[†]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*.

- 107 956 spectra from 582 *Apo-Ident* customers from a total of 30 677 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 *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	80	0	35 755
Type B	0	60	0	79 018
Type C	0	3	0	107 956

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 % (> 99.9708 %)	100.0000 % (> 92.5000 %)
Type B	100.0000 % (> 99.9689 %)	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.

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	53.76
31594	30851	6.38	51.48

VALIDATION REPORT

IdentModul 2.0-2019-02

Validated substance/substance group **2-ethylhexyl laurate**
Substance class APIs & excipients, liquid/semi-solid (with analysis certificate)
Report date 24/05/2019
Report number 30849-2019-05-24
Executing company HiperScan GmbH
Weißeritzstraße 3
01067 Dresden
Germany

Relevant substance names

2-ethylhexyl laurate; 2-Ethylhexylislauromyristas

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*
Appendix F [Addition to the second-stage models](#)

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.

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	40	20140429
Caelo	2-ethylhexyl lau...	153825	31878	40	20151113*
Caelo	2-ethylhexyl lau...	163157	33086	40	20161124*

Validation samples

A total of 222 872 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 *2-ethylhexyl laurate*. These samples are listed above in the [calibration samples](#) section.
- 35 675 spectra from a total of 843 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*.

These samples are allowed to originate from the same batch as calibration samples (*Type A*) as long as the package differs. In the following table spectra recorded from the same package as the corresponding calibration samples (*Type A*) are highlighted by [†].

- 160 spectra of 5 reference samples from the substance/substance group *2-ethylhexyl laurate*.

Supplier	Substance	Batch	Sample ID	Spectra
Caelo	2-ethylhexyl laurate	14129304	31507 [†]	20
Caelo	2-ethylhexyl laurate	153825	31878 [†]	20
Caelo	2-ethylhexyl laurate	163482	33087	40
Caelo	2-ethylhexyl laurate	17065201	33786	40
Caelo	2-ethylhexyl laurate	180194	33885	40

- 78 918 spectra from a total of 1825 batches from further 350 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.

*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.

[†]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*.

- 290 spectra from 133 *Apo-Ident* customers from 59 batches from the substance/substance group *2-ethylhexyl laurate*.

Supplier	Substance	Batch	Spectra
Bombastus	2-ethylhexyl laurate	221010	1
Pharmachem	2-ethylhexyl laurate	131111	2
Pharmachem/Noweda	2-ethylhexyl laurate	131111	2
Caelo	2-ethylhexyl laurate	8014210112	1
Pharmachem/Gehe	2-ethylhexyl laurate	131111	1
Pharmachem GmbH	2-ethylhexyl laurate	131111	2
Phönix Gotha	2-ethylhexyl laurate	131111	1
apomix	2-ethylhexyl laurate	8325111111	1
Gehe	2-ethylhexyl laurate	130312	2
Pharmachem/ Sanacorp	2-ethylhexyl laurate	130312	1
Pharmachem GmbH	2-ethylhexyl laurate	130312	1
Caelo	2-ethylhexyl laurate	130312	1
Caelo	2-ethylhexyl laurate	130312	1
Noweda	2-ethylhexyl laurate	130312	2
Pharmachem/ Noweda	2-ethylhexyl laurate	130312	1
Apomix	2-ethylhexyl laurate	8014210112	1
Caelo	2-ethylhexyl laurate	13018601	1
Caelo	2-ethylhexyl laurate	21091303	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	130312	1
Pharmachem/Phönix	2-ethylhexyl laurate	10213	1
Pharmachem / Phönix	2-ethylhexyl laurate	10213	1
Pharmachem Anzag	2-ethylhexyl laurate	130312	2
Caelo	2-ethylhexyl laurate	8015180213	1
Pharmachem/AHD	2-ethylhexyl laurate	10213	4
Pharmachem Pößneck	2-ethylhexyl laurate	10213	2
Pharmachem GmbH	2-ethylhexyl laurate	10213	2
pharmachem GmbH Pößneck	2-ethylhexyl laurate	10213	1
Apomix/Noweda	2-ethylhexyl laurate	8014260413	2
Phönix Gotha	2-ethylhexyl laurate	10213	1
Caelo	2-ethylhexyl laurate	13252003	1
PKH Halle/Sanacorp	2-ethylhexyl laurate	8013120913	1
apomix	2-ethylhexyl laurate	8014260413	2
Pharmachem Pösneck	2-ethylhexyl laurate	50414	4
Apomix/Anzag	2-ethylhexyl laurate	813M-03324	1
Caelo	2-ethylhexyl laurate	50414	13
Pharmachem/ Sanacorp	2-ethylhexyl laurate	50414	2
Ichthyol	2-ethylhexyl laurate	8015180213	1
Caelo	2-ethylhexyl laurate	14129304	1
apomix	2-ethylhexyl laurate	8015050414	2
Apomix	2-ethylhexyl laurate	8015050414	1
Apomix / Phönix	2-ethylhexyl laurate	40514	1
Pharmachem	2-ethylhexyl laurate	50414	6
apomix/ Phoenix	2-ethylhexyl laurate	8015050414	1
Apomix/Noweda	2-ethylhexyl laurate	8015050414ZA96/14	1
Euro OTC	2-ethylhexyl laurate	50414	2
apomix/Sanacorp	2-ethylhexyl laurate	8015050414	1
Caelo	2-ethylhexyl laurate	14182802	1
Caelo	2-ethylhexyl laurate	1482802	1
Pharmachem./Allianc.H.	2-ethylhexyl laurate	50414	1
AHD / Pharmachem Pößneck	2-ethylhexyl laurate	50414	2
pharmachem gmbh	2-ethylhexyl laurate	50414	1
Pharmachem GmbH	2-ethylhexyl laurate	50414	1
Apomix/Sanacorp	2-ethylhexyl laurate	8015010115ZA48/15	1
Pharmachem/Sanacorp	2-ethylhexyl laurate	50414	1
Phoenix/Apomix	2-ethylhexyl laurate	8015010115	1
Pharmachem Pößneck/Sana...	2-ethylhexyl laurate	50414	1
AHD/Pharmachem.	2-ethylhexyl laurate	10515	8

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Supplier	Substance	Batch	Spectra
Pharmachem Pösneck/Noweda	2-ethylhexyl laurate	10515	4
Pharmachem/Sanacorp	2-ethylhexyl laurate	10515	5
Apomix	2-ethylhexyl laurate	8015010115	5
Pharmachem.Pösneck	2-ethylhexyl laurate	10515	3
Pharmachem Pösneck, GEHE	2-ethylhexyl laurate	10515	1
apomix	2-ethylhexyl laurate	148-8014010815	1
Pharmachem	2-ethylhexyl laurate	10515	5
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	10515	1
Pharmachem Pösneck/Sana...	2-ethylhexyl laurate	10515	1
Pharmachem Pösneck /Now...	2-ethylhexyl laurate	10515	3
Apomix/Anzag	2-ethylhexyl laurate	3114U-03641	1
Caelo	2-ethylhexyl laurate	148-8014010815	2
Caelo	2-ethylhexyl laurate	10515	1
Caelo	2-ethylhexyl laurate	15382601	1
Caelo	2-ethylhexyl laurate	16143802	1
apomix	2-ethylhexyl laurate	148-8013010616	4
Caelo	2-ethylhexyl laurate	16143803	4
Caelo	2-ethylhexyl laurate	148-8013010616	2
Apomix/phönix	2-ethylhexyl laurate	148-8013010616	1
Caelo	2-ethylhexyl laurate	16143804	1
Apomix	2-ethylhexyl laurate	148-80130106ZA182/16	1
Pharmachem/ Sanacorp	2-ethylhexyl laurate	10515	1
Apomix	2-ethylhexyl laurate	148-8013010616	9
Caelo	2-ethylhexyl laurate	16143801	1
apomix	2-ethylhexyl laurate	1488013010616	1
Phoenix	2-ethylhexyl laurate	148-8013010616	1
Caelo	2-ethylhexyl laurate	16245001	5
Caelo	2-ethylhexyl laurate	16245003	1
Apomix/Anzag	2-ethylhexyl laurate	148-8013010616	1
PKH Halle,Anzag	2-ethylhexyl laurate	148-8013010616	1
Apomix/Noweda	2-ethylhexyl laurate	148-8013010616	1
Caelo	2-ethylhexyl laurate	16245004	1
Allianc. Health. / Phar...	2-ethylhexyl laurate	10515	1
Bombastus	2-ethylhexyl laurate	304559	1
Caelo	2-ethylhexyl laurate	16315701	4
Apomix/Phönix	2-ethylhexyl laurate	148-8013010616	1
Fagron	2-ethylhexyl laurate	148-8013010616	1
Pharma Pösneck	2-ethylhexyl laurate	10515	1
Pharmachem/ Noweda	2-ethylhexyl laurate	10616	2
Caelo	2-ethylhexyl laurate	16348201	8
Caelo	2-ethylhexyl laurate	16315703	2
AHD/Pharmachem	2-ethylhexyl laurate	10616	5
Pharmachem/Sanacorp	2-ethylhexyl laurate	10616	2
apomix/Noweda	2-ethylhexyl laurate	148-8013011116	1
Apomix	2-ethylhexyl laurate	148-8013011116	4
Phönix / Pharmachem	2-ethylhexyl laurate	10616	1
Caelo	2-ethylhexyl laurate	148-8013011116	1
Gehe / Pharmachem. Pösn...	2-ethylhexyl laurate	10616	2
Pharmachem	2-ethylhexyl laurate	10616	4
Pharm.Pösneck/AHD	2-ethylhexyl laurate	10616	3
Caelo	2-ethylhexyl laurate	16348202	5
apomix	2-ethylhexyl laurate	2140817	1
Pharmachem/Noweda	2-ethylhexyl laurate	10616	1
Apomix/Noweda	2-ethylhexyl laurate	148-8013011116	1
Caesar & Loretz GmbH	2-ethylhexyl laurate	17065201	1
Apomix	2-ethylhexyl laurate	148-8014010517	2
apomix	2-ethylhexyl laurate	148-8014010517	2
Sanacorp/Pharmachem	2-ethylhexyl laurate	290317	2
Caelo	2-ethylhexyl laurate	17065201	3
Pharmach.Pösneck/AHD	2-ethylhexyl laurate	290317	5

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Supplier	Substance	Batch	Spectra
Allinace	2-ethylhexyl laurate	17065201	1
phönix Pharmochem	2-ethylhexyl laurate	290317	1
Caeolo / ahd	2-ethylhexyl laurate	17065201	1
Apomix/Spangro	2-ethylhexyl laurate	148-8014010517	1
Caeolo	2-ethylhexyl laurate	17065202	2
Pharmachem GmbH&Co.KG/N...	2-ethylhexyl laurate	10616	1
Apomix / Phönix	2-ethylhexyl laurate	148-8014010517	1
apomix/Sanacorp	2-ethylhexyl laurate	148-8014010517	1
Phönix/Pharmachem Pößneck	2-ethylhexyl laurate	290317	1
Pharmachem GmbH&Co.KG	2-ethylhexyl laurate	290317	1
Apomix / Gehe	2-ethylhexyl laurate	148-8014010517	1
Pharmachem	2-ethylhexyl laurate	290317	4
Apomix/Gehe	2-ethylhexyl laurate	148-8014010517	1
Pharmachem Pößneck	2-ethylhexyl laurate	290317	1
Caeolo	2-ethylhexyl laurate	18019405	2
pkh gmbh/Noweda	2-ethylhexyl laurate	1488013010218	1
Caeolo	2-ethylhexyl laurate	18019403	2
EuRho/Noweda	2-ethylhexyl laurate	18019403	1
apomix	2-ethylhexyl laurate	148-8013010218	4
Caeolo	2-ethylhexyl laurate	170665201	1
Caeolo	2-ethylhexyl laurate	18121802	5
Pharmachem/Sanacorp	2-ethylhexyl laurate	290317	1
Kehr	2-ethylhexyl laurate	18121802	1
Apomix/Noweda	2-ethylhexyl laurate	148-8013010218	1
Caeolo	2-ethylhexyl laurate	148-8013010218	1
Apomix	2-ethylhexyl laurate	148-8013010218	2
Caeolo	2-ethylhexyl laurate	18121804	1
Pharmachem/Sanacorp	2-ethylhexyl laurate	260418	2
Apomix/Noveda	2-ethylhexyl laurate	148-8013010218	1
Allianz	2-ethylhexyl laurate	18121804	1
Pharmach.Pößneck/AHD	2-ethylhexyl laurate	260418	2
Caeolo	2-ethylhexyl laurate	18225901	3
Nachtestung-Verlängerung	2-ethylhexyl laurate	275/18	1

- 107 669 spectra from 582 *Apo-Ident* customers from a total of 30 622 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 *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	160	0	35 675
Type B	0	160	0	78 918
Type C	0	274	16	107 669

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 % (> 99.9706 %)	100.0000 % (> 96.2500 %)
Type B	100.0000 % (> 99.9689 %)	100.0000 % (> 96.2500 %)
Type C	100.0000 % (> 99.6450 %)	94.4828 % (> 93.4483 %)

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.

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
31878	31878	0.00	9.13
31507	31878	2.45	8.09
33086	33086	0.00	6.80
31373	31878	2.26	9.04

Appendix A: Additional calibration samples (Type A)

Not required.

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 190 batches. From these 8235 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
apomix	Benzalkonium chl...	05B150612	40	not necessary
apomix	Betamethasone va...	01B200912	40	not necessary
apomix	Clobatesol propi...	01B200912	40	not necessary
apomix	Dexamethasone 1%...	04A270513	40	not necessary
apomix	Epinephrine solu...	04A160712	40	not necessary
apomix	Methylrosanilini...	03C200712	80	not necessary
apomix	Methylrosanilini...	01A260413	40	not necessary
apomix	Methylrosanilini...	05A200712	40	not necessary
apomix	Metronidazole 10...	07B110913	40	1403475
apomix	Prednisolone 1% ...	01A100113	40	not necessary
apomix	Prednisolone 1% ...	07A031212	40	not necessary
apomix	Searing paste SR	04B130418	40	not necessary
apomix	Triamcinolone ac...	01A210513	40	not necessary
apomix	Triamcinolone ac...	09C111212	40	not necessary
apomix	Zinc oxide oil S...	10B090712	40	from supplier
apomix	Zinc oxide paste...	01A190218	40	not necessary
apomix	Zinc oxide paste...	31B141117	40	not necessary
Audor	Phenoxyethanol	APDEG4324219P	60	not necessary
Audor	Phenoxyethanol	APDEG4324219P	60	AR-16-FG-003720-01
Audor	Phenoxyethanol	APDEG4324219XP	40	not necessary
Audor	Vitamin F liposo...	AP307176FL	40	not necessary
Bene	Tacholiniquin [®] 1...	350K121	40	from supplier
Bombastus	Propolis tinctur...	273005	40	not necessary
Bombastus	Propolis tinctur...	273005	40	not necessary
Bombastus	Zinc oxide cream...	00269409	40	not necessary
Bombastus	Zinc oxide oil DAC	00269769	40	from supplier
Bombastus	Zinc oxide oil S...	00269651	40	not necessary
Bombastus	Zinc oxide paste...	00267515	20	from supplier
Caelo	Abwaschbare Salb...	182529	40	20180926*
Caelo	Abwaschbare Salb...	180622	40	20180215*
Caelo	Acorus tincture ...	11355109	40	not necessary
Caelo	Alcoholic liniment	13351909	40	not necessary
Caelo	Aromatic tinctur...	11355009	40	not necessary
Caelo	Basil oil	13153601	40	1404505
Caelo	Basil oil	11035902	40	not necessary
Caelo	Basil oil	11346902	40	not necessary
Caelo	Basil oil	13395803	40	not necessary
Caelo	Benzalkonium chl...	12033409	40	not necessary
Caelo	Bitter tincture ...	11380108	60	not necessary
Caelo	Calendula oil, fat	13287203	40	1403102
Caelo	Calendula oil, fat	14063403	40	not necessary
Caelo	Camphor oil 10%	13317402	40	1509155
Caelo	Camphor oil 10%	13317402	60	not necessary
Caelo	Carmelite water	14001202	40	not necessary
Caelo	Carotene (ca. 4m...	12139305	40	1402564
Caelo	Cayenne pepper t...	11102412	40	not necessary
Caelo	Chinchona bark t...	11275507	40	not necessary
Caelo	Cineole	173099	40	20171205*

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Supplier	Substance	Batch	Spectra	Certificate
Caelo	Coal tar solution	90392199	40	F 2009 000 986
Caelo	Dimethyl isosorb...	16170904	40	not necessary
Caelo	Dimethyl isosorb...	15230402	60	1603485
Caelo	Dimethyl isosorb...	17169803	40	not necessary
Caelo	Dimethyl isosorb...	15427602	60	not necessary
Caelo	Food colorant y...	12022212	40	not necessary
Caelo	Formic acid 85%	13373301	60	not necessary
Caelo	Ginger oil	163186	40	20161213*
Caelo	Ginger oil	15042113	40	not necessary
Caelo	Hawthorn tinctur...	11311816	40	not necessary
Caelo	Horse chestnut s...	10346909	40	not necessary
Caelo	Hyoscyamus oil	162692	40	20160930*
Caelo	Larch terpentine	161264	60	20160428*
Caelo	Lavender spirit	13300803	60	not necessary
Caelo	Lavender spirit	13300803	50	1403101
Caelo	Lime water	12055002	40	not necessary
Caelo	Macadamia oil, r...	14179304	60	not necessary
Caelo	Macadamia oil, r...	13012102	40	1407349
Caelo	Macadamia oil, r...	170556	40	20170302*
Caelo	Matricaria flowe...	11269917	40	not necessary
Caelo	Matricaria liqui...	12360310	40	not necessary
Caelo	Matricaria liqui...	12360306	40	not necessary
Caelo	Matricaria oil, ...	12189803	40	not necessary
Caelo	Matricaria oil, ...	14001103	40	not necessary
Caelo	Melissa leaf tin...	11102807	40	not necessary
Caelo	Nettle herb liqu...	14176902	40	1501199
Caelo	Nettle root tinc...	11187409	40	not necessary
Caelo	Nettle tincture ...	11108801	40	not necessary
Caelo	Opium tincture, ...	13394905	40	0914I-02461
Caelo	Orange flower oi...	13067705	40	not necessary
Caelo	Orange flower oi...	13067707	40	1404598
Caelo	Orange flower wa...	12238104	40	not necessary
Caelo	Peanut oil, hydr...	13339803	40	not necessary
Caelo	Pepsin wine	15449303	40	not necessary
Caelo	Pepsin wine	15449301	60	not necessary
Caelo	Pepsin wine	12277403	60	not necessary
Caelo	Pepsin wine	14339802	45	1503624
Caelo	Peru balsam, ori...	14223909	60	1703349
Caelo	Peru balsam, ori...	12302401	40	not necessary
Caelo	Plantain herb li...	11332613	40	not necessary
Caelo	Polyacrylic acid...	173012	40	20171027*
Caelo	Prednisolone ace...	13077701	100	not necessary
Caelo	Primrose root li...	12175307	100	1404596
Caelo	Primrose root li...	13330110	60	not necessary
Caelo	Propolis liquid ...	13347602	40	1404589
Caelo	Propolis liquid ...	11220406	40	not necessary
Caelo	Propolis liquid ...	13347606	60	not necessary
Caelo	Propolis liquid ...	11220411	40	not necessary
Caelo	Propolis tinctur...	11269521	40	not necessary
Caelo	Pyroligneous aci...	12023203	40	not necessary
Caelo	Sage leaf liquid...	10305313	40	not necessary
Caelo	Sage leaf liquid...	11372203	40	not necessary
Caelo	Salicylic acid c...	153947	40	20151130*
Caelo	Salicylic acid c...	153946	40	20151130*
Caelo	Siam benzoin tin...	13169905	50	1405623
Caelo	Siam benzoin tin...	11239201	60	not necessary
Caelo	Spearmint water	11210003	40	not necessary
Caelo	St. John's wort ...	12076913	40	not necessary
Caelo	St. John's wort ...	13389218	40	not necessary
Caelo	Standardised cay...	13259103	20	not necessary

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Supplier	Substance	Batch	Spectra	Certificate
Caelo	Texapon [®] CS paste	14087206	60	1501415
Caelo	Texapon [®] CS paste	12292006	40	not necessary
Caelo	Texapon [®] CS paste	12292001	40	not necessary
Caelo	Texapon [®] CS paste	16268901	40	not necessary
Caelo	Texapon [®] CS paste	16268901	40	not necessary
Caelo	Thyme liquid ext...	13273613	60	not necessary
Caelo	Triamcinolone ac...	12250701	70	not necessary
Caelo	Valerian root li...	13343703	60	not necessary
Caelo	Valerian tinctur...	12196203	40	not necessary
Caelo	Valerian tinctur...	12113006	40	not necessary
Caelo	Valerian tinctur...	12113006	40	not necessary
Caelo	Vitamin A-palmit...	12132910	60	not necessary
Caelo	Witch hazel bark...	13357902	40	not necessary
Caelo	Witch hazel bark...	13357902	40	1407627
Caelo	Witch hazel leaf...	12165010	40	not necessary
Caelo	Wormwood tinctur...	12237901	40	not necessary
Caelo	Zinc oxide oil DAC	12289802	40	not necessary
Caelo	Zinc oxide oil DAC	12160002	40	not necessary
Caelo	Zinc paste DAB	12147801	40	not necessary
Caelo	Zinc paste, soft...	12378402	80	not necessary
Euro OTC	Capsaicin liquid...	1205038-02	40	1406349
Euro OTC	Capsaicin liquid...	1205038-01	40	not necessary
Euro OTC	Sodium lactate s...	1310007-01	40	not necessary
Euro OTC	Sodium lactate s...	1201037-01	60	not necessary
Euro OTC	Sodium lactate s...	1310007-01	60	not necessary
Euro OTC	Sodium lactate s...	1310007-01	40	AR-17-FG-012458-01
Fagron	Apricot aroma	13D08-N08	30	1407103
Fagron	Carbomer gel 1%	1205D002	40	from supplier
Fagron	Iron (III) subsu...	17J23-B12-342837	40	not necessary
Fagron	Peru balsam, ori...	13F13-N04	40	1502255
Fagron	Tretinoin soluti...	11K09-N03	40	not necessary
Fagron	Zinc paste DAB	12E22-T09	40	from supplier
Gatt-Koller	Camphor spirit (...)	18.00514	40	1809577
Hedinger	Ammonia solution...	027138	40	not necessary
Hedinger	Sodium hypochlor...	045226	40	not necessary
Henry Lamotte	Zinc oxide lotio...	5375600	40	not necessary
Henry Lamotte	Zinc paste, soft...	5374900	40	not necessary
Ichthyol	Clobetasol 0.5% ...	11D034	40	not necessary
Ichthyol	Ichthyol [®] raw ma...	11A075	20	not necessary
Leyh Pharma	Methylrosanilini...	131711	40	not necessary
Maros	Abrotani mother ...	RU2276	40	not necessary
Maros	Arnica root moth...	U3606	40	not necessary
Maros	Ash bark mother ...	U3264	40	not necessary
Maros	Bilberry leaf mo...	U3749	40	not necessary
Maros	Bittersweet stal...	U3320	40	not necessary
Maros	Black cohosh mot...	U3668	40	not necessary
Maros	Boldo leaf mothe...	U3502	30	not necessary
Maros	Bryony root moth...	U3269	40	not necessary
Maros	Burnet root moth...	U3600	30	not necessary
Maros	Common broom mot...	R4688	40	not necessary
Maros	Common wormwood ...	U2448	40	not necessary
Maros	Coneflower herb...	U3041	40	not necessary
Maros	Fennel fruit tin...	6996	40	not necessary
Maros	Figwort mother t...	U3623	40	not necessary
Maros	Ginkgo leaf moth...	U2834	40	not necessary
Maros	Golden rod herb ...	6737	30	not necessary
Maros	Horehound herb m...	U2929	40	not necessary
Maros	Horse chestnut s...	U2882	40	not necessary
Maros	Juniper tincture...	1239	40	not necessary
Maros	Lovage root moth...	U3389	40	not necessary

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Supplier	Substance	Batch	Spectra	Certificate
Maros	Matricaria flowe...	U3347	40	not necessary
Maros	Mistletoe mother...	U2932	40	not necessary
Maros	Monk's pepper fr...	U3476	40	not necessary
Maros	Motherwort herb ...	U2785	40	not necessary
Maros	Motherwort herb ...	6997	40	not necessary
Maros	Nettle mother ti...	U3633	40	not necessary
Maros	Pelargonium root...	01028113	40	not necessary
Maros	Ribwort plantain...	6736	40	not necessary
Maros	Robert herb moth...	U3720	40	not necessary
Maros	Rosemary leaf mo...	U3238	40	not necessary
Maros	St. John's wort ...	9712	40	not necessary
Maros	Strophanthus see...	01028513	40	not necessary
Maros	Sundew herb moth...	U3354	40	not necessary
Maros	Teasel root moth...	U3685	40	not necessary
Maros	Tetterwort mothe...	U3063	40	not necessary
Maros	Walnut bark tinc...	1240	40	not necessary
Maros	Waterhorehound h...	U3388	40	not necessary
Maros	Willow bark tinc...	6865	40	not necessary
Maros	Wood violet moth...	U2222	40	not necessary
Maros	Yam mother tinct...	32210	40	not necessary
Ratiopharm	Corticoid-ratiop...	L30263	40	from supplier
Staufen-Pharm	Oxalic acid D30 ...	09.05.12	80	not necessary

*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 1861 batches. From these, 4512 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
AHD	Castor oil, hydrated	278661	1
aliance healthcare	Matricaria oil, fat	13204306	2
All..Healthc./Apomix	Hydrophilic metronida...	7B180713	5
Alliance	Hydroxyethylcellulose...	13190401	10
Alliance Health	Zinc paste, soft DAB	278229	4
Alliance Healthcare	Hydrophobic triclosan...	S091202.1	5
Alliance Healthcare	Zinc paste, soft DAB	281118	1
Alliance Healthcare/A...	Hydrophilic metronida...	11201113	1
Alliance Healthcare/A...	Hydrophilic metronida...	6B120613	5
AMH Niemann	Methylrosanilinium ch...	3A060612	1
AMH Niemann GmbH & Co...	Hydrophilic metronida...	4190413	1
AMH Niemann GmbH & Co...	Methylrosanilinium ch...	1b140213	1
AMH Niemann GmbH & Co...	Zinc oxide paste, sof...	25A310712	2
AMH Niemann GmbH& Co...	Hydroxyethylcellulose...	13B310513	1
AMH Niemann GmbH& Co...	Hydroxyethylcellulose...	7B040313	1
AMH Niemann GmbH&Co.KG	Zinc oxide paste, sof...	21B210612	1
AMH Niemann GmbH+Co Kg	Hydrophilic metronida...	5B170414	1
AMH Niemann/G	Oxytetracycline ointm...	1B200313	1
AMH Niemann/G	Oxytetracycline ointm...	4C300712	1
AMH Niemann/G	Oxytetracycline ointm...	2C160212	1
AMH/ Sanacorp	Zinc oxide paste, sof...	43B150811	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	10B200412	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	6C090312	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	1B270112	1
AMH-Niemann GmbH & Co...	Hydroxyethylcellulose...	2C270112	1
amv niemann gmbh&co kg	Hydrophilic metronida...	4B060515	1
Anzag	Hydrogen peroxide sol...	61007B	7
Anzag	Hydrophilic metronida...	11B201113	2
Anzag	Hydrophobic triclosan...	S021202.1	5
Anzag	Methylrosanilinium ch...	1A140213	2
Anzag	Methylrosanilinium ch...	5A200712	1
Anzag	Opium tincture, stand...	12006212	17
Anzag	Zinc oxide lotion, aq...	12309601	6
Anzag	Zinc oxide oil SR 90	15B100912	1
Anzag	Zinc oxide paste, sof...	12121501	1
Anzag	Zinc paste, soft DAB	14023301	4
Anzag	Zinc paste, soft DAB	12121501	1
Anzag 08.03.2013	Zinc oxide lotion, aq...	13018401	16
Anzag 18.10.12	Zinc paste, soft DAB	12121401	3
Anzag 19.12.2012	Castor oil, hydrated	273882	3
Anzag 26.11.12 ek:3,35	Orange flower water	12171703	1
Anzag 27.12.12 ek:5,19	Camphor oil 10%	12269502	10
Anzag 29.04.13 ek: 3,...	Castor oil, hydrated	13096304	1
Anzag ek:10.21EUR 27.08...	Alcoholic liniment	12103301	1
Anzag/ Fischar	Formic acid 85%		1
Anzag/04.04.2013	Betamethasone valerat...	3B280213	1

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Supplier	Substance	Batch	Spectra
Anzag/Fischar	Hydrogen peroxide sol...	6313035	2
Anzag/Infectopharm	Hydrophobic triclosan...	S091206.1	10
apomix	Benzalkonium chloride...	4a210515	1
apomix	Clobatesol propionate...	1A20213	1
apomix	Hydrogen peroxide sol...	6A070114	1
apomix	Hydrogen peroxide sol...	6A080116	1
apomix	Hydrogen peroxide sol...	231A160513	1
apomix	Hydrophilic metronida...	9B091013	2
apomix	Hydrophilic metronida...	10C141013	1
apomix	Hydrophilic metronida...	11B221112	2
apomix	Hydrophilic metronida...	5B020513	6
apomix	Hydroxyethylcellulose...	20B230712	1
apomix	Hydroxyethylcellulose...	17B080713	2
apomix	Hydroxyethylcellulose...	14B310513	1
apomix	Metronidazole 10% (no...	5B150513	1
apomix	Metronidazole 10% (no...	38110313	1
apomix	Metronidazole 10% (no...	48170413	1
apomix	Searing paste SR	9B280613	2
apomix	Zinc oxide paste, sof...	34A231012	1
Apomix	Benzalkonium chloride...	6B060912	1
Apomix	Benzalkonium chloride...	3A170413	2
Apomix	Hydrogen peroxide sol...	227A160513	1
Apomix	Hydrophilic metronida...	2B220213	5
Apomix	Hydrophilic metronida...	1B190112	1
Apomix	Hydrophilic metronida...	10B251012	3
Apomix	Hydrophilic metronida...	4B270412	1
Apomix	Hydrophilic metronida...	9B041012	2
Apomix	Hydrophilic metronida...	8418213	2
Apomix	Hydrophilic metronida...	8B110912	4
Apomix	Hydrophilic metronida...	1B030113	4
Apomix	Hydrophilic metronida...	3B140313	4
Apomix	Hydrophilic metronida...	2B220212	2
Apomix	Hydroxyethylcellulose...	6D230514	1
Apomix	Hydroxyethylcellulose...	27B081113	1
Apomix	Hydroxyethylcellulose...	6B090312	1
Apomix	Hydroxyethylcellulose...	16B310513	3
Apomix	Hydroxyethylcellulose...	11B260413	1
Apomix	Hydroxyethylcellulose...	13B260413	4
Apomix	Hydroxyethylcellulose...	24B070912	1
Apomix	Hydroxyethylcellulose...	12B260413	1
Apomix	Hydroxyethylcellulose...	5B150213	3
Apomix	Hydroxyethylcellulose...	9B120413	1
Apomix	Hydroxyethylcellulose...	6B040313	2
Apomix	Hydroxyethylcellulose...	21C060913	2
Apomix	Hydroxyethylcellulose...	19B141011	1
Apomix	Hydroxyethylcellulose...	22B281011	1
Apomix	Hydroxyethylcellulose...	5B090312	3
Apomix	Hydroxyethylcellulose...	16B080713	1
Apomix	Hydroxyethylcellulose...	15B060712	1
Apomix	Hydroxyethylcellulose...	14B080612	1
Apomix	Hydroxyethylcellulose...	26B301112	1
Apomix	Oxytetracycline ointm...	1A160212	1
Apomix	Searing paste SR	3B180213	1
Apomix	Searing paste SR	15B211013	1
Apomix	Searing paste SR	14B240913	3
Apomix	Zinc oxide cream 25% ...	7B270513	1
Apomix	Zinc oxide oil DAC	26C190911	1
Apomix	Zinc oxide oil SR 90	6B150413	1
Apomix	Zinc oxide paste, sof...	3A090113	1
Apomix	Zinc oxide paste, sof...	4A090113	3

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Supplier	Substance	Batch	Spectra
Apomix	Zinc oxide paste, sof...	12B140313	1
Apomix	Zinc paste, soft DAB	13A040912	1
Apomix	Zinc paste, soft DAB	41B051212	1
ApoMix	Hydrophilic metronida...	6B310512	3
Apomix / 11	Dexamethasone 1% (non...	4A270513	1
Apomix / 11	Triamcinolone acetoni...	9C111212	1
Apomix / 11	Triamcinolone acetoni...	10A051213	1
Apomix / 11	Triamcinolone acetoni...	5A290713	2
Apomix / 11	Triamcinolone acetoni...	6A260813	2
APOMIX / 11	Prednisolone 1% (non...	3A160813	1
Apomix / 20	Searing paste SR	12B150813	2
Apomix / 20	Triamcinolone acetoni...	8A190913	1
Apomix / 30	Triamcinolone acetoni...	7A170913	2
APOMIX / 30	Triamcinolone acetoni...	3A110613	1
Apomix / Phönix	Hydroxyethylcellulose...	21C090813	1
Apomix / Phönix	Hydroxyethylcellulose...	11B120413	1
Apomix Anzag	Hydrophilic metronida...	7B200712	5
Apomix direkt	Benzalkonium chloride...	4A110713	2
Apomix direkt	Benzalkonium chloride...	2B070313	1
apomix PKH	Hydrogen peroxide sol...	472A160913	1
apomix PKH	Hydroxyethylcellulose...	2B270112	1
apomix PKH	Hydroxyethylcellulose...	9C200412	1
apomix PKH	Hydroxyethylcellulose...	17B060712	1
apomix PKH	Hydroxyethylcellulose...	14B080612	1
apomix, Phönix	Zinc oxide paste, sof...	6A110213	2
apomix, PKH GmbH	Methylrosanilinium ch...	2B260413	1
Apomix/ 11	Triamcinolone acetoni...	4A040713	1
apomix/ Gehe	Methylrosanilinium ch...	2B290312	1
Apomix/ Noweda	Hydroxyethylcellulose...	5B090312	1
apomix/ Phoenix	Dexamethasone 1% (non...	2A220313	1
Apomix/ Phönix	Hydroxyethylcellulose...	19B090813	1
Apomix/ Sanacorp	Hydroxyethylcellulose...	19B080713	1
Apomix/ Sanacorp	Zinc oxide cream 25% ...	13B230813	1
Apomix/Anzag	Hydrogen peroxide sol...	67A300113	1
Apomix/Anzag	Hydroxyethylcellulose...	10C120413	1
Apomix/Anzag	Methylrosanilinium ch...	1B260413	1
Apomix/Gehe	Methylrosanilinium ch...	4B200712	1
Apomix/Noweda	Hydrophilic metronida...	8B290813	3
Apomix/Noweda	Hydroxyethylcellulose...	18B080713	2
Apomix/Noweda	Searing paste SR	11B010813	1
Apomix/Noweda	Zinc oxide cream 25% ...	4A100413	1
apomix/phoenix	Betamethasone valerat...	13C031213	1
apomix/Phönix	Hydrophilic metronida...	11B20113	1
apomix/Phönix	Zinc oxide cream 25% ...	15B230913	1
Apomix/Phönix	Hydrophilic metronida...	12B111213	1
Apomix/Phönix	Searing paste SR	5B110413	1
Audor Pharma	Phenoxyethanol	APDEG432419P	1
Audor Pharma	Phenoxyethanol	APDEG4324219P	11
Audor Pharma	Phenoxyethanol	APDEG4324219XP	1
Audor Pharma	Vitamin F liposomes	AP207152FL	1
Audor Pharma	Vitamin F liposomes	AP302038FL	1
Berkel AHK	Camphor oil 10%	15028001	3
bom	Zinc paste, soft DAB	286902	1
Bomba/AHD	Propolis tincture 20%	280337	2
Bombastus	Castor oil, hydrated	275938	1
Bombastus	Castor oil, hydrated	272591	1
Bombastus	Castor oil, hydrated	26956512-13	1
Bombastus	Castor oil, hydrated	273390	13
Bombastus	Castor oil, hydrated	255179	1
Bombastus	Castor oil, hydrated	270580	5

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Supplier	Substance	Batch	Spectra
Bombastus	Castor oil, hydrated	271754	2
Bombastus	Castor oil, hydrated	269565	3
Bombastus	Castor oil, hydrated	266593	1
Bombastus	Castor oil, hydrated	266591	1
Bombastus	Castor oil, hydrated	264468	1
Bombastus	Chinese cinnamon oil	269558	1
Bombastus	Chinese cinnamon oil	262660	1
Bombastus	Chinese cinnamon oil	263892	1
Bombastus	St. John's wort oil	272178	1
Bombastus	St. John's wort oil	293138	1
Bombastus	St. John's wort oil	283368	1
Bombastus	St. John's wort oil	282275	1
Bombastus	St. John's wort oil	279926	1
Bombastus	St. John's wort oil	275674	1
Bombastus	Zinc ointment DAB	277335	2
Bombastus	Zinc ointment DAB	30071602	1
Bombastus	Zinc ointment DAB	275313	4
Bombastus	Zinc ointment DAB	274127	1
Bombastus	Zinc ointment DAB	282182	1
Bombastus	Zinc oxide cream 25% ...	281755	2
Bombastus	Zinc oxide cream 25% ...	272491	1
Bombastus	Zinc oxide cream 25% ...	279248	1
Bombastus	Zinc oxide cream 25% ...	272490	1
Bombastus	Zinc oxide cream 25% ...	276966	2
Bombastus	Zinc oxide lotion, aq. ...	274933	1
Bombastus	Zinc oxide lotion, aq. ...	284632	1
Bombastus	Zinc oxide lotion, aq. ...	281537	1
Bombastus	Zinc oxide oil DAC	301565	1
Bombastus	Zinc oxide oil DAC	273970	1
Bombastus	Zinc oxide oil DAC	269650	1
Bombastus	Zinc oxide oil DAC	286041	2
Bombastus	Zinc oxide oil DAC	282083	1
Bombastus	Zinc oxide oil DAC	273971	1
Bombastus	Zinc oxide oil DAC	273972	1
Bombastus	Zinc oxide oil DAC	263248	1
Bombastus	Zinc oxide oil DAC	274182	1
Bombastus	Zinc oxide oil DAC	278159	6
Bombastus	Zinc oxide oil DAC	269765	1
Bombastus	Zinc oxide oil DAC	279564	1
Bombastus	Zinc oxide oil SR 90	273973	6
Bombastus	Zinc oxide oil SR 90	6858379	1
Bombastus	Zinc oxide oil SR 90	277647	1
Bombastus	Zinc oxide paste SR90	256014	1
Bombastus	Zinc oxide paste SR90	279387	1
Bombastus	Zinc oxide paste SR90	279384	1
Bombastus	Zinc oxide paste SR90	276200	3
Bombastus	Zinc oxide paste SR90	276198	1
Bombastus	Zinc oxide paste SR90	273833	1
Bombastus	Zinc oxide paste SR90	266450	1
Bombastus	Zinc oxide paste, sof. ...	273328	3
Bombastus	Zinc oxide paste, sof. ...	271192	2
Bombastus	Zinc oxide paste, sof. ...	273329	4
Bombastus	Zinc oxide paste, sof. ...	273330	2
Bombastus	Zinc oxide paste, sof. ...	271196	2
Bombastus	Zinc oxide paste, sof. ...	279586	4
Bombastus	Zinc oxide paste, sof. ...	281586	1
Bombastus	Zinc oxide paste, sof. ...	275031	1
Bombastus	Zinc oxide paste, sof. ...	277662	1
Bombastus	Zinc oxide paste, sof. ...	273326	1
Bombastus	Zinc paste DAB	271136	1

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Supplier	Substance	Batch	Spectra
Bombastus	Zinc paste DAB	273894	1
Bombastus	Zinc paste DAB	271138	2
Bombastus	Zinc paste DAB	271134	1
Bombastus	Zinc paste DAB	271135	2
Bombastus	Zinc paste DAB	271133	1
Bombastus	Zinc paste DAB	27113603-15	1
Bombastus	Zinc paste DAB	276144	2
Bombastus	Zinc paste DAB	276143	1
Bombastus	Zinc paste DAB	284662	1
Bombastus	Zinc paste DAB	276141	1
Bombastus	Zinc paste DAB	278861	1
Bombastus	Zinc paste DAB	276604	1
Bombastus	Zinc paste DAB	276145	1
Bombastus	Zinc paste DAB	278274	3
Bombastus	Zinc paste DAB	278865	1
Bombastus	Zinc paste DAB	278863	1
Bombastus	Zinc paste DAB	278270	1
Bombastus	Zinc paste DAB	278272	3
Bombastus	Zinc paste DAB	276146	1
Bombastus	Zinc paste DAB	280733	2
Bombastus	Zinc paste DAB	282037	1
Bombastus	Zinc paste DAB	278273	3
Bombastus	Zinc paste DAB	287850	1
Bombastus	Zinc paste DAB	290176	1
Bombastus	Zinc paste DAB	291718	2
Bombastus	Zinc paste DAB	62/13	1
Bombastus	Zinc paste DAB	280732	1
Bombastus	Zinc paste DAB	278864	3
Bombastus	Zinc paste, soft DAB	262918	1
Bombastus	Zinc paste, soft DAB	271194	1
Bombastus	Zinc paste, soft DAB	274978	3
Bombastus	Zinc paste, soft DAB	265457	1
Bombastus	Zinc paste, soft DAB	274973	1
Bombastus	Zinc paste, soft DAB	275948	1
Bombastus	Zinc paste, soft DAB	293485	1
Bombastus	Zinc paste, soft DAB	266383	1
Bombastus	Zinc paste, soft DAB	276537	1
Bombastus	Zinc paste, soft DAB	280233	1
Bombastus	Zinc paste, soft DAB	276538	2
Bombastus	Zinc paste, soft DAB	271195	2
Bombastus	Zinc paste, soft DAB	267591	1
Bombastus	Zinc paste, soft DAB	270465	3
Bombastus	Zinc paste, soft DAB	267515	1
Bombastus	Zinc paste, soft DAB	267590	1
Bombastus	Zinc paste, soft DAB	281116	2
Bombastus	Zinc paste, soft DAB	274971	1
Bombastus	Zinc paste, soft DAB	278227	1
Bombastus	Zinc paste, soft DAB	281121	2
Bombastus	Zinc paste, soft DAB	278226	1
Bombastus	Zinc paste, soft DAB	280234	1
Bombastus	Zinc paste, soft DAB	278223	1
Bombastus	Zinc paste, soft DAB	271343	2
Bombastus	Zinc paste, soft DAB	274972	2
Bombastus	Zinc paste, soft DAB	273701	1
Bombastus	Zinc paste, soft DAB	281122	4
Bombastus	Zinc paste, soft DAB	276536	1
Bombastus	Zinc paste, soft DAB	276539	3
Bombastus	Zinc paste, soft DAB	278228	2
Bombastus	Zinc paste, soft DAB	276540	3
Bombastus	Zinc paste, soft DAB	271341	2

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Supplier	Substance	Batch	Spectra
Bombastus	Zinc paste, soft DAB	282861	1
Bombastus	Zinc paste, soft DAB	271344	2
Bombastus	Zinc paste, soft DAB	5216300	4
Bombastus	Zinc paste, soft DAB	282863	1
Bombastus	Zinc paste, soft DAB	270463	2
Bombastus	Zinc paste, soft DAB	270516	2
Bombastus	Zinc paste, soft DAB	280235	1
Bombastus	Zinc paste, soft DAB	281117	1
Bombastus	Zinc paste, soft DAB	282859	1
Bombastus	Zinc paste, soft DAB	271340	3
Brückenapotheke	Hydrophilic metronida...	3113Q-07001	1
Brückenapotheke	Hydrophilic metronida...	3913E-07001	1
Brückenapotheke	Hydrophilic metronida...	414M-07001	1
Brückenapotheke	Hydrophilic metronida...	5013A-07001	1
Brückenapotheke	Hydrophilic metronida...	3313M-07001	1
Brücken-Apotheke	Hydrophilic metronida...	4613M-07001	1
Caelo	Acorus tincture (70%)...	11355115	1
Caelo	Acorus tincture (70%)...	19121322	1
Caelo	Alcoholic liniment	12103319	1
Caelo	Alcoholic liniment	12103312	1
Caelo	Alcoholic liniment	204312316	1
Caelo	Alcoholic liniment	5213E2316	1
Caelo	Alcoholic liniment	2612M-02925	1
Caelo	Alcoholic liniment	2507212316	1
Caelo	Alcoholic liniment	34365645645	1
Caelo	Alcoholic liniment	445255	1
Caelo	Aloe vera oil	11014804	1
Caelo	Aloe vera oil	123033108	1
Caelo	Aloe vera oil	12033104	1
Caelo	Aloe vera oil	11014806	1
Caelo	Aloe vera oil	11014807	2
Caelo	Aloe vera oil	12033106	1
Caelo	Aloe vera oil	12033108	1
Caelo	Aloe vera oil	12033111	1
Caelo	Aloe vera oil	12033113	4
Caelo	Aloe vera oil	12033101	1
Caelo	Aloe vera oil	12033114	2
Caelo	Aloe vera oil	12033107	1
Caelo	Aloe vera oil	12383703	2
Caelo	Aloe vera oil	12383706	5
Caelo	Aloe vera oil	12383702	2
Caelo	Apricot aroma	14C19-B30-292291	1
Caelo	Arnica oil, fat	11096702	1
Caelo	Arnica oil, fat	12359703	1
Caelo	Arnica oil, fat	13186602	1
Caelo	Arnica oil, fat	13186601	2
Caelo	Arnica oil, fat	13186604	1
Caelo	Arnica oil, fat	12088504	3
Caelo	Arnica oil, fat	13042503	3
Caelo	Arnica oil, fat	Sanacorb	1
Caelo	Arnica tincture (70%)...	20090312-4	1
Caelo	Arnica tincture (70%)...	12301009	1
Caelo	Arnica tincture (70%)...	12031001	1
Caelo	Arnica tincture (70%)...	12031008	1
Caelo	Arnica tincture (70%)...	12031004	2
Caelo	Arnica tincture (70%)...	10341801	1
Caelo	Arnica tincture (70%)...	10362805	1
Caelo	Arnica tincture (70%)...	12031017	7
Caelo	Arnica tincture (70%)...	10362820	1
Caelo	Arnica tincture (70%)...	26031301	1

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Supplier	Substance	Batch	Spectra
Caelo	Arnica tincture (70%)...	12031009	4
Caelo	Arnica tincture (70%)...	10362809	1
Caelo	Arnica tincture (70%)...	12031015	7
Caelo	Arnica tincture (70%)...	10362814	3
Caelo	Arnica tincture (70%)...	10362815	2
Caelo	Arnica tincture (70%)...	13094612	2
Caelo	Arnica tincture (70%)...	13094607	3
Caelo	Arnica tincture (70%)...	8111301	1
Caelo	Arnica tincture (70%)...	1213A-02398	1
Caelo	Arnica tincture (70%)...	13094610	2
Caelo	Arnica tincture (70%)...	13094613	1
Caelo	Arnica tincture (70%)...	13094609	5
Caelo	Basil oil	13153601	1
Caelo	Belladonna tincture, ...	11322615	1
Caelo	Belladonna tincture, ...	12315101	1
Caelo	Belladonna tincture, ...	12315104	2
Caelo	Belladonna tincture, ...	12315111	2
Caelo	Belladonna tincture, ...	13273004	1
Caelo	Belladonna tincture, ...	11322611	2
Caelo	Benzalkonium chloride	12033403	2
Caelo	Benzalkonium chloride	12033411	1
Caelo	Benzalkonium chloride	13070206	6
Caelo	Benzalkonium chloride	13070201	1
Caelo	Benzalkonium chloride	13307902	1
Caelo	Benzoic lard (stabili...	12063902	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
Caelo	Bitter orange tinctur...	27072013	1
Caelo	Calendula mother tinc...	12117313	1
Caelo	Calendula oil, fat	11274801	2
Caelo	Calendula oil, fat	11183102	1
Caelo	Calendula oil, fat	13069603	1
Caelo	Calendula oil, fat	13251002	3
Caelo	Calendula oil, fat	12373103	1
Caelo	Calendula oil, fat	13185401	2
Caelo	Calendula oil, fat	13069601	1
Caelo	Calendula oil, fat	13251002/1	1
Caelo	Calendula oil, fat	12373101	2
Caelo	Calendula oil, fat	13251003	4
Caelo	Calendula oil, fat	13355702	2
Caelo	Calendula oil, fat	14001004	2
Caelo	Calendula oil, fat	122116904	1
Caelo	Calendula oil, fat	12308502	2
Caelo	Calendula oil, fat	12216901	2
Caelo	Calendula oil, fat	12216904	1
Caelo	Calendula oil, fat	12189903	2
Caelo	Calendula oil, fat	12189901	1
Caelo	Calendula oil, fat	12006802	3
Caelo	Calendula oil, fat	13185402	4
Caelo	Calendula oil, fat	12373102	3
Caelo	Calendula oil, fat	13355701	1
Caelo	Calendula tincture (7...	12117310	2
Caelo	Calendula tincture (7...	12117313	1
Caelo	Calendula tincture (7...	12117320	1
Caelo	Calendula tincture (7...	11332702	1
Caelo	Calendula tincture (7...	12117308	1
Caelo	Calendula tincture (7...	11332710	1
Caelo	Calendula tincture (7...	11143803	1

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Supplier	Substance	Batch	Spectra
Caelo	Calendula tincture (7...	10260111	1
Caelo	Calendula tincture (7...	13142802	2
Caelo	Calendula tincture (7...	13142804	7
Caelo	Calendula tincture (7...	12117317	5
Caelo	Calendula tincture (7...	12117301	3
Caelo	Calendula tincture (7...	19061311	1
Caelo	Calendula tincture (7...	12117312	3
Caelo	Calendula tincture (7...	12117311	1
Caelo	Calendula tincture (7...	12117305	1
Caelo	Camphor oil 10%	14139201	1
Caelo	Camphor oil 10%	17003105	1
Caelo	Camphor oil 10%	13317401	4
Caelo	Camphor oil 10%	13317402	10
Caelo	Camphor oil 10%	16085201	2
Caelo	Camphor oil 10%	16085202	1
Caelo	Camphor oil 10%	14139202	3
Caelo	Camphor oil 10%	14139202	2
Caelo	Camphor oil 10%	15338205	1
Caelo	Camphor oil 10%	15338201	1
Caelo	Camphor oil 10%	15338202	2
Caelo	Camphor oil 10%	15028004	2
Caelo	Camphor oil 10%	15028003	1
Caelo	Camphor oil 10%	15028002	1
Caelo	Camphor oil 10%	15028003	1
Caelo	Camphor oil 10%	18082015A	1
Caelo	Camphor oil 10%	15208001	1
Caelo	Camphor oil 10%	15338202	1
Caelo	Camphor oil 10%	13043901	2
Caelo	Camphor oil 10%	12269501	1
Caelo	Carbomer gel 1%	1102D002	1
Caelo	Carotene (ca. 4m IU)	13008404	1
Caelo	Castor oil, hydrated	11260603	2
Caelo	Castor oil, hydrated	14199604	1
Caelo	Castor oil, hydrated	12114606	1
Caelo	Castor oil, hydrated	25011301	1
Caelo	Castor oil, hydrated	12114602	3
Caelo	Castor oil, hydrated	12114605	2
Caelo	Castor oil, hydrated	12114603	3
Caelo	Castor oil, hydrated	11359508	5
Caelo	Castor oil, hydrated	11359502	2
Caelo	Castor oil, hydrated	12071101	1
Caelo	Castor oil, hydrated	8061201	1
Caelo	Castor oil, hydrated	11359507	1
Caelo	Castor oil, hydrated	14101703	1
Caelo	Castor oil, hydrated	11260609	1
Caelo	Castor oil, hydrated	11359501	2
Caelo	Castor oil, hydrated	4101201	1
Caelo	Castor oil, hydrated	12042103	2
Caelo	Castor oil, hydrated	11260604	1
Caelo	Castor oil, hydrated	16071201	1
Caelo	Cayenne pepper tinctu...	11102419	1
Caelo	Cayenne pepper tinctu...	11102425	1
Caelo	Cayenne pepper tinctu...	13072013	1
Caelo	Cayenne pepper tinctu...	12207111	2
Caelo	Cinchona bark tinctur...	13069808	1
Caelo	Coal tar solution	14331506	1
Caelo	Coal tar solution	11319204	5
Caelo	Coal tar solution	27071207	1
Caelo	Coal tar solution	11319207	10
Caelo	Coal tar solution	113192017	1

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Supplier	Substance	Batch	Spectra
Caelo	Coal tar solution	15203704	1
Caelo	Coal tar solution	15203703	1
Caelo	Coal tar solution	11319203	1
Caelo	Coal tar solution	12286103	20
Caelo	Coal tar solution	14331509	1
Caelo	Coal tar solution	14331401	1
Caelo	Coal tar solution	90391069	2
Caelo	Coal tar solution	24131-01799	1
Caelo	Coal tar solution	14331402	1
Caelo	Coal tar solution	9345509	2
Caelo	Coal tar solution	9039201	1
Caelo	Coal tar solution	13193703	4
Caelo	Coal tar solution	11319209	1
Caelo	Coal tar solution	9345510	1
Caelo	Coal tar solution	13193713	2
Caelo	Coal tar solution	14331403	1
Caelo	Coal tar solution	9345406	1
Caelo	Coconut oil, hardened	11379510	2
Caelo	Coconut oil, hardened	613E-07004	1
Caelo	Coconut oil, hardened	11379517	1
Caelo	Coconut oil, hardened	11379511	1
Caelo	Comfrey root tincture...	12054016	1
Caelo	Comfrey root tincture...	12054012	2
Caelo	Comfrey root tincture...	12054008	1
Caelo	Comfrey root tincture...	11121314	2
Caelo	Comfrey tincture, cle...	4512E-02482	1
Caelo	Comfrey tincture, cle...	12177001	3
Caelo	Comfrey tincture, cle...	11121406	1
Caelo	Comfrey tincture, cle...	12177005	1
Caelo	Comfrey tincture, cle...	14298513	1
Caelo	Dimethyl isosorbide	16170902	12
Caelo	Food colorant blue (...)	12038601	1
Caelo	Food colorant blue (...)	12322306	1
Caelo	Food colorant blue (...)	13212405	1
Caelo	Food colorant green ...	13020105	1
Caelo	Food colorant red (E...	13020002	1
Caelo	Food colorant red (E...	13020005	1
Caelo	Food colorant red (E...	13020001	1
Caelo	Food colorant yellow...	12022212	1
Caelo	Food colorant yellow...	13075706	1
Caelo	Formic acid 85%	10343801	1
Caelo	Formic acid 85%	13373301	1
Caelo	Gentian tincture (70%...	11220504	1
Caelo	Gentian tincture (70%...	4109M-02442	1
Caelo	Gentian tincture (70%...	11220506	1
Caelo	Gentian tincture (70%...	13036405	1
Caelo	Gentian tincture (70%...	12035507	4
Caelo	Gentian tincture (70%...	300711	1
Caelo	Ginger tincture (70%)...	11323810	1
Caelo	Ginger tincture (70%)...	11053812	1
Caelo	Hawthorn tincture of ...	12211008	1
Caelo	Horse chestnut seed l...	11194611	2
Caelo	Horse chestnut seed l...	12293604	1
Caelo	Horse chestnut seed t...	12295308	1
Caelo	Hydrogen peroxide sol...	610093	1
Caelo	Hydrogen peroxide sol...	61010b	1
Caelo	Hydrogen peroxide sol...		1
Caelo	Hydrogen peroxide sol...	12091302	1
Caelo	Hydrophobic triclosan...	S0211201.1	1
Caelo	Hydrophobic triclosan...	S011503.1	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydrophobic triclosan...	2111310005	1
Caelo	Hydrophobic triclosan...	3131-07001	1
Caelo	Hydroxyethylcellulose...	13286101	6
Caelo	Hydroxyethylcellulose...	13190801	5
Caelo	Hydroxyethylcellulose...	15067801	1
Caelo	Hydroxyethylcellulose...	16127002	1
Caelo	Hydroxyethylcellulose...	12351501	2
Caelo	Hydroxyethylcellulose...	4091303	1
Caelo	Hydroxyethylcellulose...	1319401	1
Caelo	Hydroxyethylcellulose...	13190901	3
Caelo	Hydroxyethylcellulose...	30071301	1
Caelo	Hydroxyethylcellulose...	29061301	1
Caelo	Hydroxyethylcellulose...	12320602	1
Caelo	Hydroxyethylcellulose...	13084404	13
Caelo	Hydroxyethylcellulose...	6061308	1
Caelo	Hydroxyethylcellulose...	6061307	1
Caelo	Hydroxyethylcellulose...	15067901	1
Caelo	Hydroxyethylcellulose...	6121301	1
Caelo	Hydroxyethylcellulose...	13286201	5
Caelo	Hydroxyethylcellulose...	14200101	2
Caelo	Hydroxyethylcellulose...	13286401	1
Caelo	Hydroxyethylcellulose...	3286101	1
Caelo	Hydroxyethylcellulose...	11011402	1
Caelo	Hydroxyethylcellulose...	24011402	1
Caelo	Hydroxyethylcellulose...	21111304	1
Caelo	Hydroxyethylcellulose...	13286601	5
Caelo	Hydroxyethylcellulose...	14111308	1
Caelo	Hydroxyethylcellulose...	8101303	1
Caelo	Hydroxyethylcellulose...	14111307	1
Caelo	Hydroxyethylcellulose...	13393201	1
Caelo	Hydroxyethylcellulose...	13286801	2
Caelo	Hydroxyethylcellulose...	13393301	1
Caelo	Hydroxyethylcellulose...	14066401	2
Caelo	Hydroxyethylcellulose...	13190701	4
Caelo	Hydroxyethylcellulose...	15101311	1
Caelo	Hydroxyethylcellulose...	14066301	3
Caelo	Hydroxyethylcellulose...	13286301	3
Caelo	Hydroxyethylcellulose...	3786917	1
Caelo	Hydroxyethylcellulose...	17101201	1
Caelo	Hydroxyethylcellulose...	13009303	3
Caelo	Hydroxyethylcellulose...	13084403	10
Caelo	Hydroxyethylcellulose...	17101207	1
Caelo	Hydroxyethylcellulose...	17101206	1
Caelo	Hydroxyethylcellulose...	12219302	4
Caelo	Hydroxyethylcellulose...	12219501	5
Caelo	Hydroxyethylcellulose...	2101203	1
Caelo	Hydroxyethylcellulose...	2101201	1
Caelo	Hydroxyethylcellulose...	25091209	1
Caelo	Hydroxyethylcellulose...	12128202	2
Caelo	Hydroxyethylcellulose...	12128001	4
Caelo	Hydroxyethylcellulose...	12244002	4
Caelo	Hydroxyethylcellulose...	11341801	1
Caelo	Hydroxyethylcellulose...	14081203	1
Caelo	Hydroxyethylcellulose...	14081202	1
Caelo	Hydroxyethylcellulose...	11363401	1
Caelo	Hydroxyethylcellulose...	12071501	2
Caelo	Hydroxyethylcellulose...	12071701	2
Caelo	Hydroxyethylcellulose...	12071401	1
Caelo	Hydroxyethylcellulose...	22061204	1
Caelo	Hydroxyethylcellulose...	16061204	1

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Supplier	Substance	Batch	Spectra
Caelo	Hydroxyethylcellulose...	11341501	1
Caelo	Hydroxyethylcellulose...	11341701	1
Caelo	Hydroxyethylcellulose...	12128201	2
Caelo	Hydroxyethylcellulose...	12219201	4
Caelo	Hydroxyethylcellulose...	26101205	1
Caelo	Hydroxyethylcellulose...	20071204	1
Caelo	Hydroxyethylcellulose...	6051303	1
Caelo	Hydroxyethylcellulose...	13084402	12
Caelo	Hydroxyethylcellulose...	10111202	1
Caelo	Hydroxyethylcellulose...	12351502	3
Caelo	Hydroxyethylcellulose...	26031306	1
Caelo	Hydroxyethylcellulose...	13009301	4
Caelo	Hydroxyethylcellulose...	11264501	1
Caelo	Hydroxyethylcellulose...	13009501	10
Caelo	Hydroxyethylcellulose...	1219401	1
Caelo	Hydroxyethylcellulose...	29011301	1
Caelo	Hydroxyethylcellulose...	12320601	3
Caelo	Hydroxyethylcellulose...	21121201	1
Caelo	Hydroxyethylcellulose...	5121205	1
Caelo	Hydroxyethylcellulose...	12209201	1
Caelo	Hydroxyethylcellulose...	13021302	1
Caelo	Hydroxyethylcellulose...	23041305	1
Caelo	Iodine tincture	12285901	1
Caelo	Iodine tincture	5021402	1
Caelo	Iodine tincture	24011405	1
Caelo	Iodine tincture	12285902	1
Caelo	Iodine tincture	11303104	1
Caelo	Iodine tincture	2101302	1
Caelo	Iodine tincture	13193503	1
Caelo	Iodine tincture	28061302	1
Caelo	Iodine tincture	12285906	3
Caelo	Iodine tincture	13193501	1
Caelo	Iodine tincture	12285903	1
Caelo	Iodine tincture	14111309	1
Caelo	Iodine tincture	1071303	1
Caelo	Iodine tincture	13193502	1
Caelo	Iodine tincture	9356601	1
Caelo	Iodine tincture	5021308	1
Caelo	Lard	11263706	1
Caelo	Lard	11263707	1
Caelo	Lard	11263715	1
Caelo	Lard	11379605	2
Caelo	Lard	11263714	1
Caelo	Lard	11379606	1
Caelo	Lavender spirit	13300803	2
Caelo	Lavender spirit	13166502	1
Caelo	Lime water	13028602	1
Caelo	Macadamia oil, refined	14179304	2
Caelo	Macadamia oil, refined	13012106	1
Caelo	Macadamia oil, refined	13012104	1
Caelo	Marian thistle seed t...	13044304	1
Caelo	Marian thistle seed t...	12043822	1
Caelo	Marian thistle seed t...	11061110	1
Caelo	Matricaria flower tin...	9061201	1
Caelo	Matricaria flower tin...	11269905	1
Caelo	Matricaria flower tin...	24091208	1
Caelo	Matricaria flower tin...	13044206	1
Caelo	Matricaria flower tin...	3081201	1
Caelo	Matricaria flower tin...	11011303	1
Caelo	Matricaria flower tin...	3051310	1

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Supplier	Substance	Batch	Spectra
Caelo	Matricaria flower tin...	11269917	2
Caelo	Matricaria flower tin...	11269920	4
Caelo	Matricaria flower tin...	11269924	1
Caelo	Matricaria flower tin...	11269911	1
Caelo	Matricaria flower tin...	13142803	1
Caelo	Matricaria flower tin...	13044202	1
Caelo	Matricaria flower tin...	11011307	1
Caelo	Matricaria flower tin...	12111305	1
Caelo	Matricaria flower tin...	14078402	1
Caelo	Matricaria liquid ext...	10382713	1
Caelo	Matricaria liquid ext...	12360306	1
Caelo	Matricaria liquid ext...	12360310	3
Caelo	Matricaria liquid ext...	12254801	2
Caelo	Matricaria liquid ext...	11303606	2
Caelo	Matricaria liquid ext...	12360303	2
Caelo	Matricaria oil, fat	12189803	2
Caelo	Matricaria oil, fat	12372903	5
Caelo	Matricaria oil, fat	1218903	1
Caelo	Matricaria oil, fat	11261506	1
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...	3051307	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
Caelo	Myrrh tincture (90%) ...	614M2460	1
Caelo	Myrrh tincture (90%) ...	230312	1
Caelo	Myrrh tincture (90%) ...	13273302	8
Caelo	Myrrh tincture (90%) ...	13273303	4
Caelo	Myrrh tincture (90%) ...	13273404	1
Caelo	Myrrh tincture (90%) ...	13273308	4
Caelo	Myrrh tincture (90%) ...	45132U2460	1
Caelo	Myrrh tincture (90%) ...	12197303	15
Caelo	Myrrh tincture (90%) ...	13273301	5
Caelo	Myrrh tincture (90%) ...	12197305	7
Caelo	Myrrh tincture (90%) ...	20101012-1	1
Caelo	Myrrh tincture (90%) ...	2913M2460	1
Caelo	Myrrh tincture (90%) ...	12197112	2
Caelo	Myrrh tincture (90%) ...	12197205	4
Caelo	Myrrh tincture (90%) ...	2002312460	1
Caelo	Myrrh tincture (90%) ...	12197106	1
Caelo	Myrrh tincture (90%) ...	12197104	2
Caelo	Myrrh tincture (90%) ...	133273301	1
Caelo	Myrrh tincture (90%) ...	12197105	10
Caelo	Myrrh tincture (90%) ...	15110504	1
Caelo	Myrrh tincture (90%) ...	11260908	1
Caelo	Myrrh tincture (90%) ...	24081209	1
Caelo	Myrrh tincture (90%) ...	11019809	1
Caelo	Myrrh tincture (90%) ...	11260918	1
Caelo	Myrrh tincture (90%) ...	14244206	1
Caelo	Myrrh tincture (90%) ...	1910211095	1

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Supplier	Substance	Batch	Spectra
Caelo	Myrrh tincture (90%) ...	11260916	1
Caelo	Myrrh tincture (90%) ...	12197103	2
Caelo	Myrrh tincture (90%) ...	20111214	1
Caelo	Myrrh tincture (90%) ...	12197107	2
Caelo	Myrrh tincture (90%) ...	2704212460	1
Caelo	Myrrh tincture (90%) ...	11260909	3
Caelo	Myrrh tincture (90%) ...	11260914	3
Caelo	Myrrh tincture (90%) ...	3101212460	1
Caelo	Myrrh tincture (90%) ...	11019810	1
Caelo	Nettle root tincture ...	12341302	1
Caelo	Nettle root tincture ...	11187409	1
Caelo	Nettle tincture (70%)...	1108810	1
Caelo	Nettle tincture (70%)...	11108810	1
Caelo	Opium tincture, stand...	12380307	1
Caelo	Opium tincture, stand...	30031301	1
Caelo	Opium tincture, stand...	22031302	1
Caelo	Opium tincture, stand...	12380302	1
Caelo	Opium tincture, stand...	12162608	1
Caelo	Opium tincture, stand...	25071303	1
Caelo	Opium tincture, stand...	5005712	6
Caelo	Opium tincture, stand...	12162602	1
Caelo	Opium tincture, stand...	13144011	1
Caelo	Opium tincture, stand...	8061301	1
Caelo	Opium tincture, stand...	13144005	2
Caelo	Opium tincture, stand...	13144010	1
Caelo	Opium tincture, stand...	3071303	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...	13394902	1
Caelo	Opium tincture, stand...	14108504	1
Caelo	Opium tincture, stand...	14108510	1
Caelo	Opium tincture, stand...	6009916	1
Caelo	Opium tincture, stand...	13144004	1
Caelo	Orange flower oil, ar...		1
Caelo	Orange flower oil, ar...	13154801	1
Caelo	Orange flower oil, ar...	13121302	1
Caelo	Orange flower oil, ar...	11232005	3
Caelo	Orange flower oil, ar...	13154804	1
Caelo	Orange flower water	1339301	1
Caelo	Orange flower water	11327301	2
Caelo	Orange flower water	12328602	1
Caelo	Orange flower water	12328604	2
Caelo	Orange flower water	1235606	1
Caelo	Orange flower water	12359606	3
Caelo	Orange flower water	13057302	2
Caelo	Orange flower water	13096605	3
Caelo	Orange flower water	14156804	1
Caelo	Orange flower water	13339301	1
Caelo	Orange flower water	13339302	2
Caelo	Peanut oil, hydrated	10206801	2
Caelo	Peanut oil, hydrated	12298206	4
Caelo	Peanut oil, hydrated	11266904	1
Caelo	Peanut oil, hydrated	11300302	1
Caelo	Peanut oil, hydrated	12298203	1
Caelo	Peanut oil, hydrated	13172801	2
Caelo	Peanut oil, hydrated	13172803	4
Caelo	Peanut oil, hydrated	12298204	2

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Supplier	Substance	Batch	Spectra
Caelo	Peanut oil, hydrated	12298205	2
Caelo	Peppermint spirit 80.2%	12327202	2
Caelo	Peppermint spirit 80.2%	11185902	1
Caelo	Peppermint spirit 80.2%	11185901	1
Caelo	Peppermint spirit 80.2%	11339501	1
Caelo	Peppermint tincture (...)	24091206	1
Caelo	Peppermint tincture (...)	10106507	1
Caelo	Peppermint tincture (...)	9089504	1
Caelo	Peppermint tincture (...)	11207414	3
Caelo	Peppermint tincture (...)	12293409	1
Caelo	Peppermint tincture (...)	9089503	1
Caelo	Peru balsam, original	13196609	1
Caelo	Peru balsam, original	13196609	1
Caelo	Peru balsam, original	13196606	1
Caelo	Peru balsam, original	13196606	1
Caelo	Peru balsam, original	131966609	1
Caelo	Peru balsam, original	11025902	1
Caelo	Peru balsam, original	11150808	2
Caelo	Peru balsam, original	Retest	1
Caelo	Peru balsam, original	12020602	2
Caelo	Peru balsam, original	12020611	4
Caelo	Peru balsam, original	12302411	5
Caelo	Peru balsam, original	12302413	1
Caelo	Plantain herb liquid ...	13008706	1
Caelo	Plantain herb liquid ...	13008703	2
Caelo	Plantain herb liquid ...	11332621	1
Caelo	Propolis liquid extra. ...	12086105	1
Caelo	Propolis liquid extra. ...	12086101	1
Caelo	Propolis liquid extra. ...	12086102	1
Caelo	Propolis liquid extra. ...	12086115	1
Caelo	Propolis liquid extra. ...	12086113	1
Caelo	Propolis liquid extra. ...	13347613	1
Caelo	Propolis liquid extra. ...	14377408	1
Caelo	Propolis liquid extra. ...	14377411	1
Caelo	Propolis liquid extra. ...	13347601	1
Caelo	Propolis tincture (96%)	12206322	1
Caelo	Propolis tincture (96%)	11269521	1
Caelo	Propolis tincture (96%)	10305414	1
Caelo	Propolis tincture (96%)	11269516	1
Caelo	Propolis tincture (96%)	11269511	1
Caelo	Ratanhia tincture (70. ...)	14101305	1
Caelo	Ratanhia tincture (70. ...)	13051206	3
Caelo	Ratanhia tincture (70. ...)	13051205	1
Caelo	Ratanhia tincture (70. ...)	CH: 008/0913	1
Caelo	Ratanhia tincture (70. ...)	12255403	2
Caelo	Ratanhia tincture (70. ...)	12255401	5
Caelo	Ratanhia tincture (70. ...)	11292802	4
Caelo	Ratanhia tincture (70. ...)	11204310	1
Caelo	Rose water	13306604	8
Caelo	Rose water	11355401	1
Caelo	Rose water	12185405	3
Caelo	Rose water	12123203	1
Caelo	Rose water	11286005	1
Caelo	Rose water	12299802	6
Caelo	Rose water	12288903	7
Caelo	Rose water	12299801	2
Caelo	Rose water	1021301	1
Caelo	Rose water	15253701	1
Caelo	Rose water	13343604	2
Caelo	Rose water	12288902	2

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Supplier	Substance	Batch	Spectra
Caelo	Rose water	13137305	6
Caelo	Rose water	13306603	5
Caelo	Rose water	31101305	1
Caelo	Rose water	13137303	1
Caelo	Rose water	12342406	2
Caelo	Rose water	13255902	3
Caelo	Rose water	13137302	2
Caelo	Rose water	12342407	2
Caelo	Rose water	1317302	1
Caelo	Rose water	12342405	1
Caelo	Rose water	12342402	1
Caelo	Rose water	12342401	2
Caelo	Rose water	12342404	1
Caelo	Rose water	1234201	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...	4111M-02476	1
Caelo	Sage tincture (70%) 1...	1120910	1
Caelo	Sage tincture (70%) 1...	13125509	1
Caelo	Sage tincture (70%) 1...	12196609	3
Caelo	Sage tincture (70%) 1...	12196607	2
Caelo	Sage tincture (70%) 1...	11220911	1
Caelo	Sage tincture (70%) 1...	11220909	1
Caelo	Sage tincture (70%) 1...	11220910	1
Caelo	Sage tincture (70%) 1...	14078111	1
Caelo	Sage tincture (70%) 1...	1219661	1
Caelo	Sage tincture (70%) 1...	15081804	1
Caelo	Sage tincture (70%) 1...	13125513	3
Caelo	Sage tincture (70%) 1...	12196602	6
Caelo	Sage tincture (70%) 1...	1120912	1
Caelo	Sage tincture (70%) 1...	9345011	1
Caelo	Sage tincture (70%) 1...	27111308	1
Caelo	Sage tincture (70%) 1...	13125504	1
Caelo	Sage tincture (70%) 1...	12196612	3
Caelo	Sage tincture (70%) 1...	13125505	1
Caelo	Sage tincture (70%) 1...	13125503	3
Caelo	Sage tincture (70%) 1...	12196611	7
Caelo	Siam benzoin tincture...	1228119	1
Caelo	Sodium lactate soluti...	131000701	1
Caelo	Spearmint water	13184503	1
Caelo	St. John's wort oil	13065104	5
Caelo	St. John's wort oil	12293918	4
Caelo	St. John's wort oil	13065105	9
Caelo	St. John's wort oil	12292904	1
Caelo	St. John's wort oil	13155802	3
Caelo	St. John's wort oil	12293903	1
Caelo	St. John's wort oil	5346791	1
Caelo	St. John's wort oil	13065106	3
Caelo	St. John's wort oil	13155803	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	13155804	8
Caelo	St. John's wort oil	12293919	2

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Supplier	Substance	Batch	Spectra
Caelo	St. John's wort oil	12076904	1
Caelo	St. John's wort oil	12193404	1
Caelo	St. John's wort oil	10380614	1
Caelo	St. John's wort oil	2061205	1
Caelo	St. John's wort oil	2071201	1
Caelo	St. John's wort oil	11372102	2
Caelo	St. John's wort oil	11205309	5
Caelo	St. John's wort oil	28091204	1
Caelo	St. John's wort oil	12076905	2
Caelo	St. John's wort oil	11372104	4
Caelo	St. John's wort oil	12076912	2
Caelo	St. John's wort oil	1501302	1
Caelo	St. John's wort oil	12293911	7
Caelo	St. John's wort oil	12293917	4
Caelo	St. John's wort oil	12076913	7
Caelo	St. John's wort oil	12293902	1
Caelo	St. John's wort tinct...	12237708	1
Caelo	St. John's wort tinct...	11091303	1
Caelo	St. John's wort tinct...	12237709	1
Caelo	St. John's wort tinct...	11195216	2
Caelo	St. John's wort tinct...	11195217	1
Caelo	St. John's wort tinct...	11195213	1
Caelo	St. John's wort tinct...	122377006	1
Caelo	St. John's wort tinct...	12237706	1
Caelo	Standardised cayenne ...	12053902	2
Caelo	Texapon [®] CS paste	16268904	1
Caelo	Texapon [®] CS paste	12292006	1
Caelo	Texapon [®] CS paste	12292007	1
Caelo	Texapon [®] CS paste	15177804	2
Caelo	Texapon [®] CS paste	16268903	1
Caelo	Texapon [®] CS paste	1577804	1
Caelo	Texapon [®] CS paste	16268907	2
Caelo	Texapon [®] CS paste	16268909	2
Caelo	Theriac	12067207	2
Caelo	Theriac	13187201	3
Caelo	Theriac	11121203	1
Caelo	Theriac	1121206	1
Caelo	Theriac	12067205	1
Caelo	Theriac	12067201	2
Caelo	Theriac	12067214	1
Caelo	Thyme liquid extract	12072102	2
Caelo	Thyme liquid extract	13036502	2
Caelo	Thyme liquid extract	13036516	1
Caelo	Thyme liquid extract	100312	1
Caelo	Thyme liquid extract	11090508	1
Caelo	Thyme liquid extract	1313M-01420	1
Caelo	Thyme tincture (70%) ...	18101304	1
Caelo	Thyme tincture (70%) ...	10043113	1
Caelo	Thyme tincture (70%) ...	21031311	1
Caelo	Tormentil tincture (7...	614M2484	1
Caelo	Tormentil tincture (7...	11061207	1
Caelo	Tormentil tincture (7...	3101212484	1
Caelo	Tormentil tincture (7...	11278310	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...	13003002	2
Caelo	Tormentil tincture (7...	2103312484	1
Caelo	Tormentil tincture (7...	13003010	2

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Supplier	Substance	Batch	Spectra
Caelo	Tormentil tincture (7...	13003012	5
Caelo	Tormentil tincture (7...	13003003	1
Caelo	Tormentil tincture (7...	13003009	3
Caelo	Tormentil tincture (7...	3713Q2484	1
Caelo	Tormentil tincture (7...	13003008	1
Caelo	Tormentil tincture (7...	13263007	1
Caelo	Tormentil tincture (7...	13263004	1
Caelo	Tormentil tincture (7...	13263003	1
Caelo	Tormentil tincture (7...	13003018	3
Caelo	Tretinoin solution 3...	11K09-N-03	1
Caelo	Triamcinolone acetoni...	12301201	2
Caelo	Triamcinolone acetoni...	13184701	6
Caelo	Triamcinolone acetoni...	13275801	4
Caelo	Triamcinolone acetoni...	1332501	1
Caelo	Valerian tincture (70...	12294008	2
Caelo	Valerian tincture (70...	16030101	1
Caelo	Valerian tincture (70...	11187103	1
Caelo	Valerian tincture (70...	12113002	1
Caelo	Valerian tincture (70...	12030902	2
Caelo	Valerian tincture (70...	12196204	4
Caelo	Valerian tincture (70...	12030904	1
Caelo	Valerian tincture (70...	6099.99.99	1
Caelo	Valerian tincture (70...	12196210	2
Caelo	Valerian tincture (70...	12113004	3
Caelo	Valerian tincture (70...	12030908	1
Caelo	Valerian tincture (70...	12196203	1
Caelo	Valerian tincture (70...	11379203	1
Caelo	Valerian tincture (70...	11011308	1
Caelo	Valerian tincture (70...	11379204	1
Caelo	Valerian tincture (70...	14353011	1
Caelo	Valerian tincture (70...	11379201	3
Caelo	Valerian tincture (70...	12294002	3
Caelo	Valerian tincture (70...	13094505	7
Caelo	Valerian tincture (70...	13094503	2
Caelo	Valerian tincture (70...	12113005	1
Caelo	Valerian tincture (70...	1309505	1
Caelo	Valerian tincture (70...	13094507	5
Caelo	Valerian tincture (70...	11254309	1
Caelo	Valerian tincture (70...	13184905	4
Caelo	Valerian tincture (70...	13003205	1
Caelo	Valerian tincture (70...	13094505-3380319003	1
Caelo	Valerian tincture (70...	13052601	1
Caelo	Valerian tincture (70...	18101302	1
Caelo	Valerian tincture (70...	13003206	6
Caelo	Valerian tincture (70...	8011423	1
Caelo	Valerian tincture (70...	13349203	1
Caelo	Valerian tincture (70...	13094506	2
Caelo	Valerian tincture (70...	12294007	4
Caelo	Vitamin A-palmitate (...)	13296208	1
Caelo	Vitamin A-palmitate (...)	13296206	1
Caelo	Vitamin A-palmitate (...)	1117801	1
Caelo	Vitamin A-palmitate (...)	12132902	2
Caelo	Vitamin A-palmitate (...)	10316605	1
Caelo	Vitamin A-palmitate (...)	130577002	1
Caelo	Vitamin A-palmitate (...)	12132910	4
Caelo	Vitamin A-palmitate (...)	13057003	1
Caelo	Vitamin A-palmitate (...)	12132910	2
Caelo	Vitamin A-palmitate (...)	13057002	4
Caelo	Vitamin A-palmitate (...)	12132906	1
Caelo	Vitamin A-palmitate (...)	3815926	1

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Supplier	Substance	Batch	Spectra
Caelo	Vitamin A-palmitate (...)	1013Q-02565	1
Caelo	Vitamin A-palmitate (...)	13057002	1
Caelo	Vitamin A-palmitate (...)	11178101	1
Caelo	Vitamin A-palmitate (...)	12132906	1
Caelo	Vitamin A-palmitate (...)	12132904	2
Caelo	Vitamin A-palmitate (...)	120404301	1
Caelo	Vitamin A-palmitate (...)	11178109	1
Caelo	Witch hazel bark liqu...	11165605	1
Caelo	Witch hazel bark liqu...	13044104	1
Caelo	Witch hazel bark liqu...	13044106	1
Caelo	Witch hazel bark liqu...	11165602	1
Caelo	Witch hazel bark liqu...	13044102	3
Caelo	Witch hazel bark water	12376905	2
Caelo	Witch hazel bark water	12196905	3
Caelo	Witch hazel bark water	12196906	4
Caelo	Witch hazel bark water	15430206	1
Caelo	Witch hazel bark water	14093309	2
Caelo	Witch hazel bark water	14093305	2
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	12376901	3
Caelo	Witch hazel bark water	13324401	1
Caelo	Witch hazel bark water	12376907	9
Caelo	Witch hazel bark water	12376912Caelo	1
Caelo	Witch hazel bark water	13324403	7
Caelo	Witch hazel bark water	12376918	3
Caelo	Witch hazel bark water	12376912	2
Caelo	Witch hazel bark water	12376909	3
Caelo	Witch hazel bark water	12376906	2
Caelo	Witch hazel bark water	12359605	1
Caelo	Witch hazel bark water	13324411	1
Caelo	Witch hazel bark water	11238904	1
Caelo	Witch hazel bark water	11238906	3
Caelo	Witch hazel leaf liqu...	15397406	1
Caelo	Witch hazel leaf liqu...	14112302	1
Caelo	Witch hazel leaf liqu...	16071401	1
Caelo	Witch hazel leaf liqu...	27081303	1
Caelo	Witch hazel leaf liqu...	31031404	1
Caelo	Witch hazel leaf liqu...	12165010	1
Caelo	Witch hazel leaf liqu...	11060505	1
Caelo	Wormwood tincture (70...	12237905	4
Caelo	Wormwood tincture (70...	12237907	1
Caelo	Wormwood tincture (70...	10260210	2
Caelo	Wormwood tincture (70...	12237902	1
Caelo	Wormwood tincture (70...	12237901	1
Caelo	Wormwood tincture (70...	92780419	1
Caelo	Wormwood tincture (70...	11145005	1
Caelo	Zinc ointment DAB	13257003	1
Caelo	Zinc ointment DAB	12042502	1
Caelo	Zinc ointment DAB	13072702	1
Caelo	Zinc ointment DAB	12101302	1
Caelo	Zinc ointment DAB	13393903	1
Caelo	Zinc ointment DAB	11367501	3
Caelo	Zinc ointment DAB	20270912-5	1
Caelo	Zinc ointment DAB	13257001	9
Caelo	Zinc ointment DAB	12042503	3
Caelo	Zinc ointment DAB	16101202	1
Caelo	Zinc ointment DAB	12343602	9
Caelo	Zinc ointment DAB	11271001	1

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Supplier	Substance	Batch	Spectra
Caelo	Zinc ointment DAB	7031303	1
Caelo	Zinc ointment DAB	12098402	4
Caelo	Zinc ointment DAB	1234602	1
Caelo	Zinc oxide cream 25% ...	279250	2
Caelo	Zinc oxide cream 25% ...	2795250	1
Caelo	Zinc oxide cream 25% ...	13A040912	3
Caelo	Zinc oxide lotion, aq...	15273502	2
Caelo	Zinc oxide lotion, aq...	13139302	5
Caelo	Zinc oxide lotion, aq...	13139402	12
Caelo	Zinc oxide lotion, aq...	1109779	1
Caelo	Zinc oxide lotion, aq...	24101311	1
Caelo	Zinc oxide lotion, aq...	13283002	6
Caelo	Zinc oxide lotion, aq...	16003202	1
Caelo	Zinc oxide lotion, aq...	14275002	1
Caelo	Zinc oxide lotion, aq...	13282701	1
Caelo	Zinc oxide lotion, aq...	12111306	1
Caelo	Zinc oxide lotion, aq...	13282901	16
Caelo	Zinc oxide lotion, aq...	13282801	5
Caelo	Zinc oxide lotion, aq...	132801	1
Caelo	Zinc oxide lotion, aq...	20122013F	1
Caelo	Zinc oxide lotion, aq...	15003201	1
Caelo	Zinc oxide lotion, aq...	13283103	1
Caelo	Zinc oxide lotion, aq...	15061201	1
Caelo	Zinc oxide lotion, aq...	13283001	3
Caelo	Zinc oxide lotion, aq...	14010501	3
Caelo	Zinc oxide lotion, aq...	14010602	1
Caelo	Zinc oxide lotion, aq...	14010502	1
Caelo	Zinc oxide lotion, aq...	14116701	1
Caelo	Zinc oxide lotion, aq...	15154301	1
Caelo	Zinc oxide lotion, aq...	38112A-01815	1
Caelo	Zinc oxide lotion, aq...	24122013A	1
Caelo	Zinc oxide lotion, aq...	2713M1815	1
Caelo	Zinc oxide lotion, aq...	13139601	23
Caelo	Zinc oxide lotion, aq...	28121204	1
Caelo	Zinc oxide lotion, aq...	12211802	4
Caelo	Zinc oxide lotion, aq...	12197103	1
Caelo	Zinc oxide lotion, aq...	4121204	1
Caelo	Zinc oxide lotion, aq...	711217039	1
Caelo	Zinc oxide lotion, aq...	12211701	14
Caelo	Zinc oxide lotion, aq...	12211501	8
Caelo	Zinc oxide lotion, aq...	20310812-3	1
Caelo	Zinc oxide lotion, aq...	12211401	6
Caelo	Zinc oxide lotion, aq...	12065203	1
Caelo	Zinc oxide lotion, aq...	11329903	2
Caelo	Zinc oxide lotion, aq...	12065301	8
Caelo	Zinc oxide lotion, aq...	11329902	1
Caelo	Zinc oxide lotion, aq...	3101217039	1
Caelo	Zinc oxide lotion, aq...	11184601	1
Caelo	Zinc oxide lotion, aq...	10082601	1
Caelo	Zinc oxide lotion, aq...	12065401	1
Caelo	Zinc oxide lotion, aq...	1319601	2
Caelo	Zinc oxide lotion, aq...	12309701	4
Caelo	Zinc oxide lotion, aq...	12309802	10
Caelo	Zinc oxide lotion, aq...	13087701	18
Caelo	Zinc oxide lotion, aq...	11281401	1
Caelo	Zinc oxide lotion, aq...	11071303	1
Caelo	Zinc oxide lotion, aq...	11281301	1
Caelo	Zinc oxide lotion, aq...	13087501	12
Caelo	Zinc oxide lotion, aq...	13024401	5
Caelo	Zinc oxide lotion, aq...	13139301	16

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Supplier	Substance	Batch	Spectra
Caelo	Zinc oxide lotion, aq. ...	12307902	1
Caelo	Zinc oxide lotion, aq. ...	13087601	20
Caelo	Zinc oxide lotion, aq. ...	13018803	5
Caelo	Zinc oxide lotion, aq. ...	19041309	1
Caelo	Zinc oxide lotion, aq. ...	112814101	1
Caelo	Zinc oxide lotion, aq. ...	1013I-01815	1
Caelo	Zinc oxide lotion, aq. ...	13018801	7
Caelo	Zinc oxide lotion, aq. ...	1230951	1
Caelo	Zinc oxide lotion, aq. ...	12309702	5
Caelo	Zinc oxide lotion, aq. ...	6061301	1
Caelo	Zinc oxide lotion, aq. ...	16003302	1
Caelo	Zinc oxide lotion, aq. ...	13283101	9
Caelo	Zinc oxide oil DAC	12289801	1
Caelo	Zinc oxide oil DAC	12160002	1
Caelo	Zinc oxide oil DAC	15170902	1
Caelo	Zinc oxide oil DAC	13307202	1
Caelo	Zinc oxide oil DAC	12128602	1
Caelo	Zinc oxide oil DAC	3112M-02026	1
Caelo	Zinc oxide oil DAC	13196501	2
Caelo	Zinc oxide oil DAC	13069701	13
Caelo	Zinc oxide oil DAC	12004701	2
Caelo	Zinc oxide oil DAC	12004601	2
Caelo	Zinc oxide oil DAC	14032701	2
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	12160101	1
Caelo	Zinc oxide paste SR90	Test2	1
Caelo	Zinc oxide paste SR90	244154	1
Caelo	Zinc oxide paste SR90	271195	1
Caelo	Zinc oxide paste, sof. ...	12366801	1
Caelo	Zinc oxide shaking mi. ...	13244001	1
Caelo	Zinc oxide shaking mi. ...	12261701	1
Caelo	Zinc oxide shaking mi. ...	13080201	3
Caelo	Zinc oxide shaking mi. ...	1308021	1
Caelo	Zinc oxide shaking mi. ...	1324401	1
Caelo	Zinc paste DAB	903312054	1
Caelo	Zinc paste DAB	12206401	3
Caelo	Zinc paste DAB	12271702	9
Caelo	Zinc paste DAB	20021310	1
Caelo	Zinc paste DAB	14201201	1
Caelo	Zinc paste DAB	11290801	2
Caelo	Zinc paste DAB	31051302	1
Caelo	Zinc paste DAB	13043401	18
Caelo	Zinc paste DAB	11321701	3
Caelo	Zinc paste DAB	12271601	8
Caelo	Zinc paste DAB	12147801	11
Caelo	Zinc paste DAB	14293302	1
Caelo	Zinc paste DAB	16013302	1
Caelo	Zinc paste DAB	16068501	1
Caelo	Zinc paste DAB	11290901	1
Caelo	Zinc paste DAB	12206501	8
Caelo	Zinc paste DAB	12066102	1
Caelo	Zinc paste DAB	10345201	3
Caelo	Zinc paste DAB	11364102	3
Caelo	Zinc paste DAB	13043301	4
Caelo	Zinc paste DAB	20271012-1	1
Caelo	Zinc paste DAB	13201801	21
Caelo	Zinc paste DAB	10245901	2
Caelo	Zinc paste DAB	12262301	2

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Supplier	Substance	Batch	Spectra
Caelo	Zinc paste DAB	14092301	1
Caelo	Zinc paste DAB	13201701	1
Caelo	Zinc paste DAB	11321702	1
Caelo	Zinc paste DAB	13345202	1
Caelo	Zinc paste DAB	13201201	1
Caelo	Zinc paste DAB	15121-02054	1
Caelo	Zinc paste DAB	14011402	1
Caelo	Zinc paste DAB	1321903	1
Caelo	Zinc paste, soft DAB	12271401	10
Caelo	Zinc paste, soft DAB	13316601	6
Caelo	Zinc paste, soft DAB	6021305	1
Caelo	Zinc paste, soft DAB	13316401	6
Caelo	Zinc paste, soft DAB	14111313	1
Caelo	Zinc paste, soft DAB	13088901	12
Caelo	Zinc paste, soft DAB	12308307	1
Caelo	Zinc paste, soft DAB	13316701	1
Caelo	Zinc paste, soft DAB	414U-02055	1
Caelo	Zinc paste, soft DAB	12206201	1
Caelo	Zinc paste, soft DAB	12207801	1
Caelo	Zinc paste, soft DAB	13388001	3
Caelo	Zinc paste, soft DAB	16042101	1
Caelo	Zinc paste, soft DAB	12207901	7
Caelo	Zinc paste, soft DAB	12271301	4
Caelo	Zinc paste, soft DAB	11269701	2
Caelo	Zinc paste, soft DAB	12208201	7
Caelo	Zinc paste, soft DAB	16121901	1
Caelo	Zinc paste, soft DAB	12208001	7
Caelo	Zinc paste, soft DAB	12208101	5
Caelo	Zinc paste, soft DAB	213E-02055	1
Caelo	Zinc paste, soft DAB	14023401	1
Caelo	Zinc paste, soft DAB	12271501	10
Caelo	Zinc paste, soft DAB	13387801	5
Caelo	Zinc paste, soft DAB	14173001	2
Caelo	Zinc paste, soft DAB	13203701	2
Caelo	Zinc paste, soft DAB	13316301	23
Caelo	Zinc paste, soft DAB	14172901	1
Caelo	Zinc paste, soft DAB	14181702	1
Caelo	Zinc paste, soft DAB	15073001	1
Caelo	Zinc paste, soft DAB	63075606	1
Caelo	Zinc paste, soft DAB	14296301	1
Caelo	Zinc paste, soft DAB	15005202	1
Caelo	Zinc paste, soft DAB	208212055	1
Caelo	Zinc paste, soft DAB	11338401	1
Caelo	Zinc paste, soft DAB	8081301	1
Caelo	Zinc paste, soft DAB	15072701	3
Caelo	Zinc paste, soft DAB	2101212055	1
Caelo	Zinc paste, soft DAB	13203501	12
Caelo	Zinc paste, soft DAB	3413E-02055	1
Caelo	Zinc paste, soft DAB	1212601	1
Caelo	Zinc paste, soft DAB	11099003	1
Caelo	Zinc paste, soft DAB	70913WZP	1
Caelo	Zinc paste, soft DAB	15072901	1
Caelo	Zinc paste, soft DAB	13089101	5
Caelo	Zinc paste, soft DAB	13203301	15
Caelo	Zinc paste, soft DAB	13088/01	1
Caelo	Zinc paste, soft DAB	16001201	3
Caelo	Zinc paste, soft DAB	13088602	1
Caelo	Zinc paste, soft DAB		2
Caelo	Zinc paste, soft DAB	17111203	1
Caelo	Zinc paste, soft DAB	13203401	11

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Supplier	Substance	Batch	Spectra
Caelo	Zinc paste, soft DAB	13089001	13
Caelo	Zinc paste, soft DAB	1601312055	1
Caelo	Zinc paste, soft DAB	12366703	1
Caelo	Zinc paste, soft DAB	13027001	8
Caelo	Zinc paste, soft DAB	12068701	4
Caelo	Zinc paste, soft DAB	13026702	4
Caelo	Zinc paste, soft DAB	28031401	1
Caelo	Zinc paste, soft DAB	12121601	9
Caelo	Zinc paste, soft DAB	1268901	1
Caelo	Zinc paste, soft DAB	12366801	11
Caelo	Zinc paste, soft DAB	13036901	1
Caelo	Zinc paste, soft DAB	13026801	7
Caelo	Zinc paste, soft DAB	711212055	1
Caelo	Zinc paste, soft DAB	1403212055	1
Caelo	Zinc paste, soft DAB	11338501	2
Caelo	Zinc paste, soft DAB	12069001	4
Caelo	Zinc paste, soft DAB	2713E2055	1
Caelo	Zinc paste, soft DAB	13026901	20
Caelo	Zinc paste, soft DAB	12068901	2
Caelo	Zinc paste, soft DAB	11338001	1
Caelo	Zinc paste, soft DAB	1417601	1
Caelo	Zinc paste, soft DAB	5316600	4
Caelo	Zinc paste, soft DAB	13004101	1
Caelo	Zinc paste, soft DAB	11061301	1
Caelo	Zinc paste, soft DAB	14173201	1
Caelo	Zinc paste, soft DAB	12121302	2
Caelo	Zinc paste, soft DAB	1212401	1
Caelo	Zinc paste, soft DAB	13088701	22
Caelo	Zinc paste, soft DAB	14023701	3
Caelo	Zinc paste, soft DAB	14023801	1
Caelo	Zinc paste, soft DAB	14023601	1
Caelo	Zinc paste, soft DAB	11202101	1
Caelo	Zinc paste, soft DAB	14117801	1
Caelo	Zinc paste, soft DAB	12366701	10
Caelo	Zinc paste, soft DRF ...	12160302	1
Caelo	Zinc paste, soft DRF ...	12378402	1
Caelo	Zinc paste, soft DRF ...	13094201	2
Caesar & Lorenz	Matricaria oil, fat	13204304	2
Caesar & Loretz	Plantain herb liquid ...	13008704	1
Caesar & Loretz	Thyme liquid extract	12197005	2
Caesar & Loretz GmbH	Coal tar solution	72816068	1
Caesar & Loretz GmbH	Hydrophobic triclosan...	S041303.1	3
Caesar & Loretz GmbH	Vitamin A-palmitate (...)	10316605	1
Caesar & Loretz GmbH	Zinc oxide lotion, aq...	13405901	4
Caesar & Loretz GmbH	Zinc oxide lotion, aq...	12309501	29
Caesar & Loretz GmbH	Zinc paste DAB	281972	1
Caesar & Loretz GmbH ...	Zinc paste, soft DAB	11269601	2
Caesar & Loretz GmbH,...	Benzalkonium chloride	12033407	2
Caesar & Loretz/ Noweda	Hydroxyethylcellulose...	5B150213	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332611	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332613	2
Caesar & Loretz/ Noweda	Plantain herb liquid ...	13008708	2
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332620	1
Caesar & Loretz/ Noweda	Plantain herb liquid ...	11332616	1
Caesar § Lorenz GmbH	Aloe vera oil	12383707	1
Caesar u Loretz	Calendula oil, fat	13251004	1
Caesar&Loretz GmbH/An...	Peppermint spirit 80.2%	13252802	1
Caesar&lorenz,Phoenix	Gentian tincture (70%...	13036409	2
Caesar&lorenz,Phoenix	Lard	11095310	1
Caesar/Lorenz	Propolis tincture (96%)	12206319	1

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Supplier	Substance	Batch	Spectra
Caesar/Noweda	Gentian tincture (70%...	13036408	1
Caesar/Noweda	Myrrh tincture (90%) ...	12197204	2
Caesar/Noweda	Ratanhia tincture (70...	13051210	1
Calo	Zinc oxide lotion, aq...	14211601	1
Cealo / Noweda	Coconut oil, hardened	13010808	1
Cheplapharm Arzneimit...	Valerian tincture (70...	70713	1
Defektur	Hydrophilic metronida...	4612E-03387	1
Defektur	Hydrophilic metronida...	3512L-07001	1
Defektur	Hydrophilic metronida...	813A-07001	1
Defektur	Hydrophilic metronida...	3712Q-07001	1
Defektur	Hydrophilic metronida...	4012A-07001	1
Defektur	Hydrophilic metronida...	4112E-07001	1
Defektur	Hydrophilic metronida...	4812E-07001	1
Defektur	Hydrophilic metronida...	4912Q-07001	1
Defektur	Hydrophilic metronida...	1813E-07001	1
Defektur	Hydrophilic metronida...	2713E-07001	1
Defektur	Hydrophilic metronida...	3412M-07001	1
Defektur	Hydrophilic metronida...	3212M-03387	1
Defektur	Hydrophilic metronida...	2513q-07001	1
Defektur	Hydrophilic metronida...	1913A-07001	1
Defektur	Hydrophilic metronida...	1613a-07001	1
Defektur	Hydrophilic metronida...	1813Q-07001	1
Defektur	Oxytetracycline ointm...	50/13	1
Defektur	Oxytetracycline ointm...	25/13	1
Defektur	Oxytetracycline ointm...	41/13	1
Defektur	Oxytetracycline ointm...	43/13	1
Defektur	Oxytetracycline ointm...	55/12	1
Defektur	Oxytetracycline ointm...	49/12	1
Defektur	Oxytetracycline ointm...	12/13	1
Defektur	Oxytetracycline ointm...	8/13	1
Defektur	Triamcinolone acetoni...	3813Q	1
Defektur	Triamcinolone acetoni...	4213E	1
Defektur	Triamcinolone acetoni...	4713A	1
Defektur	Triamcinolone acetoni...	4913Q	1
Defektur	Zinc paste, soft DAB	54/12	1
Defektur	Zinc paste, soft DAB	56/13	1
Defektur	Zinc paste, soft DAB	11/13	1
Defektur	Zinc paste, soft DAB	32/13	1
dhu	Lavender spirit	1041012	4
Eigenherstellung	Hydrophilic metronida...	912Q-07001	1
Eigenherstellung	Opium tincture, stand...	70613PML01	2
Eigenherstellung	Vitamin F liposomes	AP307176FL	1
EuRho	Castor oil, hydrated	1212008-01	1
EuRho	Valerian tincture (70...	1301003-01	1
Euro OTC	Arnica tincture (70%)...	1211003-01	2
Euro OTC	Arnica tincture (70%)...	1306038-01	1
Euro OTC	Arnica tincture (70%)...	1112029-01	1
Euro OTC	Arnica tincture (70%)...	1204046-01	3
Euro OTC	Camphor oil 10%	15338204	2
Euro OTC	Castor oil, hydrated	120204-01	1
Euro OTC	Castor oil, hydrated	1109001-01	1
Euro OTC	Castor oil, hydrated	1206039-01	2
Euro OTC	Castor oil, hydrated	1910212009	1
Euro OTC	Castor oil, hydrated	1206039-02	2
Euro OTC	Castor oil, hydrated	1202041-02	1
Euro OTC	Castor oil, hydrated	1512212009	1
Euro OTC	Castor oil, hydrated	2507213553	1
Euro OTC	Castor oil, hydrated	1112002-02	1
Euro OTC	Coal tar solution	1110031	2
Euro OTC	Coal tar solution	1110031-01	6

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Supplier	Substance	Batch	Spectra
Euro OTC	Coal tar solution	1110031-02	6
Euro OTC	Coal tar solution	1307027-01	2
Euro OTC	Sodium lactate soluti...	1310007-01	27
Euro OTC	Sodium lactate soluti...	1212004-01	2
Euro OTC	Valerian tincture (70...	1304041-01	1
Euro OTC	Vitamin A-palmitate (...)	1204043-01	4
Euro OTC	Vitamin A-palmitate (...)	1305003-01-342631115	1
Euro OTC	Vitamin A-palmitate (...)	1310030-01	1
Euro OTC	Vitamin A-palmitate (...)	1305003-01	3
Euro OTC	Vitamin A-palmitate (...)	1211032-01	3
Euro OTC	Zinc paste, soft DAB	1211014-01	7
Euro OTC	Zinc paste, soft DAB	1009043-01	3
Euro OTC	Zinc paste, soft DAB	1108059-01	4
Euro OTC	Zinc paste, soft DAB	214I-02055	1
Euro OTC	Zinc paste, soft DAB	1310019-01	2
Euro OTC	Zinc paste, soft DAB	13211014-01	1
Euro OTC	Zinc paste, soft DAB	121014-01	1
EUro/AHD	Vitamin A-palmitate (...)	1211032-01	2
Fagron	Carbomer gel 1%	1309D001	1
Fagron	Carbomer gel 1%	1309D002	1
Fagron	Carbomer gel 1%	1211D010	2
Fagron	Carbomer gel 1%	1302D002	7
Fagron	Castor oil, hydrated	10L02-N03	1
Fagron	Coal tar solution	18061301	1
Fagron	Coal tar solution	2011.07.0288	2
Fagron	Coal tar solution	20230712-6	1
Fagron	Coal tar solution	12E08-N01	3
Fagron	Coal tar solution	12E08-N08	1
Fagron	Coal tar solution	13H06-N02	9
Fagron	Coal tar solution	12H28-N05	1
Fagron	Coal tar solution	16102013B	1
Fagron	Coal tar solution	4513E1799	1
Fagron	Coal tar solution	13I26-N02	1
Fagron	Coal tar solution	11F21-N01	3
Fagron	Coal tar solution	13H06N02	1
Fagron	Coal tar solution	12L05-N02	3
Fagron	Coal tar solution	11/05-N12	1
Fagron	Hydrogen peroxide sol...	13G09-M07	1
Fagron	Hydrogen peroxide sol...	13A02-M13	1
Fagron	Hydrogen peroxide sol...	13D05-M04	1
Fagron	Hydrogen peroxide sol...	12I06-M05	1
Fagron	Hydrogen peroxide sol...	13A02-M10	1
Fagron	Hydrogen peroxide sol...	13G09-M03	1
Fagron	Hydrogen peroxide sol...	13K07-M04	1
Fagron	Hydrogen peroxide sol...	13G12-M09	1
Fagron	Hydrogen peroxide sol...	13G12-M06	1
Fagron	Hydroxyethylcellulose...	13009401	3
Fagron	Hydroxyethylcellulose...	12351401	1
Fagron	Iodine tincture	11309402	1
Fagron	Opium tincture, stand...	9006012/Maros	1
Fagron	Peru balsam, original	3913E-01162	1
Fagron	Peru balsam, original	2215I-01162	1
Fagron	Peru balsam, original	11G22-N06	2
Fagron	Peru balsam, original	9G03-N09	1
Fagron	Peru balsam, original	12K30-N02	2
Fagron	Peru balsam, original	12A20-N13	2
Fagron	Peru balsam, original	12H29-N010432/549	1
Fagron	Rose water	12H-20-N09	1
Fagron	Rose water	737724	1
Fagron	Rose water	13B01-N01	3

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Supplier	Substance	Batch	Spectra
Fagron	Rose water	12H20-N09	3
Fagron	St. John's wort oil	13A30-N09	1
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	Tretinoin solution 3...	12C08-N14	4
Fagron	Tretinoin solution 3...	1108D001	1
Fagron	Tretinoin solution 3...	12G05-N15	6
Fagron	Tretinoin solution 3...	1501D004	1
Fagron	Tretinoin solution 3...	13C28-N01	10
Fagron	Tretinoin solution 3...	13C25-N01	1
Fagron	Tretinoin solution 3...	1204D004	1
Fagron	Tretinoin solution 3...	13/11-N04	2
Fagron	Tretinoin solution 3...	1308D00213/11-N04	1
Fagron	Tretinoin solution 3...	1308D002	1
Fagron	Tretinoin solution 3...	19061306	1
Fagron	Tretinoin solution 3...	13I11-N04	6
Fagron	Triamcinolone acetoni...	214Q	1
Fagron	Vitamin A-palmitate (...)	12J16-N03	1
Fagron	Vitamin A-palmitate (...)	13F26-N08	5
Fagron	Vitamin A-palmitate (...)	13C19-N12	5
Fagron	Zinc oxide lotion, aq...	13K19-T02-014523	1
Fagron	Zinc oxide lotion, aq...	10H19-T01-000747	1
Fagron	Zinc oxide lotion, aq...	4213Q-01815	1
Fagron	Zinc paste DAB	12I06-T01	1
Fagron	Zinc paste DAB	273893	1
Fagron	Zinc paste, soft DAB	12J26-T03	6
Fagron	Zinc paste, soft DAB	4113A-02055	1
Fagron	Zinc paste, soft DAB	13H13-T05-006158	1
Fagron	Zinc paste, soft DAB	12/26-T03	1
Fagron	Zinc paste, soft DAB	10D15-T01	1
Fiebig	Coal tar solution	9345501	3
Fiebig	Zinc paste DAB	268489	1
Fiebig 23.10.12 ek:6,...	Theriac	12067202	1
Fiebig ek:5.69EUR 10.08...	Witch hazel bark water	11238911	2
Finze	Zinc oxide lotion, aq...	12065501	5
Fischar	Hydrogen peroxide sol...	6303042A	1
Fischar	Hydrogen peroxide sol...	6312077	1
Fischar	Hydrogen peroxide sol...	6313061	5
Fischar	Hydrogen peroxide sol...	6313025	2
Fischar	Hydrogen peroxide sol...	631109	1
Fischar	Hydrogen peroxide sol...	6312082	1
Fischar	Hydrogen peroxide sol...	6312081	2
Fischar	Hydrogen peroxide sol...	6315084	1
Fischar	Hydrogen peroxide sol...	6312061	1
Fischar	Hydrogen peroxide sol...	6311092	2
Fischar	Hydrogen peroxide sol...	6314021	2
Fischar	Hydrogen peroxide sol...	6312073	2
Fischar	Hydrogen peroxide sol...	6314018	1
Fischar/AHD	Hydrogen peroxide sol...	6313062	1
Fischar/Anzag	Hydrogen peroxide sol...	6313064	2
Fischar/G	Hydrogen peroxide sol...	6313093	2
Fischar/G	Hydrogen peroxide sol...	6312072	1
Fischar/G	Hydrogen peroxide sol...	6313033	1
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	Bitter orange tinctur...	11187211	1

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Supplier	Substance	Batch	Spectra
Gehe	Castor oil, hydrated	1311012	1
Gehe	Coal tar solution	701972-0001	1
Gehe	Coal tar solution	12A20-N04	1
Gehe	Hydrogen peroxide sol...	6312074	3
Gehe	Hydrophilic metronida...	1013Q-07001	1
Gehe	Hydrophilic metronida...	1213E-07001	2
Gehe	Hydrophilic metronida...	3613E-07001	1
Gehe	Hydrophilic metronida...	2813M-07001	1
Gehe	Hydrophilic metronida...	2512Q-07001	2
Gehe	Hydrophilic metronida...	4813E-07001	1
Gehe	Hydrophilic metronida...	5513E-03387	1
Gehe	Hydrophilic metronida...	114M-07001	1
Gehe	Hydrophilic metronida...	5112Q-07001	1
Gehe	Hydroxyethylcellulose...	22b070912	1
Gehe	Methoxsalen 0.006% Co...	13D004A	1
Gehe	Methoxsalen 0.006% Co...	13D004B	1
Gehe	Opium tincture, stand...	5007714	1
Gehe	Opium tincture, stand...	6007814	2
Gehe	Opium tincture, stand...	6006713	28
Gehe	Opium tincture, stand...	7007914	1
Gehe	Vitamin A-palmitate (...)	11178101	3
Gehe	Vitamin A-palmitate (...)	1110018-01	1
Gehe	Vitamin A-palmitate (...)	11178103	2
Gehe	Zinc oxide lotion, aq...	12211402	8
Gehe	Zinc oxide oil DAC	275086	2
Gehe	Zinc oxide oil DAC	289826	1
Gehe	Zinc oxide oil DAC	275085	1
Gehe	Zinc oxide oil DAC	279563	3
Gehe	Zinc oxide oil DAC	282085	1
Gehe	Zinc oxide paste SR90	264198	1
Gehe	Zinc oxide paste SR90	276199	2
Gehe	Zinc oxide paste SR90	270919	1
Gehe	Zinc oxide paste SR90	279386	1
Gehe	Zinc oxide paste SR90	266451	1
Gehe	Zinc oxide paste SR90	268240	1
Gehe	Zinc oxide paste, sof...	260912	1
Gehe	Zinc paste, soft DAB	12068801	6
Gehe	Zinc paste, soft DAB	12A250412	1
Gehe	Zinc paste, soft DAB	11338801	4
Gehe	Zinc paste, soft DAB	130112	1
Gehe	Zinc paste, soft DAB	11338601	2
GEHE	Hydrogen peroxide sol...	H216091/1	1
GEHE	Hydrogen peroxide sol...		10
GEHE	Vitamin A-palmitate (...)	12132902	4
gehe 28.11.2013	Vitamin A-palmitate (...)	13057007	2
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
Gehe/Maros	Opium tincture, stand...	11006112	16
Gehrlicher	Pansy mother tincture	RU1775	1
Gehrlicher/Gehrlicher	Burnet root mother ti...	U3600	1
H.Lamotte/Noweda	Castor oil, hydrated	123384	1
H.Lamotte/Noweda	Castor oil, hydrated	5280301	2
Hedinger	Formic acid 85%	170912	1
Hedinger	Formic acid 85%	383338	1
Hedinger	Hydrogen peroxide sol...	301210	2
Hedinger	Hydrogen peroxide sol...	301205	1
Hedinger	Hydrogen peroxide sol...	301211	1
Hedinger	Hydrogen peroxide sol...	301208	1
Hedinger	Hydrogen peroxide sol...	301212	1

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Supplier	Substance	Batch	Spectra
Hedinger	Hydrogen peroxide sol. ...	301207	1
Hedinger	Hydrogen peroxide sol. ...	61011B	24
Hedinger	Hydrogen peroxide sol. ...	16092013A	1
Hedinger	Hydrogen peroxide sol. ...	61010B	21
Hedinger	Hydrogen peroxide sol. ...	61005B	2
Hedinger	Hydrogen peroxide sol. ...	610128	1
Hedinger	Hydrogen peroxide sol. ...	210913H202	1
Hedinger	Hydrogen peroxide sol. ...	61003B	2
Hedinger	Hydrogen peroxide sol. ...	8111302	1
Hedinger	Hydrogen peroxide sol. ...	61006B	1
Hedinger	Witch hazel bark water	20153B	2
HEDINGER	Hydrogen peroxide sol. ...	601008B	1
Hedinger / Gehe	Hydrogen peroxide sol. ...	64044B	1
Hedinger / Gehe	Hydrogen peroxide sol. ...	(061b)061b	2
Hedinger / Sanacorp	Sodium hypochlorite s. ...	46386	1
Hedinger / Stumpf	Hydrophobic triclosan. ...	S101209.1	13
Hedinger Jenne	Hydrogen peroxide sol. ...	61009B	21
Hedinger/ Gehe	Sodium hypochlorite s. ...	46375	1
Hedinger/ Phönix	Sodium hypochlorite s. ...	46392	1
Hedinger/AHD	Hydrogen peroxide sol. ...	61010B	1
Hedinger/Anzag	Hydrogen peroxide sol. ...	4413A-01720	1
Hedinger/Anzag 21.07....	Hydrogen peroxide sol. ...	61008B	19
henry	St. John's wort oil	5803902	1
Henry Lamotte	St. John's wort oil	5442802	1
Henry Lamotte	Zinc oxide lotion, aq. ...	60480	1
Henry Lamotte	Zinc paste, soft DAB	5375700	3
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
Henry Lamotte Oils GmbH	Zinc paste, soft DAB	5374900	5
Henry Lamotte Oils, A...	Zinc oxide lotion, aq. ...	5375600	12
Henry Lamotte/ 24.04....	Zinc oxide lotion, aq. ...	1221401	1
HenryLamotte/Sanacorp	St. John's wort oil	5308402-3457312120	1
Herbeta Arzneimittel	Hydrogen peroxide sol. ...	15061202	1
Herstellung	Hydrogen peroxide sol. ...	6313072	1
Hetterich/Teofarma	Myrrh tincture (90%) ...	139101	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
ichthyol	Clobetasol 0.5% Corde...	1713M-03390	1
ichthyol	Clobetasol 0.5% Corde...	5112M-03390	1
Ichthyol	Betamethason-V 1.22% ...	11D035	99
Ichthyol	Betamethason-V 1.22% ...	11D01	1
Ichthyol	Betamethason-V 1.22% ...	11/2015	1
Ichthyol	Betamethason-V 1.22% ...	11D001	56
Ichthyol	Clobetasol 0.5% Corde...	12d012	1
Ichthyol	Clobetasol 0.5% Corde...	11D003	12
Ichthyol	Clobetasol 0.5% Corde...	10D024	1
Ichthyol	Clobetasol 0.5% Corde...	11D034	24
Ichthyol	Clobetasol 0.5% Corde...	9D035	1
Ichthyol	Gentamicin 1% Cordes®...	12D010	28
Ichthyol	Gentamicin 1% Cordes®...	10D026	33
Ichthyol	Methoxsalen 0.006% Co...	14D001	1
Ichthyol	Methoxsalen 0.006% Co...	130004	2
Ichthyol- Gesellschaft	Methoxsalen 0.006% Co...	13D013	7
ICHTHYOL/ahp	Methoxsalen 0.006% Co...	13d004	1
Ichthyol/Gehe	Methoxsalen 0.006% Co...	13D004	29
Ichthyol/Jenne	Betamethason-V 1.22% ...	12D015	24

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Supplier	Substance	Batch	Spectra
Ichthyol/Jenne	Betamethason-V 1.22% ...	12D015	2
Ichthyol-Gesellschaft...	Gentamicin 1% Cordes®...	9D002	1
Ichtyol	Clobetasol 0.5% Corde...	12D012	13
Infectopharm/Gehe	Hydrophobic triclosan...	S021201.	1
infectopharm	Hydrophobic triclosan...	S041302.1	2
Infectopharm	Hydrophobic triclosan...	S031101.1	1
Infectopharm	Hydrophobic triclosan...	20160712-1	1
Infectopharm	Hydrophobic triclosan...	S091203.1	8
Infectopharm	Hydrophobic triclosan...	S091109.1	2
Infectopharm	Hydrophobic triclosan...	S021201.1	2
Infectopharm	Hydrophobic triclosan...	S0212041	1
Infectopharm	Hydrophobic triclosan...	S031502.1	1
Infectopharm	Hydrophobic triclosan...	S041301.1	7
Infectopharm	Hydrophobic triclosan...	s1012091	1
Infectopharm	Hydrophobic triclosan...	S101208.1	12
Infectopharm	Hydrophobic triclosan...	S101207.1	8
Infectopharm	Hydrophobic triclosan...	S04131011	1
InfectoPharm	Hydrophobic triclosan...	S091103.1	3
InfectoPharm / 04.09...	Hydrophobic triclosan...	S091104.1	1
InfectoPharm / Gehe	Hydrophobic triclosan...	S0413041	1
Infectopharm, Noweda	Hydrophobic triclosan...	S0231204.1	1
Infectopharm, Noweda	Hydrophobic triclosan...	S021203.1	4
Infectopharm,AHC	Hydrophobic triclosan...	S101304.1	1
Infectopharm/AHD	Hydrophobic triclosan...	S1012209.1	1
InfectoPharm/GEHE	Hydrophobic triclosan...	S.091203.1	1
InfectoPharm/Phoenix	Hydrophobic triclosan...	S021201.1	3
InfectoPharm/Phönix	Hydrophobic triclosan...	1101410005	1
Klenk	Calendula oil, fat	12308503	1
Krieger	Coal tar solution	11319212	3
lamotte	Castor oil, hydrated	5188401	2
lamotte	Zinc oxide lotion, aq...	6003206002	2
Lamotte	Arnica tincture (70%)...	5139400	1
Lamotte	St. John's wort oil	5171601	6
Lamotte	St. John's wort oil	5346702	11
Lamotte	Zinc oxide lotion, aq...	5099300	1
Lamotte	Zinc oxide lotion, aq...	5216200	1
Lamotte	Zinc oxide lotion, aq...	5735500	3
Lamotte	Zinc oxide lotion, aq...	5163600	2
Lamotte	Zinc oxide lotion, aq...	60460	1
Lamotte	Zinc oxide lotion, aq...	5651500	1
Lamotte	Zinc paste, soft DAB	5517500	1
Lamotte / Gehe	Castor oil, hydrated	5138701	2
Lamotte / Gehe	Zinc oxide lotion, aq...	5321300	10
Lamotte / Gehe	Zinc oxide lotion, aq...	5517400	12
Lamotte / Sanacorp	St. John's wort oil	517601	1
Lamotte Sanacorp	St. John's wort oil	5308402	4
Lamotte/ Finze	Zinc oxide lotion, aq...	5563300	2
lamotte/Gehe	Zinc oxide oil DAC	13196401	3
lamotte/Noweda	Zinc paste, soft DAB	5447900	3
Lamotte/Noweda	St. John's wort oil	4959702	5
Leyhs/Noweda	Methylrosanilinium ch...	124141	1
Maros	Angelica root tinctur...	8030113	1
Maros	Angelica root tinctur...	1028713	2
Maros	Bitter candytuft fres...	5433	1
Maros	Bitter candytuft fres...	5408	1
Maros	Marian thistle fruit ...	U3762	2
Maros	Matricaria liquid ext...	6990	3
Maros	Melissa leaf liquid e...	6399	3
Maros	Opium tincture, stand...	3007514	2
Maros	Opium tincture, stand...	9006012	15

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Supplier	Substance	Batch	Spectra
Maros	Opium tincture, stand...	13071303	1
Maros	Opium tincture, stand...	8005812	7
Maros	Opium tincture, stand...	4005612	3
Maros	Opium tincture, stand...	2004511	1
Maros	Opium tincture, stand...	4007614	3
Maros	Opium tincture, stand...	1006313	14
Maros	Opium tincture, stand...	15031302	1
Maros	Opium tincture, stand...	8009015	2
Maros	Opium tincture, stand...	10009115	2
Maros	Opium tincture, stand...	11007213	8
Maros	Opium tincture, stand...	4009716	1
Maros	Opium tincture, stand...	7008915	1
Maros	Opium tincture, stand...	2009416	2
Maros	Opium tincture, stand...	3009616	1
Maros	Opium tincture, stand...	11008214	1
Maros	Opium tincture, stand...	5008715	2
Maros	Peppermint leaf mothe...	RU2432	2
Maros	Peppermint tincture (...)	RU2432	1
Maros	St. John's wort oil	97583x	1
Maros	St. John's wort oil	9758	1
Maros	Thyme liquid extract	1156	1
MAROS	Opium tincture, stand...	3005512	1
Maros Arznei GmbH	Opium tincture, stand...	11007113	8
Maros Arznei GmbH	Opium tincture, stand...	8006913	25
MAROS Arznei GmbH	Opium tincture, stand...	7006813	16
Maros Arznei GmbH/Anzag	Opium tincture, stand...	2005412	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/Gehe	Opium tincture, stand...	5006613	27
Maros/Gehe	Opium tincture, stand...	10007013	11
Maros/Maros	Cistus tincture 1:5	11027812	1
Maros/Maros	Strophanthus seed mot...	6029813	2
Maros/N/010.06.13/PZN...	Opium tincture, stand...	4006513	31
Maros/Phoenix	Opium tincture, stand...	60066713	1
müller	Propolis tincture (96%)	131206	1
Nachprüfung	Chinese cinnamon oil		1
Nachprüfung	Gentian tincture (70%...	411E02442	1
Nachprüfung	Peru balsam, original	12020602	1
Nachprüfung	Standardised cayenne ...	2413M-03232	1
Noweda	Castor oil, hydrated	268877	1
Noweda	Myrrh tincture (90%) ...	1219104	1
Noweda	Opium tincture, stand...	1106112	2
Noweda	Orange flower oil, ar...	10267805	1
Noweda	Ratanhia tincture (70...	12255406	1
Noweda	Thyme liquid extract	10198605	1
Noweda	Valerian tincture (70...	F1300146	1
Noweda	Valerian tincture (70...	F1300052	1
Noweda	Witch hazel leaf liqu...	12095405	1
Noweda	Zinc oxide lotion, aq...	1211701	1
Noweda	Zinc paste DAB	276606	1
Noweda/apomix	Clobatesol propionate...	13A131113	1
Noweda/Hedinger	Hydrogen peroxide sol...	61012B	8
Noweda/Lamotte	Zinc oxide lotion, aq...	5447800	9
Otto Fischar	Hydrogen peroxide sol...	6313101	1
Otto Fischar / Noweda	Hydrogen peroxide sol...	6314011	1
Otto Fischar gmbh	Hydrogen peroxide sol...	6315031	1
Otto Fischar gmbh	Hydrogen peroxide sol...	6314113	1
Otto Fischar GmbH	Hydrogen peroxide sol...	6312021	2

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Supplier	Substance	Batch	Spectra
Otto Fischar GmbH	Rose water	5354081	1
Otto Fischar GmbH & C...	Lactic acid 80% L(+)	20020271	1
Otto Fischar GmbH & Co...	Hydrogen peroxide sol...	6313055	5
pharmachem	Zinc oxide oil DAC	90512	1
Pharmachem	Oxytetracycline ointm...	230113	1
Pharmachem	Zinc oxide cream 25% ...	110112	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	Zinc oxide oil SR 90	20712	1
Pharmachem	Zinc oxide paste, sof...	70512	1
PharmaChem	Zinc oxide cream 25% ...	150513	1
Pharmachem	Oxytetracycline ointm...	140212	2
Pharmachem Anzag	Zinc oxide oil SR 90	140513	1
Pharmachem Anzag	Zinc paste, soft DAB	191112	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
Phoenix	Castor oil, hydrated	11325205	2
Phoenix	Castor oil, hydrated	12071107	1
Phoenix	Zinc oxide lotion, aq...	4010501	1
Phoenix	Zinc paste, soft DAB	281120	1
Phoenix (Pharmachem P...	Zinc oxide paste, sof...	191112	1
Phoenix (PKH Halle)	Methylrosanilinium ch...	4A200712	1
Phoenix (PKH Halle)	Metronidazole 10% (no...	11B251012	1
Phoenix (PKH Halle)	Metronidazole 10% (no...	1B020113	1
Phoenix/Apomix	Clobatesol propionate...	6A070513	1
phönix	Camphor oil 10%	7/AKD57	1
phönix	Zinc paste DAB	12147903	1
Phönix	Cayenne pepper tinctu...		1
Phönix	Coal tar solution	12F19-N08	3
Phönix	Coal tar solution	11B14-N04	1
Phönix	Coal tar solution	12105-n02	1
Phönix	Hydrogen peroxide sol...	6313073	2
Phönix	Hydroxyethylcellulose...	13286702	1
Phönix	Opium tincture, stand...	2006413	23
Phönix	Siam benzoin tincture...	12228107	1
Phönix	St. John's wort oil	12293904	4
Phönix	Theriac	12067210	1
Phönix	Triamcinolone acetoni...	13029801	2
Phönix	Vitamin A-palmitate (...)	12132904	3
Phönix	Zinc oxide lotion, aq...	11329801	2
Phönix	Zinc oxide oil DAC	286040	1
Phönix	Zinc oxide oil DAC	1C010212	1
Phönix	Zinc paste, soft DAB	278225	1
Phönix	Zinc paste, soft DAB	13040201	10
Phönix	Zinc paste, soft DAB	13316501	7
Phönix Gotha	Castor oil, hydrated	12H29-N04	1
Phönix Gotha	Castor oil, hydrated	12H29-N04	2
Phönix Gotha	Gentian tincture (70%...	10334601	1
Phönix Gotha	Hydrophilic metronida...	4B190413	6
Phönix Gotha	Hydrophobic triclosan...	S091201.1	1
Phönix Gotha	Hydrophobic triclosan...	561069	1
Phönix Gotha	Hydroxyethylcellulose...	12320501	8
Phönix Gotha	Hydroxyethylcellulose...	12244003	4
Phönix Gotha	Lactic acid 80% L(+)	2002071	2
Phönix Gotha	Peanut oil, hydrated	12230701	2
Phönix Gotha	Peru balsam, original	10C30-N07	1
Phönix Gotha	Valerian tincture (70...	11254302	1

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Supplier	Substance	Batch	Spectra
Phönix Gotha	Wormwood tincture (70...	10010909	1
Phönix Gotha	Zinc oxide cream 25% ...	276963	1
Phönix Gotha	Zinc paste, soft DAB	13088801	8
Phönix Gotha	Zinc paste, soft DAB	12069101	3
Phönix Gotha	Zinc paste, soft DAB	12271502	4
Phönix/InfectoPharm	Hydrophobic triclosan...	S021204.1	7
Phönix/InfectoPharm	Hydrophobic triclosan...	S021205.1	5
PKH / Gehe	Hydrogen peroxide sol...	12I04-M09	1
PKH / Gehe	Hydrogen peroxide sol...	12D26-M05	1
PKH / Gehe	Hydrogen peroxide sol...	12I06-M07	2
PKH / Gehe	Hydrogen peroxide sol...	13A02-M09	3
PKH / Gehe	Hydrogen peroxide sol...	12D27-M09	1
PKH GmbH	Hydrogen peroxide sol...	487A161012	1
PKH GmbH	Zinc oxide cream 25% ...	2B080113	1
PKH GmbH/Anzag	Hydrogen peroxide sol...	485A121012	1
PKH Halle / Phoenix	Metronidazole 10% (no...	8B211013	1
PKH Halle/ Alliance H.	Hydroxyethylcellulose...	18B090813	4
primavera	St. John's wort oil	12106131	1
Primavera	Aloe vera oil	8601131	1
Primavera	St. John's wort oil	25508131	1
Purren Apotheke	St. John's wort oil	11205311	1
Resena/Anzag	Carotene (ca. 4m IU)	1204-3534	1
Retest	Coal tar solution	11D01-N04	1
s.Prüfprotokoll	Peru balsam, original	s.Prüfprotokoll	1
sanacorp	Opium tincture, stand...	9005912	3
Sanacorp	Benzalkonium chloride	10190002	1
Sanacorp	Camphor oil 10%	7/AKD4	1
Sanacorp	Hydrophobic triclosan...	S031105.1	1
Sanacorp	Hydroxyethylcellulose...	13190501	8
Sanacorp	Hydroxyethylcellulose...	12127901	2
Sanacorp	Hydroxyethylcellulose...	12219401	6
Sanacorp	Hydroxyethylcellulose...	12309303	9
Sanacorp	Methoxsalen 0.006% Co...	12D011	4
Sanacorp	Opium tincture, stand...	60006713	1
Sanacorp	Orange flower water	AKD34	1
Sanacorp	St. John's wort oil	13252505	3
Sanacorp	Witch hazel leaf liqu...	13112003	1
Sanacorp	Zinc oxide lotion, aq...	AKD33	1
Sanacorp	Zinc paste DAB	13201903	1
Sanacorp	Zinc paste DAB	13043502	3
Sanacorp	Zinc paste DAB	13345101	7
Sanacorp	Zinc paste, soft DAB	274979	1
Sanacorp	Zinc paste, soft DAB	273704	2
Sanacorp, 1303.12 EK:...	Hydrophobic triclosan...	S091102.1	1
Sanacorp/ apomix	Zinc oxide oil DAC	26B190911	1
Sanacorp/ PKH Halle	Hydroxyethylcellulose...	8B050412	1
Sanacorp/ PKH Halle	Hydroxyethylcellulose...	10B200412	1
Sanacorp/Ichthyol	Methoxsalen 0.006% Co...	13D013	1
Spangro/Infectopharm	Hydrophobic triclosan...	S041301.1	3
Spinnrad/Phoenix	Witch hazel bark water	413310062	1
stumpf	Hydrogen peroxide sol...	280A060712	1
Taoasis	Aloe vera oil	130237-112020BAG94	1
Taoasis	Aloe vera oil	130501-112371	1
Taoasis	Aloe vera oil	130237-111659	1
Taoasis	Aloe vera oil	110137-96542	1
Taoasis	Aloe vera oil	111208-105327	1
Taoasis	Aloe vera oil	120247-107323	1
Taoasis	Aloe vera oil	120247-106498	1
Taoasis	Arnica oil, fat	7525-113064	1
Taoasis	Arnica oil, fat	7360-112511	1

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Supplier	Substance	Batch	Spectra
Taoasis	Arnica oil, fat	7360-111366	1
Taoasis	Arnica oil, fat	7360-111459	1
Taoasis	Calendula oil, fat	119426-108734	1
Taoasis	Calendula oil, fat	119943-110316	1
Taoasis	Siam benzoin	541389-111081	1
Taoasis	St. John's wort oil	123212-110835	1
Taoasis	St. John's wort oil	123212-111876	1
Taoasis	St. John's wort oil	145646-103095	1
Taoasis	St. John's wort oil	12312-109683	1
Taoasis GmbH	Aloe vera oil	130237	1
Taoasis GmbH	St. John's wort oil	150822-107470	1
Taoasis	Macadamia oil, refined	4976601-92844	1
Teofarma	Arnica tincture (70%)...	144301	1
vdl	Zinc oxide oil DAC	12351702	5
Wasserfuhr	Zinc paste DAB	12169401	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).

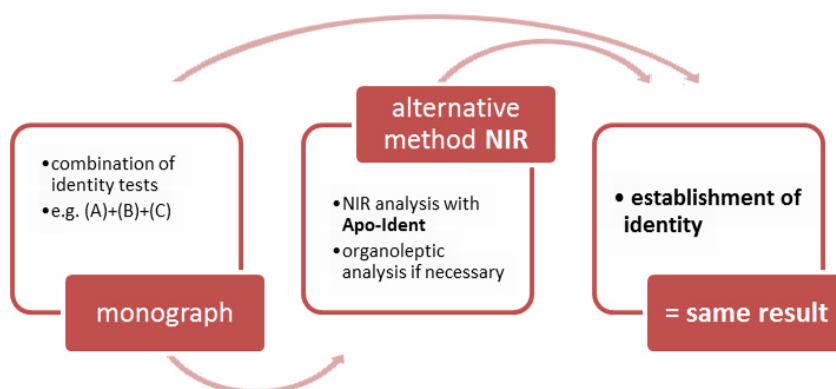


Figure 2: The combination of tests of the monograph is replaced by the alternative method NIR spectroscopy using *Apo-Ident*. This is permissible because both test procedures result in the establishment of the identity of the raw material.

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 *Apo-Ident Update 2019-02*, a distinction is made between the following substances in the listed second-stage models:

Submodel 1

Bacitracin
Betamethasone, micronized
Betamethasone valerate
Budesonide, micronized
Capsaicin
Dexamethasone
Erythromycin
Heparin sodium
Hydrocortisone butyrate
Norethisterone acetate
Prednicarbate, micronized
Prednisolone, micronized
Prednisone
Triamcinolone, micronized
Triamcinolone acetonide

Submodel 2

Beclometasone dipropionate, anhydrous
Betamethasone dipropionate, micronized
Clobetasol propionate
Diphenylcyclopropenone
Gentamicin sulfate
Sodium benzoate
Sodium citrate
Oxybutynin hydrochloride

Submodel 3

Alfatradiol
Estriol
Pregnenolone
Progesterone, micronized
Quinine hydrochloride
Quinine sulfate dihydrate
Spironolactone
Testosterone propionate

Liquid submodel

2-ethylhexyl laurate
Base cream DAC

Lanette® ointment (conserved)
Non-ionic hydrophil ointment
Squalane
Wool alcohols cream DAB/SR

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