



Standards Commission for Straight  
Feeding Stuffs  
at the Central Committee of the  
German Agriculture

# Positive List for Straight Feeding Stuffs 12th Edition

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## **Straight Feeding Stuffs**

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# Preliminary remarks

In the current 12<sup>th</sup> edition, 18 straight feeding stuffs were admitted and 38 amendments for straight feeding stuffs already listed and some other remarks and 5 deletions have been made.

The amendments which have been made since the 11<sup>th</sup> edition are summarized in table 1 in the Annex (see page XVIII).

## Preface

In the agricultural and food sector as well as between politicians and consumers, there is a consensus on the need to list all feed used in the Federal Republic of Germany as well as in the EU for the feeding of farm animals. Over recent years feeding stuff legislation has been drawn up to ensure comprehensive safety when producing foodstuffs of animal origin, however various recent scandals (dioxin contamination, use of contaminated fats etc.) have shown that the necessary care is not always taken during production and distribution of raw materials. Therefore it appears sensible and commensurate to draw up a list of straight feeding stuffs that can be used for feeding livestock. In livestock feeding also compound feeding stuffs, which may also contain additives, processing aids or carrier substances, are used; these products are regulated by specific legislation and are therefore not subject of this list. A current list of approved additives on the basis of Regulation (EC) No 1831/2003 can be found on the homepage of the Bundesanstalt für Lebensmittelsicherheit ([www.bvl.bund.de](http://www.bvl.bund.de) - Futtermittel - Zusatzstoffe in Futtermitteln).

The Positive List for Straight Feeding Stuffs is based on a voluntary agreement of the concerned economic sectors and organizations. While in the lists established on the basis of the European feed legislation (see EU catalog of straight feedingstuffs in Regulation (EU) No. 68/2013 and EU-feedmaterialsregister, [www.feedmaterialsregister.eu](http://www.feedmaterialsregister.eu)) almost all feed ingredients intended or may be intended for animal consumption are collected, the Positive List of Straight Feedingstuffs contains only feed materials, which have undergone a safety audit with regard to the raw materials, processing aids and manufacturing processes used and taking also in account their nutritional value and their suitability for livestock feeding.

The Standards Commission of Straight Feeding Stuffs works on the following principles:

The list should not just be restricted to enumerate the straight feeding stuffs. In fact the basis must be a clear definition (designation and description) of the origin and characteristics of the straight feeding stuffs. For this purpose it is necessary to have a comprehensive description of the manufacturing process inclusive the processing aids used and indication of possible risks.

**Field crops**, which are only reduced technically to different degrees of size (e.g. crushing or grinding whole grains), from which nothing else is removed or added except water, are not listed individually. If feeding stuffs of the same or similar origin with different designations are circulated, (e.g. wheat bran, wheat feed, wheat hulls and bran), they must be clearly differentiated from each other. It is the task of the specific industrial sector to define differentiation criteria and to quantify them. The defined requirements are criteria that are binding for the inclusion of the respective straight feeding stuffs in the list. It is important here to define a compact number of criteria in order to ensure the highest possible level of risk minimisation and consumer protection and also proved feed value.

**Primary criteria for the inclusion of a straight feeding stuff in the positive list comprise:**

- a) the legal admissible use as a straight feeding stuff
  - b) a substantiated feed value, i.e. the product must
    - be consumed orally in an effective quantity and
    - make a relevant contribution to the supply of energy and/or nutrition or
    - contribute to appetite stimulation, salivary flow, satiety or to maintain or support the function of the digestive tract and / or its eubiosis,
  - c) harmlessness for animals and humans,
  - d) not negatively affect the quality of animal products,
  - e) not present a hazard to the ecological balance due to undesirable substances it contains,
- Specific nutritional effects may be included as additional benefits, while taking into account the primacy of the drug legislation and the feedingstuffs legislation on feed additives and dietary feed.

A differentiation should be made here between straight feeding stuffs primarily produced on the farm (e.g. grass and the products conserved from grass such as hay or silage) and commercial feeding stuffs. In the case of **roughage produced on the farm**, it is not necessary and not commensurate to define all quality differences. In this case, a summarised list of all relevant products must be drawn up. In contrast to **commercial feeding stuffs**, a clear designation for each product with a clear description must be available.

One important question is the intended use of former **foodstuffs and products and by-products from the food production** as feeding stuff. The overriding principle here is, that products, that have been clearly indicated as food for human consumption can be used to feed livestock unless there are contrary statutory regulations (e.g. restrictions or prohibitions to feed products of animal origin to animals intended for food production). As food and by-products of food change in relatively short periods with regard to their processing and also production procedures, and to ensure that this list does not grow immeasurably, steps have been taken to summarise products into defined groups based on certain characteristics.

One large sector comprises **by-products obtained during the production and processing of foodstuffs**. In principle, it is reasonable to use these products, of which most of them have high quality nutrients and are of food quality, as animal feed. However measures must be taken to ensure that these by-products really originate from foodstuffs and are not predominately processing additives, added externally during the production processes and then removed from the process and fed to animals as "food" without being included in the positive list.

Distinguishing between the sectors of food, parts of foodstuffs and by-products obtained during the production of food is a complex task. This is why data sheets need to be presented for certain products especially in the case of complex production processes. This is an aid that needs to be applied in particular on an everyday basis of feeding stuff circulation. The **data sheet** must contain all relevant data about the production process, the use of processing aids, the analyses and so-called "critical control points".

In particular, a data sheet should also be submitted for foodstuffs of which the shelf life has expired (taking into consideration the hygiene status) or for pre-packed foodstuffs as, in the case of the latter, the legal feed requirements can often only be satisfied by specialized companies with specific technical tools (e.g. removal of the packaging).

The objective of this Positive List cannot be to list and assess data sheets for all products and from all manufacturers. This would go beyond the scope of the Positive List and could never be brought to an end due to the continuously changing of market conditions. The intention is rather to give an impulse to create and maintain data sheets as an aid to ensure feed safety. For this purpose, the Standards Commission has requested a data sheet for most of the straight feeding stuffs in order to be able to assess whether or not the requirements are satisfied to the Standards Commission's

satisfaction. It is up to the users of straight feeding stuffs (compound feed manufacturers as well as farmers) to ask for the data sheet when purchasing the respective straight feeding stuffs. The manufacturers and distributors of these feeding stuffs are obliged to keep a data sheet, make it available to the customers and to update it in case of changes of the production process and to inform the users about changes of the product.

The professional evaluation of the straight feeding stuffs is based on nutritional and safety criteria. Regarding genetically modified organisms and feeding stuffs produced thereof it is referred to the appropriate legislation.

Products that are not allowed for livestock feeding under current law (such as e.g. certain products from warm-blooded livestock) except those with special legal approval (see hydrolysed proteins, blood plasma etc.) have been looked at during the evaluation and assessment but are not included in the Positive List. However it is possible at any time to include those products, subject to a risk assessment, if legislation changes. Straight feeding stuffs that are approved in accordance with current law, but which feed value for example is particularly low, are not excluded from the Positive List but are indicated with special comments in the column "remarks".

The Positive List should be regarded as a so-called closed list. This does not mean that new or previously not listed products are excluded from use as feed for all time. There is a possibility of including them in the Positive List during the continuously updating process after they have been examined according to the principles of the Standards Commission. On the other side, there is a possibility to remove straight feeding stuffs from the list on the basis of new information. In cases directly connected with a direct hazard, an amendment of this kind affiliated to an appropriate transition period is indicated in the list in order to inform the interested circles and to give them an opportunity to adapt to the new situation.

In the light of the frequent changes in the market, it is not feasible to reprint the updated list continuously. Instead, all amendments are updated in the Internet, marked accordingly and made accessible. This means that users have the opportunity to keep their own list up-to-date by printing out the concerning parts.

Due to the size of the feeding stuff market the scope of the Positive List is extensive. Primarily this is due to the division of labour in our society. On the one hand, to ensure sustainability many by-products need to be considered, e.g. food production and processing, within the meaning of recycling and production of meat, milk and eggs, and on the other hand, the number of products is high due to the differentiated preparation of individual products as is clearly seen by the example of wheat and the products obtained thereof.

The wide range of feed resources is advantageous for our livestock production. Similar to humans, the indigestion system and the metabolism is able to make use of a wide feed base without impairing the health or well-being of the animals.

In all cases, the above-mentioned principles need to be observed. This was the basis upon which the Positive List was compiled.

**Dr. Franz-Peter Engling**

Chairman of the Standards Commission for Straight Feeding Stuffs at the Central Committee of the German Agriculture

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*German Farmers Association*
- Deutsche Landwirtschaftsgesellschaft DLG e.V.  
*German Agriculture Society*
- Deutscher Raiffeisen-Verband e.V. (DRV)  
*German Raiffeisen Federation*
- Verband der Landwirtschaftskammern e.V. (VLK)  
*Chamber of Agriculture*

The Positive List is drawn up by the Standards Commission. This is a working group within the Central Committee of the German Agriculture. The Standards Commission is independent and focuses primarily on evaluating, assessing, classifying and differentiating feed materials with regard to their use and safety.

The Standards Commission comprises of 8-12 members whose work is in addition supported by representatives from other organisations (permanent guests). Representatives from science, consulting, feeding industry and feeding experts are brought in if necessary.

The evaluation process is based on scientific criteria. These are documented as a guide and comprise part of the rules of procedure of the Standards Commission.

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# Explanations

The Positive List in its current valid version provides an overview of the straight feeding stuffs for livestock. It needs to be constantly updated. It is always possible to add new products or cross off products or make amendments based on latest findings.

The positive list is updated once a year. Any amendments/new additions agreed upon by the Commission in the meantime are published via the amendments/new additions list at [www.futtermittel.net/pdf/positivliste\\_aenderungen.pdf](http://www.futtermittel.net/pdf/positivliste_aenderungen.pdf).

Products crossed off by the Commission are marked with an appropriate interim period. These changes are communicated at an early date via the "**Grey list**" in the Internet <http://www.dlg.org/de/landwirtschaft/futtermittelnet/positivliste/index.html> in order to give producers, distributors or users the opportunity to adapt accordingly within an adequate period. In the Internet, all new added products are marked in *italics*.

The level of transparency when circulating the respective feeding stuffs is significantly increased thanks to the "**data sheet**". The information contained in the data sheet is much more detailed than the general description given in the Positive List. It also contains details about special operation, specific features during production or the composition of the straight feeding stuffs that are not usually available in practice. The information about the production process can help to identify so called critical control points for the risk assessment of feeding stuffs. In addition, the data sheet also contains information about any necessary examinations relating to undesirable substances with regard to the specific properties of the raw product, the production processes or processing aids that are used. The data sheet should be available to the buyer of the straight feeding stuff, e.g. the farmer or compound feed producer. In the case of deliveries from one supplier, the data sheet only needs to be presented once as long as the product itself or the production process has not changed. In the case of changes, the data sheet needs to be updated and made available to the buyer in the current version. In the case of the products of Group 13 (Former foods, products and by-products of food production), the appropriate data sheet for each delivery in the current version need to be enclosed.

During the revision and update of the Positive List, the latest findings relating to the production, composition or use of the straight feeding stuffs are taken into consideration. A risk assessment remains a point of focus both for new and products already on the list.

## The straight feeding stuffs are classified into the following groups:

01. Cereal grains, their products and by-products
02. Oil seeds, oil fruits and other oil-supplying plants, their products and by-products
03. Legume grains, their products and by-products
04. Tubers and roots, their products and by-products
05. By-products of fermentation and distillation, including fermentative alcohol production for bioenergy purposes
06. Other seeds and fruits, their products and by-products
07. Roughages and forages
08. Other plants, their products and by-products
09. Milk products (except where cow's milk is used, the species must be specified)
10. Fish and other marine animals, their products and by-products
11. Minerals
12. Miscellaneous straight feeding stuffs
13. Former foodstuffs, products and by-products of food production
14. Protein obtained from microorganisms
17. Ammonium salts (except ammonium salts)
18. Other NPN compounds
19. Products and by-products from terrestrial animals
20. Egg products



For the presentation of the **straight feeding stuffs**

### **“Head notes”**

The listed products are preceded by five so-called "headnotes":

- 1) Feedingstuff may be formaldehyde-treated, xylose-treated, thermally, hydrothermally or pressure hydrothermally treated in order to reduce ruminal protein or starch digestion. In this case the feeding stuff has to be designated as “protected”. The kind of treatment has to be stated in the data sheet.
- 2) The word ‘low in glucosinolate’ may be added to the designation if the straight feeding stuff complies with the maximum glucosinolate content determined in Article 4 (2) of Commission Regulation (EC) No 658/96 of 9 April 1996 on certain conditions for granting compensatory payments under the support system for producers of certain arable crops (OJ L 91 p. 46), as amended
- 3) Product obtained by anaerobic lactic acid-fermentation with or without use of ensiling additives. Only ensiling additives listed in the register of the European Commission ([http://ec.europa.eu/food/food/animalnutrition/feedadditives/registeradditives\\_en.htm](http://ec.europa.eu/food/food/animalnutrition/feedadditives/registeradditives_en.htm)) may be used in accordance with Directive (EU) No. 1831/2003 of the European Parliament and the Council dated 22nd September 2003 on additives for use in animal nutrition.
- 4) The provisions of Regulation (EC) No 1069/2009 as amended and the implementing provisions of Regulation (EC) No 142/2011 need to be observed.
- 5) For explanations of the columns see pages IX-X of the foreword.

The head notes 1-4 are added as footnotes to the designation, description and labelling provisions of the listed feeding stuffs, if relevant.

### **Column heading and column contents**

#### **Number (column 1):**

Column 1 contains the code number of the feeding stuff in alphabetical order (German Alphabet) according to the respective raw products. In some cases, exceptions to the alphabetical order may be made.

Within the raw products the corresponding processing products are ranged in the order of their occurrence in the processing procedure. The feeding stuffs are numerically coded; the first number indicates the Group, the following number the type of feeding stuff and the last number the specific product or by-product.

#### **Designation (column 2)**

Column 2 contains the designation of the straight feeding stuff. This designation must be used on the label. Parts of words in brackets may be omitted, e.g. (-beans) in soya(-bean), extracted.

#### **Description (column 3)**

Column 3 contains the description of the products; the used part of the product or by-product, e.g. grains, seeds, tubers, meal, cake etc., and the procedure that the product or by-product was subjected to, such as e.g. drying, extracting, heating etc., are clearly characterised. If necessary the level of distinguishing features, ripeness or the quality of the product or byproduct are also indicated, e.g. “low in glucosinolate“, “low in sugar”.

**Distinguishing features (column 4)**

The differentiation criteria in column 4 serve to distinguish similar products within a stepwise or continuous processing procedure. The differentiation figures for characteristic constituents are based on dry matter.

**Requirements (column 5)**

Column 5 contains the characteristic requirements for the products based on dry matter unless stated otherwise.

**Instructions for labelling (column 6)**

Here the ingredients are listed, which shall be given on the label under the heading "Ingredients" or "analytical components". In addition, the provisions of the feed legislation for the labeling of feed ingredients according to Regulation (EC) No. 767/2009 have to be observed. The mandatory listing of ingredients of a feed material depends on the respective category, in which the feed material in accordance with Annex V to Regulation (EC) No. 767/2009 is to be classified. In Annex V, 18 categories of feed ingredients are listed and for each category the analytical components which shall be labelled are indicated. The labeling of the analytical components may be done also in accordance with the requirements of Regulation (EU) No. 68/2013 regarding the catalog of feed material, when the feed material corresponds to the description in the catalog. In individual cases different analytical components from those prescribed pursuant to Annex V for the listed feed materials may be given for labelling. Unless otherwise specified, the contents of the analytical components, in accordance with Article 11 para. 4 in conjunction with Annex II Nr. 1 of Regulation (EC) No. 767/2009, must be indicated on the basis of original substance. The content of ash insoluble in hydrochloric acid shall be declared on the basis of dry matter; the declaration has to be done due to the provisions of Annex I no. 5 of Regulation (EC) No. 767/2009, unless other requirements are specified in the Catalogue of feed materials. Furthermore, this column can contain additional requirements for the designation

**Additional information about the production process (column 7)**

Column 7 contains the following information

- a) "Data sheet required", i.e. a data sheet (see Annex) is required for these products if an HACCP assessment has indicated chemical, physical or biological risks or the raw material is subject to significant variation in the composition of constituents or also undesirable substances. This data sheet must be made available to the user by the manufacturer/distributor on request. In the case of changes of the product or the production process, this data sheet must to be updated and the purchaser must be informed about the modification.
- b) Other information that characterises the product or production process in more detail (e.g. information about ensiling additives or the drying process).

**Remarks (column 8)**

Column 8 contains additional comments to column 7 with regard to information that is already available or which needs to be presented by the manufacturers, any open issues relating to certain products or any other comments, e.g. about a questionable feed value or critical constituents in a straight feeding stuff.

## **Explanation of further terms**

For clearer understanding, a few terms are explained below, that are not part of the glossary; the glossary contains technical terms of the most important production procedures. Foodstuff identical stuff, their products and by-products of the food industry are listed in Group 13. This means the individual products do not have to be listed unless they are already listed within other groups due to their importance for animal feeding (e.g. bran, starch, milk etc.). For the listed products, the designation, description, requirements etc. apply in accordance with the filed chart and not the general designation "Food" or "products and by-products of the food production".

## **Former foodstuffs, products and by-products of food production**

**Food** within the meaning of article 2 of Regulation (EC) No. 178/2002/EG are any substance or product, whether intended to be or reasonably expected to be ingested by humans, whether processed, partially processed or unprocessed. Substances and products can be both foodstuffs or feeding stuffs depending on their type and properties. The distinction should be made objectively based on the abstract or specific intended use. They can only be fed to livestock if they are labelled according to the nature of the substance and their use in animal nutrition is not restricted or forbidden by specific feed legislation. If food contain food additives or processing aids, steps need to be taken to ensure that they are safe if fed properly. Some of these products are already included in the positive list in the individual groups (e.g. individual cereal species and bran). Unnamed products, in particular processed products or by-products, can be included in the positive list under the position "Former foodstuffs, products and by-products of food production" but they must have a feed value that is verified by means of suitable parameters in accordance with the criteria for the inclusion of a feeding stuff in the list.

The category "Former foodstuffs, products and by-products of food production" also includes "former foodstuffs".

## **Former foodstuffs**

are foodstuffs, except recyclable residues from the preparation of food (catering reflux), which were prepared in full compliance with EU food law for human consumption, but for practical or logistical reasons or due to problems in the production or due to defective packing or otherwise are no longer intended for that purpose, and when used as feed pose no health risk (part A of Annex no. 3 of Regulation (EU) No. 68/2013). Former foodstuffs also include food of which the shelf life data has expired taking into account the hygiene status of the product. Likewise, it may be foodstuffs that e.g. for reasons of presentation (size difference, colour, non conforming batches etc.) are not forwarded for human consumption. Substances for which a health-related effect is claimed (e.g. functional foodstuff) cannot be included in the positive list.

## **Products and by-products from the production of food**

are obtained during the production of foodstuffs and are not all recorded separately as straight feeding stuffs in the positive list. The products from process steps (e.g. vegetable peel waste etc.) and basic substances from the food production (e.g. baking mixtures, yoghurt powder) that are usually further processed before they are consumed by humans should be named. They may be fed to livestock if the products are labelled to the nature of the substance and their use is not restricted or forbidden by other legal acts.

No part of the positive list are processing aids and carriers, insofar as the latter are not straight feeding stuffs.

## **Processing aids**

Within the meaning of the Article 2 Par. 2 Letter h) of Regulation (EC) No. 1831/2003 of the European Parliament and the Council of 22nd September 2003 about additives for use in animal nutrition (ABI EU No. L 268 S.29), processing aids are substances, which are added when finishing or processing feeding stuffs in order to satisfy certain technological requirements. Their use, based on the state-of-the-art, can lead to unavoidable residues including decomposition and reaction

products in feeding stuffs. These residues may neither be hazardous to the health of animals or humans or the environment nor have a technological effect on the feeding stuff. In accordance with Article 4, paragraph 3 in conjunction with Annex I no. 1 of Regulation (EC) No. 767/2009 on the marketing and use of feed (OJ. European Union L 229, p 1) feed materials must be in accordance with good practice free from chemical impurities of the production process, and must be free of processing aids, unless there is a maximum level in the European Catalogue of feed materials established. With Regulation (EU) No. 68/2013 on the Catalogue of straight feedingstuffs (OJ. European Union L 29, p 1) for some feed ingredients maximum levels for residues of processing aids for some feed ingredients were set. According to Annex Part A no. 5 of Regulation (EU) No. 68/2013 maximum levels for residues of processing aids in principle only should be established if the use a processing aid results of residues of more than 0.1% (based on original substance). The established levels of maximum residues and the 0.1% rule apply only to feed materials that are listed in the Catalogue of straight feeding stuffs. For feed ingredients which have been registered in accordance with Article 24, paragraph 6 of the feed business under their own responsibility in the Register of feed materials, neither the maximum levels fixed nor the 0.1% rule apply; those feed materials must be free of chemical impurities in accordance with good practice.

For the positive list, the 0.1% rule applies, as long as the legal regulations do not specify otherwise.

### **Carrier substances**

are substances added to a premixture for technological purposes (e.g. support of the homogenous dilution of an additive or the flowability). Feed material, feed additives or other substances can be used as carriers provided they are safe (in the meaning of article 15 of Regulation (EC) No 178/2002 in conjunction with § 17 of the Lebensmittel-, Bedarfsgegenstände- und Futtermittelgesetzbuch (LFGB) 2006). Straight feeding stuffs listed in the Positive List, which may be used as carrier, are not specifically indicated.

# Glossary

| <b>Term</b>          | <b>Description</b>  | <b>Common designation</b>   |
|----------------------|---|---|
| Pressing             | Obtaining oil or fat from oil-rich products or juice from fruits or other plant products or dewatering by mechanical means of pressing, may be also with additional gentle heat treatment   | Cake (for products containing oil), pulp, marc (e.g. in the case of fruits), pressed pieces (for sugar beets). In the case of products containing oil, only the term cake is used, the former term "expeller" is out of use |
| Expansion            | Release of starch kernels localised in the endosperm by means of chemical or physical processes or degradation of the lignocellulose compounds by use of alkali (e.g. straw)  | expanded / starch expansion / straw expansion   |
| Coating              | Coating of feed particles, e.g. with fat, to prevent decomposition  | coated  |
| Steaming             | Heating process using damp heat   | steamed   |
| Torrefying           | Drying of germinated cereals during the malting process with hot air  | torrefied   |
| Delinting            | Removal of the furry exterior (lint and fuzz) from <i>Gossypium</i> spp. Seeds  | Delinted  |
| Extraction of pectin | Extraction of pectin  | Pectin extracted  |
| Desugaring           | Complete or partial removal of mono- or disaccharides from molasses or other sugar containing materials by means of chemical or physical processes  | desugared, partially desugared  |
| Heating              | General designation for different heat treatments performed under certain conditions to modify the nutritional value or structure of the material or to reduce the content of native anti-nutritive substances  | steam-heated/toasted, boiled, heat-treated, roasted   |
| Extraction           | Obtaining fat or oil from certain materials by means of extraction using organic solvents or obtaining sugar or other water-soluble components by means of watery extraction. If an organic solvent is used, the extracted material needs to be technically free of solvent residues. | Extraction meal (for oily materials), molasses, pulp (for sugar or other materials containing water-soluble components)   |
| Extruding            | Pressing or squeezing material through an opening under pressure (see also pre-agglutination)   | extruded  |
| Fermenting           | Biochemical break down of carbohydrates (starch, sugar), e.g. for producing alcohol   | fermented   |
| Fat hydrogenation    | Converting unsaturated glycerides into saturated glycerides (hardening of oils and fats)  | hydrogenated, partially hydrogenated  |
| Flaking              | Rolling of damp, heat-treated material  | Flakes  |

| <b>Term</b>                 | <b>Description</b>  | <b>Common designation</b>        |
|-----------------------------|---|----------------------------------|
| Fractioning                 | Physical process to separate vegetable fats into fatty acid fractions   | fractionate, fractionation       |
| Hydrothermal treatment      | Heating of products using saturated steam, e.g. treatment to expand starch  | Expanded, expansion              |
| Hydrolysis                  | Break down into simpler chemical components by means of suitable treatment with water and if necessary enzymes, acids or alkalis  | hydrolysed, partially hydrolysed |
| Conservation                | Procedure used to conserve products using physical processes or by adding organic or inorganic substances   | conserved                        |
| Concentrating <sup>1)</sup> | Enriching certain ingredients by removing water or other components   | Concentrate                      |
| Flour milling               | Mechanical processing of grains to reduce the grain size and gentle separation into its several parts like flour, bran, middlings, feed   | Flour, bran, middlings, feed     |
| Modifying                   | Modifying of starch in order to improve the characteristic and mode action by physical and chemical treatment   | modified                         |
| Wet milling                 | Mechanical separation of individual components of grains and kernels also after soaking in water with or without adding sulphur dioxide to obtain starch  | Germs, gluten, starch            |
| Parboiling                  | Water, heat and pressure treatment to protect the B-vitamins and improve the cooking properties (rice)  | parboiled                        |
| Pelleting                   | Special shaping process using dies  | Pellet, pelleted                 |
| Refining                    | Complete or partial removal of impurities from sugar, oils, fats and other natural materials by means of chemical or physical processes   | refined, partially refined       |
| Cleaning                    | e.g. of grain; mechanical removal of impurities such as spoiled grains or fungi-infested grains incl. ergot, dust or any other solid components   | cleaned                          |
| Peeling <sup>2)</sup>       | Complete or partial removal of the outer shell or of shells of grains, seeds, fruits, nuts or others  | peeled, partially peeled         |
| Grinding coarsely           | Mechanical processing of grains or other straight feeding stuffs to reduce their size   | coarse meal, ground              |
| Sifting                     | Mechanical separation of ground products of varying size by means of sieving  | sifted                           |
| Ensiling                    | Production of storable feeding stuffs (silages) by means of anaerobic fermentation  | ensiled (fermented)              |
| Syrup                       | Thick-liquid, concentrated, sugar containing liquid   |                                  |
| (Soap)stock                 | Product, which is obtained during the deacidification of vegetable oils and fats with the help of aqueous solutions of calcium, magnesium, potassium or Sodium or Potassium oxide; it contains salts of free fatty acids, oils or fats and natural components of seeds, fruits or animal tissue such as mono- and diglycerides, lecithin and fibers (see Regulation (EU) No. No. 68/2013. 13.6.8) |                                  |

| <b>Term</b>                                 | <b>Description</b>   | <b>Common designation</b>               |
|---|--|---|
| Drying                                      | Artificial or natural removal of water   | dried                                   |
| Pre-agglutination                           | Hydrothermal processing of starch to significantly increase its swelling capacity in cold water                | pre-agglutinated <sup>3)</sup> , soaked |
| significantly exceeding                     | More than two thirds   |   |
| low percentage                              | Unavoidable portion due to technical processing  |   |
| practically free of/as free as possible of. | In compliance with the current state-of-the-art free of non-desirable components                               |   |
| technically pure                            | In compliance with the technical possibilities (state-of-the-art) free or freed of any other type of component |   |

1) "Concentrating" may be substituted by "Thickening". The usual term would then be "thickened".

2) "Peeling" may be replaced in certain cases by "shelled" or "dehusked". The usual term would then be "shelled" or "dehusked".

3) "Pre-agglutination" may be substituted by the term "expanded" (with reference to starch).

# See Annex

## Data sheet for straight feeding stuffs of the Positive List

|  |  |
|--|--|
| <b>Manufacturer/distributor</b>  |  |
| <b>Feeding stuff/designation of the product</b><br>(Name according to positive list / trade name / brand name,<br>supplemented with no according to the positive list)                                       |  |
| <b>Product description</b><br>(Description of the product and description of the<br>manufacturing process)   |  |
| <b>Information about the production process</b><br>Information on constituents of the starting product /<br>possible further components<br>→ (Flow diagram to show the processing steps / material<br>flows) |  |
| <b>Information on the use of processing aids</b><br>→ (Including all other added substances)   |  |
| <b>Information about the composition</b><br>Averages analysis of the most important valuable<br>constituents   |  |
| <b>Information about relevant undesirable substances during<br/>the risk-oriented self control (e.g. HACCP)</b>  |  |
| <b>Details about shelf life, storage and transport</b>   |  |
| <b>Safety information</b><br>(flammable, explosive, caustic etc.)  |  |
| Information about specific analytical problems   |  |

Details in **bold print** are stringently required



# Instruction on compiling the data sheet

## Manufacturer/distributor

- Specify the correct full address

## Feeding stuff/Product *designation*

- **Stated according to the designation in the Positive List (with number)**  
**In the case of new additions after confirming the designation with the Standards Commission**

Additional designations (trade or brand name) are possible  
 compatibility with the Positive List has priority (see also requirements of QS)

## Product description

- **Product description according to the Positive List**  
**Special features/deviations must be clearly indicated here!**

Company-specific characteristics have to be marked in the data sheets.

## Information about the production process

- **The information should contain all important sub-steps ranging from the raw material to the product or by-product (to be supplemented with a flow chart)**

The chart should allow clear allocation of the following information about the use of processing aids in the process and/or allocation of CCPs in the HACCP-system.

It should be clear whether or not e.g. several raw products are used or whether or not the final product also contains different partial fractions that are developed during the whole process.

Information about technical innovations that could result in a new group (designation) or possibly modification of differentiating features also need to be sent to the Standards Commission of straight feeding stuffs.

## Information about the use of processing aids

- **Complete list of all used processing aids**

Within the meaning of the Article 2 Par. 2 letter h) of Regulation (EC) No. 1831/2003 of the European Parliament and the Council dated 22nd September 2003 about additives for use in animal nutrition (ABI EU No. L 268 S.29), processing aids are substances that have been added when finishing or processing feeding stuffs in order to satisfy certain technological requirements. Their use, based on the state-of-the-art, can result in unavoidable residues including decomposition and reaction products in feeding stuffs. These residues may neither be hazardous to the health of animals or humans or the environment nor have a technological effect on the feeding stuff. Details about quality requirements of **processing aids** would be preferred. According to Article 4, paragraph 3 in connection with Annex I, No. 1 of Regulation (EC) No. 767/2009 on the marketing and use of feed (OJ. European Union L 229, p.1) feed materials must be free of chemical impurities resulting from the manufacturing process taking in account good manufactory practice, and must be free of processing aids, unless a maximum residue level has been established for a specific constituent in the European Catalogue of feed materials. For some feed ingredients maximum residue levels for processing aids were established in Commission Regulation (EU) No. 68/2013 on the Catalogue of feed (OJ. European Union L 29 p.1). According to Part A of Annex no. 5 of Regulation (EU) No. 68/2013 maximum levels for residues of processing aids in principle may only be established if the use of a processing aid results in

residues of more than 0.1% (based on original substance). The maximum level for residues of processing aids and the 0.1% rule apply only to feed materials that are listed in the Catalogue of feed. For feed ingredients which have been registered in accordance with Article 24, paragraph 6 in the Register of Feed materials by action of the feed business operators under their own responsibility, neither the established maximum residue levels nor the 0.1% rule apply; those feed materials in principle must be free of chemical impurities in accordance with the good practice.

## Information about composition

### → Details about the contents of the most important valuable constituents (average analysis)

At least details of the parameters regarding the labeling are necessary.

At least one timely analyses certificate or a compilation of values from the self-control or assurance of minimum or maximum values of the parameters to be labelled is required

Feed analysis methods shall be used.

If a declaration of energy is made, these calculations are to be made for the specific feedstuffs (eg ME for poultry, pigs, calves, fattening cows, NEL for dairy cows)

## Details about relevant undesirable substances on the basis of the risk-oriented self control

### → It must be clearly stated, which tests were performed for which substances with regard to the specific properties of the raw product, the production process or the processing aids used.

Also a timely examination test or a compilation of values from the self-control or maximum values of the parameters

Details of the essential CCPs when HACCP concepts are available. Otherwise HACCP-compliant notes

Where applicable, reference to "industry guidelines on quality assurance".

## Details about shelf life, storage and transport<sup>1)</sup>

e.g. storage conditions (moisture), control of rodents and birds etc.

<sup>1)</sup> if there are specific requirements

## Safety information

In accordance with the requirements of the Hazardous Substances Regulation for the handling of hazardous substances

## Notes about special analytical problems, if relevant or known

# Annex

Table 1 contains the relevant amendments / new additions for the straight feeding stuffs of the Positive List for the period 01.08.2014 to 28.02.2017.

The table contains the amendment date, the number or classification in the Positive List, the designation and the respective amendments / new additions.

**Table 1:**

| Date of amendment or new addition | Number or classification in the Positive List | Designation   | Kind of amendments / new additions   |
|-----------------------------------|---|---|--|
| 22.01.2015                        | 04.10.11                                      | Pressed (Sugar) beet pulp, (partially) depectinised                   | New  |
| 22.01.2015                        | 05.04.01                                      | Vinasse   | Description and Labelling provisions revised   |
| 22.01.2015                        | 05.04.03                                      | Vinasse from ketogulonic acid production                              | New  |
| 22.01.2015                        | 06.07.01                                      | Citrus pulp, dried  | Information on the Manufacturing process revised   |
| 22.01.2015                        | 06.07.02                                      | Citrus pulp, (Partially) depectinised                                 | Designation, description, comments and information on the labelling provisions and manufacturing process revised |
| 22.01.2015                        | 08.09.01                                      | Schizochytrium limacinum algae  | New  |
| 22.01.2015                        | 12.07.01                                      | 1.2 Propanediol (Propylenglycol)                                      | Requirements revised   |
| 22.01.2015                        | 14.08.01                                      | By-product of the production of enzymes with <i>Aspergillus niger</i> | New  |
| 22.01.2015                        | 20.02.01                                      | Hen's egg albumen, pasteurised  | Description, comments and information on the labelling provisions and manufacturing process revised              |
| 22.01.2015                        | 20.03.01                                      | Egg shells, dried   | Description, comments and information on the labelling provisions and manufacturing process revised              |
| 01.08.2016                        | 01.03.09                                      | Oat-Spelt-husks   | New  |
| 01.08.2016                        | 02.15.03                                      | Sunflower cake poor in husks  | New  |
| 01.08.2016                        | 02.15.04                                      | Sunflower cake from peeled or partially peeled seed                   | New  |
| 01.08.2016                        | 02.15.05                                      | Sunflower extraction meal <sup>1)</sup>                               | Number changed   |

| Date of amendment or new addition | Number or classification in the Positive List | Designation   | Kind of amendments / new additions                            |
|-----------------------------------|---|---|---|
| 01.08.2016                        | 02.15.06                                      | Sunflower extraction meal from peeled or partially peeled seed          | New   |
| 01.08.2016                        | 02.15.07                                      | Sunflower protein concentrate <sup>1)</sup>                             | New   |
| 01.08.2016                        | 02.15.08                                      | Sunflower syrup   | New   |
| 01.08.2016                        | 02.15.09                                      | Sunflower husk  | Number changed  |
| 01.08.2016                        | 08.10.01                                      | Small water lens  | New   |
| 01.08.2016                        | 12.08.07                                      | Product obtained from brown coal, rich in humic acid                    | New   |
| 01.08.2016                        | 19.01.03                                      | Protein hydrolyzate from porcine hemoglobin                             | New   |
| 31.12.2016                        | High number <sup>1)</sup> on page 1           |   | Description added   |
| 31.12.2016                        | 01.05.14                                      | Maize gluten feed   | Description revised   |
| 31.12.2016                        | 02.07.03                                      | Linseed, extraction meal <sup>1)</sup>                                  | Labelling provisions revised                                  |
| 31.12.2016                        | 02.07.04                                      | Linseed extraction meal, partially extracted <sup>1)</sup>              | Labelling provisions revised                                  |
| 31.12.2016                        | 02.10.04                                      | Fatty acids from chemical refining                                      | Labelling provisions revised                                  |
| 31.12.2016                        | 02.10.05                                      | Fatty acid distillates from physical refining                           | Labelling provisions revised                                  |
| 31.12.2016                        | 02.11.04                                      | Rape seed, extraction meal <sup>1) 2)</sup>                             | Labelling provisions revised                                  |
| 31.12.2016                        | 02.11.05                                      | Rape seed extraction meal, partially extracted <sup>1) 2)</sup>         | Labelling provisions revised                                  |
| 31.12.2016                        | 02.14.05                                      | Soya (bean) extraction meal, toasted <sup>1)</sup>                      | Labelling provisions revised                                  |
| 31.12.2016                        | 02.14.06                                      | Soya (bean) extraction meal from, dehulled seeds, toasted <sup>1)</sup> | Labelling provisions revised                                  |
| 31.12.2016                        | 02.20.02                                      | Hemp expeller   | Comments changed  |
| 31.12.2016                        | 02.21.01                                      | Chia seed   | Comments changed  |
| 31.12.2016                        | 02.21.02                                      | Chia press cake   | New   |
| 31.12.2016                        | 04.10.07                                      | Pressed (sugar) beet pulp   | Description and requirements and labelling provisions revised |

| Date of amendment or new addition | Number or classification in the Positive List | Designation  | Kind of amendments / new additions               |
|-----------------------------------|---|--|--|
| 31.12.2016                        | 04.10.08                                      | Dried (sugar) beet pulp  | Description of the manufacturing process revised |
| 31.12.2016                        | 04.10.09                                      | (Sugar) beet pulp, molassed  | Description of the manufacturing process revised |
| 31.12.2016                        | 04.10.10                                      | (Sugar) beet cooking chips   | Description of the manufacturing process revised |
| 31.12.2016                        | 05.08.01                                      | First wort   | Comments changed                                 |
| 31.12.2016                        | 07.01.01                                      | Permanent pasture products   | Comments changed                                 |
| 31.12.2016                        | 07.01.02                                      | Grass/legume plants  | Comments changed                                 |
| 31.12.2016                        | 07.06.01                                      | Maize plants   | Labelling provisions revised                     |
| 31.12.2016                        | 08.11.01                                      | Fragrant agrimony  | New  |
| 31.12.2016                        | 11.01.01                                      | Calciumacetate   | deleted  |
| 31.12.2016                        | 11.01.09                                      | Calciumlactate   | deleted  |
| 31.12.2016                        | 11.01.10                                      | Calciumpropionate  | deleted  |
| 31.12.2016                        | 11.01.35                                      | Mono-dicalcium-sodiumphosphate   | Description revised                              |
| 31.12.2016                        | 11.01.43                                      | Sodiumformiate   | deleted  |
| 31.12.2016                        | 11.01.44                                      | Sodiumpropionate   | deleted  |
| 31.12.2016                        | 11.01.60                                      | Salt from the processing of plant crude glycerol, rich in sodium                   | New  |
| 31.12.2016                        | 12.14.01                                      | Fructo-Oligosaccharides  | Labelling provisions revised                     |
| 31.12.2016                        | 13  |  | Change of the group name                         |
| 31.12.2016                        | 13.02.01                                      | Products and by-products of the convenience food industry                          | Designation and description revised              |
| 31.12.2016                        | 13.02.02                                      | Products and by-products from the baking and pastry industry                       | Designation and description revised              |
| 31.12.2016                        | 13.02.03                                      | Products and by-products from the sweets industry <sup>4)</sup>                    | Designation and description revised              |
| 31.12.2016                        | 13.02.04                                      | Products and by-products of the confectionary and ice-cream industry <sup>4)</sup> | Designation and description revised              |
| 31.12.2016                        | 13.02.05                                      | Products and by-product from processing fresh fruit and vegetables                 | Designation and description revised              |
| 31.12.2016                        | 13.02.06                                      | Products and by-products from the dairy industry <sup>4)</sup>                     | Designation and description revised              |

| Date of amendment or new addition | Number or classification in the Positive List | Designation   | Kind of amendments / new additions                |
|-----------------------------------|---|---|---|
| 31.12.2016                        | 14.03.01                                      | Yeast   | Description and additional information changed    |
| 31.12.2016                        | 14.04.01                                      | Brewer's yeast, fresh   | New   |
| 31.12.2016                        | 14.06.01                                      | By-product of fermentation of solid material with fungi, rich in crude protein                      | Comments changed                                  |
| 31.12.2016                        | 14.07.01                                      | Crude protein rich by-product of the production of amino acids by <i>Corynebacterium glutamicum</i> | Designation, description and comments and revised |
| 31.12.2016                        | 14.09.01                                      | By-product of the production of citric acid with <i>Aspergillus niger</i>                           | New   |
| 28.02.2017                        | 14.10.01                                      | By-product of the production of citric acid with <i>Pichia guilliermondii</i>                       | New   |

<sup>1)</sup> Feedingstuff may be formaldehyde-treated, xylose-treated, thermally, hydrothermally or pressure hydrothermally treated in order to reduce ruminal protein or starch digestion. In this case the feeding stuff has to be designated as “protected”. The kind of treatment has to be stated in the data sheet.

<sup>2)</sup> The word ‘low in glucosinolate’ may be added to the designation if the straight feedingstuff complies with the maximum glucosinolate content determined in Article 4 (2) of Commission Regulation (EC) No. 658/96 of 9 April 1996 on certain conditions for granting compensatory payments under the support system for producers of certain arable crops (OJ L 91 p. 46), as amended.

<sup>3)</sup> Product obtained by anaerobic lactic acid fermentation with or without use of ensiling additives. Only ensiling additives listed in the register of the European Commission ([http://ec.europa.eu/food/food/animalnutrition/feedadditives/registeradditives\\_en.htm](http://ec.europa.eu/food/food/animalnutrition/feedadditives/registeradditives_en.htm)) may be used in accordance with the Regulation (EC) No. 1831/2003 of the European Parliament and the Council dated 22nd September 2003 on additives for use in animal nutrition.

<sup>4)</sup> The provisions of Regulation (EC) No. 1069/2009 as amended and the implementing provisions of Regulation (EC) No 142/2011 need to be observed.

<sup>5)</sup> Explanation for the columns see page IX - X of the foreword.

| Number   | Designation          | Description   | <sup>5)</sup> Distinguishing features (%)             | <sup>5)</sup> Requirements (%)        | <sup>5)</sup> Instruction for labelling (constituents to be declared)                       | Additional information on the production process | Remarks  |
|--|----------------------|---|---|---------------------------------------|---|--|--|
| 00.01.01   | (Drinking) Water     | Water obtained from the public water supply, watercourses, wells or rainfall                              |   |                                       |   |  | Observe water quality                                    |
| <b>01. Cereal grains, their products and by-products</b> |                      |   |   |                                       |   |  |  |
| 01.01.01   | Spelt                | Grains of spelt, <i>Triticum spelta</i> L., <i>Triticum diococcum</i> Schrank, <i>Triticum monococcum</i> |   |                                       |   |  |  |
| 01.01.02   | Dehusked Spelt       | Product obtained by dehusking cleaned spelt   | Crude fibre max. 5                                    |                                       | Starch<br>Crude fibre   |  |  |
| 01.01.03   | Spelt flakes         | Product obtained by steaming and rolling cleaned and dehusked spelt                                       | Crude fibre max. 5                                    |                                       | Starch<br>Crude fibre   |  |  |
| 01.01.04   | Spelt husks          | By-product of the dehusking of cleaned spelt  | Ash insoluble in HCl max. 6                           |                                       | Crude fibre<br>Ash insoluble in HCl   |  | Low energy- and nutrient supply, dietary fiber-character |
| 01.02.01   | Barley <sup>1)</sup> | Grains of <i>Hordeum vulgare</i> L.   |   |                                       |   | If <sup>1)</sup> , then data sheet required      |  |
| 01.02.02   | Dehusked barley      | Product obtained by dehusking cleaned barley  | Crude fibre max. 2,3                                  |                                       | Starch  |  |  |
| 01.02.03   | Barley flakes        | Product obtained by steaming and rolling screened and dehusked barley and which can be expanded           | Crude fibre max. 2,3<br>Ash insoluble in HCl max. 0,5 | If expanded: starch expansion min. 50 | Starch<br>Crude fibre<br>In case of expansion, the designation may be completed accordingly |  |  |

| Number   | Designation                   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|-------------------------------|--|---|--------------------------------|---|--|---------|
| 01.02.04 | Barley middlings              | By-product obtained during the processing of screened, dehusked barley into pearl barley, groats or flour  | Crude fibre max. 12                       |                                | Crude fibre<br>Starch   |  |         |
| 01.02.05 | Barley bran                   | By-product obtained during the processing of cleaned barley into flour. It consists predominately of barley hulls and particles of grain and may contain a small proportion of husks | Crude fibre max. 17                       |                                | Crude protein<br>Crude fibre  |  |         |
| 01.02.06 | Barley hulls and bran         | By-product obtained during the processing of cleaned barley into pearl barley and barley groat. It consists almost entirely of hulls   | Crude fibre max. 23                       |                                | Crude fibre   |  |         |
| 01.02.08 | Small barley flakes, expanded | By-product obtained by wetting and heating cleaned barley after rolling and screening  | Crude fibre max. 15                       | Starch expansion min. 50       | Starch<br>Crude fibre   |  |         |
| 01.03.01 | Oat                           | Grains of Avena sativa L. and other cultivars of oat   |   |                                |   |  |         |
| 01.03.02 | Dehusked oat                  | Product obtained by dehusking cleaned oat  | Crude fibre max. 4                        |                                | Starch  |  |         |
| 01.03.03 | Oat groat                     | Product obtained by steaming and steel-cutting cleaned, dehusked oat. It may contain a small proportion of oat husks   |   |                                | Starch<br>Crude fibre   |  |         |
| 01.03.04 | Oat flakes                    | Product obtained by steaming and rolling cleaned, dehusked oat. It may contain a small proportion of oat husks   | Crude fibre max. 4                        |                                | Starch  |  |         |
| 01.03.05 | Oat middlings                 | By-product obtained during the processing of cleaned, dehusked barley into oat groat or flour. It consists predominately of oat flour and small proportions oat husks                | Crude fibre max. 9,5                      |                                | Crude fibre   |  |         |



| Number   | Designation               | Description  | <sup>5)</sup> Distinguishing features (%)             | <sup>5)</sup> Requirements (%)               | <sup>5)</sup> Instruction for labelling (constituents to be declared)                          | Additional information on the production process | Remarks  |
|----------|---------------------------|--|---|--|--|--|--|
| 01.03.06 | Pre-gelatinised oat flour | Product obtained from ground oat groat and in which the starch has been largely expanded by heat or heat-moisture treatment                            | Crude fibre max. 4                                    | Moisture max. 12<br>Starch expansion min. 50 | Starch   | Data sheet required                              |  |
| 01.03.07 | Oat hulls and bran        | By-product of flour manufacture, obtained from cleaned oat kernels. It consists predominately of fragments of hulls, husks and parts of the endosperm  | Crude fibre max. 30<br>Ash insoluble in HCl max. 5    |  | Crude fibre  |  |  |
| 01.03.08 | Oat husks                 | By-product of the dehusking of oat   | Ash insoluble in HCl max. 6                           |  | Crude fibre<br>Ash insoluble in HCl  |  | Low energy- and nutrient supply, ballast character |
| 01.03.09 | Oat-Spelt-husks           | By-product of peeling of oat and spelt consisting predominately of husks   | Ash insoluble in HCl max. 6                           |  | Crude fibre<br>Ash insoluble in HCl  |  | Low energy- and nutrient supply, ballast character |
| 01.04.01 | Millet                    | Grains of Panicum miliaceum L.   |   |  |  |  |  |
| 01.04.02 | Sorghum                   | Sorghum grains of Sorghum bicolor (L.) Moench s.l.   |   |  | Additional designation "Milocorn" is possible.   |  |  |
| 01.05.01 | Maize <sup>1)</sup>       | Grains of Zea mays L.  |   |  |  | If <sup>1)</sup> , then data sheet required      |  |
| 01.05.02 | Maize flakes              | Product obtained by steaming and rolling cleaned maize and which can be expanded or wetting and heating  | Crude fibre max. 4,7<br>Ash insoluble in HCl max. 0,5 | If expanded: Starch expansion min. 50        | Starch<br>Crude fibre<br>In case of expansion, the designation can be supplemented accordingly |  |  |
| 01.05.03 | Maize screenings          | By-product of the manufacture of flour or semolina or flour from maize   | Starch min. 40  |  | Starch<br>Crude fibre  |  |  |
| 01.05.04 | Maize middlings           | By-product of the manufacture of flour or semolina from maize. It consists predominately of fragments of the outer skins and of particles of the grain | Starch min. 34  |  | Starch<br>Crude fibre  |  |  |

| Number   | Designation                  | Description  | <sup>5)</sup> Distinguishing features (%)                    | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|------------------------------|--|--|---|---|--|---------|
| 01.05.05 | Maize bran                   | By-product of the manufacture of flour or semolina from maize. It consists predominately of outer skins and some maize germ fragments, parts of the endosperm            |  |   | Crude protein<br>Crude fibre  |  |         |
| 01.05.06 | Maize germ                   | By-product of the manufacture of semolina, flour or starch from maize. It consists predominately of maize germ, outer skins and parts of the endosperm, and may be dried |  | Crude fat min. 18   | Crude protein<br>Crude fat<br>Crude fibre<br>Moisture, if > 10%       | Data sheet required                              |         |
| 01.05.07 | Maize germ and bran          | By-product of the manufacture of semolina, flour or starch from maize. It consists of non-extracted germ, outer skins and parts of the endosperm                         | Crude fibre max. 10  |   | Starch<br>Crude protein<br>Crude fat<br>Crude fibre                   | Data sheet required                              |         |
| 01.05.08 | Maize starch                 | Technically pure starch obtained from maize  |  | Ash insoluble in HCl<br>max. 0,5  | Starch  | Data sheet required                              |         |
| 01.05.09 | Pre-gelatinised maize starch | Product obtained from maize starch largely expanded by heat or heat-moisture treatment   |  | Ash insoluble in HCl<br>max. 0,5<br>Moisture max. 12<br>starch expansion<br>min. 50 | Starch  | Data sheet required                              |         |
| 01.05.11 | Maize gluten                 | Dried by-product of starch production from maize. It consists predominately of maize-protein obtained during the separation of the starch                                | Crude protein<br>min. 62<br>Ash insoluble in HCl<br>max. 0,5 |   | Crude protein   | Data sheet required                              |         |
| 01.05.12 | Maize germ expeller          | By-product of oil manufacture, obtained by pressing of dry or wet processed germ of maize and to which parts of the endosperm and testa may still adhere                 |  |   | Starch<br>Crude protein<br>Crude fat<br>Crude fibre                   | Data sheet required                              |         |
| 01.05.13 | Maize germ, extracted        | By-product of oil extraktion, obtained by and extraction of dry or wet processed maize germ to which parts of the endosperm and testa may still adhere                   | Crude fat max. 4   |   | Starch<br>Crude protein<br>Crude fibre                                | Data sheet required                              |         |

| Number   | Designation                  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                                     | <sup>5)</sup> Instruction for labelling (constituents to be declared)                                  | Additional information on the production process | Remarks                        |
|----------|------------------------------|---|---|--|--|--|--------------------------------|
| 01.05.14 | Maize gluten feed            | By-product of the manufacture of maize starch. It consists of bran and gluten, to which the broken maize obtained from screening at an amount no greater than 15% of the product or the residues of the steeping liquor used for the production of alcohol or other starch-derived products, may be added. The product may also include residues from the oil extraction of maize germs |   |  | Crude protein<br>Starch<br>Crude fat, if > 4,5%<br>Moisture, if > 14%                                  | Data sheet required                              | Description due to customs law |
| 01.05.15 | Pre-gelatinised maize flour  | Product obtained from maize flour, in which the starch has largely been expanded by heat or heat-moisture treatment   |   | Moisture max. 12<br>Crude fibre max. 2<br>starch expansion min. 50 | Starch   | Data sheet required                              |                                |
| 01.05.16 | Small maize flakes, expanded | By-product obtained by wetting and heating cleaned maize after rolling and screening  | Crude fibre max. 12                       | Starch expansion min. 50   | Starch<br>Crude protein<br>Crude fat<br>Crude fibre  |  |                                |
| 01.05.17 | Maize hulls                  | By-product obtained during starch production from cleaned maize that may contain parts of the endosperm and maize germs   |   |  | Crude fibre<br>Starch, if > 20%<br>Crude protein, if > 10%<br>Crude fat, if > 5%<br>Moisture, if > 14% | Data sheet required                              |                                |
| 01.06.01 | Rice                         | Grains of <i>Oryza sativa</i> L. (including parboiled rice)   |   |  |  |  |                                |
| 01.06.02 | Rice, broken                 | By-product of preparation of cleaned, polished or glazed rice <i>Oryza sativa</i> L. (including parboiled rice). It consists predominately of undersized and/or broken grains   | Ash insoluble in HCl max. 1               | Botanical purity min. 99   | Starch   |  |                                |
| 01.06.03 | Fodder rice                  | Product obtained from cleaned, chalky or unripe grains (including parboiled rice grains) sifted out during the milling of rice, or from normal dehusked grains which are yellow or spotted  | Crude fibre max. 3                        | Botanical purity min. 99   | Starch   |  |                                |

| Number   | Designation                      | Description  | <sup>5)</sup> Distinguishing features (%)              | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks |
|----------|----------------------------------|--|--|---|--|--|---------|
| 01.06.04 | Rice flakes                      | Product obtained by grinding, steaming and rolling broken rice (including parboiled rice)  | Crude fibre max. 3                                     | Botanical purity min. 99  | Starch   |  |         |
| 01.06.05 | Rice semolina/rice flour         | Product obtained during the grinding of cleaned rice (including parboiled rice)  |  |   | Starch   |  |         |
| 01.06.06 | Pre-gelatinised rice flour       | Product obtained from rice flour or broken rice, in which the starch has largely been expanded by heat or heat-moisture treatment and which is practically free of husks   | Crude fibre max. 2                                     | Starch expansion min. 50  | Starch   | Data sheet required                              |         |
| 01.06.07 | Rice middlings <sup>1)</sup>     | By-product of the polishing of cleaned dehusked rice (including parboiled rice). It consists principally of silvery skins, particles of the aleurone layer, endosperm and germ   | Crude fibre max. 12,5<br>Ash insoluble in HCl max. 1,7 | Rice hulls max. 3   | Starch<br>Crude fat<br>Crude fibre<br>The designation may be completed with "yellow" or "white", in these case the maximum ash insoluble in HCl must be stated | Data sheet required                              |         |
| 01.06.09 | Rice bran with calcium carbonate | By-product of the polishing of cleaned dehusked rice (including parboiled rice). It consists predominately of silvery skins, parts of the aleurone layer, endosperm and germ and may contain varying amounts of calcium carbonate resulting from the polishing process |  | Calcium carbonate max. 23<br>Ash insoluble in HCl max. 1,2<br>Rice hulls max. 2 | Starch<br>Crude fat<br>Crude fibre<br>Calcium carbonate  | Data sheet required                              |         |
| 01.06.10 | Rice bran <sup>1)</sup>          | By-product of the polishing of cleaned rice (including parboiled rice). It consists predominately of parts of rice hulls and bran and may contain varying amounts of calcium carbonate   |  |   | Crude protein<br>Starch<br>Crude fibre<br>Calcium carbonate  | Data sheet required                              |         |
| 01.06.15 | Rice gluten/<br>Rice protein     | By-product of the starch production from cleaned rice, primarily comprising of rice protein or rice gluten, dried  |  | Crude protein min. 50<br>Crude ash max 3  | Crude protein<br>Crude fibre<br>Crude ash  | Data sheet required                              |         |
| 01.07.01 | Rye                              | Grain of <i>Secale cereale L.</i>  |  |   |  |  |         |

| Number   | Designation               | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                                     | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|---------------------------|---|---|--|---|--|---------|
| 01.07.02 | Rye flakes                | Product obtained by rolling and in some cases steaming cleaned rye  |   |  | Starch<br>Crude fibre   |  |         |
| 01.07.03 | Rye middlings             | By-product of the manufacture of flour from cleaned rye. It consists predominately of particles of endosperm, with fine fragments of the outer skins and some other parts of the grain                              | Starch min. 32                            |  | Starch<br>Crude fibre   |  |         |
| 01.07.04 | Rye screenings            | By-product of the manufacture of flour from cleaned rye in which the proportion of endosperm significantly exceeds the proportion of fragments of outer skins   | Starch min. 44                            |  | Starch<br>Crude fibre   |  |         |
| 01.07.05 | Rye feed                  | By-product of flour manufacture, obtained from cleaned rye. It consists predominately of fragments of the outer skins, and of particles of grain from which less of the endosperm has been removed than in rye bran | Starch min. 17<br>Crude fibre max. 7      |  | Crude protein<br>Crude fibre  |  |         |
| 01.07.06 | Rye bran                  | By-product of flour manufacture, obtained from cleaned rye. It consists predominately of fragments of the outer skins, and of particles of grain from which most of the endosperm has been removed                  |   |  | Crude protein<br>Crude fibre  |  |         |
| 01.07.07 | Pre-gelatinised rye flour | Product obtained from rye flour and in which the starch has been largely expanded by heat or heat-moisture treatment  |   | Moisture max. 12<br>Crude fibre max. 4<br>Starch expansion min. 50 | Starch  | Data sheet required                              |         |
| 01.08.01 | Triticale                 | Grain of <i>Triticum x Secale</i> hybrid  |   |  |   |  |         |
| 01.08.02 | Triticale flakes          | Product obtained by rolling and in some cases steaming cleaned triticale  | Crude fibre max. 3                        |  | Starch<br>Crude fibre   |  |         |
| 01.09.01 | Wheat <sup>1)</sup>       | Grain of <i>Triticum aestivum</i> L., <i>Triticum durum</i> Desf. and other cultivars of naked wheat species  |   |  |   | If <sup>1)</sup> , then data sheet required      |         |

| Number   | Designation                 | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                                | <sup>5)</sup> Instruction for labelling (constituents to be declared)                       | Additional information on the production process | Remarks |
|----------|-----------------------------|--|---|---|---|--|---------|
| 01.09.02 | Wheat flakes                | Product obtained by rolling and in some cases steaming cleaned wheat which may be expanded   | Crude fibre max. 3                        | If expanded, starch expansion min. 50                         | Starch<br>Crude fibre<br>In case of expansion, the designation may be completed accordingly |  |         |
| 01.09.03 | Wheat screenings            | By-product of the manufacture of flour from cleaned wheat. It consists predominately of particles of endosperm, fine fragments of outer skins and few other parts of the grain   | Starch min. 44                            |   | Starch<br>Crude fibre   |  |         |
| 01.09.04 | Wheat middlings             | By-product of flour manufacture, obtained from cleaned grains. It consists primarily of particles of endosperm, fine fragments of the outer skins and few particles of the grain   | Starch min. 34                            |   | Starch<br>Crude fibre   |  |         |
| 01.09.05 | Wheat feed                  | By-product of flour or flake manufacture, obtained from cleaned grains. It consists predominately of fragments of the outer skins and of particles of grain from which to a lower extent the endosperm has been removed than in wheat bran | Starch min. 17                            |   | Crude protein<br>Crude fibre  |  |         |
| 01.09.06 | Wheat bran                  | By-product of flour manufacture, obtained from cleaned grains of wheat. It consists predominately of fragments of the outer skins and of particles of grain from which the greater part of the endosperm has been removed                  |   |   | Crude protein<br>Crude fibre  |  |         |
| 01.09.07 | Wheat protein, hydrolysed   | Product obtained from wheat gluten by enzymatic hydrolysis   |   | Crude protein min. 65<br>Ash insoluble in HCl max.1,5         | Crude protein   | Data sheet required                              |         |
| 01.09.08 | Pre-gelatinised wheat flour | Product obtained from wheat flour and in which the starch has been largely expanded by heat or heat-moisture treatment   |   | Moisture max. 12<br>Crude fibre max. 3<br>Starch expansion 50 | Starch  | Data sheet required                              |         |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%)    | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|--|---|--|---|---|--|---------|
| 01.09.09 | Wheat germ   | By-product of flour milling, the manufacture of starch or grits from cleaned wheat, consisting predominately of wheat germ to which fragments of endosperm and outer skin may still adhere, it may be dried or treated by heat or heat-moisture |  | Moisture max. 10, if dried  | Crude protein<br>Crude fat<br>Moisture, if > 12%                      | Data sheet required                              |         |
| 01.09.11 | Wheat starch   | Technically pure starch obtained from cleaned wheat or from wheat flour   |  | Ash insoluble in HCl<br>max. 0,5  | Starch  | Data sheet required                              |         |
| 01.09.13 | Pre-gelatinised wheat starch                         | Product consisting of wheat starch largely expanded by heat and hydrothermal treatment  |  | Moisture max. 12<br>Ash insoluble in HCl<br>max. 0,5<br>Starch expansion 50 | Starch  | Data sheet required                              |         |
| 01.09.14 | Wheat starch containing protein, partially desugared | By-product obtained during the production of wheat starch mainly comprising of desugared starch, the soluble proteins and other soluble parts of the endosperm  |  | Crude protein min. 15   | Total sugar as sucrose<br>Crude protein<br>Moisture, if >14%          | Data sheet required                              |         |
| 01.09.15 | Wheat gluten   | Dried by-product of the manufacture of wheat starch. It consists predominately of wheat protein obtained during the separation of starch  | Crude protein<br>min. 70<br>Moisture max. 13 | Ash insoluble in HCl<br>max. 0,5  | Crude protein   | Data sheet required                              |         |
| 01.09.16 | Wheat gluten feed                                    | By-product of the manufacture of wheat starch and gluten. It consists of bran, from which the germ may have been partially removed, gluten and pulp   |  |   | Starch<br>Crude protein<br>Crude fat                                  | Data sheet required                              |         |
| 01.09.17 | Wheat germ expeller                                  | By-product of oil manufacture obtained during the pressing of wheat germs obtained from cleaned wheat to which parts of the endosperm and hulls still adhere  | Crude protein<br>min. 25                     |   | Crude protein<br>Crude fat<br>Crude fibre<br>Starch                   | Data sheet required                              |         |

| Number   | Designation                      | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)        | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process           | Remarks |
|----------|----------------------------------|---|---|---------------------------------------|--|--|---------|
| 01.10.01 | Preserved wet grain              | Grain preserved by adding approved preservation additives   |   |                                       | Moisture<br>The type of treatment must be stated. Grain species used (descending order of content)                                   | Details about the conservation additives used are required |         |
| 01.10.02 | Cereal grains/mixed cereals      | Product obtained from the grading of cleaned cereal grains using trieur cylinders or revolving screens  |   | Grain species max. 5<br>Grain min. 96 | Grain species used (descending order of content)   |  |         |
| 01.10.03 | Cereal pulp                      | By-product of starch manufacture from cereal grains or cereal flour, it may contain starch, gluten and hulls  |   | Moisture max. 95                      | Moisture<br>Crude protein<br>Grain species used (descending order of content)  | Data sheet required  |         |
| 01.10.04 | Dried cereal pulp                | By-product obtained by extracting most of the water from cereal pulp  |   | Moisture max. 13                      | Starch<br>Crude protein<br>Crude fibre<br>Grain species used (descending order of content)   | Data sheet required  |         |
| 01.10.05 | Condensed/grain steep water      | By-product obtained by concentrating or drying steeping liquor from starch manufacture  |   |                                       | Crude protein<br>Crude ash<br>Moisture, if > 13%<br>Grain species used (descending order of content)                                 | Data sheet required  |         |
| 01.10.06 | Grain expanded with caustic soda | Grain that has been expanded by means of adding caustic soda  |   | Sodium 1,5 to 2,5                     | Moisture<br>Sodium<br>Starch, if > 20%<br>Crude protein, if > 10%<br>Crude fibre<br>Grain species used (descending order of content) |  |         |
| 01.10.07 | Grain feed flour                 | By-product obtained during the production of flour from cleaned grain kernels. It consists predominately of parts of the endosperm and hulls and small amounts of other parts of the kernel | Starch min. 44                            |                                       | Starch<br>Crude fibre<br>Grain species used (descending order of content)  |  |         |



| Number  | Designation         | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)               | Additional information on the production process | Remarks                            |
|---|---------------------|---|---|--------------------------------|---|--|------------------------------------|
| 01.10.08  | Grain midlings      | By-product obtained during the production of flour from cleaned grain kernels. It consists predominately of parts of the endosperm and for the rest hulls and small amounts of other parts of the kernels   | Starch min. 34                            |                                | Starch<br>Crude fibre<br>Grain species used<br>(descending order of content)        |  |                                    |
| 01.10.09  | Grain semolina bran | By-product obtained during the production of flour or flakes from cleaned grain kernels. It consists predominately of parts of the hulls and for the rest of parts of the kernels, from which the endosperm is not so extensively removed as compared with grain bran | Starch min. 17                            |                                | Crude protein<br>Crude fibre<br>Grain species used<br>(descending order of content) |  |                                    |
| 01.10.10  | Grain bran          | By-product obtained during the production of flour from cleaned grain kernels. It consists predominately of parts of the hulls and for the rest of other parts of the kernel, from which the endosperm is extensively removed   |   |                                | Crude protein<br>Crude fibre<br>Grain species used<br>(descending order of content) |  |                                    |
| <b>02. Oil seeds, oil fruits and other oil-supplying plants, their products and by-products, the content of Gossypol considered</b> |                     |   |   |                                |   |  |                                    |
| 02.01.01  | Cotton seed         | Seeds of cotton, <i>Gossypium</i> ssp., from which the fibres have been removed   |   |                                | Crude protein<br>Crude fat<br>Crude fibre   |  | The content of Gossypol considered |
| 02.02.01  | Groundnuts          | Groundnut seeds, <i>Arachis hypogea</i> L. and other species of <i>Arachis</i> , decorticated, the hulls may be removed   |   |                                |   |  | Observe aflatoxin content          |
| 02.02.02  | Groundnut expeller  | By-product of oil manufacture, obtained by pressing of wholly or partially decorticated groundnuts  |   | Crude fibre max. 16            | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              | Observe aflatoxin content          |
| 02.02.03  | Groundnut extracted | By-product of oil manufacture, obtained by extraction of wholly or partially decorticated groundnuts  | Crude fat max. 4                          | Crude fibre max. 16            | Crude protein<br>Crude fibre  | Data sheet required                              | Observe aflatoxin content          |

| Number   | Designation           | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)       | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks                          |
|----------|-----------------------|---|---|--------------------------------------|---|--|----------------------------------|
| 02.03.01 | Cocoa husks           | Product obtained by dehusking roasted cocoa beans, <i>Theobroma cacao</i> L.  |   |                                      | Crude fibre   | Data sheet required                              | Observe theobromine content      |
| 02.05.01 | Dried copra           | Dried endosperm and outer husk (tegument) of the seed of the coconut palm, <i>Cocos nucifera</i> L.   |   | Crude fat min. 60<br>Moisture max. 6 | Crude fat   | Data sheet required                              |                                  |
| 02.05.02 | Copra expeller        | By-product of oil manufacture, obtained by pressing the dried endosperm and outer husk (tegument) of the seed of the coconut palm   |   |                                      | Crude protein<br>Crude fat<br>Crude fibre                             | Data sheet required                              |                                  |
| 02.05.03 | Copra, extracted      | By-product of oil manufacture, obtained by extraction of the dried endosperm and outer husk (tegument) of the seed of the coconut palm  | Crude fat max. 4                          |                                      | Crude protein<br>Crude fibre  | Data sheet required                              |                                  |
| 02.06.01 | Pumpkin seed expeller | By-product of oil manufacture, obtained by pressing of pumpkin seeds, <i>Cucurbita maxima</i> Duch., <i>moschata</i> (Duch) Poir., <i>Cucurbita pepo</i> L. and other species of <i>Cucurbita</i> |   | Moisture max. 13                     | Crude protein<br>Crude fat<br>Crude fibre                             | Data sheet required                              |                                  |
| 02.07.01 | Linseed               | Seeds of flax, <i>Linum usitatissimum</i> L.  |   | Botanical purity min. 93             |   |  | Observe hydrogen cyanide content |
| 02.07.02 | Linseed cake          | By-product of oil manufacture, obtained by pressing of linseed  |   | Botanical purity min. 93             | Crude protein<br>Crude fat<br>Crude fibre                             | Data sheet required                              | Observe hydrogen cyanide content |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks                          |
|----------|--|---|---|--------------------------------|---|--|----------------------------------|
| 02.07.03 | Linseed, extraction meal <sup>1)</sup>                     | By-product of oil manufacture, obtained by extraction of linseed cake         | Crude fat max. 4                          | Botanical purity min. 93       | Crude protein<br>Crude fibre<br>In the case "linseed extraction meal" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>linseed extraction meal feed</b> "<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>linseed extraction meal feed, with (soap)stock</b> "  | Data sheet required                              | Observe hydrogen cyanide content |
| 02.07.04 | Linseed extraction meal, partially extracted <sup>1)</sup> | By-product of oil manufacture, obtained by partial extraction of linseed cake | Crude fat max. 8                          | Botanical purity min. 93       | Crude protein<br>Crude fat<br>Crude fibre<br>In the case "linseed extraction meal, partially extracted" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>linseed extraction meal feed, partially extracted</b> ".<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>linseed extraction meal feed, partially extracted, with (soap)stock</b> " | Data sheet required                              | Observe hydrogen cyanide content |
| 02.08.01 | Olives   | Olives of the variety <i>Olea europaea</i> L.                                 |   |                                |   |  |                                  |

| Number   | Designation                   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks |
|----------|-------------------------------|--|---|--|--|--|---------|
| 02.09.01 | Palm kernels                  | Product obtained by crushing kernels, from which as much as possible of the hard shell has been removed, of the oil palms <i>Elaeis guineensis</i> Jacq. and <i>Corozo oleifera</i> (H.B.K.) L. H. Bailey ( <i>Elaeis melanococca</i> auct.), the Ecuadorian palm <i>Ynesa colenda</i> O.F. Cook, the Macoya palms <i>Acrocomia sclerocarpa</i> Mart. and <i>Acrocomia totai</i> Mart., the murumuru palm <i>Astrocaryum murumuru</i> Mart., the tucum palm <i>Astrocaryum tucuma</i> Mart. and the uricuri palm <i>Syagrus coronata</i> (Mart.) Becc. |   | Moisture max. 10   | Crude fat<br>Crude fibre   |  |         |
| 02.09.02 | Palm kernel expeller          | By-product of oil manufacture, obtained by pressing of palm kernels from which as much as possible of the hard shell has been removed  |   |  | Crude protein<br>Crude fat<br>Crude fibre  | Data sheet required                              |         |
| 02.09.03 | Palm kernel, extracted        | By-product of oil manufacture, obtained by extraction of palm kernels from which as much as possible of the hard shell has been removed  | Crude fat max. 4                          |  | Crude protein<br>Crude fibre   | Data sheet required                              |         |
| 02.10.01 | Vegetable oil / vegetable fat | Crude, unprocessed oil or fat obtained from plants (excluding the castor-oil plant), it may be degummed  |   | Impurities insoluble in petrol-ether max. 1.5. Maximum acid index in the product as such 50. | Moisture, if > 1%<br>The word "vegetable" may be replaced in the designation of the plant.<br>The designation must be completed by the plant species.<br>If the oil or fat is obtained from more than one plant species, these must be stated in descending order of their content | Data sheet required                              |         |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks  |
|----------|--|---|---|--|--|--|--|
| 02.10.02 | Vegetable fat, refined / vegetable oil, refined      | Refined product obtained from vegetable fats or vegetable oils and used edible fats (excluding castor oil)  |   | Impurities insoluble in petrol-ether max. 1.5. Maximum unsaponifiable matter in the product as such 3. Moisture max. 0.2 | Water, if > 1%<br>The word "vegetable" may be replaced in the designation of the plant. The designation must be supplemented by the plant species. If the oil or fat is obtained from more than one plant species, these must be stated in descending order of their content   | Data sheet required                              |  |
| 02.10.03 | Vegetable fat , protected / vegetable oil, protected | Vegetable oil or vegetable fat (excluding castor oil) and used edible fats or isolated fractions thereof suitably processed (by hydration, coating or physical treatment) to decrease ruminal digestion   |   | Impurities insoluble in petrol-ether max. 1.5. Maximum acid index in the product as such 50.                             | The word "vegetable" may be replaced in the designation of the plant. The designation must be supplemented by the plant species. If the oil or fat is obtained from more than one plant species, these must be stated in descending order of their content<br>The process (hydration, coating or physical procedure) and eventually developed fat fractions must be stated | Data sheet required                              |  |
| 02.10.04 | Fatty acids from chemical refining                   | By-product obtained during the deacidification of oils and fats of vegetable (except castor oil) or animal origin (except used cooking fats) with alkalis and then acidified and separated from the aqueous phase, it contains free fatty acids, oils or fats and natural components of seed, fruit or animal tissue such as mono and diglycerides, lecithin, and fibers. The residues of deodorisation must not be added |   | Residues insoluble in petrol-ether max. 1.3  | Crude fat<br>Moisture, if > 1%<br>The plant species or the animal species must also be specified in the designation. If the oil or fat is obtained from more than one plant or animal species, this must be specified in descending order of content   | Data sheet required                              | The addition of deo-distillates must be marked |

| Number   | Designation                                   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                            | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks                       |
|----------|---|--|---|---|--|--|-------------------------------|
| 02.10.05 | Fatty acid distillates from physical refining | By-product obtained during the deacidification of oils and fats of vegetable (except castor oil) or animal origin (except used cooking fats) by distillation, it contains free fatty acids, oils or fats and natural components of seeds, fruits or animal tissue such as mono and diglycerides, sterols and tocopherols |   | Residues insoluble in petrol-ether max. 1.3               | Crude fat<br>Moisture, if > 1%<br>The plant species or the species must also be specified in the designation<br>If the oil or fat is obtained from more than one plant or animal species, this must be specified in descending order of content  | Data sheet required                              |                               |
| 02.11.01 | Rape seed <sup>2)</sup>                       | Seeds of rape, Brassica napus L. ssp. oleifera (Metzg.) Sinsk, of Indian sarson Brassica napus L. Var. Glauca (Roxb.) O.E. Schulz and of rape Brassica napa ssp. oleifera (Metzg.) Sinsk   |   | Botanical purity min. 94                                  |  |  | Observe glucosinolate content |
| 02.11.02 | Rape seed hulls                               | By-product obtained by dehulling of rape seeds   |   |   | Crude fibre  |  |                               |
| 02.11.03 | Rape seed cake <sup>1) 2)</sup>               | By-product of oil manufacture, obtained by extraction of seeds rape  |   | Botanical purity min. 94                                  | Crude protein<br>Crude fat<br>Crude fibre  | Data sheet required                              | Observe glucosinolate content |
| 02.11.04 | Rape seed, extraction meal <sup>1) 2)</sup>   | By-product of oil manufacture, obtained by extraction of rape seed cake  | Crude fat max. 4                          | Botanical purity min. 94<br>Ash insoluble in HCl max. 0,9 | Crude protein<br>Crude fibre<br>In the case "Rape seed, extraction meal" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>Rape seed extraction meal feed</b> ".<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>Rape seed extraction meal feed, with (soap)stock</b> " | Data sheet required                              | Observe glucosinolate content |

| Number   | Designation   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                            | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks                       |
|----------|---|--|---|---|---|--|-------------------------------|
| 02.11.05 | Rape seed extraction meal, partially extracted <sup>1)</sup><br><sup>2)</sup> | By-product of oil manufacture, obtained by extraction of rape seed cake  | Crude fat max.6                           | Botanical purity min. 94<br>Ash insoluble in HCl max. 0,9 | Crude protein<br>Crude fat<br>Crude fibre<br>In the case "Rape seed extraction meal, partially extracted" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>Rape seed extraction meal feed, partially extracted,</b><br><br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>Rape seed extraction meal feed, partially extracted, with (soap)stock</b> " | Data sheet required                              | Observe glucosinolate content |
| 02.12.01 | Safflower seed  | Seeds of safflower, Catharmus tinctorius L.  |   |   |   |  |                               |
| 02.12.02 | Safflower seed expeller   | By-product of oil manufacture, obtained by pressing of decorticated or partially decorticated seeds of safflower   |   | Crude fibre max. 33                                       | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              |                               |
| 02.12.03 | Safflower seed, extracted   | By-product of oil manufacture, obtained by extraction of decorticated or partially decorticated seeds of safflower | Crude fat max. 4                          | Crude fibre max. 35                                       | Crude protein<br>Crude fibre  | Data sheet required                              |                               |
| 02.13.01 | Sesame seed   | Seeds of sesame, Sesamum indicum L.  |   |   |   |  |                               |
| 02.13.02 | Sesame seed expeller  | By-product of oil manufacture, obtained by pressing of seeds of the sesame plant                                   |   | Ash insoluble in HCl max. 5                               | Crude protein<br>Crude fat<br>Crude fibre<br>Ash insoluble in HCl, if > 2,2%  | Data sheet required                              |                               |

| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks |
|----------|--|--|---|--|---|--|---------|
| 02.13.03 | Sesame seed, extracted                             | By-product of oil manufacture, obtained by extraction of seeds of the sesame plant                                   | Crude fat max. 4                          | Ash insoluble in HCl max. 5  | Crude protein<br>Crude fibre<br>Ash insoluble in HCl, if > 2,2%   | Data sheet required                              |         |
| 02.14.01 | Soya beans   | Soya beans, Glycine max. L. Merr   |   |  |   |  |         |
| 02.14.02 | Soya beans, toasted <sup>1)</sup>                  | Soya beans subjected to an appropriate heat treatment  |   | Urease activity: max. 0,4 mg N/g * minute                                |   | If <sup>1)</sup> , then data sheet required      |         |
| 02.14.03 | Soya (bean) hulls                                  | By-product obtained during dehulling of soya beans   |   |  | Crude fibre   |  |         |
| 02.14.04 | Soya (bean) extraction meal                        | By-product of oil manufacture, obtained by pressing of soya beans  |   |  | Crude protein<br>Crude fat<br>Crude fibre, if > 8%  | Data sheet required                              |         |
| 02.14.05 | Soya (bean) extraction meal, toasted <sup>1)</sup> | By-product of oil manufacture, obtained from soya beans by extraction and subjected to an appropriate heat treatment | Crude fat max. 4                          | Urease activity: max. 0,4 mg N/g * minute, Ash insoluble in HCl max. 0,9 | Crude protein<br>Crude fibre, if > 8%<br>In the case "Soya(bean), extraction meal, toasted" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>Soya(bean) extraction meal feed, ,toasted</b> "<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>Soya(bean) extraction meal feed, toasted, with (soap)stock</b> " | Data sheet required                              |         |



| Number   | Designation   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks |
|----------|---|--|---|--|---|--|---------|
| 02.14.06 | Soya (bean) extraction meal from, dehulled seeds, toasted <sup>1)</sup> | By-product of oil manufacture, obtained from dehulled soya beans by extraction and subjected to an appropriate heat treatment  | Crude fat max. 4                          | Crude fibre max. 5<br>Urease activity: max. 0,5 mg N/g * minute<br>Ash insoluble in HCl max. 0,9 | Crude protein<br>In the case "Soya(bean) extraction meal from dehulled seeds, toasted" contains bleaching earth and filter materials up to 1% and crude lecithins it must be designated as " <b>Soya(bean) extraction meal feed from dehulled seeds, toasted</b><br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as " <b>Soya(bean) extraction meal feed from dehulled seeds with (soap)stock</b> " | Data sheet required                              |         |
| 02.14.07 | Soya (bean) protein concentrate   | Product obtained from dehulled, fat-extracted soya beans, subjected to a further extraction with water or alcohol or treated with enzymes to reduce the level of soluble non-protein components. | Crude protein min. 55                     | Moisture max. 10   | Crude protein   | Data sheet required                              |         |
| 02.14.08 | Soya (bean) protein isolate   | Product obtained from coagulation, separation and drying of soya beans (dehulled and defatted).  | Crude protein min. 85                     | Lysine min. 5<br>Moisture max. 10  | Crude protein<br>Lysine   | Data sheet required                              |         |
| 02.15.01 | Sunflower seed  | Seeds of the sunflower, Helianthus annuus L.   |   |  |   |  |         |
| 02.15.02 | Sunflower cake  | By-product of oil manufacture, obtained by pressing of seeds of the sunflower from which part or all of the husks have been removed.   |   | Crude fibre max. 25  | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              |         |
| 02.15.03 | Sunflower cake poor in husks  | By-product of oil manufacture, obtained by pressing of unpeeled seeds of the sunflower from which the husks have were then largely removed   |   | Crude fibre max. 15  | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              |         |

| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks |
|----------|--|--|---|---|---|--|---------|
| 02.15.04 | Sunflower cake from peeled or partially peeled seed            | By-product of oil manufacture obtained by pressing of peeled or partly peeled sunflower seed   |   | From peeled seed<br>Crude fiber max. 15<br>From partially peeled seed crude fiber max. 25 | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              |         |
| 02.15.05 | Sunflower extraction meal <sup>1)</sup>                        | By-product of oil manufacture obtained by extracting sunflower cake from unpeeled sunflower seed under heat treatment  | Crude fat max. 4                          | Ash insoluble in HCl max. 0,9   | Crude protein<br>Crude fiber<br>In the case "sunflower extraction meal" contains" bleaching earth and filter materials up to 1% and crude lecithins it must be designated as "sunflower extraction meal feed".<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as "sunflower extraction meal feed with (soap)stock"                                   | Data sheet required                              |         |
| 02.15.06 | Sunflower extraction meal from peeled or partially peeled seed | By-product of oil manufacture obtained by extracting sunflower cake from partially peeled or peeled sunflower seed under heat treatment. It can be set differently in the crude fiber and crude protein fraction by further mechanical processing (e.g. air sifting) | Crude fat max. 4                          | Ash insoluble in HCl max. 0,9   | Crude protein<br>Crude fiber<br>May be designated as "protein-rich" when produced from partially-peeled seed if the crude protein content is min 45%.<br>May be designated as "rich in crude fiber" when made from partially-peeled seed if the crude fiber content is at least 35%.<br>In the case "sunflower extraction meal from peeled or partially-peeled seed" contains bleaching earths and filter aids up to 1% and crude | Data sheet required                              |         |

| Number   | Designation                                 | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                         | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks  |
|----------|---|---|---|--|--|--|--|
|          |   |   |   |  | lecithins, it must be designated as "sunflower extraction meal feed from peeled or partly peeled seed".<br><u>In the case the product</u> contains furthermore soapstock occurring in the production process, it must be designated as "sunflower extraction meal feed from peeled or partly peeled seed with (soap)stock" |  |  |
| 02.15.07 | Sunflower protein concentrate <sup>1)</sup> | By-product obtained from defatted and peeled sunflower seed by various chemical and physical separation methods (e.g., extraction, centrifugation, ultrafiltration, reverse osmosis) consisting essentially of the proteins of the sunflower endosperm                  | Crude fat max. 5                          | Ash insoluble in HCl max. 0,9<br>Crude protein min. 70 | Crude protein  | Data sheet required                              |  |
| 02.15.08 | Sunflower syrup                             | By-product obtained from defatted, peeled sunflower seed by various chemical and physical separation methods (e.g. extraction, centrifugation, ultrafiltration, reverse osmosis) consisting essentially of the readily soluble carbohydrates of the sunflower endosperm |   | Ash insoluble in HCl max. 0.9<br>Total sugar min. 40   | Moisture<br>Crude ash<br>Total sugar<br>Crude protein  | Data sheet required                              | Crude protein consists approximately half of NPN   |
| 02.15.09 | Sunflower husk                              | By-product obtained by peeling sunflower seeds  |   |  | Crude fibre  |  | Low energy- and nutrient supply, ballast character |
| 02.16.01 | Walnut expeller                             | By-product of oil manufacture obtained by pressing of walnuts, <i>Juglans regia</i> . L., from which practically all of the hull has been removed   |   |  | Crude protein<br>Crude fat<br>Crude fibre  | Data sheet required.                             |  |

| Number   | Designation                            | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)                 | Additional information on the production process | Remarks                                    |
|----------|--|---|---|--------------------------------|---|--|--|
| 02.17.02 | Borage expeller                        | By-product of oil manufacture obtained by pressing the seeds of the borage, <i>Borago officinalis</i> L.                  |   | Ash insoluble in HCL max. 8    | Crude protein<br>Crude fat<br>Crude fibre<br>Crude ash                                | Data sheet required.                             |  |
| 02.18.02 | Evening primrose expeller              | By-product of oil manufacture obtained by pressing the seeds of the evening primrose, <i>Oenothera biennis</i> L.         |   | Crude fibre max. 25            | Crude protein<br>Crude fat<br>Crude fibre<br>Crude ash                                | Data sheet required.                             |  |
| 02.19.02 | Black cumin expeller                   | By-product of oil manufacture obtained by pressing the seeds of the black cumin, <i>Nigella sativa</i> L.                 |   |                                | Crude protein<br>Crude fat<br>Crude fibre<br>Crude ash                                | Data sheet required.                             | Observe shelf life.                        |
| 02.20.02 | Hemp expeller                          | By-product of oil manufacture obtained by pressing hemp seeds, <i>Cannabis sativa</i> L.                                  |   | Tetrahydrocannabinol max. 0,2  | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required.                             | Only seeds that meet EU requirements       |
| 02.21.01 | Chia seed                              | Seeds of the chia plant <i>Salvia hispanica</i> L.  |   |                                | Crude fat<br>Crude protein<br>Crude fibre   |  | As far as possible free from Senecio seeds |
| 02.21.02 | Chia press cake                        | By-product obtained during oil manufacture by pressing chia seed ( <i>Salvia hispanica</i> )                              |   |                                | Crude fat<br>Crude protein<br>Crude fibre   | Data sheet required                              | As far as possible free from Senecio seeds |
| 02.22.01 | Lecithin, raw (crude lecithin)         | Product obtained from crude vegetable oils by separation of oil   |   | Aceton insoluble min. 55       | Aceton insoluble Crude ash.<br>The designaton may be replaced by "Crude lecithin"     | Data sheet required                              |  |
| 02.22.02 | Lecithin, de-oiled (de-oiled lecithin) | Product obtained by de-oiling of crude lecithin   |   | Aceton insoluble min. 90       | Aceton insoluble Crude ash.<br>The designation may be replaced by "De-oiled lecithin" | Data sheet required                              |  |
| 02.23.01 | Milk thistle expeller                  | By-product of oil manufacture, obtained by pressing the seeds of the Milk Thistle ( <i>Silybum marianum</i> ) is obtained |   |                                | Crude protein<br>Crude fat<br>Crude fibre   | Data sheet required                              |  |

| Number  | Designation                          | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|---|--------------------------------------|--|---|--------------------------------|---|--|---------|
| 02.24.01  | Mono and diglycerides of fatty acids | Product, which is obtained from vegetable fats / oils and consists of mixtures of mono and diglycerol esters of glycerol with fatty acids having at least 4 carbon atoms. It may contain small amounts of free fatty acids and glycerol, and up to 50 ppm of nickel from the hydrogenation |   |                                | Crude fat<br>Nickel, ij > 20 ppm                                      | Data sheet required                              |         |
| <b>03. Grain legume, their products and by-products</b> |                                      |  |   |                                |   |  |         |
| 03.01.01  | Horse bean <sup>1)</sup>             | Seeds of <i>Vicia faba</i> L. ssp. <i>faba</i> var. <i>equina</i> Pers. and var. <i>minuta</i> (Alef.) Mansf.  |   |                                |   | If <sup>1)</sup> , data sheet required           |         |
| 03.01.02  | Horse bean flakes                    | Product obtained by steaming and rolling cleaned horse beans   |   |                                | Crude protein<br>Crude fibre<br>Starch                                |  |         |
| 03.01.03  | Horse bean protein                   | By-product obtained during starch manufacturing from the separated horse bean fruit water  |   | Crude protein min. 70          | Moisture, if > 14 %<br>Crude protein                                  | Data sheet required                              |         |
| 03.01.04  | Horse bean pulp                      | By-product obtained by starch manufacturing from cleaned horse beans which consists of parts of the hulls and the endosperm  |   |                                | Moisture, if > 14 %<br>Crude fibre<br>Starch                          | Data sheet required                              |         |
| 03.01.05  | Horse bean fruit water               | By-product obtained by starch manufacturing from the cleaned horse beans and from which crude protein and water are partly removed   |   |                                | Moisture<br>Crude protein<br>Crude ash<br>Potassium                   | Data sheet required                              |         |
| 03.02.01  | Beans, toasted                       | Seeds of <i>Phaseolus</i> or <i>Vigna</i> ssp. submitted to an appropriate heat treatment to destroy toxic lectines  |   |                                |   | The heat treatment must be stated                |         |
| 03.02.02  | Bean flakes                          | Product obtained by steaming and rolling cleaned beans submitted to an appropriate heat treatment to destroy toxic lectines  |   |                                | Crude protein<br>Crude fibre<br>Starch                                | The heat treatment must be stated                |         |

| Number   | Designation        | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|--------------------|--|---|--------------------------------|---|--|---------|
| 03.02.03 | Bean middlings     | By-product of flour manufacture, obtained from cleaned beans. It consists primarily of particles of cotyledons and, to a lesser extent, of hulls. The beans must be submitted to an appropriate heat treatment to destroy toxic lectines | Crude fibre max. 11                       |                                | Crude protein<br>Crude fibre  | The heat treatment must be stated                |         |
| 03.02.04 | Bean bran          | By-product obtained during the manufacture of bean meal. It consists primarily of hulls. The beans must be submitted to an appropriate heat treatment to destroy toxic lectines  |   | Crude fibre max. 45            | Crude fibre<br>The designation may be replaced by 'bean husks'        | The heat treatment must be stated                |         |
| 03.03.01 | Peas <sup>1)</sup> | Seeds of Pisum spp.  |   |                                |   | If <sup>1)</sup> , data sheet required           |         |
| 03.03.02 | Pea flakes         | Product obtained by steaming and rolling cleaned peas  |   |                                | Crude protein<br>Crude fibre<br>Starch                                |  |         |
| 03.03.03 | Pea middlings      | By-product obtained during the manufacture of pea-flour from cleaned peas. It consists primarily of particles of cotyledons and, to a lesser extent, of hulls  | Crude fibre max. 10                       |                                | Crude protein<br>Crude fibre  |  |         |
| 03.03.04 | Pea bran           | By-product obtained during the manufacture of pea meal from cleaned peas. It consists predominately of hulls   |   | Crude fibre max. 28            | Crude fibre   |  |         |
| 03.03.05 | Pea protein        | By-product obtained from the separated pea fruit water when producing starch   |   | Crude protein min. 65          | Moisture, if > 14%<br>Crude protein                                   | Data sheet required                              |         |
| 03.03.06 | Pea pulp           | By-product obtained when producing starch from cleaned peas; it consists of parts of the hulls and the endosperm   |   |                                | Moisture, if > 14%<br>Crude fibre<br>Starch                           | Data sheet required                              |         |
| 03.03.07 | Pea fruit water    | By-product obtained when producing starch from the cleaned peas and from which crude protein and water are partly removed  |   |                                | Moisture<br>Crude protein<br>Crude ash<br>Potassium                   | Data sheet required                              |         |

| Number   | Designation                | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process   | Remarks |
|--|----------------------------|--|---|--------------------------------|---|--|---------|
| 03.03.08   | Pea hulls                  | By-product obtained during dehulling of cleaned peas   |   |                                | Crude fibre   |  |         |
| 03.04.01   | Guar germs, extracted      | By-product of mucilage extraction from germinated seeds of <i>Cyamopsis tetragonoloba</i> (L.) Taub  |   |                                | Crude protein   | Data sheet required  |         |
| 03.05.01   | Chick peas                 | Seeds of <i>Cicer arietinum</i> L.   |   |                                |   |  |         |
| 03.06.01   | Lentils                    | Seeds of <i>Lens culinaris</i> a.o. Medik  |   |                                |   |  |         |
| 03.06.02   | Lentil hulls               | Product obtained during dehulling of cleaned lentils. It consists predominately of hulls   |   |                                | Crude fibre   |  |         |
| 03.07.01   | Chickling vetch            | Seeds of <i>Lathyrus sativus</i> L. submitted to an appropriate heat treatment to destroy toxic lectines   |   |                                |   |  |         |
| 03.08.01   | Sweet lupins <sup>1)</sup> | Seeds of <i>Lupinus</i> ssp. low in bitter constituents  |   |                                |   | If <sup>1)</sup> , then data sheet required  |         |
| 03.09.01   | Vetches                    | Seeds of <i>Vicia sativa</i> L. var. <i>sativa</i> and other varieties   |   |                                |   |  |         |
| 03.10.01   | Monantha vetch             | Seeds of <i>Vicia monanthos</i> Desf.  |   |                                |   |  |         |
| 03.11.01   | Legumes bran               | By-product obtained when producing flour from cleaned legume grains which consist predominantly of husks, fragments and components of flour. Products containing by-products of beans must be heat treated in order to destroy toxic lectins |   |                                | Crude protein<br>Crude fibre  | Data sheet and, in case of a product containing beans, information about heat treatment are required |         |
| <b>04. Tubers, roots, their products and by-products</b> |                            |  |   |                                |   |  |         |
| 04.01.01   | Fodder beat                | <i>Beta vulgaris</i> var. <i>crassa</i>  |   |                                |   |  |         |
| 04.02.01   | Carrot                     | <i>Daucus carota</i> L. ssp. <i>sativus</i> .  |   |                                |   |  |         |
| 04.02.02   | Carrot pulp                | By-product of juice extraction from cleaned carrots; it may be dried   |   |                                | Crude fibre<br>Moisture, if > 14%                                     | Additional information on the drying process and the fuel if dried                                   |         |

| Number   | Designation                   | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks  |
|----------|-------------------------------|---|---|--|---|--|--|
| 04.03.01 | Potatoes                      | Tubers of <i>Solanum tuberosum</i> L.   |   |  |   |  |  |
| 04.03.02 | Potato flakes                 | Product obtained by drying of washed, peeled or unpeeled steamed or cooked potatoes   |   | Ash insoluble in HCl<br>max. 1,7   | Starch<br>Crude fibre   | Drying process and fuel used must be indicated   |  |
| 04.03.03 | Potato starch                 | Technically pure starch from washed potatoes  |   | Ash insoluble in HCl<br>max. 0,5   | Starch<br>Moisture, if > 14%  | Data sheet required                              |  |
| 04.03.04 | Pre-gelatinised potato starch | Product consisting of potato starch largely expanded by heat treatment  |   | Water max. 12<br>Ash insoluble in HCl<br>max. 0,5<br>Starch expansion<br>max. 50 | Starch  | Data sheet required                              |  |
| 04.03.06 | Potato fibre/starch mixture   | By-product of starch production from washed potatoes. It consists of cell wall material and starch  |   | Starch min. 70   | Starch<br>Moisture, if > 14%  | Data sheet required                              |  |
| 04.03.07 | Potato protein                | Dried by-product of starch manufacture, which consists predominately protein obtained after the separation of starch  |   | Crude protein min. 75<br>Ash insoluble in HCl<br>max. 0,5                        | Crude protein<br>Moisture, if > 14%                                   | Data sheet required                              |  |
| 04.03.08 | Potato fruit water, condensed | By-product of the manufacture of potato starch from which proteins and water have been partly withdrawn   |   |  | Crude protein<br>Crude ash<br>Moisture                                | Data sheet required                              |  |
| 04.03.09 | Potato pulp                   | By-product (may be dried) of the manufacture of potato starch from washed potatoes  |   |  | Starch<br>Crude fibre<br>Moisture, if > 14%                           | Data sheet required                              |  |
| 04.03.10 | Potato peels                  | By-product of the peeling of washed potatoes, it may be steamed or dried  |   |  | Ash insoluble in HCl, if > 5%<br>Crude fibre                          | Data sheet required                              | Additional information on the drying process and the fuel if dried |
| 04.03.11 | Potatoe bits and pieces       | By-product obtained when processing cleaned potatoes to produce starch, flakes or granules it comprises predominately of pieces of potatoes and of potato peels |   |  | Starch<br>Crude fibre<br>Ash insoluble in HCL,<br>if > 3,5%           |  |  |
| 04.03.12 | Potato steaming water         | By-product obtained when producing potato flakes by steaming washed potatoes  |   |  | Moisture  | Data sheet required                              | Not storable   |



| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process         | Remarks |
|----------|--|--|---|--------------------------------|--|--|---------|
| 04.03.13 | Potatoe granules                                     | Granulated product obtained by steaming or cooking and after that drying of cleaned and possibly washed potatoes                           |   | Ash insoluble in HCl max. 1,7  | Starch<br>Crude fibre  | The drying process has to be indicated                   |         |
| 04.04.01 | Manioc/tapioca                                       | Product obtained by crushing, grinding or pelleting dried, and if necessary washed, peeled manioc roots ( <i>Manihot esculenta</i> Crantz) |   | Ash insoluble in HCl max. 4,5  | Starch<br>Crude fibre<br>Ash insoluble in HCl, if > 3,5%<br>The designation may be supplemented with 'meal', 'pulp' (=crisps) or 'pellets' | Data sheet required.                                     |         |
| 04.05.01 | Horseradish pulp                                     | By-product of juice extraction from cleaned horseradish ( <i>Armoracia P. Gaertn.</i> )  |   |                                | Crude fibre<br>Moisture  |  |         |
| 04.06.01 | Turnip   | <i>Brassica rapa</i> var. <i>Rapa</i>  |   |                                |  |  |         |
| 04.07.01 | Sweet potato/batata                                  | Tubers of <i>Ipomoea batatas</i> (L.) Poir   |   |                                | Starch   |  |         |
| 04.07.02 | Sweet potato chips or sweet potato meal              | Product obtained by crushing or grinding cleaned, dried sweet potato/batata tubers   |   |                                | Starch   |  |         |
| 04.08.01 | Jerusalem artichoke                                  | Tubers of <i>Helianthus tuberosus</i> L.   |   |                                |  |  |         |
| 04.08.02 | Jerusalem artichoke chips / Jerusalem artichoke meal | Product obtained by chopping or grinding cleaned, dried tubers of Jerusalem, <i>Helianthus tuberosus</i> L.                                |   |                                | Inulin<br>Crude fibre  |  |         |
| 04.09.01 | Chicory  | Roots of <i>Cichorium intybus</i> L.   |   |                                |  |  |         |
| 04.09.02 | Chicory roots  | Product obtained by chopping or grinding cleaned, dried roots of chicory which may be dried  |   |                                | Inulin<br>Crude fibre  |  |         |
| 04.09.03 | Chicory pulp, dried                                  | By-product obtained when extracting inulin after chopping /or grinding cleaned and dried chicory roots                                     |   |                                | Crude fibre<br>Crude ash<br>Ash insoluble in HCl, if > 3,5   | Data sheet required.                                     |         |
| 04.10.01 | Sugar beet   | <i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>altissima</i> Doell   |   |                                |  | If dried, drying process and fuel used must be indicated |         |

| Number   | Designation                                | Description  | <sup>5)</sup> Distinguishing features (%)                             | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process                       | Remarks              |
|----------|--|--|---|--------------------------------|---|--|----------------------|
| 04.10.02 | (Sugar) beet tops and tails                | By-product of sugar beet processing. It consists predominately of cleaned pieces of sugar beet, and parts of leaves, and is as free as possible of weeds and other foreign constituents; it may be ensiled <sup>3)</sup> |   |                                | Ash insoluble in HCl, if > 5 %  | Additional information on the ensiling additive if <sup>3)</sup>       | Observe soil content |
| 04.10.03 | (Beet) sugar/sucrose                       | Product extracted from sugar beets   |   |                                | Sucrose   | Data sheet required  |                      |
| 04.10.04 | (Sugar) beet molasses                      | By-product obtained during the manufacture or refining of sugar from sugar beets   | Total sugar calculated as sucrose: minimum 40% of the product as such |                                | Total sugar, calculated as sucrose<br>Moisture, if > 28%  | Data sheet required  |                      |
| 04.10.05 | (Sugar) beet molasses, partially desugared | By-product obtained during recovery of the remaining sucrose from sugar beet molasses by saccharate precipitate, ion exchange or ion exclusion   |   |                                | Total sugar, expressed as sucrose<br>Moisture, if > 14%   |  |                      |
| 04.10.06 | Wet (sugar) beet pulp                      | By-product obtained after the extraction of the raw juice from sugar beets, which is practically desugared and may be ensiled <sup>3)</sup>  |   | Moisture max. 92               | Ash insoluble in HCl, if > 5%   | Additional information on the ensiling additive if <sup>3)</sup>       |                      |
| 04.10.07 | Pressed (sugar) beet pulp                  | By-product obtained after the extraction of the raw juice from sugar beets, which is practically desugared and pressed, and may be molassed and ensiled,   |   |                                | Ash insoluble in HCl, if > 5%<br>Total sucrose content, when > 10,5 %<br>If molassed, the product must be designated as "(Sugar) beet pulp, molassed" | Additional information on the ensiling additive if <sup>3)</sup>       |                      |
| 04.10.08 | Dried (sugar) beet pulp                    | By-product obtained after the extraction of the raw juice from sugar beets consisting of dried and pressed chips   |   | Ash insoluble in HCl max. 4,5  | Ash insoluble in HCl, if > 3,5%<br>Total sugar expressed as sucrose, if > 10,5%   | Data sheet required<br>Information on the drying process and fuel used |                      |
| 04.10.09 | (Sugar) beet pulp, molassed                | By-product obtained after the extraction of the raw juice from sugar beets by drying the molassed and pressed sugar beet pulp  |   | Ash insoluble in HCl max. 4,5  | Ash insoluble in HCl, if > 3,5 %<br>Total sugar expressed as sucrose, if > 10,5%  | Data sheet required<br>Information on the drying process and fuel used |                      |

| Number  | Designation   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process                           | Remarks   |
|---|---|--|---|--------------------------------|---|--|---|
| 04.10.10  | (Sugar) beet cooking chips                          | By-product obtained when producing syrup from sugar beet; and which may be pressed or dried  |   |                                | If dried, ash insoluble in HCl, if >3.5 %<br>If pressed, ash insoluble in HCl, if >5 %  | Data sheet required<br>Information on the drying process and fuel used     |   |
| 04.10.11  | Pressed (Sugar) beet pulp, (partially) depectinised | By-product obtained during the pectin manufacture from pressed (sugar) beet chips, and - due to the manufacturing process - may contain salts of acids and alkalis, crude cellulose, fatty acid esters and residual pectin   |   |                                | Ash insoluble in HCl, if > 5%<br>Crude fiber<br>moisture, if > 14%  | Data sheet required  | Note of rapid spoilage required   |
| <b>05. By-products of fermentation- and distillation industry inclusive enzymatic production of alcohol for bioenergetic purposes</b> |   |  |   |                                |   |  |   |
| 05.01.01  | Brewers' grains                                     | By-product of brewing obtained from malted and unmalted cereals and other starchy products; it may be ensiled <sup>3)</sup> or dried   |   | Moisture max. 81               | Crude protein<br>Crude ash<br>Moisture, if > 14%<br>used raw materials (starch origin) if not grain                           | Data sheet required.<br>Information on the ensiling agent if <sup>3)</sup> |   |
| 05.03.01  | Malt germs (Malt sprouts)                           | By-product of malting of cereals, consisting of dried germs  |   | Crude fibre max. 19            | Crude protein   | Data sheet required  |   |
| 05.03.02  | Malt bran   | By-product obtained during the production of malt flour of grain malt after extraction of the malt germs and malt flour. It consists predominately of skin particles and other parts of the kernel and may contain traces of husks   |   |                                | Crude protein<br>Crude fibre<br>Starch, if < 20%  | Data sheet required  |   |
| 05.04.01  | Vinasse   | By-product obtained after the fermentation with added microorganisms of sugar cane molasses, sugar beet molasses or thickened juice in the production of alcohol, yeast, citric acid or other organic substances and from which potassium may be removed. It may contain inactivated microorganisms used during the process. |   |                                | The raw materials used must be stated in the designation<br><br>crude protein<br>crude ash<br>potassium<br>moisture, if > 35% | Data sheet required  | Crude protein consists predominately of NPN, may have higher sulphate content |

| Number   | Designation                              | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks   |
|----------|--|---|---|--------------------------------|---|--|---|
| 05.04.02 | Apple vinasse                            | By-product obtained after the fermentation with added micro-organisms of depectinised apple pulp in the production of alcohol, yeast, citric acid or other organic substances   |   |                                | Crude protein<br>Crude fibre<br>Moisture, if > 35%<br>Crude ash<br>Sugar  | Data sheet required                              | Crude protein consists predominately of NPN, may have higher sulphate content                                     |
| 05.04.03 | Vinasse from ketogulonic acid production | By-product obtained during the fermentative production of ketogulonic acid based on corn steep liquor and sorbitol. The ketogulonic acid is used as a starting product for the production of vitamin C  |   |                                | Moisture, if > 14%<br>crude protein<br>pH value   | Data sheet required                              | Observe the pH value  |
| 05.05.01 | Distillery spent wash                    | By-product obtained when extracting alcohol by distilling mash of cereals, potatoes and/or other starch or sugar containing substances of vegetable origin with addition of yeast and from which only water may be removed  |   |                                | Moisture, if >14 %,<br>Crude protein<br>Raw material used must be stated in descending order  | Data sheet required                              |   |
| 05.06.01 | Distillers dried grains feed             | By-product obtained when producing alcohol by distilling mash of cereals, parts of cereals and/or other starch or sugar containing substances of vegetable origin with addition of yeast. Water and other substances may be removed and/or during the manufacturing process occurring substances may be added |   |                                | Moisture, if >14 %<br>Crude protein<br>Crude fat, if >5%<br>Crude fibre, if >5%<br>Crude ash<br>Chloride, calculated as NaCl, if >1%<br>Potassium, if > 1%<br>Raw materials used must be stated in descending order | Data sheet required                              | Feed value varies depending on raw material and manufacturing process. Sufficient water supply should be attended |
| 05.07.01 | Grape pulp from wine production          | By-product obtained after extraction of juice from grapes by pressing out and from which kernels and particles are largely removed  |   |                                |   |  | Low content of usable energy and nutrient content; dietary fibre character.                                       |
| 05.08.01 | First wort                               | Liquid by-product of breweries obtained by lantering of the mash. It contains substantially the solvent substances of the malt after conversion into sugar and may be fermented   |   |                                | Crude protein<br>Crude fibre<br>Sugar as saccharose<br>Moisture   | Data sheet required                              | In case of non fermented products, notice to rapid spoilage is necessary  |

| Number  | Designation              | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks   |
|---|--------------------------|--|---|--------------------------------|---|--|---|
| <b>06. Other seeds and fruits, their products and by-products</b> |                          |  |   |                                |   |  |   |
| 06.01.01  | Buckwheat                | Grains of buckwheat <i>Fagopyrum sagittatum</i> Gilib. ( <i>Fagopyrum esculentum</i> Moench)   |   |                                |   |  | Can trigger skin disorders on unpigmented parts if fed as a high proportion of the daily ration to animals exposed to direct sunlight |
| 06.01.02  | Buckwheat, dehulled      | Product obtained by dehulling cleaned buckwheat grains   | Crude fibre max. 3                        | Starch min. 57                 | Starch  |  | Can trigger skin disorders on unpigmented parts if fed as a high proportion of the daily ration to animals exposed to direct sunlight |
| 06.01.03  | Buckwheat hulls and bran | By-product obtained during the processing of cleaned buckwheat. It consists predominately of particles of buckwheat hulls  | Crude fibre max. 29                       |                                | Crude fibre   |  | Can trigger skin disorders on unpigmented parts if fed as a high proportion of the daily ration to animals exposed to direct sunlight |
| 06.02.01  | Acorns, dehusked         | Dried and dehusked fruit of the pendunculate oak <i>Quercus robur</i> L., the sessile oak <i>Quercus petraea</i> (Matt.) Liebl, the cork oak of <i>Quercus suber</i> L., or other species of oak |   | Moisture max. 13               |   |  |   |
| 06.03.01  | Carob meal               | Product obtained by grinding the dried fruits (pods) of the carob tree <i>Ceratonia siliqua</i> L., from which the kernels have been removed   |   | Moisture max. 14               | Crude fibre   |  |   |
| 06.04.01  | Coffee skin pellets      | By-product of processing the seeds of the coffee tree <i>Coffea</i> L. ssp. It consists of coffee bean skins   |   | Crude fibre max. 30            | Crude protein<br>Crude fibre  | Data sheet required                              |   |

| Number   | Designation                           | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process   | Remarks  |
|----------|---------------------------------------|---|---|--------------------------------|---|--|--|
| 06.04.02 | Coffee waste pellets                  | By-product obtained when processing shelled seeds of the coffee tree <i>Coffea L. ssp.</i> It consists of coffee skins and residues of dried and treated coffee beans as well as of coffee wax, obtained during the decaffeination and which may be added in varying portions |   |                                | Crude fat<br>Crude fibre  | Data sheet required  | The contents of theobromine and caffeine should be observed. |
| 06.05.01 | Fruit pulp                            | By-product obtained during the production of fruit juice. It may be dried   |   |                                | Crude fibre<br>Moisture   |  | The description must be completed by the type of fruit       |
| 06.05.02 | Fruit pulp, depectinised              | Depectinised by-product obtained during the production of fruit juice   |   |                                | Crude fibre<br>Moisture   | Data sheet required  | The description must be completed by the type of fruit       |
| 06.05.03 | Apple molasses                        | By-product obtained after producing pectine from apple pulp   |   |                                | Total sugar calculated as sucrose                                     |  |  |
| 06.06.02 | Grape kernels, de-oiled               | By-product obtained during the production of grape kernel oil by pressing or extraction which consists nearly exclusively of deoiled grape kernels  |   |                                |   | Data sheet required  | Low energy and nutrient supply, dietary fibre character      |
| 06.07.01 | Citrus pulp, dried                    | Dried by-product obtained by pressing citrus fruits, <i>Citrus ssp.</i> , during the production of citrus juice   |   | Moisture max. 13               | Crude fibre   | Data sheet required<br>Information on the drying process and the fuel used                                     |  |
| 06.07.02 | Citrus pulp, (Partially) depectinised | By-product obtained during pectin production from citrus pulp, which may contain, by virtue of the process-, salts of acids and alkalis, crude cellulose and residual pectin  |   |                                | Crude fibre<br>Moisture, if > 14 %                                    | Data sheet required<br>In the case of using dried citrus ester information on the drying process and fuel used | Note regarding rapid spoilage required                       |
| 06.08.01 | (Sugar) beet seeds                    | Seeds of sugar beet, <i>Beta vulgaris L. ssp. vulgaris var. altissima</i> Doell   |   |                                |   |  |  |

| Number  | Designation                | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process                   | Remarks   |
|---|----------------------------|---|---|--|---|--|---|
| 06.09.01  | Roselip oilcake            | By-product obtained after extraction of the oil from roselips by pressing. It may be dried                    |   |  | Crude fibre<br>Crude protein  | Data sheet required  | Low energy and nutrient supply, dietary fibre character   |
| <b>07. Roughages and forages produced on farm</b> |                            |   |   |  |   |  |   |
| 07.01.01  | Permanent pasture products | Fresh, ensiled <sup>3)</sup> or dried products from permanent pasture consisting of grasses, legumes or herbs |   |  | Crude fibre   | Additional information on the ensiling additive if <sup>3)</sup>   | As far as possible free of toxic plants (e.g. autumn crocus, senecio herbs, marsh horsetail or eagle fern) and in the case of hay or silage free of visible mould |
| 07.01.02  | Grass/legume plant         | Fresh, ensiled <sup>3)</sup> or dried arable crops consisting of grass, legumes or herbs                      |   |  | Crude fibre   | Additional information on the ensiling additive if <sup>3)</sup> . | As far as possible free of toxic plants (e.g. autumn crocus, senecio herbs, marsh horsetail or eagle fern) and in the case of hay or silage free of visible mould |
| 07.01.03  | Green meal                 | Product obtained by drying, milling and in some cases compacting young forage plants                          |   | Crude protein min. 15,5<br>Ash insoluble in HCl max. 5<br>Moisture max. 12 | Crude protein<br>Crude fibre<br>Ash insoluble in HCl, if > 3,5 v.H.<br>The word 'meal' may be replaced by 'pellets',<br>The species of fodder plant must be stated in the designation | Information on the drying process and the fuel.                    |   |
| 07.02.01  | Brassica plants            | Fresh, ensiled <sup>3)</sup> or dried plants of species of brassica   |   |  | Crude fibre   | Additional information on the ensiling additive, if <sup>3)</sup>  |   |

| Number   | Designation     | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process                 | Remarks   |
|----------|-----------------|---|---|--|---|--|---|
| 07.03.01 | Cereal plants   | Fresh, ensiled <sup>3)</sup> or dried whole plants of cereal species or parts thereof, except grains (see Group 1: Cereal grains, their products and by-products)                                   |   |  | Crude fibre   | Additional information on the ensiling additive if <sup>3)</sup> |   |
| 07.03.02 | Straw           | Product obtained after the removal of seeds from plants   |   |  | Crude fibre<br>The species of plant must be stated in the designation.  |  | Alternative EU designation: cereal straw.         |
| 07.03.03 | Straw, expanded | Product obtained after the removal of seeds from plants and subjected to alkali treatment with sodium hydroxide or ammonia to improve its digestibility   |   | a) Nitrogen min. 1,1 in case of treatment with NH <sub>3</sub><br>b) Sodium 1,5 to 3,1<br>Moisture max. 16 | Crude fibre<br>Sodium, if treated with NaOH<br>The designation must be completed with the type of chemical treatment  |  | Alternative EU designation: cereal straw, treated |
| 07.04.01 | Clover meal     | Product obtained by drying and milling and in some cases compacting young clover plants, Trifolium spp. It may contain up to 20% other forage crops dried and milled at the same time as the clover |   | Crude protein min. 17 in case of treatment with NaOH<br>Moisture max. 12<br>Botanical purity min. 80       | Crude protein<br>Crude fibre<br>Ash insoluble in HCl, if > 3,5%<br>The word "meal" may be replaced by "pellets"   | Information on the drying process and the fuel                   |   |
| 07.05.01 | Lucerne meal    | Product obtained by drying and milling young lucerne, Medicago sativa L. and Medicago var. Martyn. It may contain up to 20% other forage crops dried and milled at the same time as the lucerne     |   | Crude protein min. 17<br>Moisture max. 12  | Crude protein<br>Crude fibre<br>Ash insoluble in HCl, if > 3,5%<br>The word "meal" may be replaced by "pellets"   | Information on the drying process and the fuel                   |   |
| 07.06.01 | Maize plants    | Fresh, ensiled <sup>3)</sup> or dried plants of Zea mays or parts thereof, except grains (see Group 1)  |   |  | Crude fibre<br>In the case the product consist of parts of the maize plant, the name of the respective part of the plant (for example maize stalks) instead of the designation "maize plant" must be used | Additional information on the ensiling additive if <sup>3)</sup> |   |
| 07.07.01 | Beet leaves     | Fresh, ensiled <sup>3)</sup> or dried leaves of Beta species  |   |  | Crude ash<br><br>As designation also the plant part may be specified  | Additional information on the ensiling additive if <sup>3)</sup> | Observe soil content                              |



| Number  | Designation           | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared)       | Additional information on the production process                   | Remarks   |
|---|-----------------------|---|---|---|---|--|---|
| <b>08. Other plants, their products and by-products</b> |                       |   |   |   |   |  |   |
| 08.01.01  | Hop cones, debittered | By-product obtained after extraction of hop cones and practically free from bitter constituents   |   | Bitter constituents max. 0.2 (conductomete)<br>Moisture max. 13   | Crude fibre<br>The designation may be replaced by "spent hops"              | Data sheet required  |   |
| 08.03.01  | Marigold meal         | Product obtained by grinding dried petals of Mexican marigold, <i>Tagetes erecta</i>  |   |   | Crude protein   |  |   |
| 08.04.01  | (Cane) sugar/sucrose  | Sugar extracted from sugar cane, <i>Saccharum officinarum</i> L.  |   |   | Sucrose   | Data sheet required  |   |
| 08.04.02  | (Cane) sugar molasses | By-product obtained during the manufacture or refining of sugar from (cane) sugar   |   |   | Total sugar calculated as sucrose<br>Moisture, if > 28%                     | Data sheet required  |   |
| 08.05.01  | Sea weed meal         | Product obtained by drying and chopping sea weed, in particular brown algae, the product may be washed to reduce the iodine content   |   |   | Crude ash<br>Crude fibre  |  | Observe arsenic and iodine content                        |
| 08.06.01  | Spirulina algae       | Blue/green algae (cyanobacteriae) of the species <i>Spirulina</i> , produced under controlled conditions in natural alkaline unfertilized lakes or in open cultivation facilities (raceway ponds) using defined nutrient solutions and which may be washed. No substances except water may be extracted. The algae are deactivated by drying and toxinogenic algae and their toxins may not be measurable |   | Crude ash max. 9<br>Crude protein min. 50<br>Crude fat min. 4<br>Cyanobacterial toxins not measurable (microcystine < 0,4 µg/g) | Crude protein<br>Crude fat<br>Crude fibre<br>Crude ash<br>Moisture, if > 8% | Data sheet required. Details about drying procedure and fuels used | Observe content of lead, cadmium mercury and microcystine |
| 08.07.01  | Chlorella algae       | Green algae (Chlorophytae) of species <i>Chlorella</i> , produced under controlled conditions in open or closed cultivation facilities using defined nutrient solutions and which may be washed. No substances except water may be extracted. The algae are deactivated by drying   |   | Crude ash max. 9<br>Crude protein min. 35<br>Crude fat min. 6,5   | Crude protein<br>Crude fat<br>Crude fibre<br>Crude ash<br>Moisture, if > 8% | Data sheet required. Details about drying procedure and fuels used | Observe content of lead, cadmium and mercury              |

| Number   | Designation                    | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                    | <sup>5)</sup> Instruction for labelling (constituents to be declared)        | Additional information on the production process                                  | Remarks   |
|--|--------------------------------|---|---|---|--|---|---|
| 08.08.01   | Oregano leaves                 | Product obtained from the preparation of purified oregano leaves for food purposes, may contain small amounts of stems and stalks, can be shredded and dried  |   | Ash insoluble in HCl max. 5                       | Crude fibre<br>Crude ash<br>Ash insoluble in HCl, if > 3, 5 v.H.             | Data sheet required<br>Details about drying procedure and fuels used              |   |
| 08.09.01   | Schizochytrium limacinum algae | Algae of the species Schizochytrium limacinum, produced under controlled conditions in cultivation plants with defined nutrient solutions, which may be washed, of which no substances other than water are extracted, which are deactivated by drying and in which toxin-forming algae and their toxins are not detectable |   | Crude fat min. 60<br>Docosahexaenoic acid min. 15 | Crude protein<br>Crude Fat<br>Crude fiber<br>Crude ash<br>moisture, if > 8%  | Data sheet required<br>Details about drying procedure and fuels used              | Note the lead, cadmium and mercury content  |
| 08.10.01   | Small water lens               | Small water lens ( <i>Lemna Minor L.</i> ) which is produced in closed photobioreactors under controlled conditions and using suitable water. It may be dried.  |   | Crude ash max. 15<br>crude protein min. 25        | Crude protein<br>Crude Fat<br>Crude fiber<br>Crude ash<br>moisture, if >8 %  | Data sheet required.<br>If dried: information on the drying process and fuel used |   |
| 08.11.01   | Fragrant agrimony              | Whole plants of fragrant agrimony ( <i>Agrimonia procera</i> ), dried and crushed   |   | Tannins min. 2                                    | Crude protein<br>Crude fiber<br>Crude ash<br>ash insoluble in HCl, if > 3,5% | Data sheet required.<br>If dried: information on the drying process and fuel used | Note content of tannins. Low nutrient and energy supply capacity. Dietary fiber character |
| <b>09. Milk products (the species must be stated if other than cow's milk) <sup>4)</sup></b> |                                |   |   |   |  |   |   |
| 09.01.01   | Milk                           | Unprocessed secretion of the mammary gland obtained by milking farmed animals   |   |   |  |   |   |
| 09.01.02   | Milk powder                    | Dried product from milk or semi-skimmed milk.   | Crude fat min. 10                         |   | Crude protein<br>Crude fat<br>Moisture, if > 5%                              |   |   |

| Number   | Designation            | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process | Remarks |
|----------|------------------------|--|---|--|---|--|---------|
| 09.01.03 | Skimmed milk           | By-product obtained by removing the milk fat from milk, whose protein content may be standardized by addition or withdrawal of milk constituents. The relationship between whey protein to casein must not be modified |   | Moisture max. 92<br>Crude protein min. 34 based on fat free dry matter | The designation 'skimmed milk concentrate' may be used if water has been removed to concentrate the product. In this case the moisture content must be stated |  |         |
| 09.01.04 | Skimmed milk powder    | Product obtained by drying of skimmed milk   |   |  | Crude protein<br>Moisture, if > 5%  |  |         |
| 09.02.01 | Milk fat               | Product obtained by skimming milk and from which the water may be extracted  |   | Moisture max. 1<br>Crude fat min. 96                                   | Crude fat   |  |         |
| 09.03.01 | Buttermilk             | By-product obtained after the separation of butter by churning whole milk and cream, including sour milk   |   | Moisture max. 92   | The designation 'butter milk concentrate' may be used if water has been removed to concentrate the product. The moisture content must then be stated          | Data sheet required                              |         |
| 09.03.02 | Buttermilk powder      | Product obtained by drying buttermilk  |   |  | Crude fat<br>Crude protein<br>Lactose<br>Moisture, if > 6%  | Data sheet required                              |         |
| 09.04.01 | Lactose powder         | Product obtained by purifying and drying the sugar separated from milk or whey   |   |  | Lactose<br>Moisture, if > 5%  | Data sheet required                              |         |
| 09.05.01 | Whey                   | By-product obtained by the manufacture of cheese, yoghurt or casein from milk and which may be thickened   |   | Moisture max. 95   | The designation 'whey concentrate' may be used, if water has been removed to concentrate the product. The moisture content must then be stated.'              | Data sheet required                              |         |
| 09.05.02 | Whey, partly desugared | Product obtained by partly removing lactose and from whey and which may be thickened   |   | Moisture max.97  | Moisture  | Data sheet required                              |         |

| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)                               | Additional information on the production process | Remarks |
|----------|--|--|---|--------------------------------|---|--|---------|
| 09.05.03 | Whey powder  | Product obtained by drying whey  |   |                                | Crude protein<br>Lactose<br>Crude ash<br>Moisture, if > 8%  | Data sheet required                              |         |
| 09.05.04 | Whey powder, partly desugared                          | Product obtained by drying whey from which the lactose has been partly removed   | Lactose max. 70                           |                                | Crude protein<br>Lactose<br>Crude ash<br>Moisture, if > 8%  | Data sheet required                              |         |
| 09.05.05 | Whey powder, partly desugared and partly demineralised | Product obtained by drying whey from which the lactose and minerals have been partly removed                                       | Lactose max. 70                           |                                | Crude protein<br>Lactose<br>Crude ash<br>Moisture, if > 8%  | Data sheet required                              |         |
| 09.05.06 | Whey permeate  | Product obtained by ultra filtration of whey through an membrane filter which may be partly desugared and thickened or dried       |   |                                | Crude ash<br>Crude protein<br>Lactose<br>Moisture, if > 8%  | Data sheet required                              |         |
| 09.05.07 | Whey retentate   | Product obtained during ultra filtration of whey retained by the membrane and which may be partially desugared, thickened or dried |   |                                | Crude protein<br>Crude ash<br>Lactose<br>Moisture, if > 8%  | Data sheet required                              |         |
| 09.06.01 | Casein powder  | Product obtained by drying casein precipitated from skimmed milk or buttermilk by means of acids or rennet                         |   |                                | Crude protein<br>Moisture, if > 10%   | Data sheet required                              |         |
| 09.06.02 | Caseinate, dried                                       | Dried product obtained from broken cheese or casein by treatment with neutralising agents  |   |                                | Crude protein<br>Moisture, if > 10%   | Data sheet required                              |         |
| 09.07.02 | Whey protein powder                                    | By-product consisting of dried protein compounds obtained from whey or milk by chemical or physical processing                     | Crude protein min. 70                     |                                | Crude protein<br>Moisture, if > 8%<br>The designation may be replaced with milk-protein concentrate | Data sheet required                              |         |
| 09.08.01 | Acid whey powder, neutralised                          | Dried by-product obtained by the manufacture of fresh cheese, casein or sour milk cheese   |   | Ash insoluble in HCl max. 0,5  | Crude protein<br>Lactose<br>Calcium<br>Sodium<br>Moisture, if > 5%                                  | Data sheet required                              |         |

| Number   | Designation   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)       | Additional information on the production process         | Remarks  |
|--|---|--|---|--|---|--|--|
| 09.09.01   | Colostrum   | Untreated secretion of the udder obtained by milking of farmed lactating animals up to the third or fifth day of lactation.  |   |  |   |  | Fresh colostrum may only be fed in the own establishment   |
| 09.09.02   | Colostrum powder, defatted, rich in immunoglobulins | Dried product obtained from colostrum after separation of the fat and pasteurizing   |   | Immunoglobulins (IgG) min. 15%<br>Crude protein min. 50%   | Crude protein<br>Lactose, if >10%<br>Moisture, if >5%                       | Data sheet required (including kind of drying procedure) | References of health status of the animals or the livestock, from which the colostrum has been obtained, should be given   |
| 09.09.03   | Colostrum feed, standardised                        | Product obtained drying of colostrum, defatted or partly defatted colostrum and whose content of immunoglobulins and protein is adjusted by addition or extraction of colostrum components |   | Immunoglobulins (IgG) min. 8<br>Crude protein min. 35  | Crude protein<br>Crude fat<br>Lactose, if >10 v.H.<br>Moisture, if > 5 v.H. | Data sheet required                                      | References of health status of the animals or animal stocks, from which the colostrum has been obtained, should be given. The drying procedure needs to include pasteurization or a homologous procedure |
| <b>10. Fish and other marine animals, their products and by-products <sup>4)</sup></b> |   |  |   |  |   |  |  |
| 10.01.01   | Fish liver oil                                      | Oil obtained from fresh livers of fish   |   | Residues insoluble in petroleum ether in the product as such max. 0.1, acid index in the product as such max. 6, Moisture max. 0.2, predominately livers from the cod family (Cadidae) |   | Data sheet required                                      | Be aware of high vitamin A contents  |

| Number              | Designation                     | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process | Remarks |
|---------------------|---------------------------------|---|---|--|--|--|---------|
| 10.02.01            | Fish meal                       | Product obtained by processing whole fish or parts of fish from which part of the oil may have been removed and to which fish solubles may have been re-added |   | Crude protein min. 60<br>ash insoluble in HCl max. 2.2<br>Moisture max. 12 | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture, if > 8%<br>Products containing more than 75 % crude protein in the dry matter may be qualified as 'rich in protein' | Data sheet required                              |         |
| 10.02.02            | Fish solubles, condensed        | Product obtained during manufacture of fish meal which is stabilised by acidification or drying   |   |  | Crude protein<br>Crude fat<br>Moisture, if > 5%  | Data sheet required                              |         |
| 10.02.03            | Fish oil                        | Oil obtained from fish or parts of fish   |   |  | Water, if > 1%   | Data sheet required                              |         |
| 10.02.04            | Fish oil, refined, hydrogenized | Oil obtained from fish or parts of fish which has been refined and hydrogenized   |   |  | Iodine number<br>Moisture, if > 1%   | Data sheet required.                             |         |
| 10.03.01            | Shrimps                         | Product obtained by steaming and drying shrimps; it may be ground   |   | Ash insoluble in HCl max. 5<br>Moisture max. 12                            | Moisture, if > 8%<br>Crude protein, if > 10%<br>Crude fat, if > 5%   | Data sheet required                              |         |
| 10.04.01            | Mussel meatmeal, dried          | Dried and ground meat of mussels  |   |  | Crude protein<br>Crude fat, if > 5 %<br>Moisture, if > 8 %   | Data sheet required                              |         |
| 10.05.01            | Fish protein hydrolysate        | Product obtained from fish or of fish parts by means of acid hydrolysis   |   |  | Moisture<br>Crude protein<br>The predominately fish species may be highlighted   | Data sheet required                              |         |
| <b>11. Minerals</b> |                                 |   |   |  |  |  |         |
| 11.01.03            | Calcium carbonate               | Product obtained by grinding sources of calcium carbonate, such as limestone, oyster or mussel shells, or by precipitation from acid solution                 |   | Calcium min. 36  | Calcium<br>Ash insoluble in HCl, if > 5%<br>The origin type may substitute the designation or be added to the designation  | Data sheet required                              |         |
| 11.01.04            | Calcium chloride                | Product consisting of technically pure calcium chloride, including crystal water  |   |  | Calcium  | Data sheet required                              |         |

| Number   | Designation                 | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                         | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|-----------------------------|---|---|--|---|--|---------|
| 11.01.05 | Calcium citrate             | Product consisting of technically pure calcium citrate  |   |  | Calcium   | Data sheet required                              |         |
| 11.01.06 | Calcium formiate            | Product consisting of technically pure calcium formiate   |   |  | Calcium   | Data sheet required                              |         |
| 11.01.07 | Calcium fumarate            | Product consisting of technically pure calcium fumarate   |   |  | Calcium   | Data sheet required                              |         |
| 11.01.08 | Calcium gluconate           | Product consisting of technically pure calcium gluconate  |   |  | Calcium   | Data sheet required                              |         |
| 11.01.11 | Calcium magnesium carbonate | Natural mixture of calcium carbonate and magnesium carbonate  |   |  | Calcium<br>Magnesium<br>Ash insoluble in HCl, if > 5%                 | Data sheet required                              |         |
| 11.01.12 | Calcium magnesium phosphate | Technically pure calcium magnesium phosphate  |   |  | Calcium<br>Magnesium<br>Phosphor                                      | Data sheet required                              |         |
| 11.01.13 | Calcium sodium phosphate    | Product obtained by a hydrothermal process from apatite phosphate, phosphoric acid and soda                       |   |  | Calcium<br>Sodium<br>Phosphor   | Data sheet required                              |         |
| 11.01.14 | Calcium sulphate            | Product that occurs naturally as gypsum ( $\text{CaSO}_4 \cdot x\text{H}_2\text{O}$ )                             |   | Calcium min. 23  | Calcium   | Data sheet required                              |         |
| 11.01.15 | Dicalcium phosphate         | Precipitated calcium monohydrogen phosphate from inorganic sources ( $\text{CaHPO}_4 \cdot x\text{H}_2\text{O}$ ) |   | Chloride, calculated as NaCl max. 1<br>moisture max. 5 | Calcium<br>Phosphor   | Data sheet required                              |         |
| 11.01.16 | Dimagnesium phosphate       | Product consisting of technically pure dimagnesium phosphate  |   |  | Magnesium<br>Phosphor   | Data sheet required                              |         |
| 11.01.18 | Disodium phosphate          | Product consisting of technically pure disodium phosphate, including cristal water                                |   | Purity min. 95   | Sodium<br>Phosphor  | Data sheet required                              |         |
| 11.01.19 | Potassium chloride          | Product consisting of technically pure potassium chloride   |   |  | Potassium   | Data sheet required                              |         |
| 11.01.20 | Calcareous marine algae     | Product of natural origin obtained from calcareous algae, ground or granulated                                    |   | Ash insoluble in HCl max. 5                            | Calcium   | Data sheet required                              |         |

| Number   | Designation                | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)     | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks |
|----------|----------------------------|--|---|------------------------------------|---|--|---------|
| 11.01.21 | Magnesium carbonate, basic | Industrially obtained product consisting in varying proportions of magnesium carbonate, magnesium hydroxide and crystal water  |   | Purity min. 95                     | Magnesium   | Data sheet required                              |         |
| 11.01.22 | Magnesium acetate          | Product consisting of technically pure magnesium acetate   |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.23 | Magnesium chloride         | Product consisting of technically pure magnesium chloride (MgCl <sub>2</sub> ·6H <sub>2</sub> O)   |   | Purity min. 95                     | Magnesium   | Data sheet required                              |         |
| 11.01.24 | Magnesium citrate          | Product consisting of technically pure magnesium citrate   |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.25 | Magnesium fumarate         | Product consisting of technically pure magnesium fumarate  |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.26 | Magnesium gluconate        | Product consisting of technically pure magnesium gluconate   |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.27 | Magnesium lactate          | Product consisting of technically pure magnesium lactate   |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.28 | Magnesium oxide            | Technically pure magnesium oxide   |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.29 | Magnesium propionate       | Technically pure magnesium propionate  |   |                                    | Magnesium   | Data sheet required                              |         |
| 11.01.30 | Magnesium phosphate        | Product consisting of technically pure mono- or dimagnesium phosphate (MgHPO <sub>4</sub> ·xH <sub>2</sub> O)  |   |                                    | Magnesium Phosphor  | Data sheet required                              |         |
| 11.01.31 | Magnesium sulphate         | Technically pure magnesium sulphate (MgSO <sub>4</sub> ·xH <sub>2</sub> O)   |   |                                    | Magnesium Sulphur   | Data sheet required                              |         |
| 11.01.32 | Monocalcium phosphate      | Technically pure calcium-bis-dihydrogen phosphate (Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> ·xH <sub>2</sub> O) of mineral origin  |   |                                    | Calcium Phosphor  | Data sheet required                              |         |
| 11.01.33 | Monoammonium phosphate     | Technically pure monoammonium phosphate (NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> )  |   |                                    | Total nitrogen Phosphor   | Data sheet required                              |         |
| 11.01.34 | Mono-dicalcium phosphate   | Product obtained chemically consisting of equal parts of dicalcium phosphate and mono-calcium phosphate (CaHPO <sub>4</sub> -Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> ·H <sub>2</sub> O) |   | Chloride, expressed as NaCl max. 1 | Calcium Phosphor  | Data sheet required                              |         |



| Number   | Designation                          | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)      | <sup>5)</sup> Instruction for labelling (constituents to be declared)                   | Additional information on the production process | Remarks |
|----------|--------------------------------------|---|---|-------------------------------------|---|--|---------|
| 11.01.35 | Mono-dicalcium sodium phosphate      | Product obtained from calcium sodium phosphate and defluorinated phosphoric acid, or from defluorinated phosphoric acid, calcium oxide and sodium carbonate |   |                                     | Calcium<br>Sodium<br>Phosphor   | Data sheet required                              |         |
| 11.01.36 | Monosodium phosphate                 | Technically pure monosodium phosphate (NaH <sub>2</sub> PO <sub>4</sub> ·H <sub>2</sub> O).   |   | Purity min. 95                      | Sodium<br>Phosphor  | Data sheet required                              |         |
| 11.01.38 | Sodium calcium magnesium phosphate   | Product consisting of sodium-calcium-magnesium-phosphate  |   |                                     | Calcium<br>Magnesium<br>Sodium<br>Phosphor  | Data sheet required                              |         |
| 11.01.39 | Sodium acetate                       | Product consisting of technically pure sodium acetate   |   |                                     | Sodium  | Data sheet required                              |         |
| 11.01.40 | Sodium bicarbonate                   | Technically pure sodium bicarbonate   |   |                                     | Sodium  | Data sheet required                              |         |
| 11.01.41 | Sodium carbonate                     | Product consisting of technically pure sodium carbonate   |   |                                     | Sodium  | Data sheet required                              |         |
| 11.01.42 | Sodium chloride                      | Technically pure sodium chloride or product obtained by grinding natural sources of sodium chloride, such as rock salt, boiled salt or sea salt             |   |                                     | Sodium<br>The origin type may substitute the designation or be added to the designation | Data sheet required                              |         |
| 11.01.47 | Sodium sulphate, anhydrous           | Product consisting of technically pure anhydrous sodium sulphate  |   |                                     | Sodium<br>Sulphur   | Data sheet required                              |         |
| 11.01.48 | Raw phosphate, defluorinated         | Product obtained by grinding purified and appropriately defluorinated natural phosphates  |   | Fluor max. 0,2                      | Calcium<br>Phosphor   | Data sheet required                              |         |
| 11.01.49 | Tricalcium phosphate                 | Product consisting of technically pure tricalcium phosphate   |   | Chloride, calculated as NaCl max. 1 | Calcium<br>Phosphor   | Data sheet required                              |         |
| 11.01.50 | Trisodium phosphate                  | Product consisting of technically pure trisodium phosphate  |   |                                     | Sodium<br>Phosphor  | Data sheet required                              |         |
| 11.01.51 | Trimagnesium phosphate <sup>4)</sup> | Product consisting of technically pure trimagnesium phosphate   |   |                                     | Magnesium<br>Phosphor   | Data sheet required                              |         |
| 11.01.52 | Monopotassium phosphate              | Product consisting of technically pure potassium dihydrogen orthophosphate (KH <sub>2</sub> PO <sub>4</sub> )   |   |                                     | Potassium<br>Phosphor   | Data sheet required                              |         |

| Number  | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                         | <sup>5)</sup> Instruction for labelling (constituents to be declared)                             | Additional information on the production process  | Remarks   |
|---|--|---|---|--|---|---|---|
| 11.01.53  | Magnesium aspartate (-hydrochloride)                             | Product consisting of technically pure magnesium aspartate in the chemical form as tetrahydrate or hydrochloride                                |   | Magnesium min. 6,5                                     | Magnesium   | Data sheet required   |   |
| 11.01.54  | Dicalcium phosphate, dihydrat <sup>4)</sup>                      | Product obtained from edible bones after the extraction of gelatine   |   | Chloride, calculated as NaCl max. 1<br>Moisture max. 5 | Calcium Phosphor<br>"contains di-calcium phosphate of animal origin, may not be fed to ruminants" | Data sheet required   | Regulation (EU) No. 999/2001, as amended, need to be observed |
| 11.01.55  | Calcium carbonate from crustacean shells                         | Product obtained by drying and grinding hydrolysed crab and shrimp shells   |   | Calcium min. 20  | Calcium<br>Crude fibre  | Data sheet required   |   |
| 11.01.56  | Calcium pidolate   | Product obtained from L-glutamic acid and calcium carbonate   |   | Calcium min. 13  | Calcium   | Data sheet required   |   |
| 11.01.57  | Calcium carbonate-magnesium oxide                                | Product obtained by heating of natural calcium and magnesium containig substances like dolomite   |   | Calcium oxide max. 1<br>Magnesium oxide min. 22        | Calcium<br>Magnesium  | Data sheet required   |   |
| 11.01.58  | Tripotassium citrat  | Product consisting of technically pure tripotassium citrate   |   |  | Potassium   | Data sheet required   |   |
| 11.01.59  | Magnesium glycinate  | Product consisting of technically pure magnesium glycinate  |   | Magnesium min. 10                                      | Magnesium   | Data sheet required   |   |
| 11.01.60  | Salt from the processing of plant crude glycerol, rich in sodium | By-product obtained during the distillation of vegetabile crude glycerol which consists essentially of sodium chloride and residues of glycerol |   |  | Sodium<br>Glycerol  | Data sheet required.<br>The method used to determine the glycerol content should be indicated | Ensure adequate water supply for the animal                   |
| <b>12. Miscellaneous straight feedingstuffs</b> |  |   |   |  |   |   |   |
| 12.01.01  | Dextrose molasses  | By-product obtained during the production of dextrose by enzymatic digestion of grain starch after the crystallisation.                         |   | Total sugar min. 50<br>Moisture max. 50                | Total sugar, calculated as sucrose<br>Moisture  | Data sheet required   |   |
| 12.02.01  | Glucose molasses   | By-product obtained during the production of glucose by enzymatic digestion of grain starch after the crystallisation                           |   | Total sugar min. 50<br>Moisture max. 50                | Total sugar, calculated as sucrose<br>Moisture  | Data sheet required   |   |

| Number   | Designation                         | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                    | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process  | Remarks  |
|----------|-------------------------------------|--|---|---|---|---|--|
| 12.03.01 | Isomaltulose (palatinose-) molasses | By- product obtained during the production of isomaltulose (palatinose) by enzymatic digestion of saccharose after the crystallization |   | Total sugar min. 50<br>Moisture max. 50           | Total sugar, calculated as sucrose<br>Moisture                        | Data sheet required. The word "molasses" in the description may be replaced by the word "syrup" |  |
| 12.06.01 | Starch sugar                        | Product obtained by hydrolysis of starch   |   | Reduced sugar min. 70<br>Moisture max. 22         | reduced sugar<br>Moisture   | Data sheet required   |  |
| 12.06.02 | Dextrose (glucose)                  | Product of the saccharification of starch, consisting of purified, crystallised glucose, with or without crystal water                 |   | Glucose min. 99<br>Moisture max. 10               | Glucose   | Data sheet required   |  |
| 12.07.01 | 1.2 Propanediol (Propylenglycol)    | Product obtained from Propylene oxide by hydrogenation   |   | Monopropylenglycol min. 99,5<br>Moisture max. 0,2 | Propan-1,2-diol   | Data sheet required   |  |
| 12.07.02 | Plant glycerine                     | Product obtained by distilling "raw plant glycerine" (see 12.07.03), it may be bleached  |   | Glycerine min. 99                                 | Glycerine   | Data sheet required   | Ensure adequate water supply for the animals; The determination of the glycerol content must be carried out according to the analytical method of the VDLUFA, Methodenbuch Vol. III, No. 14.25.1 |

| Number   | Designation          | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                        | <sup>5)</sup> Instruction for labelling (constituents to be declared)                             | Additional information on the production process | Remarks  |
|----------|----------------------|---|---|---|---|--|--|
| 12.07.03 | Raw plant glycerine  | By-product obtained during the production of fatty acid methyl esters (biodiesel) from vegetable oils or fats   |   | Glycerine min. 80<br>Methanol max. 0,2                | Glycerine<br>Moisture<br>Crude ash<br>Chloride, calculated as NaCl, if > 1%<br>potassium, if > 1% | Data sheet required                              | Ensure adequate water supply for the animals; The determination of the glycerol content must be carried out according to the analytical method of the VDLUFA, Methodenbuch Vol. III, No. 14.25.1 |
| 12.08.01 | Lignocellulose       | Product obtained by means of mechanical processing (fibrillation) of fresh natural dried wood and which predominantly consists of lignocellulose  | Acidic Detergent Lignin (ADL) min. 20     | Size of particles < 500µm air jet sieving             | May be designated as woodfibre.<br>Plant species must be specified                                | Data sheet required                              | Low energy- and nutrient supply, dietary fiber-character. Water binding capacity may be indicated  |
| 12.08.02 | Powdercellulose      | Product obtained by decomposition, separation of the lignin and further cleaning as cellulose from vegetable fiber substances of untreated wood, and which is exclusively modified by mechanical processing |   | Neutral detergent fibre (NDF) min. 87                 |   | Data sheet required                              | Low energy- and nutrient supply, bulk material character   |
| 12.08.03 | Psyllium husks       | Product obtained by dehusking of cleaned psyllium seeds ( <i>Plantago ovata</i> )   |   | Swelling number min. 40                               |   | Data sheet required                              | Low content of available energy and nutrients, dietary fibre character; water binding capacity may be stated   |
| 12.08.04 | Spruce branch powder | Branch of common spruce ( <i>Picea abies</i> ), harvested freshly in its natural state, mechanical processed and dried  |   | Size of particles < 400µm<br>Ash insoluble in HCl < 3 |   | Data sheet required                              | Low content of nutrient supply   |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                     | <sup>5)</sup> Instruction for labelling (constituents to be declared)                              | Additional information on the production process                        | Remarks  |
|----------|--|---|---|--|--|---|--|
| 12.08.05 | Lignocellulose from bark                             | Product which is manufactured from fresh, purified bark and small amounts of wood after drying by mechanical treatment and primarily consists of lignocellulose     | Acid detergent lignin (ADL) min. 15       | Particle size < 300 um (air flow sieving)          | Crude fibre<br>Crude ash<br>Plant species must be specified  | Data sheet required   | Low energy and nutrient supply capacity, fiber character                                     |
| 12.08.06 | Peat, dried  | Product originated by the natural decomposition of plants (especially peat moss) in anaerobic and oligotrophic atmosphere and which shall be dried                  |   | Humic acids min. 10<br>Ash insoluble in HCl max. 7 | Crude fibre  | Data sheet required   | Low energy and nutrient supply capacity, fiber character<br>Note arsenic and dioxin contents |
| 12.08.07 | Product obtained from brown coal, rich in humic acid | Product obtained by crushing, drying and hydrolytic conversion from brown coal or soft brown coal (Leonardite) which consists mainly of humic acids and their salts |   | Humic acids min. 50<br>crude ash max. 30           | Crude fiber<br>Ash insoluble in HCl, if > 5 %  | Data sheet required.<br>Information on the drying process and fuel used | Note low energy and nutrient supply capacity, fiber character, arsenic and dioxin levels     |
| 12.09.01 | Malt coffee spent wash                               | By-product obtained when producing coffee extract from barley, rye, chicory and water.  |   |  | Crude fibre<br>Crude protein<br>Crude fat  | Data sheet required   |  |
| 12.10.01 | Salts from fatty acids                               | Product obtained by saponification of fatty acids with calcium-, sodium- or potassium hydroxide   |   |  | Crude fat<br>Crude ash<br>Moisture, if > 1%<br>Calcium, potassium or sodium depending on treatment | Data sheet required   |  |
| 12.11.01 | Starch mixture                                       | Product consisting of native or modified edible starch obtained from maize, rice, potatoes or manioc in different proportions                                       |   |  | Starch<br>Kind of Starch<br>in descending order  | Data sheet required   |  |
| 12.12.01 | Lactulose  | Semi-synthetic disaccharides obtained by the isomerization of glucose to fructose of lactose and may be present as a powder or syrup                                |   | Lactulose min. 60                                  | Lactulose  | Data sheet required   | Provisions of Regulation (EU) No. 142/2011 in the currently valid version are to be noted    |

| Number   | Designation              | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                                     | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process                                       | Remarks  |
|----------|--------------------------|--|---|--|--|--|--|
| 12.13.01 | Pectin                   | Product, which is obtained by aqueous extraction of suitable plant material, in particular citrus fruits or apples, and which consists essentially of the partial methyl esters of polygalacturonic acid, and their sodium, potassium, calcium or ammonium salts |   | Max.1 free methanol, ethanol or propan-2-ol individually or in sum | Pektin   | Data sheet required. As precipitant only methanol, ethanol or propane-2-ol may be used | The pectin content can be determined by determining the polygalacturonic acid      |
| 12.14.01 | Fructo-Oligosaccharides  | Product obtained by enzymatic degradation of polymeric carbohydrates (eg inulin) or produced from sucrose  |   |  | Content of fructo-oligosaccharides (method of analysis must be specified), animal species or category and recommended dosage (minimum, maximum level) and raw material used shall be indicated | Data sheet required  | Prebiotic effect   |
| 12.15.01 | Poultry grit from quartz | Product which is obtained by means of crushing or without crushing of purified quartz gravel or quartz sand  |   |  | Raw material, granulation (average and / or range) as well as target species and application must be indicated. May also be referred to stomach pebbles or stomach gravel of quartz            | Data sheet required  | In support of the mechanical comminution of feed in the digestive tract of poultry |

| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process  | Remarks   |
|--|--|--|---|--------------------------------|--|---|---|
| <b>13. Former foods, products and by-products of food production</b> |  |  |   |                                |  |   |   |
| 13.01.01   | Former foodstuff <sup>4)</sup>                               | Foodstuffs other than recyclable residues from the preparation of food (catering reflux), which were prepared in full compliance with EU food legislation for human consumption, but for practical or logistical reasons or due to problems in the production or due to defective packing or otherwise are no longer intended for that purpose, and which do not pose a health risk when used as animal feed. They can be dried and must be free of packaging and packaging components |   |                                | The designation must be made specifically by the nature of the product. The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Moisture, if > 14 %   | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried | Data sheet to be provided, see explanatory notes, observe spoilage of the product |
| 13.02.01   | Products and by-products of the convenience food industry    | Products and by-products obtained during the production of convenience food. They may be dried and must be free of packaging and packaging parts   |   |                                | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Moisture, if >14 %   | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried | Data sheet to be provided, see explanatory notes                                  |
| 13.02.02   | Products and by-products from the baking and pastry industry | Products and by-products obtained when producing bread, inclusive biscuits, wafers or pastry goods. They may be dried and must be free of packaging and packaging parts  |   |                                | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered. .<br>Starch<br>Total sugar, calculated as sucrose,<br>Moisture, if >14%<br>Crude fat, if > 5% | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried | Data sheet to be provided, see explanatory notes                                  |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process  | Remarks  |
|----------|--|---|---|--------------------------------|--|---|--|
| 13.02.03 | Products and by-products from the sweets industry <sup>4)</sup>                    | Products and by-products obtained during the production of sweets, inclusive chocolate. They may be dried and must be free of packaging and packaging parts |   |                                | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Starch<br>Crude fat, if > 5%<br>Total sugar, calculated as sucrose,<br>Moisture, if > 14%            | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried | Data sheet to be provided, see explanatory notes |
| 13.02.04 | Products and by-products of the confectionary and ice-cream industry <sup>4)</sup> | Products and by-products obtained when producing confectionary, cakes or ice-cream. They may be dried and must be free of packaging and packaging parts     |   |                                | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Starch<br>Total sugar, calculated as sucrose,<br>Crude fat<br>Moisture, if >14 %                     | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried | Data sheet to be provided, see explanatory notes |
| 13.02.05 | Products and by-product from processing fresh fruit and vegetables                 | Products and by-products obtained when processing fresh fruit and vegetables. They may be dried and must be free of packaging and packaging parts           |   |                                | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Starch<br>Crude fibre<br>Crude fat, if > 5%<br>Ash insoluble in HCl, if > 5 %<br>Moisture, if > 14 % | Data sheet required. Feeding is permitted, if not restricted by other legal regulations. Additional information on the drying process and the fuel if dried |  |



| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)   | <sup>5)</sup> Instruction for labelling (constituents to be declared)  | Additional information on the production process  | Remarks  |
|--|--|---|---|--|--|---|--|
| 13.02.06   | Products and by-products from the dairy industry <sup>4)</sup>   | Products and by-products obtained at the end of the production process by rinsing the residues with potable water when producing dairy products (e.g. buttermilk, quark, ice-cream) from heated milk, also by adding other foodstuffs (e.g. rice, fruit juices) in the dairy, unless listed separately in the positive list, and to which heated centrifuge sludge (centrifuges repelling) can be added |   |  | The designation must be made specifically by the nature of the product The designation may be supplemented by an indication of the way in which the feed material was recovered.<br>Moisture<br>Crude protein<br>Crude fat<br>Lactose, if > 10 %<br>Total sugar, calculated as sucrose | Data sheet required. Feeding is permitted, if not restricted by other legal regulations | Data sheet to be provided, see explanatory notes. The product must not contain any inhibitors, detergent or disinfectant residues. The requirements of Regulation (EU) No. 142/2011 shall be observed  |
| <b>14. Proteins obtained from microorganisms</b> |  |   |   |  |  |   |  |
| 14.01.01   | Bacteria cultivated on methanol for calves, pigs, poultry and fish   | Product obtained by drying <i>Methylophilus methylotrophus</i> bacteria, strain NCIB strain 10.515, cultivated on methanol  |   | Crude protein in the product as such min. 68<br>Reflectance index > 50 | Crude protein<br>Crude fat<br>Crude ash<br>Moisture  | Data sheet required   | a) 'Avoid inhalation'<br>b) Approval number of the establishment   |
| 14.02.01   | Protein product of fermentation from natural gas obtained by culture of <i>Methylococcus capsulatus</i> (Bath) strain NCIMB 11132, <i>Alcaligenes acidovorans</i> strain NCIMB 12387, <i>Bacillus brevis</i> strain NCIMB 13288 and <i>Bacillus firmus</i> strain NCIMB 13280 for pigs for fattening from 25 to 60 kg and for salmon | Protein product obtained of fermentation from natural gas (approx. 91% methane, 5% ethane, 2% propane, 0.5% isobutane, 0.5% n-butane and 1% other constituents), ammonium and mineral salts by culture of <i>Methylococcus capsulatus</i> (Bath), <i>Alcaligenes acidovorans</i> , <i>Bacillus brevis</i> and <i>Bacillus firmus</i> and the cells of which have been killed                            |   | Crude protein in the product as such min. 65                           | Crude protein<br>Crude fat<br>Crude ash<br>Moisture  | Data sheet required   | a) 'The product named in Column 1 must not exceed 8% of the daily ration in the case of pigs for fattening and calves, 19% in the case of salmon (fresh water) and 33% in the case of salmon (seawater)'<br>b) 'Avoid inhalation'<br>c) Approval number of the establishment |

| Number   | Designation                               | Description   | <sup>5)</sup> Distinguishing features (%)  | <sup>5)</sup> Requirements (%) | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process                             | Remarks  |
|----------|---|---|--|--------------------------------|---|--|--|
| 14.02.02 | Bacterial protein of Escherichia coli K12 | By-product from the production of amino acids by multiplying Escherichia coli K12 in nutrient solutions of plant or chemical origin with addition of ammonia or minerals salts, possibly hydrolyzed or dried  |  |                                | Crude protein   | Data sheet required  |  |
| 14.03.01 | Yeast                                     | All yeasts obtained from the fermentation of animal or vegetable nutrient substrates such as molasses, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid or hydrolyzed vegetable fibres, using Saccharomyces cerevisiae, Saccharomyces carlsbergiensis, Kluyveromyces fragilis, and the cells of which have been killed or inactivated and may be dried |  |                                | Crude protein<br>Moisture   | Data sheet required<br>If dried, details of the drying process and fuel used |  |
| 14.04.01 | Brewer's yeast, fresh                     |   | By-product obtained during the production of beer which consists essentially of the cells of yeast strains of the genus Saccharomyces cerevisiae and / or Saccharomyces pastorianus and whose cells are not killed |                                | Crude protein<br>Moisture   | Data sheet required  | The yeast cells must be inactivated before feeding |

| Number   | Designation   | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)             | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process                   | Remarks   |
|----------|---|--|---|--|---|--|---|
| 14.06.01 | By-product of fermentation of solid material with fungi, rich in crude protein                      | By-product, rich in crude protein, obtained by fermentation of defined substrates (rape seed extracted, beet pulpe, molassed, maize gluten feed, maize semolina) with fungi ( <i>Aspergillus niger</i> , <i>Aspergillus tubingensis</i> , <i>Aspergillus oryzae</i> , <i>Aspergillus sojae</i> and <i>Neurospora intermedia</i> ). Organic acids are added in order to inactivate the residues of the biomass and preserve the product |   | Crude protein min. 28 in original material | Crude protein<br>Crude fat<br>Crude fibre                             | Data sheet required  | Included fungi must be killed   |
| 14.07.01 | Crude protein rich by-product of the production of amino acids by <i>Corynebacterium glutamicum</i> | Crude protein rich by-product from the production of amino acids by fermentation of a nutrient solution of vegetable or chemical origin (eg ammonia and mineral salts) with <i>Corynebacterium glutamicum</i> . The microbes must be inactivated or killed   |   | Crude protein min 65                       | Crude protein<br>Lysine<br>Crude ash                                  | Data sheet required  | Included fungi must be killed   |
| 14.08.01 | By-product of the production of enzymes with <i>Aspergillus niger</i>                               | By-product which is obtained during the fermentative production of enzymes by means of <i>Aspergillus niger</i> using defined substrates (for example malt germs, wheat bran) and is dried   |   |  | Crude protein<br>Crude fat<br>Crude ash                               | Data sheet required<br>Details of the drying process and fuel used | Included fungi must be killed   |
| 14.09.01 | By-product of the production of citric acid with <i>Aspergillus niger</i>                           | By-product obtained in the production of citric acid by fermentation of high-sugar substrates with the aid of <i>Aspergillus niger</i> . It consists essentially of the mycelium of the fungus and is dried  |   | Crude fibre min. 30                        | Crude protein<br>Crude fat<br>Crude ash                               | Data sheet required<br>Details of the drying process and fuel used | Included fungi must be killed.<br>Low nutrient and energy supply, fiber character |

| Number   | Designation  | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)                   | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process                   | Remarks   |
|--|--|--|---|--|---|--|---|
| 14.10.01   | By-product of the production of citric acid with <i>Pichia guilliermondii</i>          | By-product obtained from the fermentative production of citric acid by means of <i>Pichia guilliermondii</i> using suitable substrates (for example, molasses, sugar syrup or starch-containing products). It consists essentially of inactivated cells of this yeast strain and their constituents, may contain residues of the substrates and is dried |   |  | Crude protein<br>Moisture   | Data sheet required<br>Details of the drying process and fuel used | Contained yeast cells must be inactivated   |
| <b>Non-protein nitrogenous compounds (NPN compounds)</b> |  |  |   |  |   |  |   |
| <b>17. Ammonium salts</b>                                |  |  |   |  |   |  |   |
| 17.01.01   | Ammonium acetate for bovines, sheep and goats with functioning rumen                   | Product consisting of ammonium acetate in aqueous solution $\text{CH}_3\text{COONH}_4$   |   | Ammonium acetate in the product as such min. 55  | Nitrogen<br>Moisture  | Data sheet required  |   |
| 17.01.02   | Ammonium lactate from fermentation for bovines, sheep and goats with functioning rumen | Ammonium lactate produced by fermentation of whey with <i>Lactobacillus bulgaricus</i> $\text{CH}_3\text{CHOHCOONH}_4$   |   | Crude protein in the product as such min. 44     | Crude protein<br>Crude ash<br>Moisture                                | Data sheet required  |   |
| 17.01.03   | Ammonium sulphate for bovines, sheep and goats with functioning rumen                  | Product consisting of ammonium sulphate in aqueous solution $(\text{NH}_4)_2\text{SO}_4$   |   | Ammonium sulphate in the product as such min. 35 | Nitrogen<br>Moisture  | Data sheet required  | "Ammonium sulphate must not exceed 0.5% of the daily ration in the case of calves, lambs and goat kids" |

| Number   | Designation  | Description   | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)               | <sup>5)</sup> Instruction for labelling (constituents to be declared) | Additional information on the production process | Remarks  |
|--|--|---|---|--|---|--|--|
| <b>18. Other NPN compounds (except ammonium salts)</b>                     |  |   |   |  |   |  |  |
| 18.01.01   | By-product from the production of L-glutamic acid, for bovines, sheep and goats with functioning rumen | Concentrated liquid by-product from the production of L-glutamic acid by fermentation of sucrose, molasses, starch products and their hydrolysates with <i>Corynebacterium melassecola</i>              |   | Crude protein in the product as such min. 48 | Crude protein<br>Crude ash<br>Moisture                                | Data sheet required                              | Approval number of the establishment   |
| 18.01.02   | By-product from the production of L-lysine, for bovines, sheep and goats with functioning rumen        | Concentrated liquid by-product from the production of L-lysine monohydrochloride by fermentation of sucrose, molasses, starch products and their hydrolysates with <i>Brevibacterium lactofermentum</i> |   | Crude protein in the product as such min. 45 | Crude protein<br>Crude ash<br>Moisture                                | Data sheet required                              | Approval number of the establishment   |
| <b>19. Products and by-products from terrestrial animals <sup>4)</sup></b> |  |   |   |  |   |  |  |
| 19.01.01   | Blood plasma powder, from pigs   | Product obtained by means of centrifugal force and partial filtering of pig blood, spray-dried  |   | Crude protein min. 70                        | Crude protein<br>Crude ash<br>Sodium                                  | Data sheet required                              | Provisions of Regulation (EU) No. 999/2001, as amended, must be observed                 |
| 19.01.02   | Haemoglobin powder, from pigs  | By-product obtained when producing plasma from pig blood, consisting predominately of spray-dried haemoglobin   |   | Crude protein min. 90                        | Crude protein<br>Iron   | Data sheet required                              | Provisions of Regulation (EU) No. 999/2001, as amended, must be observed                 |
| 19.01.03   | Protein hydrolyzate from porcine hemoglobin  | Product obtained by enzymatic hydrolysis from the red blood cells (hemoglobin) of pig blood and is spray-dried  |   | Crude protein min. 85                        | Crude protein<br>Crude ash<br>Iron<br>Moisture                        | Data sheet required                              | Provisions of Regulation (EC) no. 999/2001, as amended, must be observed, note potassium |
| 19.02.01   | Protein hydrolysate, from pigs   | By-product obtained during the production of heparin by enzymatic digestion from pig intestine mucosa   |   | Crude protein min. 50                        | Crude protein<br>Crude ash<br>Sodium                                  | Data sheet required                              | Regulation (EU) No. 999/2001, as amended, needs to be observed                           |

| Number                  | Designation                                       | Description  | <sup>5)</sup> Distinguishing features (%) | <sup>5)</sup> Requirements (%)  | <sup>5)</sup> Instruction for labelling (constituents to be declared)   | Additional information on the production process                                | Remarks   |
|-------------------------|---|--|---|---|---|---|---|
| 19.03.01                | Gelatine, from pigs                               | Product obtained by means of hydrolysis of the collagen of defatted pig bones, dried   |   | Crude protein min. 90   | Crude protein<br>Crude ash  | Data sheet required   | Regulation (EU) No. 999/2001, as amended, needs to be observed  |
| 19.03.02                | Protein hydrolyzate of gelatin extraction of pigs | By-product of the production of gelatin of hydrolyzed pig bones, which may be dried  |   | Crude protein min. 60   | Crude protein<br>Crude fat<br>Crude ash<br>Moisture   | Data sheet required   | Regulation (EU) No. 999/2001, as amended, needs to be observed  |
| 19.04.01                | Animal fat  | Product consisting of fat from warm-blooded land animals   |   | Impurities insoluble in petrolether for rendered fat of ruminants max. 0,15 | Moisture, if >1%<br>The designation may be completed by the indication of the animal species and of kind of fat, from which it has been derived (tallow, lard, bone fat etc.) | Data sheet required   | Feeding of animal fat to ruminants is not allowed in Germany (§18 LFGB)   |
| <b>20. Egg products</b> |   |  |   |   |   |   |   |
| 20.01.01                | Egg powder  | Product consisting of dried and pasteurised hen eggs without shells or of a mixture of different proportions of dried albumen and dried egg yolk |   | Moisture max. 5   | Crude protein<br>Crude fat  | Data sheet required   | If cracked eggs are used, head note <sup>4)</sup> must be considered  |
| 20.01.02                | Egg powder, sugared                               | Egg powder to which one or several types of sugar has been added   | Total sugar mind. 3                       | Moisture max. 5   | Crude protein<br>Crude fat<br>Total sugar   | Data sheet required   | If cracked eggs are used, head note <sup>4)</sup> must be considered  |
| 20.02.01                | Hen's egg albumen, pasteurised                    | Product obtained after the separation of shells and yolk from cracked hen eggs, pasteurised and denatured with fishmeal_and / or may be dried    |   |   | Crude protein<br>Moisture   | Data sheet required.<br>When dried, details of the drying process and fuel used | If cracked eggs are used, head note <sup>4)</sup> must be considered.<br>For non-dried products, indication of shelf life is required |
| 20.03.01                | Egg shells, dried                                 | By-product obtained during the production of egg powder. It consists mainly of egg shells and is dried   |   |   | Crude ash<br>Calcium  | Data sheet required<br>Details of the drying process and fuel used              | If cracked eggs are used, head note <sup>4)</sup> must be considered  |

## Alphabetical list of the straight feeding stuffs

| <b>Designation</b>   | <b>Number</b> |
|--|---------------|
| Acid whey powder, neutralised  | 09.08.01      |
| Acorns, dehusked   | 06.02.01      |
| Ammonium acetate for bovines, sheep and goats with functioning rumen                                   | 17.01.01      |
| Ammonium lactate from fermentation for bovines, sheep and goats with functioning rumen                 | 17.01.02      |
| Ammonium sulphate for bovines, sheep and goats with functioning rumen                                  | 17.01.03      |
| Animal fat   | 19.04.01      |
| Apple molasses   | 06.05.03      |
| Apple vinasse  | 05.04.02      |
| Bacteria cultivated on methanol for calves, pigs, poultry and fish                                     | 14.01.01      |
| Bacterial protein of Escherichia coli K12  | 14.02.02      |
| Barley   | 01.02.01      |
| Barley bran  | 01.02.05      |
| Barley flakes  | 01.02.03      |
| Barley hulls and bran  | 01.02.06      |
| Barley middlings   | 01.02.04      |
| Bean bran  | 03.02.04      |
| Bean flakes  | 03.02.02      |
| Bean middlings   | 03.02.03      |
| Beans, toasted   | 03.02.01      |
| Beet leaves  | 07.07.01      |
| (Beet) sugar/sucrose   | 04.10.03      |
| Black cumin expeller   | 02.19.02      |
| Blood plasma powder, from pigs   | 19.01.01      |
| Borage expeller  | 02.17.02      |
| Brassica plants  | 07.02.01      |
| Brewers' grains  | 05.01.01      |
| Brewer's yeast, fresh  | 14.04.01      |
| Buckwheat  | 06.01.01      |
| Buckwheat hulls and bran   | 06.01.03      |
| Buckwheat, dehulled  | 06.01.02      |
| Buttermilk   | 09.03.01      |
| Buttermilk powder  | 09.03.02      |
| By-product from processing fresh fruit and vegetables  | 13.02.05      |
| By-product from the production of L-glutamic acid, for bovines, sheep and goats with functioning rumen | 18.01.01      |
| By-product from the production of L-lysine, for bovines, sheep and goats with functioning rumen        | 18.01.02      |
| By-products from the baking and pastry industry  | 13.02.02      |
| By-products from the convenience food industry   | 13.02.01      |
| By-products from the dairy industry  | 13.02.06      |
| By-products from the sweets industry   | 13.02.03      |
| By-products of the confectionary and ice-cream industry  | 13.02.04      |
| By-product of fermentation of solid material with fungi, rich in crude protein                         | 14.06.01      |
| Calcareous marine algae  | 11.01.20      |
| Calcium carbonate  | 11.01.03      |

| <b>Designation</b>  | <b>Number</b> |
|---|---------------|
| Calcium carbonate - magnesium oxide   | 11.01.57      |
| Calcium carbonate from crustacean shells  | 11.01.55      |
| Calcium chloride  | 11.01.04      |
| Calcium citrate   | 11.01.05      |
| Calcium formiate  | 11.01.06      |
| Calcium fumarate  | 11.01.07      |
| Calcium gluconate   | 11.01.08      |
| Calcium magnesium carbonate   | 11.01.11      |
| Calcium magnesium phosphate   | 11.01.12      |
| Calcium pidolate  | 11.01.56      |
| Calcium sodium phosphate  | 11.01.13      |
| Calcium sulphate  | 11.01.14      |
| (Cane) sugar molasses   | 08.04.02      |
| (Cane) sugar/sucrose  | 08.04.01      |
| Carob meal  | 06.03.01      |
| Carrot  | 04.02.01      |
| Carrot pulp   | 04.02.02      |
| Casein powder   | 09.06.01      |
| Caseinate, dried  | 09.06.02      |
| Cereal grains/mixed cereals   | 01.10.02      |
| Cereal plants   | 07.03.01      |
| Cereal pulp   | 01.10.03      |
| Ceral wort  | 05.08.01      |
| Chlorella algae   | 08.07.01      |
| Chia seed   | 02.21.01      |
| Chia press cake   | 02.21.02      |
| Chick peas  | 03.05.01      |
| Chickling vetch   | 03.07.01      |
| Chicory   | 04.09.01      |
| Chicory roots   | 04.09.02      |
| Chicory pulp, dried   | 04.09.03      |
| Citrus pulp, (partially) depectinised   | 06.07.02      |
| Citrus pulp, dried  | 06.07.01      |
| Clover meal   | 07.04.01      |
| Cocoa husks   | 02.03.01      |
| Coffee skin pellets   | 06.04.01      |
| Colostrum   | 09.09.01      |
| Colostrum feed, standardised  | 09.09.03      |
| Colostrum powder, defatted, rich in immunoglobulins   | 09.09.02      |
| Condensed/grain steep water   | 01.10.05      |
| Copra expeller  | 02.05.02      |
| Copra, extracted  | 02.05.03      |
| Cotton seed   | 02.01.01      |
| Crude protein rich by-product of the production of amino acids by <i>Corynebacterium glutamicum</i> | 14.07.01      |
| Dehusked barley   | 01.02.02      |
| Dehusked oat  | 01.03.02      |
| Dehusked Spelt  | 01.01.02      |
| Dextrose (glucose)  | 12.06.02      |



| <b>Designation</b>                            | <b>Number</b> |
|---|---------------|
| Dextrose molasses                             | 12.01.01      |
| Dicalcium phosphate                           | 11.01.15      |
| Dicalcium phosphate, dihydrat                 | 11.01.54      |
| Dimagnesium phosphate                         | 11.01.16      |
| Disodium phosphate                            | 11.01.18      |
| Distillers dried grains feed                  | 05.06.01      |
| Distillery spent wash                         | 05.05.01      |
| Dried (sugar) beet pulp                       | 04.10.08      |
| Dried cereal pulp                             | 01.10.04      |
| Dried copra                                   | 02.05.01      |
| (Drinking) Water                              | 00.01.01      |
| Egg powder                                    | 20.01.01      |
| Egg powder, sugared                           | 20.01.02      |
| Egg shells, dried                             | 20.03.01      |
| Evening primrose expeller                     | 02.18.02      |
| Fatty acid distillates from physical refining | 02.10.05      |
| Fatty acids from chemical refining            | 02.10.04      |
| Fish liver oil                                | 10.01.01      |
| Fish meal                                     | 10.02.01      |
| Fish oil                                      | 10.02.03      |
| Fish oil, refined, hydrogenized               | 10.02.04      |
| Fish protein hydrolysate                      | 10.05.01      |
| Fish solubles, condensed                      | 10.02.02      |
| Flea seed husks                               | 12.08.03      |
| Fodder beat                                   | 04.01.01      |
| Fodder rice                                   | 01.06.03      |
| Fragrant agrimony                             | 08.11.01      |
| Food-identical substances and products        | 13.01.01      |
| Fructo-Oligosaccharides                       | 12.14.01      |
| Fruit pulp                                    | 06.05.01      |
| Fruit pulp, depectinised                      | 06.05.02      |
| Gelatine, from pigs                           | 19.03.01      |
| Glucose molasses                              | 12.02.01      |
| Grain expanded with caustic soda              | 01.10.06      |
| Legumes bran/pulses bran                      | 03.11.01      |
| Grain feed flour                              | 01.10.07      |
| Grain midlings                                | 01.10.08      |
| Grain semolina bran                           | 01.10.09      |
| Grain bran                                    | 01.10.10      |
| Grape (residues) pulp                         | 05.07.01      |
| Grape kernels, deviled                        | 06.06.02      |
| Grape pulp                                    | 06.05.01      |
| Grass/legume plant                            | 07.01.02      |
| Green meal                                    | 07.01.03      |
| Groundnuts, extracted                         | 02.02.03      |
| Groundnut expeller                            | 02.02.02      |
| Groundnuts                                    | 02.02.01      |
| Guar germs, extracted                         | 03.04.01      |
| Haemoglobin powder, from pigs                 | 19.01.02      |

| <b>Designation</b>                                       | <b>Number</b> |
|--|---------------|
| Hemp expeller  | 02.20.02      |
| Hen's egg albumen, pasteurised                           | 20.02.01      |
| Hop cones, debittered                                    | 08.01.01      |
| Horse bean   | 03.01.01      |
| Horse bean flakes  | 03.01.02      |
| Horse bean fruit water                                   | 03.01.05      |
| Horse bean protein                                       | 03.01.03      |
| Horse bean pulp  | 03.01.04      |
| Horseradish pulp   | 04.05.01      |
| Isomaltulose (palatinose-) molasses                      | 12.03.01      |
| Jerusalem artichoke                                      | 04.08.01      |
| Jerusalem artichoke chips / Jerusalem artichoke meal     | 04.08.02      |
| Lactose powder   | 09.04.01      |
| Lactulose  | 12.12.01      |
| Lecithin, crude (crude lecithin)                         | 02.22.01      |
| Lecithin, deoiled (de-oiled lecithin)                    | 02.22.02      |
| Lentil hulls   | 03.06.02      |
| Lentils  | 03.06.01      |
| Lignocellulose   | 12.08.01      |
| Lignocellulose from bark                                 | 12.08.05      |
| Linseed  | 02.07.01      |
| Linseed expeller   | 02.07.02      |
| Linseed, extracted                                       | 02.07.03      |
| Linseed meal feed, extracted                             | 02.07.03      |
| Linseed meal feed, extracted, with (soap)stock           | 02.07.03      |
| Linseed, partially extracted                             | 02.07.04      |
| Linseed meal feed, partially extracted                   | 02.07.04      |
| Linseed meal feed, partially extracted, with (soap)stock | 02.07.04      |
| Lucerne meal   | 07.05.01      |
| Magnesium acetate  | 11.01.22      |
| Magnesium aspartate (-hydrochloride)                     | 11.01.53      |
| Magnesium carbonate, basic                               | 11.01.21      |
| Magnesium chloride                                       | 11.01.23      |
| Magnesium citrate  | 11.01.24      |
| Magnesium fumarate                                       | 11.01.25      |
| Magnesium gluconate                                      | 11.01.26      |
| Magnesium glycinate                                      | 11.01.59      |
| Magnesium lactate  | 11.01.27      |
| Magnesium oxide  | 11.01.28      |
| Magnesium phosphate                                      | 11.01.30      |
| Magnesium propionate                                     | 11.01.29      |
| Magnesium sulphate                                       | 11.01.31      |
| Maize  | 01.05.01      |
| Maize bran   | 01.05.05      |
| Maize flakes   | 01.05.02      |
| Maize germ   | 01.05.06      |
| Maize germ and bran                                      | 01.05.07      |
| Maize germ expeller                                      | 01.05.12      |
| Maize germ, extracted                                    | 01.05.13      |

| <b>Designation</b>                    | <b>Number</b> |
|---------------------------------------|---------------|
| Maize gluten                          | 01.05.11      |
| Maize gluten feed                     | 01.05.14      |
| Maize hulls                           | 01.05.17      |
| Maize middlings                       | 01.05.04      |
| Maize plants                          | 07.06.01      |
| Maize screenings                      | 01.05.03      |
| Maize starch                          | 01.05.08      |
| Malt bran                             | 05.03.02      |
| Malt coffee spent wash                | 12.09.01      |
| Malt germs                            | 05.03.01      |
| Manioc/tapioca                        | 04.04.01      |
| Marigold meal                         | 08.03.01      |
| Milk                                  | 09.01.01      |
| Milk fat                              | 09.02.01      |
| Milk powder                           | 09.01.02      |
| Milk thistle expeller                 | 02.23.01      |
| Millet                                | 01.04.01      |
| Monantha vetch                        | 03.10.01      |
| Monoammonium phosphate                | 11.01.33      |
| Monocalcium phosphate                 | 11.01.32      |
| Mono-dicalcium phosphate              | 11.01.34      |
| Mono-dicalcium sodium phosphate       | 11.01.35      |
| Mono and diglycerides of fatty acids  | 02.24.01      |
| Monopotassium phosphate               | 11.01.52      |
| Monosodium phosphate                  | 11.01.36      |
| Mussel meatmeal, dried                | 10.04.01      |
| Oat                                   | 01.03.01      |
| Oat flakes                            | 01.03.04      |
| Oat groat                             | 01.03.03      |
| Oat hulls and bran                    | 01.03.07      |
| Oat husks                             | 01.03.08      |
| Oat middlings                         | 01.03.05      |
| Oat-Spelt-husks                       | 01.03.09      |
| Olives                                | 02.08.01      |
| Oregano leaves                        | 08.08.01      |
| Palm kernel expeller                  | 02.09.02      |
| Palm kernel, extracted                | 02.09.03      |
| Palm kernels                          | 02.09.01      |
| Pea bran                              | 03.03.04      |
| Pea flakes                            | 03.03.02      |
| Pea fruit water                       | 03.03.07      |
| Pea hulls                             | 03.03.08      |
| Pea middlings                         | 03.03.03      |
| Pea protein                           | 03.03.05      |
| Pea pulp                              | 03.03.06      |
| Peas                                  | 03.03.01      |
| Peat, dried                           | 12.08.06      |
| Pectin                                | 12.13.01      |
| Pellets from waste material of coffee | 06.04.02      |

| <b>Designation</b>   | <b>Number</b> |
|--|---------------|
| Permanent pasture products   | 07.01.01      |
| Plant glycerine  | 12.07.02      |
| Potassium chloride   | 11.01.19      |
| Potato fibre/starch mixture  | 04.03.06      |
| Potato flakes  | 04.03.02      |
| Potato fruit water, condensed  | 04.03.08      |
| Potato granules  | 04.03.13      |
| Potato peels   | 04.03.10      |
| Potato protein   | 04.03.07      |
| Potato pulp  | 04.03.09      |
| Potato starch  | 04.03.03      |
| Potato steaming water  | 04.03.12      |
| Potatoes   | 04.03.01      |
| Poultry grit from quartz   | 12.15.01      |
| Powdercellulose  | 12.08.02      |
| Pre-gelatinised maize flour  | 01.05.15      |
| Pre-gelatinised maize starch   | 01.05.09      |
| Pre-gelatinised oat flour  | 01.03.06      |
| Pre-gelatinised potato starch  | 04.03.04      |
| Pre-gelatinised rice flour   | 01.06.06      |
| Pre-gelatinised rye flour  | 01.07.07      |
| Pre-gelatinised wheat flour  | 01.09.08      |
| Pre-gelatinised wheat starch   | 01.09.13      |
| Preserved wet grain  | 01.10.01      |
| Pressed (sugar) beet pulp  | 04.10.07      |
| Pressed (sugar) beet pulp, (partially) depectinised                  | 04.10.11      |
| 1,2 Propanediol  | 12.07.01      |
| Propylenglycol   | 12.07.01      |
| Product obtained from brown coal, rich in humic acid                 | 12.08.07      |
| Products and by-product from processing fresh fruit and vegetables   | 13.02.05      |
| Products and by-products of the convenience food industry            | 13.02.01      |
| Products and by-products from the dairy industry                     | 13.02.06      |
| Products and by-products from the sweets industry                    | 13.02.03      |
| Products and by-products of the confectionary and ice-cream industry | 13.02.04      |
| Protein hydrolysate from pigs  | 19.02.01      |
| Protein hydrolysate of gelatin extraction of pigs                    | 19.03.02      |
| Protein hydrolyzate from porcine hemoglobin                          | 19.01.03      |
| Protein product of fermentation from natural gas                     | 14.02.01      |
| Pumpkin seed expeller  | 02.06.01      |
| Rape seed expeller   | 02.11.03      |
| Rape seed hulls  | 02.11.02      |
| Rape seed  | 02.11.01      |
| Rape seed, extracted   | 02.11.04      |
| Rape seed meal feed, extracted                                       | 02.11.04      |
| Rape seed meal feed, extracted, with (soap)stock                     | 02.11.04      |
| Rape seed, partially extracted                                       | 02.11.05      |
| Rape seed meal, partially extracted                                  | 02.11.05      |
| Rape seed meal, partially extracted, with (soap)stock                | 02.11.05      |
| Raw phosphate, defluorinated   | 11.01.48      |

| <b>Designation</b>  | <b>Number</b> |
|---|---------------|
| Raw plant glycerine   | 12.07.03      |
| Rice  | 01.06.01      |
| Rice bran   | 01.06.10      |
| Rice bran with calcium carbonate                                    | 01.06.09      |
| Rice flakes   | 01.06.04      |
| Rice gluten/Rice protein  | 01.06.15      |
| Rice middlings  | 01.06.07      |
| Rice semolina/rice flour  | 01.06.05      |
| Rice, broken  | 01.06.02      |
| Roselip oilcake   | 06.09.01      |
| Rye   | 01.07.01      |
| Rye bran  | 01.07.06      |
| Rye feed  | 01.07.05      |
| Rye flakes  | 01.07.02      |
| Rye middlings   | 01.07.03      |
| Rye screenings  | 01.07.04      |
| Safflower seed  | 02.12.01      |
| Safflower seed expeller   | 02.12.02      |
| Safflower seed, extracted   | 02.12.03      |
| Salts from fatty acids  | 12.10.01      |
| Salt from the processing of plant crude glycerol, rich in sodium    | 11.01.60      |
| Sea weed meal   | 08.05.01      |
| Schizochytrium limacinum algae                                      | 08.09.01      |
| Sesame seed   | 02.13.01      |
| Sesame seed expeller  | 02.13.02      |
| Sesame seed, extracted  | 02.13.03      |
| Shrimps   | 10.03.01      |
| Skimmed milk  | 09.01.03      |
| Skimmed milk powder   | 09.01.04      |
| Small barley flakes, expanded                                       | 01.02.08      |
| Small maize flakes, expanded  | 01.05.16      |
| Small potato parts  | 04.03.11      |
| Small water lens  | 08.10.01      |
| Sodium acetate  | 11.01.39      |
| Sodium bicarbonate  | 11.01.40      |
| Sodium calcium magnesium phosphate                                  | 11.01.38      |
| Sodium carbonate  | 11.01.41      |
| Sodium chloride   | 11.01.42      |
| Sodium sulphate, anhydrous  | 11.01.47      |
| Sorghum   | 01.04.02      |
| Soya (bean) expeller  | 02.14.04      |
| Soya (bean) hulls   | 02.14.03      |
| Soya (bean) protein concentrate                                     | 02.14.07      |
| Soya (bean) protein isolate   | 02.14.08      |
| Soya (bean), dehulled, extracted, toasted                           | 02.14.06      |
| Soya(bean) meal feed, dehulled, extracted, toasted                  | 02.14.06      |
| Soya(bean) meal feed, dehulled, extracted,toasted, with (soap)stock | 02.14.06      |
| Soya (bean), extracted, toasted                                     | 02.14.05      |
| Soya(bean) meal feed, extracted, toasted                            | 02.14.05      |

| <b>Designation</b>   | <b>Number</b> |
|--|---------------|
| Soya(bean) meal feed, extracted, toasted, with (soap)stock | 02.14.05      |
| Soya beans   | 02.14.01      |
| Soya beans, toasted  | 02.14.02      |
| Spelt  | 01.01.01      |
| Spelt flakes   | 01.01.03      |
| Spelt husks  | 01.01.04      |
| Spirulina algae  | 08.06.01      |
| Spruce branch powder                                       | 12.08.04      |
| Stomach gravel/stomach pebbles of quartz                   | 12.15.01      |
| Starch mixture   | 12.11.01      |
| Starch sugar   | 12.06.01      |
| Straw  | 07.03.02      |
| Straw, expanded  | 07.03.03      |
| Sugar beet   | 04.10.01      |
| (Sugar) beet molasses                                      | 04.10.04      |
| (Sugar) beet molasses, partially desugared                 | 04.10.05      |
| (Sugar) beet pieces  | 04.10.10      |
| (Sugar) beet pulp, molassed                                | 04.10.09      |
| (Sugar) beet seeds   | 06.08.01      |
| (Sugar) beet tops and tails                                | 04.10.02      |
| Sunflower seed   | 02.15.01      |
| Sunflower seed expeller                                    | 02.15.02      |
| Sunflower seed, extracted                                  | 02.15.03      |
| Sunflower seed meal feed, extracted                        | 02.15.03      |
| Sunflower seed meal feed, extracted, with (soap)stock      | 02.15.03      |
| Sunflower seed husks                                       | 02.15.04      |
| Sweet lupins   | 03.08.01      |
| Sweet potato chips or sweet potato meal                    | 04.07.02      |
| Sweet potato/batata  | 04.07.01      |
| Tricalcium phosphate                                       | 11.01.49      |
| Trimagnesium phosphate                                     | 11.01.51      |
| Tripotassium citrate                                       | 11.01.58      |
| Trisodium phosphate  | 11.01.50      |
| Triticale  | 01.08.01      |
| Triticale flakes   | 01.08.02      |
| Turnip   | 04.06.01      |
| Vegetable fat, protected / vegetable oil, protected        | 02.10.03      |
| Vegetable fat, refined / vegetable oil, refined            | 02.10.02      |
| Vegetable oil / vegetable fat                              | 02.10.01      |
| Vetches  | 03.09.01      |
| Vinasse  | 05.04.01      |
| Vinasse from ketogulonic acid production                   | 05.04.03      |
| Walnut expeller  | 02.16.01      |
| Wet (sugar) beet pulp                                      | 04.10.06      |
| Wheat bran   | 01.09.06      |
| Wheat feed   | 01.09.05      |
| Wheat flakes   | 01.09.02      |
| Wheat germ   | 01.09.09      |
| Wheat germ expeller  | 01.09.17      |

| <b>Designation</b>                                     | <b>Number</b> |
|--|---------------|
| Wheat gluten   | 01.09.15      |
| Wheat gluten feed                                      | 01.09.16      |
| Wheat middlings  | 01.09.04      |
| Wheat protein, hydrolysed                              | 01.09.07      |
| Wheat screenings                                       | 01.09.03      |
| Wheat starch   | 01.09.11      |
| Wheat starch containing protein, partially desugared   | 01.09.14      |
| Wheat  | 01.09.01      |
| Whey   | 09.05.01      |
| Whey permeate  | 09.05.06      |
| Whey powder  | 09.05.03      |
| Whey powder, partly desugared                          | 09.05.04      |
| Whey powder, partly desugared and partly demineralised | 09.05.05      |
| Whey protein powder                                    | 09.07.02      |
| Whey retentate   | 09.05.07      |
| Whey, partly desugared                                 | 09.05.02      |
| Woodfibre  | 12.08.01      |
| Yeast  | 14.03.01      |

**Effective 31<sup>th</sup> August 2017**