



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

**Positive List  
for Straight Feeding Stuffs  
9th Edition**

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# Table of Contents

	<b>Page</b>
<b>Preliminary remarks about the 9th edition</b>	<b>II</b>
<b>Preface</b>	<b>III</b>
<b>Editors and authors</b>	<b>VI</b>
<b>Explanations</b>	<b>VIII</b>
<b>Glossary</b>	<b>XII</b>
<b>Data sheet for straight feeding stuffs of the Positive List</b>	<b>XV</b>
<b>Information on compiling the data sheet</b>	<b>XVI</b>
<b>Annex</b>	<b>XVIII</b>

## **Straight Feeding Stuffs**

<b>Number</b>	<b>Group</b>	<b>Page</b>
<u>1</u>	Cereal grains, their products and by-products	<u>1</u>
<u>2</u>	Oil seeds and oil fruits and other oil-supplying plants, their products and by-products	<u>8</u>
<u>3</u>	Grain legumes, their products and by-products	<u>14</u>
<u>4</u>	Tubers and roots, their products and by-products	<u>16</u>
<u>5</u>	By-products of fermentation and distillation industry	<u>19</u>
<u>6</u>	Other seeds and fruits, their products and by-products	<u>20</u>
<u>7</u>	Roughages and forages	<u>22</u>
<u>8</u>	Other plants, their products and by-products	<u>24</u>
<u>9</u>	Milk products	<u>25</u>
<u>10</u>	Fish and other marine animals, their products and by-products	<u>28</u>
<u>11</u>	Minerals	<u>29</u>
<u>12</u>	Miscellaneous straight feeding stuffs	<u>33</u>
<u>13</u>	Foodstuff identical stuffs, their products and by-products of the food industry	<u>35</u>
<u>14</u>	Proteins obtained from microorganisms	<u>38</u>
<u>17</u>	Ammonium salts	<u>39</u>
<u>18</u>	Other NPN compounds	<u>40</u>
<u>19</u>	Products and by-products from terrestrial animals	<u>41</u>
<u>20</u>	Egg products	<u>42</u>

<b>Alphabetical list of the straight feeding stuffs</b>	<b>43</b>
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# Preliminary remarks about the **9th** edition

In the current edition, 9 straight feeding stuffs were admitted and 2 amendments for straight feeding stuffs already listed and some other remarks were made. One feeding stuff (Mycelium silage) has been cancelled. This is clear proof that the Positive List is open for changes and amendments.

The amendments which have been made since the 8<sup>th</sup> edition are summarized in table 1 in the Annex (see page XVIII).

A current list of feed additives approved on the basis of Directive 70/524/EC and 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*).

# Preface

Consumers and politicians as well as the agricultural and food industry agree, that it is necessary to register all feeding stuffs used for feeding farm livestock in Germany and beyond that in the EU.

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 closed list of straight feeding stuffs that can be used for feeding livestock. In livestock feeding also compound feeding stuffs and additives are used; these products are regulated by specific legislation and are therefore not subject of this list.

The Standards Commission for straight feeding stuffs based its work 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 list comprise:

- a) 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
  - make a contribution to satiety and maintaining the function of the intestinal tract,
  - be safe with regard to the health of animals and humans,
  - not negatively affect the quality of animal products,
  - not present a hazard to the ecological balance due to undesirable substances it contains,
- b) a recognisable importance in the market (regardless of the quantity in the market, it depends more on whether or not the said straight feeding stuff is currently traded and used),
- c) the legal admissible use as a straight feeding stuff.

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 foodstuffs and by-products from the food production as feeding stuff. The overriding principle here is, that products, that are clearly indicated as food for human consumption can be used to feed livestock unless there are contrary statutory regulations (e.g. prohibition to feed products of animal origin to livestock).

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 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 firms 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. 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 tran-

sition 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 within the EU, 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. F.-P. 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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wirtschaftliche Rentenbank.

# 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 (foodstuff identical stuffs, their products and by-products of the food industry), 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:

1. Cereal grains, their products and by-products
2. Oil seeds, oil fruits and other oil-supplying plants, their products and by-products
3. Legume grains, their products and by-products
4. Tubers and roots, their products and by-products
5. By-products of fermentation and distillation industry
6. Other seeds and fruits, their products and by-products
7. Roughages and forages
8. Other plants, their products and by-products
9. Milk products
10. Fish and other marine animals, their products and by-products
11. Minerals
12. Miscellaneous straight feeding stuffs
13. Foodstuff identical stuffs, their products and by-products of the food industry
14. Protein obtained from microorganisms
17. Ammonium salts
18. Other NPN compounds
19. Products and by-products from terrestrial animals
20. Egg products

Note to the groups 14, 17, 18:

For the purpose of completeness, the straight feeding stuffs for which authorisation is required and has been granted under EU law are included in the Positive List; these products are evaluated and approved individually in accordance with EU law.

### “Head notes”

Four so-called “head notes” are not in front of the individual listed products:

- 1) Feeding stuff may be formaldehyde-treated, xylose-treated, hydrothermal or heat-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 need to be observed.
- 5) For explanations of the columns see pages IX-X of the foreword.
- 6) The provisions of Regulation (EC) No 79/2005 as amended and the implementing provisions should be observed.

The respective footnotes are added to the designation, description and labelling provisions of the listed feeding stuffs, if relevant.

### 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 by-product 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)**

The constituents for which the contents must be declared are listed in column 6. Also, the provisions of the legal requirements relating to animal fodder in the respective valid version apply; special attention should be paid to Annex 1a Part B and C of the German Feed Regulation. Unless otherwise stated, the contents of constituents are based on original substance (§§ 5, 6 and Annex 1, 1a of the German Feed Regulation. If requirements are stated in column 6 (e.g. ash insoluble in HCl >5%), they refer to the dry matter, except regarding water content.

### **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) "Presented during authorisation procedure", i.e. in the case of straight feeding stuffs, that need to be approved, the required information is provided during the authorisation process (Directive 82/471/EC from 30.07.82).
- c) 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.

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 des-

ignation, 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".

### **Foodstuff identical stuffs or products:**

**Food** within the meaning of Regulation (EC) No. 178/2002/EG comprises 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 identical stuffs, 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 "food identical stuffs and products" 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 "food identical stuffs and products" also include food of which the shelf life data has expired after taking the hygiene status into consideration. 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.

**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.

**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. Straight feeding stuffs must be technically free of chemical impurities to the state-of-the-art as the result of the use of processing aids in the production process which can enter the products (§4 par.2 of the German feed Regulation), as long as there set no tolerance level in annex 1a part B column 3 of the said Regulation.

**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 the Lebensmittelgesetzbuch – LFGB – 2006). Straight feeding stuffs listed in the Positive List, which may be used as carrier, are not extra indicated or grouped.

# 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
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
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

<b>Term</b>	<b>Description</b>	<b>Common designation</b>
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 or semolina bran	Flour, bran, feed meal, semolina bran
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	
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).



# Data sheet for straight feeding stuffs of the Positive List

<b>Manufacturer / distributor</b>	
<b>Feeding stuff / designation of the product</b> (designation according to the Positive List / trade name / brand name; supplemented with no. acc. to the Positive List)	
<b>Product description</b> (Explanation of the product and description of the production procedure)	
<b>Information about the production process</b> Information about the components of the raw products / about possible further components (flow chart showing processing steps / material flows)	
<b>Processing aids</b> (including all other added substances)	
<b>Information about the composition</b> Averages analysis stating the most important valuable constituents	
<b>Information about relevant undesirable substances during the risk-oriented self control</b> (e.g. HACCP)	
<b>Details about shelf life, storage and transport</b> (spoiling)	
<b>Safety information</b> (flammable, explosive, caustic etc.)	
Indication of critical constituents (endogenous origin or contamination)  CCP from HACCP test	
Information about specific analytical problems	

Details **in bold print** must be given

# Information on compiling the data sheet

## Manufacturer / distributor

### → Statement of the correct complete address

Even when comprehensive texts are used (e.g. from association or trade cooperative). The company-specific details must be clearly marked in the data sheets.

## 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!**

## 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.

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 differentiation features also need to be sent to the Standards Commission of straight feeding stuffs.

## Information about the use of processing aids

**The following information is required**

### → **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.

## Information about composition

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

At least information about the parameters stated under instructions for labelling are required.

**A quote from an analyses certificate drawn up shortly or reference to a summary of values from self control (Internet, company information) or confirmation of minimum or maximum contents of parameter, which must be labelled, is necessary.**

## 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.  
(A quote from an analysis certificate drawn up shortly or reference to a summary of values from self control (Internet, company information) or confirmation of minimum or maximum contents of the parameters is necessary.)

## 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

Notes about critical constituents (endogenous origin or contamination)

Details about the most important CCP, if a HACCP concept is available. Otherwise HACCP-conform information

Eventually reference to "Industrial guide to quality assurance"

## Notes about special analytical problems

Information, whether the data concerning undesirable substances are recorded in the company's own or industry-specific databases.

# Annex

Table 1 contains the relevant amendments / new additions for the straight feeding stuffs of the Positive List for the period 01.02.2010 to 21.01.2011.

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
21.10.2010	Cover sheet	(feed material)	Cancelled
21.10.2010	Head notes on page IX preface	Head notes No 1 and 4	Wording added/amended
21.10.2010	Head notes of the table	Head note No 1	Wording added
21.10.2010	Head notes of the table	Head note No 4	Wording amended
21.10.2010	2.22.01	Lecithin, raw (crude lecithin)	New
21.10.2010	2.22.02	Lecithin, deoiled (de-oiled lecithin)	New
21.10.2010	3.11.01	Legumes bran/pulses bran	New
21.10.2010	5.05.01	Destillery spent wash	Description revised
21.10.2010	5.06.01	Destillery dried grains feed	Description revised
21.10.2010	6.04.02	Coffee waste pellets	New
21.10.2010	9.09.03	Colostrum feed, standardised	New
21.10.2010	11.01.56	Calciumpidolat	New
21.10.2010	11.01.57	Calcium carbonate-Magnesium oxide	New
21.10.2010	12.08.03	Psyllium skins	New
21.10.2010	14.04.01	Mycelium silage	Cancelled
21.10.2010	20.03.01	Egg shells, dried	New

<sup>1)</sup> Feedingstuff may be formaldehyde-treated, xylose-treated, heat-treated or hydrothermal 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 this implementing provisions as for example Regulation (EC) No. 79/2005 need to be observed.

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

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
0.01.01	(Drinking) Water	Water obtained from the public water supply, watercourses, wells or rainfall.					Observe water quality.
<b>1. Cereal grains, their products and by-products</b>							
1.01.01	Spelt	Grains of spelt, <i>Triticum spelta</i> L., <i>Triticum diococcum</i> Schrank, <i>Triticum monococcum</i> .					
1.01.02	Dehusked Spelt	Product obtained by dehusking cleaned spelt.	Crude fibre max. 5		Starch Crude fibre		
1.01.03	Spelt flakes	Product obtained by steaming and rolling cleaned and dehusked spelt.	Crude fibre max. 5		Starch Crude fibre		
1.01.04	Spelt husks	By-product of the dehusking of cleaned spelt.	Ash insoluble in HCl max. 6		Crude fibre Ash insoluble in HCl		Low energy- and nutrient supply, dietary fiber-character.
1.02.01	Barley <sup>1)</sup>	Grains of <i>Hordeum vulgare</i> L.				If <sup>1)</sup> , then data sheet required.	
1.02.02	Dehusked barley	Product obtained by dehusking cleaned barley.	Crude fibre max. 2,3		Starch		
1.02.03	Barley flakes	Product obtained by steaming and rolling screened and dehusked barley and which can be expanded.	Crude fibre max. 2,3 Ash insoluble in HCl max. 0,5	If expanded: starch expansion min. 50	Starch Crude fibre In case of expansion, the designation may be completed accordingly.		
1.02.04	Barley middlings	By-product obtained during the processing of screened, dehusked barley into pearl barley, groats or flour.	Crude fibre max. 12		Crude fibre Starch		
1.02.05	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 Crude fibre		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.02.06	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		
1.02.08	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 Crude fibre		
1.03.01	Oat	Grains of <i>Avena sativa</i> L. and other cultivars of oat.					
1.03.02	Dehusked oat	Product obtained by dehusking cleaned oat.	Crude fibre max. 4		Starch		
1.03.03	Oat groat	Product obtained by steaming and steel-cutting cleaned, dehusked oat. It may contain a small proportion of oat husks.			Starch Crude fibre		
1.03.04	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		
1.03.05	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		
1.03.06	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 Starch expansion min. 50	Starch	Data sheet required.	
1.03.07	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 Ash insoluble in HCl max. 5		Crude fibre		
1.03.08	Oat husks	By-product of the dehusking of oat.	Ash insoluble in HCl max. 6		Crude fibre Ash insoluble in HCl		Low energy- and nutritient supply, ballast character.
1.04.01	Millet	Grains of <i>Panicum miliaceum</i> L.					
1.04.02	Sorghum	Sorghum grains of <i>Sorghum bicolor</i> (L.) Moench s.l.			Additional designation "Milocorn" is possible.		
1.05.01	Maize	Grains of <i>Zea mays</i> L.				If <sup>1)</sup> , then data sheet required.	
1.05.02	Maize flakes	Product obtained by steaming and rolling cleaned maize and which can be expanded or wetting and heating.	Crude fibre max. 4,7 Ash insoluble in HCl max. 0,5	If expanded: Starch expansion min. 50	Starch Crude fibre In case of expansion, the designation can be supplemented accordingly.		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.05.03	Maize screenings	By-product of the manufacture of flour or semolina or flour from maize.	Starch min. 40		Starch Crude fibre		
1.05.04	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 Crude fibre		
1.05.05	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 Crude fibre		
1.05.06	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 Crude fat Crude fibre Moisture, if > 10%	Data sheet required.	
1.05.07	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 Crude protein Crude fat Crude fibre	Data sheet required.	
1.05.08	Maize starch	Technically pure starch obtained from maize.		Ash insoluble in HCl max. 0,5	Starch	Data sheet required.	
1.05.09	Pre-gelatinised maize starch	Product obtained from maize starch largely expanded by heat or heat-moisture treatment.		Ash insoluble in HCl max. 0,5 Moisture max. 12 starch expansion min. 50	Starch	Data sheet required.	
1.05.11	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 min. 62 Ash insoluble in HCl max. 0,5		Crude protein	Data sheet required.	
1.05.12	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 Crude protein Crude fat Crude fibre	Data sheet required.	
1.05.13	Maize germ, extracted	By-product of oil extraction, 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 Crude protein Crude fibre	Data sheet required.	
1.05.14	Maize gluten feed	By-product of the wet manufacture of maize starch. It is composed 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 obtained also by a wet process.			Crude protein Starch Crude fat, if > 4,5% Moisture, if > 14%	Data sheet required.	Description due to customs law.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.05.15	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 Crude fibre max. 2 starch expansion min. 50	Starch	Data sheet required.	
1.05.16	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 Crude protein Crude fat Crude fibre		
1.05.17	Maize hulls	By-product obtained during starch production from cleaned maize that may contain parts of the endosperm and maize germs.			Crude fibre Starch, if > 20% Crude protein, if > 10% Crude fat, if > 5% Moisture, if > 14%	Data sheet required.	
1.06.01	Rice	Grains of <i>Oryza sativa</i> L. (including parboiled rice).					
1.06.02	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		
1.06.03	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		
1.06.04	Rice flakes	Product obtained by grinding, steaming and rolling broken rice (including parboiled rice).	Crude fibre max. 3	Botanical purity min. 99	Starch		
1.06.05	Rice semolina/rice flour	Product obtained during the grinding of cleaned rice (including parboiled rice).			Starch		
1.06.06	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.	
1.06.07	Rice middlings	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 Ash insoluble in HCl max. 1,7	Rice hulls max. 3	Starch Crude fat Crude fibre The designation may be completed with "yellow" or "white", in these case the maximum ash insoluble in HCl must be stated	Data sheet required.	
1.06.09	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 Ash insoluble in HCl max. 1,2 Rice hulls max. 2	Starch Crude fat Crude fibre Calcium carbonate	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.06.10	Rice bran	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 Starch Crude fibre Calcium carbonate	Data sheet required.	
1.06.15	Rice gluten	By-product of the starch production from cleaned rice, primarily comprising gluten, dried.		Crude protein min. 62 Crude ash max 2,5	Crude protein Crude fibre Crude ash	Data sheet required.	
1.07.01	Rye	Grain of <i>Secale cereale</i> L.					
1.07.02	Rye flakes	Product obtained by rolling and in some cases steaming cleaned rye.			Starch Crude fibre		
1.07.03	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 Crude fibre		
1.07.04	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 Crude fibre		
1.07.05	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 Crude fibre max. 7		Crude protein Crude fibre		
1.07.06	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 Crude fibre		
1.07.07	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 Crude fibre max. 4 Starch expansion min. 50	Starch	Data sheet required.	
1.08.01	Triticale	Grain of <i>Triticum x Secale</i> hybrid.					
1.08.02	Triticale flakes	Product obtained by rolling and in some cases steaming cleaned triticale.	Crude fibre max. 3		Starch Crude fibre		
1.09.01	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.	
1.09.02	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 Crude fibre In case of expansion, the designation may be completed accordingly.		
1.09.03	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 Crude fibre		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.09.04	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 Crude fibre		
1.09.05	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 Crude fibre		
1.09.06	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 Crude fibre		
1.09.07	Wheat protein, hydrolysed	Product obtained from wheat gluten by enzymatic hydrolysis.		Crude protein min. 65 Ash insoluble in HCl max.1,5	Crude protein	Data sheet required.	
1.09.08	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 Crude fibre max. 3 Starch expansion 50	Starch	Data sheet required.	
1.09.09	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 Crude fat Moisture, if > 12%	Data sheet required.	
1.09.11	Wheat starch	Technically pure starch obtained from cleaned wheat or from wheat flour.		Ash insoluble in HCl max. 0,5	Starch	Data sheet required.	
1.09.13	Pre-gelatinised wheat starch	Product consisting of wheat starch largely expanded by heat and hydrothermal treatment.		Moisture max. 12 Ash insoluble in HCl max. 0,5 Starch expansion 50	Starch	Data sheet required.	
1.09.14	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 Crude protein Moisture, if >14%	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
1.09.15	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 min.70 Moisture max. 13	Ash insoluble in HCl max. 0,5	Crude protein	Data sheet required.	
1.09.16	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 Crude protein Crude fat	Data sheet required.	
1.09.17	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 min. 25		Crude protein Crude fat Crude fibre Starch	Data sheet required.	
1.10.01	Preserved wet grain	Grain preserved by adding approved preservation additives.			Moisture The type of treatment must be stated.	Details about the conservation additives used are required.	
1.10.02	Cereal grains/mixed cereals	Product obtained from the grading of cereal grains after cleaned using trieur cylinders or trommel screens. The description needs to be supplemented with the grain species used.		Grain species max. 5 Grain min. 96	Grain species stated in descending order of content.		
1.10.03	Cereal pulp	By-product of starch manufacture from cereal grains or cereal flour, it may contain starch, gluten and hulls. The description must be supplemented with the grain species.		Moisture max. 95	Moisture Crude protein Grain species used	Data sheet required.	
1.10.04	Dried cereal pulp	By-product obtained by extracting most of the water from cereal pulp. The description must be supplemented by the grain species.		Moisture max. 13	Starch Crude protein Crude fibre Grain species used	Data sheet required.	
1.10.05	Condensed/grain steep water	By-product obtained by concentrating or drying steeping liquor from starch manufacture. The description must be supplemented by the grain species.			Crude protein Crude ash Moisture, if > 13% Grain species used	Data sheet required.	
1.10.06	Grain expanded with caustic soda	Grain that has been expanded by means of adding caustic soda.		Sodium 1,5 to 2,5	Moisture Sodium Starch, if > 20% Crude protein, if > 10% Crude fibre		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>2. Oil seeds, oil fruits and other oil-supplying plants, their products and by-products, the content of Gossypol considered</b>							
2.01.01	Cotton seed	Seeds of cotton, <i>Gossypium</i> ssp., from which the fibres have been removed.			Crude protein Crude fat Crude fibre		The content of Gossypol considered.
2.02.01	Groundnuts	Groundnut seeds, <i>Arachis hypogea</i> L. and other species of <i>Arachis</i> , decorticated, the hulls may be removed.					Observe aflatoxin content.
2.02.02	Groundnut expeller	By-product of oil manufacture, obtained by pressing of wholly or partially decorticated groundnuts.		Crude fibre max. 16	Crude protein Crude fat Crude fibre	Data sheet required.	Observe aflatoxin content.
2.02.03	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 Crude fibre	Data sheet required.	Observe aflatoxin content.
2.03.01	Cocoa husks	Product obtained by dehusking roasted cocoa beans, <i>Theobroma cacao</i> L.			Crude fibre	Data sheet required.	Observe theobromine content.
2.05.01	Dried copra	Dried endosperm and outer husk (tegument) of the seed of the coconut palm, <i>Cocos nucifera</i> L.		Crude fat min. 60 Moisture max. 6	Crude fat	Data sheet required.	
2.05.02	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 Crude fat Crude fibre	Data sheet required.	
2.05.03	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 Crude fibre	Data sheet required.	
2.06.01	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 Crude fat Crude fibre	Data sheet required.	
2.07.01	Linseed	Seeds of linseed, <i>Linum usitatissimum</i> L.		Botanical purity min. 93			Observe hydrogen cyanide content.
2.07.02	Linseed expeller	By-product of oil manufacture, obtained by pressing of linseed.		Botanical purity min. 93	Crude protein Crude fat Crude fibre	Data sheet required.	Observe hydrogen cyanide content.
2.07.03	Linseed, extracted <sup>1)</sup>	By-product of oil manufacture, obtained by extraction of linseed.	Crude fat max. 4	Botanical purity min. 93	Crude protein Crude fibre	Data sheet required.	Observe hydrogen cyanide content.
2.07.04	Linseed, partially extracted <sup>1)</sup>	By-product of oil manufacture, obtained by partial extraction of linseed.	Crude fat max. 8	Botanical purity min. 93	Crude protein Crude fat Crude fibre	Data sheet required.	Observe hydrogen cyanide content.
2.08.01	Olives	Olives of the variety <i>Olea europaea</i> L.					

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
2.09.01	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 Crude fibre		
2.09.02	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 Crude fat Crude fibre	Data sheet required.	
2.09.03	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 Crude fibre	Data sheet required.	
2.10.01	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% The word "vegetable" may be replaced in the designation of the plant. The designation must be completed 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.	
2.10.02	Vegetable fat, refined / vegetable oil, refined	Refined product obtained from vegetable fats or vegetable oils (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% 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.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
2.10.03	Vegetable fat , protected / vegetable oil, protected	Vegetable oil or vegetable fat (excluding castor oil) or isolated fractions 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 The process (hydration, coating or physical procedure) and eventually developed fat fractions must be stated.	Data sheet required.	
2.10.04	Fatty acids from refining	By-product of alkaline neutralisation of vegetable fats or vegetable oils (excluding castor oil) obtained after mineral acid hydrolysis. The residues of deodorisation must not be added.		Residues insoluble in petrol ether max. 1.3	Crude fat Moisture, if > 1% 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 content.	Data sheet required.	The addition of deo-distillates must be marked.
2.10.05	Fatty acid distillate	By-product obtained during the distillative neutralisation of vegetable fats or vegetable oils (excluding castor oil).		Residues insoluble in petrol ether max. 1.3	Crude fat Moisture, if > 1% 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 content.	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
2.11.01	Rape seed <sup>2)</sup>	Seeds of rape, <i>Brassica napus</i> L. ssp. <i>oleifera</i> (Metzg.) Sinsk., of Indian sarson <i>Brassica napus</i> L. Var. <i>Glauca</i> (Roxb.) O.E. Schulz and of rape <i>Brassica napa</i> ssp. <i>oleifera</i> (Metzg.) Sinsk.		Botanical purity min. 94			Observe glucosinolate content.
2.11.02	Rape seed hulls	By-product obtained by dehulling of rape seeds.			Crude fibre		
2.11.03	Rape seed expeller <sup>1)</sup> <sup>2)</sup>	By-product of oil manufacture, obtained by extraction of seeds rape.		Botanical purity min. 94	Crude protein Crude fat Crude fibre	Data sheet required.	Observe glucosinolate content.
2.11.04	Rape seed, extracted <sup>1) 2)</sup>	By-product of oil manufacture, obtained by extraction of rape seeds. In accordance with industry codes of practice, it may contain used bleaching earth from processing.	Crude fat max. 4	Botanical purity min. 94 Ash insoluble in HCl max. 0,9	Crude protein Crude fibre	Data sheet required.	Observe glucosinolate content.
2.11.05	Rape seed, partially extracted <sup>1) 2)</sup>	By-product of oil manufacture, obtained by extraction of rape seed. In accordance with industry codes of practice, it may contain used bleaching earth from processing.	Crude fat max.6	Botanical purity min. 94 Ash insoluble in HCl max. 0,9	Crude protein Crude fat Crude fibre	Data sheet required.	Observe glucosinolate content.
2.12.01	Safflower seed	Seeds of safflower, <i>Catharmus tinctorius</i> L.					
2.12.02	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 Crude fat Crude fibre	Data sheet required.	
2.12.03	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 Crude fibre	Data sheet required.	
2.13.01	Sesame seed	Seeds of sesame, <i>Sesamum indicum</i> L.					
2.13.02	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 Crude fat Crude fibre Ash insoluble in HCl, if > 2,2%	Data sheet required.	
2.13.03	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 Crude fibre Ash insoluble in HCl, if > 2,2%	Data sheet required.	
2.14.01	Soya beans	Soya beans, <i>Glycine max.</i> L. Merr.					
2.14.02	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.	
2.14.03	Soya (bean) hulls	By-product obtained during dehulling of soya beans.			Crude fibre		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
2.14.04	Soya (bean) expeller	By-product of oil manufacture, obtained by pressing of soya beans.			Crude protein Crude fat Crude fibre, if > 8%	Data sheet required.	
2.14.05	Soya (bean), extracted, toasted <sup>1)</sup>	By-product of oil manufacture, obtained from soya beans by extraction and subjected to an appropriate heat treatment. In accordance with industry codes of practice, it may contain used bleaching earth from processing.	Crude fat max. 4	Urease activity: max. 0,4 mg N/g · minute Ash insoluble in HCl max. 0,9	Crude protein Crude fibre, if > 8%	Data sheet required.	
2.14.06	Soya (bean), dehulled, extracted, toasted <sup>1)</sup>	By-product of oil manufacture, obtained from dehulled soya beans by extraction and subjected to an appropriate heat treatment. In accordance with industry codes of practice, it may contain used bleaching earth from processing.	Crude fat max. 4	Crude fibre max. 5 Urease activity: max. 0,5 mg N/g · minute Ash insoluble in HCl max. 0,9	Crude protein	Data sheet required.	
2.14.07	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.	
2.14.08	Soya (bean) protein isolate	Product obtained from coagulation, separation and drying of soya beans (dehulled and defatted).	Crude protein min. 85	Lysine min. 5 Moisture max. 10	Crude protein Lysine	Data sheet required.	
2.15.01	Sunflower seed	Seeds of the sunflower, <i>Helianthus annuus</i> L.					
2.15.02	Sunflower seed expeller	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 Crude fat Crude fibre	Data sheet required.	
2.15.03	Sunflower seed, extracted	By-product of oil manufacture, obtained by extraction of seeds of the sunflower from which part or all of the husks have been removed. In accordance with industry codes of practice, it may contain used bleaching earth from processing.	Crude fat max. 4	Crude fibre max. 27 Ash insoluble in HCl max. 0,9	Crude protein Crude fibre	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
2.16.01	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 Crude fat Crude fibre	Data sheet required.	
2.17.02	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 Crude fat Crude fibre Crude ash	Data sheet required.	
2.18.02	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 Crude fat Crude fibre Crude ash	Data sheet required.	
2.19.02	Black cumin expeller	By-product of oil manufacture obtained by pressing the seeds of the black cumin, <i>Nigella sativa</i> L.			Crude protein Crude fat Crude fibre Crude ash	Data sheet required.	Observe shelf life.
2.20.02	Hemp expeller	By-product of oil manufacture obtained by pressing hemp seeds, <i>Cannabis sativa</i> L.		Tetrahydrocannabinol max. 0,2	Crude protein Crude fat Crude fibre	Data sheet required.	Only seeds from production pastures in countries of the European Union using seeds listed in the type list of Regulation (EC) No. 2316/1999.
2.21.01	Chia seed	Seeds of the chia plant <i>Salvia hispanica</i> L.			Crude fat Crude protein Crude fibre		
2.22.01	Lecithin, raw (crude lecithin)	Product obtained from crude vegetable oils by separation of oil.		Aceton insoluble min. 55	Aceton insoluble Crude ash The designation may be replaced by "Crude lecithin"	Data sheet required	
2.22.02	Lecithin, de-oiled (de-oiled lecithin)	Product obtained by de-oiling of crude lecithin.		Aceton insoluble min. 90	Aceton insoluble Crude ash The designation may be replaced by "De-oiled lecithin"	Data sheet required	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>3. Grain legume, their products and by-products</b>							
3.01.01	Horse bean	Seeds of <i>Vicia faba</i> L. ssp. <i>faba</i> var. <i>equina</i> Pers. and var. <i>minuta</i> (Alef.) Mansf.					
3.01.02	Horse bean flakes	Product obtained by steaming and rolling cleaned horse beans.			Crude protein Crude fibre Starch		
3.01.03	Horse bean protein	By-product obtained during starch manufacturing from the separated horse bean fruit water.		Crude protein min. 70	Moisture, if > 14 % Crude protein	Data sheet required.	
3.01.04	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 % Crude fibre Starch	Data sheet required.	
3.01.05	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 Crude protein Crude ash Potassium	Data sheet required.	
3.02.01	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.	
3.02.02	Bean flakes	Product obtained by steaming and rolling cleaned beans submitted to an appropriate heat treatment to destroy toxic lectines.			Crude protein Crude fibre Starch	The heat treatment must be stated.	
3.02.03	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 Crude fibre	The heat treatment must be stated.	
3.02.04	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 The designation may be replaced by 'bean husks'	The heat treatment must be stated.	
3.03.01	Peas	Seeds of <i>Pisum</i> spp.					
3.03.02	Pea flakes	Product obtained by steaming and rolling cleaned peas.			Crude protein Crude fibre Starch		
3.03.03	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 Crude fibre		
3.03.04	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		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
3.03.05	Pea protein	By-product obtained from the separated pea fruit water when producing starch.		Crude protein min. 65	Moisture, if > 14% Crude protein	Data sheet required.	
3.03.06	Pea pulp	By-product obtained when producing starch from cleaned peas; it consists of parts of the hulls and the endosperm.			Moisture, if > 14% Crude fibre Starch	Data sheet required.	
3.03.07	Pea fruit water	By-product obtained when producing starch from the cleaned peas and from which crude protein and water are partly removed.			Moisture Crude protein Crude ash Potassium	Data sheet required.	
3.03.08	Pea hulls	By-product obtained during dehulling of cleaned peas.			Crude fibre		
3.04.01	Guar germs, extracted	By-product of mucilage extraction from germinated seeds of <i>Cyamopsis tetragonoloba</i> (L.) Taub.			Crude protein	Data sheet required.	
3.05.01	Chick peas	Seeds of <i>Cicer arietinum</i> L.					
3.06.01	Lentils	Seeds of <i>Lens culinaris</i> a.o. Medik					
3.06.02	Lentil hulls	Product obtained during dehulling of cleaned lentils. It consists predominately of hulls.			Crude fibre		
3.07.01	Chickling vetch	Seeds of <i>Lathyrus sativus</i> L. submitted to an appropriate heat treatment to destroy toxic lectines.					
3.08.01	Sweet lupins <sup>1)</sup>	Seeds of <i>Lupinus</i> ssp. low in bitter constituents.				If <sup>1)</sup> , then data sheet required.	
3.09.01	Vetches	Seeds of <i>Vicia sativa</i> L. var. <i>sativa</i> and other varieties.					
3.10.01	Monantha vetch	Seeds of <i>Vicia monanthos</i> Desf.					
3.11.01	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 lectines.			Crude protein Crude fibre	Data sheet and, in case of a product containing beans, information about heat treatment are required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>4. Tubers, roots, their products and by-products</b>							
4.01.01	Fodder beat	Beta vulgaris var. crassa.					
4.02.01	Carrot	Daucus carota L. ssp sativus.					
4.02.02	Carrot pulp	By-product of juice extraction from cleaned carrots; it may be dried.			Crude fibre Moisture, if > 14%	Additional information on the drying process and the fuel if dried.	
4.03.01	Potatoes	Tubers of Solanum tuberosum L.					
4.03.02	Potato flakes	Product obtained by roller drying of washed, peeled or unpeeled steamed potatoes.		Ash insoluble in HCl max. 1,7	Starch Crude fibre		
4.03.03	Potato starch	Technically pure starch from washed potatoes.		Ash insoluble in HCl max. 0,5	Starch Moisture, if > 14%	Data sheet required.	
4.03.04	Pre-gelatinised potato starch	Product consisting of potato starch largely expanded by heat treatment.		Water max. 12 Ash insoluble in HCl max. 0,5 Starch expansion max. 50	Starch	Data sheet required.	
4.03.06	Potato fibre/starch mixture	By-product of starch production from washed potatoes. It consists of cell wall material and starch.		Starch min. 70	Starch Moisture, if > 14%	Data sheet required.	
4.03.07	Potato protein	Dried by-product of starch manufacture, which consists predominately protein obtained after the separation of starch.		Crude protein min. 75 Ash insoluble in HCl max. 0,5	Crude protein Moisture, if > 14%	Data sheet required.	
4.03.08	Potato fruit water, condensed	By-product of the manufacture of potato starch from which proteins and water have been partly withdrawn.			Crude protein Crude ash Moisture	Data sheet required.	
4.03.09	Potato pulp	By-product (may be dried) of the manufacture of potato starch from washed potatoes.			Starch Crude fibre Moisture, if > 14%	Data sheet required.	
4.03.10	Potato peels	By-product of the peeling of washed potatoes, it may be steamed or dried.			Ash insoluble in HCl, if > 5% Crude fibre	Data sheet required.	Additional information on the drying process and the fuel if dried.
4.03.11	Small potato parts	By-product obtained when processing cleaned potatoes to produce starch, it comprises of pieces of potatoes and potato peels.			Starch Crude fibre Ash insoluble in HCL, if > 3,5%		
4.03.12	Potato steaming water	By-product obtained when producing potato flakes by steaming cleaned potatoes.			Moisture	Data sheet required.	Not storable.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
4.04.01	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 Crude fibre Ash insoluble in HCl, if > 3,5% The designation may be supplemented with 'meal', 'pulp' (=crisps) or 'pellets'	Data sheet required.	
4.05.01	Horseradish pulp	By-product of juice extraction from cleaned horseradish ( <i>Armoracia P. Gaertn.</i> ).			Crude fibre Moisture		
4.06.01	Turnip	<i>Brassica rapa</i> var. <i>Rapa</i> .					
4.07.01	Sweet potato/batata	Tubers of <i>Ipomoea batatas</i> (L.) Poir.			Starch		
4.07.02	Sweet potato chips or sweet potato meal	Product obtained by crushing or grinding cleaned, dried sweet potato/batata tubers			Starch		
4.08.01	Jerusalem artichoke	Tubers of <i>Helianthus tuberosus</i> L.					
4.08.02	Jerusalem artichoke chips / Jerusalem artichoke meal	Product obtained by chopping or grinding cleaned, dried tubers of Jerusalem, <i>Helianthus tuberosus</i> L.			Inulin Crude fibre		
4.09.01	Chicory	Roots of <i>Cichorium intybus</i> L.					
4.09.02	Chicory powder	Product obtained by chopping or grinding cleaned, dried roots of chicory.			Inulin Crude fibre		
4.09.03	Chicory pulp, dried	By-product obtained when extracting inulin after chopping /or grinding cleaned and dried chicory roots.			Crude fibre Crude ash Ash insoluble in HCl, if > 3,5	Data sheet required.	
4.10.01	Sugar beet	<i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>altissima</i> Doell.					
4.10.02	(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.
4.10.03	(Beet) sugar/sucrose	Product extracted from sugar beets.			Sucrose	Data sheet required.	
4.10.04	(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 Moisture, if > 28%	Data sheet required.	
4.10.05	(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 Moisture, if > 14%		

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
4.10.06	Wet (sugar) beet pulp	Practically desugared by-product obtained during extraction of raw juice from sugar beet; it 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> .	
4.10.07	Pressed (sugar) beet pulp	Practically desugared, pressed by-product obtained during extraction of raw juice from sugar beet, it may be ensiled <sup>3)</sup> .		Moisture max. 82	Ash insoluble in HCl, if > 5%	Additional information on the ensiling additive if <sup>3)</sup> .	
4.10.08	Dried (sugar) beet pulp	Dried product of the manufacture of sugar extracted of sugar beets.		Ash insoluble in HCl max. 4,5	Ash insoluble in HCl, if > 3,5 % Total sugar expressed as sucrose, if > 10,5%	Data sheet required.	
4.10.09	(Sugar) beet pulp, molassed	Dried product of the manufacture of sugar extracted of sugar beets, to which molasses has been added.		Ash insoluble in HCl max. 4,5	Ash insoluble in HCl, if > 3,5 % Total sugar expressed as sucrose, if > 10,5%	Data sheet required.	
4.10.10	(Sugar) beet pieces	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 % If pressed, ash insoluble in HCl, if >5 %	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>5. By-products of fermentation- and distillation industry inclusive enzymatic production of alcohol for bioenergetic purposes</b>							
5.01.01	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 Crude ash Moisture, if > 14% used raw materials (starch origin) if not grain	Data sheet required. Information on the ensiling agent if <sup>3)</sup> .	
5.03.01	Malt germs	By-product of malting of cereals, consisting of dried germs.		Crude fibre max. 19	Crude protein	Data sheet required.	
5.04.01	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.		Ash insoluble in HCl max. 4,5	Used raw materials must be stated Crude protein Crude ash Moisture, if >35% Potassium	Data sheet required.	Crude protein consists predominately of NPN, may have higher sulphate content.
5.04.02	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 Crude fibre Moisture, if > 35% Crude ash Sugar	Data sheet required.	Crude protein consists predominately of NPN, may have higher sulphate content.
5.05.01	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 %, Crude protein Raw material used must be stated	Data sheet required.	
5.06.01	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 % Crude protein Crude fat, if >5% Crude fibre, if >5% Crude ash Chloride, calculated as NaCl, if >1% Potassium, if > 19% Raw materials used must be stated	Data sheet required.	Feed value varies depending on raw material and manufacturing process. Sufficient water supply should be attended.
5.07.01	Grape (residues) pulp	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.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>6. Other seeds and fruits, their products and by-products</b>							
6.01.01	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.
6.01.02	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.
6.01.03	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.
6.02.01	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			
6.03.01	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		
6.04.01	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 Crude fibre	Data sheet required.	
6.04.02	Coffee waste pellets	By-product obtained when processing shelled seeds of the coffee tree <i>Coffea</i> L. ssp. 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 Crude fibre	Data sheet required	The contents of theobromine and caffeine should be observed.
6.05.01	Fruit pulp	By-product obtained during the production of fruit juice. It may be dried.			Crude fibre Moisture		The description must be completed by the type of fruit.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
6.05.02	Fruit pulp, depectinised	Depectinised by-product obtained during the production of fruit juice.			Crude fibre Moisture	Data sheet required.	The description must be completed by the type of fruit.
6.05.03	Apple molasses	By-product obtained after producing pectine from apple pulp.			Total sugar calculated as sucrose		
6.06.02	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 fiber-character.
6.07.01	Citrus pulp, dried	Dried by-product obtained by pressing citrus fruits, Citrus ssp., during the production of citrus juice.		Moisture max. 13	Crude fibre	Data sheet required.	
6.07.02	Citrus pulp, depectinised	By-product obtained during pectin production from citrus pulp, which may contain, by virtue of the process, salts of nitric acid and crude cellulose.			Crude fibre	Data sheet required.	
6.08.01	(Sugar) beet seeds	Seeds of sugar beet, Beta vulgaris L. ssp. vulgaris var. altissima Doell.					

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>7. Roughages and forages produced on farm</b>							
7.01.01	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 Colchicum autumnale, marsh horsetail Equisetum palustre or bracken Pteridium aquilinum) and in the case of hay or silage of visible mould.
7.01.02	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 Colchicum autumnale, marsh horsetail Equisetum palustre or bracken Pteridium aquilinum) and in the case of hay or silage of visible mould.
7.01.03	Green meal	Product obtained by drying, milling and in some cases compacting young forage plants.		Crude protein min. 15,5 Ash insoluble in HCl max. 3,4 Moisture max. 12	Crude protein Crude fibre Ash insoluble in HCl, if > 3,5% The word 'meal' may be replaced by 'pellets', The species of fodder plant must be stated in the designation.	Information on the drying process and the fuel.	
7.02.01	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> .	
7.03.01	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> .	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
7.03.02	Straw	Product obtained after the removal of seeds from plants.			Crude fibre The species of plant must be stated in the designation.		Alternative EU designation: cereal straw.
7.03.03	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> b) Sodium 1,5 to 3,1 Moisture max. 16	Crude fibre Sodium, if treated with NaOH The designation must be completed with the type of chemical treatment.		Alternative EU designation: cereal straw, treated.
7.04.01	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 Moisture max. 12 Botanical purity min. 80	Crude protein Crude fibre Ash insoluble in HCl, if > 3,5% The word "meal" may be replaced by "pellets".	Information on the drying process and the fuel.	
7.05.01	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 Moisture max. 12	Crude protein Crude fibre Ash insoluble in HCl, if > 3,5% The word "meal" may be replaced by "pellets".	Information on the drying process and the fuel.	
7.06.01	Maize plants	Fresh, ensiled <sup>3)</sup> or dried plants of Zea mays or parts thereof, except grains (see Group 1).			Crude fibre	Additional information on the ensiling additive if <sup>3)</sup> .	
7.07.01	Beet leaves	Fresh, ensiled <sup>3)</sup> or dried leaves of Beta species.			Crude ash	Additional information on the ensiling additive if <sup>3)</sup> .	Observe soil content.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>8. Other plants, their products and by-products</b>							
8.01.01	Hop cones, debittered	By-product obtained after extraction of hop cones and practically free from bitter constituents.		Bitter constituents max. 0.2 (conductometer) Moisture max. 13	Crude fibre The designation may be replaced by "spent hops".	Data sheet required.	
8.03.01	Marigold meal	Product obtained by grinding dried petals of Mexican marigold, <i>Tagetes erecta</i> .			Crude protein		
8.04.01	(Cane) sugar/sucrose	Sugar extracted from sugar cane, <i>Saccharum officinarum</i> L.			Sucrose	Data sheet required.	
8.04.02	(Cane) sugar molasses	By-product obtained during the manufacture or refining of sugar from (cane) sugar.			Total sugar calculated as sucrose Moisture, if > 28%	Data sheet required.	
8.05.01	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 Crude fibre		Observe arsenic and iodine content.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>9. Milk products (the species must be stated if other than cow's milk)<sup>4)</sup></b>							
9.01.01	Milk	Unprocessed secretion of the mammary gland obtained by milking farmed animals.					
9.01.02	Milk powder	Dried product from milk or semi-skimmed milk.	Crude fat min. 10		Crude protein Crude fat Moisture, if > 5%		
9.01.03	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 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.		
9.01.04	Skimmed milk powder	Product obtained by drying of skimmed milk.			Crude protein Moisture, if > 5%		
9.02.01	Milk fat	Product obtained by skimming milk and from which the water may be extracted.		Moisture max. 1 Crude fat min. 96	Crude fat		
9.03.01	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.	
9.03.02	Buttermilk powder	Product obtained by drying buttermilk.			Crude fat Crude protein Lactose Moisture, if > 6%	Data sheet required.	
9.04.01	Lactose powder	Product obtained by purifying and drying the sugar separated from milk or whey.			Lactose Moisture, if > 5%	Data sheet required.	
9.05.01	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.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
9.05.02	Whey, partly desugared	Product obtained by partly removing lactose and from whey and which may be thickened.		Moisture max.97	Moisture	Data sheet required.	
9.05.03	Whey powder	Product obtained by drying whey.			Crude protein Lactose Crude ash Moisture, if > 8%	Data sheet required.	
9.05.04	Whey powder, partly desugared	Product obtained by drying whey from which the lactose has been partly removed.	Lactose max. 70		Crude protein Lactose Crude ash Moisture, if > 8%	Data sheet required.	
9.05.05	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 Lactose Crude ash Moisture, if > 8%	Data sheet required.	
9.05.06	Whey permeate	Product obtained by ultra filtration of whey through an membrane filter which may be partly desugared and thickened or dried.			Crude ash Crude protein Lactose Moisture, if > 8%	Data sheet required.	
9.05.07	Whey retentate	Product obtained during ultra filtration of whey retained by the membrane and which may be partially desugared, thickened or dried.			Crude protein Crude ash Lactose Moisture, if > 8%	Data sheet required.	
9.06.01	Casein powder	Product obtained by drying casein precipitated from skimmed milk or buttermilk by means of acids or rennet.			Crude protein Moisture, if > 10%	Data sheet required.	
9.06.02	Caseinate, dried	Dried product obtained from broken cheese or casein by treatment with neutralising agents.			Crude protein Moisture, if > 10%	Data sheet required.	
9.07.02	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 Moisture, if > 8% The designation may be replaced with milk-protein concentrate.	Data sheet required.	
9.08.01	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 Lactose Calcium Sodium Moisture, if > 5%	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
9.09.01	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.
9.09.02	Colostrum powder, defatted, rich in immunoglobulins	Dried product obtained from colostrum after separation of the fat and pasteurizing.		Immunoglobulins (IgG) min. 15% Crude protein min. 50%	Crude protein Lactose, if >10% 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.
9.09.03	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 Crude protein min. 35	Crude protein Crude fat Lactose, if >10 v.H. 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.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>10. Fish and other marine animals, their products and by-products</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.
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 ash insoluble in HCl max. 2.2 Moisture max. 12	Crude protein Crude fat Crude ash, if > 20% Moisture, if > 8% 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 Crude fat 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 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 Moisture max. 12	Moisture, if > 8% Crude protein, if > 10% Crude fat, if > 5%	Data sheet required.	
10.04.01	Mussel meatmeal, dried	Dried and ground meat of mussels.			Crude protein Crude fat, if > 5 % 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 Crude protein The predominately fish species may be highlighted.	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>11. Minerals</b>						Data sheet required.	
11.01.01	Calcium acetate	Product consisting of technically pure calcium acetate, including crystal water.			Calcium	Data sheet required.	
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 Ash insoluble in HCl, if > 5% 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.	
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.	
11.01.09	Calcium lactate	Product consisting of technically pure calcium lactate.			Calcium	Data sheet required.	
11.01.10	Calcium propionate	Product consisting of technically pure calcium propionate.			Calcium	Data sheet required.	
11.01.11	Calcium magnesium carbonate	Natural mixture of calcium carbonate and magnesium carbonate.			Calcium Magnesium Ash insoluble in HCl, if > 5%	Data sheet required.	
11.01.12	Calcium magnesium phosphate	Technically pure calcium magnesium phosphate.			Calcium Magnesium Phosphor	Data sheet required.	
11.01.13	Calcium sodium phosphate	Product obtained by a hydrothermal process from apatite phosphate, phosphoric acid and soda.			Calcium Sodium Phosphor	Data sheet required.	
11.01.14	Calcium sulphate	Product that occurs naturally as gypsum (CaSO <sub>4</sub> *xH <sub>2</sub> O).		Calcium min. 23	Calcium	Data sheet required.	
11.01.15	Dicalcium phosphate	Precipitated calcium monohydrogen phosphate from inorganic sources (CaHPO <sub>4</sub> *xH <sub>2</sub> O).		Chloride, calculated as NaCl max. 1 moisture max. 5	Calcium Phosphor	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
11.01.16	Dimagnesium phosphate	Product consisting of technically pure dimagnesium phosphate.			Magnesium Phosphor	Data sheet required.	
11.01.18	Disodium phosphate	Product consisting of technically pure disodium phosphate, including cristal water.		Purity min. 95	Sodium 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 Ash insoluble in HCl, if > 5%	Data sheet required.	
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	Distinguishing features (%)	Requirements (%)	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.			Calcium Sodium Phosphor	Data sheet required.	
11.01.36	Monosodium phosphate	Technically pure monosodium phosphate (NaH <sub>2</sub> PO·H <sub>2</sub> O).		Purity min. 95	Sodium Phosphor	Data sheet required.	
11.01.38	Sodium calcium magnesium phosphate	Product consisting of sodium-calcium-magnesium phosphate.			Calcium Magnesium Sodium 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 The origin type may substitute the designation or be added to the designation.	Data sheet required.	
11.01.43	Sodium formiate	Product consisting of technically pure sodium formiate.			Sodium	Data sheet required.	
11.01.44	Sodium propionate	Product consisting of technically pure sodium propionate.			Sodium	Data sheet required.	
11.01.47	Sodium sulphate, anhydrous	Product consisting of technically pure anhydrous sodium sulphate.			Sodium 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 Phosphor	Data sheet required.	
11.01.49	Tricalcium phosphate	Product consisting of technically pure tricalcium phosphate.		Chloride, calculated as NaCl max . 1	Calcium Phosphor	Data sheet required.	
11.01.50	Trisodium phosphate	Product consisting of technically pure trisodium phosphate.			Sodium Phosphor	Data sheet required.	
11.01.51	Trimagnesium phosphate <sup>4)</sup>	Product consisting of technically pure trimagnesium phosphate.			Magnesium Phosphor	Data sheet required.	
11.01.52	Monopotassium phosphate	Product consisting of technically pure potassium dihydrogen orthophosphate (KH <sub>4</sub> PO <sub>4</sub> ).			Potassium Phosphor	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	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 moisture max. 5	Calcium Phosphor "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 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 Magnesium oxide min. 22	Calcium Magnesium	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<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 Moisture max. 50	Total sugar, calculated as sucrose 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 Moisture max. 50	Total sugar, calculated as sucrose Moisture	Data sheet required.	
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 Moisture max. 50	Total sugar, calculated as sucrose 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 Moisture max. 22	reduced sugar 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 Moisture max. 10	Glucose	Data sheet required.	
12.07.01	1,2 Propanediol (Propylenglycol)	Product obtained from Propylene oxide by hydrogenation.		Monopropylenglycol min. 99 Moisture max. 0,1 USP-specification	Propan-1,2-diol	Data sheet required.	
12.07.02	Glycerine	Product obtained by distilling "glycerine, crude" (see 12.07.03), it may be bleached.		Glycerine min. 99	Glycerine	Data sheet required.	
12.07.03	Glycerine, crude	By-product obtained during the production of fatty acid methyl esters (biodiesel) from vegetable oils or fats.		Glycerine min. 80 Methanol max. 0,2	Glycerine Moisture Crude ash Chloride, calculated as NaCl, if > 1% potassium, if > 1%	Data sheet required.	Ensure an adequate water supply of the animal.
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.	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.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
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.
12.09.01	Malt coffee spent wash	By-product obtained when producing coffee extract from barley, rye, chicory and water.			Crude fibre Crude protein 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 Crude ash Moisture, if > 1% 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 Kind of Starch in descending order.	Data sheet required.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>13. Foodstuff identical stuffs, their products and by-products of the food industry</b>							
13.01.01	Food-identical substances and products <sup>4)</sup>	Substances or products that are intended or where it is reasonable to expect that they can be consumed by humans in their processed, partially processed or unprocessed forms. They may be dried and must be free of packaging and packaging parts.			According to the feedingstuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedingstuff may be indicated additionally in the designation or replace it. 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 shelf life.
13.02.01	By-products from the convenience food industry <sup>4)</sup>	By-products obtained during the production of convenience food. They may be dried and must be free of packaging and packaging parts.			According to the feedingstuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedingstuff may be indicated additionally in the designation or replace it. 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	By-products from the baking and pastry industry	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.			According to the feedingstuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedingstuff may be indicated additionally in the designation or replace it. Starch Total sugar, calculated as sucrose, Moisture, if >14% 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	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
13.02.03	By-products from the sweets industry	By-products obtained during the production of sweets, inclusive chocolate. They may be dried and must be free of packaging and packaging parts.			According to the feedingsuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedingsuff may be indicated additionally in the designation or replace it. Starch Crude fat, if > 5% Total sugar, calculated as sucrose, 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	By-products of the confectionary and ice cream industry	By-products obtained when producing confectionary, cakes or ice-cream. They may be dried and must be free of packaging and packaging parts.			According to the feedingsuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedingsuff may be indicated additionally in the designation or replace it. Starch Total sugar, calculated as sucrose, Crude fat 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.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
13.02.05	By-product from processing fresh fruit and vegetables	By-products obtained when processing fresh fruit and vegetables. They may be dried and must be free of packaging and packaging parts.			According to the feedstuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedstuff may be indicated additionally in the designation or replace it. Starch Crude fibre Crude fat, if > 5% Ash insoluble in HCl, if > 5 % 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.	
13.02.06	By-products from the dairy industry <sup>4)</sup>	By-products obtained 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.			According to the feedstuff laws, the designation must reflect the nature of the product. The nature of the source of the individual feedstuff may be indicated additionally in the designation or replace it. To be stated: Moisture Crude protein Crude fat 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.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>Straight feedingstuffs for which authorisation is required and has been granted under EU law</b>							
<b>14. Proteins obtained from microorganisms</b>							
14.01.01	Bacteria cultivated on methanol for calves, pigs, poultry and fish	Product obtained by drying Methylophilus methylotrophus bacteria, strain NCIB strain 10.515, cultivated on methanol.		Crude protein in the product as such min. 68 Reflectance index > 50	Crude protein Crude fat Crude ash Moisture	Presented during authorisation procedure.	a) 'Avoid inhalation' b) Approval number of the establishment.
14.02.01	Protein product of fermentation from natural gas obtained by culture of Methylococcus capsulatus (Bath) strain NCIMB 11132, Alcaligenes acidovorans strain NCIMB 12387, Bacillus brevis strain NCIMB 13288 and Bacillus firmus 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 Methylococcus capsulatus (Bath), Alcaligenes acidovorans, Bacillus brevis and Bacillus firmus and the cells of which have been killed.		Crude protein in the product as such min. 65	Crude protein Crude fat Crude ash Moisture	Presented during authorisation procedure.	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)' b) 'Avoid inhalation' c) Approval number of the establishment.
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 lactis or Kluyveromyces fragilis, and the cells of which have been killed.			Crude protein Moisture	Presented during authorisation procedure.	

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<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 Moisture	Presented during authorisation procedure.	
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 Crude ash Moisture	Presented during authorisation procedure.	
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 Moisture	Presented during authorisation procedure.	"Ammonium sulphate must not exceed 0.5% of the daily ration in the case of calves, lambs and goat kids."

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<b>18. Other NPN compounds</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 Crude ash Moisture	Presented during authorisation procedure.	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 Crude ash Moisture	Presented during authorisation procedure.	Approval number of the establishment.

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<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 Crude ash Sodium	Data sheet required.	Regulation (EU) No. 999/2001, as amended, needs to 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 Iron	Data sheet required.	The Regulation (EU) No. 999/2001, as amended, needs to be observed.
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 Crude ash Sodium	Data sheet required.	The Regulation (EU) No. 999/2001, as amended, needs to be observed.
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 Crude ash	Data sheet required.	The 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% 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).

Number	Designation	Description	Distinguishing features (%)	Requirements (%)	Instruction for labelling (constituents to be declared)	Additional information on the production process	Remarks
<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 Crude fat	Data sheet required.	If cracked eggs are used, note head note <sup>4)</sup> .
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 Crude fat Total sugar	Data sheet required.	If cracked eggs are used, note head note <sup>4)</sup> .
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.			Crude protein Crude fat Moisture	Data sheet required.	If cracked eggs are used, note head note <sup>4)</sup> .
20.03.01	Egg shells, dried	By-product obtained during the production of egg powder consisting predominantly of egg shells.			Crude protein Calcium	Data sheet required.	If cracked eggs are used, head note <sup>4)</sup> must be considered.

## Alphabetical list of the feeding stuffs

Designation	Number
(Beet) sugar/sucrose	4.10.03
(Cane) sugar molasses	8.04.02
(Cane) sugar/sucrose	8.04.01
(Drinking) Water	0.01.01
(Sugar) beet molasses	4.10.04
(Sugar) beet molasses, partially desugared	4.10.05
(Sugar) beet pieces	4.10.10
(Sugar) beet pulp, molassed	4.10.09
(Sugar) beet seeds	6.08.01
(Sugar) beet tops and tails	4.10.02
1,2 Propanediol	12.07.01
Acid whey powder, neutralised	9.08.01
Acorns, dehusked	6.02.01
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	6.05.03
Apple vinasse	5.04.02
Bacteria cultivated on methanol for calves, pigs, poultry and fish	14.01.01
Barley <sup>1)</sup>	1.02.01
Barley bran	1.02.05
Barley flakes	1.02.03
Barley hulls and bran	1.02.06
Barley middlings	1.02.04
Bean bran	3.02.04
Bean flakes	3.02.02
Bean middlings	3.02.03
Beans, toasted	3.02.01
Beet leaves	7.07.01
Black cumin expeller	2.19.02
Blood plasma powder, from pigs	19.01.01
Borage expeller	2.17.02
Brassica plants	7.02.01
Brewers' grains	5.01.01
Buckwheat	6.01.01
Buckwheat hulls and bran	6.01.03
Buckwheat, dehulled	6.01.02
Buttermilk	9.03.01
Buttermilk powder	9.03.02
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 <sup>4)</sup>	13.02.01
By-products from the dairy industry <sup>4)</sup>	13.02.06
By-products from the sweets industry	13.02.03
By-products of the confectionary and ice-cream industry	13.02.04

Designation	Number
Calcareous marine algae	11.01.20
Calcium acetate	11.01.01
Calcium carbonate	11.01.03
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 lactate	11.01.09
Calcium magnesium carbonate	11.01.11
Calcium magnesium phosphate	11.01.12
Calcium pidolate	11.01.56
Calcium propionate	11.01.10
Calcium sodium phosphate	11.01.13
Calcium sulphate	11.01.14
Carob meal	6.03.01
Carrot	4.02.01
Carrot pulp	4.02.02
Casein powder	9.06.01
Caseinate, dried	9.06.02
Cereal grains/mixed cereals	1.10.02
Cereal plants	7.03.01
Cereal pulp	1.10.03
Chia seed	2.21.01
Chick peas	3.05.01
Chickling vetch	3.07.01
Chicory	4.09.01
Chicory powder	4.09.02
Chicory pulp, dried	4.09.03
Citrus pulp, depectinised	6.07.02
Citrus pulp, dried	6.07.01
Clover meal	7.04.01
Cocoa husks	2.03.01
Coffee skin pellets	6.04.01
Colostrum	9.09.01
Colostrum feed, standardised	9.09.03
Colostrum powder, defatted, rich in immunoglobulins	9.09.02
Condensed/grain steep water	1.10.05
Copra expeller	2.05.02
Copra, extracted	2.05.03
Cotton seed	2.01.01
Dehusked barley	1.02.02
Dehusked oat	1.03.02
Dehusked Spelt	1.01.02
Dextrose (glucose)	12.06.02
Dextrose molasses	12.01.01
Dicalcium phosphate	11.01.15
Dicalcium phosphate, dihydrat <sup>4)</sup>	11.01.54
Dimagnesium phosphate	11.01.16
Disodium phosphate	11.01.18
Distillers dried grains feed	5.06.01

Designation	Number
Distillery spent wash	5.05.01
Dried (sugar) beet pulp	4.10.08
Dried cereal pulp	1.10.04
Dried copra	2.05.01
Egg powder	20.01.01
Egg powder, sugared	20.01.02
Egg shells, dried	20.03.01
Evening primrose expeller	2.18.02
Fatty acid distillate	2.10.05
Fatty acids from refining	2.10.04
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	4.01.01
Fodder rice	1.06.03
Food-identical substances and products <sup>4)</sup>	13.01.01
Fruit pulp	6.05.01
Fruit pulp, depectinised	6.05.02
Gelatine, from pigs	19.03.01
Glucose molasses	12.02.01
Glycerine	12.07.02
Glycerine, crude	12.07.03
Grain expanded with caustic soda	1.10.06
Legumes bran/pulses bran	3.11.01
Grape (residues) pulp	5.07.01
Grape kernels, deviled	6.06.02
Grape pulp	6.05.01
Grass/legume plant	7.01.02
Green meal	7.01.03
Groundnut ? extracted	2.02.03
Groundnut expeller	2.02.02
Groundnuts	2.02.01
Guar germs, extracted	3.04.01
Haemoglobin powder, from pigs	19.01.02
Hemp expeller	2.20.02
Hen's egg albumen, pasteurised	20.02.01
Hop cones, debittered	8.01.01
Horse bean	3.01.01
Horse bean flakes	3.01.02
Horse bean fruit water	3.01.05
Horse bean protein	3.01.03
Horse bean pulp	3.01.04
Horseradish pulp	4.05.01
Isomaltulose (palatinose-) molasses	12.03.01
Jerusalem artichoke	4.08.01
Jerusalem artichoke chips / Jerusalem artichoke meal	4.08.02
Lactose powder	9.04.01
Lecithin, crude (crude lecithin)	2.22.01
Lecithin, deoiled (de-oiled lecithin)	2.22.02

Designation	Number
Lentil hulls	3.06.02
Lentils	3.06.01
Lignocellulose	12.08.01
Linseed	2.07.01
Linseed expeller	2.07.02
Linseed, extracted <sup>1)</sup>	2.07.03
Linseed, partially extracted <sup>1)</sup>	2.07.04
Lucerne meal	7.05.01
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 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	1.05.01
Maize bran	1.05.05
Maize flakes	1.05.02
Maize germ	1.05.06
Maize germ and bran	1.05.07
Maize germ expeller	1.05.12
Maize germ, extracted	1.05.13
Maize gluten	1.05.11
Maize gluten feed	1.05.14
Maize hulls	1.05.17
Maize middlings	1.05.04
Maize plants	7.06.01
Maize screenings	1.05.03
Maize starch	1.05.08
Malt coffee spent wash	12.09.01
Malt germs	5.03.01
Manioc/tapioca	4.04.01
Marigold meal	8.03.01
Milk	9.01.01
Milk fat	9.02.01
Milk powder	9.01.02
Millet	1.04.01
Monantha vetch	3.10.01
Monoammonium phosphate	11.01.33
Monocalcium phosphate	11.01.32
Mono-dicalcium phosphate	11.01.34
Mono-dicalcium sodium phosphate	11.01.35
Monopotassium phosphate	11.01.52
Monosodium phosphate	11.01.36
Mussel meatmeal, dried	10.04.01
Oat	1.03.01
Oat flakes	1.03.04
Oat groat	1.03.03

Designation	Number
Oat hulls and bran	1.03.07
Oat husks	1.03.08
Oat middlings	1.03.05
Olives	2.08.01
Palm kernel expeller	2.09.02
Palm kernel, extracted	2.09.03
Palm kernels	2.09.01
Pea bran	3.03.04
Pea flakes	3.03.02
Pea fruit water	3.03.07
Pea hulls	3.03.08
Pea middlings	3.03.03
Pea protein	3.03.05
Pea pulp	3.03.06
Peas	3.03.01
Pellets from waste material of coffee	6.04.02
Permanent pasture products	7.01.01
Potassium chloride	11.01.19
Potato fibre/starch mixture	4.03.06
Potato flakes	4.03.02
Potato fruit water, condensed	4.03.08
Potato peels	4.03.10
Potato protein	4.03.07
Potato pulp	4.03.09
Potato starch	4.03.03
Potato steaming water	4.03.12
Potatoes	4.03.01
Powdercellulose	12.08.02
Pre-gelatinised maize flour	1.05.15
Pre-gelatinised maize starch	1.05.09
Pre-gelatinised oat flour	1.03.06
Pre-gelatinised potato starch	4.03.04
Pre-gelatinised rice flour	1.06.06
Pre-gelatinised rye flour	1.07.07
Pre-gelatinised wheat flour	1.09.08
Pre-gelatinised wheat starch	1.09.13
Preserved wet grain	1.10.01
Pressed (sugar) beet pulp	4.10.07
Propylenglycol	12.07.01
Protein hydrolysate, from pigs	19.02.01
Protein product of fermentation from natural gas	14.02.01
Pumpkin seed expeller	2.06.01
Rape seed expeller <sup>1) 2)</sup>	2.11.03
Rape seed hulls	2.11.02
Rape seed <sup>2)</sup>	2.11.01
Rape seed, extracted <sup>1) 2)</sup>	2.11.04
Rape seed, partially extracted <sup>1) 2)</sup>	2.11.05
Raw phosphate, defluorinated	11.01.48
Rice	1.06.01
Rice bran	1.06.10
Rice bran with calcium carbonate	1.06.09
Rice flakes	1.06.04
Rice gluten	1.06.15

Designation	Number
Rice middlings	1.06.07
Rice semolina/rice flour	1.06.05
Rice, broken	1.06.02
Rye	1.07.01
Rye bran	1.07.06
Rye feed	1.07.05
Rye flakes	1.07.02
Rye middlings	1.07.03
Rye screenings	1.07.04
Safflower seed	2.12.01
Safflower seed expeller	2.12.02
Safflower seed, extracted	2.12.03
Salts from fatty acids	12.10.01
Sea weed meal	8.05.01
Sesame seed	2.13.01
Sesame seed expeller	2.13.02
Sesame seed, extracted	2.13.03
Shrimps	10.03.01
Skimmed milk	9.01.03
Skimmed milk powder	9.01.04
Small barley flakes, expanded	1.02.08
Small maize flakes, expanded	1.05.16
Small potato parts	4.03.11
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 formiate	11.01.43
Sodium propionate	11.01.44
Sodium sulphate, anhydrous	11.01.47
Sorghum	1.04.02
Soya (bean) expeller	2.14.04
Soya (bean) hulls	2.14.03
Soya (bean) protein concentrate	2.14.07
Soya (bean) protein isolate	2.14.08
Soya (bean), dehulled, extracted, toasted <sup>1)</sup>	2.14.06
Soya (bean), extracted, toasted <sup>1)</sup>	2.14.05
Soya beans	2.14.01
Soya beans, toasted <sup>1)</sup>	2.14.02
Spelt	1.01.01
Spelt flakes	1.01.03
Spelt husks	1.01.04
Starch mixture	12.11.01
Starch sugar	12.06.01
Straw	7.03.02
Straw, expanded	7.03.03
Sugar beet	4.10.01
Sunflower seed	2.15.01
Sunflower seed expeller	2.15.02
Sunflower seed, extracted	2.15.03
Sweet lupins <sup>1)</sup>	3.08.01
Sweet potato chips or sweet potato meal	4.07.02

Designation	Number
Sweet potato/batata	4.07.01
Tricalcium phosphate	11.01.49
Trimagnesium phosphate <sup>4)</sup>	11.01.51
Trisodium phosphate	11.01.50
Triticale	1.08.01
Triticale flakes	1.08.02
Turnip	4.06.01
Vegetable fat, protected / vegetable oil, protected	2.10.03
Vegetable fat, refined / vegetable oil, refined	2.10.02
Vegetable oil / vegetable fat	2.10.01
Vetches	3.09.01
Vinasse	5.04.01
Walnut expeller	2.16.01
Wet (sugar) beet pulp	4.10.06
Wheat bran	1.09.06
Wheat feed	1.09.05
Wheat flakes	1.09.02
Wheat germ	1.09.09
Wheat germ expeller	1.09.17
Wheat gluten	1.09.15
Wheat gluten feed	1.09.16
Wheat middlings	1.09.04
Wheat protein, hydrolysed	1.09.07
Wheat screenings	1.09.03
Wheat starch	1.09.11
Wheat starch containing protein, partially desugared	1.09.14
Wheat <sup>1)</sup>	1.09.01
Whey	9.05.01
Whey permeate	9.05.06
Whey powder	9.05.03
Whey powder, partly desugared	9.05.04
Whey powder, partly desugared and partly demineralised	9.05.05
Whey protein powder	9.07.02
Whey retentate	9.05.07
Whey, partly desugared	9.05.02
Woodfibre	12.08.01
Yeast	14.03.01

Effective 20<sup>th</sup> January 2011