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| Subject:         | COMMISSION REGULATION (EU) No/ of XXX on the Catalogue of feed materials |

Delegations will find attached Commission document D021839/02.

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EUROPEAN COMMISSION

Brussels, XXX SANCO/11355/2012 (POOL/G1/2012/11355/11355-EN.doc) D021839/02 [...](2012) XXX draft

## COMMISSION REGULATION (EU) No .../..

# of XXX

on the Catalogue of feed materials

(Text with EEA relevance)

## COMMISSION REGULATION (EU) No .../..

#### of XXX

#### on the Catalogue of feed materials

(Text with EEA relevance)

#### THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC<sup>1</sup>, and in particular Article 26(2) and (3) thereof,

Whereas:

- (1) Commission Regulation (EU) No 575/2011 of 16 June 2011 on the Catalogue of feed materials<sup>2</sup> ('the Catalogue') replaced the first version of the Catalogue of feed materials set out in Commission Regulation (EU) No 242/2010 of 19 March 2010 creating the Catalogue of feed materials<sup>3</sup>
- (2) The appropriate representatives of the European feed business sectors have, in consultation with other parties concerned, in collaboration with the competent national authorities and taking into account relevant experience from opinions issued by the European Food Safety Authority and scientific or technological developments, developed amendments to Regulation (EU) No 575/2011.
- (3) These amendments concern new entries of treatment processes and feed materials and improvements of existing entries, in particular for oil and fat derivatives.
- (4) Furthermore, the amendments concern maximum contents of chemical impurities resulting from their manufacturing process or from processing aids to be set according to point 1 of Annex I to Regulation (EC) No 767/2009. Specific rules should apply to former foodstuff e.g. production surplus, misshapen products or food with expired use-by date that had been produced in compliance with EU food law.

<sup>&</sup>lt;sup>1</sup> OJ L 229, 1.9.2009, p. 1.

<sup>&</sup>lt;sup>2</sup> OJ L 159, 17.6.2011, p. 25.

<sup>&</sup>lt;sup>3</sup> OJ L 77, 24.3.2010, p. 17.

- (5) The conditions set out in Article 26 of Regulation (EC) No 767/2009 are fulfilled.
- (6) Given the very high number of amendments to be made to Regulation (EU) No 575/2011, it is appropriate, for reasons of coherence, clarity and simplification, to repeal and replace that Regulation.
- (7) It is appropriate to reduce the administrative burden on the operators by providing a period of time allowing a smooth conversion of labelling to avoid unnecessary disruption to commercial practices.
- (8) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS REGULATION:

## Article 1

The Catalogue of feed materials referred to in Article 24 of Regulation (EC) No 767/2009 is established, as set out in the Annex to this Regulation.

#### Article 2

Regulation (EU) No 575/2011 is repealed.

References to the repealed Regulation shall be construed as references to this Regulation.

## Article 3

Feed materials which have been labelled in accordance with Regulation (EU) No 575/2011 before [6 months after the date of entry into force of this Regulation – *To be completed by the Service responsible for the publication*] may continue to be placed on the market and used until stocks are exhausted.

## Article 4

This Regulation shall enter into force on the twentieth day following that of its publication in the *Official Journal of the European Union*.

This Regulation shall be binding in its entirety and directly applicable in all Member States.

Done at Brussels,

For the Commission The President José Manuel BARROSO

## <u>ANNEX</u>

#### **CATALOGUE OF FEED MATERIALS**

#### Part A

#### **General provisions**

- (1) The use of this Catalogue by the feed business operators shall be voluntary. However, the name of a feed material listed in Part C may be used only for a feed material complying with the requirements of the entry concerned.
- (2) All entries in the list of feed materials in Part C shall comply with the restrictions on the use of feed materials in accordance with the relevant legislation of the Union. Feed business operators using a feed material entered in the Catalogue shall ensure that it complies with Article 4 of Regulation (EC) No 767/2009.
- (3) "Former foodstuffs" means foodstuffs, other than catering reflux, which were manufactured for human consumption in full compliance with the EU food law but which are no longer intended for human consumption for practical or logistical reasons or due to problems of manufacturing or packaging defects or other defects and which do not present any health risks when used as feed. The setting of maximum contents as referred to in point 1 of Annex I to Regulation (EC) No 767/2009 shall not be applicable to former foodstuffs and catering reflux. It shall apply when further processed as feed.
- (4) In accordance with good practice as referred to in Article 4 of Regulation (EC) No 183/2005, feed materials shall be free from chemical impurities resulting from their manufacturing process and from processing aids, unless a specific maximum content is fixed in the Catalogue. Substances prohibited for use in feed shall not be present and for those substances such maximum contents shall not be fixed. In the interest of transparency, feed materials with tolerated residues are complemented with relevant information provided by feed business operators in the context of usual commercial transactions.
- (5) In accordance with good practice as referred to in Article 4 of Regulation (EC) No 183/2005, application of the ALARA<sup>4</sup> principle and without prejudice to the application of Regulation (EC) No 183/2005, Directive 2002/32/EC of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed<sup>5</sup>, Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC<sup>6</sup> and Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition<sup>7</sup>, it is appropriate to specify in the Catalogue of feed materials the maximum contents for chemical impurities resulting from the manufacturing process or from processing aids that are

<sup>&</sup>lt;sup>4</sup> As Low As Reasonably Achievable.

<sup>&</sup>lt;sup>5</sup> OJ L 140, 30.5.2002, p. 10.

<sup>&</sup>lt;sup>6</sup> OJ L 70, 16.3.2005, p. 1.

<sup>&</sup>lt;sup>7</sup> OJ L 268, 18.10.2003, p. 29.

present at levels of 0.1% or above. Maximum contents may also be set in the Catalogue for chemical impurities and processing aids present at levels lower than 0.1% if deemed suitable for good trading practices. Unless otherwise specified in Part B or C of the present Regulation, any maximum content is expressed on a weight/weight basis.

- (6) The specific maximum contents for chemical impurities and processing aids are set either in the description of the process in Part B, in the description of the feed material in Part C or at the end of a category in Part C. Unless a specific maximum content is set in Part C, any maximum content set in Part B for a given process is applicable to any feed material listed in Part C insofar as the description of the feed material makes reference to this process in its description and insofar as the process at stake meets the description given in Part B.
- (7) The botanical purity of a feed material shall not be less than 95%. However, botanical impurities such as residues of other oil seeds or oil fruits derived from a previous manufacturing process shall not exceed 0.5% for each type of oil seed or fruit. Derogating from these general rules a specific level shall be set in the list of feed materials in Part C.
- (8) The common name/qualifier of one or more of the processes, as listed in the last column of the glossary of processes in Part B, shall<sup>8</sup> be added to the name of the feed material to indicate that it has undergone the respective process or processes. A feed material whose name is a combination of a name listed in Part C with the common name/qualifier of one or more of the processes listed in Part B shall be considered as included in the Catalogue and its label shall bear the compulsory declarations applicable for this feed material as set out in the last columns of Parts B and C, as applicable. Whenever set out in the last column of Part B, the specific method used for the process shall be specified in the name of the feed material.
- (9) If the manufacturing process for a feed material differs from the description of the process concerned, as set out in the glossary of processes in Part B, the manufacturing process shall be set out in the description of the feed material concerned.
- (10) For a number of feed materials, synonyms may be used. Such synonyms are included in square brackets in the column 'name' of the entry for the feed material concerned in the list of feed materials in Part C.
- (11) In the description of the feed materials in the list of feed materials in Part C, the word "product" is used instead of the word "by-product" to reflect the market situation and the language used in practice by feed business operators to highlight the commercial value of feed materials.
- (12) The botanical name of a plant is only given in the description of the first entry in the list of feed materials in Part C concerning that plant.

<sup>8</sup> 

By derogation from this obligation, for the process "drying" it may be added.

- (13) The underlying principle for the compulsory labelling of analytical constituents of a certain feed material in the Catalogue is, whether a certain product contains high concentrations of a specific constituent, or the manufacturing process has changed the nutritional characteristics of the product.
- (14) Article 15(g) of Regulation (EC) No 767/2009 in conjunction with point 6 of Annex I to that Regulation lays down labelling requirements as regards the moisture content. Article 16(1)(b) of that Regulation in conjunction with its Annex V lays down labelling requirements as regards other analytical constituents. In addition, point 5 of Annex I to Regulation (EC) No 767/2009 requires the declaration of the level of ash insoluble in hydrochloric acid if it exceeds 2.2% in general or for certain feed material if it exceeds the level set in the relevant section of Annex V to that Regulation. However, some entries in the list of feed materials in Part C deviate from those rules as follows:
  - (a) Compulsory declarations regarding analytical constituents in the list of feed materials in Part C replace the compulsory declarations as set out in the relevant section of Annex V to Regulation (EC) No 767/2009.
  - (b) If the column relating to compulsory declarations in the list of feed materials in Part C is left blank with respect to the analytical constituents that would have to be declared in accordance with the relevant section of Annex V to Regulation (EC) No 767/2009, none of those constituents need be labelled. For ash insoluble in hydrochloric acid, however, where no level is set in the list of feed materials in Part C, the level shall be declared if it exceeds 2.2%.
  - (c) Where one or more specific moisture levels are set in the column 'compulsory declarations' of the list of feed materials in Part C, those levels shall apply instead of the levels in point 6 of Annex I to Regulation (EC) No 767/2009. However, if the moisture content is below 14% its declaration is not compulsory. Where no specific moisture level is set in that column, point 6 of Annex I to Regulation (EC) No 767/2009 shall apply.
- (15) A feed business operator, who claims a feed material has more properties than those specified in the column 'description' of the list of feed materials in Part C, or refers to a process listed in Part B that can be assimilated as a claim (e.g. rumen protection), has to comply with Article 13 of Regulation (EC) No 767/2009. Furthermore, feed materials may meet a particular nutritional purpose in accordance with Articles 9 and 10 of Regulation (EC) No 767/2009.

## Part B

# **Glossary of processes**

|    | Process                           | Definition   | Common name/qualifier |
|----|-----------------------------------|--|-----------------------|
| 1  | Air fractionation                 | Separation of particles by means of an air stream.   | Air fractionated      |
| 2  | Aspiration                        | Process to remove dust, fine particles<br>and other parts with suspended cereal<br>fines from a bulk of grain during<br>transfer by means of an air-flow   | Aspirated             |
| 3  | Blanching                         | Process consisting of heat treatment of<br>an organic substance by boiling or<br>steaming in order to denature natural<br>enzymes, soften tissue and remove raw<br>flavouring and followed by immersion<br>in cold water to halt the cooking<br>process. | Blanched              |
| 4  | Bleaching                         | Removing naturally occurring colour  | Bleached              |
| 5  | Chilling                          | Lowering the temperature below<br>ambient but above freezing point to aid<br>preservation.   | Chilled               |
| 6  | Chopping                          | Reduction of particle size using one or more knives.   | Chopped               |
| 7  | Cleaning                          | Removal of objects (contaminants, e.g.<br>stones) or vegetative parts of the plant<br>e.g. unattached particles of straw or<br>husks or weeds.   | Cleaned / Sorted      |
| 8  | <b>Concentration</b> <sup>1</sup> | Increase in certain contents by removal of water and/or other constituents.  | Concentrate           |
| 9  | Condensation                      | Transition of a substance from a gaseous to a liquid phase.  | Condensed             |
| 10 | Cooking                           | The application of heat to change the physical and chemical characteristics of feed materials.   | Cooked                |
| 11 | Crushing                          | Reduction of particle size using a crusher.  | Crushed, crushing     |

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In German 'Konzentrieren' may be replaced by 'Eindicken' where appropriate, in which case the common qualifier should be 'eingedickt'.

| · · · · · · · · · · · · · · · · · · · |                                   | ·  |                                      |
|---------------------------------------|-----------------------------------|--|--------------------------------------|
| 12                                    | Crystallisation                   | Purification by the formation of solid<br>crystals from a liquid solution.<br>Impurities in the liquid are usually not<br>incorporated into the lattice structure of<br>the crystal. | Crystallised                         |
| 13                                    | <b>Decortication</b> <sup>2</sup> | Complete or partial removal of outer<br>layers from grains, seeds, fruits, nuts<br>and others.   | Decorticated, partially decorticated |
| 14                                    | Dehulling / dehusking             | Removal of the outer skins of beans,<br>grains and seeds usually by physical<br>means.   | Dehulled or dehusked <sup>3</sup>    |
| 15                                    | Depectinising                     | Extraction of pectins from a feed material.  | Depectinised                         |
| 16                                    | Desiccation                       | Process of extracting moisture   | Desiccated                           |
| 17                                    | Desliming                         | Process used to remove the slime layer<br>on the surface.  | Deslimed                             |
| 18                                    | Desugaring                        | Complete or partial removal of mono-<br>and disaccharides from molasses and<br>other material containing sugar by<br>chemical or physical means.                                     | Desugared, partially desugared       |
| 19                                    | Detoxification                    | Process by which toxic contaminants<br>are destroyed or reduced in<br>concentration.   | Detoxified                           |
| 20                                    | Distillation                      | Fractionation liquids by boiling and collecting the condensed vapour into a separate container.  | Distilled                            |
| 21                                    | Drying                            | Dehydration by artificial or natural processes.  | Dried (sun or artificially)          |
| 22                                    | Ensiling                          | Storage of feed materials in a silo<br>possibly with the addition of<br>preservatives or by using anaerobic<br>conditions possibly with silage<br>additives                          | Ensiled                              |
| 23                                    | Evaporation                       | Reducing the water content.  | Evaporated                           |
| 24                                    | Expansion                         | Thermal process during which the<br>product's internal water content,<br>abruptly steamed, leads to the<br>breaking-up of the product.   | Expanded or puffed                   |
| 25                                    | Expelling                         | Removal of oil/fat by pressing.  | Expeller/cake and oil/fat            |

<sup>&</sup>lt;sup>2</sup> 'Decortication' may be replaced by 'dehulling' or 'dehusking' where appropriate, in which case the common qualifier should be 'dehulled' or 'dehusked'.

<sup>&</sup>lt;sup>3</sup> In the case of rice, this process is referred to as 'husking' and the common qualifier as 'husked'.

| 26 | Extraction         | Removal either by organic solvent of<br>fat/ oil from certain materials or by<br>aqueous solvent of sugar or other<br>water-soluble components.  | Extracted/meal and fat/oil,<br>molasses/pulp and sugar or<br>other water-soluble<br>components |
|----|--------------------|--|--|
| 27 | Extrusion          | Thermal process during which the<br>product's internal water content,<br>abruptly steamed, leads to the<br>breaking-up of the product combined<br>with special shaping by passing<br>through an orifice. | Extruded   |
| 28 | Fermentation       | Process in which micro-organisms such<br>as bacteria, fungi or yeasts are<br>produced or used to act on materials to<br>promote a change in their chemical<br>composition/properties.                    | Fermented  |
| 29 | Filtration         | Separation of a mixture of liquid and<br>solid materials by passing the liquid<br>through a porous medium or<br>membrane.  | Filtered   |
| 30 | Flaking            | Rolling of moist heat-treated material.  | Flakes   |
| 31 | Flour milling      | Reduction of particle size of dry grain<br>and to facilitate separation into<br>constituent fractions (principally flour,<br>bran and middlings).  | Flour, bran, middlings <sup>4</sup> , feed   |
| 32 | Fractionation      | Separation of feed material fragments<br>by sieving and/or treated with a stream<br>of air that carries the light shell pieces<br>away.  | Fractionated   |
| 33 | Fragmentation      | Process of breaking a feed material into fragments.  | Fragmented   |
| 34 | Frying             | Process of cooking feed materials in a oil or fat.   | Fried  |
| 35 | Gelling            | Process to form a gel, a solid, jelly-like<br>material that can have properties<br>ranging from soft and weak to hard and<br>tough usually using gelling agents  | Gelled   |
| 36 | Granulation        | Treatment of feed materials to obtain a specific particle size and consistency   | Granulated   |
| 37 | Grinding / milling | Reducing the particle size of solid feed materials in a dry or wet process.  | Ground or milled   |
| 38 | Heating            | heat treatments carried out under specific conditions  | Heat treated   |

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In French the name 'issues' may be used.

| 39 | Hydrogenation  | Catalytic process aimed at saturating<br>double bonds of oils/fats/Fatty Acids,<br>carried out at high Temperature under<br>Hydrogen Pressure, in order to obtain<br>partially of or fully saturated<br>triglycerides/Fatty Acids, or aimed at<br>obtaining polyols by reduction of<br>carbonyl groups of carbohydrates to<br>hydroxyl groups. | Hydrogenated, partially<br>hydrogenated |
|----|----------------|--|---|
| 40 | Hydrolysis     | Reduction of molecular size by<br>appropriate treatment with water and<br>either heat/pressure, enzymes or<br>acid/alkali.   | Hydrolysed                              |
| 41 | Liquefying     | Transition from a solid or a gas phase into a liquid.  | Liquefied                               |
| 42 | Maceration     | Reducing the size of feed materials<br>using mechanical means often in the<br>presence of water or other liquids.  | Macerated                               |
| 43 | Malting        | Allowing grain to commence<br>germination to activate naturally<br>occurring enzymes that are able to<br>break down starch to fermentable<br>carbohydrates and proteins to amino<br>acids and peptides.  | Malted                                  |
| 44 | Melting        | Transition from a solid to a liquid phase by the application of heat.  | Melted                                  |
| 45 | Micronisation  | Process of reducing the average<br>diameter of a solid material's particles<br>to the micrometer scale.  | Micronised                              |
| 46 | Parboiling     | Process of soaking in water and<br>subjecting to a heat treatment so that<br>the starch is fully gelatinized, followed<br>by a drying process  | Par-boiled                              |
| 47 | Pasteurisation | Heating to a critical temperature for a specified "amount" of time to eliminate harmful micro-organisms followed by rapid cooling.   | Pasteurised                             |
| 48 | Peeling        | Removal of the skin/peel from fruit and vegetables.  | Peeled                                  |
| 49 | Pelleting      | Shaping by compression through a die   | Pellet, pelleted                        |
| 50 | Rice milling   | Removing almost all or part of the bran and embryo from husked rice.   | Milled                                  |

| 51 | Pregelatinisation     | Modification of starch to improve significantly its swelling properties in cold water.  | Pregelatinised <sup>5</sup>   |
|----|-----------------------|---|---|
|    |                       |   | Expeller/cake (in case of oil-<br>containing materials)             |
| 52 | Pressing <sup>6</sup> | Physical removal of liquids like fat, oil,<br>water or juice from solids.   | Pulp, pomace (in case of fruits, etc.)                              |
|    |                       |   | Pressed pulp (in case of sugar beet)                                |
| 53 | Refining              | Complete or partial removal of impurities or unwanted components by chemical/-physical treatment.   | Refined, partially refined  |
| 54 | Roasting              | Heating of feed materials in a dry state<br>to improve digestibility, increase<br>colour and / or reduce naturally<br>occurring anti-nutritive factors.   | Roasted   |
| 55 | Rolling               | Reduction of particle size by passing<br>the feed material, e.g. grains, between<br>pairs of rollers.   | Rolled  |
| 56 | Rumen protection      | Process which, either by physical<br>treatment with use of heat, pressure,<br>steam and combination of such<br>conditions and/or through the action of<br>e.g. aldehydes, lignosulfonates, sodium<br>hydroxide or organic acids (such as<br>propionic or tannic acid) aims to<br>protect the nutrients from degradation<br>in the rumen.<br>Feed materials rumen protected by<br>aldehydes may contain up to 0.12% of<br>free aldehydes | Rumen protected through the<br>action of [insert as<br>applicable]" |
| 57 | Sieving / Screening   | Separation of particles of different<br>sizes by passing feed materials through<br>screen(s) while being shaken or poured.  | Sieved, sifted, screened  |
| 58 | Skimming              | Separating the top floating layer of a liquid by mechanical means, e.g. milk fat.   | Skimmed   |
| 59 | Slicing               | Cutting feed materials into flat pieces   | Sliced  |

<sup>5</sup> In German the qualifier 'aufgeschlossen' and the name 'Quellwasser' (referring to starch) may be used. In Danish the qualifier 'Kvældning' and the name 'Kvældet' (referring to starch) may be used. In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

<sup>6</sup> 

| 60 | Soaking / Steeping                               | Moistening and softening of feed<br>materials, usually seeds, to reduce<br>cooking time, aid in seed coat removal,<br>facilitate the uptake of water to activate<br>the germination process or reduce the<br>concentration of naturally occurring<br>anti-nutritive factors. | Steeped                |
|----|--|--|------------------------|
| 61 | Spray drying                                     | Reducing the moisture content of a<br>liquid by creating a spray or mist of the<br>feed material to increase the surface<br>area to weight ratio through which<br>warm air is blown.   | Spray dried            |
| 62 | Steaming   | Process using pressurized steam for<br>heating and cooking to increase<br>digestibility.   | Steamed                |
| 63 | Toasting   | Heating using dry heat usually applied<br>to oilseeds, e.g. to reduce or remove<br>naturally occurring anti-nutritive<br>factors.  | Toasted                |
| 64 | Ultra-filtration                                 | Filtration of liquids through a membrane permeable only for small molecules.   | Ultra-filtrated        |
| 65 | Degermination                                    | Process of complete or partial removal of germ from crushed cereal grain.  | Degermed, degerminated |
| 66 | Infra-Red micronization                          | Thermal process using infra red heat<br>for cooking and roasting cereals, roots,<br>seeds or tubers, or their co-products,<br>usually followed by flaking  | Infra red micronized   |
| 67 | Oil/fats and hydrogenated<br>oils/fats splitting | Chemical process of hydrolysis of<br>fats/oils. The reaction of fats/oils with<br>water, carried out at high temperatures<br>and pressures, allows obtaining crude<br>fatty acids in the hydrophobic phase<br>and sweet waters (crude glycerol) in<br>the hydrophilic phase. | Split                  |

# Part C

# List of feed materials

# 1. Cereal grains and products derived thereof

| Number | Name                | Description  | Compulsory<br>declarations  |
|--------|---------------------|--|---|
| 1.1.1  | Barley              | Grains of <i>Hordeum vulgare</i> L. It may be rumen protected.   |   |
| 1.1.2  | Barley, puffed      | Product obtained from milled or broken barley<br>by means of a treatment in humid, warm<br>conditions and under pressure.  | Starch  |
| 1.1.3  | Barley, roasted     | Product of barley roasting process which is partially roasted with low colour.   | Starch, if > 10%<br>Crude protein, if > 15%   |
| 1.1.4  | Barley flakes       | Product obtained by steaming or infra red<br>micronizing and rolling dehusked barley. It may<br>contain a small proportion of barley husks. It<br>may be rumen protected.  | Starch  |
| 1.1.5  | Barley fibre        | Product of barley starch manufacture. It consists<br>of particles of endosperm and principally of<br>fibre.  | Crude fibre<br>Crude protein, if >10%   |
| 1.1.6  | Barley hulls        | Product of ethanol-starch manufacture after dry milling, screening and dehulling of barley grains.   | Crude fibre<br>Crude protein, if >10%   |
| 1.1.7  | Barley middlings    | Product obtained during the processing of<br>screened, dehusked barley into pearl barley,<br>semolina or flour. It consists principally of<br>particles of endosperm with fine fragments of<br>the outer skins and some grain screenings.    | Crude fibre<br>Starch   |
| 1.1.8  | Barley protein      | Product from barley obtained after starch and<br>bran separation. It consists principally of<br>protein.   | Crude protein   |
| 1.1.9  | Barley protein feed | Product from barley obtained after starch separation. It consists principally of protein and particles of endosperm.   | Moisture, if < 45% or<br>> 60%<br>If moisture < 45%:<br>- Crude protein<br>- Starch |
| 1.1.10 | Barley solubles     | Product from barley obtained after wet protein and starch extraction.  | Crude protein   |
| 1.1.11 | Barley bran         | Product of flour manufacture, obtained from<br>screened grains of dehusked barley. It consists<br>principally of fragments of the outer skins and<br>of particles of grain from which the greater part<br>of the endosperm has been removed. | Crude fibre   |

|        |                                    |  | TC 1   |
|--------|------------------------------------|--|--|
| 1.1.12 | Liquid barley starch               | Secondary starch fraction from the production of starch from barley.   | If moisture <50%:<br>- Starch  |
| 1.1.13 | Malting barley<br>screenings       | Product from mechanical screening (size fractionation) consisting of undersized barley kernels and fractions of barley kernels separated before the malting process.   | Crude fibre<br>Crude ash if >2.2%                                    |
| 1.1.14 | Malting barley and<br>malt fines   | Product consisting of fractions of barley kernels<br>and malt separated during the production of<br>malt.  | Crude fibre  |
| 1.1.15 | Malting barley husks               | Product from malting barley cleaning consisting of fractions of husk and fines.  | Crude fibre  |
| 1.1.16 | Barley distillers<br>solids, wet   | Product of ethanol manufacture from barley. It contains solid feed fraction from distillation.   | Moisture, if <65% or<br>>88%<br>If moisture <65%:<br>- Crude protein |
| 1.1.17 | Barley distillers<br>solubles, wet | Product of ethanol manufacture from barley. It contains soluble feed fraction from distillation.   | Moisture, if <45% or<br>>70%<br>If moisture <45%<br>- Crude protein  |
| 1.1.18 | Malt <sup>1</sup>                  | Product from germinated cereals, dried, milled and/or extracted.   |  |
| 1.1.19 | Malt rootlets <sup>1</sup>         | Product from malting cereals germination and<br>malt cleaning consisting of rootlets, cereal fines,<br>husks and small broken malted cereal grains. It<br>may be milled.   |  |
| 1.2.1  | Maize <sup>2</sup>                 | Grains of Zea mays L. ssp. mays. It may be rumen protected.  |  |
| 1.2.2  | Maize flakes                       | Product obtained by steaming or infra red<br>micronizing and rolling dehusked maize. It may<br>contain a small proportion of maize husks.  | Starch   |
| 1.2.3  | Maize middlings                    | Product of the manufacture of flour or semolina<br>from maize. It consists principally of fragments<br>of the outer skins and of particles of grain from<br>which less of the endosperm has been removed<br>than in maize bran. It may contain some maize<br>germ fragments. | Crude fibre<br>Starch  |
| 1.2.4  | Maize bran                         | Product of the manufacture of flour or semolina<br>from maize. It consists principally of outer skins<br>and some maize germ fragments, with some<br>endosperm particles.  | Crude fibre  |
| 1.2.5  | Maize cobs                         | Central core of a maize ear. It comprises unseparated rachis, grain and leaves.  | Crude fibre<br>Starch  |
| 1.2.6  | Maize screenings                   | Fraction of maize kernels separated by the screening process at product intake.  |  |

<sup>1</sup> 

The name may be supplemented by the cereal species. Please note that "maize" can either be referred to as such or as "corn". This is valid for all maize products. 2

| 1.0.7  | Maize fibre          | Product of the manufacture of maize starch. It consists principally of fibre.   | Moisture, if < 50% or > 70%                      |
|--------|----------------------|---|--|
| 1.2.7  |                      |   | If moisture <50%:                                |
|        |                      |   | - Crude fibre                                    |
|        | Maize gluten         | Product of the manufacture of maize starch. It  | Moisture, if $< 70\%$ or $> 90\%$                |
| 1.2.8  |                      | consists principally of gluten obtained during separation of starch.  | If moisture <70%:                                |
|        |                      | separation of staten.   | - Crude protein                                  |
|        |                      | Product obtained during the manufacture of maize starch. It is composed of bran and maize   | Moisture, if < 40% or > 65%                      |
|        |                      | solubles. The product may also include broken   | If moisture <40%:                                |
| 1.2.9  | Maize gluten feed    | maize and residues from the oil extraction of maize germs. Other products derived from  | - Crude protein                                  |
|        |                      | starch and from the refining or fermentation of   | - Crude fibre                                    |
|        |                      | starch products may be added.   | - Starch   |
|        |                      | Product of the manufacture of semolina, flour or  | Moisture, if < 40% or > 60%                      |
| 1.2.10 | Maize germ           | starch from maize. It consists predominately of   | If moisture < 40%:                               |
|        |                      | maize germ, outer skins and parts of the endosperm.   | - Crude protein                                  |
|        |                      |   | - Crude fat                                      |
|        |                      | Product of oil manufacture obtained by pressing   | Crude protein                                    |
| 1.2.11 | Maize germ expeller  | of processed maize germ to which parts of the   | Crude fat  |
|        |                      | endosperm and testa may still adhere.<br>Product of oil manufacture, obtained by  |  |
| 1.2.12 | Maize germ meal      | extraction of processed maize germ.   | Crude protein                                    |
| 1.2.13 | Crude maize germ oil | Product obtained from maize germ.   | Crude fat  |
| 1.2.14 | Maize, puffed        | Product obtained from milled or broken maize<br>by means of a treatment in humid, warm<br>conditions and under pressure.  | Starch   |
| 1.2.15 | Maize steep liquor   | Concentrated liquid fraction from the steeping process of corn.   | Moisture, if < 45% or > 65%<br>If moisture <45%: |
|        |                      | 1   | - Crude protein                                  |
| 1.2.16 | Sweet corn silage    | By-product of the sweet-corn processing<br>industry, composed of centre cobs, husks, base<br>of the kernels, chopped and drained or pressed.<br>Generated by chopping the sweet-corn cobs,<br>husks and leaves, with presence of sweet-corn<br>kernels. | Crude fibre                                      |
|        | Crushed              | Product obtained by degermination of crushed  | Canada fili                                      |
| 1.2.17 | degerminated         | maize. It consists principally of endosperm<br>fragments and may contain some maize germ  | Crude fiber                                      |
|        | (degermed) Maize     | and outer skin particles.   | Starch   |
| 1.3.1  | Millet               | Grains of Panicum miliaceum L.  |  |
| 1.4.1  | Oats                 | Grains of Avena sativa L. and other cultivars of oats.  |  |
| 1.4.2  | Dehulled oats        | Dehulled grains of oats. It may be steam treated.   |  |
| 1.4.3  | Oat flakes           | Product obtained by steaming or infra red micronizing and rolling dehusked oats. It may contain a small proportion of oat husks.  | Starch   |

| 1.4.4          | Oat middlings<br>Oat bran  | Product obtained during the processing of<br>screened, dehusked oats into oat groats and<br>flour. It consists principally of oat bran and<br>some endosperm.<br>Product of flour manufacture, obtained from<br>screened grains of dehusked oat. It consists  | Crude fibre<br>Starch           |
|----------------|----------------------------|---|---------------------------------|
| 1.4.5          | Oat bran                   |   | l                               |
|                |                            | principally of fragments of the outer skins and<br>of particles of grain from which the greater part<br>of the endosperm has been removed.  | Crude fibre                     |
| 1.4.6          | Oat hulls                  | Product obtained during dehulling of oat grains.  | Crude fibre                     |
| 1.4.7          | Oat, puffed                | Product obtained from milled or broken oat by<br>means of a treatment in humid, warm conditions<br>and under pressure.  | Starch                          |
| 1.4.8          | Oat groats                 | Cleaned oats with the hull removed.   | Crude fibre<br>Starch           |
| 1.4.9          | Oat flour                  | Product obtained by milling of oat grains.  | Crude fibre<br>Starch           |
| 1.4.10         | Fodder oat flour           | Oats product with high content in starch, after decortication.  | Crude fibre                     |
| 1.4.11         | Oat feed                   | Product obtained during the processing of<br>screened, dehusked oats into oat groats and<br>flour. It consists principally of oat bran and<br>some endosperm.   | Crude Fibre                     |
| 1.5.1          | Quinoa seed,<br>extracted  | Cleaned whole seed of the quinoa plant ( <i>Chenopodium quinoa</i> Willd.) from which the saponin contained in the seeds outer layer has been removed.  |                                 |
| 1.6.1          | Broken rice                | Part of rice kernel of <i>Oryza Sativa L</i> with a length less than three-quarters of a whole kernel. The rice may have been parboiled.  | Starch                          |
| 1.6.2          | Milled rice                | Husked rice from which almost all the bran and<br>embryo have been removed during rice milling.<br>The rice may have been parboiled.  | Starch                          |
| 1.6.3          | Pre-gelatinized rice       | Product obtained from milled or broken rice by pregelatinisation  | Starch                          |
| 1.6.4          | Extruded rice              | Product obtained by extruding rice flour.   | Starch                          |
| 1.6.5          | Rice flakes                | Product obtained by flaking pregelatinized rice kernels or broken kernels.  | Starch                          |
| 1.6.6          | Husked rice                | Paddy (Oryza Sativa L.) from which the husk<br>only has been removed. It may be parboiled.<br>The processes of husking and handling may<br>result in some loss of bran.   | Starch<br>Crude fibre           |
| 1.6.7          | Ground fodder rice         | Product obtained by grinding fodder rice,<br>consisting either of green, chalky or unripe<br>grains, sifted out during the milling of husked<br>rice, or of normal husked grains which are<br>yellow or spotted.  | Starch                          |
| 1.6.8          | Rice flour                 | Product obtained by grinding milled rice. The rice may have been parboiled.   | Starch                          |
| 1.6.9          | Husked rice, flour         | Product obtained by grinding husked rice. The rice may have been parboiled.   | Starch<br>Crude fibre           |
| 1.6.5<br>1.6.6 | Rice flakes<br>Husked rice | <ul> <li>Product obtained by extruding rice flour.</li> <li>Product obtained by flaking pregelatinized rice kernels or broken kernels.</li> <li>Paddy (Oryza Sativa L.) from which the husk only has been removed. It may be parboiled. The processes of husking and handling may result in some loss of bran.</li> <li>Product obtained by grinding fodder rice, consisting either of green, chalky or unripe grains, sifted out during the milling of husked rice, or of normal husked grains which are yellow or spotted.</li> </ul> | Starch<br>Starch<br>Crude fibre |

|        |   | Product obtained during rice milling, mainly  |   |
|--------|---|---|---|
| 1.6.10 | Rice bran   | consisting of the outer layers of the kernel<br>(pericarp, seed coat, nucleus, aleurone) with part<br>of the germ. The rice may have been parboiled<br>or extruded.   | Crude fibre   |
| 1.6.11 | Rice bran with<br>calcium carbonate               | Product obtained during rice milling, mainly consisting of the outer layers of the kernel (pericarp, seed coat, nucleus, aleurone) with part of the germ. It may contain up to 23% of calcium carbonate used as processing aid. The rice may have been parboiled. | Crude fibre<br>Calcium carbonate  |
| 1.6.12 | Defatted rice bran                                | Rice bran resulting from oil extraction. It may be rumen protected.   | Crude fibre   |
| 1.6.13 | Rice bran oil                                     | Oil extracted from stabilized rice bran.  | Crude fat   |
| 1.6.14 | <b>Rice middlings</b>                             | Product of rice flour and starch production, obtained by dry or wet milling and sieving. It consists principally of starch, protein, fat and fibre. The rice may have been parboiled. May contain up to 0.25% sodium and up to 0.25% sulphate.                    | Starch, if $> 20\%$<br>Crude protein, if $> 10\%$<br>Crude fat, if $> 5\%$<br>Crude fibre |
| 1.6.15 | Rice middlings with calcium carbonate             | Product obtained during rice milling, mainly consisting of particles of aleurone layer and endosperm, It may contain up 23% of calcium carbonate used as processing aid. The rice may have been parboiled.  | Starch<br>Crude protein<br>Crude fat<br>Crude fibre<br>Calcium carbonate                  |
| 1.6.17 | Rice germ   | Product obtained during rice milling, mainly consisting of the embryo.  | Crude fat<br>Crude protein  |
| 1.6.18 | Rice germ expeller                                | Product remaining after rice germ has been crushed to expel the oil.  | Crude protein<br>Crude fat<br>Crude fibre   |
| 1.6.20 | Rice protein                                      | Product of rice starch production, obtained by wet milling sieving, separation, concentration and drying.   | Crude protein   |
| 1.6.21 | Liquid rice feed                                  | Concentrated liquid product of wet milling and sieving rice.  | Starch  |
| 1.6.22 | Rice, puffed                                      | Product obtained by expanding rice kernels or broken kernels.   | Starch  |
| 1.6.23 | Rice, fermented                                   | Product obtained by fermentation of rice.   | Starch  |
| 1.6.24 | Malformed rice,<br>milled /Chalky rice,<br>milled | Product obtained during rice milling, mainly<br>consisting of malformed kernel and/or chalky<br>kernel and/or damaged kernel, whole or broken.<br>It may be parboiled.  | Starch  |
| 1.6.25 | Immature rice, milled                             | Product obtained during rice milling, mainly consisting of immature and/or chalky kernel.   | Starch  |
| 1.7.1  | Rye   | Grains of Secale cereale L.   |   |
| 1.7.2  | Rye middlings                                     | Product of flour manufacture, obtained from<br>screened rye. It consists principally of particles<br>of endosperm, with fine fragments of the outer<br>skins and some miscellaneous parts of the grain.   | Starch<br>Crude fibre   |

|        |                            |   | 1                     |
|--------|----------------------------|---|-----------------------|
| 1.7.3  | Rye feed                   | Product of flour manufacture, obtained from<br>screened rye. It consists principally of fragments<br>of the outer skins, and of particles of grain from<br>which less of the endosperm has been removed<br>than in rye bran.          | Starch<br>Crude fibre |
| 1.7.4  | Rye bran                   | Product of flour manufacture, obtained from<br>screened rye. It consists principally of fragments<br>of the outer skins, and of particles of grain from<br>which most of the endosperm has been<br>removed.                           | Starch<br>Crude fibre |
| 1.8.1  | Sorghum; [Milo]            | Grains/seeds of Sorghum bicolor (L.) Moench   |                       |
| 1.8.2  | Sorghum white              | Grains of white Sorghum   |                       |
| 1.8.3  | Sorghum gluten feed        | Dried product obtained during the separation of<br>sorghum starch. It consists principally of bran<br>and a small quantity of gluten. The product may<br>also include dried residues of maceration water<br>and germs could be added. | Crude protein         |
| 1.9.1  | Spelt                      | Grains of spelt Triticum spelta L., Triticum dicoccum Schrank, Triticum monococcum.   |                       |
| 1.9.2  | Spelt bran                 | Product of the manufacture of spelt flour. It<br>consists principally of outer skins and some<br>spelt germ fragments, with some endosperm<br>particles.  | Crude fibre           |
| 1.9.3  | Spelt hulls                | Product obtained during dehulling of spelt grains.  | Crude fibre           |
| 1.9.4  | Spelt middlings            | Product obtained during the processing of<br>screened, dehulled spelt into spelt flour. It<br>consists principally of particles of endosperm<br>with fine fragments of the outer skins and some<br>grain screenings.                  | Crude fibre<br>Starch |
| 1.10.1 | Triticale                  | Grains of Triticum X Secale cereale L. Hybrid.  |                       |
| 1.11.1 | Wheat                      | Grains of <i>Triticum aestivum</i> L., <i>Triticum durum</i> Desf. and other cultivars of wheat. It may be rumen protected.   |                       |
| 1.11.2 | Wheat rootlets             | Product from malting wheat germination and<br>malt cleaning consisting of rootlets, cereal fines,<br>husks and small broken malted wheat grains.  |                       |
| 1.11.3 | Wheat, pre-<br>gelatinised | Product obtained from milled or broken wheat<br>by means of a treatment in humid, warm<br>conditions and under pressure.  | Starch                |
| 1.11.4 | Wheat middlings            | Product of flour manufacture obtained from<br>screened grains of wheat or dehusked spelt. It<br>consists principally of particles of endosperm<br>with fine fragments of the outer skins and some<br>grain screenings.                | Crude fibre<br>Starch |
| 1.11.5 | Wheat flakes               | Product obtained by steaming or infra red<br>micronizing and rolling dehusked wheat. It may<br>contain a small proportion of wheat husks. It<br>may be rumen protected.   | Crude fibre<br>Starch |

| 1.11.6  | Wheat feed                          | Product of flour or malting manufacture<br>obtained from screened grains of wheat or<br>dehusked spelt. It consists principally of<br>fragments of the outer skins and of particles of<br>grain from which less of the endosperm has<br>been removed than in wheat bran.  | Crude fibre   |
|---------|-------------------------------------|---|---|
| 1.11.7  | Wheat bran <sup>3</sup>             | Product of flour or malting manufacture<br>obtained from screened grains of wheat or<br>dehusked spelt. It consists principally of<br>fragments of the outer skins and of particles of<br>grain from which the greater part of the<br>endosperm has been removed.   | Crude fibre   |
| 1.11.8  | Malted fermented<br>wheat particles | Product obtained by a process combining malting and fermentation of wheat and wheat bran. The product is then dried and ground.   | Starch<br>Crude fibre   |
| 1.11.10 | Wheat fibre                         | Fibre extracted from wheat processing. It consists principally of fibre.  | Moisture, if < 60% or<br>> 80%<br>If moisture <60%:<br>- Crude fibre                |
| 1.11.11 | Wheat germ                          | Product of flour milling consisting essentially of<br>wheat germ, rolled or otherwise, to which<br>fragments of endosperm and outer skin may still<br>adhere.   | Crude protein<br>Crude fat  |
| 1.11.12 | Wheat germ,<br>fermented            | Product of fermentation of wheat germ, with inactivated micro-organisms.  | Crude protein<br>Crude fat  |
| 1.11.13 | Wheat germ expeller                 | Product of oil manufacture, obtained by<br>pressing of wheat germ ( <i>Triticum aestivum</i> L.,<br><i>Triticum durum</i> Desf. and other cultivars of<br>wheat and dehusked spelt ( <i>Triticum spelta</i> L.,<br><i>Triticum dicoccum</i> Schrank, <i>Triticum<br/>monococcum</i> L.)) to which parts of the<br>endosperm and testa may still adhere. | Crude protein   |
| 1.11.15 | Wheat protein                       | Wheat protein extracted during starch or ethanol production, maybe partially hydrolysed   | Crude protein   |
| 1.11.16 | Wheat gluten feed                   | Product of the manufacture of wheat starch and<br>gluten. It consists of bran, from which the germ<br>may have been partially removed. Wheat<br>solubles, broken wheat and other products<br>derived from starch and from the refining or<br>fermentation of starch products may be added.  | Moisture, if < 45% or<br>> 60%<br>If moisture < 45%:<br>- Crude protein<br>- Starch |
| 1.11.18 | Vital wheat gluten                  | Wheat protein characterized by a high viscoelasticity as hydrated, with minimum 80% protein (Nx6.25) and maximum 2% ash on dry substance.   | Crude protein   |
| 1.11.19 | Liquid wheat starch                 | Product obtained from the production of starch/glucose and gluten from wheat.   | Moisture, if < 65% or<br>> 85%<br>If moisture <65%:<br>- Starch                     |

<sup>&</sup>lt;sup>3</sup> If this product has been subject to a finer milling the word "fine" may be added to the name or the name may be replaced by a corresponding denomination.

| [ [ ]   |   |   | · · · · · · · · · · · · · · · · · · · |
|---------|---|---|---------------------------------------|
|         | Wheat starch<br>containing protein,<br>partially de-sugared | Product obtained during the production of wheat<br>starch mainly comprising partially sugared<br>starch, the soluble proteins and other soluble | Crude protein                         |
| 1.11.20 |   |   | Starch                                |
|         |   | parts of the endosperm.   | Total sugar calculated as sucrose     |
|         |   |   | Moisture if $< 55\%$ or               |
|         |   | Product of wheat obtained after wet protein and   | > 85%                                 |
| 1.11.21 | Wheat solubles  | starch extraction. May be hydrolysed.   | If moisture < 55%:                    |
|         |   |   | - Crude protein                       |
|         |   |   | Moisture, if < 60% or                 |
| 1.11.22 | Wheat yeast   | Wet by-product that is released after the fermentation of wheat starch for alcohol  | > 80%                                 |
| 1.11.22 | concentrate   | production.   | If moisture <60%:                     |
|         |   |   | - Crude protein                       |
|         | Malting wheat   | Product from mechanical screening (size fractionation) consisting of undersized wheat   |                                       |
| 1.11.23 | screenings  | kernels and fractions of wheat kernels separated  | Crude fibre                           |
|         | -   | before the malting process.   |                                       |
| 1.11.24 | Malting wheat and   | Product consisting of fractions of wheat kernels  | Crude fibre                           |
| 1.11.24 | malt fines  | and malt separated during the production of malt.   | Crude libre                           |
| 1 11 25 | Malting wheat hereby  | Product from malting wheat cleaning consisting  | Crude fibre                           |
| 1.11.25 | Malting wheat husks   | of fractions of husk and fines.   |                                       |
| 1.12.2  | Grain flour <sup>4</sup>                                    | Flour from milling grains.  | Starch                                |
|         | 2- ATT 10 WI  |   | Crude fibre                           |
| 1.12.3  | Grain protein   | Concentrate and dried product obtained from grain after starch removing through yeast   | Crude protein                         |
| 1.12.3  | concentrate <sup>4</sup>                                    | fermentation.   |                                       |
|         |   | Products from mechanical screening (size  |                                       |
|         | Cereal grains<br>screenings <sup>4</sup>                    | fractionation) consisting of small grains and<br>fractions of grain kernels, which may be   |                                       |
| 1.12.4  |   | germinated, separated before further processing   | Crude fibre                           |
|         |   | of the grain. The products contain more crude   |                                       |
|         |   | fibre (e.g. hulls) than the unfractionated cereals  |                                       |
| 1.10.5  |   | Product of flour milling and the manufacture of starch consisting principally of grain germ,  | Crude protein,                        |
| 1.12.5  | <b>Grain germ</b> <sup>4</sup>                              | rolled or otherwise, to which fragments of  | Crude fat                             |
|         |   | endosperm and outer skin may still adhere.  |                                       |
| 1.12.6  |   | Product of grain obtained through the   | Moisture, if <45% or >70%             |
|         | Grain spent wash<br>syrup <sup>4</sup>                      | evaporation of the concentrate of the spent wash<br>from the fermentation and distillation of grain   | If moisture <45%:                     |
|         |   | used in the production of grain spirit.   | - Crude protein                       |
| 1.12.7  |   | Moist product produced as the solid fraction by centrifuging and/or filtration of the spent wash  | Moisture, if <65% or                  |
|         | Moist distillers'<br>grains <sup>4</sup>                    |   | >88%                                  |
|         |   | from fermented and distilled grains used in the   | If moisture <65%:                     |
|         |   | production of grain spirit.   | - Crude protein                       |

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The name may be supplemented by the grain species.

| 1.12.8  | Concentrated<br>Distillers Solubles <sup>4</sup>   | Moist product from production of alcohol by<br>fermentation and distilling a mash of wheat and<br>sugar syrup after previous separation of bran<br>and gluten. They may contain dead cells and/or<br>parts of the fermentation microorganisms.  | Moisture, if <65% or<br>>88%<br>If moisture <65%:<br>- Crude protein, if<br>>10% |
|---------|--|---|--|
| 1.12.9  | Distillers' grains and solubles <sup>4</sup>   | Product obtained when producing alcohol by<br>fermentation and distilling grain mash of cereals<br>and/ or other starchy and sugar containing<br>products. They may contain dead cells and/or<br>parts of the fermentation microorganisms. May<br>contain 2% sulphate. It may be rumen protected.                                 | Moisture, if <60% or<br>>80%<br>If moisture <60%:<br>- Crude protein             |
| 1.12.10 | Distillers' dried<br>grains  | Product of alcohol distilling obtained by drying<br>solid residues of fermented grains. It may be<br>rumen protected.   | Crude protein  |
| 1.12.11 | Distillers' dark<br>grains <sup>4</sup> ; [Distillers'<br>dried grains and<br>solubles] <sup>4</sup> | Product of alcohol distilling obtained by drying<br>solid residues of fermented grains to which pot<br>ale syrup or evaporated spent wash has been<br>added. It may be rumen protected.   | Crude protein  |
| 1.12.12 | Brewers' grains <sup>4</sup>   | Product of brewing composed by residues of malted and unmalted cereals and other starchy products, which may contain hop materials. Typically marketed in a moist condition but may also be sold in a dried form. May contain up to 0.3% dimethyl polysiloxane, may contain up to 1.5% enzymes, may contain up to 1.8% bentonite. | Moisture, if <65% or<br>>88%<br>If moisture <65%:<br>- Crude protein             |
| 1.12.13 | Draff <sup>4</sup>   | Solid product of cereal whisky production. It consists of the residues from hot water extraction of malted cereal. Typically marketed in the moist form after the extract has been removed by gravity.  | Moisture, if <65% or<br>>88%<br>If moisture <65%:<br>- Crude protein             |
| 1.12.14 | Mash Filter Grains   | Solid product obtained through the production<br>of beer, malt extract and whisky spirit. It<br>consists of the residues of hot water extraction<br>of ground malt and possibly other sugar or<br>starch-rich adjuncts. Typically marketed in the<br>moist form after the extract has been removed<br>by pressing.                | Moisture, if <65% or<br>>88%<br>If moisture <65%:<br>- Crude protein             |
| 1.12.15 | Pot ale  | The product remaining in the still from the first (wash) distillation of a malt distillery.   | Crude protein, if >10%   |
| 1.12.16 | Pot ale syrup  | Product from the first (wash) distillation of a malt distillery produced by evaporating the pot ale remaining in the still.   | Moisture, if <45% or<br>>70%<br>If moisture <45%:<br>Crude protein               |

| Number | Name  | Description  | Compulsory<br>declarations                |
|--------|---|--|---|
| 2.1.1  | Babassu expeller                            | Product of oil manufacture, obtained by pressing Babassu palm nuts <i>Orbignya</i> varieties.  | Crude protein<br>Crude fat<br>Crude fibre |
| 2.2.1  | Camelina seed                               | Seeds of Camelina sativa L. Crantz.  |   |
| 2.2.2  | Camelina, expeller                          | Product of oil manufacture, obtained by pressing of seeds of Camelina.   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.2.3  | Camelina meal                               | Product of oil manufacture, obtained by extraction and appropriate heat treatment of Camelina seed expeller.   | Crude protein                             |
| 2.3.1  | Cocoa husks                                 | Teguments of the dried and roasted beans of <i>Theobroma cacao</i> L.  | Crude fibre                               |
| 2.3.2  | Cocoa hulls                                 | Product obtained by processing of cocoa beans.   | Crude fibre<br>Crude protein              |
| 2.3.3  | Cocoa bean meal,<br>partially decorticated  | Product of oil manufacture, obtained by<br>extraction of dried and roasted cocoa beans<br>Theobroma cacao L. from which part of the<br>husks has been removed  | Crude protein<br>Crude fibre              |
| 2.4.1  | Copra expeller                              | Product of oil manufacture, obtained by pressing the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm <i>Cocos nucifera</i> L.   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.4.2  | Copra, hydrolysed<br>expeller               | Product of oil manufacture, obtained by pressing and enzymatic hydrolisation of the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm <i>Cocos nucifera</i> L.                            | Crude protein<br>Crude fat<br>Crude fibre |
| 2.4.3  | Copra meal                                  | Product of oil manufacture, obtained by<br>extraction of the dried kernel (endosperm) and<br>outer husk (tegument) of the seed of the coconut<br>palm.   | Crude protein                             |
| 2.5.1  | Cotton seed                                 | Seeds of <i>Gossypium</i> spp. from which the fibres have been removed. It may be rumen protected.   |   |
| 2.5.2  | Cotton seed meal,<br>partially decorticated | Product of oil manufacture, obtained by<br>extraction of seeds of cotton from which the<br>fibres and part of the husks have been removed.<br>(Maximum crude fibre 22.5% in the dry matter).<br>It may be rumen protected. | Crude protein<br>Crude fibre              |
| 2.5.3  | Cotton seed expeller                        | Product of oil manufacture, obtained by pressing of seeds of cotton from which the fibres have been removed.   | Crude protein<br>Crude fibre<br>Crude fat |

| 2.6.1  | Groundnut expeller,<br>partially decorticated | Product of oil manufacture, obtained by<br>pressing of partially decorticated groundnuts<br><i>Arachis hypogaea</i> L. and other species of<br><i>Arachis</i> .<br>(Maximum crude fibre content 16% in the dry<br>matter)  | Crude protein<br>Crude fat<br>Crude fibre |
|--------|---|--|---|
| 2.6.2  | Groundnut meal,<br>partially decorticated     | Product of oil manufacture, obtained by<br>extraction of partially decorticated groundnut<br>expeller.<br>(Maximum crude fibre content 16% in the dry<br>matter)   | Crude protein<br>Crude fibre              |
| 2.6.3  | Groundnut expeller,<br>decorticated           | Product of oil manufacture, obtained by pressing of decorticated groundnuts.   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.6.4  | Groundnut meal,<br>decorticated               | Product of oil manufacture, obtained by extraction of decorticated groundnut expeller.   | Crude protein<br>Crude fibre              |
| 2.7.1  | Kapok expeller                                | Product of oil manufacture obtained by pressing of Kapok seeds ( <i>Ceiba pentadra</i> L. Gaertn.).  | Crude protein<br>Crude fibre              |
| 2.8.1  | Linseed                                       | Seeds of linseed <i>Linum usitatissimum</i> L. (Minimum botanical purity 93%) as whole, flattened or ground linseed. It may be rumen protected.  |   |
| 2.8.2  | Linseed expeller                              | Product of oil manufacture, obtained by pressing of linseed. (Minimum botanical purity 93%).   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.8.3  | Linseed meal                                  | Product of oil manufacture, obtained by extraction and appropriate heat treatment of linseed expeller. It may be rumen protected.  | Crude protein                             |
| 2.8.4  | Linseed expeller feed                         | Product of oil manufacture, obtained by<br>pressing of linseed. (Minimum botanical purity<br>93%). May contain up to 1% used bleaching<br>earth and filter aid (e.g. diatomaceous earth,<br>amorphous silicates and silica, phyllosilicates<br>and cellulosic or wood fibres) and crude<br>lecithins from integrated crushing and refining<br>plants.                                      | Crude protein<br>Crude fat<br>Crude fibre |
| 2.8.5  | Linseed meal feed                             | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>linseed expeller. May contain up to 1% used<br>bleaching earth and filter aid (e.g. diatomaceous<br>earth, amorphous silicates and silica,<br>phyllosilicates and cellulosic or wood fibres)<br>and crude lecithins from integrated crushing and<br>refining plants. It may be rumen protected. | Crude protein                             |
| 2.9.1  | Mustard bran                                  | Product of the manufacture of mustard ( <i>Brassica juncea</i> L.). It consists of fragments of the outer skins and particles of grain.  | Crude fibre                               |
| 2.9.2  | Mustard seed meal                             | Product obtained by the extraction of volatile mustard oil from mustard seeds  | Crude protein                             |
| 2.10.1 | Niger seed                                    | Seeds of the niger plant <i>Guizotia abyssinica</i> (L. F.) Cass.  |   |

| 2.10.2 Niger seed expeller pressing of seeds of the niger plant (Ash Crude   | protein          |
|--|------------------|
| incoluble in UCL maximum 2.49()  | -                |
|  |                  |
|  |                  |
| extraction of pressed olives Olea europea I  | protein          |
| separated as far as possible from parts of the Crude   |                  |
| kernel. Crude  | fat              |
| 2.11.2 <b>Defatted olive meal</b><br><b>feed</b> Product of olive oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>olive pulp expeller separated as far as possible<br>from parts of the kernel. May contain up to 1%<br>used bleaching earth and filter aid (e.g.<br>diatomaceous earth, amorphous silicates and<br>silica, phyllosilicates and cellulosic or wood<br>fibres) and crude lecithins from integrated<br>crushing and refining plants. | protein<br>fibre |
| 2.11.3Defatted olive mealProduct of olive oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>olive pulp expeller separated as far as possible<br>from parts of the kernel.Crude<br>Crude  | protein<br>fibre |
| 2.12.1Palm kernel expellerProduct of oil manufacture, obtained by<br>pressing of palm kernels <i>Elaeis guineensis</i><br>Jacq., <i>Corozo oleifera</i> (HBK) L. H. Bailey<br>( <i>Elaeis melanococca auct.</i> ) from which as much<br>as possible of the hard shell has been removed.Crude<br>Crude  |                  |
| 2.12.2 <b>Palm kernel meal</b> Product of oil manufacture, obtained by extraction of palm kernels from which as much as possible of the hard shell has been removed. Crude   | protein<br>fibre |
| 2.13.1 Pumpkin and squash seed Seeds of <i>Cucurbita pepo</i> L. and plants of the genus <i>Cucurbita</i> .  |                  |
| 2.13.2 <b>Pumpkin and squash</b> Product of oil manufacture, obtained by pressing of seeds of <i>Cucurbita pepo</i> and plants Orude Crude   | protein<br>fat   |
| 2.14.1Rape seed5Seeds of rape Brassica napus L. ssp. oleifera<br>(Metzg.) Sinsk., of Indian sarson Brassica<br>napus L. var. glauca (Roxb.) O.E. Schulz and of<br>rape Brassica rapa ssp. oleifera (Metzg.) Sinsk.<br>Minimum botanical purity 94%. It may be<br>rumen protected.  |                  |
| Product of oil manufacture, obtained by Crude  | protein          |
| 2.14.2 Rape seed, expeller pressing of seeds of rape. It may be rumen Crude  | fat              |
| protected. Crude   | fibre            |
| 2.14.3Rape seed mealProduct of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>rape seed expeller. It may be rumen protected.Crude   | protein          |
| Product obtained from whole rape by means of   | protein          |
| 2.14.4 <b>Rape seed, extruded</b> a treatment in humid, warm conditions and under pressure increasing starch gelatinisation. Crude It may be rumen protected.  | protein<br>fat   |

<sup>&</sup>lt;sup>5</sup> The indication 'low in glucosinolate' as defined in Community legislation may be added, where appropriate. This is valid for all rape seed products.

| 2.14.5 | Rape seed protein<br>concentrate            | Product of oil manufacture, obtained by separation of protein fraction of rapeseed expeller or rapeseed.   | Crude protein   |
|--------|---|--|---|
| 2.14.6 | Rape seed expeller<br>feed                  | Product of oil manufacture, obtained by<br>pressing of seeds of rape. May contain up to 1%<br>used bleaching earth and filter aid (e.g.<br>diatomaceous earth, amorphous silicates and<br>silica, phyllosilicates and cellulosic or wood<br>fibres) and crude lecithins from integrated<br>crushing and refining plants. It may be rumen<br>protected.                                       | Crude protein<br>Crude fat<br>Crude fibre             |
| 2.14.7 | Rape seed meal feed                         | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>rape seed expeller. May contain up to 1% used<br>bleaching earth and filter aid (e.g. diatomaceous<br>earth, amorphous silicates and silica,<br>phyllosilicates and cellulosic or wood fibres)<br>and crude lecithins from integrated crushing and<br>refining plants. It may be rumen protected. | Crude protein   |
| 2.15.1 | Safflower seed                              | Seeds of the safflower Carthamus tinctorius L.   |   |
| 2.15.2 | Safflower seed meal, partially decorticated | Product of oil manufacture, obtained by extraction of partially decorticated seeds of safflower.   | Crude protein<br>Crude fibre                          |
| 2.15.3 | Safflower hulls                             | Product obtained during dehulling of safflower seeds.  | Crude fibre   |
| 2.16.1 | Sesame seed                                 | Seeds of Sesamum indicum L.  |   |
| 2.17.1 | Sesame seed, partially<br>dehulled          | Product of oil manufacture, obtained by removing part of the husks.  | Crude protein<br>Crude fibre                          |
| 2.17.2 | Sesame hulls                                | Product obtained during dehulling of sesame seeds.   | Crude fibre   |
| 2.17.3 | Sesame seed expeller                        | Product of oil manufacture, obtained by pressing of seeds of the sesame plant (Ash insoluble in HCl: maximum 5%)   | Crude protein<br>Crude fibre<br>Crude fat             |
| 2.18.1 | Toasted soya (beans)                        | Soya beans ( <i>Glycine max.</i> L. Merr.) subjected to<br>an appropriate heat treatment. (Urease activity<br>maximum 0.4 mg N/g $\times$ min.). It may be rumen<br>protected.   |   |
| 2.18.2 | Soya (bean) expeller                        | Product of oil manufacture, obtained by pressing the seed of soya  | Crude protein<br>Crude fat<br>Crude fibre             |
| 2.18.3 | Soya (bean) meal                            | Product of oil manufacture, obtained from soya<br>beans after extraction and appropriate heat<br>treatment. (Urease activity maximum 0.4 mg<br>$N/g \times min.$ ).<br>It may be rumen protected.  | Crude protein<br>Crude fibre<br>if > 8% in dry matter |
| 2.18.4 | Soya (bean) meal,<br>dehulled               | Product of oil manufacture, obtained from dehulled soya beans after extraction and appropriate heat treatment. (Urease activity maximum 0.5 mg N/g $\times$ min.). It may be rumen protected.  | Crude protein   |
| 2.18.5 | Soya (bean) hulls                           | Product obtained during dehulling of soya beans.   | Crude fibre   |

|         |                                       |  | · · · · · · · · · · · · · · · · · · ·   |
|---------|---------------------------------------|--|---|
| 2.18.6  | Soya beans, extruded                  | Product obtained from soya beans by means of a treatment in humid, warm conditions and under pressure increasing starch gelatinisation. It may be rumen protected.   | Crude protein<br>Crude fat  |
| 2.18.7  | Soya (bean) protein<br>concentrate    | Product obtained from dehulled, fat extracted<br>soya beans, after fermentation or a second<br>extraction to reduce the level of nitrogen-free<br>extract.   | Crude protein   |
| 2.18.8  | Soya bean pulp ;<br>[Soya bean paste] | Product obtained during extraction of soya beans for food preparation.   | Crude protein   |
| 2.18.9  | Soya bean molasses                    | Product obtained during the processing of soya bean.   | Crude protein<br>Crude fat  |
| 2.18.10 | By-product from soybean preparation   | Products obtained when processing soybeans to obtain soybean food preparations.  | Crude protein   |
| 2.18.11 | Soya (beans)                          | Soya beans (Glycine max. L. Merr.)   | $\begin{array}{c} \text{Urease}  \text{activity}  \text{if} \\ \text{>}0.4 \text{ mg } N/g \times \text{min} \end{array}$ |
| 2.18.12 | Soybean, flakes                       | Product obtained by steaming or infra red micronizing and rolling dehulled soya beans. (Urease activity maximum 0.4 mg N/g $\times$ min.).   | Crude protein   |
| 2.18.13 | Soya (bean) meal feed                 | Product of oil manufacture, obtained from soya beans after extraction and appropriate heat treatment. (Urease activity maximum 0.4 mg N/g $\times$ min.). May contain up to 1% used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants. It may be rumen protected.                                     | Crude protein<br>Crude fibre<br>if > 8% in dry matter   |
| 2.18.14 | Soya (bean) meal<br>feed, dehulled    | Product of oil manufacture, obtained from<br>dehulled soya beans after extraction and<br>appropriate heat treatment. (Urease activity<br>maximum 0.5 mg N/g $\times$ min.). May contain up<br>to 1% used bleaching earth and filter aid (e.g.<br>diatomaceous earth, amorphous silicates and<br>silica, phyllosilicates and cellulosic or wood<br>fibres) and crude lecithins from integrated<br>crushing and refining plants. It may be rumen<br>protected. | Crude protein   |
| 2.19.1  | Sunflower seed                        | Seeds of the sunflower <i>Helianthus annuus</i> L. It may be rumen protected.  |   |
| 2.19.2  | Sunflower seed<br>expeller            | Product of oil manufacture, obtained by pressing of seeds of the sunflower.  | Crude protein<br>Crude fat<br>Crude fibre   |
| 2.19.3  | Sunflower seed meal                   | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>sunflower seed expeller. It may be rumen<br>protected.  | Crude protein   |
| 2.19.4  | Sunflower seed meal,<br>dehulled      | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>expeller of sunflower seeds from which part or<br>all of the husks has been removed.<br>Maximum crude fibre 27.5% in the dry matter   | Crude protein<br>Crude fibre  |

| 2.19.5 | Sunflower seed hulls                  | Product obtained during dehulling of sunflower seeds.  | Crude fibre                               |
|--------|---------------------------------------|--|---|
| 2.19.6 | Sunflower seed meal<br>feed           | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>sunflower seed expeller. May contain up to 1%<br>used bleaching earth and filter aid (e.g.<br>diatomaceous earth, amorphous silicates and<br>silica, phyllosilicates and cellulosic or wood<br>fibres) and crude lecithins from integrated<br>crushing and refining plants. It may be rumen<br>protected.   | Crude protein                             |
| 2.19.7 | Sunflower seed meal<br>feed, dehulled | Product of oil manufacture, obtained by<br>extraction and appropriate heat treatment of<br>expeller of sunflower seeds from which part or<br>all of the husks has been removed. May contain<br>up to 1% used bleaching earth and filter aid (e.g.<br>diatomaceous earth, amorphous silicates and<br>silica, phyllosilicates and cellulosic or wood<br>fibres) and crude lecithins from integrated<br>crushing and refining plants.<br>Maximum crude fibre 27.5% in the dry matter. | Crude protein<br>Crude fibre              |
| 2.20.1 | Vegetable oil and fat <sup>6</sup>    | Oil and fat obtained from plants (excluding castor oil from the ricinus plant), it may be degummed, refined and/or hydrogenated  | Moisture, if > 1%                         |
| 2.21.1 | Crude lecithins                       | Product obtained during degumming of crude<br>oil from oilseeds and oil fruits with water. Citric<br>acid, phosphoric acid or sodium hydroxide may<br>be added during degumming of the crude oil.  |   |
| 2.22.1 | Hemp seed                             | Controlled hemp seed <i>Cannabis sativa</i> L. with a maximum THC content according to EU legislation  |   |
| 2.22.2 | Hemp expeller                         | Product of oil manufacture obtained by pressing of hemp seed.  | Crude protein<br>Crude fibre              |
| 2.22.3 | Hemp oil                              | Product of oil manufacture, obtained by pressing of hemp plant and seed.   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.23.1 | Poppy seed                            | Seeds of Papaver somniferum L.   |   |
| 2.23.2 | Poppy meal                            | Product of oil manufacture, obtained by extraction of expeller of poppy seed   | Crude protein                             |

<sup>6</sup> 

The name shall be supplemented by the plant species.

|        |  |  | Compulsory  |
|--------|--|--|---|
| Number | Name                                   | Description  | declarations  |
| 3.1.1  | Beans, toasted                         | Seeds of <i>Phaseolus</i> spp. or <i>Vigna</i> spp. submitted to an appropriate heat treatment. It may be rumen protected.   |   |
| 3.1.2  | Bean protein<br>concentrate            | Product obtained from the separated bean fruit water, when producing starch.   | Crude protein   |
| 3.2.1  | Carob, dried                           | Dried fruits of the carob tree <i>Ceratonia siliqua</i> L.   | Crude fibre   |
| 3.2.3  | Carob pods, dried                      | Product obtained by crushing the dried fruits (pods) of the carob tree and from which the locust beans have been removed.    | Crude fibre   |
| 3.2.4  | Dried carob pod meal,<br>micronised    | Product obtained by micronisation of the dried<br>fruits of the carob tree from which the locust<br>beans have been removed. | Crude fibre<br>Total sugars, calculated<br>as sucrose |
| 3.2.5  | Carob germ                             | Germ of the locust bean of the carob tree.   | Crude protein   |
| 3.2.6  | Carob germ, expeller                   | Product of oil manufacture, obtained by pressing of germ of carob.   | Crude protein   |
| 3.2.7  | Locust bean (seed)                     | Bean of the carob tree.  | Crude fibre   |
| 3.3.1  | Chick peas                             | Seeds of Cicer arietinum L.  |   |
| 3.4.1  | Ervil                                  | Seeds of Ervum ervilia L.  |   |
| 3.5.1  | Fenugreek seed                         | Seed of fenugreek ( <i>Trigonella foenum-graecum</i> ).  |   |
| 3.6.1  | Guar meal                              | Product obtained after extraction of the mucilage from seeds of guar bean <i>Cyamopsis tetragonoloba</i> (L.) Taub.          | Crude protein   |
| 3.6.2  | Guar germs meal                        | Product of mucilage extraction from the germ of seeds of guar bean.  | Crude protein   |
| 3.7.1  | Horse beans                            | Seeds of Vicia faba L. ssp. faba var. equina Pers. and var. minuta (Alef.) Mansf.  |   |
| 3.7.2  | Horse bean flakes                      | Product obtained by steaming or infra red micronizing and rolling dehusked horse beans.                                      | Starch<br>Crude protein                               |
| 3.7.3  | Film horse beans;<br>[Faba bean hulls] | Product obtained during dehulling horse bean seeds, consisting mainly of external envelopes.                                 | Crude fibre<br>Crude protein                          |
| 3.7.4  | Horse beans, dehulled                  | Product obtained during dehulling horse bean seeds, consisting mainly of bean kernels from horse beans.                      | Crude protein<br>Crude fibre                          |
| 3.7.5  | Horse bean protein                     | Product obtained by grinding and air fractionation of horse beans.   | Crude protein   |
| 3.8.1  | Lentils                                | Seeds of Lens culinaris a.o. Medik.  |   |
| 3.8.2  | Lentil hulls                           | Product obtained during dehulling process of lentil seeds.   | Crude fibre   |
| 3.9.1  | Sweet lupins                           | Seeds of Lupinus spp. low in bitter seed content.  |   |
| 3.9.2  | Sweet lupins, dehulled                 | Dehulled lupin seeds.  | Crude protein   |
| 3.9.3  | Film lupins; [lupin<br>hulls]          | Product obtained during dehulling of lupin seeds, consisting mainly of external envelopes.                                   | Crude protein<br>Crude fibre                          |

# 3. Legume seeds and products derived thereof

| 3.9.4   | Lupin pulp         | Product obtained after extraction of components of lupin.  | Crude fibre  |  |
|---------|--------------------|--|--|--|
| 3.9.5   | Lupin middlings    | Product obtained during the manufacture of<br>lupin flour from lupin. It consists principally of<br>particles of cotyledon, and to a lesser extent, of<br>skins.                       | Crude protein<br>Crude fibre   |  |
| 3.9.6   | Lupin protein      | Product obtained from the separated lupin fruit<br>water when producing starch, or after grinding<br>and air fractionation.  | Crude protein  |  |
| 3.9.7   | Lupin protein meal | Product of lupin processing to produce a high protein meal.  | Crude protein  |  |
| 3.10.1  | Mung beans         | Beans of Vigna radiata L.  |  |  |
| 3.11.1  | Peas               | Seeds of <i>Pisum</i> spp. It may be rumen protected.  |  |  |
| 3.11.2  | Pea bran           | Product obtained during the manufacture of pea<br>meal. It is composed mainly of skins removed<br>during the skinning and cleaning of peas.  | Crude fibre  |  |
| 3.11.3  | Pea flakes         | Product obtained by steaming or infra red micronizing and rolling dehulled seeds of peas.  | Starch   |  |
| 3.11.4  | Pea flour          | Product obtained during the grinding of peas.  | Crude protein  |  |
| 3.11.5  | Pea hulls          | Product obtained during the manufacture of pea<br>meal from peas. It is mainly composed of skins<br>removed during the skinning and cleaning and,<br>to a lesser extent, of endosperm. | Crude fibre  |  |
| 3.11.6  | Peas, dehulled     | Dehulled pea seeds.  | Crude protein<br>Crude fibre   |  |
| 3.11.7  | Pea middlings      | Product obtained during the manufacture of pea<br>flour. It consists principally of particles of<br>cotyledon, and to a lesser extent, of skins.                                       | Crude protein<br>Crude fibre   |  |
| 3.11.8  | Pea screenings     | Product from the mechanical screening consisting of fractions of pea kernels separated before further processing.  | Crude fibre  |  |
| 3.11.9  | Pea protein        | Product obtained from the separated pea fruit<br>water when producing starch, or after grinding<br>and air fractionation, maybe partially<br>hydrolysed.                               | Crude protein  |  |
| 3.11.10 | Pea pulp           | Product obtained from starch and protein wet<br>extraction from peas. It is mainly composed of<br>internal fibre and starch.   | Moisture if < 70% or<br>> 85%<br>Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5% of dry matter |  |
| 3.11.11 | Pea solubles       | Product obtained from starch and protein wet<br>extraction from peas. It is mainly composed of<br>soluble proteins and oligosaccharides.   | Moisture if < 60% or<br>> 85%<br>Total sugars<br>Crude protein   |  |
| 3.11.12 | Pea fibre          | Product obtained by extraction after grinding and sieving of the dehulled pea.   | Crude fibre  |  |
| 3.12.1  | Vetches            | Seeds of <i>Vicia sativa</i> L. <i>var sativa</i> and other varieties.   |  |  |

| 3.13.1 | Chickling vetch | Seeds of <i>Lathyrus sativus</i> L. submitted to an appropriate heat treatment. | Method<br>treatment | of | heat |
|--------|-----------------|---|---------------------|----|------|
| 3.14.1 | Monantha vetch  | Seeds of Vicia monanthos Desf.  |                     |    |      |

| Number | Name   | Description   | Compulsory<br>declarations  |  |
|--------|--|---|---|--|
| 4.1.1  | Sugar beet   | Root of <i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>altissima</i> Doell.   |   |  |
| 4.1.2  | Sugar beet tops and<br>tails   | Fresh product of the manufacture of sugar consisting mainly of cleaned pieces of sugar beet with or without parts of beet leaves.   | Ash insoluble in HCl,<br>if > 5% of dry matter<br>Moisture if <50%  |  |
| 4.1.3  | (Beet) sugar;<br>[sucrose]   | Sugar extracted from sugar beets using water.   | Sucrose   |  |
| 4.1.4  | (Sugar) beet molasses  | Syrupy product obtained during the manufacture<br>or refining of sugar from sugar beets. May<br>contain up to 0.5% antifoaming agents. May<br>contain up to 0.5% antiscaling agents. May<br>contain up to 2% sulphate. May contain up to<br>0.25% sulphite.   | Total sugars, calculated<br>as sucrose<br>Moisture, if > 28%  |  |
| 4.1.5  | (Sugar) beet molasses,<br>partially-desugared<br>and/or debetainized | Product obtained after further extraction using water of sucrose and/or betaine from sugar beet molasses. May contain up to 2% sulphate. May contain up to 0.25% sulphite.  | Total sugars, calculated<br>as sucrose<br>Moisture, if > 28%  |  |
| 4.1.6  | Isomaltulose molasses  | Non-crystallised fraction from the manufacture<br>of isomaltulose by enzymatic conversion of<br>sucrose from sugar beets.   | Moisture if >40%  |  |
| 4.1.7  | Wet (sugar) beet pulp  | Product of the manufacture of sugar consisting<br>of slices of sugar beet that have had sugar<br>extracted with water. Minimum moisture<br>content: 82%. Sugar content is low and declines<br>towards zero due to (lactic acid) fermentation.   | Ash insoluble in HCl,<br>if > 5% of dry matter<br>Moisture, if <82% or<br>>92%                              |  |
| 4.1.8  | Pressed (sugar) beet<br>pulp   | Product of the manufacture of sugar consisting<br>of slices of sugar beet that have had sugar<br>extracted with water and have been<br>mechanically pressed. Maximum moisture<br>content: 82%. Sugar content is low and declines<br>towards zero due to (lactic acid) fermentation.<br>May contain up to 1% sulphate. | Ash insoluble in HCl,<br>if > 5% of dry matter<br>Moisture if <65% or<br>>82%                               |  |
| 4.1.9  | Pressed (sugar) beet<br>pulp, molassed                               | Product of the manufacture of sugar consisting<br>of slices of sugar beet that have had sugar<br>extracted with water, have been mechanically<br>pressed, and with molasses added. Maximum<br>moisture content: 82%. Sugar content declines<br>due to (lactic acid) fermentation. May contain<br>up to 1% sulphate.   | Ash insoluble in HCl,<br>if > 5% of dry matter<br>Moisture if <65% or<br>>82%                               |  |
| 4.1.10 | Dried (sugar) beet<br>pulp   | Product of the manufacture of sugar consisting<br>of slices of sugar beet that have had sugar<br>extracted with water, mechanically pressed and<br>dried. May contain up to 2% sulphate.  | Ash insoluble in HCl,<br>if $> 3.5\%$ of dry matter<br>Total sugars, calculated<br>as sucrose, if $>10.5\%$ |  |
| 4.1.11 | Dried (sugar) beet<br>pulp, molassed                                 | Product of the manufacture of sugar consisting<br>of slices of sugar beet that have had sugar<br>extracted with water, mechanically pressed, and<br>dried, with molasses added. May contain up to<br>0.5% antifoaming agents. May contain up to 2%<br>sulphate.   | Ash insoluble in HCl,<br>if > 3.5% of dry matter<br>Total sugars, calculated<br>as sucrose                  |  |

4. Tubers, roots, and products derived thereof

| 4.1.12 | Sugar syrup                    | Product obtained by processing of sugar and/or molasses. May contain up to 0.5% sulphate. May contain up to 0.25% sulphite.   | Total sugars, calculated<br>as sucrose<br>Moisture, if $> 35\%$  |  |
|--------|--------------------------------|---|--|--|
| 4.1.13 | (Sugar) beet pieces,<br>boiled | Product of the manufacture of edible syrup from sugar beet, which may be pressed or dried.  | If dried:<br>ash insoluble in HCl, if<br>>3.5% of dry matter<br>If pressed:<br>ash insoluble in HCl, if<br>>5% of dry matter<br>Moisture, if < 50% |  |
| 4.1.14 | Fructo-<br>oligosaccharides    | Product obtained from sugar from sugar beet through an enzymatic process.   | Moisture if > 28%  |  |
| 4.2.1  | Beetroot juice                 | Juice from pressing of red beet ( <i>Beta vulgaris convar. crassa var. conditiva</i> ) with subsequent concentration and pasteurization, maintaining the typical vegetable-like taste and flavour.  | Moisture if $< 50\%$ or<br>> 60%<br>Ash insoluble in HCl,<br>if $> 3.5\%$ of dry matter  |  |
| 4.3.1  | Carrots                        | Root of the yellow or red carrot <i>Daucus carota</i> L.  |  |  |
| 4.3.2  | Carrot peelings,<br>steamed    | Moist product from the carrot processing<br>industry consisting of the peelings removed<br>from the carrot root by steam treatment to which<br>auxiliary flows of gelatinous carrot starch may<br>be added. Maximum moisture content: 97%.  | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if $> 3.5\%$ of dry matter<br>Moisture, if $< 87\%$ or<br>> 97%                                  |  |
| 4.3.3  | Carrot scrapings               | Moist product which is released via mechanical separation in the processing of carrots and which mostly consists of dried carrots and carrot remnants. The product may have been subject to heat treatment. Maximum moisture content: 97%.  | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter<br>Moisture, if < 87% or<br>> 97%  |  |
| 4.3.4  | Carrot flakes                  | Product obtained by flaking roots of the yellow<br>or red carrot, which are subsequently dried.   |  |  |
| 4.3.5  | Carrot, dried                  | Root of the yellow or red carrot regardless of their presentation, which are subsequently dried.  | Crude fibre  |  |
| 4.3.6  | Carrot feed, dried             | Product constituted of internal pulp and outer skins that are dried.  | Crude fibre  |  |
| 4.4.1  | Chicory roots                  | Roots of Cichorium intybus L.   |  |  |
| 4.4.2  | Chicory tops and tails         | Fresh product from chicory processing. It consists predominantly of cleaned pieces of chicory and parts of leaves.  | Ash insoluble in HCl,<br>if $> 3.5\%$ of dry matter<br>Moisture if $<50\%$   |  |
| 4.4.3  | Chicory seed                   | Seed of Cichorium intybus L.  |  |  |
| 4.4.4  | Pressed chicory pulp           | Product of the manufacture of inulin from roots<br>of <i>Cichorium intybus</i> L. consisting of extracted<br>and mechanically pressed slices of chicory. The<br>(soluble) chicory carbohydrates and water have<br>been partly removed. May contain up to 1%<br>sulphate, and may contain up to 0.2% sulphite. | Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter<br>Moisture if <65% or<br>>82%   |  |

|        |                                 |  | ]  |
|--------|---------------------------------|--|--|
| 4.4.5  | Dried chicory pulp              | Product of the manufacture of inulin from roots<br>of <i>Cichorium intybus</i> L. consisting of extracted<br>and mechanically pressed slices of chicory and<br>subsequent drying. The (soluble) chicory<br>carbohydrates have been partly extracted. May<br>contain up to 2% sulphate, and may contain up<br>to 0.5% sulphite. | Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter              |
| 4.4.6  | Chicory roots powder            | Product obtained by chopping, drying and grinding of chicory roots. May contain up to 1% of anticaking agents.   | Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter              |
| 4.4.7  | Chicory molasses                | Product of chicory processing, obtained during<br>the production of inulin and oligofructose.<br>Chicory molasses consists of organic plant<br>material and minerals. May contain up to 0.5%<br>antifoaming agents   | Crude protein<br>Crude ash<br>Moisture if <20% or<br>>30%                    |
| 4.4.8  | Chicory vinasses                | By-product from chicory processing obtained<br>after the separation of inulin and oligofructose<br>and ion exchange eluation. Chicory vinasses<br>consists of organic plant material and minerals.<br>May contain up to 1% antifoaming agents.   | Crude protein<br>Crude ash<br>Moisture if <30% or<br>>40%                    |
| 4.4.9  | Chicory inulin                  | Inulin is a fructan extracted from roots of <i>Cichorium intybus</i> L.; raw chicory inulin may contain up to 1% sulphate and may contain up to 0.5% sulphite.   |  |
| 4.4.10 | Oligofructose syrup             | Product obtained by partial hydrolysis of inulin<br>from <i>Cichorium intybus</i> L.; raw oligofructose<br>syrup may contain up to 1% sulphate and may<br>contain up to 0.5% sulphite.   | Moisture if <20% or >30%   |
| 4.4.11 | Oligofructose, dried            | Product obtained by partial hydrolysis of inulin from <i>Cichorium intybus</i> L. and subsequent drying.   |  |
| 4.5.1  | Garlic, dried                   | White to yellow powder of pure, ground garlic, <i>Allium sativum</i> L.  |  |
| 4.6.1  | Manioc; [tapioca];<br>[cassava] | Roots of <i>Manihot esculenta</i> Crantz, regardless of their presentation.  | Moisture if < 60% or > 70%   |
| 4.6.2  | Manioc, dried                   | Roots of Manioc, regardless of their presentation, which are subsequently dried.   | Starch<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter                   |
| 4.7.1  | Onion pulp                      | Moist product which is released during the processing of onions (genus <i>Allium</i> ) and consists of both skins and whole onions. If from the production process for onion oil, then it mostly consists of cooked remains of onions.   | Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter              |
| 4.7.2  | Onions, fried                   | Skinned and crumbed onion pieces which are then fried.   | Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter<br>Crude fat |
| 4.7.3  | Onions solubles                 | Dry product which is released during the<br>processing of fresh onions. It is obtained by<br>alcoholic and/or water extraction, the water or<br>alcoholic fraction is separated and spraydried.<br>It consists mainly in carbohydrates.  | Crude fibre  |

| 4.8.1  | Potatoes                            | Tubers of Solanum tuberosum L.   | Moisture if <72% or >88%   |
|--------|-------------------------------------|--|--|
| 4.8.2  | Potatoes, peeled                    | Potatoes from which the skin is removed using steam treatment.   | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter                                  |
| 4.8.3  | Potato peelings,<br>steamed         | Moist product from the potato processing<br>industry consisting of the peelings removed by<br>steam treatment from the potato tuber to which<br>auxiliary flows of gelatinous potato starch may<br>be added. It may be mashed. | Moisture if < 82% or<br>> 93%<br>Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter |
| 4.8.4  | Potato cuttings, raw                | Product released from potatoes during the preparation of potato products for human consumption, which may have been peeled.  | Moisture if <72% or<br>>88%<br>Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter   |
| 4.8.5  | Potato scrapings                    | Product which is released via mechanical separation in the processing of potatoes and which mostly consists of dried potatoes and potato remnants. The product may have been subject to heat treatment.                        | Moisture if < 82% or<br>> 93%<br>Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter |
| 4.8.6  | Potato, mashed                      | Blanched or boiled and then mashed potato product.   | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5% of dry matter                                  |
| 4.8.7  | Potato flakes                       | Product obtained by rotary drying of washed, peeled or unpeeled steamed potatoes.  | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3.5% of dry matter                                  |
| 4.8.8  | Potato pulp                         | Product of the manufacture of potato starch consisting of extracted ground potatoes.   | Moisture, if < 77% or > 88%  |
| 4.8.9  | Potato pulp, dried                  | Dried product of the manufacture of potato starch consisting of extracted ground potatoes.   |  |
| 4.8.10 | Potato protein                      | Product of starch manufacture composed mainly<br>of protein substances obtained after the<br>separation of starch.   | Crude protein  |
| 4.8.11 | Potato protein,<br>hydrolysed       | Protein obtained by a controlled enzymatic hydrolysis of potato proteins.  | Crude protein  |
| 4.8.12 | Potato protein,<br>fermented        | Product obtained by fermentation of potato protein and subsequent spray drying.  | Crude protein  |
| 4.8.13 | Potato protein<br>fermented, liquid | Liquid product obtained by fermentation of potato protein.   | Crude protein  |

| 4.8.14 | Potato juice,<br>concentrated        | Concentrated product of the manufacture of<br>potato starch, consisting of the remaining<br>substance after the partial removal of fibre,<br>proteins and starch from the whole potato pulp<br>and evaporation of part of the water. | Moisture if < 50% or<br>> 60%<br>If moisture < 50%:<br>- Crude protein<br>- Crude ash |
|--------|--------------------------------------|--|---|
| 4.8.15 | Potato granules                      | Dried potatoes (potatoes after washing, peeling, size reduction – cutting, flaking, etc. and water content removal).   |   |
| 4.9.1  | Sweet potato                         | Tubers of <i>Ipomoea batatas</i> L. regardless of their presentation.  | Moisture if < 57% or > 78%  |
| 4.10.1 | Jerusalem artichoke;<br>[Topinambur] | Tubers of <i>Helianthus tuberosus</i> L. regardless of their presentation.   | Moisture if < 75% or > 80%  |

5. Other seeds and fruits, and products derived thereof

| Number | Name   | Description   | Compulsory<br>declarations                                       |
|--------|--|---|--|
| 5.1.1  | Acorn  | Whole fruits of the pendunculate oak <i>Quercus</i> robur L., the sessile oak <i>Quercus petraea</i> (Matt.) <i>Liebl.</i> , the cork oak of <i>Quercus suber</i> L., or other species of oak.  |  |
| 5.1.2  | Acorn, dehulled                                    | Product obtained during dehulling of acorn.   | Crude protein<br>Crude fibre                                     |
| 5.2.1  | Almond   | Whole or broken fruit <i>Prunus dulcis</i> , with or without hulls.   |  |
| 5.2.2  | Almond Hulls                                       | Almond hulls obtained from dehusked almond seeds by physical separation from the kernels and ground.  | Crude fibre  |
| 5.2.3  | Almond kernel<br>expeller                          | Product of oil manufacture obtained by pressing of almond kernels   | Crude protein<br>Crude fibre                                     |
| 5.3.1  | Anise seed   | Seeds of Pimpinella anisum.   |  |
| 5.4.1  | Apple pulp, dried;<br>[Apple pomace,<br>dried]     | Product obtained from the production of juice of <i>Malus domestica</i> or cider production. It consists principally of internal pulp and outer skins that are dried. It may have been depectinised   | Crude fibre  |
| 5.4.2  | Apple pulp, pressed;<br>[Apple pomace,<br>pressed] | Moist product obtained from the production of<br>apple juice or cider production. It consists<br>principally of internal pulp and outer skins that<br>are pressed. It may have been depectinised  | Crude fibre  |
| 5.4.3  | Apple molasses                                     | Product obtained after producing pectin from apple pulp. It may have been depectinised  | Crude protein<br>Crude fibre<br>Crude oils and fats, if<br>> 10% |
| 5.5.1  | Sugar beet seed                                    | Seeds of sugar beet   |  |
| 5.6.1  | Buckwheat  | Seeds of Fagopyrum esculentum   |  |
| 5.6.2  | Buckwheat hulls and<br>bran                        | Product obtained during the milling of buckwheat grains.  | Crude fibre  |
| 5.6.3  | Buckwheat middlings                                | Product of flour manufacture, obtained from<br>screened buckwheat. It consists principally of<br>particles of endosperm, with fine fragments of<br>the outer and some miscellaneous parts of the<br>grain. It must contain no more than 10% crude<br>fibre. | Crude fibre<br>Starch  |
| 5.7.1  | Red cabbage seed                                   | Seeds of Brassica oleracea var. capitata f.<br>Rubra.   |  |
| 5.8.1  | Canary grass seed                                  | Seeds of <i>Phalaris canariensis</i> .  |  |
| 5.9.1  | Caraway seed                                       | Seeds from Carum carvi L.   |  |
| 5.12.1 | Broken chestnuts                                   | Product of the production of chestnut flour, consisting mainly of particles of endosperm, with fine fragments of envelopes and a few remnants of chestnut ( <i>Castanea</i> spp.).  | Crude protein<br>Crude fibre                                     |

| 5.13.1 | Citrus pulp                    | Product obtained by pressing citrus fruits <i>Citrus</i> (L.) spp. or during the production of citrus juice.                            | Crude fibre                  |
|--------|--------------------------------|---|------------------------------|
| 5.13.2 | Citrus pulp, dried             | It may have been depectinised.<br>Product obtained by pressing citrus fruits or<br>during the production of citrus juice, which is      | Crude fibre                  |
| 5.15.2 | Citi us puip, uricu            | subsequently dried. It may have been depectinised.  |                              |
| 5.14.1 | Red clover seed                | Seeds of <i>Trifolium pratense</i> L.   |                              |
| 5.14.2 | White clover seed              | Seeds of Trifolium repens L.  |                              |
| 5.15.1 | Coffee skins                   | Product obtained from dehusked seeds of the <i>Coffea</i> plant.  | Crude fibre                  |
| 5.16.1 | Cornflower seed                | Seeds of Centaurea cyanus L.  |                              |
| 5.17.1 | Cucumber seed                  | Seeds of Cucumis sativus L.   |                              |
| 5.18.1 | Cypress seed                   | Seeds of Cupressus L.   |                              |
| 5.19.1 | Date fruit                     | Fruits of Phoenix dactylifera L. It may be dried.   |                              |
| 5.19.2 | Date seed                      | Whole seeds of the date plant.  | Crude fibre                  |
| 5.20.1 | Fennel seed                    | Seeds of Foeniculum vulgare Mill.   |                              |
| 5.21.1 | Fig fruit                      | Fruits of Ficus carica L. It may be dried.  |                              |
| 5.22.1 | Fruit kernels <sup>6</sup>     | Product consisting of the inner, edible seeds of a nut or fruit stone.  |                              |
| 5.22.2 | Fruit pulp <sup>6</sup>        | Product obtained during the production of fruit<br>juice and fruit puree. It may have been<br>depectinised.                             | Crude fibre                  |
| 5.22.3 | Fruit pulp, dried <sup>6</sup> | Product obtained during the production of fruit<br>juice and fruit puree which is subsequently<br>dried. It may have been depectinised. | Crude fibre                  |
| 5.23.1 | Garden cress                   | Seeds from Lepidium sativum L.  | Crude fibre                  |
| 5.24.1 | Graminaceous seeds             | Seeds from graminoids of the families <i>Poaceae</i> , <i>Cyperaceae</i> and <i>Juncaceae</i> .   |                              |
| 5.25.1 | Crono ning                     | Pips from vitis L. separated from grape pulp,   | Crude fat                    |
| 5.23.1 | Grape pips                     | from which the oil has not been removed.  | Crude fibre                  |
| 5.25.2 | Grape pips meal                | Product obtained during the extraction of oil from grape pips.  | Crude fibre                  |
| 5.25.3 | Grape pulp [Grape<br>marc]     | Grape pulp dried rapidly after the extraction of alcohol from which as much as possible of the stalks and pips have been removed.       | Crude fibre                  |
| 5.25.4 | Grape pips soluble             | Product obtained from grape pips after<br>producing grape juice. It principally contains<br>carbohydrates. It may be concentrated.      | Crude fibre                  |
| 5.26.1 | Hazelnut                       | Whole or broken fruit of <i>Corylus</i> (L.) spp., with or without hulls.   |                              |
| 5.26.2 | Hazelnut expeller              | Product of oil manufacture obtained by pressing of hazelnut kernels   | Crude protein<br>Crude fibre |

| 5.27.1 | Pectin                         | Pectin is obtained by aqueous extraction (of natural strains) of appropriate plant material, usually citrus fruits or apples. No organic precipitant shall be used other than methanol, ethanol and propane-2-ol. May contain up to 1% methanol, ethanol and propane-2-ol singly or in combination, on an anhydrous basis. Pectin consists mainly of the partial methyl esters of polygalacturonic acid and their ammonium, sodium, potassium and calcium salts. Seeds of <i>Perilla frutescens</i> L. and its milling |                              |
|--------|--------------------------------|--|------------------------------|
| 5.28.1 | Perilla seed                   | products.  |                              |
| 5.29.1 | Pine nut                       | Seeds from <i>Pinus</i> (L.) spp.  |                              |
| 5.30.1 | Pistachio                      | Fruit of <i>Pistacia vera</i> L.   |                              |
| 5.31.1 | Plantago seed                  | Seeds of Plantago (L.) spp.  |                              |
| 5.32.1 | Radish seed                    | Seeds of Raphanus sativus L.   |                              |
| 5.33.1 | Spinach seed                   | Seeds of Spinacia oleracea L.  |                              |
| 5.34.1 | Thistle seed                   | Seeds from Carduus marianus L.   |                              |
| 5.35.1 | Tomato pulp [tomato<br>pomace] | Product obtained by pressing tomatoes <i>Solanum lycopersicum</i> L. during the production of tomato juice. It consists principally of tomato peel and seeds.  | Crude fibre                  |
| 5.36.1 | Yarrow seed                    | Seeds of Achillea millefolium L.   |                              |
| 5.37.1 | Apricot kernel<br>expeller     | Product of oil manufacture obtained by pressing<br>of apricot kernels (Prunus armeniaca L.). It may<br>contain hydrocyanic acid  | Crude protein<br>Crude fibre |
| 5.38.1 | Black cumin expeller           | Product of oil manufacture obtained by pressing of black cumin seeds ( <i>Bunium persicum L.</i> )   | Crude protein<br>Crude fibre |
| 5.39.1 | Borrage seed expeller          | Product of oil manufacture obtained by pressing of borrage seeds ( <i>Borago officinalis L.</i> )  | Crude protein<br>Crude fibre |
| 5.40.1 | Evening primrose<br>expeller   | Product of oil manufacture obtained by pressing of evening primrose seeds ( <i>Oenothera L</i> .)  | Crude protein<br>Crude fibre |
| 5.41.1 | Pome grenade<br>expeller       | Product of oil manufacture obtained by pressing of pome grenade seeds ( <i>Punica granatum L.</i> )  | Crude protein<br>Crude fibre |
| 5.42.1 | Walnut kernel<br>expeller      | Product of oil manufacture obtained by pressing of walnut kernels ( <i>Juglans regia L.</i> )  | Crude protein<br>Crude fibre |

| Number | Name  | Description  | Compulsory<br>declarations   |
|--------|---|--|--|
| 6.1.1  | Beet leaves   | Leaves of Beta spp.  |  |
| 6.2.1  | Cereal plants <sup>6</sup>  | Whole plants of cereal species or parts thereof.<br>It may be dried, fresh or ensiled.   |  |
| 6.3.1  | Cereals straw <sup>6</sup>  | Straw of cereals.  |  |
| 6.3.2  | Cereal straw,<br>treated <sup>67</sup>  | Product obtained by an appropriate treatment of cereal straw.  | Sodium, if treated with NaOH   |
| 6.4.1  | Clover meal   | Product obtained by drying and milling clover <i>Trifolium</i> spp. It may contain up to 20% lucerne ( <i>Medicago sativa</i> L. and <i>Medicago</i> var. <i>Martyn</i> ) or other forage crops dried and milled at the same time as the clover. | Crude protein<br>Crude fibre<br>Ash insoluble, in HCI,<br>if >3.5% of dry matter |
| 6.5.1  | Forage meal <sup>8</sup> ; [Grass<br>meal] <sup>8</sup> ; [Green meal] <sup>8</sup> | Product obtained by drying and milling and in some cases compacting forage plants.   | Crude protein<br>Crude fibre<br>Ash insoluble, in HCI,<br>if >3.5% of dry matter |
| 6.6.1  | Grass, field dried,<br>[Hay]  | Species of any grass, field dried.   | Ash insoluble, in HCI,<br>if >3.5% of dry matter                                 |
| 6.6.2  | Grass, high<br>temperature dried  | Product obtained from grass (any variety) that has been artificially dehydrated (in any form).   | Crude protein<br>Fibre<br>Ash insoluble, in HCI,<br>if >3.5% of dry matter       |
| 6.6.3  | Grass, herbs, legume<br>plants, [green forage]                                      | Fresh, ensiled or dried arable crops consisting of grass, legumes or herbs, commonly described as silage, haylage, hay or green forage.  | Ash insoluble, in HCI, if >3.5% of dry matter                                    |
| 6.7.1  | Hemp flour  | Flour ground from dried leaves from Cannabis sativa L.   | Crude protein  |
| 6.7.2  | Hemp fibre  | Product obtained during the processing of hemp, green coloured, dried, fibrous.  |  |
| 6.8.1  | Horse bean straw  | Straw of horse bean.   |  |
| 6.9.1  | Linseed straw   | Straw of linseed (Linum usitatissimum L.).   |  |
| 6.10.1 | Lucerne; [Alfalfa]  | <i>Medicago sativa</i> L. and <i>Medicago</i> var. <i>Martyn</i> plants or parts thereof.  | Ash insoluble, in HCI, if $>3.5\%$ of dry matter                                 |
| 6.10.2 | Lucerne field dried;<br>[Alfalfa field dried]                                       | Lucerne, field dried.  | Ash insoluble, in HCI,<br>if >3.5% of dry matter                                 |
| 6.10.3 | Lucerne, high<br>temperature dried;<br>[Alfalfa, high<br>temperature dried]         | Lucerne artificially dehydrated, in any form.  | Crude protein<br>Crude fibre<br>Ash insoluble, in HCI,<br>if >3.5% of dry matter |
| 6.10.4 | Lucerne, extruded;<br>[Alfalfa, extruded]   | Alfalfa pellets that have been extruded.   |  |

## Forages and roughage, and products derived thereof 6.

The name must be supplemented by an indication of the nature of the treatment carried out. The species of forage crop may be added to the name. 7 8

| 6.10.5 | Lucerne meal <sup>9</sup> ;<br>[Alfalfa meal] <sup>9</sup>       | Product obtained by drying and milling<br>Lucerne. It may contain up to 20% clover or<br>other forage crop dried and milled at the same<br>time as the lucerne.              | Crude protein<br>Crude fibre<br>Ash insoluble, in HCI,<br>if >3.5% of dry matter |
|--------|--|--|--|
| 6.10.6 | Lucerne pomace;<br>[Alfalfa pomace]                              | Dried product obtained by pressing of the juice from lucerne.  | Crude protein<br>Crude fibre   |
| 6.10.7 | Lucerne protein<br>concentrate; [Alfalfa<br>protein concentrate] | Product obtained by artificially drying fractions<br>of lucerne press juice, which have been<br>separated by centrifugation and heat treated to<br>precipitate the proteins. | Crude protein<br>Carotene  |
| 6.10.8 | Lucerne solubles   | Product obtained after the extraction of proteins<br>from lucerne juice, it may be dried   | Crude protein  |
| 6.11.1 | Maize silage   | Ensiled plants or parts thereof of Zea mays L. ssp. mays.  |  |
| 6.12.1 | Pea Straw  | Straw of Pisum spp.  |  |

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The term "meal" may be replaced by "pellets". The method of drying may be added to the name.

| Number | Name  | Description  | Compulsory<br>declarations                                  |
|--------|---|--|---|
| 7.1.1  | <b>Algae</b> <sup>10</sup>                                      | Algae, live or processed, including fresh, chilled or frozen algae. May contain up to 0.1% of antifoaming agents.  | Crude protein<br>Crude fat<br>Crude ash                     |
| 7.1.2  | <b>Dried algae</b> <sup>10</sup>                                | Product obtained by drying algae. This product may have been washed to reduce the iodine content. May contain up to 0.1% of antifoaming agents.  | Crude protein<br>Crude fat<br>Crude ash                     |
| 7.1.3  | Algae meal <sup>10</sup>  | Product of algae oil manufacture, obtained<br>by extraction of algae. May contain up to<br>0.1% of antifoaming agents.   | Crude protein<br>Crude fat<br>Crude ash                     |
| 7.1.4  | Algal oil <sup>10</sup>   | Product of the oil manufacture from algae obtained by extraction. May contain up to $0.1\%$ of antifoaming agents.   | Crude fat<br>Moisture if > 1%                               |
| 7.1.5  | Algae extract <sup>10</sup> ; [Algae<br>fraction] <sup>10</sup> | Watery or alcoholic extract of algae that principally contains carbohydrates. May contain up to 0.1% of antifoaming agents.  |   |
| 7.2.6  | Seaweed meal  | Product obtained by drying and crushing macro-algae, in particular brown seaweed. This product may have been washed to reduce the iodine content. May contain up to 0.1% of antifoaming agents.  | Crude ash   |
| 7.3.1  | <b>Barks</b> <sup>6</sup>                                       | Cleaned and dried barks of trees or bushes.  | Crude fibre   |
| 7.4.1  | Blossoms <sup>6</sup> , dried                                   | All parts of dried blossoms of consumable plants and their fractions.  | Crude fibre   |
| 7.5.1  | Broccoli, dried   | Product obtained by drying the plant <i>Brassica oleracea</i> L. after washing, size reduction (cutting, flaking, etc.) and water content removal.   |   |
| 7.6.1  | (Sugar) cane molasses   | Syrupy product obtained during the manufacture or refining of sugar from <i>Saccharum L</i> . May contain up to 0.5% antifoaming agents. May contain up to 0.5% antiscaling agents. May contain up to 3.5% sulphate. May contain up to 0.25% sulphite. | Total sugars calculated as<br>sucrose<br>Moisture, if > 30% |
| 7.6.2  | (Sugar) cane<br>Molasses, partially<br>desugared                | Product obtained after further extraction<br>using water of sucrose from sugar cane<br>molasses.   | Total sugars calculated as<br>sucrose<br>Moisture, if > 28% |
| 7.6.3  | (Cane) sugar [sucrose]  | Sugar extracted from sugar canes using water.  | Sucrose   |
| 7.6.4  | Cane bagasse  | Product obtained during extraction using water of sugar from sugar canes. It consists mainly of fibres.  | Crude fibre   |
| 7.7.1  | Leaves, dried <sup>6</sup>                                      | Dried leaves of consumable plants and their fractions.   | Crude fibre   |

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The name shall be supplemented by the species.

| 7.8.1  | Lignocellulose <sup>6</sup>   | Product obtained by means of mechanical processing of raw natural dried wood and which predominantly consists of lignocellulose.   | Crude fibre |
|--------|-------------------------------|--|-------------|
| 7.9.1  | Liquorice root                | Root of <i>Glycyrrhiza L</i> .   |             |
| 7.10.1 | Mint                          | Product obtained from drying aerial parts of<br>the plants <i>Mentha apicata, Mentha piperita</i><br>or <i>Mentha viridis</i> (L.), regardless of their<br>presentation. |             |
| 7.11.1 | Spinach, dried                | Product obtained from drying the plant <i>Spinacia oleracea</i> L., regardless of its presentation.  |             |
| 7.12.1 | Mojave yucca                  | Pulverized Yucca schidigera Roezl.   | Crude fibre |
| 7.13.1 | Vegetal carbon;<br>[charcoal] | Product obtained by carbonisation of organic vegetal material.   | Crude fibre |
| 7.14.1 | Wood <sup>6</sup>             | Chemically untreated mature wood or wood fibres.   | Crude fibre |

| Number | Name  | Description  | Compulsory<br>declarations                                |
|--------|---|--|---|
| 8.1.1  | Butter and butter<br>products                   | Butter and products obtained by production<br>or processing of butter (e.g. butter serum),<br>unless listed separately.<br>Product obtained by churning butter out of  | Crude protein<br>Crude fat<br>Lactose<br>Moisture if > 6% |
| 8.2.1  | Buttermilk / Buttermilk<br>powder <sup>11</sup> | <ul> <li>cream or similar processes.</li> <li>Concentration and/or drying may be applied.</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> <li>up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</li> <li>up to 0.4% emulsifier lecithin.</li> </ul> </li> </ul> | Crude protein<br>Crude fat<br>Lactose<br>Moisture if > 6% |
| 8.3.1  | Casein  | buttermilk by drying casein precipitated by means of acids or rennet.  | Crude protein<br>Moisture if > 10%                        |
| 8.4.1  | Caseinate                                       | Product extracted from curd or casein through use of neutralizing substances and drying.   | Crude protein<br>Moisture if > 10%                        |
| 8.5.1  | Cheese and cheese<br>products                   | Cheese and products made of cheese and of milk based products.   | Crude protein<br>Crude fat                                |
| 8.6.1  | Colostrum / Colostrum<br>powder                 | The fluid secreted by the mammary glands<br>of milk-producing animals up to five days<br>post parturition. Concentration and/or drying<br>may be applied.  | Crude protein   |

<sup>&</sup>lt;sup>11</sup> Expressions are not synonymous and differ mainly in their moisture content, respective expression to be used as appropriate.

| 8.7.1  | Dairy by-products                                      | <ul> <li>Products obtained when producing dairy products (including, but not limited to: former dairy foodstuffs, centrifuge or separator sludge, white water, milk minerals).</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> <li>up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</li> <li>up to 0.4% emulsifier lecithin.</li> </ul> </li> </ul> | Moisture<br>Crude protein<br>Crude fat<br>Total sugars    |
|--------|--|--|---|
| 8.8.1  | Fermented milk<br>products                             | Products obtained by fermentation of milk (e.g. yoghurt etc.).   | Crude protein<br>Crude fat                                |
| 8.9.1  | Lactose  | The sugar separated from milk or whey by purification and drying.  | Lactose<br>Moisture if > 5%                               |
| 8.10.1 | Milk / Milk powder <sup>11</sup>                       | Normal mammary secretion obtained from<br>one or more milkings. Concentration and/or<br>drying may be applied.   | Crude protein<br>Crude fat<br>Moisture if > 5%            |
| 8.11.1 | Skimmed milk /<br>Skimmed milk<br>powder <sup>11</sup> | Milk whose fat content has been reduced by separation.<br>Concentration and/or drying may be applied.  | Crude protein<br>Moisture if > 5%                         |
| 8.12.1 | Milk fat   | Product obtained by skimming milk.   | Crude fat   |
| 8.13.1 | Milk protein powder                                    | Product obtained by drying the protein compounds extracted from milk by chemical or physical treatment.  | Crude protein<br>Moisture if > 8%                         |
| 8.14.1 | Condensed and<br>evaporated milk and<br>their products | Condensed and evaporated milk and products obtained by production or processing of these products.   | Crude protein<br>Crude fat<br>Moisture if > 5%            |
| 8.15.1 | Milk permeate / Milk<br>permeate powder <sup>11</sup>  | Product obtained by filtration (ultra, nano or<br>micro) of milk (penetrating through the<br>membrane) and from which lactose may<br>have been partly removed.<br>Reverse osmosis and concentration and/or<br>drying may be applied.   | Crude ash<br>Crude protein<br>Lactose<br>Moisture if > 8% |

|        |  |  | Crudo protoin   |
|--------|--|--|---|
|        | Mills understade / NAIL                                      | Product obtained by filtration (ultra, nano or   | Crude protein<br>Crude ash                                |
| 8.16.1 | Milk retentate / Milk<br>retentate powder <sup>11</sup>      | micro) of milk (withheld by the membrane).   | Lactose   |
|        |  | Concentration and/or drying may be applied.  | Moisture if $> 8\%$                                       |
| 8.17.1 | Whey / Whey powder <sup>11</sup>                             | <ul> <li>Product of cheese, quark or casein manufacturing or similar processes.</li> <li>Concentration and/or drying may be applied.</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> <li>up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</li> </ul> </li> </ul> | Crude protein<br>Lactose<br>Moisture if > 8%<br>Crude ash |
| 8.18.1 | Delactosed whey /<br>Delactosed whey<br>powder <sup>11</sup> | <ul> <li>up to 0.4% emulsifier lecithin.</li> <li>Whey from which the lactose has been partly removed.</li> <li>Concentration and/or drying may be applied.</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> <li>up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-</li> </ul> </li> </ul>   | Crude protein<br>Lactose<br>Moisture if > 8%<br>Crude ash |

|        |  | triphosphate, tri-calcium-phosphate,   |                                   |
|--------|--|--|-----------------------------------|
|        |  | used to improve powder flowing properties;   |                                   |
|        |  | - up to 0.4% emulsifier lecithin.  |                                   |
|        |  | Product obtained by drying the whey protein<br>compounds extracted from whey by<br>chemical or physical treatment.<br>Concentration and/or drying may be applied.<br>Where specifically prepared as feed<br>material, may contain:                         |                                   |
|        |  | <ul> <li>up to 0.5% phosphates e.g.<br/>polyphosphates (e.g. sodium<br/>hexametaphosphate), diphosphates (e.g.<br/>tetrasodiumpyrophosphate), used to<br/>decrease the viscosity and to stabilise<br/>protein during processing;</li> </ul>                |                                   |
| 8.19.1 | Whey protein / Whey<br>protein powder <sup>11</sup>  | <ul> <li>up to 0.3% acids e.g. organic acids:<br/>citric acid, formic acid, propionic acid,<br/>Inorganic acids: sulphuric acid,<br/>hydrochloric acid, phosphoric acid,<br/>used for pH adjustments in many parts<br/>of production processes;</li> </ul> | Crude protein<br>Moisture if > 8% |
|        |  | <ul> <li>up to 0,5 % akalis e.g. sodium,<br/>potassium, calcium, magnesium<br/>hydroxides, used for pH adjustments in<br/>many parts of production processes;</li> </ul>   |                                   |
|        |  | <ul> <li>up to 2% free-flowing agents e.g.<br/>silicium dioxide, penta-sodium-<br/>triphosphate, tri-calcium-phosphate,<br/>used to improve powder flowing<br/>properties;</li> </ul>  |                                   |
|        |  | - up to 0.4% emulsifier lecithin.  |                                   |
|        |  | Whey from which the lactose and minerals have been partly removed.   |                                   |
|        | Demineralised,<br>delactosed whey /<br>Demineralised,<br>delactosed whey<br>powder <sup>11</sup> | Concentration and/or drying may be applied.  |                                   |
|        |  | Where specifically prepared as feed material, may contain:   |                                   |
| 8.20.1 |  | - up to 0.5% phosphates e.g.<br>polyphosphates (e.g. sodium<br>hexametaphosphate), diphosphates (e.g.<br>tetrasodiumpyrophosphate), used to<br>decrease the viscosity and to stabilise<br>protein during processing;                                       | Crude protein<br>Lactose          |
|        |  | <ul> <li>up to 0.3% acids e.g. organic acids:<br/>citric acid, formic acid, propionic acid,<br/>Inorganic acids: sulphuric acid,<br/>hydrochloric acid, phosphoric acid,<br/>used for pH adjustments in many parts<br/>of production processes;</li> </ul> | Crude ash<br>Moisture if > 8%     |
|        |  | <ul> <li>up to 0,5 % akalis e.g. sodium,<br/>potassium, calcium, magnesium<br/>hydroxides, used for pH adjustments in<br/>many parts of production processes;</li> </ul>   |                                   |
|        |  | - up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-  |                                   |

|        |   | triphosphate, tri-calcium-phosphate,  |   |
|--------|---|---|---|
|        |   | used to improve powder flowing properties;  |   |
|        |   | - up to 0.4% emulsifier lecithin.   |   |
| 8.21.1 | Whey permeate / Whey<br>permeate powder <sup>11</sup>   | <ul> <li>Product obtained by filtration (ultra, nano or micro) of whey (penetrating through the membrane) and from which lactose may have been partly removed. Reverse osmosis and concentration and/or drying may be applied.</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, lnorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> <li>up to 2% free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</li> <li>up to 0.4% emulsifier lecithin.</li> </ul> </li> </ul> | Crude ash<br>Crude protein<br>Lactose<br>Moisture if > 8% |
|        |   | Product obtained by filtration (ultra, nano or micro) of whey (withheld by the membrane).   |   |
| 8.22.1 | Whey retentate / Whey<br>retentate powder <sup>11</sup> | <ul> <li>Concentration and/or drying may be applied.</li> <li>Where specifically prepared as feed material, may contain: <ul> <li>up to 0.5% phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</li> <li>up to 0.3% acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</li> <li>up to 0,5 % akalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</li> </ul> </li> </ul>  | Crude protein<br>Crude ash<br>Lactose<br>Moisture if > 8% |

| <ul> <li>up to 2% free-flowing agents e.g.<br/>silicium dioxide, penta-sodium-<br/>triphosphate, tri-calcium-phosphate,<br/>used to improve powder flowing<br/>properties;</li> </ul> |  |
|---|--|
| - up to 0.4% emulsifier lecithin.   |  |

|        | . Land animal products and products derived thereof |  |   |  |
|--------|---|--|---|--|
| Number | Name  | Description  | Compulsory<br>declarations                                  |  |
| 9.1.1  | Animal by-products <sup>12</sup>                    | Whole or parts of warm-blooded land animals, fresh, frozen, cooked, acid treated or dried.   | Crude protein<br>Crude fat<br>Moisture if > 8%              |  |
| 9.2.1  | Animal fat <sup>13</sup>                            | Product composed of fat from warm-blooded<br>land animals.<br>If extracted with solvents, may contain up to<br>0.1% hexane.  | Crude fat<br>Moisture if > 1%                               |  |
| 9.3.1  | Apiculture by-<br>products                          | Honey, beeswax, royal jelly, propolis, pollen, processed or unprocessed.   | Total sugar calculated as sucrose                           |  |
| 9.4.1  | Processed animal<br>protein <sup>13</sup>           | Product obtained by heating, drying and grinding whole or parts of warm-blooded land animals from which the fat may have been partially extracted or physically removed.<br>If extracted with solvents, may contain up to 0.1% hexane. | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8% |  |
| 9.5.1  | Gelatine process<br>derived proteins <sup>13</sup>  | Dried animal proteins of food quality derived from gelatine production.  | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8% |  |
| 9.6.1  | Hydrolysed animal proteins <sup>13</sup>            | Hydrolysed proteins obtained by heat and/or pressure, chemical, microbiological or enzymatic hydrolysis of animal protein.   | Crude protein<br>Moisture if > 8%                           |  |
| 9.7.1  | <b>Blood meal</b> <sup>13</sup>                     | Product derived from the heat treatment of blood of slaughtered warm-blooded animals.  | Crude protein<br>Moisture if > 8%                           |  |

9. Land animal products and products derived thereof

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<sup>&</sup>lt;sup>12</sup> Without prejudice to mandatory requirements concerning commercial documents and health certificates for animal by-products and derived products as laid down in Regulation (EC) No 142/2011 (Annex VIII, Chapter III), if the catalogue is used for labelling purposes the name shall be replaced as appropriate by

<sup>-</sup> the animal species and

<sup>-</sup> the part of the animal product (e.g. liver, meat (only if skeletal muscle)), and/or

<sup>-</sup> the naming of the animal species not used in respect of the ban on intra-species recycling (e.g. poultry-free) or

supplemented as appropriate by

<sup>-</sup> the animal species and/or

<sup>-</sup> the part of the animal product (e.g. liver, meat (only if skeletal muscle)), and/or

<sup>-</sup> the naming of the animal species not used in respect of the ban on intra-species recycling.

Without prejudice to mandatory requirements concerning commercial documents and health certificates for animal by-products and derived products as laid down in Regulation (EC) No 142/2011 (Annex VIII, Chapter III), if the catalogue is used for labelling purposes the name shall be supplemented as appropriate by

<sup>-</sup> the animal species processed (e.g. porcine, ruminant, avian) and/or

<sup>-</sup> the material processed (e.g. bone) and/or

<sup>-</sup> the process used (e.g. defatted, refined) and/or

<sup>-</sup> the naming of the animal species not used in respect of the ban on intra-species recycling (e.g. poultry-free).

| r      |  |   |   |
|--------|--|---|---|
| 9.8.1  | Blood products <sup>12</sup>               | Products derived from blood or fractions of<br>blood of slaughtered warm-blooded animals;<br>they include dried/frozen/liquid plasma, dried<br>whole blood, dried/frozen/liquid red cells or<br>fractions thereof and mixtures. | Crude protein<br>Moisture if > 8%                           |
| 9.9.1  | Catering reflux<br>[Catering recycling]    | All waste food containing material of animal<br>origin including used cooking oil originating<br>in restaurants, catering facilities and kitchens,<br>including central kitchens and household<br>kitchens.                     | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8% |
| 9.10.1 | <b>Collagen</b> <sup>13</sup>              | Protein-based product derived from animal bones, hides, skins and tendons.  | Crude protein<br>Moisture if > 8%                           |
| 9.11.1 | Feather meal                               | Product obtained by drying and grinding feathers of slaughtered animals, it may be hydrolysed.  | Crude protein<br>Moisture if > 8%                           |
| 9.12.1 | Gelatine <sup>13</sup>                     | Natural, soluble protein, gelling or non-<br>gelling, obtained by the partial hydrolysis of<br>collagen produced from bones, hides and<br>skins, tendons and sinews of animals.   | Crude protein<br>Moisture if > 8%                           |
| 9.13.1 | <b>Greaves</b> <sup>13</sup>               | Product obtained from the manufacture of tallow, lard and other extracted or physically removed fats of animal origin, fresh, frozen or dried.<br>If extracted with solvents, may contain up to 0.1%hexane.                     | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8% |
| 9.14.1 | Products of animal origin <sup>12</sup>    | Former foodstuff containing animal products;<br>with or without treatment such as fresh,<br>frozen, dried.  | Crude protein<br>Crude fat<br>Moisture if > 8%              |
| 9.15.1 | Eggs                                       | Whole eggs of <i>Gallus gallus</i> L. with or without shells.   |   |
| 9.15.2 | Albumen                                    | Product obtained from eggs after the separation of shells and yolk, pasteurised and possibly denatured.   | Crude protein<br>Method of denaturation<br>if applicable    |
| 9.15.3 | Egg products, dried                        | Products consisting of pasteurised dried<br>eggs, without shells or a mixture of different<br>proportions of dried albumen and dried egg<br>yolk.   | Crude protein<br>Crude fat<br>Moisture if > 5%              |
| 9.15.4 | Egg powder sugared                         | Dried whole or parts of sugared eggs.   | Crude protein<br>Crude fat<br>Moisture if > 5%              |
| 9.15.5 | Egg shells, dried                          | Product obtained from poultry eggs, after the content (yolk and albumen) has been removed. Shells are dried.  | Crude ash   |
| 9.16.1 | Terrestrial<br>invertebrates <sup>12</sup> | Whole or parts of terrestrial invertebrates, in<br>all their life stages, other than species<br>pathogenic to humans and animals; with or<br>without treatment such as fresh, frozen, dried.                                    |   |
| 9.17.1 | Chondroitin sulphate                       | Product obtained by extraction from tendons,<br>bones and other animal tissues containing<br>cartilage and soft connective tissues.   | Sodium  |

| Number | Name   | Description   | Compulsory declarations   |
|--------|--|---|---|
| 10.1.1 | <b>Aquatic invertebrates</b> <sup>10</sup>     | Whole or parts of marine or freshwater<br>invertebrates, in all their life stages, other<br>than species pathogenic to humans and<br>animals; with or without treatment such as<br>fresh, frozen, dried |   |
| 10.2.1 | By-products from aquatic animals <sup>10</sup> | Originating from establishments or plants<br>preparing or manufacturing products for<br>human consumption; with or without<br>treatment such as fresh, frozen, dried.                                   | Crude protein<br>Crude fat<br>Crude ash                               |
| 10.3.1 | Crustacea meal                                 | Product produced by heating, pressing and<br>drying whole or parts of crustacean<br>including wild and farmed shrimp.   | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |
| 10.4.1 | Fish <sup>14</sup>                             | Whole or parts of fish: fresh, frozen, cooked, acid treated or dried.   | Crude protein<br>Moisture if > 8%                                     |
| 10.4.2 | Fish meal <sup>14</sup>                        | Product obtained by heating, pressing and<br>drying whole or parts of fish and to which<br>fish solubles may have been re-added prior<br>to drying.   | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |
| 10.4.3 | Fish solubles                                  | Condensed product obtained during manufacture of fishmeal which has been separated and stabilised by acidification or drying.   | Crude protein<br>Crude fat<br>Moisture if > 5%                        |
| 10.4.4 | Fish protein,<br>hydrolysed                    | Product obtained by acid hydrolysis of whole or parts of fish often concentrated by drying.   | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |
| 10.4.5 | Fishbone meal                                  | Product obtained by heating, pressing and drying parts of fish. It consists principally of fishbone.  | Crude ash   |
| 10.4.6 | Fish oil                                       | Oil obtained from fish or parts of fish<br>followed by centrifugation to remove water<br>(may include species specific details e.g.<br>cod liver oil).  | Crude fat<br>Moisture if > 1%   |
| 10.4.7 | Fish oil, hydrogenated                         | Oil obtained from hydrogenation of fish oil.  | Moisture if > 1%  |
| 10.5.1 | Krill oil                                      | Oil obtained from cooked and pressed<br>marine planktonic krill followed by<br>centrifugation to remove water.  | Moisture if > 1%  |
| 10.5.2 | Krill protein<br>concentrate, hydrolysed       | Product obtained by the enzymatic hydrolysis of whole or parts of krill often concentrated by drying.   | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |

<sup>&</sup>lt;sup>14</sup> The name shall be supplemented by the species when produced from farmed fish.

| 10.6.1 | Marine annelid meal        | Product produced by heating and drying<br>whole or parts of marine annelids, including<br>Nereis virens.M. Sars. | Fat<br>Ash if >20%<br>Moisture if > 8%                                |
|--------|----------------------------|--|---|
| 10.7.1 | Marine zooplankton<br>meal | Product produced by heating, pressing and drying marine zooplankton e.g. krill.                                  | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |
| 10.7.2 | Marine zooplankton oil     | Oil obtained from cooked and pressed<br>marine zooplankton followed by<br>centrifugation to remove water.        | Moisture if > 1%  |
| 10.8.1 | Mollusc meal               | Product produced by heating and drying<br>whole or parts of molluscs including squid<br>and bi-valves.           | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |
| 10.9.1 | Squid meal                 | Product produced by heating, pressing and drying whole squid or parts of squid.                                  | Crude protein<br>Crude fat<br>Crude ash, if > 20%<br>Moisture if > 8% |

| Number   | Name   | Description  | Compulsory  |
|----------|--|--|---|
| Nulliper | Iname  | Description  | declarations  |
| 11.1.1   | Calcium<br>carbonate <sup>15</sup> ;<br>[Limestone]    | <ul><li>Product obtained by grinding sources of calcium carbonate (CaCO<sub>3</sub>), such as limestone or by precipitation from acid solution.</li><li>May contain up to 0.25% propylene glycol</li><li>May contain up to 0.1% grinding aids.</li></ul> | Calcium, Ash<br>insoluble in HCl if ><br>5%               |
| 11.1.2   | Calcareous<br>marine shells                            | Product of natural origin, obtained from marine shells, ground or granulated, such as oyster shells or seashells.  | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.3   | Calcium and<br>magnesium<br>carbonate                  | Natural mixture of calcium carbonate (CaCO <sub>3</sub> ) and magnesium carbonate (MgCO <sub>3</sub> ). May contain up to $0.1\%$ grinding aids.   | Calcium,<br>Magnesium, Ash<br>insoluble in HCl if<br>> 5% |
| 11.1.4   | Maerl  | Product of natural origin obtained from calcareous marine algae, ground or granulated.   | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.5   | Lithothamn   | Product of natural origin obtained from calcareous marine algae ( <i>Phymatolithon calcareum</i> (Pall.)), ground or granulated.   | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.6   | Calcium chloride                                       | Calcium chloride (CaCl <sub>2</sub> ). May contain up to 0.2% barium sulphate  | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.7   | Calcium<br>hydroxide                                   | Calcium hydroxide (Ca(OH) <sub>2</sub> ).<br>May contain up to $0.1\%$ grinding aids.  | Calcium, Ash<br>insoluble in HCl if ><br>5%               |
| 11.1.8   | Calcium<br>sulphate<br>anhydrous                       | Calcium sulphate anhydrous (CaSO <sub>4</sub> ) obtained by grinding calcium sulphate anhydrous or dehydration of calcium sulphate dihydrate.  | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.9   | Calcium<br>sulphate<br>hemihydrate                     | Calcium sulphate hemihydrate (CaSO <sub>4</sub> x $\frac{1}{2}$ H <sub>2</sub> O) obtained by partially dehydrating calcium sulphate dihydrate.  | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.10  | Calcium<br>sulphate<br>dihydrate                       | Calcium sulphate dihydrate (CaSO <sub>4</sub> x 2H <sub>2</sub> O) obtained<br>by grinding calcium sulphate dihydrate or hydration of<br>calcium sulphate hemihydrate.   | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.11  | <b>Calcium salts of</b><br>organic acids <sup>16</sup> | Calcium salts of edible organic acids with at least 4 carbon atoms.  | Calcium, Organic<br>acid                                  |
| 11.1.12  | Calcium oxide  | Calcium oxide (CaO) obtained from calcination of naturally occurring limestone.<br>May contain up to 0.1% grinding aids.   | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.13  | Calcium<br>gluconate                                   | Calcium salt of gluconic acid generally expressed as $Ca(C_6H_{11}O_7)_2$ and its hydrated forms.  | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |
| 11.1.15  | Calcium<br>Sulphate /<br>Carbonate                     | Product obtained during the manufacturing of sodium carbonate.   | Calcium, Ash<br>insoluble in HCl if<br>> 5%               |

## Minerals and products derived thereof 11.

<sup>15</sup> The nature of the source may be indicated additionally in the name or replace it. The name shall be amended or supplemented to specify the organic acid.

<sup>16</sup> 

| 11.1.16 | Calcium pidolate  | L-calcium pidolate ( $C_5H_6CaNO_3$ ). May contain up to 1.5% glutamic acid and related substances.  | Calcium, Ash<br>insoluble in HCl if<br>> 5%  |
|---------|---|--|--|
| 11.1.17 | Calcium<br>carbonate-<br>magnesium oxide  | Product obtained by heating of natural calcium and magnesium containing substances like dolomite. May contain up to 0.1% grinding aids.  | Calcium, magnesium   |
| 11.2.1  | Magnesium<br>oxide  | Calcined magnesium oxide (MgO) not less than 70% MgO.  | Magnesium, Ash<br>insoluble in HCl if<br>>15%  |
| 11.2.2  | Magnesium<br>sulphate<br>heptahydrate   | Magnesium sulphate (MgSO <sub>4</sub> x 7 H <sub>2</sub> O).   | Magnesium, Sulphur,<br>Ash insoluble in HCl<br>if > 15%  |
| 11.2.3  | Magnesium<br>sulphate<br>monohydrate  | Magnesium sulphate (MgSO <sub>4</sub> x H <sub>2</sub> O).   | Magnesium, Sulphur,<br>Ash insoluble in HCl<br>if > 15%  |
| 11.2.4  | Magnesium<br>sulphate<br>anhydrous  | Anhydrous magnesium sulphate (MgSO <sub>4</sub> ).   | Magnesium, Sulphur,<br>ash insoluble in HCl<br>if > 10%  |
| 11.2.5  | Magnesium<br>propionate   | Magnesium propionate ( $C_6H_{10}MgO_4$ ).   | Magnesium  |
| 11.2.6  | Magnesium<br>chloride   | Magnesium chloride (MgCl <sub>2</sub> ) or solution obtained by natural concentration of sea water after deposit of sodium chloride.   | Magnesium,<br>Chlorine, ash<br>insoluble in HCl if<br>> 10%  |
| 11.2.7  | Magnesium<br>carbonate  | Natural magnesium carbonate (MgCO <sub>3</sub> ).  | Magnesium, ash<br>insoluble in HCl if<br>> 10%   |
| 11.2.8  | Magnesium<br>hydroxide  | Magnesium hydroxide (Mg(OH) <sub>2</sub> ).  | Magnesium, ash<br>insoluble in HCl if<br>> 10%   |
| 11.2.9  | Magnesium<br>potassium<br>sulphate  | Magnesium potassium sulphate.  | Magnesium,<br>Potassium, ash<br>insoluble in HCl if<br>> 10%   |
| 11.2.10 | Magnesium salts of organic acids <sup>16</sup>                                    | Magnesium salts of edible organic acids with at least 4 carbon atoms.  | Magnesium, organic acid  |
| 11.3.1  | Dicalcium<br>phosphate <sup>17</sup> ;<br>[Calcium<br>hydrogen<br>orthophosphate] | Calcium mono-hydrogen phosphate obtained from<br>bones or inorganic sources (CaHPO <sub>4</sub> x H <sub>2</sub> O)<br>Ca/P > 1.2<br>May contain up to 3% chloride expressed as NaCl                     | Calcium, Total<br>phosphorus, P<br>insoluble in 2% citric<br>acid if > 10%, Ash<br>insoluble in HCl if<br>> 5% |
| 11.3.2  | Mono-dicalcium<br>phosphate   | Product obtained chemically and composed of dicalcium phosphate and mono-calcium phosphate (CaHPO <sub>4</sub> . Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> x H <sub>2</sub> O) $0.8 < Ca/P < 1.3$ | Total phosphorus,<br>Calcium, P insoluble<br>in 2% citric acid if<br>> 10%                                     |

<sup>&</sup>lt;sup>17</sup> The manufacturing process may be included in the name.

| 11.3.3  | Mono-calcium<br>phosphate;<br>[Calcium<br>tetrahydrogen<br>diorthophosphat<br>e] | Calcium-bis dihydrogenphosphate (Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> x H <sub>2</sub> O)<br>Ca/P <0.9 | Total phosphorus,<br>Calcium, P insoluble<br>in 2% citric acid if<br>> 10%  |
|---------|--|--|---|
| 11.3.4  | Tri-calcium<br>phosphate;<br>[Tricalcium<br>orthophosphate]                      | Tri-calcium phosphate from bones or inorganic sources $(Ca_3(PO_4)_2 \times H_2O)$<br>Ca/P > 1.3                   | $\begin{array}{c} \text{Calcium,} & \text{Total} \\ \text{phosphorus,} & \text{P} \\ \text{insoluble in 2\% citric} \\ \text{acid if} > 10\% \end{array}$ |
| 11.3.5  | Calcium-<br>magnesium<br>phosphate   | Calcium-magnesium phosphate.   | Calcium,<br>Magnesium, Total<br>phosphorus, P<br>insoluble in 2% citric<br>acid if > 10%  |
| 11.3.6  | Defluorinated<br>phosphate   | Natural phosphate, calcined and further heat treated than for the removal of impurities necessary.                 | Total phosphorus,<br>Calcium, Sodium,<br>P insoluble in $2\%$<br>citric acid if > 10%,<br>Ash insoluble in HCI<br>if > 5%                                 |
| 11.3.7  | Di-calcium<br>pyrophosphate;<br>[Dicalcium<br>diphosphate]                       | Dicalcium pyrophosphate.   | Total phosphorus,<br>Calcium, P insoluble<br>in 2% citric acid if<br>> 10%  |
| 11.3.8  | Magnesium<br>phosphate   | Product consisting of monobasic and/or di-basic and/or tri-basic magnesium phosphate.                              | Total phosphorus,<br>Magnesium, P<br>insoluble in 2% citric<br>acid if > 10%, Ash<br>insoluble in HCl if<br>> 10%   |
| 11.3.9  | Sodium-calcium-<br>magnesium<br>phosphate  | Product consisting of sodium-calcium-magnesium phosphate.  | Total phosphorus,<br>Magnesium,<br>Calcium, Sodium, P<br>insoluble in 2% citric<br>acid if > 10%  |
| 11.3.10 | Mono-sodium<br>phosphate;<br>[Sodium<br>dihydrogen<br>orthophosphate]            | Mono-sodium phosphate<br>(NaH <sub>2</sub> PO <sub>4</sub> x H <sub>2</sub> O)                                     | Total phosphorus,<br>Sodium, P insoluble<br>in 2% citric acid if<br>> 10%   |
| 11.3.11 | Di-sodium<br>phosphate;<br>[Disodium<br>hydrogen<br>orthophosphate]              | Disodium phosphate (Na <sub>2</sub> HPO <sub>4</sub> x H <sub>2</sub> O)   | Total phosphorus,<br>Sodium, P insoluble<br>in 2% citric acid if<br>> 10%   |
| 11.3.12 | Tri-sodium<br>Phosphate;<br>[Trisodium<br>orthophosphate]                        | Tri-sodium phosphate (Na <sub>3</sub> PO <sub>4</sub> )  | Total phosphorus,<br>Sodium, P insoluble<br>in 2% citric acid if ><br>10%   |
| 11.3.13 | Sodium<br>pyrophosphate;<br>[Tetrasodium<br>diphosphate]                         | Sodium pyrophosphate (Na <sub>4</sub> P <sub>2</sub> O <sub>7</sub> ).   | Total phosphorus,<br>Sodium, P insoluble<br>in 2% citric acid if<br>> 10%   |

| 11.3.14 | Mono-potassium<br>phosphate;<br>[Potassium<br>dihydrogen<br>orthophosphate]   | Mono-potassium phosphate (KH <sub>2</sub> PO <sub>4</sub> x H <sub>2</sub> O)   | Total phosphorus,<br>Potassium, P<br>insoluble in 2% citric<br>acid if > 10%               |
|---------|---|---|--|
| 11.3.15 | Di-potassium<br>phosphate; [Di-<br>potassium<br>hydrogen<br>orthophosphate]   | Di-potassium phosphate (K <sub>2</sub> HPO <sub>4</sub> x H <sub>2</sub> O)   | Total phosphorus,<br>Potassium, P<br>insoluble in 2% citric<br>acid if > 10%               |
| 11.3.16 | Calcium sodium<br>phosphate   | Calcium sodium phosphate (CaNaPO <sub>4</sub> ).  | Total phosphorus,<br>Calcium, Sodium, P<br>insoluble in 2% citric<br>acid if > 10%         |
| 11.3.17 | Mono-<br>ammonium<br>phosphate;<br>[Ammonium<br>dihydrogen<br>orthophosphate] | Mono-ammonium phosphate (NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> )   | Total nitrogen, Total<br>phosphorus, P<br>insoluble in 2% citric<br>acid if > 10%          |
| 11.3.18 | Di-ammonium<br>phosphate;<br>[Diammonium<br>hydrogen<br>orthophosphate]       | Di-ammonium phosphate ((NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub> )   | TotalnitrogenTotalphosphorusPinsolublein2%citric acid if > 10%                             |
| 11.3.19 | Sodium tri-<br>polyphosphate;<br>[Penta sodium<br>triphosphate]               | Sodium tri-polyphosphate (Na <sub>5</sub> P <sub>3</sub> O <sub>9</sub> ).  | Total phosphorus<br>Sodium P insoluble<br>in 2% citric acid if<br>> 10%                    |
| 11.3.20 | Sodium<br>magnesium<br>phosphate  | Sodium-magnesium phosphate (MgNaPO <sub>4</sub> ).  | Total phosphorus,<br>Magnesium, Sodium,<br>P insoluble in $2\%$<br>citric acid if > $10\%$ |
| 11.3.21 | Magnesium<br>hypophosphite  | Magnesium hypophosphite (Mg(H <sub>2</sub> PO <sub>2</sub> ) <sub>2</sub> x 6H <sub>2</sub> O)  | Magnesium<br>Total phosphorus<br>P insoluble in 2%<br>citric acid if > 10%                 |
| 11.3.22 | Degelatinised<br>bone meal  | Degelatinised, sterilised and ground bones from which<br>the fat has been removed.  | Total phosphorus,<br>Calcium, Ash<br>insoluble in HCl if<br>> 10%                          |
| 11.3.23 | Bone ash  | Mineral residues from the incineration, combustion or gasification of animal by-products.   | Total phosphorus,<br>Calcium, Ash<br>insoluble in HCl if<br>> 10%                          |
| 11.3.24 | Calcium<br>polyphosphate  | Heterogeneous mixtures of calcium salts of condensed<br>polyphosphoric acids of general formula<br>H(n+2)PnO(3n+1) where 'n' is not less than 2 | Total phosphorus,<br>calcium, P insoluble<br>in 2 % citric acid if<br>> 10 %               |
| 11.3.25 | Calcium<br>dihydrogen<br>diphosphate  | Mono-calcium dihydrogen pyrophosphate(CaH <sub>2</sub> P <sub>2</sub> O <sub>7</sub> ).   | Total phosphorus,<br>Calcium, P insoluble<br>in 2 % citric acid if<br>> 10 %               |

| 11.3.26 | Magnesium acid<br>pyrophosphate  | Magnesium acid pyrophosphate $(MgH_2P_2O_7.)$<br>Produced from purified phosphoric acid and purified<br>magnesium hydroxide or magnesium oxide by<br>evaporation of water and condensation of the<br>orthophosphate to diphosphate. | Total phosphorus,<br>Magnesium, P<br>insoluble in 2 % citric<br>acid if $> 10$ %       |
|---------|--|---|--|
| 11.3.27 | Disodium<br>dihydrogen<br>diphosphate  | Disodium dihydrogen diphosphate (Na <sub>2</sub> H <sub>2</sub> P <sub>7</sub> O <sub>7</sub> ).  | Total phosphorus,<br>Calcium, P insoluble<br>in 2 % citric acid if ><br>10 %           |
| 11.3.28 | Tri-sodium<br>diphosphate  | Trisodium monohydrogen diphosphate (anhydrous:<br>Na <sub>3</sub> HP <sub>2</sub> O <sub>7;</sub> monohydrate: Na <sub>3</sub> HP <sub>2</sub> O <sub>7</sub> x H <sub>2</sub> O)   | Total phosphorus,<br>sodium, P insoluble<br>in 2 % citric acid if<br>> 10 %            |
| 11.3.29 | Sodium<br>polyphosphate;<br>[Sodium<br>hexameta-<br>phosphate]                         | Heterogeneous mixtures of sodium salts of linear condensed polyphosphoric acids of general formula $H(n+2)PnO(3n+1)$ where 'n' is not less than 2   | Total phosphorus,<br>sodium, P insoluble<br>in 2 % citric acid if<br>> 10 %            |
| 11.3.30 | Tri-potassium<br>phosphate   | Tripotassium monophosphate (anhydrous: $K_3PO_4$ ;<br>hydrated: $K_3PO_4 x$ n H <sub>2</sub> O (n=1 or 3)).   | Total phosphorus,<br>Potassium, P<br>insoluble in 2 % citric<br>acid if $> 10$ %       |
| 11.3.31 | Tetrapotassium<br>di-phosphate   | Tetrapotassium pyrophosphate K <sub>4</sub> P <sub>2</sub> O <sub>7</sub> )   | Total phosphorus,<br>Calcium, P insoluble<br>in 2 % citric acid if<br>> 10 %           |
| 11.3.32 | Pentapotassium<br>tri-phosphate  | Pentapotassium tri-polyphosphate (K <sub>5</sub> P <sub>3</sub> O <sub>10</sub> )   | Total phosphorus,<br>Calcium, P insoluble<br>in 2 % citric acid if<br>> 10 %           |
| 11.3.33 | Potassium<br>polyphosphate   | Heterogeneous mixtures of potassium salts of linear condensed polyphosphoric acids of general formula $H(n+2)PnO(3n+1)$ where 'n' is not less than 2  | Total phosphorus,<br>Potassium, P<br>insoluble in 2 % citric<br>acid if $> 10$ %       |
| 11.3.34 | Calcium sodium<br>polyphosphate  | Calcium sodium polyphosphate.   | Total phosphorus,<br>sodium, calcium, P<br>insoluble in 2 % citric<br>acid if $> 10$ % |
| 11.4.1  | Sodium<br>chloride <sup>15</sup>   | Sodium chloride (NaCl) or product obtained by<br>evaporative crystallization from brine (vacuum salt) or<br>evaporation of seawater (marine salt) or grinding rock<br>salt.   | Sodium, Ash<br>insoluble in HCl if<br>>10%   |
| 11.4.2  | Sodium<br>bicarbonate<br>[Sodium<br>hydrogen-<br>carbonate]                            | Sodium bicarbonate (NaHCO <sub>3</sub> )  | Sodium, Ash<br>insoluble in HCl if<br>> 10%  |
| 11.4.3  | Sodium/ammoni-<br>um (bi)carbonate<br>[Sodium/ammoni<br>um<br>(hydrogen)carbo<br>nate] | Product obtained during the production of sodium carbonate and sodium bicarbonate, with traces of ammonium bicarbonate (ammonium bicarbonate max. 5%).  | Sodium, Ash<br>insoluble in HCl if<br>> 10%  |

|        |   |  | 11  |
|--------|---|--|---|
| 11.4.4 | Sodium<br>carbonate   | Sodium carbonate (Na <sub>2</sub> CO <sub>3</sub> )  | Sodium, Ash<br>insoluble in HCl if<br>>10%              |
| 11.4.5 | Sodium<br>sesquicarbonate<br>[Trisodium<br>hydrogendicarbo<br>nate] | Sodium sesquicarbonate (Na <sub>3</sub> H(CO <sub>3</sub> ) <sub>2</sub> )   | Sodium, Ash<br>insoluble in HCl if<br>> 10%             |
| 11.4.6 | Sodium sulphate   | Sodium sulphate (Na <sub>2</sub> SO <sub>4</sub> ).<br>May contain up to 0.3% methionine   | Sodium, Ash<br>insoluble in HCl if<br>> 10%             |
| 11.4.7 | Sodium salts of organic acids <sup>16</sup>                         | Sodium salts of edible organic acids with at least 4 carbon atoms.   | Sodium, Organic acid                                    |
| 11.5.1 | Potassium<br>chloride   | Potassium chloride (KCl) or product obtained by grinding natural sources of potassium chloride.  | Potassium, Ash<br>insoluble in HCl if<br>> 10%          |
| 11.5.2 | Potassium<br>sulphate   | Potassium sulphate (K <sub>2</sub> SO <sub>4</sub> )   | Potassium, Ash<br>insoluble in HCl if<br>> 10%          |
| 11.5.3 | Potassium<br>carbonate  | Potassium carbonate (K <sub>2</sub> CO <sub>3</sub> ).   | Potassium, Ash<br>insoluble in HCl if<br>> 10%          |
| 11.5.4 | Potassium<br>bicarbonate<br>[Potassium<br>hydrogen<br>carbonate]    | Potassium bicarbonate (KHCO <sub>3</sub> ).  | Potassium, Ash<br>insoluble in HCl if<br>> 10%          |
| 11.5.5 | <b>Potassium salts</b><br>of organic acids <sup>16</sup>            | Potassium salts of edible organic acids with at least 4 carbon atoms.  | Potassium, Organic acid                                 |
| 11.6.1 | Flower of<br>sulphur  | Powder obtained from natural deposits of the mineral.<br>Also, product obtained from oil refinery production as<br>practised by sulphur manufacturers. | Sulphur   |
| 11.7.1 | Attapulgite   | Natural magnesium-aluminium-silicon mineral.   | Magnesium   |
| 11.7.2 | Quartz  | Naturally occurring mineral obtained by grinding sources of quartz.  |   |
|        |   | May contain up to $0.1\%$ grinding aids.<br>Silicon dioxide (SiO <sub>2</sub> ) obtained from the re-  |   |
| 11.7.3 | Cristobalite  | crystallisation of quartz.   |   |
|        |   | May contain up to 0.1% grinding aids.  |   |
| 11.8.1 | Ammonium<br>sulphate  | Ammonium sulphate $((NH_4)_2SO_4)$ obtained by chemical synthesis.   | Nitrogen expressed as<br>crude protein,<br>Sulphur      |
| 11.8.2 | Ammonium sulphate solution  | Ammonium sulphate in aqueous solution, containing not less than 35% Ammonium sulphate  | Nitrogen expressed as crude protein                     |
| 11.8.3 | Ammonium salts<br>of organic acids <sup>16</sup>                    | Ammonium salts of edible organic acids with at least 4 carbon atoms.   | Nitrogen expressed as<br>crude protein,<br>Organic acid |

| 11.8.4 | Ammonium<br>lactate | Ammonium lactate (CH <sub>3</sub> CHOHCOONH <sub>4</sub> ). Includes<br>the Ammonium lactate produced by fermentation with<br><i>Lactobacillus delbrueckii ssp. Bulgaricus, Lactococcus</i><br><i>lactis ssp., Leuconostoc mesenteroides, Streptococcus</i><br><i>thermophilus, Lactobacillus spp, or Bifidobacterium</i><br><i>spp.</i> , containing not less than 44% Nitrogen expressed<br>as crude protein.<br>May contain up to 0.8% phosphorus, 0.9% potassium,<br>0.7% magnesium, 0.3% sodium, 0.3% sulphates 0.1%<br>chlorides, 5% sugars and 0.1% silicone antifoam. | Nitrogen expressed as<br>crude protein, Crude<br>ash |
|--------|---------------------|---|--|
| 11.8.5 | Ammonium<br>acetate | Ammonium acetate $(CH_3COONH_4)$ in aqueous solution, containing not less than 55% Ammonium acetate)  | Nitrogen expressed as crude protein                  |

| 12. Fermentation (by-)products from microorganis |
|--|
|--|

| Number | Name   | Description   | Compulsory<br>Declarations  |
|--------|--|---|---|
| 12.1   | Products obtained from<br>the biomass of specific<br>micro-organisms grown<br>on certain substrates                        | May contain up to 0.3% antifoaming agents.<br>May contain up to 1.5% filtration/clarifying agents.<br>May contain up to 2.9% propionic acid.  | Propionic acid if > 0,5%  |
| 12.1.1 | Protein from<br>Methylophilus<br>methylotrophus  | Protein product of fermentation obtained by culture of <i>Methylophilus methylotrophus</i> (NCIMB strain 10.515) <sup>18</sup> on methanol, the crude protein is at least 68% and the reflectance index at least 50.  | Crude protein<br>Crude ash<br>Crude fat                           |
| 12.1.2 | Protein from<br>Methylococcus<br>capsulatus (Bath), Alca<br>ligenes acidovorans,<br>Bacillus brevis and<br>Bacillus firmus | Protein product of fermentation with <i>Methylococcus capsulatus (Bath)</i> (NCIMB strain 11132), <i>Alcaligenes acidovorans</i> (NCIMB strain 12387), <i>Bacillus brevis</i> (NCIMB strain 13288) and <i>Bacillus firmus</i> (NCIMB strain 13280) <sup>18</sup> on natural gas (approx. 91% methane, 5% ethane, 2% propane, 0.5% isobutane, 0.5% n-butane), ammonia, and mineral salts, the crude protein is at least 65%.   | Crude protein<br>Crude ash<br>Crude fat                           |
| 12.1.3 | Bacterial protein from<br>Escherichia coli   | Protein product, by-product from the production of amino acids by culture of <i>Escherichia coli</i> $K12^{18}$ on substrates of vegetable or chemical origin, ammonia or mineral salts; it may be hydrolysed.  | Crude protein   |
| 12.1.4 | Bacterial protein from<br>Corynebacterium<br>glutamicum  | Protein product, by-product from the production of amino acids by culture of <i>Corynebacterium glutamicum</i> <sup>18</sup> on substrates of vegetable or chemical origin, ammonia or mineral salts, it may be hydrolysed.   | Crude protein   |
| 12.1.5 | Yeasts and parts thereof<br>[Brewers'yeast] [Yeast<br>product]   | All yeasts and parts thereof obtained from <i>Saccharomyces cerevisiae, Saccharomyces carlsbergensis, Kluyveromyces lactis, Kluyveromyces fragilis, Torulaspora delbrueckii, Candida utilis/Pichia jadinii, Saccharomyces uvarum, Saccharomyces ludwigii or Brettanomyces ssp.<sup>1819</sup> on substrates mostly of vegetable_origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts.</i> | Moisture if <75% or<br>>97%<br>If moisture <75%:<br>Crude protein |

<sup>18</sup> 

The cells of the micro-organisms have been inactivated or killed. The usage name of yeast strains may vary from the scientific taxonomy, therefore, synonyms of the yeast strains listed could also be used. 19

| 12.1.6 | Mycelium silage from<br>the production of<br>penicillin   | Mycelium (nitrogenous compounds), wet<br>by-product from the production of penicillin<br>by <i>Penicillium chrysogenum</i> (ATCC48271)<br><sup>18</sup> on different sources of carbohydrates and<br>their hydrolysates, heat treated and ensiled<br>by means of <i>Lactobacillus brevis</i> ,<br><i>plantarum, sake, collinoides</i> and<br><i>Streptococcus lactis</i> to inactive the<br>penicillin, Nitrogen expressed as crude<br>protein is at least 7%.   | Nitrogen expressed as<br>crude protein<br>Crude ash                                  |
|--------|---|--|--|
| 12.1.7 | Yeasts from biodiesel<br>process  | All yeasts and parts thereof obtained from <i>Yarrowia lipolytica</i> <sup>18</sup> <sup>19</sup> grown on vegetable oils and degumming and glycerol fractions formed during biofuel production  | Moisture if <75% or<br>>97%<br>If moisture <75%:<br>Crude protein                    |
| 12.2   | Other fermentation by-<br>products  | May contain up to 0.6% antifoaming agents. May contain up to 0.5% antiscaling agents. May contain up to 0.2% sulfites  |  |
| 12.2.1 | Vinasses [condensed<br>molasses soluble]  | By-products derived from the industrial<br>processing of musts/worts issued from<br>fermentation processes such as alcohol,<br>organic acids, yeast manufacture. They are<br>composed of the liquid/paste fraction<br>obtained after the separation of the<br>fermentation musts/worts. They may also<br>include dead cells and/or parts thereof of<br>the fermentation microorganisms used. The<br>substrates are mostly of vegetable origin<br>such as molasses, sugar syrup, alcohol,<br>distillery residues, cereals and products<br>containing starch, fruit juice, whey, lactic<br>acid, sugar, hydrolyzed vegetable fibres and<br>fermentation nutrients such as ammonia or<br>mineral salts. | Crude protein<br>Substrate and indication<br>of production process as<br>appropriate |
| 12.2.2 | By-products from the<br>production of L-glutamic<br>acid  | By-products from the production of L-<br>glutamic acid by fermentation with<br><i>Corynebacterium melassecola</i> <sup>18</sup> on<br>substrate composed of sucrose, molasses,<br>starch products and their hydrolysates,<br>ammonium salts and other nitrogenous<br>compounds.  | Crude protein  |
| 12.2.3 | By-products from the<br>production of L-lysine-<br>monohydrochloride with<br><i>Brevibacterium</i><br><i>lactofermentum</i> | By-products from the production of L-<br>Lysine monohydrochloride by fermentation<br>with <i>Brevibacterium lactofermentum</i> <sup>18</sup> on<br>substrate composed of sucrose, molasses,<br>starch products and their hydrolysates,<br>ammonium salts and other nitrogenous<br>compounds.   | Crude protein  |
| 12.2.4 | By-products from the<br>production of amino<br>acids with<br><i>Corynbacterium</i><br>glutamicum                            | By-products from the production of amino<br>acids by fermentation with <i>Corynbacterium</i><br><i>glutamicum</i> <sup>18</sup> on substrate of vegetable or<br>chemical origin, ammonia or mineral salts  | Crude protein<br>Crude ash   |
| 12.2.5 | By-products from the<br>production of amino<br>acids with <i>Escherichia</i><br><i>coli</i> K12                             | By-products from the production of amino acids by fermentation with <i>Escherichia coli</i> $K12^{18}$ on substrate of vegetable or chemical origin, ammonia or mineral salts  | Crude protein<br>Crude ash   |

| 12.2.6 | By-product of enzyme<br>production with<br>Aspergillus niger | By-product of fermentation of <i>Aspergillus</i><br><i>niger</i> <sup>18</sup> on wheat and malt for enzyme<br>production | Crude protein |
|--------|--|---|---------------|
|--------|--|---|---------------|

## 13. Miscellaneous

| Number | Name  | Description   | Compulsory declarations   |
|--------|---|---|---|
| 13.1.1 | Products from the<br>bakery and pasta<br>industry   | Products obtained during and from the production of bread, biscuits, wafers or pasta. They may be dried.  | Starch<br>Total sugars, calculated<br>as sucrose,<br>Crude fat, if > 5%   |
| 13.1.2 | Products from the pastry industry   | Products obtained during and from the production of pastry and cakes. They may be dried   | Starch<br>Total sugars, calculated<br>as sucrose,<br>Crude fat, if > 5%   |
| 13.1.3 | Products of the<br>breakfast cereal<br>manufacture  | Substances or products that are intended or<br>where it is reasonable to expect that they can<br>be consumed by humans in their processed,<br>partially processed or unprocessed forms.<br>They may be dried. | Crude protein, if > 10%<br>Crude fibre<br>Crude oils/fats, if > 10%,<br>Starch, if > 30%<br>Total sugar, calculated as<br>sucrose, if > 10% |
| 13.1.4 | Products from the confectionery industry  | Products obtained during and from the production of sweets, inclusive chocolate. They may be dried.   | Starch<br>Crude fat, if > 5%<br>Total sugars, calculated<br>as sucrose  |
| 13.1.5 | Products of the ice-<br>cream industry  | Products obtained when producing ice-<br>cream. They may be dried.  | Starch<br>Total sugars, calculated<br>as sucrose,<br>Crude fat  |
| 13.1.6 | Products and by<br>products from<br>processing fresh fruits<br>and vegetables <sup>20</sup> | Products obtained when processing fresh<br>fruit and vegetables (including peel, whole<br>pieces of fruit/vegetables, and mixtures<br>thereof). They may have been dried, or<br>frozen.                       | Starch<br>Crude fibre<br>Crude fat, if > 5%<br>Ash insoluble in HCl, if<br>> 3,5%   |
| 13.1.7 | <b>Products from the</b><br>processing of plants <sup>20</sup>                              | Products obtained from freezing or drying whole plants or their parts.  | Crude Fibre   |
| 13.1.8 | Products from<br>processing of spices<br>and seasonings <sup>20</sup>                       | Products obtained from freezing or drying spices and seasonings or their parts.   | Crude protein, if > 10%<br>Crude fibre<br>Crude oils/fats, if > 10%,<br>Starch, if > 30%<br>Total sugar, calculated as<br>sucrose, if > 10% |
| 13.1.9 | <b>Products from the</b><br><b>processing of herbs</b> <sup>20</sup>                        | Products obtained from crushing, grinding, freezing or drying herbs or their parts.   | Crude Fibre   |

<sup>20</sup> 

The name shall be supplemented by the fruit, vegetable, plant, spices and herbs species, as applicable.

|         | Products from the   | Draduate obtained when proceeding retained  | Starch<br>Crude fibre   |
|---------|---|---|---|
| 13.1.10 | potato processing   | Products obtained when processing potatoes.<br>They may have been dried or frozen.  | Crude fat, if $> 5\%$   |
|         | industry  |   | Ash insoluble in HCl, if $>3,5\%$                                   |
| 13.1.11 | Products and by-<br>products of the sauces<br>production            | Substances from the sauces-production that<br>are intended or where it is reasonable to<br>expect that they can be consumed by humans<br>in their processed, partially processed or<br>unprocessed forms. They may be dried.  | Crude fat   |
| 13.1.12 | Products and by-<br>products from the<br>savoury snacks<br>industry | Products and by-products of the savoury<br>snacks industry obtained during and from the<br>production of savoury snacks - potato chips,<br>potato and/ or cereal based snacks (direct<br>extruded, dough based and pelleted snacks)<br>and nuts.  | Crude fat   |
| 13.1.13 | Products from the<br>ready-to-eat food<br>industry                  | Products obtained during the production of ready to eat food. They may be dried.  | Crude fat, if > 5%  |
| 13.1.14 | Plants by-products<br>from spirits<br>production                    | Solid products from plants (including berries<br>and seeds such as anise) obtained after<br>maceration of these plants in an alcoholic<br>solution or after alcoholic evaporation /<br>distillation, or both, in the elaboration of<br>flavourings for the spirits production. These<br>products must be distilled to eliminate the<br>alcoholic residue. | Crude protein, if > 10%<br>Crude fibre<br>Crude oils/fats, if > 10% |
| 13.1.15 | Feed beer   | Product of the brewing process which is unsalable as a human beverage.  | Alcohol content   |
| 13.2.1  | Caramelized sugar   | Product obtained by the controlled heating of any sugar.  | Total sugars, calculated as sucrose                                 |
| 13.2.2  | Dextrose  | Dextrose is obtained after hydrolysis of<br>starch and consists of purified, crystallised<br>glucose, with or without crystal water.  | Total sugars, calculated as sucrose                                 |
| 13.2.3  | Fructose  | Fructose as purified crystalline powder. It is<br>obtained from glucose in glucose syrup by<br>the use of glucose isomerase and from<br>sucrose inversion.  | Total sugars, calculated as sucrose                                 |
| 13.2.4  | Glucose syrup   | Glucose syrup is a purified and concentrated<br>aqueous solution of nutritive saccharides<br>obtained through hydrolysis from starch.   | Total sugars<br>Moisture if > 30%                                   |
| 13.2.5  | Glucose molasses  | Product produced during refining process of glucose syrups.   | Total sugars  |
| 13.2.6  | Xylose  | Sugar extracted from wood.  |   |
| 13.2.7  | Lactulose   | Semi-synthetic disaccharide (4-O-D-Galactopyranosyl-D-fructose) obtained from lactose through the isomerisation of glucose to fructose. Present in heat treated milk and milk products.   | Lactulose   |

| 13.2.8 | Glucosamine<br>(Chitosamine)                          | Amino sugar (monosaccharide) being part of<br>the structure of the polysaccharides chitosan<br>and chitin. Produced by the hydrolysis of<br>crustacean and other arthropods exoskeletons<br>or by fermentation of a grain such as corn or<br>wheat  | Sodium or Potassium, as<br>applicable<br>"from aquatic animals" or<br>"from fermentation", as<br>appropriate |
|--------|---|---|--|
| 13.3.1 | Starch <sup>21</sup>                                  | Starch.   | Starch   |
| 13.3.2 | Starch <sup>21</sup> , pre-<br>gelatinised            | Product consisting of starch expanded by heat treatment.  | Starch   |
| 13.3.3 | Starch <sup>21</sup> mixture                          | Product consisting of native and/or modified food starch obtained from different botanical sources.   | Starch   |
| 13.3.4 | Starch <sup>21</sup> hydrolysates<br>cake             | Product from starch hydrolysis liquor<br>filtration which consists of the following:<br>protein, starch, polysaccharides, fat, oil and<br>filter aid (e.g. diatomaceous earth, wood<br>fibre).  | Moisture if < 25% or<br>> 45%<br>If moisture < 25%:<br>- Crude fat<br>- Crude protein                        |
| 13.3.5 | Dextrin   | Dextrin is partially acid hydrolysed starch.  |  |
| 13.3.6 | Maltodextrin  | Maltodextrin is the partially hydrolysed starch.  |  |
| 13.4.1 | Polydextrose  | Randomly bonded bulk polymer of glucose produced by thermal polymerisation of D-Glucose.  |  |
| 13.5.1 | Polyols   | Product obtained by hydrogenation or<br>fermentation and consisting of reduced<br>mono, di- or oligosaccharides or<br>polysaccharides.  |  |
| 13.5.2 | Isomalt   | Sugar alcohol obtained from sucrose after enzymatic conversion and hydrogenation.   |  |
| 13.5.3 | Mannitol  | Product obtained by hydrogenation or fermentation and consisting of reduced glucose and/or fructose.  |  |
| 13.5.4 | Xylitol   | Product obtained by hydrogenation and fermentation of xylose.   |  |
| 13.5.5 | Sorbitol  | Product obtained by hydrogenation of glucose.   |  |
| 13.6.1 | Acid oils from<br>chemical refining <sup>22</sup>     | Product obtained during the deacidification<br>of oils and fats of vegetable or animal origin<br>by means of alkali, followed by an<br>acidulation with subsequent separation of the<br>aqueous phase, containing free fatty acids,<br>oils or fats and natural components of seeds,<br>fruits or animal tissues such as mono-, and<br>diglycerides, lecithin and fibres. | Crude fat<br>Moisture if > 1%  |
| 13.6.2 | Fatty acids esterified<br>with glycerol <sup>23</sup> | Glycerides obtained by esterification of<br>glycerol with fatty acids. May contain up to<br>50 ppm Nickel from hydrogenation  | Moisture if > 1%<br>Crude fat<br>Nickel if > 20 ppm  |

<sup>21</sup> The name shall be supplemented by the indication of the botanical origin.

<sup>22</sup> The name shall be supplemented by the indication of the botanical or animal origin. The name shall be amended or supplemented to specify the fatty acids used.

<sup>23</sup> 

| 13.6.3  | Mono di and tri<br>glycerides of fatty<br>acids <sup>23</sup>                                 | Product consisting of mixtures of mono-, di-<br>and triesters of glycerol with fatty acids.<br>They may contain small amounts of free fatty<br>acids and glycerol.<br>May contain up to 50 ppm Nickel from<br>hydrogenation   | Crude fat<br>Nickel if > 20 ppm  |
|---------|---|---|--|
| 13.6.4  | Salts of fatty acids <sup>23</sup>  | Product obtained by reaction of fatty acids<br>with at least four carbon atoms with calcium,<br>magnesium, sodium or potassium<br>hydroxides, oxides or salts.<br>May contain up to 50 ppm Nickel from<br>hydrogenation   | Crude fat (after<br>hydrolysis)<br>Moisture<br>Ca or Na or K or Mg<br>(when appropriate)<br>Nickel if > 20 ppm |
| 13.6.5  | Fatty acid distillates<br>from physical<br>refining <sup>22</sup>                             | Product obtained during the deacidification<br>of oils and fats of vegetable or animal origin<br>by means of distillation containing free fatty<br>acids, oils or fats and natural components of<br>seeds, fruits or animal tissues such as mono-<br>and diglycerides, sterols and tocopherols.   | Crude fat<br>Moisture if > 1%  |
| 13.6.6  | Crude fatty acids<br>from splitting <sup>22</sup>   | Product obtained by oil/fat splitting. By<br>definition it consists of crude fatty acids C6-<br>C24, aliphatic, linear, monocarboxylic,<br>saturated and unsaturated. May contain up to<br>50 ppm Nickel from hydrogenation   | Crude fat<br>Moisture if > 1%<br>Nickel if > 20 ppm  |
| 13.6.7  | Pure distilled fatty<br>acids from splitting <sup>22</sup>                                    | Product obtained by the distillation of crude<br>fatty acids from oil/fat splitting potentially<br>plus hydrogenation. By definition it consists<br>of pure distilled fatty acids C6-C24,<br>aliphatic, linear, monocarboxylic, saturated<br>and unsaturated.<br>May contain up to 50 ppm Nickel from   | Crude fat<br>Moisture if > 1%<br>Nickel if > 20 ppm  |
| 13.6.8  | Soap stocks <sup>22</sup>   | hydrogenation<br>Product obtained during the deacidification<br>of vegetable oils and fats by means of<br>aqueous calcium, magnesium, sodium or<br>potassium hydroxide solution, containing<br>salts of fatty acids, oils or fats and natural<br>components of seeds, fruits or animal tissues<br>such as mono- and diglycerides, lecithin and<br>fibres. | Moisture if <40 and<br>> 50%<br>Ca or Na or K or Mg, as<br>appropriate   |
| 13.6.9  | Mono- and<br>diglycerides of fatty<br>acids esterified with<br>organic acids <sup>16 23</sup> | Mono- and diglycerides of fatty acids with at least four carbon atoms esterified with organic acids.  | Crude fat  |
| 13.6.10 | Sucrose esters of fatty<br>acids <sup>23</sup>  | Esters of sachharose and fatty acids.   | Total sugars, calculated<br>as sucrose<br>Crude fat  |
| 13.6.11 | Sucroglycerides of fatty acids <sup>23</sup>  | Mixture of esters of saccharose and mono<br>and di-glycerides of fatty acids  | Total sugars, calculated<br>as sucrose<br>Crude fat  |

|        |                             |  | · · · · · · · · · · · · · · · · · · ·                                     |
|--------|-----------------------------|--|---|
|        |                             | <ul> <li>By product obtained from:</li> <li>The oleochemical process of oil/fat splitting to obtain fatty acids and sweet water, followed by concentration of the sweet water to get crude glycerol or by transesterification (may contain up to 0.5% methanol) of natural oils/fats to obtain fatty acid methyl esters and sweet water, followed by concentration of the sweet water to get crude glycerol.</li> </ul>  |   |
| 13.8.1 | Glycerine, crude            | - The production of biodiesel (methyl or<br>ethyl esters of fatty acids) by<br>transesterification of oils and fats of<br>unspecified vegetable and animal origin.<br>Mineral and organic salts might remain<br>in the glycerine (up to 7.5%).   | Glycerol<br>Potassium if >1.5 %<br>Sodium if > 1.5%<br>Nickel if > 20 ppm |
|        |                             | May contain up to 0.5% Methanol and<br>up to 4% of Matter Organic Non<br>Glycerol (MONG) comprising of Fatty<br>Acid Methyl Esters, Fatty Acid Ethyl<br>Esters, Free Fatty Acids and Glycerides.   |   |
|        |                             | <ul> <li>Saponifications of oils/fats of vegetable<br/>or animal origin, normally with<br/>alkali/alkaline earths, to obtain soaps.</li> <li>May contain up to 50 ppm Nickel from</li> </ul>   |   |
|        |                             | hydrogenation  |   |
|        |                             | <ul> <li>Product obtained from:</li> <li>The oleochemical process of a) oil/fat splitting followed by concentration of sweet waters and refining by distillation (see part B, glossary of processes, entry 20) or ion-exchange process; b) transesterification of natural oils/fats to obtain fatty acid methyl esters and crude sweet water, followed by concentration of the sweet water to get crude glycerol and refining by distillation or ion-exchange process</li> </ul> | Glycerol if < 99% on dry<br>matter basis                                  |
| 13.8.2 | Glycerine                   | - The production of biodiesel (methyl or<br>ethyl esters of fatty acids) by<br>transesterification of oils and fats of<br>unspecified vegetable and animal origin<br>with subsequent refining of the<br>glycerine. Minimum Glycerol content:<br>99 % of dry matter.  | Sodium if $> 0.1\%$<br>Potassium if $> 0.1\%$<br>Nickel if $> 20$ ppm     |
|        |                             | <ul> <li>Saponifications of oils/fats of vegetable<br/>or animal origin, normally with<br/>alkali/alkaline earths, to obtain soaps,<br/>followed by refining of crude Glycerol<br/>and distillation</li> <li>May contain up to 50 ppm Nickel from</li> </ul>   |   |
|        |                             | hydrogenation  |   |
| 13.9.1 | Methyl sulphonyl<br>methane | Organo-sulfur compound $((CH_3)_2SO_2)$<br>obtained by synthetic way which is identical<br>to the naturally occurring source in plants.  | Sulphur   |

| 13.10.1 | Peat  | Product from the natural decomposition of plant (mainly sphagnum) in anaerobic and oligotrophic environment.  | Crude Fibre                   |
|---------|---|---|-------------------------------|
| 13.10.2 | Leonardite  | Product that is a naturally occurring mineral<br>complex of phenolic hydrocarbons, also<br>known as humate, which originates from the<br>decomposition of organic matter over the<br>course of millions of years                    | Crude Fibre                   |
| 13.11.1 | Propylene glycol; [1,2-<br>propanediol;<br>[propane-1,2-diol]       | Organic compound (a diol or double alcohol) with formula $C_3H_8O_2$ . It is a viscous liquid with a faintly sweet taste, hygroscopic and miscible with water, acetone, and chloroform. May contain up to 0.3% di propylene glycol. | Propylene glycol              |
| 13.11.2 | Mono-esters of<br>propylene glycol and<br>fatty acids <sup>23</sup> | Mono-esters of propylene glycol and fatty acids, alone or in mixtures with diesters.  | Propylene glycol<br>Crude fat |