Commission Regulation (EU) 2017/1017 of 15 June 2017 amending Regulation (EU) No 68/2013 on the Catalogue of feed materials (Text with EEA relevance)

### ANNEX

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## 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; particular attention shall be paid to compliance with Regulation (EC) No 1829/2003 of the European Parliament and of the Council<sup>(1)</sup> for feed materials that are or are produced from genetically modified organisms, or result from a fermentation process involving genetically modified micro-organisms. Feed materials consisting of or containing animal by-products shall fulfil the requirements of Regulation (EC) No 1069/2009 of the European Parliament and of the Council<sup>(2)</sup> and of Commission Regulation (EU) No 142/2011<sup>(3)</sup> and their use may be subject to restrictions pursuant to Regulation (EC) No 999/2001 of the European Parliament and of 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 of the European Parliament and of the Council<sup>(5)</sup>, 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>(6)</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<sup>(7)</sup>, Regulation (EC) No 396/2005 of the European Parliament and of the Council<sup>(8)</sup> and Regulation (EC) No 1831/2003 of the European

Parliament and of the Council<sup>(9)</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 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 this Annex, any maximum content is expressed on a weight/weight basis<sup>(10)</sup>.

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 in so far as the description of the feed material makes reference to this process and in so far as the process at stake meets the description given in Part B.

- (6) Feed materials not listed in Chapter 12 of Part C which have been manufactured by fermentation and/or which have a natural presence of microorganisms may be placed on the market with live microorganisms as long as the intended use of the feed materials and compound feed containing them is
- (a) not the multiplication of the microorganisms and
- (b) not linked to a function exerted by microorganism(s) according to Annex I of Regulation (EC) No 1831/2003.

The presence of micro-organisms as well as any function resulting thereof shall not be claimed on the feed materials and the compound feed containing them.

- (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>(11)</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.
- (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 to a claim (e.g. rumen protection), shall 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/<br>qualifier   |
|---|---|---|---|-----------------------------|
| 1 |   | Air fractionation   | Separation of<br>particles by means of<br>an air stream   | Air fractionated            |
| 2 |   | Aspiration  | Process to remove<br>dust, fine particles<br>and other particulates<br>with suspended cereal<br>fines from bulk grain<br>during transfer by<br>means of an air-flow   | Aspirated                   |
| 3 |   | Blanching   | Process consisting of<br>heat treatment of an<br>organic substance by<br>boiling or steaming<br>in order to denature<br>natural enzymes,<br>soften tissue<br>and remove raw<br>flavouring, followed<br>by immersion in<br>cold water to halt the<br>cooking process | Blanched                    |
| 4 |   | Bleaching   | Removing naturally<br>occurring colour by<br>chemical or physical<br>processes or by the<br>use of bleaching earth  | Bleached                    |
| 5 |   | Chilling  | Lowering the<br>temperature below<br>ambient but above<br>freezing point to aid<br>preservation   | Chilled                     |
| a | In German 'Konzentrieren<br>should be 'eingedickt'.     | n' may be replaced by 'Eindicke                                   | en' where appropriate, in which ca  | ase the common qualifier    |
| b | 'Decortication' may be re<br>should be 'dehulled' or 'd |   | king' where appropriate, in which   | a case the common qualifier |
| c | In the case of rice, this pro-                          | ocess is referred to as 'husking'                                 | and the common qualifier as 'hus  | sked'.                      |
| d | In French the name 'issue                               | s' may be used.   |   |                             |
| e |   | ufgeschlossen' and the name 'C<br>I the name 'Kvældet' (referring | Quellwasser' (referring to starch) to starch) may be used.  | may be used. In Danish the  |
| f | In French 'Pressage' may                                | be replaced by 'Extraction méc                                    | anique' where appropriate.  |                             |

| 6  |   | Chopping  | Reduction of particle<br>size using one or<br>more knives  | Chopped                                 |
|----|---|---|--|---|
| 7  |   | Cleaning  | Removal of objects<br>(contaminants, e.g.<br>stones) or vegetative<br>parts of the plant e.g.<br>unattached particles<br>of straw or husks or<br>weeds   | Cleaned/sorted                          |
| 8  |   | Concentration <sup>a</sup>  | Removal of water<br>and/or other<br>constituents   | Concentrate                             |
| 9  |   | Condensation  | Transition of a<br>substance from a<br>gaseous to a liquid<br>phase  | Condensed                               |
| 10 |   | Cooking   | The application<br>of heat to change<br>the physical<br>and chemical<br>characteristics of feed<br>materials   | Cooked                                  |
| 11 |   | Crushing  | Reduction of particle size using a crusher   | Crushed                                 |
| 12 |   | Crystallisation   | Purification by<br>the formation of<br>solid crystals from<br>a liquid solution.<br>Impurities in the<br>liquid are usually not<br>incorporated into the<br>lattice structure of the<br>crystal. | Crystallised                            |
| 13 |   | Decortication <sup>b</sup>  | Complete or partial<br>removal of outer<br>layers from grains,   | Decorticated,<br>partially decorticated |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'. | n' may be replaced by 'Eindicke                                     | n' where appropriate, in which c   | ase the common qualifier                |
| b  | -   |   | king' where appropriate, in which  | n case the common qualifier             |
| c  | In the case of rice, this pro-                      | ocess is referred to as 'husking'                                   | and the common qualifier as 'hus   | sked'.                                  |
| d  | In French the name 'issue                           | s' may be used.   |  |   |
| e  |   | ufgeschlossen' and the name 'Q<br>I the name 'Kvældet' (referring t | uellwasser' (referring to starch) to starch) may be used.  | may be used. In Danish the              |
| f  | In French 'Pressage' may                            | be replaced by 'Extraction méc                                      | anique' where appropriate  |   |

|    |   |   | seeds, fruits, nuts and others  |   |
|----|---|---|---|---|
| 14 |   | Dehulling/dehusking   | Removal of the outer<br>skins of beans, grains<br>and seeds usually by<br>physical means  | Dehulled or<br>dehusked <sup>¢</sup>                        |
| 15 |   | Depectinising   | Extraction of pectins from a feed material  | Depectinised  |
| 16 |   | Desiccation   | Process of extracting moisture  | Desiccated  |
| 17 |   | Desliming   | Process used to<br>remove the slime<br>layer on a surface   | Deslimed  |
| 18 |   | Desugaring  | Complete or partial<br>removal of mono-<br>and disaccharides<br>from molasses<br>and other material<br>containing sugar by<br>chemical or physical<br>means | Desugared, partially<br>desugared                           |
| 19 |   | Detoxification  | Process by which<br>toxic contaminants<br>are destroyed<br>or reduced in<br>concentration   | Detoxified  |
| 20 |   | Distillation  | Fractionation of<br>liquids by boiling and<br>collecting condensed<br>vapour into a separate<br>container   | Distilled   |
| 21 |   | Drying  | Dehydration by<br>artificial or natural<br>processes  | Naturally dried or<br>artificially dried, as<br>appropriate |
| 22 |   | Ensiling  | Storage of feed<br>materials with or<br>without the addition<br>of preservatives, or  | Ensiled   |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.     | n' may be replaced by 'Eindicke                                     | n' where appropriate, in which ca   | ase the common qualifier                                    |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd | placed by 'dehulling' or 'dehusk<br>ehusked'.                       | king' where appropriate, in which   | a case the common qualifier                                 |
| c  | In the case of rice, this pro-                          | ocess is referred to as 'husking'                                   | and the common qualifier as 'hus  | sked'.  |
| d  | In French the name 'issue                               | s' may be used.   |   |   |
| e  | 1   | ufgeschlossen' and the name 'Q<br>I the name 'Kvældet' (referring t | uellwasser' (referring to starch) to starch) may be used.   | may be used. In Danish the                                  |

f In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

|    |  |                                 | by using anaerobic<br>conditions with<br>or without silage<br>additives  |  |
|----|--|---------------------------------|--|--|
| 23 |  | Evaporation                     | Reducing water content   | Evaporated   |
| 24 |  | Expansion                       | Thermal process<br>during which the<br>product's internal<br>water content,<br>abruptly steamed,<br>leads to the breaking-<br>up of the product  | Expanded or puffed   |
| 25 |  | Expelling                       | Removal of oil/fat by pressing   | Expeller/cake and oil/<br>fat  |
| 26 |  | Extraction                      | Removal either by<br>organic solvent of<br>fat/oil from certain<br>materials or by<br>aqueous solvent of<br>sugar or other water-<br>soluble components  | Extracted/meal and<br>fat/oil, molasses/<br>pulp and sugar or<br>other water-soluble<br>components |
| 27 |  | Extrusion                       | Thermal process<br>during which the<br>product's internal<br>water content is<br>rapidly evaporated<br>leading to the<br>breaking-down of the<br>product, combined<br>with specific shaping<br>of the product by<br>passing through a<br>defined orifice | Extruded   |
| 28 |  | Fermentation                    | Process in which<br>micro-organisms<br>such as bacteria,<br>fungi or yeasts either<br>are produced or<br>used on materials to  | Fermented  |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.  | n' may be replaced by 'Eindicke | n' where appropriate, in which c   | ase the common qualifier   |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd  |                                 | king' where appropriate, in which  | n case the common qualifier  |
| c  |  | -                               | and the common qualifier as 'hus   | sked'.   |
| d  | In French the name 'issue  |                                 |  |  |
| e  | 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. |                                 |  |  |

f In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

|    |   |   | modify their chemical<br>composition or<br>properties   |   |
|----|---|---|---|---|
| 29 |   | Filtration  | The process of<br>passing a liquid<br>through a porous<br>media or membrane<br>filter in order to<br>remove solid particles   | Filtered  |
| 30 |   | Flaking   | Rolling of moist heat-<br>treated material to<br>generate thin pieces<br>of material  | Flakes  |
| 31 |   | Flour milling   | Reduction of particle<br>size of dry grain<br>and to facilitate<br>separation into<br>constituent fractions<br>(principally flour,<br>bran and middlings)   | Flour, bran,<br>middlings <sup>d</sup> or feed, as<br>appropriate |
| 32 |   | Winterisation   | Cooling of oils<br>separates the more<br>saturated parts of the<br>oils and the more<br>unsaturated parts of<br>the oil. The more<br>saturated parts of<br>the oil congeal by<br>cooling, while the<br>more unsaturated<br>parts of the oil are<br>liquid and may e.g.<br>be decanted. The<br>winterized product is<br>the congealed oil. | Winterised  |
| 33 |   | Fragmentation   | Process of breaking<br>a feed material into<br>fragments  | Fragmented  |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.                               | n' may be replaced by 'Eindicke                                   | n' where appropriate, in which ca   | ase the common qualifier  |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd                           |   | king' where appropriate, in which   | a case the common qualifier                                       |
| c  | In the case of rice, this pro-  | ocess is referred to as 'husking'                                 | and the common qualifier as 'hus  | sked'.  |
| d  | In French the name 'issue   | s' may be used.   |   |   |
| e  |   | ufgeschlossen' and the name 'Q<br>I the name 'Kvældet' (referring | Quellwasser' (referring to starch) to starch) may be used.  | may be used. In Danish the  |
| f  | In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate. |   |   |   |

| 34 | Frying           | Process of cooking<br>feed materials in a oil<br>or fat   | Fried                                      |
|----|------------------|---|--|
| 35 | Gelling          | Process to form a<br>gel, a solid, jelly-like<br>material that can have<br>properties ranging<br>from soft and weak<br>to hard and tough<br>usually using gelling<br>agents   | Gelled                                     |
| 36 | Granulation      | Treatment of feed<br>materials to obtain a<br>specific particle size<br>and consistency   | Granulated                                 |
| 37 | Grinding/milling | Reducing the particle<br>size of solid feed<br>materials in a dry or<br>wet process   | Ground or milled                           |
| 38 | Heating          | Heat treatments<br>carried out under<br>specific conditions<br>such as pressure and<br>moisture   | Heated/Heat treated                        |
| 39 | Hydrogenation    | Catalytic process<br>aimed at saturating<br>double bonds<br>of oils/fats/fatty<br>acids, carried out<br>at high temperature<br>under hydrogen<br>pressure, in order<br>to obtain partially<br>of or fully saturated<br>triglycerides/fatty<br>acids, or polyols<br>by reduction of<br>carbonyl groups of<br>carbohydrates to<br>hydroxyl groups | Hydrogenated,<br>partially<br>hydrogenated |

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

**b** 'Decortication' may be replaced by 'dehulling' or 'dehusking' where appropriate, in which case the common qualifier should be 'dehulled' or 'dehusked'.

c In the case of rice, this process is referred to as 'husking' and the common qualifier as 'husked'.

**d** In French the name 'issues' may be used.

e 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.

f In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

| 40 |   | Hydrolysis  | Reduction of<br>molecular size by<br>appropriate treatment<br>with water and<br>either heat/pressure,<br>enzymes or acid/<br>alkali   | Hydrolysed                  |  |
|----|---|---|---|-----------------------------|--|
| 41 |   | Liquefying  | Transition from a solid or a gas phase into a liquid  | Liquefied                   |  |
| 42 |   | Maceration  | Reducing the size of<br>feed materials using<br>mechanical means<br>often in the presence<br>of water or other<br>liquids   | Macerated                   |  |
| 43 |   | Malting   | Allowing grain<br>to commence<br>germination to<br>activate naturally<br>occurring enzymes<br>that are able to<br>break down starch<br>to fermentable<br>carbohydrates and<br>proteins to amino<br>acids and peptides | Malted                      |  |
| 44 |   | Melting   | Transition from a<br>solid to a liquid phase<br>by the application of<br>heat   | Melted                      |  |
| 45 |   | Micronisation   | Process of reducing<br>the average diameter<br>of a solid material's<br>particles to the<br>micrometre scale  | Micronised                  |  |
| 46 |   | Parboiling  | Process of soaking in<br>water and subjecting<br>to a heat treatment  | Par-boiled                  |  |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.                               | n' may be replaced by 'Eindicke                                     | n' where appropriate, in which c  | ase the common qualifier    |  |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd                           |   | ting' where appropriate, in which   | a case the common qualifier |  |
| c  | In the case of rice, this pro-  | ocess is referred to as 'husking'                                   | and the common qualifier as 'hus  | sked'.                      |  |
| d  | In French the name 'issue   | s' may be used.   |   |                             |  |
| e  |   | ufgeschlossen' and the name 'Q<br>I the name 'Kvældet' (referring t | uellwasser' (referring to starch)<br>o starch) may be used.   | may be used. In Danish the  |  |
| f  | In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate. |   |   |                             |  |

|    |   |                                   | so that starch is fully<br>gelatinised, followed<br>by a drying process  |   |
|----|---|-----------------------------------|--|---|
| 47 |   | Pasteurisation                    | Heating to a critical<br>temperature for a<br>specified time to<br>eliminate harmful<br>micro-organisms,<br>followed by rapid<br>cooling | Pasteurised   |
| 48 |   | Peeling                           | Removal of the skin/<br>peel from fruit and<br>vegetables  | Peeled  |
| 49 |   | Pelleting                         | Shaping by<br>compression through<br>a die   | Pellet, pelleted  |
| 50 |   | Rice milling                      | Removal of almost<br>all or part of the bran<br>and embryo from<br>husked rice   | Milled  |
| 51 |   | Pregelatinisation                 | Modification of<br>starch to significantly<br>improve its swelling<br>properties in cold<br>water  | Pregelatinised <sup>e</sup>   |
| 52 |   | Pressing <sup>f</sup>             | Physical removal of<br>liquids like fat, oil,<br>water or juice from<br>solids   | Expeller/cake (in<br>case of oil-containing<br>materials)<br>Pulp, pomace (in case<br>of fruits, etc.)<br>Pressed pulp (in case<br>of sugar beet) |
| 53 |   | Refining                          | Complete or partial<br>removal of impurities<br>or unwanted<br>components by<br>chemical/physical<br>treatment                           | Refined, partially refined  |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.     | n' may be replaced by 'Eindicke   | n' where appropriate, in which c   | ase the common qualifier  |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd |                                   | king' where appropriate, in which  | n case the common qualifier   |
| c  | In the case of rice, this pro-                          | ocess is referred to as 'husking' | and the common qualifier as 'hus   | sked'.  |
| d  | In French the name 'issue                               | s' may be used.                   |  |   |

e 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.

f In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

| 54 |   | Roasting  | Heating of feed<br>materials into a dry<br>state to improve<br>digestibility, increase<br>colour and/or reduce<br>naturally occurring<br>anti-nutritive factors   | Roasted  |
|----|---|---|---|--|
| 55 |   | Rolling   | Reduction of particle<br>size by passing the<br>material, e.g. grains,<br>between pairs of<br>rollers   | Rolled   |
| 56 |   | Rumen protection  | Process which, either<br>by physical treatment<br>with use of heat,<br>pressure, steam and<br>combination of such<br>conditions and/or<br>through the action<br>of e.g. aldehydes,<br>lignosulfonates,<br>sodium hydroxide or<br>organic acids (such<br>as propionic or tannic<br>acid) aims to protect<br>the nutrients from<br>degradation in the<br>rumen<br>Feed materials which<br>are rumen protected<br>by aldehydes may<br>contain up to 0,12 %<br>of free aldehydes. | Rumen protected<br>through the action of<br>[insert as applicable] |
| 57 |   | Sieving/Screening   | Separation of<br>particles of different<br>sizes by passing feed<br>materials through<br>screen(s) whilst being<br>shaken or poured   | Sieved, sifted,<br>screened  |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.     | n' may be replaced by 'Eindicl                                    | ken' where appropriate, in which ca   | ase the common qualifier   |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd |   | sking' where appropriate, in which  | a case the common qualifier  |
| c  | In the case of rice, this pro-                          | ocess is referred to as 'husking                                  | and the common qualifier as 'hus  | sked'.   |
| d  | In French the name 'issue                               | es' may be used.  |   |  |
| e  |   | aufgeschlossen' and the name '<br>I the name 'Kvældet' (referring | Quellwasser' (referring to starch)  | may be used. In Danish the   |
|    | quannel Kvalunnig and                                   |   |   |  |

| 58 | Skimming         | Separating the top<br>floating layer of a<br>liquid by mechanical<br>means, e.g. milk fat  | Skimmed     |
|----|------------------|--|-------------|
| 59 | Slicing          | Cutting feed<br>materials into flat<br>pieces  | Sliced      |
| 60 | Soaking/Steeping | Moistening and<br>softening of feed<br>materials, usually<br>seeds, to reduce<br>cooking time, aid<br>seed coat removal<br>and facilitate water<br>uptake to activate<br>the germination<br>process or reduce<br>concentration of<br>naturally occurring<br>anti-nutritive factors | Steeped     |
| 61 | Spray-drying     | Reducing the<br>moisture content of<br>a liquid by creating a<br>spray or mist of feed<br>material to increase<br>the surface area to<br>weight ratio through<br>which warm air is<br>blown  | Spray-dried |
| 62 | Steaming         | Process using<br>pressurised steam<br>for heating and<br>cooking to increase<br>digestibility  | Steamed     |
| 63 | Toasting         | Heating using dry<br>heat usually applied<br>to oilseeds, e.g. to<br>reduce or remove<br>naturally occurring<br>anti-nutritive factors   | Toasted     |

**b** 'Decortication' may be replaced by 'dehulling' or 'dehusking' where appropriate, in which case the common qualifier should be 'dehulled' or 'dehusked'.

c In the case of rice, this process is referred to as 'husking' and the common qualifier as 'husked'.

**d** In French the name 'issues' may be used.

e 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.

f In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

| 64 |   | Ultra-filtration  | Filtration of liquids<br>through a fine<br>membrane permeable<br>to small molecules<br>only  | Ultra-filtered              |
|----|---|---|--|-----------------------------|
| 65 |   | Degermination   | Process of complete<br>or partial removal of<br>germ from crushed<br>cereal grain  | Degermed,<br>degerminated   |
| 66 |   | Infra-red<br>micronisation  | Thermal process<br>using infrared heat<br>for cooking and<br>roasting cereals,<br>roots, seeds or tubers,<br>or their co-products,<br>usually followed by<br>flaking   | Infrared micronised         |
| 67 |   | Oil/fats and<br>hydrogenated oils/<br>fats splitting                | Chemical process of<br>hydrolysis of fats/<br>oils. The reaction of<br>fats/oils with water,<br>carried out at high<br>temperatures and<br>pressures, allows<br>obtaining crude<br>fatty acids in the<br>hydrophobic phase<br>and sweet waters<br>(crude glycerol)<br>in the hydrophilic<br>phase. | Split                       |
| 68 |   | Ultrasound sonication   | Release of soluble<br>compounds<br>by mechanical<br>processing with<br>power ultrasound and<br>heat in water.  | Sonicated                   |
| 69 |   | Mechanical food<br>packaging removal                                | Mechanical removal of packaging material   | Mechanically<br>unpacked    |
| a  | In German 'Konzentrieren<br>should be 'eingedickt'.     | n' may be replaced by 'Eindicker                                    | n' where appropriate, in which ca  | ase the common qualifier    |
| b  | 'Decortication' may be re<br>should be 'dehulled' or 'd |   | ing' where appropriate, in which   | a case the common qualifier |
| c  | In the case of rice, this pro-                          | ocess is referred to as 'husking' a                                 | and the common qualifier as 'hus   | sked'.                      |
| d  | In French the name 'issue                               | s' may be used.   |  |                             |
| e  | In German the qualifier 'a<br>qualifier 'Kvældning' and | ufgeschlossen' and the name 'Q<br>I the name 'Kvældet' (referring t | uellwasser' (referring to starch) o starch) may be used.   | may be used. In Danish the  |
| f  | In French 'Pressage' may                                | be replaced by 'Extraction méca                                     | inique' where appropriate.   |                             |

## PART C

## List of feed materials

## 1. *Cereal grains and products derived thereof*

| 10 %<br>ein, if > 15 |
|----------------------|
|                      |
| ein, if > 10         |
| ein, if > 10         |
| ;                    |
|                      |
|                      |
|                      |

|        |                              | semolina or flour. It<br>consists principally<br>of particles of<br>endosperm with fine<br>fragments of outer<br>skins and some grain<br>screenings.   |   |
|--------|------------------------------|--|---|
| 1.1.8  | Barley protein               | Product from barley<br>obtained after starch<br>and bran separation.<br>It consists principally<br>of protein.   | Crude protein   |
| 1.1.9  | Barley protein feed          | Product from barley<br>obtained after starch<br>separation. It consists<br>principally of protein<br>and particles of<br>endosperm.  | Moisture, if < 45 %<br>or > 60 %<br>If moisture < 45 %:<br>— Crude<br>protein<br>— Starch |
| 1.1.10 | Barley solubles              | Product from barley<br>obtained after wet<br>protein and starch<br>extraction  | Crude protein   |
| 1.1.11 | Barley bran                  | Product of flour<br>manufacture,<br>obtained from<br>screened grains of<br>dehusked barley. It<br>consists principally<br>of fragments of the<br>outer skins and of<br>particles of grain<br>from which the<br>greater part of the<br>endosperm has been<br>removed. | Crude fibre   |
| 1.1.12 | Liquid barley starch         | Secondary starch<br>fraction from the<br>production of starch<br>from barley   | If moisture < 50 %:<br>— Starch   |
| 1.1.13 | Malting barley<br>screenings | Product from<br>mechanical screening<br>(size fractionation)<br>consisting of  | Crude fibre<br>Crude ash if > 2,2 %   |

|   |   | undersized barley<br>kernels and fractions<br>of barley kernels<br>separated before the<br>malting process   |   |
|---|---|--|---|
| 1.1.14  | Malting barley and malt fines             | Product consisting<br>of fractions of barley<br>kernels and malt<br>separated during the<br>production of malt   | Crude fibre   |
| 1.1.15  | Malting barley husks                      | Product from<br>malting barley<br>cleaning consisting of<br>fractions of husk and<br>fines   | Crude fibre   |
| 1.1.16  | Barley distillers<br>solids, wet          | Product of ethanol<br>manufacture from<br>barley. It contains<br>solid feed fraction<br>from distillation.   | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein           |
| 1.1.17  | Barley distillers<br>solubles, wet        | Product of ethanol<br>manufacture from<br>barley. It contains<br>soluble feed fraction<br>from distillation.   | Moisture, if $< 45 \%$<br>or $> 70 \%$<br>If moisture $< 45 \%$ :<br>— Crude<br>protein |
| 1.1.18  | Malt <sup>a</sup>                         | Product from<br>germinated cereals,<br>dried, milled and/or<br>extracted   |   |
| 1.1.19  | Malt rootlets <sup>a</sup>                | Product from malting<br>cereals germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken<br>malted cereal grains.<br>It may be milled. |   |
| 1.2.1   | Maize <sup>b</sup>                        | Grains of <i>Zea mays</i><br>L. <i>ssp. mays</i> . It may<br>be rumen protected.   |   |
| 1.2.2   | Maize flakes <sup>b</sup>                 | Product obtained by<br>steaming or infra<br>red micronising and<br>rolling dehusked  | Starch  |
|   | supplemented by the cereal species.       |  |   |
| <b>b</b> Please note that 'mathematical behavior of the behavior of | aize' can either be referred to as such o | or as 'corn'   |   |

|   |                                  | maize. It may contain<br>a small proportion of<br>maize husks.   |  |
|---|----------------------------------|--|--|
| 1.2.3   | Maize middlings <sup>b</sup>     | Product of the<br>manufacture of<br>flour or semolina<br>from maize. It<br>consists principally<br>of fragments of the<br>outer skins and of<br>particles of grain<br>from which less of<br>the endosperm has<br>been removed than<br>in maize bran. It may<br>contain some maize<br>germ fragments. | Crude fibre<br>Starch<br>Crude fat if > 5 %                              |
| 1.2.4   | Maize bran <sup>b</sup>          | Product of the<br>manufacture of flour<br>or semolina from<br>maize. It consists<br>principally of outer<br>skins and some maize<br>germ fragments, with<br>some endosperm<br>particles.   | Crude fibre  |
| 1.2.5   | Maize cobs <sup>b</sup>          | Central core of<br>a maize ear. It<br>may include small<br>quantities of maize<br>and spathes which<br>might not have<br>been removed<br>during mechanical<br>harvesting.  | Crude fibre<br>Starch  |
| 1.2.6   | Maize screenings <sup>b</sup>    | Fraction of maize<br>kernels separated by<br>the screening process<br>at product intake  |  |
| 1.2.7   | Maize fibre <sup>b</sup>         | Product from the<br>manufacture of maize<br>starch. It consists<br>principally of fibre.   | Moisture, if < 50 %<br>or > 70 %<br>If moisture < 50 %:<br>— Crude fibre |
| 1.2.8   | Maize gluten <sup>b</sup>        | Product from the manufacture of maize  | Moisture, if < 70 %<br>or > 90 %   |
| <b>a</b> The name may be suppler                      | nented by the cereal species.    |  |  |
| <b>b</b> Please note that 'maize' c                   | an either be referred to as such | or as 'corn'   |  |
| c If this product has been suby a corresponding denom |                                  | d 'fine' may be added to the name  | e or the name may be replaced  |

|   |                                      | starch. It consists<br>principally of gluten<br>obtained during<br>separation of starch.   | If moisture < 70 %:<br>— Crude<br>protein  |
|---|--------------------------------------|--|--|
| 1.2.9   | Maize gluten feed <sup>b</sup>       | Product obtained<br>during the<br>manufacture of<br>maize starch. It is<br>composed of bran<br>and maize solubles.<br>The product may<br>also include broken<br>maize and residues<br>from oil extraction of<br>maize germs. Other<br>products derived<br>from starch and<br>from the refining<br>or fermentation of<br>starch products may<br>be added. | Moisture, if < 40 %<br>or > 65 %<br>If moisture < 40 %:<br>— Crude<br>protein<br>— Crude fibre<br>— Starch |
| 1.2.10  | Maize germ <sup>b</sup>              | Product of the<br>manufacture of<br>semolina, flour<br>or starch from<br>maize. It consists<br>predominately of<br>maize germ, outer<br>skins and parts of the<br>endosperm.   | Moisture, if < 40 %<br>or > 60 %<br>If moisture < 40 %:<br>— Crude<br>protein<br>— Crude fat               |
| 1.2.11  | Maize germ expeller <sup>b</sup>     | Product of oil<br>manufacture obtained<br>by pressing processed<br>maize germ to<br>which parts of the<br>endosperm and testa<br>may still adhere  | Crude protein<br>Crude fat   |
| 1.2.12  | Maize germ meal <sup>b</sup>         | Product of oil<br>manufacture,<br>obtained by<br>extraction of<br>processed maize<br>germ.   | Crude protein  |
| 1.2.13  | Crude maize germ<br>oil <sup>b</sup> | Oil obtained from maize germ   | Moisture, if > 1 %   |
| <b>a</b> The name may be suppler                          | nented by the cereal species.        |  |  |
| <b>b</b> Please note that 'maize' c                       | an either be referred to as such o   | r as 'corn'  |  |
| c If this product has been so<br>by a corresponding denor |                                      | 'fine' may be added to the name  | e or the name may be replaced  |

| 1.2.14 | Maize, puffed <sup>b</sup>                               | Product obtained<br>from milled or<br>broken maize by<br>means of a treatment<br>in humid, warm<br>conditions and under<br>pressure  | Starch  |
|--------|--|--|---|
| 1.2.15 | Maize steep liquor <sup>b</sup>                          | Concentrated liquid<br>fraction from the<br>steeping process of<br>corn  | Moisture, if < 45 %<br>or > 65 %<br>If moisture < 45 %:<br>— Crude<br>protein |
| 1.2.16 | Sweet corn silage <sup>b</sup>                           | By-product of the<br>sweet corn processing<br>industry, composed<br>of centre cobs, husks,<br>base of the kernels,<br>chopped and drained<br>or pressed. Generated<br>by chopping sweet<br>corn cobs, husks and<br>leaves, with presence<br>of sweet corn kernels. | Crude fibre   |
| 1.2.17 | Crushed<br>degerminated<br>(degermed) Maize <sup>b</sup> | Product obtained<br>by degermination<br>of crushed maize. It<br>consists principally of<br>endosperm fragments<br>and may contain<br>some maize germ and<br>outer skin particles.  | Crude fibre<br>Starch   |
| 1.2.18 | Maize grits <sup>b</sup>                                 | Hard, flinty portions<br>of ground maize<br>containing little or no<br>bran or germs.  | Crude fibre<br>Starch   |
| 1.3.1  | Millet   | Grains of <i>Panicum miliaceum</i> L.  |   |
| 1.4.1  | Oats   | Grains of <i>Avena</i><br>sativa L. and other<br>cultivars of oats   |   |
| 1.4.2  | Dehulled oats  | Dehulled grains of<br>oats. It may be steam<br>treated.  |   |

| 1.4.3                  | Oat flakes                            | Product obtained by<br>steaming or infra<br>red micronising and<br>rolling dehusked<br>oats. It may contain<br>a small proportion of<br>oat husks.   | Starch                |
|------------------------|---------------------------------------|--|-----------------------|
| 1.4.4                  | Oat middlings                         | Product obtained<br>during the processing<br>of screened,<br>dehusked oats into<br>oat groats and flour.<br>It consists principally<br>of oat bran and some<br>endosperm.  | Crude fibre<br>Starch |
| 1.4.5                  | Oat bran                              | Product of flour<br>manufacture,<br>obtained from<br>screened grains of<br>dehusked oat. It<br>consists principally<br>of fragments of<br>the outer skins and<br>particles of grain<br>from which the<br>greater part of the<br>endosperm has been<br>removed. | Crude fibre           |
| 1.4.6                  | Oat hulls                             | Product obtained<br>during dehulling of<br>oat grains  | Crude fibre           |
| 1.4.7                  | Oat, puffed                           | Product obtained<br>from milled or<br>broken oat by means<br>of a treatment<br>in humid, warm<br>conditions and under<br>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<br>with high content  | Crude fibre           |
| a The name may be su   | pplemented by the cereal species.     |  |                       |
| b Please note that 'ma | ize' can either be referred to as suc | ch or as 'corn'  |                       |

by a corresponding denomination.

|        |                           | in starch, after decortication  |             |
|--------|---------------------------|---|-------------|
| 1.4.11 | Oat feed                  | Product obtained<br>during the processing<br>of screened,<br>dehusked oats into<br>oat groats and flour.<br>It consists principally<br>of oat bran and some<br>endosperm.         | Crude Fibre |
| 1.5.1  | Quinoa seed,<br>extracted | Cleaned whole<br>seed of the quinoa<br>plant ( <i>Chenopodium</i><br><i>quinoa</i> Willd.) from<br>which the saponin<br>contained in the seeds<br>outer layer has been<br>removed |             |
| 1.6.1  | Broken rice               | Part of rice kernel<br>of <i>Oryza sativa</i> L.<br>with a length less<br>than three-quarters of<br>a whole kernel. The<br>rice may have been<br>parboiled.                       | Starch      |
| 1.6.2  | Milled rice               | Husked rice from<br>which almost all the<br>bran and embryo<br>have been removed<br>during rice milling.<br>The rice may have<br>been parboiled.                                  | Starch      |
| 1.6.3  | Pre-gelatinised rice      | Product obtained<br>from milled or<br>broken rice by pre-<br>gelatinisation   | Starch      |
| 1.6.4  | Extruded rice             | Product obtained by extruding rice flour  | Starch      |
| 1.6.5  | Rice flakes               | Product obtained<br>by flaking pre-<br>gelatinised rice<br>kernels or broken<br>kernels   | Starch      |

**b** Please note that 'maize' can either be referred to as such or as 'corn'

| 1.6.6   | Husked rice                        | Paddy ( <i>Oryza sativa</i><br>L.) from which the<br>husk only has been<br>removed. It may<br>be parboiled. The<br>processes of husking<br>and handling may<br>result in some loss of<br>bran.  | Starch<br>Crude fibre            |
|---|------------------------------------|---|----------------------------------|
| 1.6.7   | Ground fodder rice                 | Product obtained<br>by grinding fodder<br>rice, consisting either<br>of green, chalky or<br>unripe grains, sifted<br>out during the milling<br>of husked rice, or of<br>normal husked grains<br>which are yellow or<br>spotted        | Starch                           |
| 1.6.8   | Rice flour                         | Product obtained by<br>grinding milled rice.<br>The rice may have<br>been parboiled.  | Starch                           |
| 1.6.9   | Husked rice, flour                 | Product obtained by<br>grinding husked rice.<br>The rice may have<br>been parboiled.  | Starch<br>Crude fibre            |
| 1.6.10  | Rice bran                          | Product obtained<br>during rice milling,<br>mainly consisting of<br>the outer layers of<br>the kernel (pericarp,<br>seed coat, nucleus,<br>aleurone) with<br>part of the germ.<br>The rice may have<br>been parboiled or<br>extruded. | Crude fibre                      |
| 1.6.11  | Rice bran with calcium carbonate   | Product obtained<br>during rice milling,<br>mainly consisting of<br>the outer layers of<br>the kernel (pericarp,<br>seed coat, nucleus,<br>aleurone) with part  | Crude fibre<br>Calcium carbonate |
| • • • •   | nented by the cereal species.      |   |                                  |
|   | an either be referred to as such o |   |                                  |
| If this product has been su<br>by a corresponding denom |                                    | fine' may be added to the name  | e or the name may be replaced    |

|        |                                       | of the germ. It may<br>contain up to 23 %<br>of calcium carbonate<br>used as processing<br>aid. The rice may<br>have been parboiled.   |  |
|--------|---------------------------------------|--|--|
| 1.6.12 | Defatted rice bran                    | Rice bran resulting<br>from oil extraction.<br>It may be rumen<br>protected  | Crude fibre  |
| 1.6.13 | Rice bran oil                         | Oil extracted from stabilised rice bran  |  |
| 1.6.14 | Rice middlings                        | Product of rice<br>flour and starch<br>production, obtained<br>by dry or wet milling<br>and sieving. It<br>consists principally<br>of starch, protein,<br>fat and fibre. The<br>rice may have been<br>parboiled. May<br>contain up to 0,25<br>% sodium and up to<br>0,25 % sulphate. | Starch, if > 20 %<br>Crude protein, if > 10<br>%<br>Crude fat, if > 5 %<br>Crude fibre |
| 1.6.15 | Rice middlings with calcium carbonate | Product obtained<br>during rice milling,<br>mainly consisting of<br>particles of aleurone<br>layer and endosperm.<br>It may contain up<br>23 % of calcium<br>carbonate used as<br>processing aid. The<br>rice may have been<br>parboiled.  | Starch<br>Crude protein<br>Crude fat<br>Crude fibre<br>Calcium carbonate               |
| 1.6.16 | Rice                                  | Grains of <i>Oryza</i><br>sativa L. It may be<br>rumen protected   |  |
| 1.6.17 | Rice germ                             | Product obtained<br>during rice milling,<br>mainly consisting of<br>the embryo   | Crude fat<br>Crude protein   |

**b** Please note that 'maize' can either be referred to as such or as 'corn'

| 1.6.18 | Rice germ expeller                               | Product remaining<br>after rice germ has<br>been crushed to expel<br>the oil   | Crude protein<br>Crude fat<br>Crude fibre |
|--------|--|--|---|
| 1.6.20 | Rice protein                                     | Product of rice starch<br>production, obtained<br>by wet milling<br>sieving, separation,<br>concentration and<br>drying  | Crude protein                             |
| 1.6.21 | Liquid rice feed                                 | Concentrated liquid<br>product of wet<br>milling and sieving<br>rice   | Starch                                    |
| 1.6.22 | Rice, puffed                                     | Product obtained<br>by expanding rice<br>kernels or broken<br>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<br>during rice milling,<br>mainly consisting of<br>malformed kernels<br>and/or chalky kernels<br>and/or damaged<br>kernels and/or<br>naturally coloured<br>kernel (green, red,<br>yellow), and/or<br>normal husked grain,<br>whole or broken. It<br>may be parboiled. | Starch                                    |
| 1.6.25 | Immature rice, milled                            | Product obtained<br>during rice milling,<br>mainly consisting<br>of immature and/or<br>chalky kernels  | Starch                                    |
| 1.7.1  | Rye  | Grains of <i>Secale cereale</i> L.   |   |
| 1.7.2  | Rye middlings                                    | Product of flour<br>manufacture,<br>obtained from  | Starch<br>Crude fibre                     |

| Status: Point in time view as at 31/01/2020.  |  |
|---|--|
| <b>Changes to legislation:</b> There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)         |  |
|   |  |

|       |                 | consists principally<br>of particles of<br>endosperm, with<br>fine fragments of the<br>outer skins and some<br>miscellaneous parts<br>of the grain.   |                       |
|-------|-----------------|---|-----------------------|
| 1.7.3 | Rye feed        | Product of flour<br>manufacture,<br>obtained from<br>screened rye. It<br>consists principally<br>of fragments of the<br>outer skins, and of<br>particles of grain<br>from which less of<br>the endosperm has<br>been removed than in<br>rye bran. | Starch<br>Crude fibre |
| 1.7.4 | Rye bran        | Product of flour<br>manufacture,<br>obtained from<br>screened rye. It<br>consists principally<br>of fragments of the<br>outer skins, and of<br>particles of grain<br>from which most of<br>the endosperm has<br>been removed                      | Starch<br>Crude fibre |
| 1.8.1 | Sorghum; [Milo] | Grains/seeds of<br>Sorghum bicolor (L.)<br>Moench   |                       |
| 1.8.2 | Sorghum white   | Grains of specific<br>cultivars of Sorghum<br>with a white seed<br>coat.  |                       |
| 1.8.3 | Sorghum feed    | Dried product<br>obtained during<br>the separation of<br>sorghum starch. It<br>consists principally<br>of bran. The product<br>may also include<br>dried residues of  | Crude protein         |

| Triticum spelta L.,<br>Triticum dicoccum1.9.2Spelt branProduct of the<br>manufacture of spelt<br>principally of outer<br>skins and some spelt<br>germ fragments, with<br>some endosperm<br>particles.Crude fibre1.9.3Spelt hullsProduct obtained<br>during dehulling of<br>spelt grainsCrude fibre1.9.4Spelt middlingsProduct obtained<br>during dehulling of<br>spelt grainsCrude fibre1.9.4Spelt middlingsProduct obtained<br>during the processing<br>of screened, dehulled<br>spelt into spelt flour.<br>It consists principally<br>of particles of<br>endosperm with fine<br>fragments of the<br>outer skins and some<br>grain screenings.Crude fibre1.10.1TriticaleGrains of Triticum<br>astivum L., Triticum<br>durum Desf. and<br>other wheat cultivars.<br>It may be rumen<br>protected.Image: Screenel Screenel Screenel Screenel Screenel<br>screenel L.<br>Hybrid1.11.2Wheat rootletsProduct from malting<br>wheat germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken<br>malted wheat grainsImage: Screenel Screene   |        |                 | maceration water and germs could be added  |             |
|---|--------|-----------------|--|-------------|
| Image: Second | 1.9.1  | Spelt           | Triticum spelta L.,<br>Triticum dicoccum<br>Schrank, Triticum  |             |
| Image: | 1.9.2  | Spelt bran      | manufacture of spelt<br>flour. It consists<br>principally of outer<br>skins and some spelt<br>germ fragments, with<br>some endosperm   | Crude fibre |
| IJJ   | 1.9.3  | Spelt hulls     | during dehulling of  | Crude fibre |
| × Secale cereale L.<br>Hybrid1.11.1WheatGrains of Triticum<br>aestivum L., Triticum<br>durum Desf. and<br>other wheat cultivars.<br>It may be rumen<br>protected.1.11.2Wheat rootletsProduct from malting<br>wheat germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken<br>malted wheat grains  | 1.9.4  | Spelt middlings | during the processing<br>of screened, dehulled<br>spelt into spelt flour.<br>It consists principally<br>of particles of<br>endosperm with fine<br>fragments of the<br>outer skins and some |             |
| aestivum L., Triticum<br>durum Desf. and<br>other wheat cultivars.<br>It may be rumen<br>protected.1.11.2Wheat rootletsProduct from malting<br>wheat germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken<br>malted wheat grains  | 1.10.1 | Triticale       | $\times$ Secale cereale L.   |             |
| wheat germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken<br>malted wheat grains   | 1.11.1 | Wheat           | <i>aestivum</i> L., <i>Triticum</i><br><i>durum</i> Desf. and<br>other wheat cultivars.<br>It may be rumen   |             |
| a The name may be supplemented by the cereal species.   | 1.11.2 | Wheat rootlets  | wheat germination<br>and malt cleaning<br>consisting of rootlets,<br>cereal fines, husks<br>and small broken   |             |
| <b>b</b> Please note that 'maize' can either be referred to as such or as 'corn'  |        |                 |  | 1           |

| 1.11.3 | Wheat, pre-<br>gelatinised | Product obtained<br>from milled or<br>broken wheat by<br>means of a treatment<br>in humid, warm<br>conditions and under<br>pressure  | Starch                |
|--------|----------------------------|--|-----------------------|
| 1.11.4 | Wheat middlings            | Product of flour<br>manufacture obtained<br>from screened<br>grains of wheat or<br>dehusked spelt. It<br>consists principally<br>of particles of<br>endosperm with fine<br>fragments of the<br>outer skins and some<br>grain screenings.   | Crude fibre<br>Starch |
| 1.11.5 | Wheat flakes               | Product obtained by<br>steaming or infrared<br>micronising and<br>rolling dehusked<br>wheat. It may contain<br>a small proportion of<br>wheat husks. It may<br>be rumen protected.   | Crude fibre<br>Starch |
| 1.11.6 | Wheat feed                 | Product of flour or<br>malting manufacture<br>obtained from<br>screened grains of<br>wheat or dehusked<br>spelt. It consists<br>principally of<br>fragments of the<br>outer skins and of<br>particles of grain<br>from which less of<br>the endosperm has<br>been removed than in<br>wheat bran. | Crude fibre           |
| 1.11.7 | Wheat bran <sup>c</sup>    | Product of flour or<br>malting manufacture<br>obtained from<br>screened grains of<br>wheat or dehusked<br>spelt. It consists   | Crude fibre           |

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|                                     | principally of<br>fragments of the<br>outer skins and of<br>particles of grain<br>from which the<br>greater part of the<br>endosperm has been<br>removed.  |  |
|-------------------------------------|--|--|
| Malted fermented<br>wheat particles | Product obtained<br>by the combined<br>processes of malting<br>and fermentation<br>of wheat and wheat<br>bran. The product<br>is then dried and<br>ground.   | Starch<br>Crude fibre  |
| Wheat fibre                         | Fibre extracted from<br>wheat processing. It<br>consists principally of<br>fibre.  | Moisture, if < 60 %<br>or > 80 %<br>If moisture < 60 %:<br>— Crude fibre   |
| Wheat germ                          | Product of flour<br>milling consisting<br>essentially of<br>wheat germ, rolled<br>or otherwise, to<br>which fragments of<br>endosperm and outer<br>skin may still adhere   | Crude protein<br>Crude fat   |
| Wheat germ,<br>fermented            | Product of<br>fermentation of wheat<br>germ  | Crude protein<br>Crude fat   |
| Wheat germ expeller                 | Product of oil<br>manufacture,<br>obtained by pressing<br>wheat germ ( <i>Triticum</i><br><i>aestivum</i> L., <i>Triticum</i><br><i>durum</i> Desf. and<br>other wheat cultivars<br>and dehusked spelt<br>( <i>Triticum spelta</i> L.,<br><i>Triticum dicoccum</i><br>Schrank, <i>Triticum</i> | Crude protein  |
|                                     | wheat particles         Wheat fibre         Wheat germ         Wheat germ, fermented   | fragments of the<br>outer skins and of<br>particles of grain<br>from which the<br>greater part of the<br>endosperm has been<br>removed.Malted fermented<br>wheat particlesProduct obtained<br>by the combined<br>processes of malting<br>and fermentation<br>of wheat and wheat<br>bran. The product<br>is then dried and<br>ground.Wheat fibreFibre extracted from<br>wheat processing. It<br>consists principally of<br>fibre.Wheat germProduct of flour<br>milling consisting<br>essentially of<br>wheat germ, rolled<br>or otherwise, to<br>which fragments of<br>endosperm and outer<br>skin may still adhereWheat germ expellerProduct of oil<br>manufacture,<br>obtained by pressing<br>wheat germ ( <i>Triticum<br/>durum</i> Desf. and<br>other wheat cultivars<br>and dehusked spelt<br>( <i>Triticum spelta</i> L., |

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|                                  |   | endosperm and testa may still adhere  |   |
|----------------------------------|---|---|---|
| 1.11.15                          | Wheat protein   | Wheat protein<br>extracted during<br>starch or ethanol<br>production, maybe<br>partially hydrolysed   | Crude protein   |
| 1.11.16                          | Wheat gluten feed   | Product from the<br>manufacture of wheat<br>starch and gluten. It<br>consists of bran, from<br>which the germ may<br>have been partially<br>removed. Wheat<br>solubles, broken<br>wheat and other<br>products derived<br>from starch and<br>from the refining<br>or fermentation of<br>starch products may<br>be added. | Moisture, if < 45 %<br>or > 60 %<br>If moisture < 45 %:<br>— Crude<br>protein<br>— Starch |
| 1.11.18                          | Vital wheat gluten  | Wheat protein<br>characterised by<br>high viscoelasticity<br>as hydrated, with<br>minimum 80 %<br>protein (N $\times$ 6,25)<br>and maximum 2 %<br>ash on dry substance  | Crude protein   |
| 1.11.19                          | Liquid wheat starch   | Product obtained<br>from the production<br>of starch/glucose and<br>gluten from wheat   | Moisture, if < 65 %<br>or > 85 %<br>If moisture < 65 %:<br>— Starch                       |
| 1.11.20                          | Wheat starch<br>containing protein,<br>partially de-sugared | Product obtained<br>during the production<br>of wheat starch<br>mainly comprising<br>partially sugared<br>starch, the soluble<br>proteins and other<br>soluble parts of the<br>endosperm  | Crude protein<br>Starch<br>Total sugars<br>calculated as sucrose                          |
| 1.11.21                          | Wheat solubles  | Product of wheat<br>obtained after wet  | Moisture if < 55 % or<br>> 85 %   |
| <b>a</b> The name may be suppler | mented by the cereal species.                               |   |   |
|                                  |   |   |   |

|         |   | protein and starch<br>extraction. May be<br>hydrolysed   | If moisture < 55 %:<br>— Crude<br>protein                                     |
|---------|---|--|---|
| 1.11.22 | Wheat yeast<br>concentrate                | Wet by-product that<br>is released after the<br>fermentation of wheat<br>starch for alcohol<br>production  | Moisture, if < 60 %<br>or > 80 %<br>If moisture < 60 %:<br>— Crude<br>protein |
| 1.11.23 | Malting wheat<br>screenings               | Product from<br>mechanical screening<br>(size fractionation)<br>consisting of<br>undersized wheat<br>kernels and fractions<br>of wheat kernels<br>separated before the<br>malting process    | Crude fibre   |
| 1.11.24 | Malting wheat and malt fines              | Product consisting<br>of fractions of wheat<br>kernels and malt<br>separated during the<br>production of malt  | Crude fibre   |
| 1.11.25 | Malting wheat husks                       | Product from<br>malting wheat<br>cleaning consisting of<br>fractions of husk and<br>fines  | Crude fibre   |
| 1.12.2  | Grain flour <sup>a</sup>                  | Flour from milling grains  | Starch<br>Crude fibre   |
| 1.12.3  | Grain protein<br>concentrate <sup>a</sup> | Concentrate and dried<br>product obtained<br>from grain after<br>starch removal<br>through yeast<br>fermentation   | Crude protein   |
| 1.12.4  | Cereal grains<br>screenings <sup>a</sup>  | Products from<br>mechanical screening<br>(size fractionation)<br>consisting of small<br>grains and fractions<br>of grain kernels,<br>which may be<br>germinated, separated<br>before further | Crude fibre   |

**a** The name may be supplemented by the cereal species.

**b** Please note that 'maize' can either be referred to as such or as 'corn'

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| <i>Status: Point in time view as at 31/01/2020.</i>                                 |   |
|---|---|
| <b>Changes to legislation:</b> There are currently no known outstanding effects for |   |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)         |   |
|   | - |

| Grain germ <sup>*</sup><br>Grain spent wash<br>syrup <sup>*</sup> | Product of flour<br>milling and the<br>manufacture of starch<br>consisting principally<br>of grain germ, rolled<br>or otherwise, to<br>which fragments of<br>endosperm and outer<br>skin may still adhere<br>Product of grain<br>obtained through<br>the evaporation of<br>the concentrate of<br>the spent wash from<br>the fermentation | Crude protein,<br>Crude fat<br>Moisture, if < 45 %<br>or > 70 %<br>If moisture < 45 %:<br>— Crude<br>protein  |
|---|--|---|
| -   | obtained through<br>the evaporation of<br>the concentrate of<br>the spent wash from  | or > 70 %<br>If moisture < 45 %:<br>— Crude   |
|   | and distillation of<br>grain used in the<br>production of grain<br>spirit  |   |
| Moist distillers'<br>grains <sup>a</sup>                          | Moist product<br>consisting in the<br>solid fraction by<br>centrifugation and/<br>or filtration of<br>spent wash from<br>fermented and<br>distilled grains used<br>in the production of<br>grain spirit  | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein   |
| Concentrated<br>listillers solubles <sup>a</sup>                  | Moist product from<br>production of alcohol<br>by fermentation and<br>distilling a mash<br>of wheat and sugar<br>syrup after previous<br>separation of bran<br>and gluten. It may<br>contain dead cells<br>and/or parts of the   | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein, if<br>> 10 %   |
|   | rains <sup>a</sup><br>Concentrated<br>istillers solubles <sup>a</sup>  | grain used in the<br>production of grain<br>spiritMoist distillers'<br>rains*Moist product<br>consisting in the<br>solid fraction by<br>centrifugation and/<br>or filtration of<br>spent wash from<br>fermented and<br>distilled grains used<br>in the production of<br>grain spiritConcentrated<br>istillers solubles*Moist product from<br>production of alcohol<br>by fermentation and<br>distilling a mash<br>of wheat and sugar<br>syrup after previous<br>separation of bran<br>and gluten. It may<br>contain dead cells<br>and/or parts of the |

|         |  | fermentation micro-<br>organisms.   |   |
|---------|--|---|---|
| 1.12.9  | Distillers' grains and solubles <sup>a</sup>   | Product obtained<br>when producing<br>alcohol by<br>fermentation and<br>distilling grain mash<br>of cereals and/or<br>other starchy and<br>sugar containing<br>products. They may<br>contain dead cells<br>and/or parts of the<br>fermentation micro-<br>organisms. May<br>contain 2 % sulphate.<br>It may be rumen<br>protected. | Moisture, if < 60 %<br>or > 80 %<br>If moisture < 60 %:<br>— Crude<br>protein |
| 1.12.10 | Distillers' dried grains   | Product of alcohol<br>distillation obtained<br>by drying solid<br>residues of fermented<br>grains. It may be<br>rumen protected.  | Crude protein   |
| 1.12.11 | Distillers' dark<br>grains <sup>a</sup> ; [Distillers'<br>dried grains and<br>solubles] <sup>a</sup> | Product of alcohol<br>distillation obtained<br>by drying solid<br>residues of fermented<br>grains to which<br>pot ale syrup or<br>evaporated spent<br>wash has been added.<br>It may be rumen<br>protected.   | Crude protein   |
| 1.12.12 | Brewers' grains <sup>a</sup>   | Product of brewing<br>composed of residues<br>from malted and<br>unmalted cereals<br>and other starchy<br>products, which<br>may contain hop<br>materials. Typically<br>marketed in a moist<br>condition but may<br>also be sold in a dried<br>form. May contain  | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein |

| <i>Status:</i> Point in time view as at 31/01/2020.                          |  |
|--|--|
| Changes to legislation: There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |  |

|         |                    | up to 0,3 % dimethyl<br>polysiloxane, may<br>contain up to 1,5<br>% enzymes, may<br>contain up to 1,8 %<br>bentonite   |   |
|---------|--------------------|--|---|
| 1.12.13 | Draff <sup>a</sup> | Solid product of<br>cereal whisky<br>production. It<br>consists of residues<br>from hot water<br>extraction of malted<br>cereal. Typically<br>marketed in the moist<br>form after the extract<br>has been removed by<br>gravity  | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein |
| 1.12.14 | Mash filter grains | Solid product<br>obtained through<br>the production of<br>beer, malt extract<br>and whisky spirit.<br>It consists of the<br>residues of hot water<br>extraction of ground<br>malt and possibly<br>other sugar or<br>starch-rich adjuncts.<br>Typically marketed in<br>the moist form after<br>the extract has been<br>removed by pressing. | Moisture, if < 65 %<br>or > 88 %<br>If moisture < 65 %:<br>— Crude<br>protein |
| 1.12.15 | Pot ale            | The product<br>remaining in the still<br>from the first (wash)<br>distillation of a malt<br>distillery   | Crude protein, if > 10<br>%   |
| 1.12.16 | Pot ale syrup      | Product from<br>the first (wash)<br>distillation of a malt<br>distillery produced by<br>evaporating the pot<br>ale remaining in the<br>still   | Moisture, if < 45 %<br>or > 70 %<br>If moisture < 45 %:<br>Crude protein      |

 ${\bf b}$  ~~ Please note that 'maize' can either be referred to as such or as 'corn'

| Number | Name                                       | Description  | Compulsory declarations                   |
|--------|--|--|---|
| 2.1.1  | Babassu expeller                           | Product of oil<br>manufacture,<br>obtained by pressing<br>Babassu palm nuts<br><i>Orbignya</i> varieties   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.2.1  | Camelina seed                              | Seeds of <i>Camelina</i><br>sativa L. Crantz   |   |
| 2.2.2  | Camelina, expeller                         | Product of oil<br>manufacture,<br>obtained by pressing<br>seeds of Camelina  | Crude protein<br>Crude fat<br>Crude fibre |
| 2.2.3  | Camelina meal                              | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of<br>Camelina seed<br>expeller   | Crude protein                             |
| 2.3.1  | Cocoa husks                                | Teguments of dried<br>and roasted beans of<br><i>Theobroma cacao</i> L.  | Crude fibre                               |
| 2.3.2  | Cocoa hulls                                | Product obtained<br>from processing<br>beans of <i>Theobroma</i><br><i>cacao</i> L.  | Crude fibre<br>Crude protein              |
| 2.3.3  | Cocoa bean meal,<br>partially decorticated | Product of oil<br>manufacture,<br>obtained by<br>extraction of dried<br>and roasted beans of<br><i>Theobroma cacao</i> L.<br>from which part of<br>the husks has been<br>removed | Crude protein<br>Crude fibre              |
| 2.4.1  | Copra expeller                             | Product of oil<br>manufacture,<br>obtained by pressing<br>the dried kernel   | Crude protein<br>Crude fat<br>Crude fibre |

#### 2. Oil seeds, oil fruits, and products derived thereof

all rape seed products.

The name 'vegetable oil and fat' may be replaced by the term 'vegetable oil' or 'vegetable fat' as appropriate. It shall be supplemented by the plant species and as appropriate by the part of the plant. It shall be specified whether the oil(s) and/ b or fat(s) is/are crude or refined.

| Status: Point in time view as at 31/01/2020.                                 |
|--|
| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |

|       |   | (endosperm) and<br>outer husk (tegument)<br>of the seed of the<br>coconut palm <i>Cocos</i><br><i>nucifera</i> L.  |   |
|-------|---|--|---|
| 2.4.2 | Copra, hydrolysed<br>expeller               | Product of oil<br>manufacture,<br>obtained by pressing<br>and enzymatic<br>hydrolisation of<br>the dried kernel<br>(endosperm) and<br>outer husk (tegument)<br>of the seed of the<br>coconut palm <i>Cocos</i><br><i>nucifera</i> L.         | Crude protein<br>Crude fat<br>Crude fibre |
| 2.4.3 | Copra meal                                  | Product of oil<br>manufacture,<br>obtained by<br>extraction of<br>the dried kernel<br>(endosperm) and<br>outer husk (tegument)<br>of the seed of the<br>coconut palm <i>Cocos</i><br><i>nucifera</i> L.                                      | Crude protein                             |
| 2.5.1 | Cotton seed                                 | Seeds of <i>Gossypium</i><br>spp. from which the<br>fibres have been<br>removed. It may be<br>rumen protected.   |   |
| 2.5.2 | Cotton seed meal,<br>partially decorticated | Product of oil<br>manufacture,<br>obtained by<br>extraction of seeds<br>of cotton from which<br>fibres and part of<br>the husks have been<br>removed. (Maximum<br>crude fibre 22,5 %<br>in the dry matter).<br>It may be rumen<br>protected. | Crude protein<br>Crude fibre              |
| 2.5.3 | Cotton seed expeller                        | Product of oil manufacture,  | Crude protein<br>Crude fibre              |

|       |  | obtained by pressing<br>seeds of cotton from<br>which fibres have<br>been removed   | Crude fat                                 |
|-------|--|---|---|
| 2.6.1 | Groundnut expeller,<br>partially decorticated      | Product of oil<br>manufacture,<br>obtained by pressing<br>partially decorticated<br>groundnuts <i>Arachis</i><br><i>hypogaea</i> L. and<br>other species of<br><i>Arachis</i><br>(Maximum crude<br>fibre content 16 % in<br>the dry matter) | Crude protein<br>Crude fat<br>Crude fibre |
| 2.6.2 | Groundnut meal,<br>partially decorticated          | Product of oil<br>manufacture,<br>obtained by<br>extraction of<br>partially decorticated<br>groundnut expeller<br>(Maximum crude<br>fibre content 16 % in<br>the dry matter)  | Crude protein<br>Crude fibre              |
| 2.6.3 | Groundnut expeller,<br>decorticated                | Product of oil<br>manufacture,<br>obtained by pressing<br>decorticated<br>groundnuts  | Crude protein<br>Crude fat<br>Crude fibre |
| 2.6.4 | Groundnut meal,<br>decorticated                    | Product of oil<br>manufacture,<br>obtained by<br>extraction of<br>decorticated<br>groundnut expeller  | Crude protein<br>Crude fibre              |
| 2.7.1 | Kapok expeller                                     | Product of oil<br>manufacture obtained<br>by pressing Kapok<br>seeds ( <i>Ceiba</i><br><i>pentadra</i> L. Gaertn.)  | Crude protein<br>Crude fibre              |
| 2.8.1 | Linseed<br>w in glucosinolate' as defined in Union | Seeds of linseed<br><i>Linum usitatissimum</i><br>L. (Minimum<br>botanical purity<br>93 %) as whole,  |   |

**a** The indication 'low in glucosinolate' as defined in Union legislation may be added, where appropriate. This is valid for all rape seed products.

|       |                       | flattened or ground<br>linseed. It may be<br>rumen protected.   |   |
|-------|-----------------------|---|---|
| 2.8.2 | Linseed expeller      | Product of oil<br>manufacture,<br>obtained by pressing<br>linseed.  | Crude protein<br>Crude fat<br>Crude fibre |
| 2.8.3 | Linseed meal          | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of linseed<br>expeller. It may be<br>rumen protected.  | Crude protein                             |
| 2.8.4 | Linseed expeller feed | Product of oil<br>manufacture,<br>obtained by pressing<br>linseed. Only when<br>produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to:<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 %<br>of crude<br>lecithins<br>— 2 % of soap<br>stocks |   |

a The indication 'low in glucosinolate' as defined in Union legislation may be added, where appropriate. This is valid for all rape seed products.

| 2.8.5 | Linseed meal feed | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of linseed<br>expeller. Only when<br>produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 2 % soap<br>stocks.<br>It may be rumen<br>protected<br>Product of the | S             |
|-------|-------------------|--|---------------|
| 2.9.1 | Mustard bran      | Product of the<br>manufacture of<br>mustard ( <i>Brassica</i><br><i>juncea</i> L.). It consists<br>of fragments of<br>the outer skins and<br>particles of grain.   | Crude fibre   |
| 2.9.2 | Mustard seed meal | Product obtained<br>by the extraction of<br>volatile mustard oil<br>from mustard seeds   | Crude protein |

| 2.10.1 | Niger seed                  | Seeds of the niger<br>plant <i>Guizotia</i><br><i>abyssinica</i> (L. F.)<br>Cass   |   |
|--------|-----------------------------|--|---|
| 2.10.2 | Niger seed expeller         | Product of oil<br>manufacture,<br>obtained by pressing<br>of seeds of the niger<br>plant (Ash insoluble<br>in HCl: maximum 3,4<br>%)   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.11.1 | Olive pulp                  | Product of oil<br>manufacture,<br>obtained by<br>extraction of pressed<br>olives <i>Olea europea</i><br>L. separated as far as<br>possible from parts of<br>the kernel   | Crude protein<br>Crude fibre<br>Crude fat |
| 2.11.2 | Defatted olive meal<br>feed | Product of olive<br>oil manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of olive<br>pulp expeller<br>separated as far as<br>possible from parts<br>of the kernel. Only<br>when produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to—1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicates |   |

**a** The indication 'low in glucosinolate' as defined in Union legislation may be added, where appropriate. This is valid for all rape seed products.

|        |                                   | and<br>cellulosic<br>or wood<br>fibres)<br>1,3 % crude<br>lecithins.<br>2 % soap<br>stocks.  |   |
|--------|-----------------------------------|--|---|
| 2.11.3 | Defatted olive meal               | Product of olive<br>oil manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of olive<br>pulp expeller<br>separated as far as<br>possible from parts of<br>the kernel.   | Crude protein<br>Crude fibre              |
| 2.12.1 | Palm kernel expeller              | Product of oil<br>manufacture,<br>obtained by pressing<br>of palm kernels<br><i>Elaeis guineensis</i><br>Jacq., <i>Corozo oleifera</i><br>(HBK) L. H. Bailey<br>( <i>Elaeis melanococca</i><br><i>auct.</i> ) from which<br>as much as possible<br>of the hard shell has<br>been removed | Crude protein<br>Crude fibre<br>Crude fat |
| 2.12.2 | Palm kernel meal                  | Product of oil<br>manufacture,<br>obtained by<br>extraction of palm<br>kernels from which<br>as much as possible<br>of the hard shell has<br>been removed  | Crude protein<br>Crude fibre              |
| 2.13.1 | Pumpkin and squash seed           | Seeds of <i>Cucurbita</i><br><i>pepo</i> L. and plants of<br>the genus <i>Cucurbita</i>  |   |
| 2.13.2 | Pumpkin and squash seed, expeller | Product of oil<br>manufacture,<br>obtained by pressing<br>seeds of <i>Cucurbita</i>  | Crude protein<br>Crude fat                |

|        |                               | <i>pepo</i> and plants of the genus <i>Cucurbita</i>  |   |
|--------|-------------------------------|---|---|
| 2.14.1 | Rape seed <sup>a</sup>        | Seeds of rape<br>Brassica napus L.<br>ssp. oleifera (Metzg.)<br>Sinsk. Indian sarson<br>Brassica napus L.<br>var. glauca (Roxb.)<br>O.E. Schulz and<br>Brassica rapa ssp.<br>oleifera (Metzg.)<br>Sinsk. Minimum<br>botanical purity 94<br>%. It may be rumen<br>protected. |   |
| 2.14.2 | Rape seed, expeller           | Product of oil<br>manufacture,<br>obtained by pressing<br>seeds of rape. It may<br>be rumen protected.  | Crude protein<br>Crude fat<br>Crude fibre |
| 2.14.3 | Rape seed meal                | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of rape seed<br>expeller. It may be<br>rumen protected.  | Crude protein                             |
| 2.14.4 | Rape seed, extruded           | Product obtained<br>from whole rape by<br>means of a treatment<br>in humid, warm<br>conditions and under<br>pressure increasing<br>starch gelatinisation.<br>It may be rumen<br>protected.  | Crude protein<br>Crude fat                |
| 2.14.5 | Rape seed protein concentrate | Product of oil<br>manufacture,<br>obtained by<br>separation of protein<br>fraction of rape seed<br>expeller or rape seed  | Crude protein                             |
| 2.14.6 | Rape seed expeller feed       | Product of oil manufacture,   | Crude protein<br>Crude fat                |

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|        |                     | obtained by pressing<br>seeds of rape. Only<br>when produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 2 % soap<br>stocks.<br>It may be rumen<br>protected. |               |
|--------|---------------------|---|---------------|
| 2.14.7 | Rape seed meal feed | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of rape<br>seed expeller. Only<br>when produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.   | Crude protein |

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|       | <b>Status:</b> Point in time view as at 31/01/2020.                        |  |
|-------|--|--|
| Ch    | anges to legislation: There are currently no known outstanding effects for |  |
| the C | Commission Regulation (EU) 2017/1017. (See end of Document for details)    |  |

|        |  | diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 2 % soap<br>stocks.<br>It may be rumen<br>protected. |   |
|--------|--|--|---|
| 2.15.1 | Safflower seed                                 | Seeds of the safflower <i>Carthamus tinctorius</i> L.  |   |
| 2.15.2 | Safflower seed meal,<br>partially decorticated | Product of oil<br>manufacture,<br>obtained by<br>extraction of partially<br>decorticated seeds of<br>safflower.  | Crude protein<br>Crude fibre              |
| 2.15.3 | Safflower hulls                                | Product obtained<br>during dehulling of<br>safflower seeds   | Crude fibre                               |
| 2.16.1 | Sesame seed                                    | Seeds of <i>Sesamum</i><br><i>indicum</i> L.   |   |
| 2.17.1 | Sesame seed, partially dehulled                | Product of oil<br>manufacture,<br>obtained by removing<br>part of the husks  | Crude protein<br>Crude fibre              |
| 2.17.2 | Sesame hulls                                   | Product obtained<br>during dehulling of<br>sesame seeds  | Crude fibre                               |
| 2.17.3 | Sesame seed expeller                           | Product of oil<br>manufacture,<br>obtained by pressing<br>seeds of the sesame<br>plant (Ash insoluble<br>in HCl: maximum 5<br>%).  | Crude protein<br>Crude fibre<br>Crude fat |

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| 2.18.1                     | Toasted soya (beans)          | Soya beans ( <i>Glycine</i><br>max L. Merr.)<br>subjected to an<br>appropriate heat<br>treatment. (Urease<br>activity maximum<br>$0,4 \text{ mg N/g} \times \text{min.}$ ).<br>It may be rumen<br>protected.                                |  |
|----------------------------|-------------------------------|---|--|
| 2.18.2                     | Soya (bean) expeller          | Product of oil<br>manufacture,<br>obtained by pressing<br>the seed of soya.   | Crude protein<br>Crude fat<br>Crude fibre              |
| 2.18.3                     | Soya (bean) meal              | Product of oil<br>manufacture,<br>obtained from soya<br>beans after extraction<br>and appropriate heat<br>treatment. (Urease<br>activity maximum<br>$0,4 \text{ mg N/g} \times \text{min.}$ ).<br>It may be rumen<br>protected.             | Crude protein<br>Crude fibre<br>if > 8 % in dry matter |
| 2.18.4                     | Soya (bean) meal,<br>dehulled | Product of oil<br>manufacture,<br>obtained from<br>dehulled soya beans<br>after extraction and<br>appropriate heat<br>treatment. (Urease<br>activity maximum<br>$0,5 \text{ mg N/g} \times \text{min.}$ ).<br>It may be rumen<br>protected. | Crude protein  |
| 2.18.5                     | Soya (bean) hulls             | Product obtained<br>during dehulling of<br>soya beans   | Crude fibre  |
| 2.18.6<br>a The indication | Soya beans, extruded          | Product obtained<br>from soya beans by<br>means of a treatment<br>in humid, warm<br>conditions and under<br>pressure increasing<br>starch gelatinisation.   | Crude protein<br>Crude fat                             |

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|         |  | It may be rumen protected.  |  |
|---------|--|---|--|
| 2.18.7  | Soya (bean) protein<br>concentrate     | Product obtained<br>from dehulled,<br>fat extracted soya<br>beans, after a<br>second extraction or<br>enzymatic treatment<br>to reduce the level<br>of nitrogen-free<br>extract. May contain<br>inactivated enzymes.  | Crude protein  |
| 2.18.8  | Soya bean pulp;<br>[Soya bean paste]   | Product obtained<br>during extraction of<br>soya beans for food<br>preparation  | Crude protein  |
| 2.18.9  | Soya bean molasses                     | Product obtained<br>during the processing<br>of soya bean   | Crude protein<br>Crude fat                             |
| 2.18.10 | By-product from<br>soybean preparation | Products obtained<br>when processing<br>soybeans to obtain<br>soybean food<br>preparations  | Crude protein  |
| 2.18.11 | Soya (beans)                           | Soya beans ( <i>Glycine max</i> L. Merr.)   | Urease activity if > 0,4 mg N/g × min                  |
| 2.18.12 | Soybean, flakes                        | Product obtained by<br>steaming or infrared<br>micronising and<br>rolling dehulled<br>soya beans (Urease<br>activity maximum<br>0,4 mg N/g × min.)  | Crude protein  |
| 2.18.13 | Soya (bean) meal<br>feed               | Product of oil<br>manufacture,<br>obtained from soya<br>beans after extraction<br>and appropriate heat<br>treatment. (Urease<br>activity maximum<br>$0,4 \text{ mg N/g} \times \text{min.}$ ).<br>Only when produced<br>at an integrated<br>crushing and refining | Crude protein<br>Crude fibre<br>if > 8 % in dry matter |

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|         |                                    | site, the product may<br>contain up to<br>1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>- 1,3 % crude<br>lecithins<br>- 1,5 % soap<br>stocks.<br>It may be rumen<br>protected.   |               |
|---------|------------------------------------|--|---------------|
| 2.18.14 | Soya (bean) meal<br>feed, dehulled | Product of oil<br>manufacture,<br>obtained from<br>dehulled soya beans<br>after extraction and<br>appropriate heat<br>treatment. (Urease<br>activity maximum<br>$0,5 \text{ mg N/g \times min.}$ ).<br>Only when produced<br>at an integrated<br>crushing and refining<br>site, the product may<br>contain up to<br>- 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth, | Crude protein |

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| <i>Status: Point in time view as at 31/01/2020.</i>                          |  |
|--|--|
| Changes to legislation: There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |  |
|  |  |

|         |   | silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 1,5 % soap<br>stocks.<br>It may be rumen<br>protected.  | 25  |
|---------|---|--|---|
| 2.18.15 | Fermented soya<br>(bean) protein<br>(concentrate) | Product obtained<br>from dehulled, fat<br>extracted soya beans,<br>after microbial<br>fermentation to<br>reduce the level of<br>nitrogen-free extract.<br>It may also include<br>dead cells and/or<br>parts thereof of the<br>fermentation micro-<br>organisms used. | Crude protein                             |
| 2.19.1  | Sunflower seed                                    | Seeds of the<br>sunflower <i>Helianthus</i><br><i>annuus</i> L. It may be<br>rumen protected.  |   |
| 2.19.2  | Sunflower seed<br>expeller                        | Product of oil<br>manufacture,<br>obtained by pressing<br>seeds of the<br>sunflower.   | Crude protein<br>Crude fat<br>Crude fibre |
| 2.19.3  | Sunflower seed meal                               | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of<br>sunflower seed<br>expeller. It may be<br>rumen protected.   | Crude protein<br>Crude fibre              |
| 2.19.4  | Sunflower seed meal,                              | Product of oil   | Crude protein                             |

|        |                             | obtained by<br>extraction and<br>appropriate heat<br>treatment of expeller<br>of sunflower seeds<br>from which part or all<br>of the husks has been<br>removed. Maximum<br>crude fibre 27,5 % in<br>the dry matter   |             |
|--------|-----------------------------|--|-------------|
| 2.19.5 | Sunflower seed hulls        | Product obtained<br>during dehulling of<br>sunflower seeds   | Crude fibre |
| 2.19.6 | Sunflower seed meal<br>feed | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of<br>sunflower seed<br>expeller. Only when<br>produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 2 % soap<br>stocks. |             |

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|        |  | It may be rumen protected.   |                              |
|--------|--|--|------------------------------|
| 2.19.7 | Sunflower seed meal<br>feed, dehulled                        | Product of oil<br>manufacture,<br>obtained by<br>extraction and<br>appropriate heat<br>treatment of expeller<br>of sunflower seeds<br>from which part or<br>all of the husks has<br>been removed. Only<br>when produced at an<br>integrated crushing<br>and refining site, the<br>product may contain<br>up to<br>— 1 % of the<br>sum of used<br>bleaching<br>earth<br>and filter<br>aid (e.g.<br>diatomaceous<br>earth,<br>amorphous<br>silicates<br>and silica,<br>phyllosilicate<br>and<br>cellulosic<br>or wood<br>fibres)<br>— 1,3 % crude<br>lecithins<br>— 2 % soap<br>stocks.<br>Maximum crude<br>fibre: 27,5 % in the<br>dry matter.<br>It may be rumen<br>protected. |                              |
| 2.19.8 | High-protein low-<br>cellulose fraction of<br>sunflower meal | Product of the<br>processing of<br>sunflower meal,<br>obtained by grinding<br>and fractionation  | Crude protein<br>Crude fibre |

all rape seed products.

|        |   | (sieving and air<br>fractionation) of<br>sunflower seed meal,<br>dehulled.<br>Minimum crude<br>protein content: 45 %<br>on 8 % moisture basis<br>Maximum crude fibre<br>content: 8 % on 8 %<br>moisture basis<br>It may be rumen<br>protected.   |                              |
|--------|---|--|------------------------------|
| 2.19.9 | High-cellulose<br>fraction of sunflower<br>meal                           | Product of the<br>processing of<br>sunflower meal,<br>obtained by grinding<br>and fractionation<br>(sieving and air<br>fractionation) of<br>sunflower seed meal,<br>dehulled.<br>Minimum crude fibre<br>content: 38 % on 8 %<br>moisture basis<br>Minimum crude<br>protein content: 17 %<br>on 8 % moisture basis<br>It may be rumen<br>protected. | Crude protein<br>Crude fibre |
| 2.20.1 | Vegetable oil and fat <sup>b</sup>  | Oil and fat obtained<br>from oilseeds or oil<br>fruits (excluding<br>castor oil from the<br>ricinus plant), it<br>may be degummed,<br>refined and/or<br>hydrogenated.  | Moisture, if > 1 %           |
| 2.20.2 | Used food factory<br>vegetable oils<br>glucosinolate' as defined in Union | Vegetable oils having<br>been used by food<br>business operators<br>in accordance with<br>Regulation (EC) No<br>852/2004 for cooking<br>purposes and which<br>have not been in<br>contact with meat,   | Moisture, if > 1 %           |

|        |                 | animal fats, fish or aquatic animals.  |                              |
|--------|-----------------|--|------------------------------|
| 2.21.1 | Crude lecithins | Product obtained<br>during degumming<br>of crude oil from<br>oilseeds and oil fruits<br>with water. Citric<br>acid, phosphoric acid,<br>sodium hydroxide<br>or enzymes may<br>be added during<br>degumming of the<br>crude oil |                              |
| 2.22.1 | Hemp seed       | Controlled seeds<br>of varieties of<br><i>Cannabis sativa</i> L.<br>with a maximum<br>tetrahydrocannabinol c<br>according to<br>Regulation (EC) No<br>1782/2003.   | ontent                       |
| 2.22.2 | Hemp expeller   | Product of oil<br>manufacture obtained<br>by pressing hemp<br>seeds  | Crude protein<br>Crude fibre |
| 2.22.3 | Hemp oil        | Oil obtained by<br>pressing of hemp<br>plants and seeds  | Moisture, if > 1 %           |
| 2.23.1 | Poppy seed      | Seeds of <i>Papaver</i> somniferum L.  |                              |
| 2.23.2 | Poppy meal      | Product of oil<br>manufacture,<br>obtained by<br>extraction of expeller<br>of poppy seeds.   | Crude protein                |

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| 3. | Legume seeds | and | products | derived | thereof |
|----|--------------|-----|----------|---------|---------|
|    |              |     |          |         |         |

| Number | Name           | Description   | Compulsory<br>declarations |
|--------|----------------|---|----------------------------|
| 3.1.1  | Beans, toasted | Seeds of <i>Phaseolus</i><br>spp. or <i>Vigna</i> spp.<br>subjected to an |                            |

|       |                             | appropriate heat<br>treatment. It may be<br>rumen protected.   |   |
|-------|-----------------------------|--|---|
| 3.1.2 | Bean protein<br>concentrate | Product obtained<br>from the separated<br>bean fruit water,<br>when producing<br>starch  | Crude protein   |
| 3.2.1 | Carob pods                  | Dried fruits of the<br>carob tree <i>Ceratonia</i><br><i>siliqua</i> L. containing<br>the carob seed                                       | Crude fibre   |
| 3.2.3 | Kibbled carob               | Product obtained by<br>crushing dried fruits<br>(pods) of the carob<br>tree and from which<br>the carob seeds have<br>been removed         | Crude fibre   |
| 3.2.4 | Carob powder; [carob flour] | Product obtained by<br>micronisation of the<br>dried fruits (pods) of<br>the carob tree from<br>which the carob seeds<br>have been removed | Crude fibre<br>Total sugars,<br>calculated as sucrose |
| 3.2.5 | Carob germ                  | Germ of the carob seed of the carob tree   | Crude protein   |
| 3.2.6 | Carob germ, expeller        | Product of oil<br>manufacture,<br>obtained by pressing<br>of germ of carob   | Crude protein   |
| 3.2.7 | Carob seed                  | Seed (kernel)<br>obtained from<br>the carob pod<br>and consisting of<br>endosperm, husk and<br>germ  | Crude fibre   |
| 3.2.8 | Carob seed husk             | Husk of the carob<br>seed, obtained by<br>decortication of seeds<br>of the carob tree  | Crude fibre   |
| 3.3.1 | Chick peas                  | Seeds of Cicer arietinum L.  |   |
| 3.4.1 | Ervil                       | Seeds of <i>Ervum</i> ervilia L.   |   |
| 3.5.1 | Fenugreek seed              | Seed of fenugreek<br>( <i>Trigonella foenum-</i><br>graecum)   |   |

| 3.6.1 | Guar meal                              | Product obtained<br>after extraction<br>of mucilage from<br>seeds of guar<br>bean <i>Cyamopsis</i><br><i>tetragonoloba</i> (L.)<br>Taub | Crude protein                |
|-------|--|---|------------------------------|
| 3.6.2 | Guar germs meal                        | Product of mucilage<br>extraction from the<br>germ of seeds of guar<br>bean.  | Crude protein                |
| 3.7.1 | Horse beans                            | Seeds of <i>Vicia faba</i> L.<br><i>ssp. faba</i> var. <i>equina</i><br>Pers. and var. <i>minuta</i><br>(Alef.) Mansf.                  |                              |
| 3.7.2 | Horse bean flakes                      | Product obtained by<br>steaming or infrared<br>micronising and<br>rolling dehusked<br>horse beans.                                      | Starch<br>Crude protein      |
| 3.7.3 | Film horse beans;<br>[Faba bean hulls] | Product obtained<br>during dehulling<br>horse bean seeds,<br>consisting mainly of<br>external envelopes.                                | Crude fibre<br>Crude protein |
| 3.7.4 | Horse beans,<br>dehulled               | Product obtained<br>during dehulling<br>horse bean seeds,<br>consisting mainly of<br>bean kernels from<br>horse beans.                  | Crude protein<br>Crude fibre |
| 3.7.5 | Horse bean protein                     | Product obtained<br>by grinding and air<br>fractionation of horse<br>beans.   | Crude protein                |
| 3.8.1 | Lentils                                | Seeds of <i>Lens</i> culinaris a.o. Medik.  |                              |
| 3.8.2 | Lentil hulls                           | Product obtained<br>during dehulling<br>process of lentil<br>seeds.   | Crude fibre                  |
| 3.9.1 | Sweet lupins                           | Seeds of <i>Lupinus</i> spp.<br>low in bitter seed<br>content.  |                              |
| 3.9.2 | Sweet lupins,<br>dehulled              | Dehulled lupin seeds.   | Crude protein                |

| 3.9.3  | Film lupins; [lupin<br>hulls] | Product obtained<br>during dehulling<br>of lupin seeds,<br>consisting mainly of<br>external envelopes.  | Crude protein<br>Crude fibre |
|--------|-------------------------------|---|------------------------------|
| 3.9.4  | Lupin pulp                    | Product obtained<br>after extraction of<br>components of lupin.   | Crude fibre                  |
| 3.9.5  | Lupin middlings               | Product obtained<br>during the<br>manufacture of lupin<br>flour from lupin. It<br>consists principally<br>of particles of<br>cotyledon, and to<br>a lesser extent, of<br>skins. | Crude protein<br>Crude fibre |
| 3.9.6  | Lupin protein                 | Product obtained<br>from the separated<br>lupin fruit water<br>when producing<br>starch, or after<br>grinding and air<br>fractionation.   | Crude protein                |
| 3.9.7  | Lupin protein meal            | Product of lupin<br>processing to produce<br>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.<br>It may be rumen<br>protected.   |                              |
| 3.11.2 | Pea bran                      | Product obtained<br>during the<br>manufacture of pea<br>meal. It is composed<br>mainly of skins<br>removed during the<br>skinning and cleaning<br>of peas.                      | Crude fibre                  |
| 3.11.3 | Pea flakes                    | Product obtained by<br>steaming or infra<br>red micronising and<br>rolling dehulled seeds<br>of peas.   | Starch                       |

| 3.11.4  | Pea flour      | Product obtained<br>during the grinding of<br>peas.  | Crude protein   |
|---------|----------------|--|---|
| 3.11.5  | Pea hulls      | Product obtained<br>during the<br>manufacture of pea<br>meal from peas. It<br>is mainly composed<br>of skins removed<br>during the skinning<br>and cleaning and,<br>to a lesser extent, of<br>endosperm. | Crude fibre   |
| 3.11.6  | Peas, dehulled | Dehulled pea seeds.  | Crude protein<br>Crude fibre  |
| 3.11.7  | Pea middlings  | Product obtained<br>during the<br>manufacture<br>of pea flour. It<br>consists principally<br>of particles of<br>cotyledon, and to<br>a lesser extent, of<br>skins.                                       | Crude protein<br>Crude fibre  |
| 3.11.8  | Pea screenings | Product from<br>mechanical screening<br>consisting of<br>fractions of pea<br>kernels separated<br>before further<br>processing.  | Crude fibre   |
| 3.11.9  | Pea protein    | Product obtained<br>from the separated<br>pea fruit water when<br>producing starch, or<br>after grinding and air<br>fractionation, maybe<br>partially hydrolysed.  | Crude protein   |
| 3.11.10 | Pea pulp       | Product obtained<br>from starch and<br>protein wet extraction<br>from peas. It is<br>mainly composed<br>of internal fibre and<br>starch.   | Moisture if $< 70 \%$ or<br>> 85 %<br>Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter |
| 3.11.11 | Pea solubles   | Product obtained<br>from starch and<br>protein wet extraction<br>from peas. It is  | Moisture if < 60 % or<br>> 85 %<br>Total sugars,<br>calculated as sucrose   |

|         |                 | mainly composed of soluble proteins and oligosaccharides.                                       | Crude protein               |
|---------|-----------------|---|-----------------------------|
| 3.11.12 | Pea fibre       | Product obtained<br>by extraction after<br>grinding and sieving<br>of dehulled peas.            | Crude fibre                 |
| 3.12.1  | Vetches         | Seeds of <i>Vicia sativa</i><br>L. <i>var sativa</i> and<br>other varieties.                    |                             |
| 3.13.1  | Chickling vetch | Seeds of <i>Lathyrus</i><br><i>sativus</i> L. subjected<br>to an appropriate heat<br>treatment. | Method of heat<br>treatment |
| 3.14.1  | Monantha vetch  | Seeds of Vicia<br>monanthos Desf.   |                             |

### 4. *Tubers, roots, and products derived thereof*

| Number                            | Name                                | Description   | Compulsory<br>declarations  |
|-----------------------------------|-------------------------------------|---|---|
| 4.1.1                             | Sugar beet                          | Root of <i>Beta vulgaris</i><br>L. ssp. <i>vulgaris</i> var.<br><i>altissima</i> Doell.   |   |
| 4.1.2                             | Sugar beet tops and tails           | Fresh product of the<br>manufacture of sugar<br>consisting mainly<br>of cleaned pieces of<br>sugar beet with or<br>without parts of beet<br>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.   |   |
| 4.1.4                             | (Sugar) beet molasses               | Syrupy product<br>obtained during<br>the manufacture or<br>refining of sugar<br>from sugar beets.<br>May contain up to<br>0,5 % antifoaming<br>agents, 0,5 %<br>antiscaling agents, 2<br>% sulphate and 0,25<br>% sulphite. | Total sugars,<br>calculated as sucrose<br>Moisture, if > 28 %         |
| a Expressions differ mainly       | y in their moisture content and are | e to be used as appropriate.  |   |
| <b>b</b> The name shall be supple | emented by the plant species.       |   |   |

| 4.1.5 | (Sugar) beet<br>molasses, partially<br>desugared and/or<br>debetainised | Product obtained<br>after further<br>extraction using<br>water of sucrose and/<br>or betaine from sugar<br>beet molasses. May<br>contain up to 2 %<br>sulphate and 0,25 %<br>sulphite.   | Total sugars,<br>calculated as sucrose<br>Moisture, if > 28 %                          |
|-------|---|--|--|
| 4.1.6 | Isomaltulose<br>molasses  | Non-crystallised<br>fraction from the<br>manufacture of<br>isomaltulose by<br>enzymatic conversion<br>of sucrose from sugar<br>beets.  | Moisture if > 40 %   |
| 4.1.7 | Wet (sugar) beet pulp   | Product of the<br>manufacture of<br>sugar consisting of<br>slices of sugar beet<br>that have had sugar<br>extracted with water.<br>Minimum moisture<br>content: 82 %. Sugar<br>content is low and<br>declines towards zero<br>due to (lactic acid)<br>fermentation.  | Ash insoluble in HCl,<br>if > 5 % of dry matter<br>Moisture, if < 82 %<br>or > 92 %    |
| 4.1.8 | Pressed (sugar) beet<br>pulp  | Product of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water and have been<br>mechanically pressed.<br>Maximum moisture<br>content: 82 %. Sugar<br>content is low and<br>declines towards zero<br>due to (lactic acid)<br>fermentation. May<br>contain up to 1 %<br>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<br>manufacture of sugar<br>consisting of slices of<br>sugar beet that have  | Ash insoluble in HCl,<br>if $> 5$ % of dry matter<br>Moisture if $< 65$ % or<br>> 82 % |

|                                      | had sugar extracted<br>with water, have been<br>mechanically pressed,<br>and with molasses<br>added. Maximum<br>moisture content:<br>82 %. Sugar content<br>declines due to (lactic<br>acid) fermentation.<br>May contain up to 1<br>% sulphate.                     |  |
|--------------------------------------|--|--|
| Dried (sugar) beet<br>pulp           | Product of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water, mechanically<br>pressed and dried.<br>May contain up to 2<br>% sulphate.  | Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Total sugars,<br>calculated as sucrose,<br>if > 10,5 %   |
| Dried (sugar) beet<br>pulp, molassed | Product of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water, mechanically<br>pressed, and dried,<br>with molasses added.<br>May contain up to 0,5<br>% antifoaming agents<br>and 2 % sulphate. | Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Total sugars,<br>calculated as sucrose   |
| Sugar syrup                          | Product obtained by<br>processing of sugar<br>and/or molasses. May<br>contain up to 0,5 %<br>sulphate and 0,25 %<br>sulphite.  | Total sugars,<br>calculated as sucrose<br>Moisture, if > 35 %  |
| (Sugar) beet pieces,<br>boiled       | Product of the<br>manufacture of edible<br>syrup from sugar<br>beet, which may be<br>pressed or dried.   | If dried:<br>ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>If pressed:<br>ash insoluble in HCl,<br>if > 5 % of dry matter<br>Moisture, if < 50 %   |
|                                      | pulp         Dried (sugar) beet         pulp, molassed         Sugar syrup         (Sugar) beet pieces, boiled   | with water, have been<br>mechanically pressed,<br>and with molasses<br>added. Maximum<br>moisture content:<br>82 %. Sugar content<br>declines due to (lactic<br>acid) fermentation.<br>May contain up to 1<br>% sulphate.Dried (sugar) beet<br>pulpProduct of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water, mechanically<br>pressed and dried.<br>May contain up to 2<br>% sulphate.Dried (sugar) beet<br>pulp, molassedProduct of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water, mechanically<br>pressed and dried.<br>May contain up to 2<br>% sulphate.Dried (sugar) beet<br>pulp, molassedProduct of the<br>manufacture of<br>sugar consisting<br>of slices of sugar<br>beet that have had<br>sugar extracted with<br>water, mechanically<br>pressed, and dried,<br>with molasses added.<br>May contain up to 0,5<br>% antifoaming agents<br>and 2 % sulphate.Sugar syrupProduct obtained by<br>processing of sugar<br>and/or molasses. May<br>contain up to 0,5 %<br>sulphate and 0,25 %<br>sulphite.(Sugar) beet pieces,<br>boiledProduct of the<br>manufacture of edible<br>syrup from sugar<br>beet, which may be |

**b** The name shall be supplemented by the plant species.

| 4.1.14                 | Fructo-<br>oligosaccharides  | Product obtained<br>from sugar from<br>sugar beet through an<br>enzymatic process.   | Moisture if > 28 %  |
|------------------------|--|--|---|
| 4.1.15                 | (Sugar) beet<br>molasses, betaine<br>rich, liquid/dried <sup>a</sup> | Product obtained<br>after extraction<br>of sugar by using<br>water and further<br>filtration of sugar<br>beet molasses.<br>The product<br>thereof contains<br>the constituents of<br>molasses and a higher<br>amount of naturally<br>occuring betaine than<br>standard molasses. It<br>may be dried.<br>May contain up to<br>0,5 % antifoaming<br>agents, 0,5 %<br>antiscaling agents, 2<br>% sulphate and 0,25<br>% sulphite. | Betaine content<br>Total sugars,<br>calculated as sucrose<br>Moisture, if > 14 %        |
| 4.1.16                 | Isomaltulose   | Isomaltulose<br>as crystalline<br>monohydrate<br>substance. It<br>is obtained by<br>enzymatic conversion<br>of sucrose from sugar<br>beets.  |   |
| 4.2.1                  | Beetroot juice   | Juice from pressing<br>of red beet ( <i>Beta</i><br><i>vulgaris</i> convar.<br>crassa var. conditiva)<br>with subsequent<br>concentration and<br>pasteurisation,<br>maintaining the<br>typical vegetable-like<br>taste and flavour.  | Moisture if < 50 % or<br>> 60 %<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter |
| 4.3.1                  | Carrots  | Root of the yellow<br>or red carrot <i>Daucus</i><br><i>carota</i> L.  |   |
| a Expressions differ m | nainly in their moisture content and                                 | are to be used as appropriate.   |   |

| 4.3.2 | Carrot peelings,<br>steamed | Moist product from<br>the carrot processing<br>industry consisting<br>of peelings removed<br>from carrot roots by<br>steam treatment to<br>which auxiliary flows<br>of gelatinous carrot<br>starch may be added.<br>Maximum moisture<br>content: 97 %. | Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Moisture, if > 97 % |
|-------|-----------------------------|--|---|
| 4.3.3 | Carrot scrapings            | Moist product<br>obtained from<br>mechanical<br>separation in<br>processing carrots<br>and carrot remnants.<br>The product may<br>have been subject<br>to heat treatment.<br>Maximum moisture<br>content: 97 %.  | Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Moisture, if > 97 % |
| 4.3.4 | Carrot flakes               | Product obtained<br>by flaking roots<br>of yellow or red<br>carrots, which are<br>subsequently dried.  |   |
| 4.3.5 | Carrot, dried               | Roots of yellow<br>or red carrots<br>regardless of their<br>presentation, which<br>are subsequently<br>dried.  | Crude fibre   |
| 4.3.6 | Carrot feed, dried          | Product constituted<br>of internal pulp and<br>outer skins that are<br>dried.  | Crude fibre   |
| 4.4.1 | Chicory roots               | Roots of <i>Cichorium</i><br><i>intybus</i> L.   |   |
| 4.4.2 | Chicory tops and tails      | Fresh product<br>from chicory<br>processing. It consists<br>predominantly of<br>cleaned pieces of<br>chicory and parts of<br>leaves.   | Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Moisture if < 50 %  |

**b** The name shall be supplemented by the plant species.

| 4.4.3 | Chicory seed         | Seed of Cichorium intybus L.   |  |
|-------|----------------------|--|--|
| 4.4.4 | Pressed chicory pulp | Product of the<br>manufacture of<br>inulin from roots<br>of <i>Cichorium</i><br><i>intybus</i> L. consisting<br>of extracted and<br>mechanically pressed<br>slices of chicory. The<br>(soluble) chicory<br>carbohydrates and<br>water have been<br>partly removed. May<br>contain up to 1 %<br>sulphate and 0,2 %<br>sulphite.               | Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Moisture if < 65 % or<br>> 82 % |
| 4.4.5 | Dried chicory pulp   | Product of the<br>manufacture of<br>inulin from roots<br>of <i>Cichorium</i><br><i>intybus</i> L. consisting<br>of extracted and<br>mechanically pressed<br>slices of chicory and<br>subsequent drying.<br>The (soluble) chicory<br>carbohydrates have<br>been partly extracted.<br>May contain up to 2<br>% sulphate and 0,5 %<br>sulphite. | Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter                                    |
| 4.4.6 | Chicory roots powder | Product obtained by<br>chopping, drying<br>and grinding chicory<br>roots. May contain up<br>to 1 % of anticaking<br>agents.  | Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter                                    |
| 4.4.7 | Chicory molasses     | Product of chicory<br>processing, obtained<br>during the production<br>of inulin and<br>oligofructose.<br>Chicory molasses<br>consists of organic<br>plant material and<br>minerals. May   | Crude protein<br>Crude ash<br>Moisture if < 20 % or<br>> 30 %  |

|        |                                 | contain up to 0,5 % antifoaming agents.   |   |
|--------|---------------------------------|---|---|
| 4.4.8  | Chicory vinasses                | By-product from<br>chicory processing<br>obtained after the<br>separation of inulin<br>and oligofructose<br>and ion exchange<br>elution. Chicory<br>vinasses consists of<br>organic plant material<br>and minerals. May<br>contain up to 1 %<br>antifoaming agents. | Crude protein<br>Crude ash<br>Moisture if < 30 % or<br>> 40 % |
| 4.4.9  | Inulin <sup>ь</sup>             | Inulin is a fructan<br>extracted from e.g.<br>roots of <i>Cichorium</i><br><i>intybus</i> L., <i>Inula</i><br><i>helenium</i> or<br><i>Helianthus tuberosus</i> ;<br>raw inulin may<br>contain up to 1 %<br>sulphate and 0,5 %<br>sulphite.                         |   |
| 4.4.10 | Oligofructose syrup             | Product obtained by<br>partial hydrolysis<br>of inulin from<br><i>Cichorium intybus</i><br>L.; raw oligofructose<br>syrup may contain up<br>to 1 % sulphate 0,5 %<br>sulphite.  | Moisture if < 20 % or<br>> 30 %                               |
| 4.4.11 | Oligofructose, dried            | Product obtained by<br>partial hydrolysis<br>of inulin from<br><i>Cichorium intybus</i><br>L. and subsequent<br>drying.   |   |
| 4.5.1  | Garlic, dried                   | White to yellow<br>powder of pure,<br>ground garlic, <i>Allium</i><br><i>sativum</i> L.   |   |
| 4.6.1  | Manioc; [tapioca];<br>[cassava] | Roots of <i>Manihot</i><br><i>esculenta</i> Crantz,<br>regardless of their<br>presentation.   | Moisture if < 60 % or<br>> 70 %                               |

**b** The name shall be supplemented by the plant species.

| 4.6.2 | Manioc, dried;<br>[tapioca, dried] | Roots of Manioc,<br>regardless of their<br>presentation, which<br>are subsequently<br>dried.   | Starch<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter                   |
|-------|------------------------------------|--|--|
| 4.7.1 | Onion pulp                         | Moist product<br>obtained from<br>processing onions<br>(genus <i>Allium</i> ) and<br>consisting of both<br>skins and whole<br>onions. If obtained<br>from the production<br>process for onion<br>oil, then it mostly<br>consists of cooked<br>remains of onions. | Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter              |
| 4.7.2 | Onions, fried                      | Skinned and crumbed<br>onion pieces which<br>are then fried.   | Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter<br>Crude fat |
| 4.7.3 | Onions solubles,<br>dried          | Dry product obtained<br>from processing fresh<br>onions. It is obtained<br>by alcoholic and/or<br>water extraction, the<br>water or alcoholic<br>fraction is separated<br>and spray dried. It<br>consists mainly of<br>carbohydrates.                            | Crude fibre  |
| 4.8.1 | Potatoes                           | Tubers of Solanum tuberosum L.   | Moisture if < 72 % or<br>> 88 %  |
| 4.8.2 | Potatoes, peeled                   | Potatoes from<br>which the skin is<br>removed using steam<br>treatment.  | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter    |
| 4.8.3 | Potato peelings,<br>steamed        | Moist product from<br>the potato processing<br>industry consisting<br>of peelings removed<br>by steam treatment<br>from potato tubers to<br>which auxiliary flows<br>of gelatinous potato  | Moisture if > 93 %<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter       |

|        |                               | starch may be added.<br>It may be mashed.   |  |
|--------|-------------------------------|---|--|
| 4.8.4  | Potato cuttings, raw          | Product obtained<br>from potatoes during<br>the preparation of<br>potato products for<br>human consumption,<br>which may have been<br>peeled.                               | Moisture if > 88 %<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter       |
| 4.8.5  | Potato scrapings              | Product obtained<br>from mechanical<br>separation in the<br>processing of<br>potatoes and potato<br>remnants. The<br>product may have<br>been subject to heat<br>treatment. | Moisture if > 93 %<br>Ash insoluble in HCl,<br>if > 3,5 % of dry<br>matter       |
| 4.8.6  | Potato, mashed                | Blanched or boiled<br>and then mashed<br>potato product.  | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if $> 3,5 \%$ of dry<br>matter |
| 4.8.7  | Potato flakes                 | Product obtained<br>by rotary drying of<br>washed, peeled or<br>unpeeled steamed<br>potatoes.   | Starch<br>Crude fibre<br>Ash insoluble in HCl,<br>if $> 3,5 \%$ of dry<br>matter |
| 4.8.8  | Potato pulp                   | Product of the<br>manufacture of potato<br>starch consisting of<br>extracted ground<br>potatoes.  | Moisture, if < 77 %<br>or > 88 %   |
| 4.8.9  | Potato pulp, dried            | Dried product of the<br>manufacture of potato<br>starch consisting of<br>extracted ground<br>potatoes.  |  |
| 4.8.10 | Potato protein                | Product of starch<br>manufacture<br>composed mainly of<br>protein substances<br>obtained after the<br>separation of starch.   | Crude protein  |
| 4.8.11 | Potato protein,<br>hydrolysed | Protein obtained by a controlled enzymatic  | Crude protein  |

|        |                                      | hydrolysis of potato proteins.   |   |
|--------|--------------------------------------|--|---|
| 4.8.12 | Potato protein,<br>fermented         | Product obtained<br>by fermentation of<br>potato protein and<br>subsequent spray-<br>drying.   | Crude protein   |
| 4.8.13 | Potato protein<br>fermented, liquid  | Liquid product<br>obtained by<br>fermentation of<br>potato protein.  | Crude protein   |
| 4.8.14 | Potato juice,<br>concentrated        | Concentrated product<br>of the manufacture<br>of potato starch,<br>consisting of the<br>remaining substance<br>after partial removal<br>of fibre, proteins<br>and starch from the<br>whole potato pulp<br>and evaporation of<br>part of the water. | Moisture if < 50 % or<br>> 60 %<br>If moisture < 50 %:<br>— Crude<br>protein<br>— Crude ash |
| 4.8.15 | Potato granules                      | Potatoes after<br>washing, peeling, size<br>reduction (cutting,<br>flaking, etc.) and<br>drying.   |   |
| 4.9.1  | Sweet potato                         | Tubers of <i>Ipomoea</i><br><i>batatas</i> L. regardless<br>of their presentation.   | Moisture if < 57 % or<br>> 78 %   |
| 4.10.1 | Jerusalem artichoke;<br>[Topinambur] | Tubers of <i>Helianthus</i><br><i>tuberosus</i> L.<br>regardless of their<br>presentation.   | Moisture if < 75 % or<br>> 80 %   |

## 5. *Other seeds and fruits, and products derived thereof*

| Number  | Name  | Description   | Compulsory<br>declarations |  |
|---|-------|---|----------------------------|--|
| 5.1.1   | Acorn | Whole fruits of the<br>pendunculate oak<br><i>Quercus robur</i> L., the<br>sessile oak <i>Quercus</i> |                            |  |
| <b>a</b> The name shall be supplemented by the word 'depectinised' where appropriate. |       |   |                            |  |
| <b>b</b> The name shall be supplemented by the plant species.                         |       |   |                            |  |

|                                |  | <i>petraea</i> (Matt.)<br>Liebl., the cork oak<br>of <i>Quercus suber</i> L.,<br>or other species of<br>oak.   |                              |
|--------------------------------|--|--|------------------------------|
| 5.1.2                          | Acorn, dehulled                                    | Product obtained<br>during dehulling of<br>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<br>obtained from<br>dehusked almond<br>seeds by physical<br>separation from the<br>kernels and ground.  | Crude fibre                  |
| 5.2.3                          | Almond kernel<br>expeller                          | Product of oil<br>manufacture obtained<br>by pressing of<br>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, dried]        | Product obtained<br>from the production<br>of juice of <i>Malus</i><br><i>domestica</i> or cider<br>production. It<br>consists principally<br>of internal pulp and<br>outer skins that are<br>dried. It may have<br>been depectinised. | Crude fibre                  |
| 5.4.2                          | Apple pulp, pressed;<br>[apple pomace,<br>pressed] | Moist product<br>obtained from<br>the production<br>of apple juice or<br>cider production. It<br>consists principally<br>of internal pulp and<br>outer skins that are<br>pressed. It may have<br>been depectinised.                    | Crude fibre                  |
| 5.4.3                          | Apple molasses                                     | Product obtained<br>after producing pectin<br>from apple pulp.   | Crude protein<br>Crude fibre |
|                                | pplemented by the word 'depectinise                |  |                              |
| <b>b</b> The name shall be sup | pplemented by the plant species.                   |  |                              |

|        |                          | It may have been depectinised.  | Crude oils and fats, if $> 10 \%$ |
|--------|--------------------------|---|-----------------------------------|
| 5.5.1  | Sugar beet seed          | Seeds of sugar beet.  |                                   |
| 5.6.1  | Buckwheat                | Seeds of Fagopyrum esculentum.  |                                   |
| 5.6.2  | Buckwheat hulls and bran | Product obtained<br>during the milling of<br>buckwheat grains.  | Crude fibre                       |
| 5.6.3  | Buckwheat middlings      | Product of flour<br>manufacture,<br>obtained from<br>screened buckwheat.<br>It consists principally<br>of particles of<br>endosperm, with<br>fine fragments of<br>the outer and some<br>miscellaneous parts<br>of the grain. It must<br>contain no more than<br>10 % crude fibre. | Crude fibre<br>Starch             |
| 5.7.1  | Red cabbage seed         | Seeds of Brassica<br>oleracea var. capitata<br>f. Rubra.  |                                   |
| 5.8.1  | Canary grass seed        | Seeds of <i>Phalaris</i> canariensis.   |                                   |
| 5.9.1  | Caraway seed             | Seeds from <i>Carum carvi</i> L.  |                                   |
| 5.12.1 | Broken chestnuts         | Product of the<br>production of<br>chestnut flour,<br>consisting mainly<br>of particles of<br>endosperm, with<br>fine fragments of<br>envelopes and a few<br>remnants of chestnut<br>( <i>Castanea</i> spp.).   | Crude protein<br>Crude fibre      |
| 5.13.1 | Citrus pulp <sup>*</sup> | Product obtained by<br>pressing citrus fruits<br><i>Citrus</i> (L.) spp. or<br>during the production<br>of citrus juice. It<br>may have been  | Crude fibre                       |

|                                 |                                  | contain collectively<br>up to 1 % methanol,<br>ethanol and propan-2-<br>ol, on an anhydrous<br>basis.  |             |
|---------------------------------|----------------------------------|--|-------------|
| 5.13.2                          | Citrus pulp, dried <sup>a</sup>  | Product obtained<br>by pressing citrus<br>fruits or during<br>the production of<br>citrus juice, which is<br>subsequently dried.<br>It may have been<br>depectinised. May<br>contain collectively<br>up to 1 % methanol,<br>ethanol and propan-2-<br>ol, on an anhydrous<br>basis. | Crude fibre |
| 5.14.1                          | Red clover seed                  | Seeds of <i>Trifolium</i> pratense L.  |             |
| 5.14.2                          | White clover seed                | Seeds of <i>Trifolium</i> repens L.  |             |
| 5.15.1                          | Coffee skins                     | Product obtained<br>from dehusked seeds<br>of the <i>Coffea</i> plant.   | Crude fibre |
| 5.16.1                          | Cornflower seed                  | Seeds of <i>Centaurea</i> cyanus L.  |             |
| 5.17.1                          | Cucumber seed                    | Seeds of Cucumis sativus L.  |             |
| 5.18.1                          | Cypress seed                     | Seeds of <i>Cupressus</i><br>L.  |             |
| 5.19.1                          | Date fruit                       | Fruits of <i>Phoenix</i><br><i>dactylifera</i> L. It may<br>be dried.  |             |
| 5.19.2                          | Date seed                        | Whole seeds of<br><i>Phoenix dactylifera</i><br>L.   | Crude fibre |
| 5.20.1                          | Fennel seed                      | Seeds of <i>Foeniculum vulgare</i> Mill.   |             |
| 5.21.1                          | Fig fruit                        | Fruits of <i>Ficus carica</i><br>L. It may be dried.   |             |
| <b>a</b> The name shall be supp | lemented by the word 'depectinis | ed' where appropriate.   |             |
| <b>b</b> The name shall be supp | lemented by the plant species.   |  |             |

| 5.22.1 | Fruit kernels <sup>b</sup>     | Product consisting of<br>the inner, edible seeds<br>of a nut or fruit stone.  |                          |
|--------|--------------------------------|---|--------------------------|
| 5.22.2 | Fruit pulp <sup>b</sup>        | Product obtained<br>during the production<br>of fruit juice and fruit<br>puree. It may have<br>been depectinised.                                   | Crude fibre              |
| 5.22.3 | Fruit pulp, dried <sup>b</sup> | Product obtained<br>during the production<br>of fruit juice and<br>fruit puree which is<br>subsequently dried.<br>It may have been<br>depectinised. | Crude fibre              |
| 5.23.1 | Garden cress                   | Seeds from <i>Lepidium</i> sativum L.   | Crude fibre              |
| 5.24.1 | Graminaceous seeds             | Seeds from<br>graminoids of the<br>families Poaceae,<br>Cyperaceae and<br>Juncaceae.  |                          |
| 5.25.1 | Grape pips                     | Pips from <i>Vitis</i> L.<br>separated from grape<br>pulp, from which<br>the oil has not been<br>removed.   | Crude fat<br>Crude fibre |
| 5.25.2 | Grape pips meal                | Product obtained<br>during the extraction<br>of oil from grape<br>pips.   | Crude fibre              |
| 5.25.3 | Grape pulp [grape<br>marc]     | Grape pulp dried<br>rapidly after the<br>extraction of alcohol<br>from which as much<br>as possible of the<br>stalks and pips have<br>been removed. | Crude fibre              |
| 5.25.4 | Grape pips soluble             | Product obtained<br>from grape pips<br>after producing<br>grape juice. It<br>principally contains<br>carbohydrates. It may<br>be concentrated.      | Crude fibre              |

| 5.26.1                       | Hazelnut                           | Whole or broken fruit<br>of <i>Corylus</i> (L.) spp.,<br>with or without hulls.   |                              |
|------------------------------|------------------------------------|---|------------------------------|
| 5.26.2                       | Hazelnut expeller                  | Product of oil<br>manufacture obtained<br>by pressing hazelnut<br>kernels.  | Crude protein<br>Crude fibre |
| 5.27.1                       | Pectin                             | Pectin is obtained by<br>aqueous extraction<br>(of natural strains)<br>of appropriate plant<br>material, usually<br>citrus fruits or<br>apples. No organic<br>precipitant shall<br>be used other than<br>methanol, ethanol<br>and propan-2-ol. May<br>contain collectively<br>up to 1 % methanol,<br>ethanol and propan-2-<br>ol, on an anhydrous<br>basis. Pectin consists<br>mainly of the partial<br>methyl esters of<br>polygalacturonic acid<br>and their ammonium,<br>sodium, potassium<br>and calcium salts. |                              |
| 5.28.1                       | Perilla seed                       | Seeds of <i>Perilla</i><br><i>frutescens</i> L. and its<br>milling 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 <i>Plantago</i> (L.) spp.  |                              |
| 5.32.1                       | Radish seed                        | Seeds of <i>Raphanus</i> sativus L.   |                              |
| 5.33.1                       | Spinach seed                       | Seeds of <i>Spinacia</i> oleracea L.  |                              |
| 5.34.1                       | Thistle seed                       | Seeds from <i>Carduus</i><br>marianus L.  |                              |
| a The name shall be s        | supplemented by the word 'depectin | ised' where appropriate.  |                              |
| <b>b</b> The name shall be s | supplemented by the plant species. |   |                              |

| 5.35.1 | Tomato pulp [tomato<br>pomace] | Product obtained<br>by pressing<br>tomatoes <i>Solanum</i><br><i>lycopersicum</i> L.<br>during production<br>of tomato juice. It<br>consists principally<br>of tomato peel and<br>seeds. | Crude fibre                  |
|--------|--------------------------------|--|------------------------------|
| 5.36.1 | Yarrow seed                    | Seeds of <i>Achillea millefolium</i> L.  |                              |
| 5.37.1 | Apricot kernel<br>expeller     | Product of oil<br>manufacture obtained<br>by pressing apricot<br>kernels ( <i>Prunus</i><br><i>armeniaca</i> L.). It may<br>contain hydrocyanic<br>acid.                                 | Crude protein<br>Crude fibre |
| 5.38.1 | Black cumin expeller           | Product of oil<br>manufacture obtained<br>by pressing black<br>cumin seeds ( <i>Bunium</i><br><i>persicum</i> L.).   | Crude protein<br>Crude fibre |
| 5.39.1 | Borrage seed expeller          | Product of oil<br>manufacture obtained<br>by pressing borrage<br>seeds ( <i>Borago</i><br>officinalis L.).   | Crude protein<br>Crude fibre |
| 5.40.1 | Evening primrose<br>expeller   | Product of oil<br>manufacture obtained<br>by pressing evening<br>primrose seeds<br>( <i>Oenothera</i> L.).   | Crude protein<br>Crude fibre |
| 5.41.1 | Pomegranate expeller           | Product of oil<br>manufacture<br>obtained by pressing<br>pomegranate seeds<br>( <i>Punica granatum</i><br>L.).   | Crude protein<br>Crude fibre |
| 5.42.1 | Walnut kernel<br>expeller      | Product of oil<br>manufacture obtained<br>by pressing walnut<br>kernels ( <i>Juglans</i><br><i>regia</i> L.).  | 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>a</sup>  | Whole plants of<br>cereal species or<br>parts thereof. It may<br>be dried, fresh or<br>ensiled.  |   |
| 6.3.1                      | Cereals straw <sup>a</sup>  | Straw of cereals.  |   |
| 6.3.2                      | Cereal straw, treated <sup>ab</sup>   | Product obtained<br>by an appropriate<br>treatment of cereal<br>straw.   | Sodium, if treated<br>with NaOH   |
| 6.4.1                      | Clover meal   | Product obtained by<br>drying and milling<br>clover <i>Trifolium</i><br>spp. It may contain<br>up to 20 % lucerne<br>( <i>Medicago sativa</i> L.<br>and <i>Medicago</i> var.<br><i>Martyn</i> ) or other<br>forage crops dried<br>and milled at the<br>same time as the<br>clover. | Crude protein<br>Crude fibre<br>Ash insoluble, in<br>HCl, if > 3,5 % of dry<br>matter   |
| 6.5.1                      | Forage meal <sup>e</sup> ; [grass<br>meal] <sup>e</sup> ; [green meal] <sup>e</sup> | Product obtained by<br>drying and milling<br>and in some cases<br>compacting forage<br>plants.   | Crude protein<br>Crude fibre<br>Ash insoluble, in<br>HCl, if $> 3,5$ % of dry<br>matter |
| 6.6.1                      | Grass, field dried;<br>[hay]  | Species of any grass, field dried.   | Ash insoluble, in<br>HCl, if > 3,5 % of dry<br>matter                                   |
| 6.6.2                      | Grass, high<br>temperature dried  | Product obtained<br>from grass (any<br>variety) that has been<br>artificially dehydrated<br>(in any form).   | Crude protein<br>Fibre<br>Ash insoluble, in<br>HCl, if $> 3,5$ % of dry<br>matter       |
| <b>a</b> The name shall be | supplemented by the plant species.  | 1  | 1   |
| <b>b</b> The name must be  | supplemented by an indication of the n  | ature of the treatment carried out   | <br>t.  |
| c The species of fora      | ge crop may be added to the name.   |  |   |

# 6. Forages and roughage, and products derived thereof

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

| 6.6.3  | Grass; herbs; legume<br>plants; [green forage]                              | Fresh, ensiled or<br>dried arable crops<br>consisting of grass,<br>legumes or herbs,<br>commonly described<br>as silage, haylage,<br>hay or green forage. | Ash insoluble, in<br>HCl, if > 3,5 % of dry<br>matter                                   |
|--------|---|---|---|
| 6.7.1  | Hemp flour  | Flour ground from<br>dried leaves from<br>Cannabis sativa L.  | Crude protein   |
| 6.7.2  | Hemp fibre  | Product obtained<br>during the processing<br>of hemp, green<br>coloured, dried,<br>fibrous.   |   |
| 6.8.1  | Horse bean straw  | Straw of horse bean<br>(Vicia faba L. ssp.<br>faba var. equina<br>Pers. and var. minuta<br>(Alef.) Mansf.).   |   |
| 6.9.1  | Linseed straw   | Straw of linseed<br>( <i>Linum usitatissimum</i><br>L.).  |   |
| 6.10.1 | Lucerne; [alfalfa]  | <i>Medicago sativa</i> L.<br>and <i>Medicago</i> var.<br>Martyn plants or<br>parts thereof.   | Ash insoluble, in<br>HCl, if > 3,5 % of dry<br>matter                                   |
| 6.10.2 | Lucerne, field dried;<br>[alfalfa field dried]                              | Lucerne, field dried.   | Ash insoluble, in<br>HCl, if > 3,5 % of dry<br>matter                                   |
| 6.10.3 | Lucerne, high<br>temperature dried;<br>[alfalfa, high<br>temperature dried] | Lucerne artificially<br>dehydrated, in any<br>form.   | Crude protein<br>Crude fibre<br>Ash insoluble, in<br>HCl, if $> 3,5$ % of dry<br>matter |
| 6.10.4 | Lucerne, extruded;<br>[alfalfa, extruded]                                   | Alfalfa pellets that have been extruded.  |   |
| 6.10.5 | Lucerne meal <sup>d</sup> ;<br>[alfalfa meal] <sup>d</sup>                  | Product obtained by<br>drying and milling<br>Lucerne. It may<br>contain up to 20 %<br>clover or other forage  | Crude protein<br>Crude fibre<br>Ash insoluble, in<br>HCl, if $> 3,5$ % of dry<br>matter |

**c** The species of forage crop may be added to the name.

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

| ied and milled<br>ame time as<br>erne.   |                      |
|--|----------------------|
|  | e protein<br>e fibre |
| t obtained by Crude<br>ally drying Carot<br>as of lucerne<br>nice, which<br>een separated<br>rifugation<br>at treated to<br>tate protein.                                | e protein<br>ene     |
| t obtained Crude<br>otein<br>ion from<br>juice, it may<br>d  | e protein            |
| plants or<br>ereof of Zea<br>. ssp. mays.  |                      |
| of Pisum spp.  |                      |
| of Brassica<br>L. ssp. oleifera<br>.) Sinsk.,<br>an sarson<br><i>va napus</i> L.<br><i>vuca</i> (Roxb.)<br>chulz and of<br><i>vassica rapa</i><br><i>vifera</i> (Metzg.) |                      |
| a  | ssica rapa           |

**b** The name must be supplemented by an indication of the nature of the treatment carried out.

**c** The species of forage crop may be added to the name.

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

## 7. Other plants, algae and products derived thereof

| Number | Name               | Description  | Compulsory declarations                 |
|--------|--------------------|--|---|
| 7.1.1  | Algae <sup>a</sup> | Algae, live or<br>processed, including<br>fresh, chilled or<br>frozen algae. May | Crude protein<br>Crude fat<br>Crude ash |

|       |  | contain up to 0,1 % antifoaming agents.  |   |
|-------|--|--|---|
| 7.1.2 | Dried algae <sup>a</sup>                                   | Product obtained<br>by drying algae.<br>This product may<br>have been washed<br>to reduce the iodine<br>content and the<br>algae have been<br>inactivated. May<br>contain up to 0,1 %<br>antifoaming agents.           | Crude protein<br>Crude fat<br>Crude ash |
| 7.1.3 | Algae meal <sup>a</sup>                                    | Product of algae<br>oil manufacture,<br>obtained by<br>extraction of algae.<br>The algae have been<br>inactivated. May<br>contain up to 0,1 %<br>antifoaming agents.   | Crude protein<br>Crude fat<br>Crude ash |
| 7.1.4 | Algal oil <sup>a</sup>                                     | Oil obtained by<br>extraction from algae.<br>May contain up to<br>0,1 % antifoaming<br>agents.   | Moisture if > 1 %                       |
| 7.1.5 | Algae extract <sup>a</sup> ; [algae fraction] <sup>a</sup> | Watery or alcoholic<br>extract of algae that<br>principally contains<br>carbohydrates. May<br>contain up to 0,1 %<br>antifoaming agents.   |   |
| 7.1.6 | Seaweed meal   | Product obtained by<br>drying and crushing<br>macro-algae, in<br>particular brown<br>algae. This product<br>may have been<br>washed to reduce the<br>iodine content. May<br>contain up to 0,1 %<br>antifoaming agents. | Crude ash                               |
| 7.3.1 | Barks <sup>a</sup>   | Cleaned and dried<br>bark of trees or<br>bushes.   | Crude fibre                             |
| 7.4.1 | Blossoms <sup>a</sup> , dried                              | All parts of dried   | Crude fibre                             |

|       |  | consumable plants and their fractions.   |   |
|-------|--|--|---|
| 7.5.1 | Broccoli, dried  | Product obtained<br>by drying the plant<br><i>Brassica oleracea</i><br>L. after washing,<br>size reduction<br>(cutting, flaking, etc.)<br>and water content<br>removal.  |   |
| 7.6.1 | (Sugar) cane<br>molasses                                   | Syrupy product<br>obtained during<br>the manufacture or<br>refining of sugar<br>from <i>Saccharum</i> L.<br>May contain up to<br>0,5 % antifoaming<br>agents, 0,5 %<br>antiscaling agents,<br>3,5 % sulphate and<br>0,25 % sulphite. | Total sugars,<br>calculated as sucrose<br>Moisture, if > 30 % |
| 7.6.2 | (Sugar) cane<br>Molasses, partially<br>desugared           | Product obtained<br>after further<br>extraction using<br>water of sucrose from<br>sugar cane molasses.   | Total sugars,<br>calculated as sucrose<br>Moisture, if > 28 % |
| 7.6.3 | (Cane) sugar<br>[sucrose]                                  | Sugar extracted from<br>sugar cane using<br>water.   |   |
| 7.6.4 | Cane bagasse   | Product obtained<br>during extraction<br>using water of sugar<br>from sugar cane. It<br>consists mainly of<br>fibres.  | Crude fibre   |
| 7.7.1 | Leaves, dried <sup>a</sup>                                 | Dried leaves of<br>consumable plants<br>and their fractions.   | Crude fibre   |
| 7.8.1 | Lignocellulose<br>be supplemented by the plant or algae sp | Product obtained by<br>means of mechanical<br>processing of<br>raw natural dried<br>wood and which<br>predominantly<br>consists of<br>lignocellulose. The<br>natural content of  | Crude fibre   |

|                           |  | trace elements shall be taken into account   |                                       |
|---------------------------|--|--|---------------------------------------|
| 7.8.2                     | Powdercellulose                          | Product obtained<br>by decomposition,<br>separation of lignin<br>and further cleaning<br>as cellulose from<br>vegetable fibre of<br>untreated wood and<br>which is modified<br>by mechanical<br>processing only.<br>Neutral detergent<br>fibre (NDF)<br>minimum 87 % | Crude fibre                           |
| 7.9.1                     | Liquorice root                           | Root of <i>Glycyrrhiza</i> L.  |                                       |
| 7.10.1                    | Mint                                     | Product obtained<br>from drying aerial<br>parts of the plants<br><i>Mentha apicata</i> ,<br><i>Mentha piperita</i> or<br><i>Mentha viridis</i> (L.),<br>regardless of their<br>presentation.   |                                       |
| 7.11.1                    | Spinach, dried                           | Product obtained<br>from drying the plant<br><i>Spinacia oleracea</i><br>L., regardless of its<br>presentation.  |                                       |
| 7.12.1                    | Mojave yucca                             | Pulverised Yucca<br>schidigera Roezl.  | Crude fibre                           |
| 7.12.2                    | Yucca Schidigera<br>juice                | A product obtained<br>by cutting and<br>pressing stems of<br><i>Yucca Schidigera</i> ,<br>composed mainly of<br>carbohydrates  |                                       |
| 7.13.1                    | Vegetal carbon;<br>[charcoal]            | Product obtained<br>by carbonisation<br>of organic vegetal<br>material.  | Crude fibre                           |
| 7.14.1                    | Wood <sup>a</sup>                        | Chemically untreated wood or wood fibres.  | Crude fibre                           |
| 7.15.1                    | Waxy-leaf nightshade meal                | Product obtained by drying and grinding  | Crude fibre<br>Vitamin D <sub>3</sub> |
| <b>a</b> The name shall b | e supplemented by the plant or algae spe | cies.  |                                       |

|   | Changes to legislation: There are                    | ime view as at 31/01/2020.<br>c currently no known outstanding effects for<br>017/1017. (See end of Document for details) |  |
|---|--|---|--|
|   |  | the leaves of <i>Solanum</i> glaucophyllum,   |  |
| a | The name shall be supplemented by the plant or algae | species.  |  |

# 8. *Milk products and products derived thereof*

Feed materials in this chapter shall fullfil the requirements of the Regulation (EC) No 1069/2009 and Regulation (EU) No 142/2011 and may be subject to restrictions in use according to Regulation (EC) No 999/2001.

| Number | Name   | Description   | Compulsory declarations                                    |
|--------|--|---|--|
| 8.1.1  | Butter and butter<br>products                | Butter and products<br>obtained by<br>production or<br>processing of<br>butter (e.g. butter<br>serum), unless listed<br>separately.   | Crude protein<br>Crude fat<br>Lactose<br>Moisture if > 6 % |
| 8.2.1  | Buttermilk/buttermilk<br>powder <sup>a</sup> | Product obtained by<br>churning butter out<br>of cream or similar<br>processes.<br>Concentration and/<br>or drying may be<br>applied.<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphosphates<br>(e.g. sodium<br>hexametaphod<br>diphosphates<br>(e.g.<br>tetrasodiump<br>used to<br>decrease the<br>viscosity<br>and to<br>stabilise<br>protein<br>during<br>processing;<br>up to 0,3 %<br>inorganic | sphate),   |

appropriate.

| 8 3 1 | Casein    | <ul> <li>acids: sulphuric acid, sulphuric acid, hydrochlorid acid, phosphoric acid, used for pH adjustments in many stages of production processes; up to 0,5 % akali e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many stages of production processes; up to 2 % free-flowing agents e.g. silicium dioxide, pentasodium-triphosphate, used to improve powder flowing properties.</li> <li>Product obtained</li> </ul> |                                     |
|-------|-----------|---|-------------------------------------|
| 8.3.1 | Casein    | Product obtained<br>from skimmed or<br>buttermilk by drying<br>casein precipitated<br>by means of acids or<br>rennet.   | Crude protein<br>Moisture if > 10 % |
| 8.4.1 | Caseinate | Product extracted<br>from curd or<br>casein through   | Crude protein<br>Moisture if > 10 % |

|       |  | use of neutralising<br>substances and<br>drying.   |                            |
|-------|--|--|----------------------------|
| 8.5.1 | Cheese and cheese products                 | Cheese and products<br>made of cheese<br>and of milk based<br>products.  | Crude protein<br>Crude fat |
| 8.6.1 | Colostrum/colostrum<br>powder <sup>a</sup> | The fluid secreted by<br>the mammary glands<br>of milk-producing<br>animals up to five<br>days post parturition.<br>Concentration and/<br>or drying may be<br>applied.   | Crude protein              |
| 8.7.1 | Dairy by-products                          | Products obtained<br>when producing dairy<br>products (including,<br>but not limited<br>to: former dairy<br>foodstuffs, centrifuge<br>or separator sludge,<br>white water, milk<br>minerals).<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphosphates<br>(e.g. sodium<br>hexametaphod<br>diphosphates<br>(e.g.<br>tetrasodiump<br>used to<br>decrease the<br>viscosity<br>and to<br>stabilise<br>protein<br>during<br>processing;<br>— up to 0,3 %<br>inorganic<br>acids:<br>sulphuric | sphate),                   |

| <i>Status:</i> Point in time view as at 31/01/2020.                          |
|--|
| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |

|        |                               | <ul> <li>acid,<br/>hydrochloric<br/>acid,<br/>phosphoric<br/>acid, used<br/>for pH<br/>adjustments<br/>in many<br/>stages of<br/>production<br/>processes;<br/>up to 0,5 %<br/>akali e.g.<br/>sodium,<br/>potassium,<br/>calcium,<br/>magnesium<br/>hydroxides,<br/>used for pH<br/>adjustments<br/>in many<br/>stages of<br/>production<br/>processes;<br/>up to 2 %<br/>free-flowing<br/>agents e.g.<br/>silicium<br/>dioxide,<br/>penta-<br/>sodium-<br/>triphosphate,<br/>used to<br/>improve<br/>powder<br/>flowing<br/>properties.</li> </ul> |   |
|--------|-------------------------------|---|---|
| 3.8.1  | Fermented milk products       | Products obtained by<br>fermentation of milk<br>(e.g. yoghurt etc.).  | Crude protein<br>Crude fat                      |
| 8.9.1  | Lactose                       | The sugar separated<br>from milk or whey<br>by purification and<br>drying.  | Moisture if > 5 %                               |
| 8.10.1 | Milk/milk powder <sup>a</sup> | Normal mammary<br>secretion obtained<br>from one or   | Crude protein<br>Crude fat<br>Moisture if > 5 % |

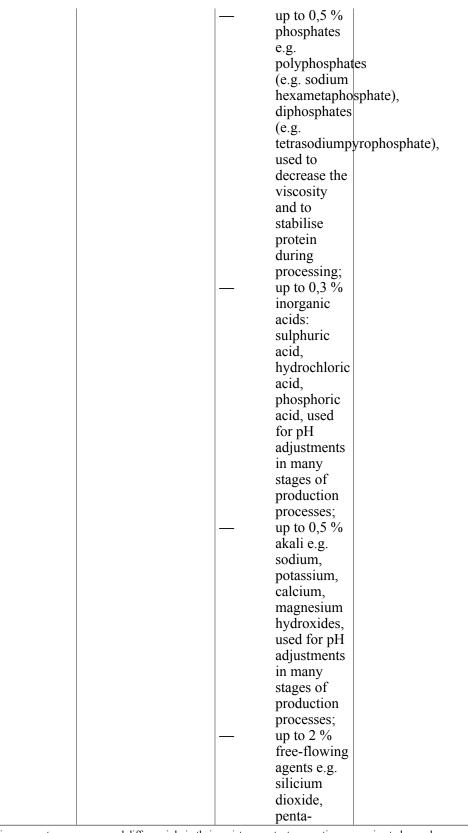
|        |  | more milkings.<br>Concentration and/<br>or drying may be<br>applied.   |  |
|--------|--|--|--|
| 8.11.1 | Skimmed milk/<br>skimmed milk<br>powder <sup>a</sup>   | Milk whose<br>fat content has<br>been reduced by<br>separation.<br>Concentration and/<br>or drying may be<br>applied.  | Crude protein<br>Moisture if > 5 %                         |
| 8.12.1 | Milk fat   | Product obtained by skimming milk.   | Crude fat  |
| 3.13.1 | Milk protein powder                                    | Product obtained<br>by drying protein<br>compounds extracted<br>from milk by<br>chemical or physical<br>treatment.   | Crude protein<br>Moisture if > 8 %                         |
| 8.14.1 | Condensed and<br>evaporated milk and<br>their products | Condensed and<br>evaporated milk and<br>products obtained<br>by production or<br>processing of these<br>products.  | Crude protein<br>Crude fat<br>Moisture if > 5 %            |
| 8.15.1 | Milk permeate/Milk<br>permeate powder <sup>a</sup>     | Product obtained<br>from the liquid phase<br>of (ultra, nano or<br>micro) filtration of<br>milk and from which<br>lactose may have<br>been partly removed.<br>Reverse osmosis,<br>concentration and/<br>or drying may be<br>applied. | Crude ash<br>Crude protein<br>Lactose<br>Moisture if > 8 % |
| 8.16.1 | Milk retentate/milk<br>retentate powder <sup>a</sup>   | Product retained on<br>the membrane from<br>(ultra, nano or micro)<br>filtration of milk.<br>Concentration and/<br>or drying may be<br>applied.  | Crude protein<br>Crude ash<br>Lactose<br>Moisture if > 8 % |
| 8.17.1 | Whey/whey powder <sup>a</sup>                          | Product of cheese,<br>quark or casein<br>manufacturing or<br>similar processes.  | Crude protein<br>Lactose<br>Moisture if > 8 %<br>Crude ash |

| Concentration and/<br>or drying may be<br>applied.<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphosphates<br>(e.g. sodium<br>hexametaphosphate),<br>diphosphates<br>(e.g.<br>tetrasodiumpyrophosphate),                           |
|--|
| <ul> <li>during processing; up to 0,3 % inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many stages of production processes; up to 0,5 % akali e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many stages of</li> </ul> |

**a** Expressions are not synonymous and differ mainly in their moisture content, respective expression to be used as appropriate.

|        |  | <ul> <li>production<br/>processes;</li> <li>up to 2 %<br/>free-flowing<br/>agents e.g.<br/>silicium<br/>dioxide,<br/>penta-<br/>sodium-<br/>triphosphate,<br/>tri-calcium-<br/>phosphate,<br/>used to<br/>improve<br/>powder<br/>flowing<br/>properties.</li> </ul>   |          |
|--------|--|---|----------|
| 8.18.1 | Delactosed whey/<br>delactosed whey<br>powder <sup>a</sup> | Whey from which<br>the lactose has been<br>partly removed.<br>Concentration and/<br>or drying may be<br>applied.<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphosphates<br>(e.g. sodium<br>hexametapho<br>diphosphates<br>(e.g.<br>tetrasodiump<br>used to<br>decrease the<br>viscosity<br>and to<br>stabilise<br>protein<br>during<br>processing;<br>— up to 0,3 %<br>inorganic<br>acids:<br>sulphuric<br>acid,<br>hydrochloric | sphate), |

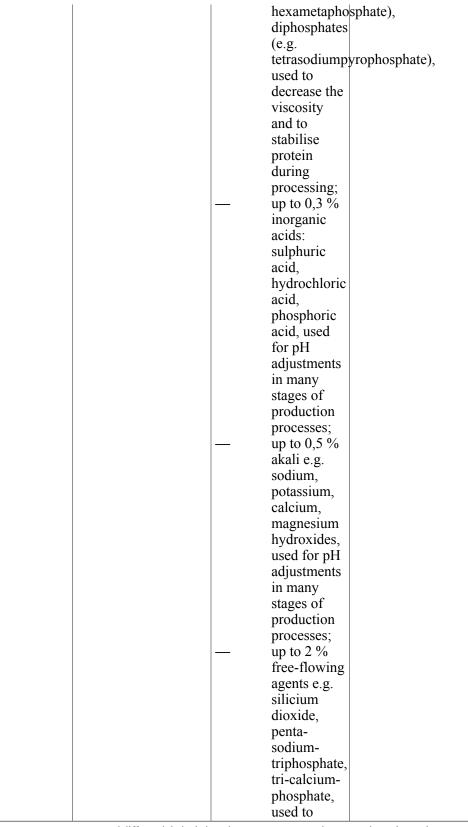
| Status: Point in time view as at 31/01/2020.                                 |
|--|
| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |



**a** Expressions are not synonymous and differ mainly in their moisture content, respective expression to be used as appropriate.

|        | Changes to legislation: There are a<br>the Commission Regulation (EU) 20 |                                |                      |
|--------|--|--------------------------------|----------------------|
|        |  | sodium-<br>triphosphate,       |                      |
|        |  | tri-calcium-                   |                      |
|        |  | phosphate,                     |                      |
|        |  | used to                        |                      |
|        |  | improve                        |                      |
|        |  | powder                         |                      |
|        |  | flowing                        |                      |
|        |  | properties.                    |                      |
| 0.001  |  |                                |                      |
| 8.20.1 | Demineralised,   | Whey from which                | Crude protein        |
|        | delactosed whey/   | lactose and minerals           | Lactose              |
|        | demineralised,   | have been partly               | Crude ash            |
|        | delactosed whey  | removed.                       | Moisture if $> 8 \%$ |
|        | powder <sup>a</sup>  | Concentration and/             |                      |
|        |  | or drying may be               |                      |
|        |  | applied.<br>Where specifically |                      |
|        |  | prepared as feed               |                      |
|        |  | material, may                  |                      |
|        |  | contain:                       |                      |
|        |  | — up to 0,5 %                  |                      |
|        |  | phosphates                     |                      |
|        |  | e.g.                           |                      |
|        |  | polyphospha                    | tes                  |
|        |  | (e.g. sodium                   |                      |
|        |  | hexametapho                    | sphate),             |
|        |  | diphosphates                   |                      |
|        |  | (e.g.                          |                      |
|        |  |                                | yrophosphate),       |
|        |  | used to                        |                      |
|        |  | decrease the                   |                      |
|        |  | viscosity                      |                      |
|        |  | and to                         |                      |
|        |  | stabilise                      |                      |
|        |  | protein<br>during              |                      |
|        |  | processing;                    |                      |
|        |  | — up to 0,3 %                  |                      |
|        |  | inorganic                      |                      |
|        |  | acids:                         |                      |
|        |  | sulphuric                      |                      |
|        |  | acid,                          |                      |
|        |  | hydrochloric                   |                      |
|        |  | acid,                          |                      |
|        |  | phosphoric                     |                      |
|        |  | acid, used                     |                      |
|        |  | for pH                         |                      |
|        |  | adjustments                    |                      |
|        |  | in many                        |                      |
|        |  | stages of                      | 1                    |

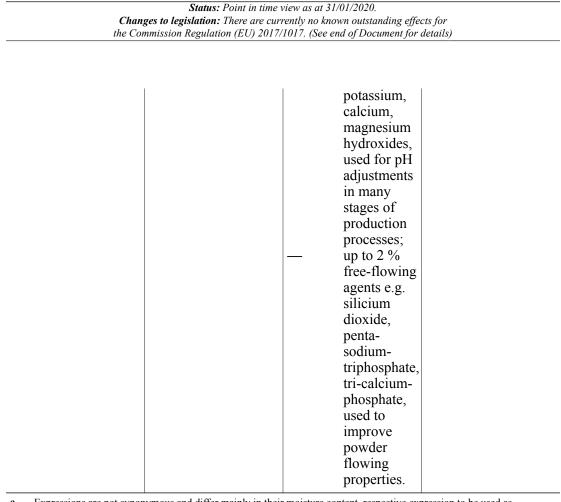
|  | production<br>processes;<br>up to 0,5 %<br>akali e.g.<br>sodium,<br>potassium   |   |
|--|---|---|
|  | <ul> <li>calcium,</li> <li>magnesium</li> <li>hydroxides,</li> <li>used for pH</li> <li>adjustments</li> <li>in many</li> <li>stages of</li> <li>production</li> <li>processes;</li> <li>up to 2 %</li> <li>free-flowing</li> <li>agents e.g.</li> <li>silicium</li> <li>dioxide,</li> <li>penta-</li> <li>sodium-</li> <li>triphosphate,</li> <li>triphosphate,</li> <li>used to</li> <li>improve</li> <li>powder</li> <li>flowing</li> <li>properties.</li> </ul> |   |
| Whey permeate/whey<br>permeate powder <sup>a</sup> | Product from the<br>liquid phase of<br>(ultra, nano or micro)<br>filtration of whey<br>and from which<br>lactose may have<br>been partly removed.<br>Reverse osmosis and<br>concentration and/<br>or drying may be<br>applied.<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphospha   | Crude ash<br>Crude protein<br>Lactose<br>Moisture if > 8 %  |
|  |   | Image: Second stateImage: Second s |



**a** Expressions are not synonymous and differ mainly in their moisture content, respective expression to be used as appropriate.

|        |   | improve<br>powder<br>flowing<br>properties.   |          |
|--------|---|---|----------|
| 8.22.1 | Whey retentate/whey retentate powder <sup>a</sup> | Product retained on<br>the membrane from<br>(ultra, nano or micro)<br>filtration of whey.<br>Concentration and/<br>or drying may be<br>applied.<br>Where specifically<br>prepared as feed<br>material, may<br>contain:<br>— up to 0,5 %<br>phosphates<br>e.g.<br>polyphosphat<br>(e.g. sodium<br>hexametapho<br>diphosphates<br>(e.g. | sphate), |

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**a** Expressions are not synonymous and differ mainly in their moisture content, respective expression to be used as appropriate.

### 9. *Land animal products and products derived thereof*

Feed materials in this chapter shall fullfil the requirements of the Regulation (EC) No 1069/2009 and Regulation (EU) No 142/2011 and may be subject to restrictions in use according to Regulation (EC) No 999/2001

| Number | Name                            | Description  | Compulsory declarations                         |
|--------|---------------------------------|--|---|
| 9.1.1  | Animal by-products <sup>a</sup> | Whole or parts<br>of warm-blooded<br>land animals, fresh,<br>frozen, cooked, acid<br>treated or dried.   | Crude protein<br>Crude fat<br>Moisture if > 8 % |
| 9.2.1  | Animal fat <sup>ь</sup>         | Product composed<br>of fat from land<br>animals, including<br>invertebrates<br>other than species<br>pathogenic to humans<br>and animals in all<br>their life stages.<br>If extracted with | Crude fat<br>Moisture if > 1 %                  |

|       |   | solvents, may contain<br>up to 0,1 % hexane.  |  |
|-------|---|---|--|
| 9.3.1 | Apiculture by-<br>products                        | Honey, beeswax,<br>royal jelly, propolis,<br>pollen, processed or<br>unprocessed  | Total sugars,<br>calculated as sucrose                       |
| 9.4.1 | Processed animal<br>protein <sup>b</sup>          | Product obtained<br>by heating, drying<br>and grinding whole<br>or parts of land<br>animals, including<br>invertebrates<br>other than species<br>pathogenic to humans<br>and animals in all<br>their life stages<br>from which the<br>fat may have been<br>partially extracted or<br>physically removed.<br>If extracted with<br>solvents, may contain<br>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>b</sup> | Dried animal proteins<br>derived from the<br>production of gelatine<br>obtained from raw<br>materials pursuant<br>to Regulation (EC)<br>No 853/2004.  | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8 % |
| 9.6.1 | Hydrolysed animal<br>proteins <sup>b</sup>        | Polypeptides,<br>peptides and<br>aminoacids, and<br>mixtures thereof,<br>obtained by<br>hydrolysis of animal<br>by-products, which<br>can be concentrated<br>by drying.   | Crude protein<br>Moisture if > 8 %                           |
| 9.7.1 | Blood meal <sup>b</sup>                           | Product derived from<br>the heat treatment of<br>blood of slaughtered<br>warm-blooded<br>animals.   | Crude protein<br>Moisture if > 8 %                           |
| 9.8.1 | Blood products <sup>a</sup>                       | Products derived<br>from blood or<br>fractions of blood of<br>slaughtered warm-<br>blooded animals; they<br>include dried/frozen/   | Crude protein<br>Moisture if > 8 %                           |

|        |   | liquid plasma, dried<br>whole blood, dried/<br>frozen/liquid red cells<br>or fractions thereof<br>and mixtures.   |  |
|--------|---|---|--|
| 9.9.1  | Catering reflux<br>[catering recycling]   | All waste food<br>containing material<br>of animal origin<br>including used<br>cooking oil<br>originating in<br>restaurants, catering<br>facilities and<br>kitchens, including<br>central kitchens and<br>household kitchens.         | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8 % |
| 9.10.1 | Collagen <sup>b</sup>                     | Protein-based product<br>derived from animal<br>bones, hides, skins<br>and tendons.   | Crude protein<br>Moisture if > 8 %                           |
| 9.11.1 | Feather meal                              | Product obtained<br>by drying and<br>grinding feathers of<br>slaughtered animals,<br>it may be hydrolysed.  | Crude protein<br>Moisture if > 8 %                           |
| 9.12.1 | Gelatine <sup>b</sup>                     | Natural, soluble<br>protein, gelling<br>or non-gelling,<br>obtained by the<br>partial hydrolysis of<br>collagen produced<br>from bones, hides and<br>skins, tendons and<br>sinews of animals.   | Crude protein<br>Moisture if > 8 %                           |
| 9.13.1 | Greaves <sup>b</sup>                      | Product obtained<br>from the manufacture<br>of tallow, lard and<br>other extracted or<br>physically removed<br>fats of animal origin,<br>fresh, frozen or dried.<br>If extracted with<br>solvents, may contain<br>up to 0,1 % hexane. | Crude protein<br>Crude fat<br>Crude ash<br>Moisture if > 8 % |
| 9.14.1 | Products of animal<br>origin <sup>a</sup> | Former foodstuff<br>containing animal<br>products; with or<br>without treatment   | Crude protein<br>Crude fat<br>Moisture if > 8 %              |

|        |   | such as fresh, frozen, dried.  |   |
|--------|---|--|---|
| 9.15.1 | Eggs  | Whole eggs of <i>Gallus</i> gallus L. with or without shells.  |   |
| 9.15.2 | Albumen   | Product obtained<br>from eggs after<br>the separation of<br>shells and yolk,<br>pasteurised and<br>possibly denatured.                                     | Crude protein<br>Method of<br>denaturation, if<br>applicable                              |
| 9.15.3 | Egg products, dried                             | Products consisting<br>of pasteurised dried<br>eggs, without shells<br>or a mixture of<br>different proportions<br>of dried albumen and<br>dried egg yolk. | Crude protein<br>Crude fat<br>Moisture if > 5 %   |
| 9.15.4 | Egg powder, sugared                             | Dried whole or parts of eggs.  | Crude protein<br>Crude fat<br>Moisture if > 5 %<br>Total sugars,<br>calculated as sucrose |
| 9.15.5 | Egg shells, dried                               | Product obtained<br>from poultry eggs,<br>after the content<br>(yolk and albumen)<br>has been removed.<br>Shells are dried.                                | Crude ash   |
| 9.16.1 | Terrestrial<br>invertebrates, live <sup>a</sup> | Live terrestrial<br>invertebrates, in all<br>their life stages, other<br>than species having<br>adverse effects on<br>plant, animals and<br>human health.  |   |
| 9.16.2 | Terrestrial                                     | Dead terrestrial   | Crude protein   |

- **a** Without prejudice to mandatory requirements concerning commercial documents and health certificates for animal byproducts and derived products as laid down in Commission Regulation (EU) No 142/2011 (Annex VIII, Chapter III) and if the catalogue is used for labelling purposes, the name shall be
  - replaced as appropriate by the animal species and
  - the part of the animal product (e.g. liver, meat (only if skeletal muscle)), and/or
  - the life stage (e.g. larvae) and/or
  - 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
  - the animal species and/or
  - the part of the animal product (e.g. liver, meat (only if skeletal muscle)), and/or
  - the life stage (e.g. larvae) and/or
  - the naming of the animal species not used in respect of the ban on intra-species recycling.
- **b** Without prejudice to mandatory requirements concerning commercial documents and health certificates for animal by-products and derived products as laid down in Regulation (EU) No 142/2011 (Annex VIII, Chapter III) and if the catalogue is used for labelling purposes, the name shall be supplemented as appropriate by
  - the animal species processed (e.g. porcine, ruminant, avian, insect) and/or
  - the life stage (e.g. larvae) and/or
  - the material processed (e.g. bone) and/or
  - the process used (e.g. defatted, refined) and/or
  - the naming of the animal species not used in respect of the ban on intra-species recycling (e.g. poultry-free).

#### 10. *Fish, other aquatic animals and products derived thereof*

Feed materials in this chapter shall fullfil the requirements of the Regulation (EC) No 1069/2009 and Regulation (EU) No 142/2011 and may be subject to restrictions in use according to Regulation (EC) No 999/2001

| Number | Name   | Description   | Compulsory<br>declarations                  |
|--------|--|---|---|
| 10.1.1 | Aquatic invertebrates <sup>a</sup>               | Whole or parts of<br>marine or freshwater<br>invertebrates, in<br>all their life stages,<br>other than species<br>pathogenic to humans<br>and animals; with<br>or without treatment<br>such as fresh, frozen,<br>dried. | Crude protein<br>Crude fat<br>Crude ash     |
| 10.2.1 | By-products from<br>aquatic animals <sup>a</sup> | Originating from<br>establishments or<br>plants preparing<br>or manufacturing<br>products for human<br>consumption; with<br>or without treatment<br>such as fresh, frozen,<br>dried.                                    | Crude protein<br>Crude fat<br>Crude ash     |
| 10.3.1 | Crustacea meal <sup>b</sup>                      | Product obtained<br>by heating, pressing<br>and drying whole or<br>parts of crustacean  | Calcium<br>Ash insoluble in HCl<br>if > 5 % |

**b** The name shall be supplemented by the species when produced from farmed fish/crustacea as relevant.

|        |  | including wild and farmed shrimp.  |   |
|--------|--|--|---|
| 10.4.1 | Fish <sup>b</sup>                          | Whole or parts of<br>fish: fresh, frozen,<br>cooked, acid treated<br>or dried.   | Crude protein<br>Moisture if > 8 %  |
| 10.4.2 | Fish meal <sup>b</sup>                     | Product obtained by<br>heating, pressing and<br>drying whole or parts<br>of fish and to which<br>fish solubles may<br>have been re-added<br>prior to drying.       | Crude protein<br>Crude fat<br>Crude ash, if > 20 %<br>Moisture if > 8 %       |
| 10.4.3 | Fish solubles                              | Condensed product<br>obtained during<br>manufacture of<br>fishmeal which<br>has been separated<br>and stabilised by<br>acidification or<br>drying.                 | Crude protein<br>Crude fat<br>Moisture if > 5 %                               |
| 10.4.4 | Fish protein,<br>hydrolysed                | Proteins obtained by<br>hydrolysis of whole<br>or parts of fish, which<br>can be concentrated<br>by drying   | Crude protein<br>Crude fat<br>Crude ash, if $> 20 \%$<br>Moisture if $> 8 \%$ |
| 10.4.5 | Fishbone meal                              | Product obtained by<br>heating, pressing and<br>drying parts of fish. It<br>consists principally of<br>fishbone.   | Crude ash   |
| 10.4.6 | Fish oil                                   | Oil obtained from<br>fish or parts of<br>fish followed by<br>centrifugation to<br>remove water (may<br>include species<br>specific details e.g.<br>cod liver oil). | Crude fat<br>Moisture if > 1 %  |
| 10.4.7 | Fish oil,<br>hydrogenated                  | Oil obtained from<br>hydrogenation of fish<br>oil  | Moisture if > 1 %   |
| 10.4.8 | Fish oil stearine<br>[Winterized fish oil] | Fraction of fish oil<br>with a high content<br>of saturated fats   | Crude fat<br>Moisture if > 1 %  |

| Status: Point in time view as at 31/01/2020.                                 |  |
|--|--|
| Changes to legislation: There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |  |

|        |   | refining of crude<br>fish oil to refined<br>fish oil using the<br>process winterization<br>in which the saturated<br>fats are congealed<br>and subsequently<br>collected. |   |
|--------|---|---|---|
| 10.5.1 | Krill oil                                   | Oil obtained from<br>cooked and pressed<br>marine planktonic<br>krill followed by<br>centrifugation to<br>remove water.   | Moisture if > 1 %   |
| 10.5.2 | Krill protein<br>concentrate,<br>hydrolysed | Product obtained<br>by the enzymatic<br>hydrolysis of whole<br>or parts of krill, often<br>concentrated by<br>drying.   | Crude protein<br>Crude fat<br>Crude ash, if > 20 %<br>Moisture if > 8 %       |
| 10.6.1 | Marine annelid meal                         | Product obtained by<br>heating and drying<br>whole or parts of<br>marine annelids,<br>including <i>Nereis</i><br><i>virens</i> M. Sars.                                   | Crude fat<br>Ash if > 20 %<br>Moisture if > 8 %                               |
| 10.7.1 | Marine zooplankton<br>meal                  | Product obtained<br>by heating, pressing<br>and drying marine<br>zooplankton e.g. krill.  | Crude protein<br>Crude fat<br>Crude ash, if > 20 %<br>Moisture if > 8 %       |
| 10.7.2 | Marine zooplankton<br>oil                   | Oil obtained<br>from cooked and<br>pressed marine<br>zooplankton followed<br>by centrifugation to<br>remove water.  | Moisture if > 1 %   |
| 10.8.1 | Mollusc meal                                | Product obtained by<br>heating and drying<br>whole or parts of<br>molluscs including<br>squid and bi-valves.  | Crude protein<br>Crude fat<br>Crude ash, if > 20 %<br>Moisture if > 8 %       |
| 10.9.1 | Squid meal                                  | Product obtained by<br>heating, pressing and<br>drying whole squid or<br>parts of squid.  | Crude protein<br>Crude fat<br>Crude ash, if $> 20 \%$<br>Moisture if $> 8 \%$ |

**b** The name shall be supplemented by the species when produced from farmed fish/crustacea as relevant.

| 10 | .10.1  | Starfish meal [sea<br>star meal] | Product obtained<br>by heating, pressing<br>and drying whole<br><i>Asteroidea</i> or parts of<br><i>Asteroidea</i> . | Crude protein<br>Crude fat<br>Crude ash, if > 20 %<br>Moisture if > 8 % |  |
|----|--|----------------------------------|--|---|--|
| a  | a The name shall be supplemented by the species.   |                                  |  |   |  |
| b  | <b>b</b> The name shall be supplemented by the species when produced from farmed fish/crustacea as relevant. |                                  |  |   |  |

## 11. *Minerals and products derived thereof*

Feed materials in this chapter containing animal products shall fullfil the requirements of the Regulation (EC) No 1069/2009 and Regulation (EU) No 142/2011 and may be subject to restrictions in use according to Regulation (EC) No 999/2001

| Number                             | Name  | Description  | Compulsory<br>declarations                               |
|------------------------------------|---|--|--|
| 11.1.1                             | Calcium carbonate <sup>a</sup> ;<br>[limestone] | Product obtained by<br>grinding sources of<br>calcium carbonate<br>(CaCO <sub>3</sub> ), such as<br>limestone or by<br>precipitation from<br>acid solution.<br>May contain up to<br>0,25 % propylene<br>glycol. May contain<br>up to 0,1 % grinding<br>aids. | Calcium<br>Ash insoluble in HCl<br>if > 5 %              |
| 11.1.2                             | Calcareous marine shells                        | Product of natural<br>origin, obtained from<br>marine shells, ground<br>or granulated, such<br>as oyster shells or<br>seashells.   | Calcium<br>Ash insoluble in HCl<br>if > 5 %              |
| 11.1.3                             | Calcium and<br>magnesium carbonate              | Natural mixture of<br>calcium carbonate<br>(CaCO <sub>3</sub> ) and<br>magnesium carbonate<br>(MgCO <sub>3</sub> ). May<br>contain up to 0,1 %<br>grinding aids.   | Calcium<br>Magnesium<br>Ash insoluble in HCl<br>if > 5 % |
| 11.1.4                             | Maerl   | Product of natural<br>origin obtained from<br>calcareous marine  | Calcium<br>Ash insoluble in HCl<br>if > 5%               |
| a The nature of the source r       | nay be indicated additionally in                | the name or replace it.  |  |
| <b>b</b> The name shall be amended | ed or supplemented to specify th                | e organic acid.  |  |
| c The manufacturing proces         | ss may be included in the name.                 |  |  |
| d The name shall be suppler        | mented by 'from bones' where a                  | ppropriate.  |  |

|                                   |  | algae, ground or granulated.  |  |
|-----------------------------------|--|---|--|
| 11.1.5                            | Lithothamn                                     | Product of natural<br>origin obtained from<br>calcareous marine<br>algae ( <i>Phymatolithon</i><br><i>calcareum</i> (Pall.)),<br>ground or granulated.                                    | Calcium<br>Ash insoluble in HCl<br>if > 5 %    |
| 11.1.6                            | Calcium chloride                               | Calcium chloride<br>(CaCl <sub>2</sub> ). May contain<br>up to 0,2 % barium<br>sulphate.  | Calcium<br>Ash insoluble in HCl<br>if $> 5 \%$ |
| 11.1.7                            | Calcium hydroxide                              | Calcium hydroxide<br>(Ca(OH) <sub>2</sub> ).<br>May contain up to 0,1<br>% grinding aids.   | Calcium<br>Ash insoluble in HCl<br>if $> 5 \%$ |
| 11.1.8                            | Calcium sulphate<br>anhydrous                  | Calcium sulphate<br>anhydrous (CaSO <sub>4</sub> )<br>obtained by grinding<br>calcium sulphate<br>anhydrous or<br>dehydration of<br>calcium sulphate<br>dihydrate.                        | Calcium<br>Ash insoluble in HCl<br>if > 5 %    |
| 11.1.9                            | Calcium sulphate<br>hemihydrate                | Calcium sulphate<br>hemihydrate (CaSO <sub>4</sub><br>$\times$<br>$\frac{1}{2}$<br>H <sub>2</sub> O) obtained by<br>partially dehydrating<br>calcium sulphate<br>dihydrate.               | Calcium<br>Ash insoluble in HCl<br>if > 5 %    |
| 11.1.10                           | Calcium sulphate<br>dihydrate                  | Calcium sulphate<br>dihydrate (CaSO <sub>4</sub><br>$\times$ 2H <sub>2</sub> O) obtained<br>by grinding calcium<br>sulphate dihydrate or<br>hydration of calcium<br>sulphate hemihydrate. | Calcium<br>Ash insoluble in HCl<br>if > 5 %    |
| 11.1.11                           | Calcium salts of<br>organic acids <sup>b</sup> | Calcium salts of<br>edible organic acids<br>with at least 4 carbon<br>atoms.  | Calcium<br>Organic acid                        |
| <b>a</b> The nature of the source | e may be indicated additionally in             | n the name or replace it.   |  |
|                                   | nded or supplemented to specify                | -   |  |
|                                   | cess may be included in the name               |   |  |
| d The name shall be supp          | elemented by 'from bones' where                | appropriate.  |  |

| 11.1.12                           | Calcium oxide                         | Calcium oxide<br>(CaO) obtained<br>from calcination of<br>naturally occurring<br>limestone.<br>May contain up to 0,1<br>% grinding aids.                      | Calcium<br>Ash insoluble in HCl<br>if > 5 %  |
|-----------------------------------|---------------------------------------|---|--|
| 11.1.13                           | Calcium gluconate                     | Calcium salt of<br>gluconic acid<br>generally expressed<br>as $Ca(C_6H_{11}O_7)_2$ and<br>its hydrated forms.   | Calcium<br>Ash insoluble in HCl<br>if > 5 %  |
| 11.1.15                           | Calcium sulphate/<br>carbonate        | Product obtained<br>during the<br>manufacturing of<br>sodium carbonate.   | Calcium<br>Ash insoluble in HCl<br>if > 5 %  |
| 11.1.16                           | Calcium pidolate                      | Calcium L-pidolate<br>( $C_{10}H_{12}CaN_2O_6$ ).<br>May contain up to 5<br>% glutamic acid.  | Calcium<br>Ash insoluble in HCl<br>if > 5 %  |
| 11.1.17                           | Calcium carbonate-<br>magnesium oxide | Product obtained<br>by heating of<br>natural calcium<br>and magnesium<br>containing substances<br>like dolomite. May<br>contain up to 0,1 %<br>grinding aids. | Calcium<br>Magnesium   |
| 11.2.1                            | Magnesium oxide                       | Calcined magnesium<br>oxide (MgO), not less<br>than 70 % MgO.   | Magnesium<br>Ash insoluble in HCl<br>if > 15 %,<br>Iron content as $Fe_2O_3$<br>if> 5 %. |
| 11.2.2                            | Magnesium sulphate<br>heptahydrate    | Magnesium sulphate (MgSO <sub>4</sub> $\times$ 7 H <sub>2</sub> O).   | Magnesium<br>Sulphur<br>Ash insoluble in HCl<br>if > 15 %                                |
| 11.2.3                            | Magnesium sulphate<br>monohydrate     | Magnesium sulphate (MgSO <sub>4</sub> × H <sub>2</sub> O).  | Magnesium<br>Sulphur<br>Ash insoluble in HCl<br>if > 15 %                                |
| <b>a</b> The nature of the source | may be indicated additionally in      | the name or replace it.   |  |
| <b>b</b> The name shall be amend  | ded or supplemented to specify th     | ne organic acid.  |  |
| <b>c</b> The manufacturing proce  | ess may be included in the name.      |   |  |
| d The name shall be supple        | emented by 'from bones' where a       | appropriate.  |  |

| 11.2.4                     | Magnesium sulphate<br>anhydrous               | Anhydrous<br>magnesium sulphate<br>(MgSO <sub>4</sub> ).  | Magnesium<br>Sulphur<br>Ash insoluble in HCl<br>if > 10 %   |
|----------------------------|---|---|---|
| 11.2.5                     | Magnesium<br>propionate                       | Magnesium<br>propionate<br>$(C_6H_{10}MgO_4).$  | Magnesium   |
| 11.2.6                     | Magnesium chloride                            | Magnesium chloride<br>(MgCl <sub>2</sub> ) or solution<br>obtained by natural<br>concentration of sea<br>water after deposit of<br>sodium chloride. | Magnesium<br>Chlorine<br>Ash insoluble in HCl<br>if > 10 %  |
| 11.2.7                     | Magnesium<br>carbonate                        | Natural magnesium carbonate (MgCO <sub>3</sub> ).   | Magnesium<br>Ash insoluble in HCl<br>if > 10 %              |
| 11.2.8                     | Magnesium<br>hydroxide                        | Magnesium<br>hydroxide<br>(Mg(OH) <sub>2</sub> ).   | Magnesium<br>Ash insoluble in HCl<br>if > 10 %              |
| 11.2.9                     | Magnesium<br>potassium sulphate               | Magnesium<br>potassium sulphate<br>$(K_2Mg(SO_4)_2 \times$<br>$nH_2O, n = 4,6).$  | Magnesium<br>Potassium<br>Ash insoluble in HCl<br>if > 10 % |
| 11.2.10                    | Magnesium salts of organic acids <sup>b</sup> | Magnesium salts of<br>edible organic acids<br>with at least 4 carbon<br>atoms.  | Magnesium<br>Organic acid                                   |
| 11.2.11                    | Magnesium<br>gluconate                        | Magnesium salt<br>of gluconic acid<br>generally expressed<br>as $Mg(C_6H_{11}O_7)_2$ and<br>its hydrated forms.                                     | Magnesium<br>Ash insoluble in HCl<br>if > 5 %               |
| 11.2.13                    | Magnesium pidolate                            | Magnesium<br>L-pidolate<br>$(C_{10}H_{12}MgN_2O_6)$ .<br>May contain up to 5<br>% glutamic acid.  | Magnesium<br>Ash insoluble in HCl<br>if > 5 %               |
| 11.3.1                     | Dicalcium<br>phosphate <sup>cd</sup> ;        | Calcium<br>monohydrogen<br>phosphate obtained   | Calcium<br>Total phosphorus                                 |
| a The nature of the source | may be indicated additionally in              | the name or replace it.   |   |
|                            | led or supplemented to specify th             | ne organic acid.  |   |
| c The manufacturing proce  | ess may be included in the name.              |   |   |
| d The name shall be supple | emented by 'from bones' where a               | ppropriate.   |   |

|   | [calcium hydrogen<br>orthophosphate]                                     | from bones or<br>inorganic sources<br>(CaHPO <sub>4</sub> × nH <sub>2</sub> O,<br>n = 0 or 2)<br>Ca/P > 1,2<br>May contain up to 3<br>% chloride expressed<br>as NaCl.   | P insoluble in 2 %<br>citric acid if > 10 %<br>Ash insoluble in HCl<br>if > 5 %  |  |
|---|--|--|--|--|
| 11.3.2  | Monodicalcium<br>phosphate   | Product composed of<br>dicalcium phosphate<br>and monocalcium<br>phosphate (CaHPO <sub>4</sub><br>$\times$ Ca(H <sub>2</sub> PO <sub>4</sub> ) <sub>2</sub> $\times$<br>nH <sub>2</sub> O, n = 0 or 1)<br>0,8 < Ca/P < 1,3 | Total phosphorus,<br>Calcium<br>P insoluble in 2 %<br>citric acid if > 10 %  |  |
| 11.3.3  | Monocalcium<br>phosphate; [calcium<br>tetrahydrogen<br>diorthophosphate] | Calcium-bis<br>dihydrogenphosphate<br>$(Ca(H_2PO_4)_2 \times nH_2O, n = 0 \text{ or } 1)$<br>Ca/P < 0,9  | Total phosphorus<br>Calcium<br>P insoluble in 2 %<br>citric acid if > 10 %   |  |
| 11.3.4  | Tricalcium<br>phosphate <sup>d</sup> ;<br>[tricalcium<br>orthophosphate] | Tricalcium phosphate<br>from bones or<br>inorganic sources<br>$(Ca_3(PO_4)_2 \times H_2O)$<br>or hydroxyl apatite<br>$(Ca_5(PO_4)_3OH)$<br>Ca/P > 1,3  | Calcium<br>Total phosphorus<br>P insoluble in 2 %<br>citric acid if > 10 %<br>Ash insoluble in HCl<br>if > 5 %           |  |
| 11.3.5  | Calcium-magnesium<br>phosphate   | Calcium-magnesium<br>phosphate<br>(Ca <sub>3</sub> Mg <sub>3</sub> (PO <sub>4</sub> ) <sub>4</sub> ).  | Calcium<br>Magnesium<br>Total phosphorus<br>P insoluble in 2 %<br>citric acid if > 10 %                                  |  |
| 11.3.6  | Defluorinated<br>phosphate   | Product obtained<br>from inorganic<br>sources, calcined and<br>further heat treated.   | Total phosphorus<br>Calcium<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %<br>Ash insoluble in HCl<br>if > 5 % |  |
| 11.3.7  | Dicalcium<br>pyrophosphate;<br>[Dicalcium<br>diphosphate]                | Dicalcium<br>pyrophosphate(Ca <sub>2</sub> P <sub>2</sub> C  | Total phosphorus<br>Galcium<br>P insoluble in 2 %<br>citric acid if > 10 %   |  |
|   | may be indicated additionally in   | _  |  |  |
|   | ed or supplemented to specify th   | e organic acid.  |  |  |
|   | ss may be included in the name.  |  |  |  |
| d The name shall be supplemented by 'from bones' where appropriate. |  |  |  |  |

| 11.3.8                     | Magnesium<br>phosphate   | Product consisting<br>of monobasic and/<br>or di-basic and/or<br>tri-basic magnesium<br>phosphate.         | Total phosphorus<br>Magnesium<br>P insoluble in 2 %<br>citric acid if $> 10$ %<br>Ash insoluble in HCl<br>if $> 10$ % |
|----------------------------|--|--|---|
| 11.3.9                     | Sodium-calcium-<br>magnesium<br>phosphate                                  | Product consisting<br>of sodium-calcium-<br>magnesium<br>phosphate.  | Total phosphorus<br>Magnesium<br>Calcium<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %                     |
| 11.3.10                    | Monosodium<br>phosphate; [Sodium<br>dihydrogen<br>orthophosphate]          | Monosodium<br>phosphate<br>$(NaH_2PO_4 \times nH_2O;$<br>n = 0, 1  or  2)                                  | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %   |
| 11.3.11                    | Disodium phosphate;<br>[Disodium hydrogen<br>orthophosphate]               | Disodium phosphate<br>(Na <sub>2</sub> HPO <sub>4</sub> × nH <sub>2</sub> O;<br>n = 0, 2, 7  or  12)       | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %   |
| 11.3.12                    | Trisodium Phosphate;<br>[Trisodium<br>orthophosphate]                      | Trisodium phosphate<br>(Na <sub>3</sub> PO <sub>4</sub> × nH <sub>2</sub> O; n = 0, 1/2, 1, 6, 8 or 12)    | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %   |
| 11.3.13                    | Sodium<br>pyrophosphate;<br>[Tetrasodium<br>diphosphate]                   | Sodium<br>pyrophosphate<br>$(Na_4P_2O_7 \times nH_2O;$<br>n = 0  or  10)                                   | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %   |
| 11.3.14                    | Monopotassium<br>phosphate;<br>[Potassium<br>dihydrogen<br>orthophosphate] | Monopotassium<br>phosphate (KH <sub>2</sub> PO <sub>4</sub> )  | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 %  |
| 11.3.15                    | Dipotassium<br>phosphate; [Di-<br>potassium hydrogen<br>orthophosphate]    | Dipotassium<br>phosphate (K <sub>2</sub> HPO <sub>4</sub><br>$\times$ nH <sub>2</sub> O; n = 0, 3 or<br>6) | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 %  |
| 11.3.16                    | Calcium sodium<br>phosphate  | Calcium sodium<br>phosphate<br>(CaNaPO <sub>4</sub> )  | Total phosphorus<br>Calcium<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %                                  |
|                            | may be indicated additionally in   | •  |   |
|                            | led or supplemented to specify th  | e organic acid.  |   |
|                            | ess may be included in the name.   |  |   |
| d The name shall be supple | emented by 'from bones' where a  | ppropriate.  |   |

| 11.3.17                          | Monoammonium<br>phosphate;<br>[Ammonium<br>dihydrogen<br>orthophosphate] | Monoammonium<br>phosphate<br>(NH <sub>4</sub> H <sub>2</sub> PO <sub>4</sub> )   | Total nitrogen<br>Total phosphorus<br>P insoluble in 2 %<br>citric acid if > 10 %      |
|----------------------------------|--|--|--|
| 11.3.18                          | Diammonium<br>phosphate;<br>[Diammonium<br>hydrogen<br>orthophosphate]   | Diammonium<br>phosphate<br>((NH <sub>4</sub> ) <sub>2</sub> HPO <sub>4</sub> )   | Total nitrogen<br>Total phosphorus<br>P insoluble in 2 %<br>citric acid if > 10 %      |
| 11.3.19                          | Sodium<br>tripolyphosphate;<br>[Penta sodium<br>triphosphate]            | Sodium<br>tripolyphosphate<br>$(Na_5P_3O_{10} \times nH_2O;$<br>n = 0  or  6)  | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %              |
| 11.3.20                          | Sodium magnesium phosphate   | Sodium-magnesium<br>phosphate<br>(MgNaPO <sub>4</sub> )  | Total phosphorus<br>Magnesium<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 % |
| 11.3.21                          | Magnesium<br>hypophosphite   | Magnesium<br>hypophosphite<br>$(Mg(H_2PO_2)_2 \times 6H_2O)$   | Magnesium<br>Total phosphorus<br>P insoluble in 2 %<br>citric acid if > 10 %           |
| 11.3.22                          | Degelatinised bone meal  | Degelatinised,<br>sterilised and ground<br>bones from which the<br>fat has been removed.   | Total phosphorus<br>Calcium<br>Ash insoluble in HCl<br>if > 10 %                       |
| 11.3.23                          | Bone ash   | Mineral residues<br>from the incineration,<br>combustion or<br>gasification of animal<br>by-products.  | Total phosphorus<br>Calcium<br>Ash insoluble in HCl<br>if > 10 %                       |
| 11.3.24                          | Calcium<br>polyphosphate   | Heterogeneous<br>mixtures of calcium<br>salts of condensed<br>polyphosphoric<br>acids of general<br>formula $H_{(n+2)}PnO_{(3n+1)}$ where 'n' is not<br>less than 2. | Total phosphorus<br>Calcium<br>P insoluble in 2 %<br>citric acid if > 10 %             |
| 11.3.25                          | Calcium dihydrogen<br>diphosphate  | Monocalcium<br>dihydrogen  | Total phosphorus<br>Calcium  |
| a The nature of the source i     | may be indicated additionally in   |  |  |
| <b>b</b> The name shall be amend | ed or supplemented to specify th   | e organic acid.  |  |
| c The manufacturing proces       | ss may be included in the name.  |  |  |
| d The name shall be supple       | mented by 'from bones' where a   | ppropriate.  |  |

|                              |   | pyrophosphate<br>(CaH <sub>2</sub> P <sub>2</sub> O <sub>7</sub> )   | P insoluble in 2 %<br>citric acid if > 10 %                                  |
|------------------------------|---|--|--|
| 11.3.26                      | Magnesium acid<br>pyrophosphate                           | Magnesium acid<br>pyrophosphate<br>(MgH <sub>2</sub> P <sub>2</sub> O <sub>7</sub> )<br>Produced from<br>purified phosphoric<br>acid and purified<br>magnesium<br>hydroxide or<br>magnesium oxide by<br>evaporation of water<br>and condensation of<br>the orthophosphate to<br>diphosphate. | Total phosphorus<br>Magnesium<br>P insoluble in 2 %<br>citric acid if > 10 % |
| 11.3.27                      | Disodium dihydrogen<br>diphosphate                        | Disodium dihydrogen<br>diphosphate<br>(Na <sub>2</sub> H <sub>2</sub> P <sub>2</sub> O <sub>7</sub> )  | Total phosphorus<br>Calcium<br>P insoluble in 2 %<br>citric acid if > 10 %   |
| 11.3.28                      | Trisodium<br>diphosphate                                  | Trisodium<br>monohydrogen<br>diphosphate<br>(anhydrous:<br>Na <sub>3</sub> HP <sub>2</sub> O <sub>7</sub> ;<br>monohydrate:<br>Na <sub>3</sub> HP <sub>2</sub> O <sub>7</sub> × nH <sub>2</sub> O;<br>n = 0, 1  or  9)   | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %    |
| 11.3.29                      | Sodium<br>polyphosphate;<br>[Sodium<br>hexametaphosphate] | Heterogeneous<br>mixtures of<br>sodium salts of<br>linear condensed<br>polyphosphoric acids<br>of general formula<br>$H_{(n+2)}PnO_{(3n+1)}$<br>where 'n' is not less<br>than 2.   | Total phosphorus<br>Sodium<br>P insoluble in 2 %<br>citric acid if > 10 %    |
| 11.3.30                      | Tripotassium<br>phosphate                                 | Tripotassium<br>monophosphate<br>$(K_3PO_4 \times nH_2O; n = 0, 1, 3, 7 \text{ or } 9)$  | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 % |
| 11.3.31                      | Tetrapotassium di-<br>phosphate                           | Tetrapotassium<br>pyrophosphate<br>$(K_4P_2O_7 \times nH_2O; n = 0, 1 \text{ or } 3)$  | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 % |
| a The nature of the source a | may be indicated additionally in                          | the name or replace it.  |  |
|                              | led or supplemented to specify th                         | e organic acid.  |  |
|                              | ss may be included in the name.                           | · .  |  |
| d The name shall be supple   | emented by 'from bones' where a                           | ppropriate.  |  |

| 11.3.32                         | Pentapotassium tri-<br>phosphate   | Pentapotassium<br>tri-polyphosphate<br>(K <sub>5</sub> P <sub>3</sub> O <sub>10</sub> )   | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 %         |
|---------------------------------|--|---|--|
| 11.3.33                         | Potassium<br>polyphosphate   | Heterogeneous<br>mixtures of<br>potassium salts of<br>linear condensed<br>polyphosphoric acids<br>of general formula<br>$H_{(n+2)}PnO_{(3n+1)}$<br>where 'n' is not less<br>than 2.   | Total phosphorus<br>Potassium<br>P insoluble in 2 %<br>citric acid if > 10 %         |
| 11.3.34                         | Calcium sodium<br>polyphosphate  | Calcium sodium polyphosphate.   | Total phosphorus<br>Sodium<br>Calcium<br>P insoluble in 2 %<br>citric acid if > 10 % |
| 11.4.1                          | Sodium chloride <sup>a</sup>   | Sodium chloride<br>(NaCl) or product<br>obtained by<br>evaporative<br>crystallisation from<br>brine (saturated or<br>depleted in another<br>process) (vacuum<br>salt) or evaporation<br>of seawater (marine<br>salt and solar salt) or<br>grinding rock salt. | Sodium<br>Ash insoluble in HCl<br>if > 10 %  |
| 11.4.2                          | Sodium bicarbonate<br>[sodium<br>hydrogencarbonate]                          | Sodium bicarbonate<br>(NaHCO <sub>3</sub> )   | Sodium<br>Ash insoluble in HCl<br>if > 10 %  |
| 11.4.3                          | Sodium/ammonium<br>(bi)carbonate<br>[sodium/ammonium<br>(hydrogen)carbonate] | Product obtained<br>during the production<br>of sodium carbonate<br>and sodium<br>bicarbonate, with<br>traces of ammonium<br>bicarbonate<br>(ammonium<br>bicarbonate max. 5<br>%)   | Sodium<br>Ash insoluble in HCl<br>if > 10 %  |
| <b>a</b> The nature of the sour | ce may be indicated additionally in  | the name or replace it.   | I  |
| <b>b</b> The name shall be amo  | ended or supplemented to specify th  | e organic acid.   |  |
|                                 | process may be included in the name.   |   |  |

| 11.4.4  | Sodium carbonate  | Sodium carbonate<br>(Na <sub>2</sub> CO <sub>3</sub> )   | Sodium<br>Ash insoluble in HCl<br>if > 10 %       |  |  |
|---|---|--|---|--|--|
| 11.4.5  | Sodium<br>sesquicarbonate<br>[trisodium<br>hydrogendicarbonate]     | Sodium<br>sesquicarbonate<br>(Na <sub>3</sub> H(CO <sub>3</sub> ) <sub>2</sub> )                           | Sodium<br>Ash insoluble in HCl<br>if $> 10 \%$    |  |  |
| 11.4.6  | Sodium sulphate   | Sodium sulphate<br>(Na <sub>2</sub> SO <sub>4</sub> )<br>May contain up to 0,3<br>% methionine             | Sodium<br>Ash insoluble in HCl<br>if > 10 %       |  |  |
| 11.4.7  | Sodium salts of organic acids <sup>b</sup>                          | Sodium salts of<br>edible organic acids<br>with at least 4 carbon<br>atoms                                 | Sodium<br>Organic acid                            |  |  |
| 11.5.1  | Potassium chloride  | Potassium chloride<br>(KCl) or product<br>obtained by grinding<br>natural sources of<br>potassium chloride | Potassium<br>Ash insoluble in HCl<br>if > 10 %    |  |  |
| 11.5.2  | Potassium sulphate  | Potassium sulphate<br>(K <sub>2</sub> SO <sub>4</sub> )  | Potassium<br>Ash insoluble in HCl<br>if > 10 %    |  |  |
| 11.5.3  | Potassium carbonate   | Potassium carbonate<br>(K <sub>2</sub> CO <sub>3</sub> )   | Potassium<br>Ash insoluble in HCl<br>if > 10 %    |  |  |
| 11.5.4  | Potassium<br>bicarbonate<br>[potassium hydrogen<br>carbonate]       | Potassium<br>bicarbonate (KHCO <sub>3</sub> )  | Potassium<br>Ash insoluble in HCl<br>if $> 10 \%$ |  |  |
| 11.5.5  | Potassium salts of organic acids <sup>b</sup>                       | Potassium salts of<br>edible organic acids<br>with at least 4 carbon<br>atoms.                             | Potassium<br>Organic acid                         |  |  |
| 11.5.6  | Potassium pidolate  | Potassium L-pidolate $(C_5H_6KNO_3)$ . May contain up to 5 % glutamic acid.                                | Potassium<br>Ash insoluble in HCl<br>if > 5 %     |  |  |
| 11.6.1  | Flower of sulphur   | Powder obtained<br>from natural deposits<br>of the mineral. Also,<br>product obtained                      | Sulphur   |  |  |
| a The nature of the source may be indicated additionally in the name or replace it. |   |  |   |  |  |
|   | ed or supplemented to specify th                                    | e organic acid.  |   |  |  |
|   | ss may be included in the name.                                     | • .  |   |  |  |
| d The name shall be supple  | d The name shall be supplemented by 'from bones' where appropriate. |  |   |  |  |

|   |  | from oil refinery<br>production as<br>practised by sulphur<br>manufacturers.  |   |  |
|---|--|---|---|--|
| 11.7.1  | Attapulgite                                  | Natural magnesium-<br>aluminium-silicon<br>mineral.   | Magnesium   |  |
| 11.7.2  | Quartz                                       | Naturally occurring<br>mineral obtained by<br>grinding sources of<br>quartz.<br>May contain up to 0,1<br>% grinding aids.   |   |  |
| 11.7.3  | Cristobalite                                 | Silicon dioxide<br>(SiO <sub>2</sub> ) obtained from<br>the re-crystallisation<br>of quartz.<br>May contain up to 0,1<br>% grinding aids.   |   |  |
| 11.8.1  | Ammonium sulphate                            | Ammonium sulphate $((NH_4)_2SO_4)$<br>obtained by chemical synthesis. May be presented in the form of an aqueous solution.  | Nitrogen expressed as<br>crude protein<br>Sulphur   |  |
| 11.8.3  | Ammonium salts of organic acids <sup>b</sup> | Ammonium salts of<br>edible organic acids<br>with at least 4 carbon<br>atoms.   | Nitrogen expressed as<br>crude protein<br>Organic acid  |  |
| 11.8.4  | Ammonium lactate                             | Ammonium lactate<br>(CH <sub>3</sub> CHOHCOONH <sub>4</sub> )<br>Includes the<br>Ammonium<br>lactate produced<br>by fermentation<br>with <i>Lactobacillus</i><br><i>delbrueckii ssp.</i><br><i>Bulgaricus</i> ,<br><i>Lactococcus lactis</i><br>ssp., <i>Leuconostoc</i><br><i>mesenteroides</i> ,<br><i>Streptococcus</i><br><i>thermophilus</i> , | Nitrogen expressed as<br>.crude protein<br>Crude ash<br>Potassium if > 1,5 %<br>Magnesium if > 1,5<br>%,<br>sodium if > 1,5 % |  |
| a The nature of the source may be indicated additionally in the name or replace it. |  |   |   |  |
| b     The name shall be amended or supplemented to specify the organic acid.        |  |   |   |  |
|   | ss may be included in the name.              | nnronriate  |   |  |
| d The name shall be supplemented by 'from bones' where appropriate.                 |  |   |   |  |

| <i>Status:</i> Point in time view as at 31/01/2020.                          |  |
|--|--|
| Changes to legislation: There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |  |

|                                     |   | Lactobacillus spp, or<br>Bifidobacterium spp.,<br>containing not less<br>than 44 % Nitrogen<br>expressed as crude<br>protein.<br>May contain up to<br>2 % phosphorus,<br>2 % potassium,<br>0,7 % magnesium,<br>2 % sodium, 2 %<br>sulphates 0,5 %<br>chlorides, 5 % sugars<br>and 0,1 % silicone<br>antifoam. |  |  |  |
|-------------------------------------|---|---|--|--|--|
| 11.8.5                              | Ammonium acetate  | Ammonium acetate<br>(CH <sub>3</sub> COONH <sub>4</sub> ) in<br>aqueous solution,<br>containing not<br>less than 55 %<br>Ammonium acetate.  | Nitrogen expressed as<br>crude protein |  |  |
| 11.9.1                              | Flint [gizzard] grit  | Product obtained by<br>crushing naturally<br>occurring mineral in<br>the form of gravel   | Particle size                          |  |  |
| 11.9.2                              | [Gizzard] Redstone  | Product obtained by<br>crushing and milling<br>of products derived<br>from the burning of<br>clay   | Particle size<br>Moisture if > 2 %     |  |  |
| <b>a</b> The nature of the source r | a The nature of the source may be indicated additionally in the name or replace it. |   |  |  |  |
| <b>b</b> The name shall be amend    | ed or supplemented to specify th  | e organic acid.   |  |  |  |
| c The manufacturing proces          | ss may be included in the name.   |   |  |  |  |
| <b>d</b> The name shall be supple   | <b>d</b> The name shall be supplemented by 'from bones' where appropriate.          |   |  |  |  |

12. Products and by-products obtained by fermentation using micro-organisms, inactivated resulting in absence of live micro-organisms

Feed materials listed in this chapter that are or are produced from genetically modified organisms, or result from a fermentation process involving genetically modified micro-organisms shall be compliant with Regulation (EC) No 1829/2003 on genetically modified feed and food.

| Number  | Name   | Description   | Compulsory<br>Declarations  |  |  |
|---|--|---|---|--|--|
| 12.1.1  | Product from<br>Methylophilus<br>methylotrophus rich<br>in protein <sup>ab</sup>   | Fermentation product<br>obtained by culture<br>of <i>Methylophilus</i><br><i>methylotrophus</i><br>(NCIMB strain<br>10.515) on methanol,<br>the crude protein is<br>at least 68 % and the<br>reflectance index at<br>least 50.  | Crude protein<br>Crude ash<br>Crude fat<br>Propionic acid if<br>> 0,5 % |  |  |
| 12.1.2  | Product from<br>Methylococcus<br>capsulatus (Bath),<br>Alca ligenes<br>acidovorans, Bacillus<br>brevis and Bacillus<br>firmus rich in<br>protein <sup>ab</sup> | Fermentation product<br>obtained by culture<br>of <i>Methylococcus</i><br><i>capsulatus</i> (Bath)<br>(NCIMB strain<br>11132), <i>Alcaligenes</i><br><i>acidovorans</i> (NCIMB<br>strain 13287),<br><i>Bacillus brevis</i><br>(NCIMB strain<br>13288) and <i>Bacillus</i><br><i>firmus</i> (NCIMB<br>strain 13289) on<br>natural gas (approx.<br>91 % methane,<br>5 % ethane, 2 %<br>propane, 0,5 %<br>isobutane, 0,5 % n-<br>butane), ammonia,<br>and mineral salts, the<br>crude protein is at<br>least 65 %. | Crude protein<br>Crude ash<br>Crude fat<br>Propionic acid if<br>> 0,5 % |  |  |
| 12.1.3  | Product from<br>Escherichia coli rich<br>in protein <sup>ab</sup>  | Fermentation by-<br>product from the<br>production of amino<br>acids by culture of<br><i>Escherichia coli</i><br>K12 on substrates of<br>vegetable or chemical  | Crude protein<br>Propionic acid if<br>> 0,5 %                           |  |  |
| a Products obtained from the biomass of specific micro-organisms grown on certain substrates. May contain up to 0,3 %   |  |   |   |  |  |
| <ul> <li>antifoaming agents, 1,5 % filtration/clarifying agents and 2,9 % propionic acid.</li> <li>Microorganisms used in the fermentation have been inactivated with the result that no such microorganisms are viable in the feed materials.</li> </ul> |  |   |   |  |  |
|   |  |   |   |  |  |
| d The used name of  |  |   |   |  |  |
| e Other fermentation sulphites.   |  |   |   |  |  |
| f Parts means any s   | Parts means any soluble and insoluble fractions of the yeast including from the membrane or the inner parts of the cell.                                       |   |   |  |  |

|        |  | origin, ammonia or<br>mineral salts; it may<br>be hydrolysed.   |   |
|--------|--|---|---|
| 12.1.4 | Product from<br>Corynebacterium<br>glutamicum rich in<br>protein <sup>ab</sup> | Fermentation by-<br>product from the<br>production of amino<br>acids by culture of<br><i>Corynebacterium</i><br><i>glutamicum</i> on<br>substrates of<br>vegetable or chemical<br>origin, ammonia or<br>mineral salts, it may<br>be hydrolysed.   | Crude protein<br>Propionic acid if<br>> 0,5 %   |
| 12.1.5 | Yeasts [brewers'<br>yeast] <sup>ab</sup>                                       | All yeasts obtained<br>from <sup>d</sup> Saccharomyces<br>cerevisiae,<br>Saccharomyces<br>carlsbergensis,<br>Kluyveromyces<br>lactis, Kluyveromyces<br>fragilis, Torulaspora<br>delbrueckii,<br>Cyberlindnera<br>jadinii <sup>c</sup> ,<br>Saccharomyces<br>uvarum,<br>Saccharomyces<br>ludwigii or<br>Brettanomyces ssp.<br>on substrates mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres | Moisture if < 75 % or<br>> 97 %<br>If moisture < 75 %:<br>Crude<br>protein<br>Propionic<br>acid if > 0,5<br>% |

**a** Products obtained from the biomass of specific micro-organisms grown on certain substrates. May contain up to 0,3 % antifoaming agents, 1,5 % filtration/clarifying agents and 2,9 % propionic acid.

**b** Microorganisms used in the fermentation have been inactivated with the result that no such microorganisms are viable in the feed materials.

c Cultivation on n-alkanes is prohibited (Regulation (EU) No 568/2010).

**d** The used name of the yeast strains may vary from the scientific taxonomy. Therefore, synonyms of the yeast strains listed could also be used.

e Other fermentation by-products. May contain up to 0,6 % antifoaming agents, 0,5 % antiscaling agents and 0,2 % sulphites.

|                          |   | and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts.   |   |  |  |  |
|--------------------------|---|---|---|--|--|--|
| 12.1.6                   | Mycelium silage<br>from the product<br>of penicillin <sup>ab</sup>  |   | Nitrogen expressed as<br>crude protein<br>Crude ash<br>Propionic acid if<br>> 0,5 %                           |  |  |  |
| 12.1.7                   | Yeasts from biod<br>process <sup>ab</sup>   | iesel All yeasts and parts <sup>f</sup><br>thereof obtained<br>from <sup>d</sup> <i>Yarrowia</i><br><i>lipolytica</i> grown on<br>vegetable oils and<br>degumming and<br>glycerol fractions<br>formed during biofuel<br>production. | Moisture if < 75 % or<br>> 97 %<br>If moisture < 75 %:<br>Crude<br>protein<br>Propionic<br>acid if > 0,5<br>% |  |  |  |
| 12.1.8                   | Product from<br>Lactobacillus spe<br>rich in protein <sup>ab</sup>  | Fermentation product<br>obtained from culture<br>of <i>Lactobacillus</i> on<br>substrates mostly  | Crude protein<br>Crude ash<br>Propionic acid if<br>> 0,5 %  |  |  |  |
|                          |   |   |   |  |  |  |
|                          | sms used in the fermentation have bee   | en inactivated with the result that no such   | h microorganisms are viable in  |  |  |  |
| c Cultivation            | Cultivation on n-alkanes is prohibited (Regulation (EU) No 568/2010).   |   |   |  |  |  |
|                          | The used name of the yeast strains may vary from the scientific taxonomy. Therefore, synonyms of the yeast strains listed could also be used. |   |   |  |  |  |
| e Other ferme sulphites. |   |   |   |  |  |  |
| f Parts means            | any soluble and insoluble fractions of  | the yeast including from the membrane   | or the inner parts of the cell.   |  |  |  |

| <i>Status:</i> Point in time view as at 31/01/2020.                                 |
|---|
| <b>Changes to legislation:</b> There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)         |
|   |

|   |  | of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. The product<br>may be dried.   |  |  |  |
|---|--|--|--|--|--|
| 12.1.9  | Product from<br><i>Trichoderma viride</i><br>rich in protein <sup>ab</sup>   | Fermentation product<br>obtained from culture<br>of <i>Trichoderma viride</i><br>on substrates mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. The product<br>may be dried | Crude protein<br>Crude ash<br>Propionic acid if<br>> 0,5 % |  |  |
| 12.1.10   | Product from <i>Bacillus</i><br>subtilis rich in<br>protein <sup>ab</sup>  | Fermentation product<br>obtained from culture<br>of <i>Bacillus subtilis</i><br>on substrates mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,   | Crude protein<br>Crude ash<br>Propionic acid if<br>> 0,5 % |  |  |
| a Products obtained from th   | e biomass of specific micro-orga   | anisms grown on certain substrat   | es. May contain up to 0,3 %                                |  |  |
|   | 6 filtration/clarifying agents and 2<br>he fermentation have been inacti   | 2,9 % propionic acid.<br>vated with the result that no such  | microorganisms are viable in                               |  |  |
|   | s prohibited (Regulation (EU) N  | o 568/2010).   |  |  |  |
| <ul> <li>d The used name of the yeast strains may vary from the scientific taxonomy. Therefore, synonyms of the yeast strains listed could also be used.</li> </ul> |  |  |  |  |  |
| e Other fermentation by-pro-<br>sulphites.  |  |  |  |  |  |
| <b>f</b> Parts means any soluble a  | Parts means any soluble and insoluble fractions of the yeast including from the membrane or the inner parts of the cell. |  |  |  |  |

| parts <sup>f</sup> obtained<br>from <sup>d</sup> Saccharomyces<br>cerevisiae,<br>Saccharomyces<br>carlsbergensis,<br>potatel<br>> 97 %<br>If moisture < 75 %<br>Crude<br>protein<br>Propioni   |                         |                                    | alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. The product<br>may be dried  |   |
|--|-------------------------|------------------------------------|--|---|
| <ul> <li>a Products obtained from the biomass of specific micro-organisms grown on certain substrates. May contain up to 0,3</li> <li>parts<sup>f</sup> obtained from dSaccharomyces cerevisiae, Saccharomyces cerevisiae, Saccharomyces carlsbergensis, Kluyveromyces fragilis, Torulaspora delbrueckii,</li> </ul> | 12.1.11                 | Aspergillus oryzae                 | obtained from culture<br>of <i>Aspergillus oryzae</i><br>on substrates mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. The product | Crude ash<br>Propionic acid if  |
|  | 12.1.12                 | Yeasts products <sup>ab</sup>      | parts <sup>f</sup> obtained<br>from <sup>d</sup> Saccharomyces<br>cerevisiae,<br>Saccharomyces<br>carlsbergensis,<br>Kluyveromyces<br>lactis, Kluyveromyces<br>fragilis, Torulaspora   | If moisture < 75 %:<br>Crude<br>protein<br>Propionic<br>acid if > 0,5 |
| <ul> <li>b Microorganisms used in the fermentation have been inactivated with the result that no such microorganisms are viable</li> </ul>   | antifoaming agents, 1,5 | % filtration/clarifying agents and | 2,9 % propionic acid.  |   |

c Cultivation on n-alkanes is prohibited (Regulation (EU) No 568/2010).

**d** The used name of the yeast strains may vary from the scientific taxonomy. Therefore, synonyms of the yeast strains listed could also be used.

e Other fermentation by-products. May contain up to 0,6 % antifoaming agents, 0,5 % antiscaling agents and 0,2 % sulphites.

| <i>Status:</i> Point in time view as at 31/01/2020.                          |
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| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |

|   |  | <i>Cyberlindnera</i><br><i>jadinii</i> <sup>¢</sup> ,<br><i>Saccharomyces</i><br><i>uvarum</i> ,<br><i>Saccharomyces</i><br><i>ludwigii</i> or<br><i>Brettanomyces</i> ssp.<br>on substrates mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. |   |
|---|--|--|---|
| 12.2.1  | Vinasses [condensed<br>molasses soluble] <sup>be</sup> | By-products derived<br>from the industrial<br>processing of<br>musts/worts issued<br>from microbial<br>fermentation<br>processes such as<br>alcohol, organic acids<br>or yeast manufacture.<br>They are composed<br>of the liquid/paste<br>fraction obtained<br>after the separation<br>of the fermentation<br>musts/worts. They<br>may also include<br>dead cells and/or<br>parts <sup>f</sup> thereof of the<br>fermentation micro-  | Crude protein<br>Substrate and<br>indication of<br>production process as<br>appropriate |
|   |  | anisms grown on certain substrat   | es. May contain up to 0,3 %   |
| antifoaming agents, 1,5 %                             | 6 filtration/clarifying agents and                     | 2,9 % propionic acid.  |   |
| <b>b</b> Microorganisms used in t the feed materials. | he fermentation have been inacti                       | vated with the result that no such   | n microorganisms are viable in  |
| c Cultivation on n-alkanes                            | is prohibited (Regulation (EU) N                       | o 568/2010).   |   |
| <b>d</b> The used name of the year                    | st strains may vary from the scie                      | ntific taxonomy. Therefore, syno   | nyms of the yeast strains listed  |

**d** The used name of the yeast strains may vary from the scientific taxonomy. Therefore, synonyms of the yeast strains listed could also be used.

e Other fermentation by-products. May contain up to 0,6 % antifoaming agents, 0,5 % antiscaling agents and 0,2 % sulphites.

|   |  | organisms used. The<br>substrates are mostly<br>of vegetable origin<br>such as molasses,<br>sugar syrup,<br>alcohol, distillery<br>residues, cereals and<br>products containing<br>starch, fruit juice,<br>whey, lactic acid,<br>sugar, hydrolysed<br>vegetable fibres<br>and fermentation<br>nutrients such as<br>ammonia or mineral<br>salts. |                                |
|---|--|---|--------------------------------|
| 12.2.2  | By-products from<br>the production of L-<br>glutamic acid <sup>be</sup>  | By-products from<br>the production of<br>L-glutamic acid by<br>fermentation with<br><i>Corynebacterium</i><br><i>melassecola</i> on<br>substrate composed<br>of sucrose, molasses,<br>starch products and<br>their hydrolysates,<br>ammonium salts and<br>other nitrogenous<br>compounds.   | Crude protein                  |
| 12.2.3  | By-products from<br>the production<br>of L-lysine-<br>monohydrochloride<br>with <i>Brevibacterium</i><br><i>lactofermentum</i> <sup>be</sup> | By-products from<br>the production<br>of L-Lysine<br>monohydrochloride<br>by fermentation<br>with <i>Brevibacterium</i><br><i>lactofermentum</i> on<br>substrate composed<br>of sucrose, molasses,<br>starch products and<br>their hydrolysates,<br>ammonium salts and  | Crude protein                  |
|   | e biomass of specific micro-org<br>filtration/clarifying agents and  | anisms grown on certain substrat<br>2,9 % propionic acid.   | es. May contain up to 0,3 %    |
| <b>b</b> Microorganisms used in the feed materials. | ne fermentation have been inact  | ivated with the result that no such   | n microorganisms are viable in |
| c Cultivation on n-alkanes is                       | s prohibited (Regulation (EU) N  | No 568/2010).   |                                |
| could also be used.                                 | · ·  | entific taxonomy. Therefore, sync   |                                |
| e Other fermentation by-pro                         |  |   |                                |

|      |   |   | other nitrogenous compounds.   |                                  |
|------|---|---|--|----------------------------------|
| 12.  | 2.4   | By-products from<br>the production of<br>amino acids with<br><i>Corynebacterium</i><br>glutamicum <sup>be</sup> | By-products from<br>the production of<br>amino acids by<br>fermentation with<br><i>Corynebacterium</i><br><i>glutamicum</i> on<br>substrate of vegetable<br>or chemical origin,<br>ammonia or mineral<br>salts.  | Crude protein<br>Crude ash       |
| 12.  | 2.5   | By-products from<br>the production of<br>amino acids with<br><i>Escherichia coli</i><br>K12 <sup>be</sup>       | By-products from the<br>production of amino<br>acids by fermentation<br>with <i>Escherichia coli</i><br>K12 on substrate of<br>vegetable or chemical<br>origin, ammonia or<br>mineral salts.   | Crude protein<br>Crude ash       |
| 12.  | 2.6   | By-product of<br>enzyme production<br>with <i>Aspergillus</i><br><i>niger</i> <sup>be</sup>                     | By-product of<br>fermentation of<br><i>Aspergillus niger</i> on<br>wheat and malt for<br>enzyme production.  | Crude protein                    |
| 12.: | 2.7   | Polyhydroxybutyrate<br>from fermentation<br>with <i>Ralstonia</i><br><i>eutropha</i> <sup>b</sup>               | Product containing 3-<br>hydroxybutyrate and<br>3-hydroxyvalerate,<br>produced via<br>fermentation with<br><i>Ralstonia eutropha</i> ,<br>and non-viable<br>bacterial protein meal<br>remaining from the<br>producing bacteria<br>and fermentation<br>broth. |                                  |
| a    | Products obtained from the antifoaming agents, 1,5 %  | be biomass of specific micro-org<br>filtration/clarifying agents and  | anisms grown on certain substrat<br>2,9 % propionic acid.  | es. May contain up to 0,3 %      |
| b    | Microorganisms used in the feed materials.  | he fermentation have been inacti  | vated with the result that no such   | n microorganisms are viable in   |
| c    | Cultivation on n-alkanes i  | is prohibited (Regulation (EU) N  | lo 568/2010).  |                                  |
| d    | The used name of the yea could also be used.  | st strains may vary from the scie   | ntific taxonomy. Therefore, syno   | nyms of the yeast strains listed |
| e    | Other fermentation by-products. May contain up to 0,6 % antifoaming agents, 0,5 % antiscaling agents and 0,2 % sulphites. |   |  |                                  |
| f    | Parts means any soluble a   | nd insoluble fractions of the yea   | st including from the membrane   | or the inner parts of the cell.  |

| <i>Status: Point in time view as at 31/01/2020.</i>                          |
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| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |

Feed materials in this chapter containing animal products shall fullfil the requirements of the Regulation (EC) No 1069/2009 and Regulation (EU) No 142/2011 and may be subject to restrictions in use according to Regulation (EC) No 999/2001

| Number                     | Name  | Description   | Compulsory<br>declarations  |
|----------------------------|---|---|---|
| 13.1.1                     | Products from the<br>bakery and pasta<br>industry   | Products obtained<br>during and from the<br>production of bread,<br>biscuits, wafers or<br>pasta. They may be<br>dried.   | Starch<br>Total sugars,<br>calculated as sucrose,<br>Crude fat, if > 5 %  |
| 13.1.2                     | Products from the<br>pastry industry  | Products obtained<br>during and from the<br>production of pastry<br>and cakes. They may<br>be dried.  | Starch<br>Total sugars,<br>calculated as sucrose,<br>Crude fat, if > 5 %  |
| 13.1.3                     | Products of the<br>breakfast cereal<br>manufacture  | Substances or<br>products that are<br>intended or where<br>it is reasonable to<br>expect that they<br>can be consumed<br>by humans in<br>their processed,<br>partially processed or<br>unprocessed forms.<br>They may be dried. | Crude protein, if > 10<br>%<br>Crude fibre<br>Crude oils/fats, if<br>> 10 %,<br>Starch, if > 30 %<br>Total sugars,<br>calculated as sucrose,<br>if > 10 % |
| 13.1.4                     | Products from<br>the confectionery<br>industry  | Products obtained<br>during and from the<br>production of sweets,<br>including chocolate<br>goods. They may be<br>dried.  | Starch<br>Crude fat, if > 5 %<br>Total sugars,<br>calculated as sucrose   |
| 13.1.5                     | Products of the ice-<br>cream industry  | Products obtained<br>during the production<br>of ice-cream. They<br>may be dried.   | Starch<br>Total sugars,<br>calculated as sucrose,<br>Crude fat  |
| 13.1.6                     | Products and by-<br>products from<br>processing fresh<br>fruits and vegetables <sup>a</sup> | Products obtained<br>when processing<br>fresh fruit and<br>vegetables (including  | Starch<br>Crude fibre<br>Crude fat, if > 5 %  |
| a The name shall be        | e supplemented by the fruit, vegetable, p   | lant, spices and herbs species, as  | applicable.   |
| <b>b</b> The name shall be | e supplemented by the indication of the l   | ootanical origin.   |   |
| <b>c</b> The name shall be | e supplemented by the indication of the l   | botanical or animal origin.   |   |
| <b>d</b> The name shall be | e amended or supplemented to specify the  | ne fatty acids used.  |   |
| e The name shall be        | e amended or supplemented to specify the  | ne organic acid.  |   |
| f The name shall be        | e supplemented by the words 'from anim  | hal tissues' or 'from fermentation  | i', as appropriate  |

| Status: Point in time view as at 31/01/2020.                                 |  |
|--|--|
| Changes to legislation: There are currently no known outstanding effects for |  |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |  |

|                                   |  | peel, whole pieces of<br>fruit/vegetables, and<br>mixtures thereof).<br>They may have been<br>dried, or frozen.  | Ash insoluble in HCl,<br>if > 3,5 %   |  |
|-----------------------------------|--|--|---|--|
| 13.1.7                            | Products from the processing of plants <sup>a</sup>  | Products obtained<br>from freezing or<br>drying whole plants<br>or their parts.  | Crude Fibre   |  |
| 13.1.8                            | Products from<br>processing of spices<br>and seasonings <sup>a</sup>                                       | Products obtained<br>from freezing or<br>drying spices and<br>seasonings or their<br>parts.  | Crude protein, if > 10<br>%<br>Crude fibre<br>Crude oils/fats, if<br>> 10 %,<br>Starch, if > 30 %<br>Total sugars,<br>calculated as sucrose,<br>if > 10 % |  |
| 13.1.9                            | Products from the processing of herbs <sup>a</sup>   | Products obtained<br>from crushing,<br>grinding, freezing or<br>drying herbs or their<br>parts.  | Crude Fibre   |  |
| 13.1.10                           | Products from the<br>potato processing<br>industry   | Products obtained<br>when processing<br>potatoes. They may<br>have been dried or<br>frozen.  | Starch<br>Crude fibre<br>Crude fat, if $> 5 \%$<br>Ash insoluble in HCl,<br>if $> 3,5 \%$   |  |
| 13.1.11                           | Products and by-<br>products of the<br>sauces production   | Substances from the<br>sauces-production<br>that are intended or<br>where it is reasonable<br>to expect that they<br>can be consumed<br>by humans in<br>their processed,<br>partially processed or<br>unprocessed forms.<br>They may be dried. | Crude fat   |  |
| 13.1.12                           | Products and by-<br>products from the  | Products and by-<br>products of the<br>savoury snacks  | Crude fat   |  |
| <b>a</b> The name shall be supple | emented by the fruit, vegetable, p   | lant, spices and herbs species, as   | applicable.   |  |
| <b>b</b> The name shall be supple | emented by the indication of the b   | potanical origin.  |   |  |
|                                   | emented by the indication of the b   | -  |   |  |
|                                   |  |  |   |  |
|                                   |  |  |   |  |
| f The name shall be supple        | f The name shall be supplemented by the words 'from animal tissues' or 'from fermentation', as appropriate |  |   |  |

|  | savoury snacks<br>industry                         | industry obtained<br>during and from the<br>production of savoury<br>snacks — potato<br>chips, potato and/or<br>cereal based snacks<br>(direct extruded,<br>dough based and<br>pelleted snacks) and<br>nuts.   |   |
|--|--|--|---|
| 13.1.13  | Products from the<br>ready-to-eat food<br>industry | Products obtained<br>during the production<br>of ready to eat food.<br>They may be dried.  | Crude fat, if > 5 %   |
| 13.1.14  | Plants by-products<br>from spirits<br>production   | Solid products from<br>plants (including<br>berries and seeds<br>such as anise)<br>obtained after<br>maceration of<br>these plants in an<br>alcoholic solution<br>or after alcoholic<br>evaporation/<br>distillation, or both,<br>in the elaboration of<br>flavourings for the<br>spirits production.<br>These products<br>must be distilled<br>to eliminate the<br>alcoholic residue. | Crude protein, if > 10<br>%<br>Crude fibre<br>Crude oils/fats, if<br>> 10 % |
| 13.1.15  | Feed beer  | Product of the<br>brewing process<br>which is unsaleable<br>as a human beverage.   | Alcohol content<br>Moisture if < 75 %                                       |
| 13.1.16  | Sweet flavored drink                               | Products from the<br>soft drink industry<br>obtained from the<br>production of sweet<br>flavoured soft drinks<br>or from unpacked<br>non-marketable  | Total sugars,<br>calculated as sucrose.<br>Moisture if > 30 %               |
| <b>a</b> The name shall be supple  | mented by the fruit, vegetable, p                  | lant, spices and herbs species, as   | applicable.   |
| <b>b</b> The name shall be supple  | mented by the indication of the b                  | potanical origin.  |   |
| <b>c</b> The name shall be supple  | mented by the indication of the b                  | potanical or animal origin.  |   |
| d The name shall be amended or supplemented to specify the fatty acids used. |  |  |   |
| e The name shall be amend  | ed or supplemented to specify th                   | e organic acid.  |   |
| <b>f</b> The name shall be supple  | mented by the words 'from anim                     | al tissues' or 'from fermentation  | ', as appropriate   |

|                                   |  | sweet-flavoured soft<br>drinks.<br>They may be<br>concentrated or dried.   |   |  |
|-----------------------------------|--|--|---|--|
| 13.1.17                           | Fruit Syrup  | Products from the<br>fruit syrup industry<br>obtained from the<br>manufacture of fruit<br>syrup for human<br>consumption   | Total sugars,<br>calculated as sucrose<br>Moisture if > 30 %  |  |
| 13.1.18                           | Sweet flavored syrup   | Products from the<br>sweet flavored syrup<br>industry obtained<br>from the production<br>of syrup or from<br>unpacked non-<br>marketable syrup.<br>They may be<br>concentrated or dried. | Total sugars,<br>calculated as sucrose.<br>Moisture if > 30 % |  |
| 13.2.1                            | Caramelised sugars   | Product obtained by<br>the controlled heating<br>of any sugar.   | Total sugars,<br>calculated as sucrose                        |  |
| 13.2.2                            | Dextrose   | Dextrose is obtained<br>after hydrolysis of<br>starch and consists of<br>purified, crystallised<br>glucose, with or<br>without crystal water.  |   |  |
| 13.2.3                            | Fructose   | Fructose as purified<br>crystalline powder.<br>It is obtained from<br>glucose in glucose<br>syrup by the use of<br>glucose isomerase<br>and from sucrose<br>inversion.                   |   |  |
| 13.2.4                            | Glucose syrup  | Glucose syrup<br>is a purified and<br>concentrated aqueous<br>solution of nutritive<br>saccharides obtained<br>through hydrolysis  | Moisture if > 30 %  |  |
| a The name shall be supple        | emented by the fruit, vegetable, p   | lant, spices and herbs species, as   | applicable.   |  |
| <b>b</b> The name shall be supple | emented by the indication of the l   | ootanical origin.  |   |  |
|                                   | emented by the indication of the b   | -  |   |  |
|                                   | d The name shall be amended or supplemented to specify the fatty acids used. |  |   |  |
|                                   | led or supplemented to specify th  | -  |   |  |
| f The name shall be supple        | emented by the words 'from anim  | hal tissues' or 'from fermentation   | , as appropriate  |  |

|                                 |   | from starch. It may be dried   |  |
|---------------------------------|---|--|--|
| 13.2.5                          | Glucose molasses                          | Product produced<br>during refining<br>process of glucose<br>syrups.   | Total sugars,<br>calculated as sucrose |
| 13.2.6                          | Xylose                                    | Sugar extracted from wood.   |  |
| 13.2.7                          | Lactulose                                 | Semi-synthetic<br>disaccharide (4-O-<br>D-Galactopyranosyl-<br>D-fructose) obtained<br>from lactose through<br>the isomerisation of<br>glucose to fructose.<br>Present in heat<br>treated milk and milk<br>products.   |  |
| 13.2.8                          | Glucosamine<br>(Chitosamine) <sup>f</sup> | Amino sugar<br>(monosaccharide)<br>being part of the<br>structure of the<br>polysaccharides<br>chitosan and chitin.<br>Produced by the<br>hydrolysis of<br>crustacean and<br>other arthropod<br>exoskeletons or<br>by fermentation of<br>grain such as corn or<br>wheat. | Sodium or Potassium,<br>as applicable  |
| 13.2.9                          | Xylo-oligosaccharide                      | Chains of xylose<br>molecules linked<br>with $\beta$ 1–4 bonds<br>with degree of<br>polymerization<br>ranging from 2 to 10<br>and produced from<br>enzymatic hydrolysis<br>of various feedstocks<br>rich in hemicellulose.   | Moisture if > 5 %                      |
| <b>a</b> The name shall be supp | plemented by the fruit, vegetable, p      | lant, spices and herbs species, as   | applicable.                            |
| <b>b</b> The name shall be supp | plemented by the indication of the b      | potanical origin.  |  |
| <b>c</b> The name shall be supp | plemented by the indication of the b      | potanical or animal origin.  |  |
| d The name shall be ame         | ended or supplemented to specify the      | e fatty acids used.  |  |
|                                 | ended or supplemented to specify th       | -  |  |
| f The name shall be supp        | plemented by the words 'from anim         | hal tissues' or 'from fermentation   | i', as appropriate                     |

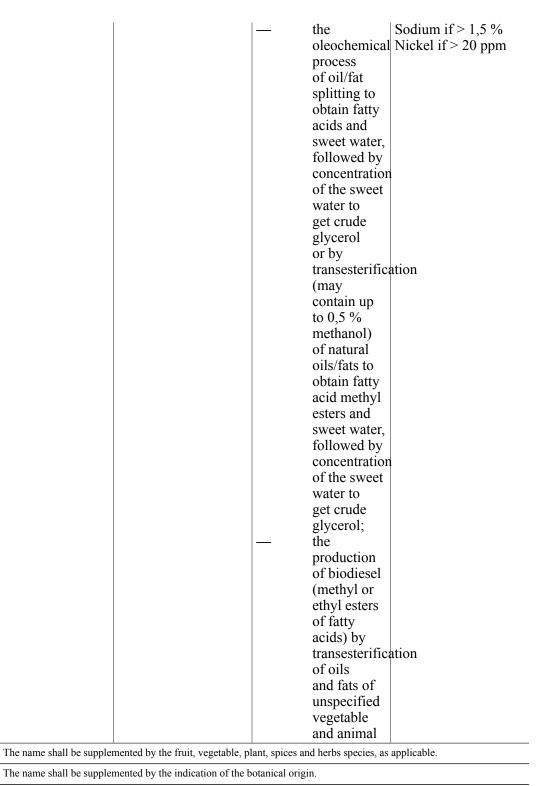
| 13.2.10                   | Gluco-<br>oligosaccharide                 | Product obtained by<br>either fermentation<br>or hydrolysis and/<br>or physical thermal<br>treatment of glucose<br>polymers, glucose,<br>sucrose and maltose.   | Moisture if > 28 %  |
|---------------------------|---|---|---|
| 13.3.1                    | Starch <sup>b</sup>                       | Starch.   | Starch  |
| 13.3.2                    | Starch <sup>b</sup> , pre-<br>gelatinised | Product consisting of starch expanded by heat treatment.  | Starch  |
| 13.3.3                    | Starch <sup>b</sup> mixture               | Product consisting<br>of native and/or<br>modified food<br>starch obtained from<br>different botanical<br>sources.  | Starch  |
| 13.3.4                    | Starch <sup>b</sup> hydrolysates<br>cake  | Product from<br>starch hydrolysis<br>liquor filtration<br>which consists<br>of the following:<br>protein, starch,<br>polysaccharides, fat,<br>oil and filter aid (e.g.<br>diatomaceous earth,<br>wood fibre). | Moisture if < 25 % or<br>> 45 %<br>If moisture < 25 %:<br>— Crude fat<br>— Crude<br>protein |
| 13.3.5                    | Dextrin                                   | Dextrin is partially<br>acid hydrolysed<br>starch.  |   |
| 13.3.6                    | Maltodextrin                              | Maltodextrin is the<br>partially hydrolysed<br>starch   |   |
| 13.4.1                    | Polydextrose                              | Randomly bonded<br>bulk polymer of<br>glucose produced<br>by thermal<br>polymerisation of D-<br>Glucose.  |   |
| a The name shall b        | e supplemented by the fruit, vegetable,   | plant, spices and herbs species, as   | applicable.   |
| <b>b</b> The name shall b | e supplemented by the indication of the   | botanical origin.   |   |
| c The name shall b        | e supplemented by the indication of the   | botanical or animal origin.   |   |
| d The name shall b        | e amended or supplemented to specify t    | he fatty acids used.  |   |
| e The name shall b        | e amended or supplemented to specify t    | he organic acid.  |   |
| f The name shall b        | e supplemented by the words 'from anin    | mal tissues' or 'from fermentation  | i', as appropriate  |

|                                   | 1  | 1   |                                |  |  |
|-----------------------------------|--|---|--------------------------------|--|--|
| 13.5.1                            | Polyols  | Product obtained<br>by hydrogenation<br>or fermentation<br>and consisting of<br>reduced mono, di- or<br>oligosaccharides or<br>polysaccharides.   |                                |  |  |
| 13.5.2                            | Isomalt  | Sugar alcohol<br>obtained from<br>sucrose after<br>enzymatic conversion<br>and hydrogenation.   |                                |  |  |
| 13.5.3                            | Mannitol   | Product obtained<br>by hydrogenation<br>or fermentation<br>and consisting of<br>reduced glucose and/<br>or fructose.  |                                |  |  |
| 13.5.4                            | Xylitol  | Product obtained<br>by hydrogenation<br>and fermentation of<br>xylose.  |                                |  |  |
| 13.5.5                            | Sorbitol   | Product obtained by<br>hydrogenation of<br>glucose  |                                |  |  |
| 13.6.1                            | Acid oils from<br>chemical refining <sup>e</sup> | Product obtained<br>during the<br>deacidification<br>of oils and fats of<br>vegetable or animal<br>origin by means of<br>alkali, followed by<br>an acidulation with<br>subsequent separation<br>of the aqueous phase,<br>containing free fatty<br>acids, oils or fats and<br>natural components<br>of seeds, fruits<br>or animal tissues<br>such as mono- and | Crude fat<br>Moisture if > 1 % |  |  |
| a The name shall be supple        | mented by the fruit, vegetable, p                | lant, spices and herbs species, as  | applicable.                    |  |  |
| <b>b</b> The name shall be supple | mented by the indication of the b                | potanical origin.   |                                |  |  |
| <b>c</b> The name shall be supple | mented by the indication of the b                | potanical or animal origin.   |                                |  |  |
|                                   | ed or supplemented to specify th                 | -   |                                |  |  |
|                                   |  |   |                                |  |  |
| <b>f</b> The name shall be supple | mented by the words 'from anim                   | al tissues' or 'from fermentation   | ', as appropriate              |  |  |

|   |  | diglycerides, crude lecithin and fibres.   |  |  |
|---|--|--|--|--|
| 13.6.2  | Fatty acids esterified with glycerol <sup>d</sup>                | Glycerides obtained<br>by esterification<br>of fatty acids with<br>glycerol. May contain<br>up to 50 ppm Nickel<br>from hydrogenation.   | Moisture if > 1 %<br>Crude fat<br>Nickel if > 20 ppm   |  |
| 13.6.3  | Mono di and tri<br>glycerides of fatty<br>acids <sup>d</sup>     | Product consisting of<br>mixtures of mono-,<br>di- and triesters of<br>glycerol with fatty<br>acids.<br>They may contain<br>small amounts of<br>free fatty acids and<br>glycerol.<br>May contain up to<br>50 ppm Nickel from<br>hydrogenation.                             | Crude fat<br>Nickel if > 20 ppm  |  |
| 13.6.4  | Salts of fatty acids <sup>d</sup>                                | Product obtained by<br>reaction of fatty acids<br>with at least four<br>carbon atoms with<br>calcium, magnesium,<br>sodium or potassium<br>hydroxides, oxides or<br>salts.<br>May contain up to<br>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>e</sup> | Product obtained<br>during the<br>deacidification of oils<br>and fats of vegetable<br>or animal origin by<br>means of distillation<br>containing free fatty<br>acids, oils or fats and<br>natural components<br>of seeds, fruits<br>or animal tissues<br>such as mono- and | Crude fat<br>Moisture if > 1 %   |  |
| <b>a</b> The name shall be supple   | mented by the fruit, vegetable, p                                | lant, spices and herbs species, as   | applicable.  |  |
|   | mented by the indication of the b                                |  |  |  |
| c The name shall be supple  | mented by the indication of the b                                | potanical or animal origin.  |  |  |
| <b>d</b> The name shall be amended or supplemented to specify the fatty acids used. |  |  |  |  |
| e The name shall be amended or supplemented to specify the organic acid.            |  |  |  |  |
| <b>f</b> The name shall be supple   | mented by the words 'from anim                                   | al tissues' or 'from fermentation  | ', as appropriate  |  |

|                                  |   | diglycerides, sterols and tocopherols.  |  |
|----------------------------------|---|---|--|
| 13.6.6                           | Crude fatty acids<br>from splitting <sup>e</sup>          | Product obtained<br>by oil/fat splitting.<br>By definition it<br>consists of crude<br>fatty acids $C_6$ - $C_{24}$ ,<br>aliphatic, linear,<br>monocarboxylic,<br>saturated and<br>unsaturated. May<br>contain up to 50<br>ppm Nickel from<br>hydrogenation.   | Crude fat<br>Moisture if > 1 %<br>Nickel if > 20 ppm                     |
| 13.6.7                           | Pure distilled fatty<br>acids from splitting <sup>e</sup> | Product obtained<br>by the distillation<br>of crude fatty acids<br>from oil/fat splitting<br>potentially plus<br>hydrogenation. By<br>definition it consists<br>of pure distilled<br>fatty acids $C_6$ - $C_{24}$ ,<br>aliphatic, linear,<br>monocarboxylic,<br>saturated and<br>unsaturated.<br>May contain up to<br>50 ppm Nickel from<br>hydrogenation | Crude fat<br>Moisture if > 1 %<br>Nickel if > 20 ppm                     |
| 13.6.8                           | Soap stocks <sup>e</sup>                                  | Product obtained<br>during the<br>deacidification of<br>vegetable oils and<br>fats by means of<br>aqueous calcium,<br>magnesium, sodium<br>or potassium<br>hydroxide solution,<br>containing salts<br>of fatty acids, oils<br>or fats and natural<br>components of seeds,   | Moisture if < 40 and<br>> 50 %<br>Ca or Na or K or Mg,<br>as appropriate |
| a The name shall be suppl        | emented by the fruit, vegetable, p                        |   | applicable.  |
| <b>b</b> The name shall be suppl | emented by the indication of the                          | botanical origin.   |  |
| c The name shall be suppl        | emented by the indication of the                          | botanical or animal origin.   |  |
| <b>d</b> The name shall be amen  | ded or supplemented to specify the                        | ne fatty acids used.  |  |
| e The name shall be amen         | ded or supplemented to specify th                         | ne organic acid.  |  |
|                                  |   |   |  |

|                                   |  | fruits or animal<br>tissues such as mono-<br>and diglycerides,<br>crude lecithin and<br>fibres.  |   |
|-----------------------------------|--|--|---|
| 13.6.9                            | Mono- and<br>diglycerides of fatty<br>acids esterified with<br>organic acids <sup>de</sup> | Mono- and<br>diglycerides of<br>fatty acids with at<br>least four carbon<br>atoms esterified with<br>organic acids.  | Crude fat   |
| 13.6.10                           | Sucrose esters of fatty acids <sup>d</sup>   | Esters of saccharose and fatty acids.  | Total sugars,<br>calculated as sucrose<br>Crude fat   |
| 13.6.11                           | Sucroglycerides of fatty acids <sup>d</sup>  | Mixture of esters of<br>saccharose and mono<br>and di-glycerides of<br>fatty acids.  | Total sugars,<br>calculated as sucrose<br>Crude fat   |
| 13.6.12                           | Palmitoylglucosamine   | Lipid organic<br>compound present<br>in the roots of<br>many plants and<br>particularly in most<br>leguminous plants.<br>It is produced by<br>acylation of D-<br>glucosamine with<br>palmitic acid. May<br>contain up to 0,5 %<br>acetone. | Moisture if > 2 %,<br>Crude fat   |
| 13.6.13                           | Salt of lactylates of fatty acids  | Non-glyceride ester<br>of fatty acids. The<br>product can be a<br>calcium, magnesium,<br>sodium or potassium<br>salt of fatty acids<br>esterified with lactic<br>acid. It may contain<br>the salts of free fatty<br>acids and lactic acid. | Crude fat<br>Moisture if > 1 %<br>Nickel if > 20 ppm<br>Ca or Na or K or Mg<br>as appropriate |
| 13.8.1                            | Glycerine, crude   | By-product obtained  | Glycerol $f > 1.5.9$  |
| <b>a</b> The name shall be supple | [Glycerol, crude]<br>mented by the fruit, vegetable, pl                                    | from:<br>ant. spices and herbs species, as   | Potassium if $> 1,5 \%$   |
|                                   | mented by the indication of the b  |  | applicatio.   |
| **                                | mented by the indication of the b  | -  |   |
| The nume bindir be supple         |  |  |   |
| <b>d</b> The name shall be amend  | ed or supplemented to specify the  | e fatty acids used.  |   |
|                                   | ed or supplemented to specify the<br>ed or supplemented to specify the                     | •  |   |



c The name shall be supplemented by the indication of the botanical or animal origin.

**d** The name shall be amended or supplemented to specify the fatty acids used.

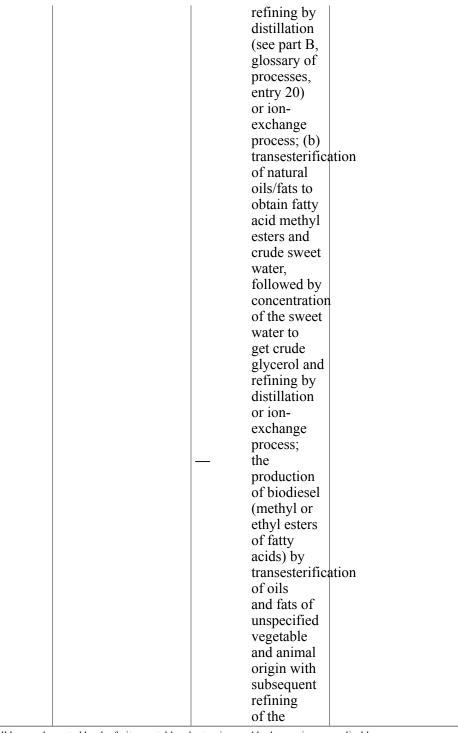
e The name shall be amended or supplemented to specify the organic acid.

f The name shall be supplemented by the words 'from animal tissues' or 'from fermentation', as appropriate

a b

| <b>Status:</b> Point in time view as at 31/01/2020.                          |
|--|
| Changes to legislation: There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)  |

| 13.8.2                          | Glycerine<br>[Glycerol]           | 0,5 % M<br>and up to<br>Matter C<br>Glycerol<br>comprisi<br>Fatty Ac<br>Esters, F<br>Ethyl Es<br>Fatty Ac<br>Glycerid<br>— | 0 4 % of<br>organic Non<br>(MONG)<br>ng of<br>id Methyl<br>atty Acid<br>ters, Free<br>ids and<br>es;<br>saponification<br>of oils/fats<br>of vegetable<br>or animal<br>origin,<br>normally<br>with alkali/<br>alkaline<br>earths,<br>to obtain<br>soaps.<br>tain up to<br>Nickel from<br>nation.<br>obtained<br>the | n<br>Glycerol if < 99 % on<br>dry matter basis<br>Sodium if > 0,1 %<br>Potassium if > 0,1 % |
|---------------------------------|-----------------------------------|--|---|---|
|                                 | [Glycerol]                        | from:<br>—   |   | Sodium if > 0,1 %<br>Potassium if > 0,1 %<br>Nickel if > 20 ppm                             |
| <b>a</b> The name shall be supp | lemented by the fruit, vegetable, | plant, spices ar   |   | applicable.   |
| <b>b</b> The name shall be supp | lemented by the indication of the | e botanical origi  | in.   |   |
| c The name shall be supp        | lemented by the indication of the | e botanical or a   | nimal origin.   |   |
| d The name shall be amer        | nded or supplemented to specify   | the fatty acids u  | used.   |   |
| e The name shall be amen        | nded or supplemented to specify   | the organic acid   | d.  |   |
| <b>f</b> The name shall be supp | lemented by the words 'from ani   | mal tissues' or  | 'from fermentation  | ', as appropriate   |
|                                 | -                                 |  |   |   |



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

**b** The name shall be supplemented by the indication of the botanical origin.

 $\mathbf{c}$  The name shall be supplemented by the indication of the botanical or animal origin.

**d** The name shall be amended or supplemented to specify the fatty acids used.

e The name shall be amended or supplemented to specify the organic acid.

f The name shall be supplemented by the words 'from animal tissues' or 'from fermentation', as appropriate

| <i>Status:</i> Point in time view as at 31/01/2020.                                 |
|---|
| <b>Changes to legislation:</b> There are currently no known outstanding effects for |
| the Commission Regulation (EU) 2017/1017. (See end of Document for details)         |
|   |

|   | I  |  | 1           |
|---|--|--|-------------|
|   |  | glycerine.<br>Minimum  |             |
|   |  | Glycerol   |             |
|   |  | content: 99  |             |
|   |  | % of dry   |             |
|   |  | matter;  |             |
|   |  | — saponification   | n           |
|   |  | of oils/fats   |             |
|   |  | of vegetable   |             |
|   |  | or animal  |             |
|   |  | origin,  |             |
|   |  | normally<br>with alkali/   |             |
|   |  | alkaline   |             |
|   |  | earths,  |             |
|   |  | to obtain  |             |
|   |  | soaps,   |             |
|   |  | followed   |             |
|   |  | by refining  |             |
|   |  | of crude   |             |
|   |  | Glycerol<br>and  |             |
|   |  | distillation.  |             |
|   |  | May contain up to  |             |
|   |  | 50 ppm Nickel from   |             |
|   |  | hydrogenation.   |             |
| 13.9.1  | Methyl sulphonyl   | Organo-sulfur  | Sulphur     |
|   | methane  | compound   |             |
|   |  | $((CH_3)_2SO_2)$ obtained  |             |
|   |  | by chemical synthetis  |             |
|   |  | which is identical   |             |
|   |  | 1 1 1 11   |             |
|   |  | to the naturally   |             |
|   |  | occurring source in  |             |
|   |  | occurring source in plants.  |             |
| 13.10.1   | Peat   | occurring source in plants.<br>Product from  | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural  | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition   | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly   | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition   | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in   | Crude Fibre |
| 13.10.1   | Peat   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and  | Crude Fibre |
|   | Peat<br>emented by the fruit, vegetable, p   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and<br>oligotrophic<br>environment.  |             |
| a The name shall be suppl   |  | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and<br>oligotrophic<br>environment.<br>lant, spices and herbs species, as  |             |
| <ul> <li>a The name shall be suppl</li> <li>b The name shall be suppl</li> </ul>  | emented by the fruit, vegetable, p   | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and<br>oligotrophic<br>environment.<br>lant, spices and herbs species, as<br>potanical origin.   |             |
| <ul> <li>a The name shall be suppl</li> <li>b The name shall be suppl</li> <li>c The name shall be suppl</li> </ul>                                   | emented by the fruit, vegetable, p<br>emented by the indication of the b                                       | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and<br>oligotrophic<br>environment.<br>lant, spices and herbs species, as<br>potanical origin.   |             |
| <ul> <li>a The name shall be suppl</li> <li>b The name shall be suppl</li> <li>c The name shall be suppl</li> <li>d The name shall be amen</li> </ul> | emented by the fruit, vegetable, p<br>emented by the indication of the b<br>emented by the indication of the b | occurring source in<br>plants.<br>Product from<br>the natural<br>decomposition<br>of plant (mainly<br>sphagnum) in<br>anaerobic and<br>oligotrophic<br>environment.<br>lant, spices and herbs species, as<br>potanical origin.<br>potanical or animal origin.<br>the fatty acids used. |             |

| 13.10.2                           | Leonardite   | Product that<br>is a naturally<br>occurring mineral<br>complex of phenolic<br>hydrocarbons, also<br>known as humate,<br>which originates from<br>the decomposition of<br>organic matter over<br>the course of millions<br>of years.  | Crude Fibre                           |
|-----------------------------------|--|--|---------------------------------------|
| 13.11.1                           | Propylene glycol;<br>[1,2-propanediol];<br>[propane-1,2-diol]      | Organic compound<br>(a diol or double<br>alcohol) with formula<br>$C_3H_8O_2$ . It is a<br>viscous liquid with<br>a faintly sweet<br>taste, hygroscopic<br>and miscible with<br>water, acetone, and<br>chloroform. May<br>contain up to 0,3 %<br>di-propylene glycol.  |                                       |
| 13.11.2                           | Mono-esters of<br>propylene glycol and<br>fatty acids <sup>d</sup> | Mono-esters of<br>propylene glycol and<br>fatty acids, alone<br>or in mixtures with<br>diesters.   | Propylene glycol<br>Crude fat         |
| 13.12.1                           | Hyaluronic acid  | Glucosamineglucan<br>(polysaccharide)<br>with repeating<br>unit consisting of<br>an amino sugar<br>(N-acetyl-D-<br>glucosamine) and<br>D-glucuronic acid<br>present in the skin,<br>synovial fluid<br>and the umbilical<br>cord, produced, for<br>example, from animal<br>tissue or by bacterial<br>fermentation | Sodium or Potassium,<br>as applicable |
| <b>a</b> The name shall be supple | emented by the fruit, vegetable, p                                 | lant, spices and herbs species, as   | applicable.                           |
| <b>b</b> The name shall be supple | emented by the indication of the b                                 | ootanical origin.  |                                       |
| <b>c</b> The name shall be supple | emented by the indication of the b                                 | ootanical or animal origin.  |                                       |
| <b>d</b> The name shall be amend  | ded or supplemented to specify th                                  | e fatty acids used.  |                                       |
| e The name shall be amend         | ded or supplemented to specify th                                  | e organic acid.  |                                       |
| f The name shall be supple        | emented by the words 'from anim                                    | al tissues' or 'from fermentation  | ', as appropriate                     |

| $\begin{array}{c} 12.3 \\ \text{Gluconic acid} \\ \text{Gluconic acid} \\ \text{Gluconic acid} \\ \text{(C}_6\text{H}_{12}\text{O}_7\text{), a water} \\ \text{soluable organic} \\ \text{acid with a pKa of} \\ \end{array} $  |
|---|
| 3,7, has a clear to<br>brown color. The<br>liquid form has a<br>minimum content<br>of Gluconic acid of<br>50 %. It is produced<br>through the microbial<br>fermentation of<br>glucose syrup or as<br>the co-product from<br>the manufacturing of<br>food grade glucono-<br>delta-lactone. |
| The name shall be supplemented by the fruit, vegetable, plant, spices and herbs species, as applicable.   |
| The name shall be supplemented by the indication of the botanical origin.   |
| 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.  |
| The name shall be amended or supplemented to specify the organic acid.  |
| The name shall be supplemented by the words 'from animal tissues' or 'from fermentation', as appropriate  |

- (1) Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed (OJ L 268, 18.10.2003, p. 1).
- (2) Regulation (EC) No 1069/2009 of the European Parliament and of the Council of 21 October 2009 laying down health rules as regards animal by-products and derived products not intended for human consumption and repealing Regulation (EC) No 1774/2002 (OJ L 300, 14.11.2009, p. 1).
- (3) Commission Regulation (EC) No 142/2011 of 25 February 2011 implementing Regulation (EC) No 1069/2009 of the European Parliament and of the Council laying down health rules as regards animal by-products and derived products not intended for human consumption and implementing Council Directive 97/78/EC as regards certain samples and items exempt from veterinary checks at the border under that Directive (OJ L 54, 26.2.2011, p. 1).
- (4) OJ L 147, 31.5.2001, p. 1.
- (5) OJ L 35, 8.2.2005, p. 1.
- (6) As Low As Reasonably Achievable.
- (7) OJ L 140, 30.5.2002, p. 10.
- (8) OJ L 70, 16.3.2005, p. 1.
- (9) OJ L 268, 18.10.2003, p. 29.
- (10) The provisions concerning chemical impurities and processing aids established in this paragraph shall not apply to feed materials listed in the Register of feed materials as referred to in Article 24(6) of Regulation (EC) No 767/2009.
- (11) By derogation from this obligation, for the process 'drying' the common name/qualifier may be added.

## Status:

Point in time view as at 31/01/2020.

### Changes to legislation:

There are currently no known outstanding effects for the Commission Regulation (EU) 2017/1017.