

ADA(15)4847:1

Third update of the EU Catalogue of feed materials

Version 19.5.2015

COMMISSION REGULATION (EU) No 68/2013

of 16 January 2013

on the Catalogue of feed materials

(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

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

Whereas:

- (1) Commission Regulation (EU) No 575/2011 of 16 June 2011 on the Catalogue of feed materials ⁽²⁾ (the Catalogue) replaced the first version of the Catalogue of feed materials set out in Commission Regulation (EU) No 242/2010 of 19 March 2010 creating the Catalogue of feed materials ⁽³⁾.
- (2) The appropriate representatives of the European feed business sectors have, in consultation with other parties concerned, in collaboration with the competent national authorities and taking into account relevant experience from opinions issued by the European Food Safety Authority and scientific or technological developments, developed amendments to Regulation (EU) No 575/2011.
- (3) These amendments concern new entries of treatment processes and feed materials and improvements of existing entries, in particular for oil and fat derivatives.
- (4) Furthermore, the amendments concern maximum contents of chemical impurities resulting from their manufacturing process or from processing aids to be set according to point 1 of Annex I to Regulation (EC) No 767/2009. Specific rules should apply to former foodstuff e.g. production surplus, misshapen products or food with expired use-by date that had been produced in compliance with EU food law.
- (5) The conditions set out in Article 26 of Regulation (EC) No 767/2009 are fulfilled.
- (6) Given the very high number of amendments to be made to Regulation (EU) No 575/2011, it is appropriate, for reasons of coherence, clarity and simplification, to repeal and replace that Regulation.
- (7) It is appropriate to reduce the administrative burden on the operators by providing a period of time allowing a smooth conversion of labelling to avoid unnecessary disruption to commercial practices.
- (8) The measures provided for in this Regulation are in accordance with the opinion of the Standing Committee on the Food Chain and Animal Health,

HAS ADOPTED THIS REGULATION:

Article 1

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

Article 2

Regulation (EU) No 575/2011 is repealed.

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

Article 3

Feed materials which have been labelled in accordance with Regulation (EU) No 575/2011 before 19 August 2013 may continue to be placed on the market and used until stocks are exhausted.

Article 4

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

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

Done at Brussels, 16 January 2013.

For the Commission

The President

José Manuel BARROSO

⁽¹⁾ [OJL 229, 19.2009, p. 1.](#)

⁽²⁾ [OJL 159, 17.6.2011, p. 25.](#)

⁽³⁾ [OJL 77, 24.3.2010, p. 17.](#)

ANNEX

CATALOGUE OF FEED MATERIALS

PART A

General provisions

- (1) The use of this Catalogue by the feed business operators shall be voluntary. However, the name of a feed material listed in Part C may be used only for a feed material complying with the requirements of the entry concerned.
- (2) All entries in the list of feed materials in Part C shall comply with the restrictions on the use of feed materials in accordance with the relevant legislation of the Union. Feed business operators using a feed material entered in the Catalogue shall ensure that it complies with Article 4 of Regulation (EC) No 767/2009.
- (3) 'Former foodstuffs' means foodstuffs, other than catering reflux, which were manufactured for human consumption in full compliance with the EU food law but which are no longer intended for human consumption for practical or logistical reasons or due to problems of manufacturing or packaging defects or other defects and which do not present any health risks when used as feed. The setting of maximum contents as referred to in point 1 of Annex I to Regulation (EC) No 767/2009 shall not be applicable to former foodstuffs and catering reflux. It shall apply when further processed as feed.
- (4) In accordance with good practice as referred to in Article 4 of Regulation (EC) No 183/2005 of the European Parliament and of the Council ⁽¹⁾, 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 ⁽²⁾ principle and without prejudice to the application of Regulation (EC) No 183/2005, Directive 2002/32/EC of the European Parliament and of the Council of 7 May 2002 on undesirable substances in animal feed ⁽³⁾, Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC ⁽⁴⁾ and Regulation (EC) No 1831/2003 of the European Parliament and of the Council of 22 September 2003 on additives for use in animal nutrition ⁽⁵⁾, 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 the present Annex, any maximum content is expressed on a weight/weight basis.
- (6) The specific maximum contents for chemical impurities and processing aids are set either in the description of the process in Part B, in the description of the feed material in Part C or at the end of a category in Part C. Unless a specific maximum content is set in Part C, any maximum content set in Part B for a given process is applicable to any feed material listed in Part C in so far as the description of the feed material makes reference to this process in its description and in so far as the process at stake meets the description given in Part B.
- (7) The botanical purity of a feed material shall not be less than 95 %. However, botanical impurities such as residues of other oil seeds or oil fruits derived from a previous manufacturing process shall not exceed 0,5 % for each type of oil seed or fruit. Derogating from these general rules a specific level shall be set in the list of feed materials in Part C.

(1) OJ L 35, 8.2.2005, p. 1.

(2) As Low As Reasonably Achievable.

(3) OJ L 140, 30.5.2002, p. 10.

(4) OJ L 70, 16.3.2005, p. 1.

(5) OJ L 268, 18.10.2003, p. 29.

- (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 ⁽¹⁾ 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 as a claim (e.g. rumen protection), has to comply with Article 13 of Regulation (EC) No 767/2009. Furthermore, feed materials may meet a particular nutritional purpose in accordance with Articles 9 and 10 of Regulation (EC) No 767/2009.

⁽¹⁾ By derogation from this obligation, for the process 'drying' it may be added.

PART B

Glossary of processes

	Process	Definition	Common name/qualifier
1	Air fractionation	Separation of particles by means of an air stream	Air fractionated
2	Aspiration	Process to remove dust, fine particles and other parts with suspended cereal fines from a bulk of grain during transfer by means of an air-flow	Aspirated
3	Blanching	Process consisting of heat treatment of an organic substance by boiling or steaming in order to denature natural enzymes, soften tissue and remove raw flavouring and followed by immersion in cold water to halt the cooking process	Blanched
4	Bleaching	Removing naturally occurring colour	Bleached
5	Chilling	Lowering the temperature below ambient but above freezing point to aid preservation	Chilled
6	Chopping	Reduction of particle size using one or more knives	Chopped
7	Cleaning	Removal of objects (contaminants, e.g. stones) or vegetative parts of the plant e.g. unattached particles of straw or husks or weeds	Cleaned/sorted
8	Concentration (?)	Increase in certain contents by removal of water and/or other constituents	Concentrate
9	Condensation	Transition of a substance from a gaseous to a liquid phase	Condensed
10	Cooking	The application of heat to change the physical and chemical characteristics of feed materials	Cooked
11	Crushing	Reduction of particle size using a crusher	Crushed, crushing
12	Crystallisation	Purification by the formation of solid crystals from a liquid solution. Impurities in the liquid are usually not incorporated into the lattice structure of the crystal.	Crystallised
13	Decortication (?)	Complete or partial removal of outer layers from grains, seeds, fruits, nuts and others	Decorticated, partially decorticated
14	Dehulling/dehusking	Removal of the outer skins of beans, grains and seeds usually by physical means	Dehulled or dehusked (?)
15	Depectinising	Extraction of pectins from a feed material	Depectinised
16	Desiccation	Process of extracting moisture	Desiccated
17	Desliming	Process used to remove the slime layer on the surface	Deslimed
18	Desugaring	Complete or partial removal of mono- and disaccharides from molasses and other material containing sugar by chemical or physical means	Desugared, partially desugared

19	Detoxification	Process by which toxic contaminants are destroyed or reduced in concentration	Detoxified
20	Distillation	Fractionation liquids by boiling and collecting the condensed vapour into a separate container	Distilled
21	Drying	Dehydration by artificial or natural processes	Dried (sun or artificially)
22	Ensiling	Storage of feed materials in a silo possibly with the addition of preservatives or by using anaerobic conditions possibly with silage additives	Ensiled
23	Evaporation	Reducing the water content	Evaporated
24	Expansion	Thermal process during which the product's internal water content, abruptly steamed, leads to the breaking-up of the product	Expanded or puffed
25	Expelling	Removal of oil/fat by pressing	Expeller/cake and oil/fat
26	Extraction	Removal either by organic solvent of fat/oil from certain materials or by aqueous solvent of sugar or other water-soluble components	Extracted/meal and fat/oil, molasses/pulp and sugar or other water-soluble components
27	Extrusion	Thermal process during which the product's internal water content, abruptly steamed, leads to the breaking-up of the product combined with special shaping by passing through an orifice	Extruded
28	Fermentation	Process in which micro-organisms such as bacteria, fungi or yeasts are produced or used to act on materials to promote a change in their chemical composition/properties	Fermented
29	Filtration	Separation of a mixture of liquid and solid materials by passing the liquid through a porous medium or membrane	Filtered
30	Flaking	Rolling of moist heat-treated material	Flakes
31	Flour milling	Reduction of particle size of dry grain and to facilitate separation into constituent fractions (principally flour, bran and middlings)	Flour, bran, middlings (C), feed
32	Fractionation	Separation of feed material fragments by sieving and/or treated with a stream of air that carries the light shell pieces away. Controlled crystallisation of oils and fats. Removal of crystallised oils and fats by means of solvents, pressing or filtering. Fractionation of oils, fats and fatty acids by crystallisation/winterisation. Oils and fats /fatty acids are fractionated in the part of saturated fatty acids and unsaturated fatty acids.	Fractionated

33	Fragmentation	Process of breaking a feed material into fragments	Fragmented
34	Frying	Process of cooking feed materials in a oil or fat	Fried
35	Gelling	Process to form a gel, a solid, jelly-like material that can have properties ranging from soft and weak to hard and tough usually using gelling agents	Gelled
36	Granulation	Treatment of feed materials to obtain a specific particle size and consistency	Granulated
37	Grinding/milling	Reducing the particle size of solid feed materials in a dry or wet process	Ground or milled
38	Heating	Heat treatments carried out under specific conditions	Heat treated
39	Hydrogenation	Catalytic process aimed at saturating double bonds of oils/fats/fatty acids, carried out at high temperature under hydrogen pressure, in order to obtain partially or fully saturated triglycerides/fatty acids, or aimed at obtaining polyols by reduction of carbonyl groups of carbohydrates to hydroxyl groups	Hydrogenated, partially hydrogenated
40	Hydrolysis	Reduction of molecular size by appropriate treatment with water and either heat/pressure, enzymes or acid/alkali	Hydrolysed
41	Liquefying	Transition from a solid or a gas phase into a liquid	Liquefied
42	Maceration	Reducing the size of feed materials using mechanical means often in the presence of water or other liquids	Macerated
43	Malting	Allowing grain to commence germination to activate naturally occurring enzymes that are able to break down starch to fermentable carbohydrates and proteins to amino acids and peptides	Malted
44	Melting	Transition from a solid to a liquid phase by the application of heat	Melted
45	Micronisation	Process of reducing the average diameter of a solid material's particles to the micrometer scale	Micronised
46	Parboiling	Process of soaking in water and subjecting to a heat treatment so that the starch is fully gelatinised, followed by a drying process	Par-boiled
47	Pasteurisation	Heating to a critical temperature for a specified 'amount' of time to eliminate harmful micro-organisms followed by rapid cooling	Pasteurised
48	Peeling	Removal of the skin/peel from fruit and vegetables	Peeled
49	Pelleting	Shaping by compression through a die	Pellet, pelleted
50	Rice milling	Removing almost all or part of the bran and	Milled

		embryo from husked rice	
51	Pregelatinisation	Modification of starch to improve significantly its swelling properties in cold water	Pregelatinised ⁽⁵⁾
52	Pressing ⁽⁶⁾	Physical removal of liquids like fat, oil, water or juice from solids	Expeller/cake (in case of oil-containing materials) Pulp, pomace (in case of fruits, etc.) Pressed pulp (in case of sugar beet)
53	Refining	Complete or partial removal of impurities or unwanted components by chemical/physical treatment	Refined, partially refined
54	Roasting	Heating of feed materials in a dry state to improve digestibility, increase colour and/or reduce naturally occurring anti-nutritive factors	Roasted
55	Rolling	Reduction of particle size by passing the feed material, e.g. grains, between pairs of rollers	Rolled
56	Rumen protection	Process which, either by physical treatment with use of heat, pressure, steam and combination of such conditions and/or through the action of e.g. aldehydes, lignosulfonates, sodium hydroxide or organic acids (such as propionic or tannic acid) aims to protect the nutrients from degradation in the rumen Feed materials rumen protected by aldehydes may contain up to 0,12 % of free aldehydes.	Rumen protected through the action of [insert as applicable]
57	Sieving/Screening	Separation of particles of different sizes by passing feed materials through screen(s) while being shaken or poured	Sieved, sifted, screened
58	Skimming	Separating the top floating layer of a liquid by mechanical means, e.g. milk fat	Skimmed
59	Slicing	Cutting feed materials into flat pieces	Sliced
60	Soaking/Steeping	Moistening and softening of feed materials, usually seeds, to reduce cooking time, aid in seed coat removal, facilitate the uptake of water to activate the germination process or reduce the concentration of naturally occurring anti-nutritive factors	Steeped
61	Spray drying	Reducing the moisture content of a liquid by creating a spray or mist of the feed material to increase the surface area to weight ratio through which warm air is blown	Spray dried
62	Steaming	Process using pressurised steam for heating and cooking to increase digestibility	Steamed
63	Toasting	Heating using dry heat usually applied to oilseeds,	Toasted

		e.g. to reduce or remove naturally occurring anti-nutritive factors	
64	Ultra-filtration	Filtration of liquids through a membrane permeable only for small molecules	Ultra-filtrated
65	Degermination	Process of complete or partial removal of germ from crushed cereal grain	Degermed, degerminated
66	Infra-red micronisation	Thermal process using infra red heat for cooking and roasting cereals, roots, seeds or tubers, or their co-products, usually followed by flaking	Infra red micronised
67	Oil/fats and hydrogenated oils/fats splitting	Chemical process of hydrolysis of fats/oils. The reaction of fats/oils with water, carried out at high temperatures and pressures, allows obtaining crude fatty acids in the hydrophobic phase and sweet waters (crude glycerol) in the hydrophilic phase.	Split
68	Ultrasound sonication	<u>Release of soluble compounds by mechanical processing with power ultrasound and heat in water.</u>	<u>Sonicated</u>
69	Mechanical food packaging removal	<u>Mechanical removal of packaging, parts of packaging and any non-feed materials of former foodstuffs involving one or several of the following physical processes: slicing, crushing, sieving, screening and drying</u>	<u>Depacked</u>

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

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

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

(4) In French the name 'issues' may be used.

(5) 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.

(6) In French 'Pressage' may be replaced by 'Extraction mécanique' where appropriate.

PART C

List of feed materials

1. Cereal grains and products derived thereof

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

		the endosperm has been removed.	
1.1.12	Liquid barley starch	Secondary starch fraction from the production of starch from barley	If moisture < 50 % : — Starch
1.1.13	Malting barley screenings	Product from mechanical screening (size fractionation) consisting of undersized barley kernels and fractions of barley kernels separated before the malting process	Crude fibre Crude ash if > 2,2 %
1.1.14	Malting barley and malt fines	Product consisting of fractions of barley kernels and malt separated during the production of malt	Crude fibre
1.1.15	Malting barley husks	Product from malting barley cleaning consisting of fractions of husk and fines	Crude fibre
1.1.16	Barley distillers solids, wet	Product of ethanol manufacture from barley. It contains solid feed fraction from distillation.	Moisture, if < 65 % or > 88 % If moisture < 65 % : —Crude protein
1.1.17	Barley distillers solubles, wet	Product of ethanol manufacture from barley. It contains soluble feed fraction from distillation.	Moisture, if < 45 % or > 70 % If moisture < 45 % —Crude protein
1.1.18	Malt (1)	Product from germinated cereals, dried, milled and/or extracted	
1.1.19	Malt rootlets (1)	Product from malting cereals germination and malt cleaning consisting of rootlets, cereal fines, husks and small broken malted cereal grains. It may be milled.	
1.1.20	Malt extract / Barley malt extract	Product by converting barley malt into malt extracts: liquefaction of germinated grain, washing, filtering and evaporation. Typically marketed in a sirup or powder condition	Crude fiber Crude proteins
1.2.1	Maize (2)	Grains of <i>Zea mays</i> L. <i>ssp. mays</i> . It may be rumen protected.	
1.2.2	Maize flakes	Product obtained by steaming or infra red micronising and rolling dehusked maize. It may contain a small proportion of maize husks.	Starch
1.2.3	Maize middlings	Product of the manufacture of flour or semolina from maize. It consists principally of fragments of the outer skins and of particles of grain from which less of the endosperm has been removed than in maize bran. It may contain some maize germ fragments.	Crude fibre Starch Crude fat if >5%
1.2.4	Maize bran	Product of the manufacture of flour or semolina from maize. It consists principally of outer skins and some maize germ fragments, with some	Crude fibre

		endosperm particles.	
1.2.5	Maize cobs	Central core of a maize ear. <u>It may include small quantities of maize and spathes which might not have been removed during mechanical harvesting</u> It comprises unseparated rachis, grain and leaves.	Crude fibre Starch
1.2.6	Maize screenings	Fraction of maize kernels separated by the screening process at product intake	
1.2.7	Maize fibre	Product of the manufacture of maize starch. It consists principally of fibre.	Moisture, if < 50 % or > 70 % If moisture < 50 %: — Crude fibre
1.2.8	Maize gluten	Product of the manufacture of maize starch. It consists principally of gluten obtained during separation of starch.	Moisture, if < 70 % or > 90 % If moisture < 70 %: — Crude protein
1.2.9	Maize gluten feed	Product obtained during the manufacture of maize starch. It is composed of bran and maize solubles. The product may also include broken maize and residues from the oil extraction of maize germs. Other products derived from starch and from the refining or fermentation of starch products may be added.	Moisture, if < 40 % or > 65 % If moisture < 40 %: — Crude protein — Crude fibre — Starch
1.2.10	Maize germ	Product of the manufacture of semolina, flour or starch from maize. It consists predominately of maize germ, outer skins and parts of the endosperm.	Moisture, if < 40 % or > 60 % If moisture < 40 %: — Crude protein — Crude fat
1.2.11	Maize germ expeller	Product of oil manufacture obtained by pressing of processed maize germ to which parts of the endosperm and testa may still adhere	Crude protein Crude fat
1.2.12	Maize germ meal	Product of oil manufacture, obtained by extraction of processed maize germ.	Crude protein
1.2.13	Crude maize germ oil	Product obtained from maize germ	<u>Moisture, if > 1 %</u> Crude fat
1.2.14	Maize, puffed	Product obtained from milled or broken maize by means of a treatment in humid, warm conditions and under pressure	Starch
1.2.15	Maize steep liquor	Concentrated liquid fraction from the steeping process of corn	Moisture, if < 45 % or > 65 %

			If moisture < 45 %: —Crude protein
1.2.16	Sweet corn silage	By-product of the sweet corn processing industry, composed of centre cobs, husks, base of the kernels, chopped and drained or pressed. Generated by chopping the sweet corn cobs, husks and leaves, with presence of sweet corn kernels.	Crude fibre
1.2.17	Crushed degerminated (degermed) Maize	Product obtained by degermination of crushed maize. It consists principally of endosperm fragments and may contain some maize germ and outer skin particles.	Crude fibre Starch
<u>1.2.18</u>	<u>Maize grits</u>	<u>Hard, flinty portions of ground maize containing little or none of the bran or germs.</u>	<u>Crude fibre</u> <u>Starch</u>
1.3.1	Millet	Grains of <i>Panicum miliaceum</i> L.	
1.4.1	Oats	Grains of <i>Avena sativa</i> L. and other cultivars of oats	
1.4.2	Dehulled oats	Dehulled grains of oats. It may be steam treated.	
1.4.3	Oat flakes	Product obtained by steaming or infra red micronising and rolling dehusked oats. It may contain a small proportion of oat husks.	Starch
1.4.4	Oat middlings	Product obtained during the processing of screened, dehusked oats into oat groats and flour. It consists principally of oat bran and some endosperm.	Crude fibre Starch
1.4.5	Oat bran	Product of flour manufacture, obtained from screened grains of dehusked oat. It consists principally of fragments of the outer skins and of particles of grain from which the greater part of the endosperm has been removed.	Crude fibre
1.4.6	Oat hulls	Product obtained during dehulling of oat grains	Crude fibre
1.4.7	Oat, puffed	Product obtained from milled or broken oat by means of a treatment in humid, warm conditions and under pressure	Starch
1.4.8	Oat groats	Cleaned oats with the hull removed	Crude fibre Starch
1.4.9	Oat flour	Product obtained by milling of oat grains	Crude fibre Starch
1.4.10	Fodder oat flour	Oats product with high content in starch, after decortication	Crude fibre
1.4.11	Oat feed	Product obtained during the processing of screened, dehusked oats into oat groats and flour.	Crude Fibre

		It consists principally of oat bran and some endosperm.	
1.5.1	Quinoa seed, extracted	Cleaned whole seed of the quinoa plant (<i>Chenopodium quinoa</i> Willd.) from which the saponin contained in the seeds outer layer has been removed	
<u>1.6.1</u>	Rice	<u>Grains of <i>Oryza sativa</i> L. It may be rumen protected</u>	
1.6. <u>24</u>	Broken rice	Part of rice kernel of <i>Oryza Sativa</i> L. with a length less than three-quarters of a whole kernel. The rice may have been parboiled.	Starch
1.6. <u>32</u>	Milled rice	Husked rice from which almost all the bran and embryo have been removed during rice milling. The rice may have been parboiled.	Starch
1.6. <u>43</u>	Pre-gelatinised rice	Product obtained from milled or broken rice by pre-gelatinisation	Starch
1.6. <u>54</u>	Extruded rice	Product obtained by extruding rice flour	Starch
1.6. <u>65</u>	Rice flakes	Product obtained by flaking pre-gelatinised rice kernels or broken kernels	Starch
1.6. <u>76</u>	Husked rice	Paddy (<i>Oryza Sativa</i> L.) from which the husk only has been removed. It may be parboiled. The processes of husking and handling may result in some loss of bran.	Starch Crude fibre
1.6. <u>87</u>	Ground fodder rice	Product obtained by grinding fodder rice, consisting either of green, chalky or unripe grains, sifted out during the milling of husked rice, or of normal husked grains which are yellow or spotted	Starch
1.6. <u>98</u>	Rice flour	Product obtained by grinding milled rice. The rice may have been parboiled.	Starch
1.6. <u>109</u>	Husked rice, flour	Product obtained by grinding husked rice. The rice may have been parboiled.	Starch Crude fibre
1.6. <u>110</u>	Rice bran	Product obtained during rice milling, mainly consisting of the outer layers of the kernel (pericarp, seed coat, nucleus, aleurone) with part of the germ. The rice may have been parboiled or extruded.	Crude fibre
1.6. <u>124</u>	Rice bran with calcium carbonate	Product obtained during rice milling, mainly consisting of the outer layers of the kernel (pericarp, seed coat, nucleus, aleurone) with part of the germ. It may contain up to 23 % of calcium carbonate used as processing aid. The rice may have been parboiled.	Crude fibre Calcium carbonate
1.6. <u>132</u>	Defatted rice bran	Rice bran resulting from oil extraction. It may be rumen protected	Crude fibre

1.6.1 ⁴³	Rice bran oil	Oil extracted from stabilised rice bran	Moisture, if > 1 % Crude fat
1.6.1 ⁵⁴	Rice middlings	Product of rice flour and starch production, obtained by dry or wet milling and sieving. It consists principally of starch, protein, fat and fibre. The rice may have been parboiled. May contain up to 0,25 % sodium and up to 0,25 % sulphate.	Starch, if > 20 % Crude protein, if > 10 % Crude fat, if > 5 % Crude fibre
1.6.1 ⁶⁵	Rice middlings with calcium carbonate	Product obtained during rice milling, mainly consisting of particles of aleurone layer and endosperm. It may contain up to 23 % of calcium carbonate used as processing aid. The rice may have been parboiled.	Starch Crude protein Crude fat Crude fibre Calcium carbonate
1.6.17	Rice germ	Product obtained during rice milling, mainly consisting of the embryo	Crude fat Crude protein
1.6.18	Rice germ expeller	Product remaining after rice germ has been crushed to expel the oil	Crude protein Crude fat Crude fibre
1.6.20	Rice protein	Product of rice starch production, obtained by wet milling sieving, separation, concentration and drying	Crude protein
1.6.21	Liquid rice feed	Concentrated liquid product of wet milling and sieving rice	Starch
1.6.22	Rice, puffed	Product obtained by expanding rice kernels or broken kernels	Starch
1.6.23	Rice, fermented	Product obtained by fermentation of rice	Starch
1.6.24	Malformed rice, milled/chalky rice, milled	Product obtained during rice milling, mainly consisting of malformed kernel and/or chalky kernel and/or damaged kernel, whole or broken. It may be parboiled.	Starch
1.6.25	Immature rice, milled	Product obtained during rice milling, mainly consisting of immature and/or chalky kernel	Starch
1.7.1	Rye	Grains of <i>Secale cereale</i> L.	
1.7.2	Rye middlings	Product of flour manufacture, obtained from screened rye. It consists principally of particles of endosperm, with fine fragments of the outer skins and some miscellaneous parts of the grain.	Starch Crude fibre
1.7.3	Rye feed	Product of flour manufacture, obtained from screened rye. It consists principally of fragments of the outer skins, and of particles of grain from which less of the endosperm has been removed than in rye bran.	Starch Crude fibre
1.7.4	Rye bran	Product of flour manufacture, obtained from screened rye. It consists principally of fragments	Starch Crude fibre

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

1.11.7	Wheat bran ⁽³⁾	Product of flour or malting manufacture obtained from screened grains of wheat or dehusked spelt. It consists principally of fragments of the outer skins and of particles of grain from which the greater part of the endosperm has been removed.	Crude fibre
1.11.8	Malted fermented wheat particles	Product obtained by a process combining malting and fermentation of wheat and wheat bran. The product is then dried and ground.	Starch Crude fibre
1.11.10	Wheat fibre	Fibre extracted from wheat processing. It consists principally of fibre.	Moisture, if < 60 % or > 80 % If moisture < 60 % : — Crude fibre
1.11.11	Wheat germ	Product of flour milling consisting essentially of wheat germ, rolled or otherwise, to which fragments of endosperm and outer skin may still adhere	Crude protein Crude fat
1.11.12	Wheat germ, fermented	Product of fermentation of wheat germ, with inactivated micro-organisms	Crude protein Crude fat
1.11.13	Wheat germ expeller	Product of oil manufacture, obtained by pressing of wheat germ (<i>Triticum aestivum</i> L., <i>Triticum durum</i> Desf. and other cultivars of wheat and dehusked spelt (<i>Triticum spelta</i> L., <i>Triticum dicoccum</i> Schrank, <i>Triticum monococcum</i> L.)) to which parts of the endosperm and testa may still adhere	Crude protein
1.11.15	Wheat protein	Wheat protein extracted during starch or ethanol production, maybe partially hydrolysed	Crude protein
1.11.16	Wheat gluten feed	Product of the manufacture of wheat starch and gluten. It consists of bran, from which the germ may have been partially removed. Wheat solubles, broken wheat and other products derived from starch and from the refining or fermentation of starch products may be added.	Moisture, if < 45 % or > 60 % If moisture < 45 % : — Crude protein — Starch
1.11.18	Vital wheat gluten	Wheat protein characterised by a high viscoelasticity as hydrated, with minimum 80 % protein (N × 6,25) and maximum 2 % ash on dry substance	Crude protein
1.11.19	Liquid wheat starch	Product obtained from the production of starch/glucose and gluten from wheat	Moisture, if < 65 % or > 85 % If moisture < 65 % : — Starch
1.11.20	Wheat starch containing protein,	Product obtained during the production of wheat starch mainly comprising partially sugared starch,	Crude protein Starch

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

			—Crude protein
1.12.8	Concentrated distillers solubles ⁽⁴⁾	Moist product from production of alcohol by fermentation and distilling a mash of wheat and sugar syrup after previous separation of bran and gluten. They may contain dead cells and/or parts of the fermentation micro-organisms.	Moisture, if < 65 % or > 88 % If moisture < 65 %: —Crude protein, if > 10 %
1.12.9	Distillers' grains and solubles ⁽⁴⁾	Product obtained when producing alcohol by fermentation and distilling grain mash of cereals and/or other starchy and sugar containing products. They may contain dead cells and/or parts of the fermentation micro-organisms. May contain 2 % sulphate. It may be rumen protected.	Moisture, if < 60 % or > 80 % If moisture < 60 %: —Crude protein
1.12.10	Distillers' dried grains	Product of alcohol distilling obtained by drying solid residues of fermented grains. It may be rumen protected.	Crude protein
1.12.11	Distillers' dark grains ⁽⁴⁾ ; [Distillers' dried grains and solubles] ⁽⁴⁾	Product of alcohol distilling obtained by drying solid residues of fermented grains to which pot ale syrup or evaporated spent wash has been added. It may be rumen protected.	Crude protein
1.12.12	Brewers' grains ⁽⁴⁾	Product of brewing composed by residues of malted and unmalted cereals and other starchy products, which may contain hop materials. Typically marketed in a moist condition but may also be sold in a dried form. May contain up to 0,3 % dimethyl polysiloxane, may contain up to 1,5 % enzymes, may contain up to 1,8 % bentonite	Moisture, if < 65 % or > 88 % If moisture < 65 %: —Crude protein
1.12.13	Draff ⁽⁴⁾	Solid product of cereal whisky production. It consists of the residues from hot water extraction of malted cereal. Typically marketed in the moist form after the extract has been removed by gravity	Moisture, if < 65 % or > 88 % If moisture < 65 %: —Crude protein
1.12.14	Mash filter grains	Solid product obtained through the production of beer, malt extract and whisky spirit. It consists of the residues of hot water extraction of ground malt and possibly other sugar or starch-rich adjuncts. Typically marketed in the moist form after the extract has been removed by pressing.	Moisture, if < 65 % or > 88 % If moisture < 65 %: —Crude protein
1.12.15	Pot ale	The product remaining in the still from the first (wash) distillation of a malt distillery	Crude protein, if > 10 %
1.12.16	Pot ale syrup	Product from the first (wash) distillation of a malt distillery produced by evaporating the pot ale remaining in the still	Moisture, if < 45 % or > 70 % If moisture < 45 %: Crude protein

- [\(1\)](#) The name may be supplemented by the cereal species.
- [\(2\)](#) Please note that 'maize' can either be referred to as such or as 'corn'. This is valid for all maize products.
- [\(3\)](#) If this product has been subject to a finer milling the word 'fine' may be added to the name or the name may be replaced by a corresponding denomination.
- [\(4\)](#) The name may be supplemented by the grain species.

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

Number	Name	Description	Compulsory declarations
2.1.1	Babassu expeller	Product of oil manufacture, obtained by pressing Babassu palm nuts <i>Orbignya</i> varieties	Crude protein Crude fat Crude fibre
2.2.1	Camelina seed	Seeds of <i>Camelina sativa</i> L. Crantz	
2.2.2	Camelina, expeller	Product of oil manufacture, obtained by pressing of seeds of Camelina	Crude protein Crude fat Crude fibre
2.2.3	Camelina meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of Camelina seed expeller	Crude protein
2.3.1	Cocoa husks	Teguments of the dried and roasted beans of <i>Theobroma cacao</i> L.	Crude fibre
2.3.2	Cocoa hulls	Product obtained by processing of cocoa beans	Crude fibre Crude protein
2.3.3	Cocoa bean meal, partially decorticated	Product of oil manufacture, obtained by extraction of dried and roasted cocoa beans <i>Theobroma cacao</i> L. from which part of the husks has been removed	Crude protein Crude fibre
2.4.1	Copra expeller	Product of oil manufacture, obtained by pressing the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm <i>Cocos nucifera</i> L.	Crude protein Crude fat Crude fibre
2.4.2	Copra, hydrolysed expeller	Product of oil manufacture, obtained by pressing and enzymatic hydrolysis of the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm <i>Cocos nucifera</i> L.	Crude protein Crude fat Crude fibre
2.4.3	Copra meal	Product of oil manufacture, obtained by extraction of the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm	Crude protein
2.5.1	Cotton seed	Seeds of <i>Gossypium</i> spp. from which the fibres have been removed. It may be rumen protected.	
2.5.2	Cotton seed meal, partially decorticated	Product of oil manufacture, obtained by extraction of seeds of cotton from which the fibres and part of the husks have been removed. (Maximum crude fibre 22,5 % in the dry matter). It may be rumen protected.	Crude protein Crude fibre
2.5.3	Cotton seed expeller	Product of oil manufacture, obtained by pressing of seeds of cotton from which the fibres have been removed	Crude protein Crude fibre Crude fat
2.6.1	Groundnut expeller, partially decorticated	Product of oil manufacture, obtained by pressing of partially decorticated groundnuts <i>Arachis hypogaea</i> L. and other species of <i>Arachis</i> (Maximum crude fibre content 16 % in the dry matter)	Crude protein Crude fat Crude fibre

2.6.2	Groundnut meal, partially decorticated	Product of oil manufacture, obtained by extraction of partially decorticated groundnut expeller (Maximum crude fibre content 16 % in the dry matter)	Crude protein Crude fibre
2.6.3	Groundnut expeller, decorticated	Product of oil manufacture, obtained by pressing of decorticated groundnuts	Crude protein Crude fat Crude fibre
2.6.4	Groundnut meal, decorticated	Product of oil manufacture, obtained by extraction of decorticated groundnut expeller	Crude protein Crude fibre
2.7.1	Kapok expeller	Product of oil manufacture obtained by pressing of Kapok seeds (<i>Ceiba pentadra</i> L. Gaertn.)	Crude protein Crude fibre
2.8.1	Linseed	Seeds of linseed <i>Linum usitatissimum</i> L. (Minimum botanical purity 93 %) as whole, flattened or ground linseed. It may be rumen protected.	
2.8.2	Linseed expeller	Product of oil manufacture, obtained by pressing of linseed. (Minimum botanical purity 93 %). <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u>	Crude protein Crude fat Crude fibre
2.8.3	Linseed meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of linseed expeller. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein
2.8.4	Linseed expeller feed	Product of oil manufacture, obtained by pressing of linseed. (Minimum botanical purity 93 %). May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants.</u> <u>The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u>	Crude protein Crude fat Crude fibre
2.8.5	Linseed meal feed	Product of oil manufacture, obtained by extraction and appropriate heat treatment of linseed expeller. May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants.</u> <u>The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005,</u>	Crude protein

		<u>the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected	
2.9.1	Mustard bran	Product of the manufacture of mustard (<i>Brassica juncea</i> L.). It consists of fragments of the outer skins and particles of grain.	Crude fibre
2.9.2	Mustard seed meal	Product obtained by the extraction of volatile mustard oil from mustard seeds	Crude protein
2.10.1	Niger seed	Seeds of the niger plant <i>Guizotia abyssinica</i> (L. F.) Cass	
2.10.2	Niger seed expeller	Product of oil manufacture, obtained by pressing of seeds of the niger plant (Ash insoluble in HCl: maximum 3,4 %)	Crude protein Crude fat Crude fibre
2.11.1	Olive pulp	Product of oil manufacture, obtained by extraction of pressed olives <i>Olea europea</i> L. separated as far as possible from parts of the kernel	Crude protein Crude fibre Crude fat
2.11.2	Defatted olive meal feed	Product of olive oil manufacture, obtained by extraction and appropriate heat treatment of olive pulp expeller separated as far as possible from parts of the kernel. May contain up to 1 % <u>of the sum of used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants and up to 1.3% crude lecithins from integrated crushing and refining plants. The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u>	Crude protein Crude fibre
2.11.3	Defatted olive meal	Product of olive oil manufacture, obtained by extraction and appropriate heat treatment of olive pulp expeller separated as far as possible from parts of the kernel.	Crude protein Crude fibre
2.12.1	Palm kernel expeller	Product of oil manufacture, obtained by pressing of palm kernels <i>Elaeis guineensis</i> Jacq., <i>Corozo oleifera</i> (HBK) L. H. Bailey (<i>Elaeis melanococca</i> auct.) from which as much as possible of the hard shell has been removed	Crude protein Crude fibre Crude fat
2.12.2	Palm kernel meal	Product of oil manufacture, obtained by extraction of palm kernels from which as much as possible of the hard shell has been removed	Crude protein Crude fibre
2.13.1	Pumpkin and squash seed	Seeds of <i>Cucurbita pepo</i> L. and plants of the genus <i>Cucurbita</i>	
2.13.2	Pumpkin and squash seed,	Product of oil manufacture, obtained by pressing of seeds of <i>Cucurbita pepo</i> and plants of the genus	Crude protein Crude fat

	expeller	<i>Cucurbita</i>	
2.14.1	Rape seed ⁽¹⁾	Seeds of rape <i>Brassica napus</i> L. ssp. <i>oleifera</i> (Metzg.) Sinsk., of Indian sarson <i>Brassica napus</i> L. var. <i>glauca</i> (Roxb.) O.E. Schulz and of rape <i>Brassica rapa</i> ssp. <i>oleifera</i> (Metzg.) Sinsk. Minimum botanical purity 94 %. It may be rumen protected.	
2.14.2	Rape seed, expeller	Product of oil manufacture, obtained by pressing of seeds of rape. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein Crude fat Crude fibre
2.14.3	Rape seed meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of rape seed expeller. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein
2.14.4	Rape seed, extruded	Product obtained from whole rape by means of a treatment in humid, warm conditions and under pressure increasing starch gelatinisation. It may be rumen protected.	Crude protein Crude fat
2.14.5	Rape seed protein concentrate	Product of oil manufacture, obtained by separation of protein fraction of rape seed expeller or rape seed	Crude protein
2.14.6	Rape seed expeller feed	Product of oil manufacture, obtained by pressing of seeds of rape. May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants. The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected.	Crude protein Crude fat Crude fibre
2.14.7	Rape seed meal feed	Product of oil manufacture, obtained by extraction and appropriate heat treatment of rape seed expeller. May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants. The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected.	Crude protein

2.15.1	Safflower seed	Seeds of the safflower <i>Carthamus tinctorius</i> L.	
2.15.2	Safflower seed meal, partially decorticated	Product of oil manufacture, obtained by extraction of partially decorticated seeds of safflower.	Crude protein Crude fibre
2.15.3	Safflower hulls	Product obtained during dehulling of safflower seeds	Crude fibre
2.16.1	Sesame seed	Seeds of <i>Sesamum indicum</i> L.	
2.17.1	Sesame seed, partially dehulled	Product of oil manufacture, obtained by removing part of the husks	Crude protein Crude fibre
2.17.2	Sesame hulls	Product obtained during dehulling of sesame seeds	Crude fibre
2.17.3	Sesame seed expeller	Product of oil manufacture, obtained by pressing of seeds of the sesame plant (Ash insoluble in HCl: maximum 5 %). <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u>	Crude protein Crude fibre Crude fat
2.18.1	Toasted soya (beans)	Soya beans (<i>Glycine max.</i> L. Merr.) subjected to an appropriate heat treatment. (Urease activity maximum 0,4 mg N/g × min.). It may be rumen protected.	
2.18.2	Soya (bean) expeller	Product of oil manufacture, obtained by pressing the seed of soya. <u>It may contain and up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u>	Crude protein Crude fat Crude fibre
2.18.3	Soya (bean) meal	Product of oil manufacture, obtained from soya beans after extraction and appropriate heat treatment. (Urease activity maximum 0,4 mg N/g × min.). <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein Crude fibre if > 8 % in dry matter
2.18.4	Soya (bean) meal, dehulled	Product of oil manufacture, obtained from dehulled soya beans after extraction and appropriate heat treatment. (Urease activity maximum 0,5 mg N/g × min.). <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein
2.18.5	Soya (bean) hulls	Product obtained during dehulling of soya beans	Crude fibre
2.18.6	Soya beans, extruded	Product obtained from soya beans by means of a treatment in humid, warm conditions and under pressure increasing starch gelatinisation. It may be rumen protected.	Crude protein Crude fat
2.18.7	Soya (bean) protein concentrate	Product obtained from dehulled, fat extracted soya beans, after fermentation or a second extraction to reduce the level of nitrogen-free extract. <u>May contain dead cells and / or parts of the fermentation micro-organisms.</u>	Crude protein

2.18.8	Soya bean pulp; [Soya bean paste]	Product obtained during extraction of soya beans for food preparation	Crude protein
2.18.9	Soya bean molasses	Product obtained during the processing of soya bean	Crude protein Crude fat
2.18.10	By-product from soybean preparation	Products obtained when processing soybeans to obtain soybean food preparations	Crude protein
2.18.11	Soya (beans)	Soya beans (<i>Glycine max.</i> L. Merr.)	Urease activity if $> 0,4 \text{ mg N/g} \times \text{min}$
2.18.12	Soybean, flakes	Product obtained by steaming or infra red micronising and rolling dehulled soya beans (Urease activity maximum $0,4 \text{ mg N/g} \times \text{min.}$)	Crude protein
2.18.13	Soya (bean) meal feed	Product of oil manufacture, obtained from soya beans after extraction and appropriate heat treatment. (Urease activity maximum $0,4 \text{ mg N/g} \times \text{min.}$). May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants. The product may also contain up to 1.5% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected.	Crude protein Crude fibre if $> 8 \%$ in dry matter
2.18.14	Soya (bean) meal feed, dehulled	Product of oil manufacture, obtained from dehulled soya beans after extraction and appropriate heat treatment. (Urease activity maximum $0,5 \text{ mg N/g} \times \text{min.}$). May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants. The product may also contain up to 1.5% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected.	Crude protein
2.19.1	Sunflower seed	Seeds of the sunflower <i>Helianthus annuus</i> L. It may be rumen protected.	
2.19.2	Sunflower seed expeller	Product of oil manufacture, obtained by pressing of seeds of the sunflower. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants</u>	Crude protein Crude fat Crude fibre

		<u>or standalone crushing plants.</u>	
2.19.3	Sunflower seed meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of sunflower seed expeller. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> It may be rumen protected.	Crude protein
2.19.4	Sunflower seed meal, dehulled	Product of oil manufacture, obtained by extraction and appropriate heat treatment of expeller of sunflower seeds from which part or all of the husks has been removed. <u>It may contain up to 1.3% crude lecithins from integrated crushing and refining plants or standalone crushing plants.</u> Maximum crude fibre 27,5 % in the dry matter	Crude protein Crude fibre
2.19.5	Sunflower seed hulls	Product obtained during dehulling of sunflower seeds	Crude fibre
2.19.6	Sunflower seed meal feed	Product of oil manufacture, obtained by extraction and appropriate heat treatment of sunflower seed expeller. May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants.</u> <u>The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> It may be rumen protected.	Crude protein
2.19.7	Sunflower seed meal feed, dehulled	Product of oil manufacture, obtained by extraction and appropriate heat treatment of expeller of sunflower seeds from which part or all of the husks has been removed. May contain up to 1 % <u>of the sum of</u> used bleaching earth and filter aid (e.g. diatomaceous earth, amorphous silicates and silica, phyllosilicates and cellulosic or wood fibres) and crude lecithins from integrated crushing and refining plants <u>and up to 1.3% crude lecithins from integrated crushing and refining plants.</u> <u>The product may also contain up to 2% soap stocks from integrated crushing and refining plants. With reference to Article 4 of Regulation (EC) No 183/2005, the sum of used bleaching earth, filter aid, crude lecithins, soap stocks and botanical impurities should not exceed 5%.</u> Maximum crude fibre 27,5 % in the dry matter	Crude protein Crude fibre
2.20.1	Vegetable oil and fat ⁽²⁾	Oil and fat obtained from plants (excluding castor oil from the ricinus plant), it may be degummed, refined and/or hydrogenated.	Moisture, if > 1 %
<u>2.20.2</u>	<u>Food factory vegetable oils</u>	<u>Vegetable oils having been used by the food industry for cooking purpose</u>	<u>Moisture, if > 1 %</u>

2.21.1	Crude lecithins	Product obtained during degumming of crude oil from oilseeds and oil fruits with water. Citric acid, phosphoric acid, or sodium hydroxide <u>or enzymes</u> may be added during degumming of the crude oil	
2.22.1	Hemp seed	Controlled hemp seed <i>Cannabis sativa</i> L. with a maximum THC content according to EU legislation	
2.22.2	Hemp expeller	Product of oil manufacture obtained by pressing of hemp seed	Crude protein Crude fibre
2.22.3	Hemp oil	Product of oil manufacture, obtained by pressing of hemp plant and seed	<u>Moisture, if > 1 %</u> Crude protein Crude fat Crude fibre
2.23.1	Poppy seed	Seeds of <i>Papaver somniferum</i> L.	
2.23.2	Poppy meal	Product of oil manufacture, obtained by extraction of expeller of poppy seed	Crude protein

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

(2) ~~The name shall be supplemented by the plant species. 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 species. It shall be specified whether the oil(s) and/or fat(s) is/are crude or refined~~

3. Legume seeds and products derived thereof

Number	Name	Description	Compulsory declarations
3.1.1	Beans, toasted	Seeds of <i>Phaseolus</i> spp. or <i>Vigna</i> spp. submitted to an appropriate heat treatment. It may be rumen protected.	
3.1.2	Bean protein concentrate	Product obtained from the separated bean fruit water, when producing starch	Crude protein
3.2.1	Carob, pods dried	Dried fruits of the carob tree <i>Ceratonia siliqua</i> L.	Crude fibre
3.2.3	Carob pods, dried Kibbled carob	Product obtained by crushing the dried fruits (pods) of the carob tree and from which the locust beans Carob seeds have been removed	Crude fibre
3.2.4	Dried carob pod meal, micronised Carob powder; [carob flour]	Product obtained by micronisation of the dried fruits (pods) of the carob tree from which the Carob seeds locust beans have been removed	Crude fibre Total sugars, calculated as sucrose
3.2.5	Carob germ	Germ of the locust bean of the carob tree	Crude protein
3.2.6	Carob germ, expeller	Product of oil manufacture, obtained by pressing of germ of carob	Crude protein
3.2.7	Locust bean (seed) Carob seed	Bean of the carob tree Seed (kernel) of the fruit (pod) of the carob tree consisting of endosperm, husk and germ	Crude fibre
3.3.1	Chick peas	Seeds of <i>Cicer arietinum</i> L.	
3.4.1	Ervil	Seeds of <i>Ervum ervilia</i> L.	
3.5.1	Fenugreek seed	Seed of fenugreek (<i>Trigonella foenum-graecum</i>)	
3.6.1	Guar meal	Product obtained after extraction of the mucilage from seeds of guar bean <i>Cyamopsis tetragonoloba</i> (L.) Taub	Crude protein
3.6.2	Guar germs meal	Product of mucilage extraction from the germ of seeds of guar bean.	Crude protein
3.7.1	Horse beans	Seeds of <i>Vicia faba</i> L. ssp. <i>faba</i> var. <i>equina</i> Pers. and var. <i>minuta</i> (Alef.) Mansf.	
3.7.2	Horse bean flakes	Product obtained by steaming or infra red micronising and rolling dehulled horse beans.	Starch Crude protein
3.7.3	Film horse beans; [Faba bean hulls]	Product obtained during dehulling horse bean seeds, consisting mainly of external envelopes.	Crude fibre Crude protein
3.7.4	Horse beans, dehulled	Product obtained during dehulling horse bean seeds, consisting mainly of bean	Crude protein

		kernels from horse beans.	Crude fibre
3.7.5	Horse bean protein	Product obtained by grinding and air fractionation of horse beans.	Crude protein
3.8.1	Lentils	Seeds of <i>Lens culinaris</i> a.o. Medik.	
3.8.2	Lentil hulls	Product obtained during dehulling process of lentil seeds.	Crude fibre
3.9.1	Sweet lupins	Seeds of <i>Lupinus</i> spp. low in bitter seed content.	
3.9.2	Sweet lupins, dehulled	Dehulled lupin seeds.	Crude protein
3.9.3	Film lupins; [lupin hulls]	Product obtained during dehulling of lupin seeds, consisting mainly of external envelopes.	Crude protein Crude fibre
3.9.4	Lupin pulp	Product obtained after extraction of components of lupin.	Crude fibre
3.9.5	Lupin middlings	Product obtained during the manufacture of lupin flour from lupin. It consists principally of particles of cotyledon, and to a lesser extent, of skins.	Crude protein Crude fibre
3.9.6	Lupin protein	Product obtained from the separated lupin fruit water when producing starch, or after grinding and air fractionation.	Crude protein
3.9.7	Lupin protein meal	Product of lupin processing to produce a high protein meal.	Crude protein
3.10.1	Mung beans	Beans of <i>Vigna radiata</i> L.	
3.11.1	Peas	Seeds of <i>Pisum</i> spp. It may be rumen protected.	
3.11.2	Pea bran	Product obtained during the manufacture of pea meal. It is composed mainly of skins removed during the skinning and cleaning of peas.	Crude fibre
3.11.3	Pea flakes	Product obtained by steaming or infra red micronising and rolling dehulled seeds of peas.	Starch
3.11.4	Pea flour	Product obtained during the grinding of peas.	Crude protein
3.11.5	Pea hulls	Product obtained during the manufacture of pea meal from peas. It is mainly composed of skins removed during the skinning and cleaning and, to a lesser extent, of endosperm.	Crude fibre
3.11.6	Peas, dehulled	Dehulled pea seeds.	Crude protein Crude fibre
3.11.7	Pea middlings	Product obtained during the manufacture of pea flour. It consists principally of particles	Crude protein

		of cotyledon, and to a lesser extent, of skins.	Crude fibre
3.11.8	Pea screenings	Product from the mechanical screening consisting of fractions of pea kernels separated before further processing.	Crude fibre
3.11.9	Pea protein	Product obtained from the separated pea fruit water when producing starch, or after grinding and air fractionation, maybe partially hydrolysed.	Crude protein
3.11.10	Pea pulp	Product obtained from starch and protein wet extraction from peas. It is mainly composed of internal fibre and starch.	Moisture if < 70 % or > 85 % Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
3.11.11	Pea solubles	Product obtained from starch and protein wet extraction from peas. It is mainly composed of soluble proteins and oligosaccharides.	Moisture if < 60 % or > 85 % Total sugars <u>calculated as sucrose</u> Crude protein
3.11.12	Pea fibre	Product obtained by extraction after grinding and sieving of the dehulled pea.	Crude fibre
3.12.1	Vetches	Seeds of <i>Vicia sativa</i> L. var <i>sativa</i> and other varieties.	
3.13.1	Chickling vetch	Seeds of <i>Lathyrus sativus</i> L. submitted to an appropriate heat treatment.	Method of heat treatment
3.14.1	Monantha vetch	Seeds of <i>Vicia monanthos</i> Desf.	

4. Tubers, roots, and products derived thereof

Number	Name	Description	Compulsory declarations
4.1.1	Sugar beet	Root of <i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>altissima</i> Doell.	
4.1.2	Sugar beet tops and tails	Fresh product of the manufacture of sugar consisting mainly of cleaned pieces of sugar beet with or without parts of beet leaves.	Ash insoluble in HCl, if > 5 % of dry matter Moisture if < 50 %
4.1.3	(Beet) sugar; [sucrose]	Sugar extracted from sugar beets using water.	Sucrose
4.1.4	(Sugar) beet molasses	Syrupy product obtained during the manufacture or refining of sugar from sugar beets. May contain up to 0,5 % antifoaming agents. May contain up to 0,5 % antiscaling agents. May contain up to 2 % sulphate. May contain up to 0,25 % sulphite.	Total sugars, calculated as sucrose Moisture, if > 28 %
4.1.5	(Sugar) beet molasses, partially desugared and/or debetainised	Product obtained after further extraction using water of sucrose and/or betaine from sugar beet molasses. May contain up to 2 % sulphate. May contain up to 0,25 % sulphite.	Total sugars, calculated as sucrose Moisture, if > 28 %
4.1.6	Isomaltulose	<u>Isomaltulose as crystalline monohydrate substance. It is obtained by enzymatic conversion of sucrose from sugar beets.</u>	
4.1.76	Isomaltulose molasses	Non-crystallised fraction from the manufacture of isomaltulose by enzymatic conversion of sucrose from sugar beets.	Moisture if > 40 %
4.1.87	Wet (sugar) beet pulp	Product of the manufacture of sugar consisting of slices of sugar beet that have had sugar extracted with water. Minimum moisture content: 82 %. Sugar content is low and declines towards zero due to (lactic acid) fermentation.	Ash insoluble in HCl, if > 5 % of dry matter Moisture, if < 82 % or > 92 %
4.1.98	Pressed (sugar) beet pulp	Product of the manufacture of sugar consisting of slices of sugar beet that have had sugar extracted with water and have been mechanically pressed. Maximum moisture content: 82 %. Sugar content is low and declines towards zero due to (lactic acid) fermentation. May contain up to 1 % sulphate.	Ash insoluble in HCl, if > 5 % of dry matter Moisture if < 65 % or > 82 %
4.1.109	Pressed (sugar) beet pulp, molassed	Product of the manufacture of sugar consisting of slices of sugar beet that have had sugar extracted with water, have been mechanically pressed, and with molasses added. Maximum moisture content: 82 %. Sugar content declines due to (lactic acid) fermentation. May contain	Ash insoluble in HCl, if > 5 % of dry matter Moisture if < 65 % or > 82 %

		up to 1 % sulphate.	
4.1.1 ¹⁰	Dried (sugar) beet pulp	Product of the manufacture of sugar consisting of slices of sugar beet that have had sugar extracted with water, mechanically pressed and dried. May contain up to 2 % sulphate.	Ash insoluble in HCl, if > 3,5 % of dry matter Total sugars, calculated as sucrose, if > 10,5 %
4.1.1 ²⁴	Dried (sugar) beet pulp, molassed	Product of the manufacture of sugar consisting of slices of sugar beet that have had sugar extracted with water, mechanically pressed, and dried, with molasses added. May contain up to 0,5 % antifoaming agents. May contain up to 2 % sulphate.	Ash insoluble in HCl, if > 3,5 % of dry matter Total sugars, calculated as sucrose
4.1.1 ³²	Sugar syrup	Product obtained by processing of sugar and/or molasses. May contain up to 0,5 % sulphate. May contain up to 0,25 % sulphite.	Total sugars, calculated as sucrose Moisture, if > 35 %
4.1.1 ⁴³	(Sugar) beet pieces, boiled	Product of the manufacture of edible syrup from sugar beet, which may be pressed or dried.	If dried Ash insoluble in HCl, if > 3,5 % of dry matter If pressed Ash insoluble in HCl, if > 5 % of dry matter Moisture, if < 50 %
4.1.1 ⁵⁴	Fructo-oligosaccharides	Product obtained from sugar from sugar beet through an enzymatic process.	Moisture if > 28 %
4.2.1	Beetroot juice	Juice from pressing of red beet (<i>Beta vulgaris</i> convar. <i>crassa</i> var. <i>conditiva</i>) with subsequent concentration and pasteurisation, maintaining the typical vegetable-like taste and flavour.	Moisture if < 50 % or > 60 % Ash insoluble in HCl, if > 3,5 % of dry matter
4.3.1	Carrots	Root of the yellow or red carrot <i>Daucus carota</i> L.	
4.3.2	Carrot peelings, steamed	Moist product from the carrot processing industry consisting of the peelings removed from the carrot root by steam treatment to which auxiliary flows of gelatinous carrot starch may be added. Maximum moisture content: 97 %.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture, if

			< 87 % or > 97 %
4.3.3	Carrot scrapings	Moist product which is released via mechanical separation in the processing of carrots and which mostly consists of dried carrots and carrot remnants. The product may have been subject to heat treatment. Maximum moisture content: 97 %.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture, if < 87 % or > 97 %
4.3.4	Carrot flakes	Product obtained by flaking roots of the yellow or red carrot, which are subsequently dried.	
4.3.5	Carrot, dried	Root of the yellow or red carrot regardless of their presentation, which are subsequently dried.	Crude fibre
4.3.6	Carrot feed, dried	Product constituted of internal pulp and outer skins that are dried.	Crude fibre
4.4.1	Chicory roots	Roots of <i>Cichorium intybus</i> L.	
4.4.2	Chicory tops and tails	Fresh product from chicory processing. It consists predominantly of cleaned pieces of chicory and parts of leaves.	Ash insoluble in HCl, if > 3,5 % of dry matter Moisture if < 50 %
4.4.3	Chicory seed	Seed of <i>Cichorium intybus</i> L.	
4.4.4	Pressed chicory pulp	Product of the manufacture of inulin from roots of <i>Cichorium intybus</i> L. consisting of extracted and mechanically pressed slices of chicory. The (soluble) chicory carbohydrates and water have been partly removed. May contain up to 1 % sulphate, and may contain up to 0,2 % sulphite.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture if < 65 % or > 82 %
4.4.5	Dried chicory pulp	Product of the manufacture of inulin from roots of <i>Cichorium intybus</i> L. consisting of extracted and mechanically pressed slices of chicory and subsequent drying. The (soluble) chicory carbohydrates have been partly extracted. May contain up to 2 % sulphate, and may contain up to 0,5 % sulphite.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.4.6	Chicory roots powder	Product obtained by chopping, drying and grinding of chicory roots. May contain up to 1 % of anticaking agents.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.4.7	Chicory molasses	Product of chicory processing, obtained during the production of inulin and oligofructose. Chicory molasses consists of organic plant material and minerals. May contain up to 0,5 % antifoaming agents.	Crude protein Crude ash Moisture if < 20 % or > 30 %
4.4.8	Chicory vinasses	By-product from chicory processing obtained after the separation of inulin and oligofructose and ion exchange elution. Chicory vinasses	Crude protein Crude ash

		consists of organic plant material and minerals. May contain up to 1 % antifoaming agents.	Moisture if < 30 % or > 40 %
4.4.9	Chicory -inulin (1)	Inulin is a fructan extracted from e.g. roots of <i>Cichorium intybus</i> L., <i>Inula helenium</i> or <i>Helianthus tuberosus</i> ; raw chicory -inulin may contain up to 1 % sulphate and may contain up to 0,5 % sulphite.	
4.4.10	Oligofructose syrup	Product obtained by partial hydrolysis of inulin from <i>Cichorium intybus</i> L.; raw oligofructose syrup may contain up to 1 % sulphate and may contain up to 0,5 % sulphite.	Moisture if < 20 % or > 30 %
4.4.11	Oligofructose, dried	Product obtained by partial hydrolysis of inulin from <i>Cichorium intybus</i> L. and subsequent drying.	
4.5.1	Garlic, dried	White to yellow powder of pure, ground garlic, <i>Allium sativum</i> L.	
4.6.1	Manioc; [tapioca]; [cassava]	Roots of <i>Manihot esculenta</i> Crantz, regardless of their presentation.	Moisture if < 60 % or > 70 %
4.6.2	Manioc, dried	Roots of Manioc, regardless of their presentation, which are subsequently dried.	Starch Ash insoluble in HCl, if > 3,5 % of dry matter
4.7.1	Onion pulp	Moist product which is released during the processing of onions (genus <i>Allium</i>) and consists of both skins and whole onions. If from the production process for onion oil, then it mostly consists of cooked remains of onions.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.7.2	Onions, fried	Skinned and crumbed onion pieces which are then fried.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Crude fat
4.7.3	Onions solubles	Dry product which is released during the processing of fresh onions. It is obtained by alcoholic and/or water extraction, the water or alcoholic fraction is separated and spray dried. It consists mainly in carbohydrates.	Crude fibre
4.8.1	Potatoes	Tubers of <i>Solanum tuberosum</i> L.	Moisture if < 72 % or > 88 %
4.8.2	Potatoes, peeled	Potatoes from which the skin is removed using steam treatment.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.3	Potato peelings, steamed	Moist product from the potato processing industry consisting of the peelings removed by	Moisture if < 82 % or > 93 %

		steam treatment from the potato tuber to which auxiliary flows of gelatinous potato starch may be added. It may be mashed.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.4	Potato cuttings, raw	Product released from potatoes during the preparation of potato products for human consumption, which may have been peeled.	Moisture if < 72 % or > 88 % Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.5	Potato scrapings	Product which is released via mechanical separation in the processing of potatoes and which mostly consists of dried potatoes and potato remnants. The product may have been subject to heat treatment.	Moisture if < 82 % or > 93 % Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.6	Potato, mashed	Blanched or boiled and then mashed potato product.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.7	Potato flakes	Product obtained by rotary drying of washed, peeled or unpeeled steamed potatoes.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.8.8	Potato pulp	Product of the manufacture of potato starch consisting of extracted ground potatoes.	Moisture, if < 77 % or > 88 %
4.8.9	Potato pulp, dried	Dried product of the manufacture of potato starch consisting of extracted ground potatoes.	
4.8.10	Potato protein	Product of starch manufacture composed mainly of protein substances obtained after the separation of starch.	Crude protein
4.8.11	Potato protein, hydrolysed	Protein obtained by a controlled enzymatic hydrolysis of potato proteins.	Crude protein
4.8.12	Potato protein, fermented	Product obtained by fermentation of potato protein and subsequent spray drying.	Crude protein
4.8.13	Potato protein fermented, liquid	Liquid product obtained by fermentation of potato protein.	Crude protein
4.8.14	Potato juice, concentrated	Concentrated product of the manufacture of potato starch, consisting of the remaining substance after the partial removal of fibre,	Moisture if < 50 % or > 60 % If moisture

		proteins and starch from the whole potato pulp and evaporation of part of the water.	< 50 % : — Crude protein — Crude ash
4.8.15	Potato granules	Dried potatoes (potatoes after washing, peeling, size reduction — cutting, flaking, etc. and water content removal).	
4.9.1	Sweet potato	Tubers of <i>Ipomoea batatas</i> L. regardless of their presentation.	Moisture if < 57 % or > 78 %
4.10.1	Jerusalem artichoke; [Topinambur]	Tubers of <i>Helianthus tuberosus</i> L. regardless of their presentation.	Moisture if < 75 % or > 80 %

(1) The name shall be supplemented by the plant species.

5. Other seeds and fruits, and products derived thereof

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

		of envelopes and a few remnants of chestnut (<i>Castanea</i> spp.).	Crude fibre
5.13.1	Citrus pulp	Product obtained by pressing citrus fruits <i>Citrus</i> (L.) spp. or during the production of citrus juice. It may have been depectinised.	Crude fibre
5.13.2	Citrus pulp, dried	Product obtained by pressing citrus fruits or during the production of citrus juice, which is subsequently dried. It may have been depectinised.	Crude fibre
5.14.1	Red clover seed	Seeds of <i>Trifolium pratense</i> L.	
5.14.2	White clover seed	Seeds of <i>Trifolium repens</i> L.	
5.15.1	Coffee skins	Product obtained from dehusked seeds of the <i>Coffea</i> plant.	Crude fibre
5.16.1	Cornflower seed	Seeds of <i>Centaurea cyanus</i> L.	
5.17.1	Cucumber seed	Seeds of <i>Cucumis sativus</i> L.	
5.18.1	Cypress seed	Seeds of <i>Cupressus</i> L.	
5.19.1	Date fruit	Fruits of <i>Phoenix dactylifera</i> L. It may be dried.	
5.19.2	Date seed	Whole seeds of the date plant.	Crude fibre
5.20.1	Fennel seed	Seeds of <i>Foeniculum vulgare</i> Mill.	
5.21.1	Fig fruit	Fruits of <i>Ficus carica</i> L. It may be dried.	
5.22.1	Fruit kernels (1)	Product consisting of the inner, edible seeds of a nut or fruit stone.	
5.22.2	Fruit pulp (1)	Product obtained during the production of fruit juice and fruit puree. It may have been depectinised.	Crude fibre
5.22.3	Fruit pulp, dried (1)	Product obtained during the production of fruit juice and fruit puree which is subsequently dried. It may have been depectinised.	Crude fibre
5.23.1	Garden cress	Seeds from <i>Lepidium sativum</i> L.	Crude fibre
5.24.1	Graminaceous seeds	Seeds from graminoids of the families <i>Poaceae</i> , <i>Cyperaceae</i> and <i>Juncaceae</i> .	
5.25.1	Grape pips	Pips from <i>vitis</i> L. separated from grape pulp, from which the oil has not been removed.	Crude fat Crude fibre
5.25.2	Grape pips meal	Product obtained during the extraction of oil from grape pips.	Crude fibre
5.25.3	Grape pulp [grape marc]	Grape pulp dried rapidly after the extraction of alcohol from which as much as possible of the stalks and pips have been removed.	Crude fibre
5.25.4	Grape pips soluble	Product obtained from grape pips after producing grape juice. It principally contains carbohydrates. It may be concentrated.	Crude fibre
5.26.1	Hazelnut	Whole or broken fruit of <i>Corylus</i> (L.) spp., with or	

		without hulls.	
5.26.2	Hazelnut expeller	Product of oil manufacture obtained by pressing of hazelnut kernels.	Crude protein Crude fibre
5.27.1	Pectin	Pectin is obtained by aqueous extraction (of natural strains) of appropriate plant material, usually citrus fruits or apples. No organic precipitant shall be used other than methanol, ethanol and propane-2-ol. May contain up to 1 % methanol, ethanol and propane-2-ol singly or in combination, on an anhydrous basis. Pectin consists mainly of the partial methyl esters of polygalacturonic acid and their ammonium, sodium, potassium and calcium salts.	
5.28.1	Perilla seed	Seeds of <i>Perilla frutescens</i> L. and its 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 sativus</i> L.	
5.33.1	Spinach seed	Seeds of <i>Spinacia oleracea</i> L.	
5.34.1	Thistle seed	Seeds from <i>Carduus marianus</i> L.	
5.35.1	Tomato pulp [tomato pomace]	Product obtained by pressing tomatoes <i>Solanum lycopersicum</i> L. during the production of tomato juice. It consists principally of tomato peel and seeds.	Crude fibre
5.36.1	Yarrow seed	Seeds of <i>Achillea millefolium</i> L.	
5.37.1	Apricot kernel expeller	Product of oil manufacture obtained by pressing of apricot kernels (<i>Prunus armeniaca</i> L.). It may contain hydrocyanic acid.	Crude protein Crude fibre
5.38.1	Black cumin expeller	Product of oil manufacture obtained by pressing of black cumin seeds (<i>Bunium persicum</i> L.).	Crude protein Crude fibre
5.39.1	Borage seed expeller	Product of oil manufacture obtained by pressing of borage seeds (<i>Borago officinalis</i> L.).	Crude protein Crude fibre
5.40.1	Evening primrose expeller	Product of oil manufacture obtained by pressing of evening primrose seeds (<i>Oenothera</i> L.).	Crude protein Crude fibre
5.41.1	Pomegranate expeller	Product of oil manufacture obtained by pressing of pomegranate seeds (<i>Punica granatum</i> L.).	Crude protein Crude fibre
5.42.1	Walnut kernel expeller	Product of oil manufacture obtained by pressing of walnut kernels (<i>Juglans regia</i> L.).	Crude protein Crude fibre

(1) The name shall be supplemented by the plant species.

6. Forages and roughage, and products derived thereof

Number	Name	Description	Compulsory declarations
6.1.1	Beet leaves	Leaves of <i>Beta</i> spp.	
6.2.1	Cereal plants (1)	Whole plants of cereal species or parts thereof. It may be dried, fresh or ensiled.	
6.3.1	Cereals straw (1)	Straw of cereals.	
6.3.2	Cereal straw, treated (1) (2)	Product obtained by an appropriate treatment of cereal straw.	Sodium, if treated with NaOH
6.4.1	Clover meal	Product obtained by drying and milling clover <i>Trifolium</i> spp. It may contain up to 20 % lucerne (<i>Medicago sativa</i> L. and <i>Medicago</i> var. Martyn) or other forage crops dried and milled at the same time as the clover.	Crude protein Crude fibre Ash insoluble, in HCl, if > 3,5 % of dry matter
6.5.1	Forage meal (2) ; [Grass meal] (2) ; [Green meal] (2)	Product obtained by drying and milling and in some cases compacting forage plants.	Crude protein Crude fibre Ash insoluble, in HCl, if > 3,5 % of dry matter
6.6.1	Grass, field dried, [Hay]	Species of any grass, field dried.	Ash insoluble, in HCl, if > 3,5 % of dry matter
6.6.2	Grass, high temperature dried	Product obtained from grass (any variety) that has been artificially dehydrated (in any form).	Crude protein Fibre Ash insoluble, in HCl, if > 3,5 % of dry matter
6.6.3	Grass, herbs, legume plants, [green forage]	Fresh, ensiled or dried arable crops consisting of grass, legumes or herbs, commonly described as silage, haylage, hay or green forage.	Ash insoluble, in HCl, if > 3,5 % of dry matter
6.7.1	Hemp flour	Flour ground from dried leaves from <i>Cannabis sativa</i> L.	Crude protein
6.7.2	Hemp fibre	Product obtained during the processing of hemp, green coloured, dried, fibrous.	
6.8.1	Horse bean straw	Straw of horse bean.	
6.9.1	Linseed straw	Straw of linseed (<i>Linum usitatissimum</i> L.).	
6.10.1	Lucerne; [alfalfa]	<i>Medicago sativa</i> L. and <i>Medicago</i> var. Martyn plants or parts thereof.	Ash insoluble, in HCl, if > 3,5 % of dry matter
6.10.2	Lucerne field dried; [alfalfa field dried]	Lucerne, field dried.	Ash insoluble, in HCl, if > 3,5 % of

			dry matter
6.10.3	Lucerne, high temperature dried; [alfalfa, high temperature dried]	Lucerne artificially dehydrated, in any form.	Crude protein Crude fibre Ash insoluble, in HCl, if > 3,5 % of dry matter
6.10.4	Lucerne, extruded; [alfalfa, extruded]	Alfalfa pellets that have been extruded.	
6.10.5	Lucerne meal ⁽¹⁾ ; [alfalfa meal] ⁽²⁾	Product obtained by drying and milling Lucerne. It may contain up to 20 % clover or other forage crop dried and milled at the same time as the lucerne.	Crude protein Crude fibre Ash insoluble, in HCl, if > 3,5 % of dry matter
6.10.6	Lucerne pomace; [alfalfa pomace]	Dried product obtained by pressing of the juice from lucerne.	Crude protein Crude fibre
6.10.7	Lucerne protein concentrate; [alfalfa protein concentrate]	Product obtained by artificially drying fractions of lucerne press juice, which have been separated by centrifugation and heat treated to precipitate the proteins.	Crude protein Carotene
6.10.8	Lucerne solubles	Product obtained after the extraction of proteins from lucerne juice, it may be dried	Crude protein
6.11.1	Maize silage	Ensiled plants or parts thereof of <i>Zea mays</i> L. <i>spp. mays</i> .	
6.12.1	Pea Straw-straw	Straw of <i>Pisum</i> spp.	
<u>6.13.1</u>	<u>Rapeseed straw</u>	<u>Straw of <i>Brassica napus</i> L. <i>spp. oleifera</i> (Metzg.) Sinsk., of Indian sarson <i>Brassica napus</i> L. var. <i>glauca</i> (Roxb.) O.E. Schulz and of rape <i>Brassica rapa</i> <i>spp. oleifera</i> (Metzg.)</u>	

(1) The name shall be supplemented by the plant species.

(2) The name must be supplemented by an indication of the nature of the treatment carried out.

(3) The species of forage crop may be added to the name.

(4) 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 (1)	Algae, live or processed, including fresh, chilled or frozen algae. May contain up to 0,1 % of antifoaming agents.	Crude protein Crude fat Crude ash
7.1.2	Dried algae (1)	Product obtained by drying algae. This product may have been washed to reduce the iodine content. May contain up to 0,1 % of antifoaming agents.	Crude protein Crude fat Crude ash
7.1.3	Algae meal (1)	Product of algae oil manufacture, obtained by extraction of algae. May contain up to 0,1 % of antifoaming agents.	Crude protein Crude fat Crude ash
7.1.4	Algal oil (1)	Product of the oil manufacture from algae obtained by extraction. May contain up to 0,1 % of antifoaming agents.	Crude fat Moisture if > 1 %
7.1.5	Algae extract (1) ; [algae fraction] (1)	Watery or alcoholic extract of algae that principally contains carbohydrates. May contain up to 0,1 % of antifoaming agents.	
7.1.6	Seaweed meal	Product obtained by drying and crushing macro-algae, in particular brown seaweed. This product may have been washed to reduce the iodine content. May contain up to 0,1 % of antifoaming agents.	Crude ash
7.3.1	Barks (2)	Cleaned and dried barks of trees or bushes.	Crude fibre
7.4.1	Blossoms (2) , dried	All parts of dried blossoms of consumable plants and their fractions.	Crude fibre
7.5.1	Broccoli, dried	Product obtained by drying the plant <i>Brassica oleracea</i> L. after washing, size reduction (cutting, flaking, etc.) and water content removal.	
7.6.1	(Sugar) cane molasses	Syrupy product obtained during the manufacture or refining of sugar from <i>Saccharum</i> L. May contain up to 0,5 % antifoaming agents. May contain up to 0,5 % antiscaling agents. May contain up to 3,5 % sulphate. May contain up to 0,25 % sulphite.	Total sugars calculated as sucrose Moisture, if > 30 %
7.6.2	(Sugar) cane Molasses, partially desugared	Product obtained after further extraction using water of sucrose from sugar cane molasses.	Total sugars calculated as sucrose Moisture, if > 28 %
7.6.3	(Cane) sugar [sucrose]	Sugar extracted from sugar canes using water.	Sucrose

7.6.4	Cane bagasse	Product obtained during extraction using water of sugar from sugar canes. It consists mainly of fibres.	Crude fibre
7.7.1	Leaves, dried, ⁽²⁾	Dried leaves of consumable plants and their fractions.	Crude fibre
7.8.1	Lignocellulose ⁽²⁾	Product obtained by means of mechanical processing of raw natural dried wood and which predominantly consists of lignocellulose.	Crude fibre
7.8.2	Powdercellulose	Product obtained by decomposition, separation of the lignin and further cleaning as cellulose from vegetable fiber substances of untreated wood, and which is exclusively modified by mechanical processing.	Neutral detergent fiber (NDF) min. 87%
7.9.1	Liquorice root	Root of <i>Glycyrrhiza</i> L.	
7.10.1	Mint	Product obtained from drying aerial parts of the plants <i>Mentha apicata</i> , <i>Mentha piperita</i> or <i>Mentha viridis</i> (L.), regardless of their presentation.	
7.11.1	Spinach, dried	Product obtained from drying the plant <i>Spinacia oleracea</i> L., regardless of its presentation.	
7.12.1	Mojave yucca	Pulverised <i>Yucca schidigera</i> Roezl.	Crude fibre
7.12.2	Yucca Schidigera liquid concentrate	A vegetable product obtained by cutting and pressing of the stems of <i>Yucca Schidigera</i> , that gives energy through simple and complex carbohydrates	
7.13.1	Vegetal carbon; [charcoal]	Product obtained by carbonisation of organic vegetal material.	Crude fibre
7.14.1	Wood ⁽²⁾	Chemically untreated mature wood or wood fibres.	Crude fibre
7.15.1	Vitis vinifera	Leaves of (<i>Vitis vinifera</i>) dried, cut or ground	Crude fibre
7.16.1	Solanum glaucophyllum	Leaves of <i>Solanum glaucophyllum</i> dried and ground.	Crude fibre

(1) The name shall be supplemented by the species.

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

8. Milk products and products derived thereof

Number	Name	Description	Compulsory declarations
8.1.1	Butter and butter products	Butter and products obtained by production or processing of butter (e.g. butter serum), unless listed separately.	Crude protein Crude fat Lactose Moisture if > 6 %
8.2.1	Buttermilk/buttermilk powder (1)	Product obtained by churning butter out of cream or similar processes. Concentration and/or drying may be applied. Where specifically prepared as feed material, may contain: —up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing; —up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes; —up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes; —up to 2 % free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties; — up to 0,4 % emulsifier lecithin.	Crude protein Crude fat Lactose Moisture if > 6 %
8.3.1	Casein	Product obtained from skimmed or buttermilk by drying casein precipitated by means of acids or rennet.	Crude protein Moisture if > 10 %
8.4.1	Caseinate	Product extracted from curd or casein through use of neutralising substances and drying.	Crude protein Moisture if > 10 %
8.5.1	Cheese and cheese products	Cheese and products made of cheese and of milk based products.	Crude protein Crude fat

8.6.1	Colostrum/colostrum powder	The fluid secreted by the mammary glands of milk-producing animals up to five days post parturition. Concentration and/or drying may be applied.	Crude protein
8.7.1	Dairy by-products	<p>Products obtained when producing dairy products (including, but not limited to: former dairy foodstuffs, centrifuge or separator sludge, white water, milk minerals).</p> <p>Where specifically prepared as feed material, may contain:</p> <ul style="list-style-type: none"> —up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing; —up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes; —up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes; —up to 2 % free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties; — up to 0,4 % emulsifier lecithin. 	<p>Moisture</p> <p>Crude protein</p> <p>Crude fat</p> <p>Total sugars <u>calculated as sucrose</u></p>
8.8.1	Fermented milk products	Products obtained by fermentation of milk (e.g. yoghurt etc.).	<p>Crude protein</p> <p>Crude fat</p>
8.9.1	Lactose	The sugar separated from milk or whey by purification and drying.	<p>Lactose</p> <p>Moisture if > 5 %</p>
8.10.1	Milk/milk powder (1)	Normal mammary secretion obtained from one or more milkings. Concentration and/or drying may be applied.	<p>Crude protein</p> <p>Crude fat</p> <p>Moisture if > 5 %</p>
8.11.1	Skimmed milk/skimmed milk powder (1)	<p>Milk whose fat content has been reduced by separation.</p> <p>Concentration and/or drying may be applied.</p>	<p>Crude protein</p> <p>Moisture if > 5 %</p>
8.12.1	Milk fat	Product obtained by skimming milk.	Crude fat

8.13.1	Milk protein powder	Product obtained by drying the protein compounds extracted from milk by chemical or physical treatment.	Crude protein Moisture if > 8 %
8.14.1	Condensed and evaporated milk and their products	Condensed and evaporated milk and products obtained by production or processing of these products.	Crude protein Crude fat Moisture if > 5 %
8.15.1	Milk permeate/Milk permeate powder (1)	Product obtained by filtration (ultra, nano or micro) of milk (penetrating through the membrane) and from which lactose may have been partly removed. Reverse osmosis and concentration and/or drying may be applied.	Crude ash Crude protein Lactose Moisture if > 8 %
8.16.1	Milk retentate/milk retentate powder (1)	Product obtained by filtration (ultra, nano or micro) of milk (withheld by the membrane). Concentration and/or drying may be applied.	Crude protein Crude ash Lactose Moisture if > 8 %
8.17.1	Whey/whey powder (1)	Product of cheese, quark or casein manufacturing or similar processes. Concentration and/or drying may be applied. Where specifically prepared as feed material, may contain: —up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing; —up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes; —up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes; —up to 2 % free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties; — up to 0,4 % emulsifier lecithin.	Crude protein Lactose Moisture if > 8 % Crude ash

8.18.1	Delactosed whey/delactosed whey powder (L)	<p>Whey from which the lactose has been partly removed.</p> <p>Concentration and/or drying may be applied.</p> <p>Where specifically prepared as feed material, may contain:</p> <ul style="list-style-type: none"> —up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing; —up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes; —up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes; —up to 2 % free-flowing agents e.g. silicon dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties; — up to 0,4 % emulsifier lecithin. 	<p>Crude protein</p> <p>Lactose</p> <p>Moisture if > 8 %</p> <p>Crude ash</p>
8.19.1	Whey protein/whey protein powder (L)	<p>Product obtained by drying the whey protein compounds extracted from whey by chemical or physical treatment. Concentration and/or drying may be applied.</p> <p>Where specifically prepared as feed material, may contain:</p> <ul style="list-style-type: none"> —up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing; —up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes; —up to 0,5 % alkalis e.g. sodium, 	<p>Crude protein</p> <p>Moisture if > 8 %</p>

		<p>potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</p> <p>— up to 2 % free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</p> <p>— up to 0,4 % emulsifier lecithin.</p>	
8.20.1	Demineralised, delactosed whey/demineralised, delactosed whey powder (1)	<p>Whey from which the lactose and minerals have been partly removed. Concentration and/or drying may be applied. Where specifically prepared as feed material, may contain:</p> <p>— up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</p> <p>— up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</p> <p>— up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</p> <p>— up to 2 % free-flowing agents e.g. silicium dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</p> <p>— up to 0,4 % emulsifier lecithin.</p>	<p>Crude protein</p> <p>Lactose</p> <p>Crude ash</p> <p>Moisture if > 8 %</p>
8.21.1	Whey permeate/whey permeate powder (1)	<p>Product obtained by filtration (ultra, nano or micro) of whey (penetrating through the membrane) and from which lactose may have been partly removed. Reverse osmosis and concentration and/or drying may be applied. Where specifically prepared as feed material, may contain:</p> <p>— up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g.</p>	<p>Crude ash</p> <p>Crude protein</p> <p>Lactose</p> <p>Moisture if > 8 %</p>

		<p>tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</p> <p>—up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</p> <p>—up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</p> <p>—up to 2 % free-flowing agents e.g. silicon dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</p> <p>— up to 0,4 % emulsifier lecithin.</p>	
8.22.1	Whey retentate/whey retentate powder (1)	<p>Product obtained by filtration (ultra, nano or micro) of whey (withheld by the membrane). Concentration and/or drying may be applied. Where specifically prepared as feed material, may contain:</p> <p>—up to 0,5 % phosphates e.g. polyphosphates (e.g. sodium hexametaphosphate), diphosphates (e.g. tetrasodiumpyrophosphate), used to decrease the viscosity and to stabilise protein during processing;</p> <p>—up to 0,3 % acids e.g. organic acids: citric acid, formic acid, propionic acid, Inorganic acids: sulphuric acid, hydrochloric acid, phosphoric acid, used for pH adjustments in many parts of production processes;</p> <p>—up to 0,5 % alkalis e.g. sodium, potassium, calcium, magnesium hydroxides, used for pH adjustments in many parts of production processes;</p> <p>—up to 2 % free-flowing agents e.g. silicon dioxide, penta-sodium-triphosphate, tri-calcium-phosphate, used to improve powder flowing properties;</p> <p>— up to 0,4 % emulsifier lecithin.</p>	<p>Crude protein</p> <p>Crude ash</p> <p>Lactose</p> <p>Moisture if > 8 %</p>

(1) 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

Number	Name	Description	Compulsory declarations
9.1.1	Animal by-products ⁽¹⁾	Whole or parts of warm-blooded land animals, fresh, frozen, cooked, acid treated or dried.	Crude protein Crude fat Moisture if > 8 %
9.2.1	Animal fat ⁽²⁾	Product composed of fat from warm-blooded land animals, <u>including invertebrates (other than species pathogenic to humans and animals) in all their life stages. It may be partly processed from whole or parts of aquatic animals.</u> If extracted with solvents, may contain up to 0.1 % hexane.	Crude fat Moisture if > 1 %
9.3.1	Apiculture by-products	Honey, beeswax, royal jelly, propolis, pollen, processed or unprocessed	Total sugars calculated as sucrose
9.4.1	Processed animal protein ⁽²⁾	Product obtained by heating, drying and grinding whole or parts of warm-blooded land animals, <u>including invertebrates (other than species pathogenic to humans and animals) in all their life stages</u> from which the fat may have been partially extracted or physically removed. <u>It may be partly processed from whole or parts of aquatic animals.</u> If extracted with solvents, may contain up to 0.1 % hexane.	Crude protein Crude fat Crude ash Moisture if > 8 %
9.5.1	Gelatine process derived proteins ⁽²⁾	<u>Dried animal proteins derived from the production of gelatine for human consumption</u> Dried animal proteins of food quality derived from gelatine production.	Crude protein Crude fat Crude ash Moisture if > 8 %
9.6.1	Hydrolysed animal proteins ⁽²⁾	Hydrolysed proteins obtained by heat and/or pressure, chemical, microbiological or enzymatic hydrolysis of animal protein.	Crude protein Moisture if > 8 %
9.7.1	Blood meal ⁽²⁾	Product derived from the heat treatment of blood of slaughtered warm-blooded animals.	Crude protein Moisture if > 8 %
9.8.1	Blood products ⁽¹⁾	Products derived from blood or fractions of blood of slaughtered warm-blooded animals; they include dried/frozen/liquid plasma, dried whole blood, dried/frozen/liquid red cells or fractions thereof and mixtures.	Crude protein Moisture if > 8 %
9.9.1	Catering reflux [catering recycling]	All waste food containing material of animal origin including used cooking oil originating in restaurants, catering facilities and kitchens, including central kitchens and household kitchens.	Crude protein Crude fat Crude ash Moisture if

Comment [AB1]: To be checked

			> 8 %
9.10.1	Collagen (2)	Protein-based product derived from animal bones, hides, skins and tendons.	Crude protein Moisture if > 8 %
9.11.1	Feather meal	Product obtained by drying and grinding feathers of slaughtered animals, it may be hydrolysed.	Crude protein Moisture if > 8 %
9.12.1	Gelatine (2)	Natural, soluble protein, gelling or non-gelling, obtained by the partial hydrolysis of collagen produced from bones, hides and skins, tendons and sinews of animals.	Crude protein Moisture if > 8 %
9.13.1	Greaves (2)	Product obtained from the manufacture of tallow, lard and other extracted or physically removed fats of animal origin, fresh, frozen or dried. If extracted with solvents, may contain up to 0,1 % hexane.	Crude protein Crude fat Crude ash Moisture if > 8 %
9.14.1	Products of animal origin (1)	Former foodstuff containing animal products; with or without treatment such as fresh, frozen, dried.	Crude protein Crude fat Moisture if > 8 %
9.15.1	Eggs	Whole eggs of <i>Gallus gallus</i> L. with or without shells.	
9.15.2	Albumen	Product obtained from eggs after the separation of shells and yolk, pasteurised and possibly denatured.	Crude protein Method of denaturation if applicable
9.15.3	Egg products, dried	Products consisting of pasteurised dried eggs, without shells or a mixture of different proportions of dried albumen and dried egg yolk.	Crude protein Crude fat Moisture if > 5 %
9.15.4	Egg powder sugared	Dried whole or parts of sugared eggs. <u>May be sugared.</u>	Crude protein Crude fat Moisture if > 5 %
9.15.5	Egg shells, dried	Product obtained from poultry eggs, after the content (yolk and albumen) has been removed. Shells are dried.	Crude ash
9.16.1	Terrestrial invertebrates (1)	Whole or parts of terrestrial invertebrates, in all their life stages, other than species pathogenic to humans and animals; with or without treatment such as fresh, frozen, dried.	
9.17.1	Chondroitin sulphate	Product obtained by extraction from tendons, bones and other animal tissues containing cartilage and soft connective tissues.	Sodium

(1) Without prejudice to mandatory requirements concerning commercial documents and health certificates for animal by-products and derived products as laid down in Commission Regulation (EU) No 142/2011 (Annex VIII, Chapter III) (OJ L 54, 26.2.2011, p. 1), if the catalogue is used for labelling purposes the name shall be, replaced as appropriate by

- the animal species and
- the physiological stage (e.g. larvae) and/or
- the part of the animal product (e.g. liver, meat (only if skeletal muscle)), 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 physiological stage (e.g. larvae) and/or
- the part of the animal product (e.g. liver, meat (only if skeletal muscle)), and/or
- the naming of the animal species not used in respect of the ban on intra-species recycling.

(2) 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), 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) and/or
- the physiological 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

Number	Name	Description	Compulsory declarations
10.1.1	Aquatic invertebrates ⁽¹⁾	Whole or parts of marine or freshwater invertebrates, in all their life stages, other than species pathogenic to humans and animals; with or without treatment such as fresh, frozen, dried.	
10.2.1	By-products from aquatic animals ⁽¹⁾	Originating from establishments or plants preparing or manufacturing products for human consumption; with or without treatment such as fresh, frozen, dried.	Crude protein Crude fat Crude ash
10.3.1	Crustacea meal ⁽²⁾	Product produced by heating, pressing and drying whole or parts of crustacean including wild and farmed shrimp.	<u>Calcium, Ash insoluble in HCl if > 5 %</u> <u>Crude protein</u> <u>Crude fat</u> <u>Crude ash, if > 20 %</u> <u>Moisture if > 8 %</u>
10.4.1	Fish ⁽²⁾	Whole or parts of fish: fresh, frozen, cooked, acid treated or dried.	Crude protein Moisture if > 8 %
10.4.2	Fish meal ⁽²⁾	Product obtained by heating, pressing and drying whole or parts of fish and to which fish solubles may have been re-added prior to drying.	Crude protein Crude fat Crude ash, if > 20 % Moisture if > 8 %
10.4.3	Fish solubles	Condensed product obtained during manufacture of fishmeal which has been separated and stabilised by acidification or drying.	Crude protein Crude fat Moisture if > 5 %
10.4.4	Fish protein, hydrolysed	Product obtained by acid <u>or enzymatic</u> hydrolysis of whole or parts of fish often concentrated by drying.	Crude protein Crude fat Crude ash, if > 20 % Moisture if > 8 %
10.4.5	Fishbone meal	Product obtained by heating, pressing and drying parts of fish. It consists principally of fishbone.	Crude ash
10.4.6	Fish oil	Oil obtained from fish or parts of fish followed by centrifugation to remove water (may include species specific details e.g. cod liver oil).	Crude fat Moisture if > 1 %
10.4.7	Fish oil, hydrogenated	Oil obtained from hydrogenation of fish oil	Moisture if > 1 %
10.5.1	Krill oil	Oil obtained from cooked and pressed marine planktonic krill followed by centrifugation to remove water.	Moisture if > 1 %

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

(1) The name shall be supplemented by the species.

(2) The name shall be supplemented by the species when produced from farmed fish/[crustacea as relevant](#).

11. Minerals and products derived thereof

Number	Name	Description	Compulsory declarations
11.1.1	Calcium carbonate (1) ; [limestone]	Product obtained by grinding sources of calcium carbonate (CaCO_3), such as limestone or by precipitation from acid solution. May contain up to 0,25 % propylene glycol. May contain up to 0,1 % grinding aids.	Calcium, Ash insoluble in HCl if > 5 %
11.1.2	Calcareous marine shells	Product of natural origin, obtained from marine shells, ground or granulated, such as oyster shells or seashells.	Calcium, Ash insoluble in HCl if > 5 %
11.1.3	Calcium and magnesium carbonate	Natural mixture of calcium carbonate (CaCO_3) and magnesium carbonate (MgCO_3). May contain up to 0,1 % grinding aids.	Calcium, Magnesium, Ash insoluble in HCl if > 5 %
11.1.4	Maerl	Product of natural origin obtained from calcareous marine algae, ground or granulated.	Calcium, Ash insoluble in HCl if > 5 %
11.1.5	Lithothamn	Product of natural origin obtained from calcareous marine algae (<i>Phymatolithon calcareum</i> (Pall.)), ground or granulated.	Calcium, Ash insoluble in HCl if > 5 %
11.1.6	Calcium chloride	Calcium chloride (CaCl_2). May contain up to 0,2 % barium sulphate.	Calcium, Ash insoluble in HCl if > 5 %
11.1.7	Calcium hydroxide	Calcium hydroxide (Ca(OH)_2). May contain up to 0,1 % grinding aids.	Calcium, Ash insoluble in HCl if > 5 %
11.1.8	Calcium sulphate anhydrous	Calcium sulphate anhydrous (CaSO_4) obtained by grinding calcium sulphate anhydrous or dehydration of calcium sulphate hydrate.	Calcium, Ash insoluble in HCl if > 5 %
11.1.9	Calcium sulphate hemihydrate	Calcium sulphate hemihydrate ($\text{CaSO}_4 \times \frac{1}{2} \text{H}_2\text{O}$) obtained by partially dehydrating calcium sulphate hydrate.	Calcium, Ash insoluble in HCl if > 5 %
11.1.10	Calcium sulphate dihydrate	Calcium sulphate dihydrate ($\text{CaSO}_4 \times 2\text{H}_2\text{O}$) obtained by grinding calcium sulphate dihydrate or hydration of calcium sulphate hemihydrate.	Calcium, Ash insoluble in HCl if > 5 %
11.1.11	Calcium salts of organic acids (2)	Calcium salts of edible organic acids with at least 4 carbon atoms.	Calcium, Organic acid
11.1.12	Calcium oxide	Calcium oxide (CaO) obtained from calcination of naturally occurring limestone. May contain up to 0,1 % grinding aids.	Calcium, Ash insoluble in HCl if > 5 %

11.1.13	Calcium gluconate	Calcium salt of gluconic acid generally expressed as $\text{Ca}(\text{C}_6\text{H}_{11}\text{O}_7)_2$ and its hydrated forms.	Calcium, Ash insoluble in HCl if > 5 %
11.1.14	Calcium chelate ⁽⁴⁾	<u>$\text{Ca}(\text{x})_{1-3} \times \text{nH}_2\text{O}$</u> <u>(x) = anion of any amino acids</u> <u>May contain up to 40% chloride.</u>	<u>Calcium, Nitrogen</u> <u>Ash insoluble in HCl if >5%</u>
11.1.15	Calcium sulphate/carbonate	Product obtained during the manufacturing of sodium carbonate.	Calcium, Ash insoluble in HCl if > 5 %
11.1.16	Calcium pidolate	L-calcium pidolate ($\text{C}_8\text{H}_8\text{CaNO}_4$). <u>Calcium L-pidolate ($\text{C}_{10}\text{H}_{12}\text{CaN}_2\text{O}_5$).</u> May contain up to 1,5 % glutamic acid and related substances.	Calcium, Ash insoluble in HCl if > 5 %
11.1.17	Calcium carbonate-magnesium oxide	Product obtained by heating of natural calcium and magnesium containing substances like dolomite. May contain up to 0,1 % grinding aids.	Calcium, magnesium
11.2.1	Magnesium oxide	Calcined magnesium oxide (MgO) not less than 70 % MgO .	Magnesium, Ash insoluble in HCl if > 15 %, <u>Iron content as Fe_2O_3 if >5%.</u>
11.2.2	Magnesium sulphate heptahydrate	Magnesium sulphate ($\text{MgSO}_4 \times 7 \text{H}_2\text{O}$).	Magnesium, Sulphur, Ash insoluble in HCl if > 15 %
11.2.3	Magnesium sulphate monohydrate	Magnesium sulphate ($\text{MgSO}_4 \times \text{H}_2\text{O}$).	Magnesium, Sulphur, Ash insoluble in HCl if > 15 %
11.2.4	Magnesium sulphate anhydrous	Anhydrous magnesium sulphate (MgSO_4).	Magnesium, Sulphur, ash insoluble in HCl if > 10 %
11.2.5	Magnesium propionate	Magnesium propionate ($\text{C}_6\text{H}_{10}\text{MgO}_4$).	Magnesium
11.2.6	Magnesium chloride	Magnesium chloride (MgCl_2) or solution obtained by natural concentration of sea water after deposit of sodium chloride.	Magnesium, Chlorine, ash insoluble in HCl if > 10 %
11.2.7	Magnesium carbonate	Natural magnesium carbonate (MgCO_3).	Magnesium, ash insoluble in HCl if > 10 %
11.2.8	Magnesium hydroxide	Magnesium hydroxide ($\text{Mg}(\text{OH})_2$).	Magnesium, ash insoluble in HCl if > 10 %
11.2.9	Magnesium potassium	Magnesium potassium sulphate.	Magnesium,

	sulphate		Potassium, ash insoluble in HCl if > 10 %
11.2.10	Magnesium salts of organic acids ⁽²⁾	Magnesium salts of edible organic acids with at least 4 carbon atoms.	Magnesium, organic acid
<u>11.2.11</u>	<u>Magnesium gluconate</u>	<u>Magnesium salt of gluconic acid generally expressed as $Mg(C_6H_{11}O_7)_2$ and its hydrated forms.</u>	<u>Magnesium, Ash insoluble in HCl if > 5 %</u>
<u>11.2.12</u>	<u>Magnesium chelate ⁽⁴⁾</u>	<u>formula $Mg(x)_{1-3} \times nH_2O$ (x) = anion of any amino acids May contain up to 55% chloride and/or sulphate.</u>	<u>Magnesium, Nitrogen Ash insoluble in HCl if >5%</u>
<u>11.2.13</u>	<u>Magnesium pidolate</u>	<u>Magnesium L-pidolate ($C_{10}H_{12}MgN_2O_6$). May contain up to 5 % glutamic acid.</u>	<u>Magnesium, Ash insoluble in HCl if > 5 %</u>
11.3.1	Dicalcium phosphate ⁽²⁾; [calcium hydrogen orthophosphate]	Calcium monohydrogen phosphate obtained from bones or inorganic sources ($CaHPO_4 \times nH_2O$, <u>n = 0 or 2</u>) Ca/P > 1,2 May contain up to 3 % chloride expressed as NaCl.	Calcium, Total phosphorus, P insoluble in 2 % citric acid if > 10 %, Ash insoluble in HCl if > 5 %
11.3.2	Monodicalcium phosphate	Product obtained chemically and composed <u>out</u> of dicalcium phosphate and monocalcium phosphate ($CaHPO_4$, $Ca(H_2PO_4)_2 \times nH_2O$, <u>n = 0 or 1</u>) $0,8 < Ca/P < 1,3$	Total phosphorus, Calcium, P insoluble in 2 % citric acid if > 10 %
11.3.3	Monocalcium phosphate; [calcium tetrahydrogen diorthophosphate]	Calcium-bis dihydrogenphosphate ($Ca(H_2PO_4)_2 \times nH_2O$, <u>n=0 or 1</u>) Ca/P < 0,9	Total phosphorus, Calcium, P insoluble in 2 % citric acid if > 10 %
11.3.4	Tricalcium phosphate; [tricalcium orthophosphate]	Tricalcium phosphate from bones or inorganic sources ($Ca_3(PO_4)_2 \times H_2O$) Ca/P > 1,3	Calcium, Total phosphorus, P insoluble in 2 % citric acid if > 10 %
11.3.5	Calcium-magnesium phosphate	Calcium-magnesium phosphate.	Calcium, Magnesium, Total phosphorus, P insoluble in 2 % citric acid if > 10 %
11.3.6	Defluorinated phosphate	Natural phosphate, Product obtained from inorganic sources, calcined and further heat treated than for the removal of impurities necessary.	Total phosphorus, Calcium, Sodium, P insoluble in 2 % citric acid if > 10 %, Ash insoluble in HCl if > 5 %

11.3.7	Dicalcium pyrophosphate; [Dicalcium diphosphate]	Dicalcium pyrophosphate.	Total phosphorus, Calcium, P insoluble in 2 % citric acid if > 10 %
11.3.8	Magnesium phosphate	Product consisting of monobasic and/or dibasic and/or tri-basic magnesium phosphate.	Total phosphorus, Magnesium, P insoluble in 2 % citric acid if > 10 %, Ash insoluble in HCl if > 10 %
11.3.9	Sodium-calcium-magnesium phosphate	Product consisting of sodium-calcium-magnesium phosphate.	Total phosphorus, Magnesium, Calcium, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.10	Monosodium phosphate; [Sodium dihydrogen orthophosphate]	Monosodium phosphate ($\text{NaH}_2\text{PO}_4 \times \underline{n}\text{H}_2\text{O}$; $n = 0, 1 \text{ or } 2$)	Total phosphorus, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.11	Disodium phosphate; [Disodium hydrogen orthophosphate]	Disodium phosphate ($\text{Na}_2\text{HPO}_4 \times \underline{n}\text{H}_2\text{O}$; $n = 0, 2, 7 \text{ or } 12$)	Total phosphorus, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.12	Trisodium Phosphate; [Trisodium orthophosphate]	Trisodium phosphate ($\text{Na}_3\text{PO}_4 \times \underline{n}\text{H}_2\text{O}$; $n = 0, 1/2, 1, 6, 8 \text{ or } 12$)	Total phosphorus, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.13	Sodium pyrophosphate; [Tetrasodium diphosphate]	Sodium pyrophosphate ($\text{Na}_4\text{P}_2\text{O}_7 \times \underline{n}\text{H}_2\text{O}$; $n = 0 \text{ or } 10$)	Total phosphorus, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.14	Monopotassium phosphate; [Potassium dihydrogen orthophosphate]	Monopotassium phosphate ($\text{KH}_2\text{PO}_4 \times \underline{n}\text{H}_2\text{O}$)	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.15	Dipotassium phosphate; [Di-potassium hydrogen orthophosphate]	Dipotassium phosphate ($\text{K}_2\text{HPO}_4 \times \underline{n}\text{H}_2\text{O}$; $n = 0, 3 \text{ or } 6$)	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.16	Calcium sodium phosphate	Calcium sodium phosphate (CaNaPO_4)	Total phosphorus, Calcium, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.17	Monoammonium phosphate; [Ammonium dihydrogen phosphate]	Monoammonium phosphate ($\text{NH}_4\text{H}_2\text{PO}_4$)	Total nitrogen, Total phosphorus, P insoluble in 2 %

	orthophosphate]		citric acid if > 10 %
11.3.18	Diammonium phosphate; [Diammonium hydrogen orthophosphate]	Diammonium phosphate ((NH ₄) ₂ HPO ₄)	Total nitrogen Total phosphorus P insoluble in 2 % citric acid if > 10 %
11.3.19	Sodium tripolyphosphate; [Penta sodium triphosphate]	Sodium tripolyphosphate (Na ₅ P ₃ O ₁₀ × <u>nH₂O</u> ; n = 0 or 6)	Total phosphorus Sodium P insoluble in 2 % citric acid if > 10 %
11.3.20	Sodium magnesium phosphate	Sodium-magnesium phosphate (MgNaPO ₃)	Total phosphorus, Magnesium, Sodium, P insoluble in 2 % citric acid if > 10 %
11.3.21	Magnesium hypophosphite	Magnesium hypophosphite (Mg(H ₂ PO ₂) ₂ × 6H ₂ O)	Magnesium Total phosphorus P insoluble in 2 % citric acid if > 10 %
11.3.22	Degelatinised bone meal	Degelatinised, sterilised and ground bones from which the fat has been removed.	Total phosphorus, Calcium, Ash insoluble in HCl if > 10 %
11.3.23	Bone ash	Mineral residues from the incineration, combustion or gasification of animal by-products.	Total phosphorus, Calcium, Ash insoluble in HCl if > 10 %
11.3.24	Calcium polyphosphate	Heterogeneous mixtures of calcium salts of condensed polyphosphoric acids of general formula H _(n+2) P _n O _(3n+1) where 'n' is not less than 2.	Total phosphorus, calcium, P insoluble in 2 % citric acid if > 10 %
11.3.25	Calcium dihydrogen diphosphate	Monocalcium dihydrogen pyrophosphate (CaH ₂ P ₂ O ₇)	Total phosphorus, Calcium, P insoluble in 2 % citric acid if > 10 %
11.3.26	Magnesium acid pyrophosphate	Magnesium acid pyrophosphate (MgH ₂ P ₂ O ₇ .) Produced from purified phosphoric acid and purified magnesium hydroxide or magnesium oxide by evaporation of water and condensation of the orthophosphate to diphosphate.	Total phosphorus, Magnesium, P insoluble in 2 % citric acid if > 10 %
11.3.27	Disodium dihydrogen diphosphate	Disodium dihydrogen diphosphate (Na ₂ H ₂ P ₂ O ₇)	Total phosphorus, Calcium, P insoluble in 2 % citric acid if > 10 %
11.3.28	Trisodium diphosphate	Trisodium monohydrogen diphosphate (anhydrous: Na ₃ HP ₂ O ₇ ; monohydrate: Na ₃ HP ₂ O ₇ × <u>nH₂O</u> ; n = 0, 1 or 9)	Total phosphorus, sodium, P insoluble in 2 % citric acid if

			> 10 %
11.3.29	Sodium polyphosphate; [Sodium hexametaphosphate]	Heterogeneous mixtures of sodium salts of linear condensed polyphosphoric acids of general formula $H_{(n+2)}PnO_{(3n+1)}$ where 'n' is not less than 2.	Total phosphorus, sodium, P insoluble in 2 % citric acid if > 10 %
11.3.30	Tripotassium phosphate	Tripotassium monophosphate (anhydrous: K_3PO_4 ; hydrated: $K_3PO_4 \times n H_2O$; (n = <u>0, 1, 2 or 3, 7 or 9</u>))	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.31	Tetrapotassium di-phosphate	Tetrapotassium pyrophosphate ($K_4P_2O_7 \times n H_2O$; n = <u>0, 1 or 3</u>)	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.32	Pentapotassium tri-phosphate	Pentapotassium tri-polyphosphate ($K_5P_3O_{10}$)	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.33	Potassium polyphosphate	Heterogeneous mixtures of potassium salts of linear condensed polyphosphoric acids of general formula $H_{(n+2)}PnO_{(3n+1)}$ where 'n' is not less than 2.	Total phosphorus, Potassium, P insoluble in 2 % citric acid if > 10 %
11.3.34	Calcium sodium polyphosphate	Calcium sodium polyphosphate.	Total phosphorus, sodium, calcium, P insoluble in 2 % citric acid if > 10 %
11.3.35	Hydroxyl apatite [pentacalcium hydroxyl triphosphate]	Hydroxyl apatite ($Ca_5(PO_4)_3OH$)	Total phosphorus, calcium, P insoluble in 2 % , citric acid if > 10 %
11.4.1	Sodium chloride (1)	Sodium chloride (NaCl) or product obtained by evaporative crystallisation from brine (<u>saturated or depleted in another process</u>) (vacuum salt) or evaporation of seawater (marine salt) or grinding rock salt.	Sodium, Ash insoluble in HCl if > 10 %
11.4.2	Sodium bicarbonate [sodium hydrogencarbonate]	Sodium bicarbonate ($NaHCO_3$)	Sodium, Ash insoluble in HCl if > 10 %
11.4.3	Sodium/ammonium (bi)carbonate [sodium/ammonium (hydrogen)carbonate]	Product obtained during the production of sodium carbonate and sodium bicarbonate, with traces of ammonium bicarbonate (ammonium bicarbonate max. 5 %)	Sodium, Ash insoluble in HCl if > 10 %
11.4.4	Sodium carbonate	Sodium carbonate (Na_2CO_3)	Sodium, Ash insoluble in HCl if > 10 %
11.4.5	Sodium sesquicarbonate [trisodium	Sodium sesquicarbonate ($Na_3H(CO_3)_2$)	Sodium, Ash insoluble in HCl if

	hydrogencarbonate]		> 10 %
11.4.6	Sodium sulphate	Sodium sulphate (Na ₂ SO ₄) May contain up to 0,3 % methionine	Sodium, Ash insoluble in HCl if > 10 %
11.4.7	Sodium salts of organic acids (e)	Sodium salts of edible organic acids with at least 4 carbon atoms	Sodium, Organic acid
11.5.1	Potassium chloride	Potassium chloride (KCl) or product obtained by grinding natural sources of potassium chloride	Potassium, Ash insoluble in HCl if > 10 %
11.5.2	Potassium sulphate	Potassium sulphate (K ₂ SO ₄)	Potassium, Ash insoluble in HCl if > 10 %
11.5.3	Potassium carbonate	Potassium carbonate (K ₂ CO ₃)	Potassium, Ash insoluble in HCl if > 10 %
11.5.4	Potassium bicarbonate [potassium hydrogen carbonate]	Potassium bicarbonate (KHCO ₃)	Potassium, Ash insoluble in HCl if > 10 %
11.5.5	Potassium salts of organic acids (e)	Potassium salts of edible organic acids with at least 4 carbon atoms.	Potassium, Organic acid
11.5.6	Potassium pidolate	<u>Potassium L-pidolate (C₃H₆KNO₃). May contain up to 5 % glutamic acid.</u>	<u>Potassium, Ash insoluble in HCl if > 5 %</u>
11.6.1	Flower of sulphur	Powder obtained from natural deposits of the mineral. Also, product obtained from oil refinery production as practised by sulphur manufacturers.	Sulphur
11.7.1	Attapulgit	Natural magnesium-aluminium-silicon mineral.	Magnesium
11.7.2	Quartz	Naturally occurring mineral obtained by grinding sources of quartz. May contain up to 0,1 % grinding aids.	
11.7.3	Cristobalite	Silicon dioxide (SiO ₂) obtained from the re-crystallisation of quartz. May contain up to 0,1 % grinding aids.	
11.8.1	Ammonium sulphate	Ammonium sulphate ((NH ₄) ₂ SO ₄) obtained by chemical synthesis. <u>May be presented in the form of an aqueous solution.</u>	Nitrogen expressed as crude protein, Sulphur
11.8.2	Ammonium sulphate solution	<u>Ammonium sulphate in aqueous solution, containing not less than 35 % Ammonium sulphate.</u>	<u>Nitrogen expressed as crude protein</u>
11.8.3	Ammonium salts of organic acids (e)	Ammonium salts of edible organic acids with at least 4 carbon atoms.	Nitrogen expressed as crude protein, Organic acid

11.8.4	Ammonium lactate	Ammonium lactate ($\text{CH}_3\text{CHOHCOONH}_4$). Includes the Ammonium lactate produced by fermentation with <i>Lactobacillus delbrueckii</i> ssp. <i>Bulgaricus</i> , <i>Lactococcus lactis</i> ssp., <i>Leuconostoc mesenteroides</i> , <i>Streptococcus thermophilus</i> , <i>Lactobacillus</i> spp, or <i>Bifidobacterium</i> spp., containing not less than 44 % Nitrogen expressed as crude protein. May contain up to <u>0,82</u> % phosphorus, <u>0,92</u> % potassium, 0.7 % magnesium, <u>0,32</u> % sodium, <u>0,32</u> % sulphates <u>0,45</u> % chlorides, 5 % sugars and 0,1 % silicone antifoam.	Nitrogen expressed as crude protein, Crude ash <u>Potassium if > 1.5%</u> <u>Magnesium if > 1.5%,</u> <u>sodium if > 1.5 %</u>
11.8.5	Ammonium acetate	Ammonium acetate ($\text{CH}_3\text{COONH}_4$) in aqueous solution, containing not less than 55 % Ammonium acetate).	Nitrogen expressed as crude protein
<u>11.9.1</u>	<u>Flint grit</u>	<u>Product obtained by crushing naturally occurring mineral in the form of gravel</u>	
<u>11.9.2</u>	<u>Redstone</u>	<u>Product obtained by crushing and milling of products derived from the baking of clay</u>	

(1) The nature of the source may be indicated additionally in the name or replace it.

(2) The name shall be amended or supplemented to specify the organic acid.

(3) The manufacturing process may be included in the name.

(4) The name shall be amended or supplemented to specify the amino acids or sources of amino acids used.

12. Fermentation (by-)products from micro-organisms

Number	Name	Description	Compulsory Declarations
12.1	Products obtained from the biomass of specific micro-organisms grown on certain substrates	May contain up to 0,3 % antifoaming agents. May contain up to 1,5 % filtration/clarifying agents. May contain up to 2,9 % propionic acid.	Propionic acid if > 0,5 %
12.1.1	Protein from <i>Methylophilus methylotrophus</i>	Protein product of fermentation obtained by culture of <i>Methylophilus methylotrophus</i> (NCIMB strain 10.515) (1) on methanol, the crude protein is at least 68 % and the reflectance index at least 50.	Crude protein Crude ash Crude fat
12.1.2	Protein from <i>Methylococcus capsulatus (Bath)</i>, <i>Alcaligenes acidovorans</i>, <i>Bacillus brevis</i> and <i>Bacillus firmus</i>	Protein product of fermentation with <i>Methylococcus capsulatus (Bath)</i> (NCIMB strain 11132), <i>Alcaligenes acidovorans</i> (NCIMB strain 12387), <i>Bacillus brevis</i> (NCIMB strain 13288) and <i>Bacillus firmus</i> (NCIMB strain 13280) (1) on natural gas (approx. 91 % methane, 5 % ethane, 2 % propane, 0,5 % isobutane, 0,5 % n-butane), ammonia, and mineral salts, the crude protein is at least 65 %.	Crude protein Crude ash Crude fat
12.1.3	Bacterial protein from <i>Escherichia coli</i>	Protein product, by-product from the production of amino acids by culture of <i>Escherichia coli</i> K12 (1) on substrates of vegetable or chemical origin, ammonia or mineral salts; it may be hydrolysed.	Crude protein
12.1.4	Bacterial protein from <i>Corynebacterium glutamicum</i>	Protein product, by-product from the production of amino acids by culture of <i>Corynebacterium glutamicum</i> (1) on substrates of vegetable or chemical origin, ammonia or mineral salts, it may be hydrolysed.	Crude protein
12.1.5	Yeasts and parts thereof [brewers' yeast] [yeast product]	All yeasts and parts thereof obtained from <i>Saccharomyces cerevisiae</i> , <i>Saccharomyces carlsbergensis</i> , <i>Kluyveromyces lactis</i> , <i>Kluyveromyces fragilis</i> , <i>Torulaspora delbrueckii</i> , <i>Candida utilis</i> / <i>Pichia jadinii</i> , <i>Saccharomyces uvarum</i> , <i>Saccharomyces ludwigii</i> or <i>Brettanomyces</i> ssp. (1) (2) on substrates mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts.	Moisture if < 75 % or > 97 % If moisture < 75 %: Crude protein
12.1.6	Mycelium silage from the production of penicillin	Mycelium (nitrogenous compounds), wet by-product from the production of	Nitrogen expressed as

		penicillin by <i>Penicillium chrysogenum</i> (ATCC48271) ⁽¹⁾ on different sources of carbohydrates and their hydrolysates, heat treated and ensiled by means of <i>Lactobacillus brevis</i> , <i>plantarum</i> , <i>sake</i> , <i>collinoides</i> and <i>Streptococcus lactis</i> to inactivate the penicillin, Nitrogen expressed as crude protein is at least 7 %.	crude protein Crude ash
12.1.7	Yeasts from biodiesel process	All yeasts and parts thereof obtained from <i>Yarrowia lipolytica</i> ⁽¹⁾ ⁽²⁾ grown on vegetable oils and degumming and glycerol fractions formed during biofuel production.	Moisture if < 75 % or > 97 % If moisture < 75 % : Crude protein
<u>12.1.8</u>	<u>Product from <i>Lactobacillus</i> species</u>	Product from culture of <i>Lactobacillus</i> ⁽¹⁾ ⁽²⁾ ⁽³⁾ on substrates mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts. It may be dried. <i>Lactobacillus acidophilus</i>	<u>Crude protein</u> <u>Crude ash</u>
<u>12.1.9</u>	<u>Product from <i>Trichoderma viride</i></u>	Product from culture of <i>Trichoderma viride</i> on substrates mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts. It may be dried	<u>Crude protein</u> <u>Crude ash</u>
<u>12.1.10</u>	<u>Product from <i>Bacillus subtilis</i></u>	Product from culture of <i>Bacillus subtilis</i> on substrates mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts. It may be dried	<u>Crude protein</u> <u>Crude ash</u>
<u>12.1.11</u>	<u>Product from <i>Aspergillus oryzae</i></u>	Product from culture of <i>Aspergillus oryzae</i> on substrates mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts. It may be dried <i>Aspergillus oryzae</i>	<u>Crude protein</u> <u>Crude ash</u>

12.2	Other fermentation by-products	May contain up to 0,6 % antifoaming agents. May contain up to 0,5 % antiscaling agents. May contain up to 0,2 % sulfites.	
12.2.1	Vinasses [condensed molasses soluble]	By-products derived from the industrial processing of musts/worts issued from fermentation processes such as alcohol, organic acids, yeast manufacture. They are composed of the liquid/paste fraction obtained after the separation of the fermentation musts/worts. They may also include dead cells and/or parts thereof of the fermentation micro-organisms used. The substrates are mostly of vegetable origin such as molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolysed vegetable fibres and fermentation nutrients such as ammonia or mineral salts.	Crude protein Substrate and indication of production process as appropriate
12.2.2	By-products from the production of L-glutamic acid	By-products from the production of L-glutamic acid by fermentation with <i>Corynebacterium melassecola</i> (U) on substrate composed of sucrose, molasses, starch products and their hydrolysates, ammonium salts and other nitrogenous compounds.	Crude protein
12.2.3	By-products from the production of L-lysine-mono-hydrochloride with <i>Brevibacterium lactofermentum</i>	By-products from the production of L-Lysine mono-hydrochloride by fermentation with <i>Brevibacterium lactofermentum</i> (U) on substrate composed of sucrose, molasses, starch products and their hydrolysates, ammonium salts and other nitrogenous compounds.	Crude protein
12.2.4	By-products from the production of amino acids with <i>Corynebacterium glutamicum</i>	By-products from the production of amino acids by fermentation with <i>Corynebacterium glutamicum</i> (U) on substrate of vegetable or chemical origin, ammonia or mineral salts.	Crude protein Crude ash
12.2.5	By-products from the production of amino acids with <i>Escherichia coli</i> K12	By-products from the production of amino acids by fermentation with <i>Escherichia coli</i> K12 (U) on substrate of vegetable or chemical origin, ammonia or mineral salts.	Crude protein Crude ash
12.2.6	By-product of enzyme production with <i>Aspergillus niger</i>	By-product of fermentation of <i>Aspergillus niger</i> (U) on wheat and malt for enzyme production.	Crude protein
12.2.7	Polyhydroxybutyrate	Polymer containing 3-hydroxybutyrate and hydroxyvalerate, produced via fermentation from <i>Ralstonia eutropha</i> and	

		<u>non-viable bacterial protein meal remaining from the producing bacteria and fermentation broth. Used as energy source.</u>	
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(1) The cells of the micro-organisms have been inactivated or killed.

(2) The usage name of yeast strains may vary from the scientific taxonomy, therefore, synonyms of the yeast strains listed could also be used

(3) All species referred to in the EFSA QPS list.

13. Miscellaneous

Number	Name	Description	Compulsory declarations
13.1.1	Products from the bakery and pasta industry	Products obtained during and from the production of bread, biscuits, wafers or pasta. They may be dried.	Starch Total sugars, calculated as sucrose, Crude fat, if > 5 %
13.1.2	Products from the pastry industry	Products obtained during and from the production of pastry and cakes. They may be dried.	Starch Total sugars, calculated as sucrose, Crude fat, if > 5 %
13.1.3	Products of the breakfast cereal manufacture	Substances or products that are intended or where it is reasonable to expect that they can be consumed by humans in their processed, partially processed or unprocessed forms. They may be dried.	Crude protein, if > 10 % Crude fibre Crude oils/fats, if > 10 %, Starch, if > 30 % Total sugars, calculated as sucrose, if > 10 %
13.1.4	Products from the confectionery industry	Products obtained during and from the production of sweets, inclusive chocolate. They may be dried.	Starch Crude fat, if > 5 % Total sugars, calculated as sucrose
13.1.5	Products of the ice-cream industry	Products obtained when producing ice-cream. They may be dried.	Starch Total sugars, calculated as sucrose, Crude fat
13.1.6	Products and by-products from processing fresh fruits and vegetables (1)	Products obtained when processing fresh fruit and vegetables (including peel, whole pieces of fruit/vegetables, and mixtures thereof). They may have been dried, or frozen.	Starch Crude fibre Crude fat, if > 5 % Ash insoluble in HCl, if > 3,5 %
13.1.7	Products from the processing of plants (1)	Products obtained from freezing or drying whole plants or their parts.	Crude Fibre
13.1.8	Products from processing of spices and	Products obtained from freezing or drying spices and seasonings or their parts.	Crude protein, if > 10 %

	seasonings (1)		Crude fibre Crude oils/fats, if > 10 %, Starch, if > 30 % Total sugar, calculated as sucrose, if > 10 %
13.1.9	Products from the processing of herbs (1)	Products obtained from crushing, grinding, freezing or drying herbs or their parts.	Crude Fibre
13.1.10	Products from the potato processing industry	Products obtained when processing potatoes. They may have been dried or frozen.	Starch Crude fibre Crude fat, if > 5 % Ash insoluble in HCl, if > 3,5 %
13.1.11	Products and by-products of the sauces production	Substances from the sauces-production that are intended or where it is reasonable to expect that they can be consumed by humans in their processed, partially processed or unprocessed forms. They may be dried.	Crude fat
13.1.12	Products and by-products from the savoury snacks industry	Products and by-products of the savoury snacks industry obtained during and from the production of savoury snacks — potato chips, potato and/or cereal based snacks (direct extruded, dough based and pelleted snacks) and nuts.	Crude fat
13.1.13	Products from the ready-to-eat food industry	Products obtained during the production of ready to eat food. They may be dried.	Crude fat, if > 5 %
13.1.14	Plants by-products from spirits production	Solid products from plants (including berries and seeds such as anise) obtained after maceration of these plants in an alcoholic solution or after alcoholic evaporation/distillation, or both, in the elaboration of flavourings for the spirits production. These products must be distilled to eliminate the alcoholic residue.	Crude protein, if > 10 % Crude fibre Crude oils/fats, if > 10 %
13.1.15	Feed beer	Product of the brewing process which is unsalable as a human beverage.	Alcohol content Moisture if < 75%
13.1.16	Sweet flavored drink	Product obtained from the production of sweet flavoured soft drinks or from unpacked non-marketable sweet-flavoured soft drinks. They may be concentrated or dried.	Total sugars, calculated as sucrose. Moisture if > 30 %

13.1.17	Fruit Syrup	Product obtained from the manufacture of fruit syrup for human consumption	Total sugars, calculated as sucrose Moisture if > 30 %
13.1.18	Sweet flavored syrup	Product obtained from the production of syrup or from unpacked non-marketable syrup. They may be concentrated or dried.	Total sugars, calculated as sucrose. Moisture if > 30 %
13.2.1	Caramelised sugars	Product obtained by the controlled heating of any sugar.	Total sugars, calculated as sucrose
13.2.2	Dextrose	Dextrose is obtained after hydrolysis of starch and consists of purified, crystallised glucose, with or without crystal water.	Total sugars, calculated as sucrose
13.2.3	Fructose	Fructose as purified crystalline powder. It is obtained from glucose in glucose syrup by the use of glucose isomerase and from sucrose inversion.	Total sugars, calculated as sucrose
13.2.4	Glucose syrup	Glucose syrup is a purified and concentrated aqueous solution of nutritive saccharides obtained through hydrolysis from starch. It may be dried	Total sugars Moisture if > 30 %
13.2.5	Glucose molasses	Product produced during refining process of glucose syrups.	Total sugars calculated as sucrose
13.2.6	Xylose	Sugar extracted from wood.	
13.2.7	Lactulose	Semi-synthetic disaccharide (4-O-D-Galactopyranosyl-D-fructose) obtained from lactose through the isomerisation of glucose to fructose. Present in heat treated milk and milk products.	Lactulose
13.2.8	Glucosamine (Chitosamine)	Amino sugar (monosaccharide) being part of the structure of the polysaccharides chitosan and chitin. Produced by the hydrolysis of crustacean and other arthropods exoskeletons or by fermentation of a grain such as corn or wheat.	Sodium or Potassium, as applicable 'from aquatic animals' or 'from fermentation', as appropriate
13.2.09	Xylo-oligosaccharide	Chains of xylose molecules linked with β 1-4 bonds with degree of polymerization ranging from 2 to 10 and produced from enzymatic hydrolysis of various feedstocks rich in hemicellulose.	Moisture if above 5%
13.2.10	Gluco-oligosaccharide	Product Gluco-oligosaccharide obtained by either fermentation or hydrolysis and/or	Moisture if > 28 %

		physical thermal treatment of glucose polymers, glucose, sucrose, saccharose and maltose.	
13.3.1	Starch (2)	Starch.	Starch
13.3.2	Starch (2) , pre-gelatinised	Product consisting of starch expanded by heat treatment.	Starch
13.3.3	Starch (2) mixture	Product consisting of native and/or modified food starch obtained from different botanical sources.	Starch
13.3.4	Starch (2) hydrolysates cake	Product from starch hydrolysis liquor filtration which consists of the following: protein, starch, polysaccharides, fat, oil and filter aid (e.g. diatomaceous earth, wood fibre).	Moisture if < 25 % or > 45 % If moisture < 25 % : — Crude fat — Crude protein
13.3.5	Dextrin	Dextrin is partially acid hydrolysed starch.	
13.3.6	Maltodextrin	Maltodextrin is the partially hydrolysed starch	
13.4.1	Polydextrose	Randomly bonded bulk polymer of glucose produced by thermal polymerisation of D-Glucose.	
13.5.1	Polyols	Product obtained by hydrogenation or fermentation and consisting of reduced mono, di- or oligosaccharides or polysaccharides.	
13.5.2	Isomalt	Sugar alcohol obtained from sucrose after enzymatic conversion and hydrogenation.	
13.5.3	Mannitol	Product obtained by hydrogenation or fermentation and consisting of reduced glucose and/or fructose.	
13.5.4	Xylitol	Product obtained by hydrogenation and fermentation of xylose.	
13.5.5	Sorbitol	Product obtained by hydrogenation of glucose	
13.6.1	Acid oils from chemical refining (3)	Product obtained during the deacidification of oils and fats of vegetable or animal origin by means of alkali, followed by an acidulation with subsequent separation of the aqueous phase, containing free fatty acids, oils or fats and natural components of seeds, fruits or animal tissues such as mono-, and diglycerides, lecithin and fibres.	Crude fat Moisture if > 1 %
13.6.2	Fatty acids esterified with glycerol (4)	Glycerides obtained by esterification of glycerol with fatty acids. May contain up to 50 ppm Nickel from hydrogenation.	Moisture if > 1 % Crude fat

			Nickel if > 20 ppm
13.6.3	Mono di and tri glycerides of fatty acids (4)	Product consisting of mixtures of mono-, di- and triesters of glycerol with fatty acids. They may contain small amounts of free fatty acids and glycerol. May contain up to 50 ppm Nickel from hydrogenation.	Crude fat Nickel if > 20 ppm
13.6.4	Salts of fatty acids (4)	Product obtained by reaction of fatty acids with at least four carbon atoms with calcium, magnesium, sodium or potassium hydroxides, oxides or salts. May contain up to 50 ppm Nickel from hydrogenation.	Crude fat (after hydrolysis) Moisture Ca or Na or K or Mg (when appropriate) Nickel if > 20 ppm
13.6.5	Fatty acid distillates from physical refining (4)	Product obtained during the deacidification of oils and fats of vegetable or animal origin by means of distillation containing free fatty acids, oils or fats and natural components of seeds, fruits or animal tissues such as mono- and diglycerides, sterols and tocopherols.	Crude fat Moisture if > 1 %
13.6.6	Crude fatty acids from splitting (4)	Product obtained by oil/fat splitting. By definition it consists of crude fatty acids C ₆ -C ₂₄ , aliphatic, linear, monocarboxylic, saturated and unsaturated. May contain up to 50 ppm Nickel from hydrogenation.	Crude fat Moisture if > 1 % Nickel if > 20 ppm
13.6.7	Pure distilled fatty acids from splitting (4)	Product obtained by the distillation of crude fatty acids from oil/fat splitting potentially plus hydrogenation. By definition it consists of pure distilled fatty acids C ₆ -C ₂₄ , aliphatic, linear, monocarboxylic, saturated and unsaturated. May contain up to 50 ppm Nickel from hydrogenation	Crude fat Moisture if > 1 % Nickel if > 20 ppm
13.6.8	Soap stocks (3)	Product obtained during the deacidification of vegetable oils and fats by means of aqueous calcium, magnesium, sodium or potassium hydroxide solution, containing salts of fatty acids, oils or fats and natural components of seeds, fruits or animal tissues such as mono- and diglycerides, lecithin and fibres.	Moisture if < 40 and > 50 % Ca or Na or K or Mg, as appropriate
13.6.9	Mono- and diglycerides of fatty acids esterified with organic acids (4) (5)	Mono- and diglycerides of fatty acids with at least four carbon atoms esterified with organic acids.	Crude fat
13.6.10	Sucrose esters of fatty acids (4)	Esters of sachharose and fatty acids.	Total sugars, calculated as

			sucrose Crude fat
13.6.11	Sucroglycerides of fatty acids ⁽⁴⁾	Mixture of esters of saccharose and mono and di-glycerides of fatty acids.	Total sugars, calculated as sucrose Crude fat
13.6.12	Palmitoylglucosamine	Lipid organic compound present in the roots of many plants and particularly in almost all the leguminous plants. It is produced by acilation of D-Glucosamine with Palmitic acid. May contain up to 0,5% of Acetone.	Moisture if > 2%, Crude fat
13.6.13	Palmitoylethanolamide	Lipid organic compound naturally present in soy, eggs and in many other vegetable feed materials. It is produced from the reaction of Palmitic acid with Ethanolamine. May contain up to 0,5% of Isopropanol.	Crude fat
13.6.14	Salt of lactylates of fatty acids	Non glyceride ester of fatty acids. The product is a calcium, magnesium, sodium or potassium salt of fatty acids esterified with lactic acid. It may contain the salts of the free fatty acids and lactic acid.	Crude fat Moisture if > 1 % Nickel if > 20 ppm Ca or Na or K or Mg as appropriate
13.78.1	Glycerine, crude [Glycerol, crude]	<p>By-product obtained from:</p> <ul style="list-style-type: none"> the oleochemical process of oil/fat splitting to obtain fatty acids and sweet water, followed by concentration of the sweet water to get crude glycerol or by transesterification (may contain up to 0,5 % methanol) of natural oils/fats to obtain fatty acid methyl esters and sweet water, followed by concentration of the sweet water to get crude glycerol; the production of biodiesel (methyl or ethyl esters of fatty acids) by transesterification of oils and fats of unspecified vegetable and animal origin. Mineral and organic salts might remain in the glycerine (up to 7,5 %). <p>May contain up to 0,5 % Methanol and up to 4 % of Matter Organic Non Glycerol (MONG) comprising of Fatty Acid Methyl Esters, Fatty Acid Ethyl Esters, Free Fatty Acids and Glycerides;</p> <p>—saponifications of oils/fats of</p>	<p>Glycerol</p> <p>Potassium if > 1,5 %</p> <p>Sodium if > 1,5 %</p> <p>Nickel if > 20 ppm</p>

		vegetable or animal origin, normally with alkali/alkaline earths, to obtain soaps. May contain up to 50 ppm Nickel from hydrogenation.	
13.78.2	Glycerine [Glycerol]	Product obtained from: —the oleochemical process of (a) oil/fat splitting followed by concentration of sweet waters and refining by distillation (see part B, glossary of processes, entry 20) or ion-exchange process; (b) transesterification of natural oils/fats to obtain fatty acid methyl esters and crude sweet water, followed by concentration of the sweet water to get crude glycerol and refining by distillation or ion-exchange process; —the production of biodiesel (methyl or ethyl esters of fatty acids) by transesterification of oils and fats of unspecified vegetable and animal origin with subsequent refining of the glycerine. Minimum Glycerol content: 99 % of dry matter; —saponifications of oils/fats of vegetable or animal origin, normally with alkali/alkaline earths, to obtain soaps, followed by refining of crude Glycerol and distillation. May contain up to 50 ppm Nickel from hydrogenation.	Glycerol if < 99 % on dry matter basis Sodium if > 0,1 % Potassium if > 0,1 % Nickel if > 20 ppm
13.89.1	Methyl sulphonyl methane	Organo-sulfur compound ((CH ₃) ₂ SO ₂) obtained by synthetic way which is identical to the naturally occurring source in plants.	Sulphur
13.940.1	Peat	Product from the natural decomposition of plant (mainly sphagnum) in anaerobic and oligotrophic environment.	Crude Fibre
13.940.2	Leonardite	Product that is a naturally occurring mineral complex of phenolic hydrocarbons, also known as humate, which originates from the decomposition of organic matter over the course of millions of years.	Crude Fibre
13.104.1	Propylene glycol; [1,2-propanediol; [propane-1,2-diol]	Organic compound (a diol or double alcohol) with formula C ₃ H ₈ O ₂ . It is a viscous liquid with a faintly sweet taste, hygroscopic and miscible with water,	Propylene glycol

		acetone, and chloroform. May contain up to 0,3 % di propylene glycol.	
13.10.2	Mono-esters of propylene glycol and fatty acids ⁽⁴⁾	Mono-esters of propylene glycol and fatty acids, alone or in mixtures with diesters.	Propylene glycol Crude fat
13.11.1	Hyaluronic acid	<u>Glucosamineglucan (polysaccharide) with repeating unit consisting of an amino sugar (N-acetyl-D- glucosamine) and D- glucuronic acid present in the skin, synovial fluid and the umbilical cord, produced, for example, from animal tissue or by bacterial fermentation</u>	<u>Sodium or Potassium, as applicable</u> <u>‘from animal tissues’ or ‘from fermentation’, as appropriate</u>
13.11.2.4	Tioctic acid [Lipoic acid]	<u>Organosulfur compound naturally occurring in many vegetable feed materials as spinach, broccoli.</u>	<u>Sulfur</u>
13.11.3	Gluconic acid	<u>Edible gluconic acids</u>	

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- (1) The name shall be supplemented by the fruit, vegetable, plant, spices and herbs species, as applicable.
- (2) The name shall be supplemented by the indication of the botanical origin.
- (3) The name shall be supplemented by the indication of the botanical or animal origin.
- (4) The name shall be amended or supplemented to specify the fatty acids used.
- (5) The name shall be amended or supplemented to specify the organic acid.