

First revision of the European Catalogue of feed materials

Preamble

The first revision of the European Catalogue is intended to be a non-exhaustive list of feed materials, aims to improve market transparency and facilitate the exchange of information on feed materials properties between the parties. This Catalogue, which has been set up by producers and purchasers of these products, provides a common system within the EU for the description and labelling of feed materials as well as compound feed.

The Catalogue includes, for each feed material listed therein, the name of the product, an identification number, a description of the feed material including - if appropriate - information on the manufacturing process, and the particulars replacing the compulsory declaration for the purpose of article 16 (1) (b). A glossary with definitions and explanations further clarifies the process(es) which feed materials may be subject to and which are referred to in the products descriptions, where appropriate.

Feed materials shall be of sound, genuine and merchantable quality. The listing of a product in the Catalogue does not guarantee its safety for use as a feed material. Where applicable, specific legislation restricting the use of certain products as feed materials shall be considered. The responsibility for the safety of feed materials placed on the market rests with the Feed Business Operators according to relevant provisions laid down in General Food Law (Regulation (EC) No 178/2002 and Feed Hygiene legislation (Regulation (EC) No 183/2005).

Producers of feed materials derived from the production of foodstuffs have to comply with both legal requirements for Food and Feed Business Operators referred to in General Food Law as well as specific legal requirements for Feed Business Operators foreseen in the Feed Hygiene Regulation.

In accordance with good practice as referred to in Regulation (EC) No 183/2005, feed materials shall – as far as technically possible - be free from chemical impurities resulting from their manufacturing process and from processing aids. With regard to the use of processing aids and presence of residues, Feed Business Operators will assure that the production process will comply with the HACCP principles. Concerning a statement on the presence of residues which is reflecting common usage, this is – subject to a reassessment of the legal necessity thereof - indicated in the Catalogue. The botanical purity of feed materials shall not be less than 95 %, unless a different level has been laid down in this Catalogue.

The non-exhaustive Catalogue of Feed Materials can be used by feed business operators on a voluntary basis. However, the name of a feed material listed in the Catalogue may only be used on a label on condition that all relevant provisions of the Catalogue are complied with.

How to read the column on compulsory declarations?

With regard to the compositional labelling of feed materials, article 15 (g) in conjunction with Annex I on the one hand, and article 16 (1) in conjunction with Annex V (categories 1 - 18) of Regulation (EC) No 767/2009 on the other hand, lay down specific mandatory labelling requirements.

- Annex V to Regulation (EC) 767/2009 lays down the “default rule” for the compulsory labelling of the different feed material categories. However, article 16(b) gives the possibility to deviate from the Annex V “default” labelling requirements if specified otherwise in the Catalogue.

The European feed business sectors have made use of this possibility when elaborating this list of feed materials. The Catalogue “compulsory declarations” column must be understood as follows:

- When the name of a feed material listed in the Catalogue is used in accordance with article 24(5), the specific labelling requirements listed in the “compulsory declarations” column of the Catalogue are applicable and shall be complied with.
 - No compulsory declarations are required if the relevant column is left blank (*except the ones listed in Annex I, see below*).
- According to article 15 (g) and Annex I(6), feed materials moisture content must be declared when it exceeds 14 %. However, Annex I(6) also foresees that it is possible to deviate from this “default rule” through the Catalogue. Where the “compulsory declarations” column of the Catalogue refers to specific moisture level(s) above or below which moisture content shall be declared, this replaces Annex I(6) “default rule”. Where no moisture level(s) is(are) mentioned, this means the “default rule” applies and moisture content must be declared if above 14%.

The compulsory declarations have to be made in accordance with the requirements set out in Annex V and Annex I(6) in case a feed material is not listed in the Catalogue. There is no possibility for deviations.

Used terminology: by-product v. product

The term “product” has been preferred to the term “by-product” to reflect the market situation, unless otherwise required by specific legislation (e.g. the Animal By-Products Regulation (EC) No 1069/2009) or particular sector situation (e.g. Common Market Organisation for certain agricultural products).

Note:

The legislative status of a number of the entries proposed in the following list cannot be unequivocally established until measures according to Article 7.2 of Regulation 767/2009 (list of products constituting feed) and/or the guidelines “clarifying the distinction between feed additives, feed materials and other products such as veterinary drugs”, as foreseen under Article 7.1 of Regulation 767/2009, are formally adopted. In consequence, a number of entries might have to be withdrawn (or added) depending on this list and/or these guidelines and so the listing of these products in the Catalogue below does not preclude about their formal status. At the end of the process, only relevant feed material entries should remain in the Catalogue and the present paragraph should be removed from the preamble of the Catalogue.

1. Cereal grains and products derived thereof

Number	Name	Description	Compulsory declarations
1.01	Barley	Grains of <i>Hordeum vulgare</i> L. It may be rumen protected.	
1.02	Barley, puffed	Product obtained from milled or broken barley by means of a treatment in humid, warm conditions and under pressure.	Starch
1.03	Barley, roasted	Product of barley roasting process which is partially roasted with low colour.	Starch, if > 10% Crude protein, if > 15%
1.04	Barley flakes	Product obtained by steaming and rolling dehusked barley. It may contain a small proportion of barley husks. It may be rumen protected.	Starch
1.05	Barley fibre	Product of barley starch manufacture. It consists of particles of endosperm. It may be dried.	Crude protein, if >10%
1.06	Barley hulls	Product of ethanol-starch manufacture after dry milling and screening of barley.	Crude protein, if >10%
1.07	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
1.08	Barley protein	Product from barley obtained after starch and bran separation. It consists principally of protein. It may be dried.	Crude protein
1.09	Barley solubles	Product from barley obtained after wet protein and starch extraction.	Crude protein
1.10	Barley bran	Product of flour manufacture, obtained from screened grains of dehusked barley, <i>Hordeum vulgare</i> L. 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	Liquid barley starch	Secondary starch fraction from the production of starch from barley.	If moisture <50%: - starch
1.12	Malting barley screenings	Product from malting barley cleaning consisting of small malting barley grains and fractions of broken malting barley grains separated before the malting process.	Crude fibre Crude ash if >2.2
1.13	Malting barley and malt fines	Cereal fines aspirated from grain transfer operations.	Crude fibre
1.14	Malting barley husks	Product from malting barley cleaning consisting of fractions of husk and fines.	Crude fibre
1.15	Barley distillers solids, wet	Product of ethanol manufacture from barley. It contains solid feed fraction from distillation.	Crude protein, if >10%
1.16	Barley distillers solubles, wet	Product of ethanol manufacture from barley. It contains soluble feed fraction from distillation.	Crude protein, if >10%
1.17	Malt	Product from germinated cereals, dried, milled and/or extracted	
1.18	Malt culms	Product of malting, consisting mainly of dried rootlets of germinated cereals.	Crude protein
1.19	Malt rootlets	Product from malting barley germination and malt cleaning consisting of rootlets, cereal fines, husks and small broken malted barley grains.	
1.20	Maize ⁽¹⁾	Grains of <i>Zea mays</i> L. It may be rumen protected.	
1.21	Maize flakes ⁽¹⁾	Product obtained by steaming and rolling dehusked maize. It may contain a small proportion of maize husks.	Starch
1.22	Maize middlings ⁽²⁾ ⁽¹⁾	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	Crude fibre

¹ Please note that "maize" can either be referred to as such or as "corn". This is valid for all maize products.

² Products containing more than 40% starch may be named as "rich in starch". They may be referred to in German as "Maisnachmehl".

		maize bran.	
1.23	Maize bran ⁽¹⁾	Product of the manufacture of flour or semolina from maize. It consists principally of outer skins and some maize germ fragments, with some endosperm particles.	Crude fibre
1.24	Maize cobs ⁽¹⁾	Central core of a maize (<i>Zea mays ssp. mays</i> L.) ear. It comprises unseparated rachis, grain and leaves.	Crude fibre
1.25	Maize screenings ⁽¹⁾	Fraction of maize left after screening process	
1.26	Maize fibre ⁽¹⁾	Product of the manufacture of maize starch. It consists principally of fibre.	Moisture, if < 50 % or > 70% If moisture <50%: - Crude fibre
1.27	Maize gluten ⁽¹⁾	Product of the manufacture of maize starch. It consist principally of gluten	Moisture, if < 70% or > 90 %
1.28	Maize gluten feed ⁽¹⁾	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 < 35 % or > 65 % If moisture <35%: - Crude protein -Crude fibre - Starch - Crude fat
1.29	Maize germ ⁽¹⁾	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 fat
1.30	Maize germ expeller ⁽¹⁾	Product of oil manufacture obtained by pressing of processed maize germ.	Crude protein Crude fat
1.31	Maize germ meal ⁽¹⁾	Product of oil manufacture, obtained by extraction of processed maize germ.	Crude protein

1.32	Crude maize germ oil ⁽¹⁾	Product obtained from maize germ.	Crude fat
1.33	Maize, puffed	Product obtained from milled or broken wheat by means of a treatment in humid, warm conditions and under pressure.	Starch
1.34	Maize steep liquor ⁽¹⁾	Concentrated liquid fraction from the steeping process of corn.	Moisture, if < 45 % or > 65 % If moisture <45%: - crude protein
1.35	Sweet corn silage	By-product of the sweet-corn processing industry, composed of center 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.	
1.36	Millet	Grains of <i>Panicum miliaceum</i> L. and products or grains therefrom.	
1.37	Oats	Grains of <i>Avena sativa</i> L. and other cultivars of oats. It may be rumen protected.	
1.38	Oat flakes	Product obtained by steaming and rolling dehusked oats. It may contain a small proportion of oat husks.	Starch
1.39	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
1.40	Oat hulls and bran	Product obtained during the processing of screened oats into oat groats. It consists principally of oat hulls and bran.	Crude fibre
1.41	Oat groats	Cleaned oats with the hull removed	
1.42	Oat flour	Product obtained by milling of oat grains	
1.43	Fodder Oat flour	Product with high content in starch, obtained by <i>Avena sativa</i> L. and other farmed varieties of Avena, after decortication.	Crude fibre

1.44	Quinoa seed, extracted	Cleaned whole seed of the quinoa plant (<i>Chenopodium quinoa</i>) from which the saponin contained in the seeds outer layer has been removed.	
1.45	Rice, broken	Product of rice milling (<i>Oryza sativa</i> L.), consisting principally of undersized and/or broken grains produced during milling.	Starch
1.46	Rice, milled	Husked rice from which all or part of the bran and embryo have been removed by milling.	Starch
1.47	Rice, puffed	Product obtained from milled or broken rice by means of a treatment in humid, warm conditions and under pressure.	Starch
1.48	Rice, extruded	Product obtained by extruding rice flour.	Starch
1.49	Rice flakes	Product obtained by flaking pregelatinized rice grains or broken grains.	Starch
1.50	Rice, husked/brown	Paddy rice from which only the husk has been removed.	Starch Crude fibre
1.51	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 dehusked grains which are yellow or spotted.	Starch
1.52	Rice flour	Product obtained by grinding milled rice.	Starch
1.53	Brown rice flour	Product obtained by grinding brown rice	Crude Fibre, Starch
1.54	Rice bran	Product from husked rice milling consisting of the outer layers of the kernel (pericarp, seed coat, nucleus, aleurone) with part of the germ.	Crude fibre
1.55	Rice bran with calcium carbonate	Rice bran obtained from dehusked (parboiled) rice by milling with calcium carbonate.	Crude fibre Calcium carbonate

1.56	Defatted rice bran	Rice bran resulting from oil extraction.	Crude fibre
1.57	Rice bran oil	Oil extracted from stabilized rice bran.	Crude fat
1.58	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.	Starch, if > 20 % Crude protein, if > 10 % Crude fat, if > 5 % Crude fibre
1.59	Fodder meal from parboiled rice	Product of the polishing of dehusked parboiled rice, consisting principally of silvery skins, particles of the aleurone layer, endosperm, germ; it contains varying amounts of calcium carbonate resulting from the polishing process.	Crude fibre Calcium carbonate
1.60	Brewers' rice	The smallest broken fragments from the rice milling process, usually about one quarter of a full grain.	Starch
1.61	Rice germ	Product mainly consisting of the embryo removed during the rice milling process and separated from the bran.	Crude fat Crude protein
1.62	Rice germ expeller	Product of oil manufacture, obtained by pressing of the germ of rice to which parts of the endosperm and testa still adhere.	Crude protein Crude fat Crude fibre
1.63	Rice germ meal	Product of oil manufacture, obtained by extraction of the germ of rice to which parts of the endosperm and testa still adhere.	Crude protein
1.64	Rice protein	Product of rice starch production from broken rice, obtained by wet milling, sieving, separation, concentration and drying.	Crude protein
1.65	Liquid polished rice feed	Concentrated liquid product of wet milling and sieving rice.	Starch
1.66	Rye	Grains of <i>Secale cereale</i> L.	
1.67	Rye middlings ⁽³⁾	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

³ Products containing more than 40% starch may be qualified as "rich in starch". They may be referred to in German as "Roggennachmehl".

1.68	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
1.69	Rye bran	Product of flour manufacture, obtained from screened rye. It consists principally of fragments of the outer skins, and of particles of grain from which most of the endosperm has been removed.	Starch Crude fibre
1.70	Sorghum, [Milo]	Grains and/or seeds of <i>Sorghum bicolor</i> (L.) Moench s.l.	
1.71	Sorghum white	Grains of <i>Sorghum white</i> (L.) Moench s.l.	
1.72	Sorghum gluten feed	Dried product obtained during the separation of sorghum starch, <i>Sorghum bicolor</i> L., Moench. 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
1.73	Spelt	Grains of spelt <i>Triticum spelta</i> L., <i>Triticum dicoccum</i> Schrank, <i>Triticum monococcum</i> .	
1.74	Spelt bran	Product of the manufacture of spelt flour, <i>Triticum spelta</i> L., <i>Triticum dicoccum</i> Schrank, <i>Triticum monococcum</i> . It consists principally of outer skins and some spelt germ fragments, with some endosperm particles.	Crude fibre
1.75	Spelt hulls	Product obtained during dehulling of spelt grains	Crude fibre
1.76	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
1.77	Triticale	Grains of <i>Triticum X Secalehybrid</i> .	
1.78	Wheat	Grains of <i>Triticum aestivum</i> (L.), <i>Triticum durum</i> Desf. and other cultivars of wheat. It may be rumen protected.	
1.79	Wheat rootlets	Product from malting wheat germination and malt cleaning consisting of rootlets, cereal fines, husks and small broken malted wheat grains.	

1.80	Wheat, puffed	Product obtained from milled or broken wheat by means of a treatment in humid, warm conditions and under pressure.	Starch
1.81	Wheat middlings ⁽⁴⁾	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.	Starch
1.82	Wheat flakes	Product obtained by steaming and rolling dehusked wheat. It may contain a small proportion of wheat husks. It may be rumen protected.	starch
1.83	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
1.84	Wheat bran ⁽⁵⁾	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
1.85	Wheat and wheat bran, malted and fermented	Product obtained by a process combining malting and fermentation of wheat and wheat bran. The product is then dried and ground.	Starch Crude fibre
1.86	Wheat red dog, [Wheat flour offals]	Product consisting of the "tail of the mill" together with some fine particles of wheat bran, wheat germ, and wheat flour. This product is obtained during the manufacture of flour and must contain not more than 4% crude fibre	Starch Crude fibre
1.87	Wheat fibre	Fibre extracted from wheat manufacture. It consists principally of fibre.	Moisture, if < 60 % or > 80 % If moisture <60%: -fibre
1.88	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 farmed wheat varieties 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
1.89	Wheat shorts, [Wheat milling offals]	Product consisting of wheat bran, wheat germ, wheat flour and the offal from the "tail of the mill". This product is obtained during the manufacture of flour and must contain not more than 7% crude fibre	Starch Crude fibre

⁴ Products containing more than 40% starch may be qualified as "rich in starch". They may be referred to in German as "Weizennachmehl".

⁵ It this ingredient 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.

1.90	Wheat gluten	Protein extracted from wheat. Product of wheat starch extraction or ethanol production.	Crude protein
1.91	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
1.92	Wheat protein, hydrolysed	Protein obtained from wheat gluten by partial hydrolysis.	Crude protein
1.93	Liquid wheat starch	Product obtained from the production of starch/glucose and gluten from wheat.	Moisture, if < 65 % or > 85 % If moisture <65 %: - Starch
1.94	Wheat starch containing protein, partially desugared	Product obtained during the production of wheat starch mainly comprising partially sugared starch, the soluble proteins and other soluble parts of the endosperm.	Crude protein Starch
1.95	Wheat solubles	Product of wheat obtained after wet protein and starch extraction. May be hydrolysed.	Moisture if < 55 % or > 85 %
1.96	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
1.97	Malting wheat screenings	Product from malting wheat cleaning consisting of small malting wheat grains and fractions of broken malting wheat grains separated before the malting process.	
1.98	Malting wheat and malt fines	Cereals fines aspirated from grain transfer operations	
1.99	Malting wheat husks	Product from malting wheat cleaning consisting of fractions of husk and fines.	
1.100	Millers' feed	Products of flour manufacture obtained from screened grains of cereals or dehusked spelt. It consists of particles of endosperm and outer skins and some miscellaneous parts of the grain	Starch Crude fibre
1.101	Grain flour	Flour extracted from grain.	Starch Crude fibre

1.102	Cereal grains screenings	Product of cereals and malt at intake.	Crude fibre
1.103	Grain germ	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
1.104	Grain Spent Wash Syrup ⁽⁶⁾	Product of grain obtained through the evaporation of the centrate of the spent wash from the fermentation and distillation of grain used in the production of grain spirit.	Crude protein if >10%;
1.105	Moist distillers' grains	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.	Crude protein if >10% ;
1.106	Concentrated Distillers Solubles	Moist product from production of alcohol by distilling a mash of wheat and sugar syrup after previous separation of bran and gluten.	Crude protein if >10%
1.107	Distillers' grains ⁽⁷⁾ and solubles	Product obtained when producing alcohol by distilling grain mash of cereals and/ or other starchy and sugar containing products. It may be rumen protected.	Moisture, if < 60 % or > 80 % If moist <60%: - crude protein
1.108	Distillers' dried grains ⁽⁷⁾	Product of alcohol distilling obtained by drying solid residues of fermented grains. It may be rumen protected.	Crude protein
1.109	Distillers' dark grains, [Distillers' dried grains and solubles]	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
1.110	Brewers' grains	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.	Moisture, if <65% or >88% Crude protein, if moisture <65% or >88%
1.111	Draff	Solid product of malt whisky production obtained through the production of malt whisky. It consists of the residues from hot water extraction of malted barley. Typically marketed in the moist form after the extract has been removed by gravity.	Crude protein if >10% ;

⁶ The name may be supplemented by the grain species.

⁷ The name may be supplemented by the grain species.

1.112	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.	Crude protein if >10%; Crude fibre
1.113	Pot Ale Syrup	Product from the first (wash) distillation of a malt distillery produced by evaporating the pot ale remaining in the still.	Crude protein if >10% ;

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

Number	Name	Description	Compulsory declarations
2.01	Babassu expeller	Product of oil manufacture, obtained by pressing Babassu palm nuts form Brasil, <i>Orbignya oleifera</i> Burr and other Orbignya varieties	Crude protein Crude fat Crude fibre
2.02	Camelina seed	Seeds of Camelina Sativa	
2.03	Camelina, expeller	Product of oil manufacture, obtained by pressing of seeds of Camelina	Crude protein Crude fat Crude fibre
2.04	Camelina meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of Camelina seed expeller.	Crude protein
2.05	Cocoa husks	Teguments of the dried and roasted beans of <i>Theobroma cacao</i> L.	Crude fibre
2.06	Cocoa hulls	Product obtained by processing of cocoa beans.	Crude fibre
2.07	Partially decorticated cocoa bean meal	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
2.08	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
2.09	Copra, hydrolysed expeller	Product of oil manufacture, obtained by pressing and enzymatic hydrolisation of the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm <i>Cocos nucifera</i> L.	Crude protein Crude fat Crude fibre
2.10	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

2.11	Cotton seed	Seeds of cotton <i>Gossypium</i> ssp. from which the fibres have been removed. It may be rumen protected.	
2.12	Partially decorticated cotton seed meal	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
2.13	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
2.14	Partially decorticated groundnut expeller	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
2.15	Partially decorticated groundnut meal	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
2.16	Decorticated groundnut expeller	Product of oil manufacture, obtained by pressing of decorticated groundnuts.	Crude protein Crude fat Crude fibre
2.17	Decorticated groundnut meal	Product of oil manufacture, obtained by extraction of decorticated groundnut expeller	Crude protein Crude fibre
2.18	Kapok expeller	Product of oil manufacture obtained by pressing of Kapok seeds (<i>Ceiba pentadra</i>).	Crude protein Crude fibre
2.19	Linseed	Seeds of Linseed <i>Linum usitatissimum</i> L. (Minimum botanical purity 93%) as whole, flattened or ground linseed. It may be rumen protected.	
2.20	Linseed expeller	Product of oil manufacture, obtained by pressing of linseed. (Minimum botanical purity 93 %)	Crude protein Crude fat Crude fibre
2.21	Linseed meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of linseed expeller. May contain up to max 1% used bleaching earth or filter aids. It may be rumen protected.	Crude protein

2.22	Mustard bran	Product of the manufacture of mustard (<i>Brassica spp.</i>). It consists of fragments of the outer skins and particles of grain	Crude fibre
2.23	Mustard seed meal	Product obtained by the extraction of volatile mustard oil from mustard seed <i>Brassica juncea cutlass.</i>	
2.24	Niger seed	Seeds of the niger plant <i>Guizotia abyssinica</i> (Lf) Cass.	
2.25	Niger seed expeller	Product of oil manufacture, obtained by pressing of seeds of the niger plant <i>Guizotia abyssinica</i> (Lf) Cass. (Ash insoluble in HCl: maximum 3,4 %)	Crude protein Crude fat Crude fibre
2.26	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
2.27	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 auct.</i>) from which as much as possible of the hard shell has been removed.	Crude protein Crude fibre Crude fat
2.28	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
2.29	Pumpkin and squash seed	Seeds of <i>Curcubita pepo</i> and plants of the genus <i>Curcubita</i> .	
2.30	Pumpkin and squash seed, expeller	Product of oil manufacture, obtained by pressing of seeds of <i>Curcubita pepo</i> and plants of the genus <i>Curcubita</i>	Crude protein Crude fat
2.31	Rape seed (⁸)	Seeds of rape <i>Brassica napus</i> L. ssp, <i>Brassica campestris</i> L. ssp and <i>Brassica juncea</i> L. ssp. It may be rumen protected.	

⁸ Where appropriate the indication 'low in glucosinolate' may be added. 'Low in glucosinolate' is as defined in Community legislation.

2.32	Rape seed, expeller ⁽⁸⁾	Product of oil manufacture, obtained by pressing of seeds of rape. May contain up to max 1% used bleaching earth or filter aids. It may be rumen protected.	Crude protein Crude fat Crude fibre
2.33	Rape seed meal ⁽⁸⁾	Product of oil manufacture, obtained by extraction and appropriate heat treatment of rape seed expeller. May contain up to max 1% used bleaching earth or filter aids. It may be rumen protected.	Crude protein
2.34	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.	
2.35	Rape seed protein concentrate	Product of oil manufacture, obtained by separation of protein fraction of rapeseed expeller or rapeseed.	Crude protein
2.36	Safflower seed	Seeds of the safflower <i>Carthamus tinctorius</i> L.	
2.37	Partially decorticated safflower seed meal	Product of oil manufacture, obtained by extraction of partially decorticated seeds of safflower <i>Carthamus tinctorius</i> L.	Crude protein Crude fibre
2.38	Safflower hulls	Product obtained during dehulling of safflower seeds.	Crude fibre
2.39	Sesame seed	Seeds of sesame seed <i>sesamum</i> spp.	
2.40	Sesame seed, partially dehulled	Product of oil manufacture, obtained by removing part of the husks.	Crude protein Crude fibre
2.41	Sesame hulls	Product obtained during dehulling of sesame seeds.	Crude fibre
2.42	Sesame seed expeller	Product of oil manufacture, obtained by pressing of seeds of the sesame plant <i>Sesamum indicum</i> L. (Ash insoluble in HCl: maximum 5 %)	Crude protein Crude fibre Crude fat
2.43	Toasted soya (beans)	Soya beans (<i>Glycine max.</i> L. Merr.) subject to an appropriate heat treatment. (Urease activity maximum 0,4 mg N/g × min.). It may be rumen protected.	
2.44	Soya expeller	Product of oil manufacture, obtained by pressing the seed of soya, <i>Glycine max</i> (L) Merr.	Crude protein Crude fat Crude fibre

2.45	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.). May contain up to max 1% used bleaching earth or filter aids. It may be rumen protected.	Crude protein Crude fibre, if > 8 % in dry matter
2.46	Dehulled soya (bean) meal	Product of oil manufacture, obtained from dehulled soya beans after extraction and appropriate heat treatment. May contain up to max 1% of used bleaching earth or filter aids. (Urease activity maximum 0,5 mg N/g × min.). It may be rumen protected.	Crude protein
2.47	Soya (bean) hulls	Product obtained during dehulling of soya beans.	Crude fibre
2.48	Soya beans, extruded	Product obtained from soya bean through a process of extrusion. It may be rumen protected.	Crude protein Crude fat
2.49	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	Crude protein
2.50	Soya bean pulp, [Soya bean paste]	Product obtained during extraction of soya bean preparation.	Crude protein
2.51	Soya bean molasses	Product obtained during the pressing of soya bean seeds	
2.52	Sunflower seed	Seeds of the sunflower <i>Helianthus annuus</i> L. It may be rumen protected.	
2.53	Sunflower seed expeller	Product of oil manufacture, obtained by pressing of seeds of the sunflower.	Crude protein Crude fat Crude fibre
2.54	Sunflower seed meal	Product of oil manufacture, obtained by extraction and appropriate heat treatment of sunflower seed expeller. May contain up to max 1% used bleaching earth or filter aids. It may be rumen protected.	Crude protein
2.55	Dehulled sunflower seed meal	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 max 1% of used bleaching earth or filter aids. (Maximum crude fibre 27,5 % in the dry matter)	Crude protein Crude fibre

2.56	Sunflower seed hulls	Product obtained during dehulling of sunflower seeds.	Crude fibre
2.57	Vegetable oil and fat ⁽⁹⁾	Oil and fat obtained from plants	Moisture, if > 1 %
2.58	Vegetable oil and fat ⁽⁹⁾, refined	Oils and fats obtained from plants, refined	Moisture, if > 1 %
2.59	Vegetable oil and fat ⁽⁹⁾, hydrogenated	Product obtained by hydrogenation of vegetable oil and fats.	Moisture, if > 1 %
2.60	Vegetable oil and fat ⁽⁹⁾, fractionated	Product obtained by fractionation of vegetable oil and fats.	Moisture, if > 1 %
2.61	Crude lecithins	Phospholipids obtained during degumming of crude oil from oilseeds and oil fruits.	
2.62	Hemp expeller	Product of oil manufacture obtained by pressing of hemp seed.	Crude protein Crude fibre
2.63	Walnut expeller	Product of oil manufacture obtained by pressing of nuts from which shells have been removed.	Crude protein Crude fibre
2.64	Hazelnut	Whole or broken fruit, with or without hulls	
2.65	Hazelnut expeller	Product of oil manufacture obtained by pressing of hazelnut from which shells have been removed.	Crude protein Crude fibre
2.66	Pistachio	Fruit of <i>Pistacia vera</i> .	
2.67	Almond	Whole or broken fruit, with or without hulls	

⁹ The name must be supplemented by the plant species

2.68	Sweet almond, expeller	Product of oil manufacture, obtained by pressing of seeds of Sweet almond.	Crude protein Crude fat
2.69	Almond Hulls	Almond hulls obtained from dehusked almond seeds by physical separation from the kernels and ground.	Crude fibre
2.70	Peanut	whole or broken seeds, with or without hulls, roasted or not.	

3. Legume seeds and products derived thereof

Number	Name	Description	Compulsory declarations
3.01	Beans, toasted	Seeds of <i>Phaseolus</i> or <i>Vigna</i> ssp. submitted to an appropriate heat treatment to destroy toxic lectins. It may be rumen protected.	
3.02	Bean protein concentrate	Product obtained from the separated bean fruit water, when producing "starch".	Crude protein
3.03	Chickling vetch ⁽¹⁰⁾	Seeds of <i>Lathyrus sativus</i> L. submitted to an appropriate heat treatment.	
3.04	Chick peas	Seeds of <i>Cier arietinum</i> L.	
3.05	Ervil	Seeds of <i>Ervum ervila</i> L.	
3.06	Fenugreek seed	Seed of Fenugreek (<i>trigonella foenum-graecum</i>).	
3.07	Guar meal	Product obtained after extraction of the mucilage from seeds of <i>Cyanopsis tetragonoloba</i> (L.) Taub.	Crude protein
3.08	Guar germs meal	Product of mucilage extraction from the germ of seeds of <i>Cyamopsis tetragonoloba</i> (L.) Taub.	Crude protein
3.09	Horse beans	Seeds of <i>Vicia faba</i> L. ssp.	
3.10	Horse bean flakes	Product obtained by steaming and rolling dehusked horse bean.	Starch

¹⁰ This name must be supplemented by an indication of the nature of the heat treatment.

3.11	Film horse beans; [Faba bean hulls]	Product obtained during dehulling bean seeds, consisting mainly of external envelopes.	Crude fibre Crude protein
3.12	Horse beans dehulled	Product obtained during dehulling bean seeds, consisting mainly of bean kernel from <i>Vicia faba</i> L. spp.	Crude protein Crude fibre
3.13	Horse bean protein	Product obtained by grinding and air fractioning of horse beans.	
3.14	Lentils	Seeds of <i>Lens culinaris a.o.</i> Medik	
3.15	Lentil hulls	Product obtained during dehulling process of lentil seeds.	Crude fibre
3.16	Sweet lupins	Seeds of <i>Lupinus ssp.</i> low in bitter seed content	
3.17	Sweet lupins, dehulled	Dehulled seed of <i>Lupinus ssp.</i> Low in bitter seed content	Crude protein
3.18	Film lupin or lupin hulls	Product obtained during dehulling of lupin seeds, consisting mainly of external envelopes.	Crude protein Crude fibre
3.19	Lupin pulp	Product obtained after extraction of components of lupin	Crude fibre
3.20	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
3.21	Lupin protein	Product obtained from the separated lupin fruit water when producing starch, or after grinding and air fractionation.	Crude protein
3.22	Lupin protein meal	Product of lupin processing to produce a high protein meal.	Crude protein

3.23	Monantha vetch	Seeds of <i>Vicia monanthos</i> Desf.	
3.24	Mung beans	Beans of <i>Vigna radiata</i> L.	
3.25	Peas	Seeds of <i>Pisum ssp.</i> It may be rumen protected.	
3.26	Pea flakes	Product obtained by steaming and rolling dehulled seeds of peas (<i>Pisum spp.</i>).	Starch
3.27	Pea flour	Product obtained during the grinding of pea.	Crude protein
3.28	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
3.29	Peas, dehulled	Dehulled seeds of peas <i>Pisum ssp.</i>	Crude protein Crude fibre
3.30	Pea middlings	Product obtained during the manufacture of pea flour. It consists principally of particles of cotyledon, and to a lesser extent, of skins.	Crude protein Crude fibre
3.31	Pea screenings	Fraction of pea left after the screening process.	Crude fibre
3.32	Pea protein	Product obtained from the separated pea fruit water when producing starch, or after grinding and air fractionation.	Crude protein

3.33	Pea pulp	Product obtained from starch and protein wet extraction.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture if < 70 % or > 85 %
3.34	Pea solubles	Product of the manufacture of pea starch from which proteins have been removed.	Moisture if < 60 % or > 85 %
3.35	Pea cream	Product obtained during the manufacture of pea starch. It is composed of pea solubles and pulp.	Starch Crude protein Moisture if < 60 % or > 80 %
3.36	Pea fibre	Product obtained by extraction after grinding and sieving of the dehulled pea.	Crude fibre
3.37	Vetches	Seeds of <i>Vicia sativa</i> L. var sativa and other varieties.	

4. Tubers, roots, and products derived thereof

Number	Name	Description	Compulsory declarations
4.01	(Sugar) beet	<i>Beta vulgaris</i> L. ssp. <i>vulgaris</i> var. <i>altissima</i> Doell.	
4.02	(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. Moisture content varies with the natural composition of the sugar beet and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.	Ash insoluble in HCl, if > 5 % of dry matter Moisture if <50%
4.03	Sugar beet seed	Seed of sugar beet.	
4.04	(Beet) sugar⁽¹¹⁾	Sugar extracted from sugar beets.	Sucrose
4.05	(Sugar) beet molasses	Product obtained during the manufacture or refining of sugar from sugar beets.	Total sugars, calculated as sucrose Moisture, if > 28%
4.06	(Sugar) beet molasses, partially desugared and/or debetainized	Product obtained after further extraction of sucrose and/or betaine from sugar beet molasses.	Total sugars, calculated as sucrose Moisture, if > 28 %
4.07	Isomaltulose molasses	Non-crystallised fraction from the manufacture of isomaltulose by enzymatic conversion of sucrose.	Moisture if >40%

¹¹ This name may be replaced by 'sucrose'

4.08	Wet (sugar) beet pulp	<p>Product of the manufacture of sugar consisting of extracted slices of sugar beet.</p> <p>Moisture content varies with the natural composition of the sugar beet and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.</p> <p>Minimum moisture content: 82%</p> <p>Sugar content is low and declines towards zero due to (lactic acid) fermentation.</p>	<p>Ash insoluble in HCl, if > 5% of dry matter</p> <p>Moisture, if <82% or >92%</p>
4.09	Pressed (sugar) beet pulp	<p>Product of the manufacture of sugar consisting of extracted and mechanically pressed slices of sugar beet.</p> <p>Moisture content varies with the natural composition of the sugar beet and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.</p> <p>Maximum moisture content: 82%</p> <p>Sugar content is low and declines towards zero due to (lactic acid) fermentation.</p>	<p>Ash insoluble in HCl, if > 5% of dry matter</p> <p>Moisture if <65% or >82%</p>
4.10	Pressed (sugar) beet pulp, molassed	<p>Product of the manufacture of sugar consisting of extracted and mechanically pressed slices of sugar beet with molasses added.</p> <p>Moisture content varies with the natural composition of the sugar beet and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.</p> <p>Maximum moisture content: 82%</p> <p>Sugar content declines due to (lactic acid) fermentation.</p>	<p>Ash insoluble in HCl, if > 5 % of dry matter</p> <p>Moisture if <65% or >82%</p>

4.11	Dried (sugar) beet pulp	Product of the manufacture of sugar consisting of extracted and dried slices of sugar beet.	Ash insoluble in HCl, if > 3,5 % of dry matter Total sugars calculated as sucrose, if >10,5%
4.12	Dried (sugar) beet pulp, molassed	Product of the manufacture of sugar consisting of extracted and dried slices of sugar beet with molasses added.	Ash insoluble in HCl, if > 3,5 % of dry matter Total sugars, calculated as sucrose
4.13	Sugar syrup	Product obtained by processing of sugar and/or molasses.	Total sugars, calculated as sucrose Moisture, if > 35%
4.14	(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%
4.15	Fructo-oligosaccharides	Product obtained from sugar through an enzymatic process.	Moisture if > 28%
4.16	Carrots	Root of the yellow or red carrot <i>Daucus carota</i> .	
4.17	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. Moisture content varies between with the natural composition of the carrot and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture, if < 87 % or > 97 %

		<p>weather conditions.</p> <p>Maximum moisture content: 90%</p>	
4.18	Carrot scrapings	<p>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.</p> <p>Moisture content varies between with the natural composition of the carrot and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.</p> <p>Maximum moisture content: 90%</p>	<p>Starch</p> <p>Crude fibre</p> <p>Ash insoluble in HCl, if > 3,5 % of dry matter</p> <p>Moisture, if < 87 % or > 97 %</p>
4.19	Carrot feed, dried	Product constituted of internal pulp and outer skins that are dried.	Crude Fibre
4.20	Chicory roots	Roots of <i>Cichorium intybus</i> L.	
4.21	Chicory tops and tails	<p>Fresh product from chicory processing. It consists predominantly of cleaned pieces of chicory and parts of leaves.</p> <p>Moisture content varies with the natural composition of the chicory root and undergoes changes from end of production to final use of the product by the customer depending on factory, transport and weather conditions.</p>	<p>Ash insoluble in HCl, if > 3,5 % of dry matter</p> <p>Moisture if <50%</p>
4.22	Chicory seed	Seed of <i>Cichorium intybus</i> L.	
4.23	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.	<p>Crude fibre</p> <p>Ash insoluble in HCl, if > 3,5 % of dry matter</p> <p>Moisture if <65% or >82%</p>

4.24	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.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.25	Chicory roots powder	Product obtained by chopping, drying and grinding of chicory roots.	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.26	Chicory molasses	Product of chicory processing, obtained during the production of inulin and oligofructose.	Crude protein Moisture if <20% or >30%
4.27	Chicory vinasses	Product of chicory processing, obtained during the refining of inulin and oligofructose.	Crude protein Moisture if <30% or >40%
4.28	Inulin	Inulin is a fructan extracted from roots of <i>Cichorium intybus</i> L.	
4.29	Oligofructose syrup	Product obtained by partial hydrolysis of inulin from <i>Cichorium intybus</i> L.	Moisture, if <20% or >30%
4.30	Oligofructose, dried	Product obtained by partial hydrolysis of inulin from <i>Cichorium intybus</i> L. and subsequent drying.	
4.31	Garlic, dried	White to yellow powder of pure, ground garlic, <i>allium sativum</i> (bot).	
4.32	Manioc ⁽¹²⁾	Roots of <i>Manihot esculenta</i> Crantz, regardless of their presentation.	
4.33	Manioc, dried	Roots of <i>Manihot esculenta</i> Crantz, regardless of their presentation, which are subsequently dried.	Starch Ash insoluble in HCl, if > 3,5 % of dry matter
4.34	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 mostly consisting of cooked	Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter

¹² This name may be replaced by 'tapioca'.

		remains of onions.	
4.35	Potatoes	Tubers of <i>Solanum tuberosum</i> L.	Moisture if <72% or >88%
4.36	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
4.37	Potato peelings, steamed	Moist product from the potato processing industry consisting of the peelings removed by 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 Moisture if < 82 % or > 93 %
4.38	Potato cuttings, raw	Product released from potatoes during the preparation of potato products for human consumption, which may have been peeled.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture if <72% or >88%
4.39	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.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter Moisture if < 82 % or > 93 %
4.40	Potato, mashed	Blanched or boiled and then mashed potato product.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.41	Potato flakes	Product obtained by crushing dried potatoes which may be peeled, steamed, dried or cooked. The starch must be fully stiffened.	Starch Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter
4.42	Potato pulp	Product of the manufacture of potato starch.	Moisture, if < 77 % or > 88 %

4.43	Potato pulp, dried	Dried product of the manufacture of potato starch consisting of extracted ground potatoes	
4.44	Potato protein	Product of starch manufacture composed mainly of protein substances obtained after the separation of starch.	Crude protein
4.45	Potato protein, hydrolysed	Protein obtained by a controlled enzymatic hydrolysis of potato proteins.	Crude protein
4.46	Potato protein, fermented	Product obtained by fermentation of potato protein and subsequent spray drying.	Crude protein
4.47	Potato protein fermented, liquid	Liquid product obtained by fermentation of potato protein.	Crude protein
4.48	Potato juice, concentrated	Concentrated product of the manufacture of potato starch, consisting of the remaining substance after the partial removal of fibre, proteins and starch from the whole potato pulp and evaporation of part of the water.	Moisture if < 50 % or > 60 %
4.49	Potato granules	Dried potatoes (potatoes after washing, peeling, size reduction – cutting, flaking etc) and water content removal.	
4.50	Sweet potato	Tubers of <i>Ipomoea batatas</i> (L.) Poir, regardless of their presentation.	Starch
4.51	Topinambur	Tubers of <i>Helianthus tuberosus</i> L regardless of their presentation.	

5. Other seeds and fruits, and products derived thereof

Number	Name	Description	Compulsory declarations
5.01	Acorn	Whole fruits of oak tree (<i>Quercus</i>).	
5.02	Acorn, dehulled	Product obtained during dehulling of acorn	Crude protein Crude fibre
5.03	Anise seed	<i>Anis pimpinella anisum</i> . The whole seed oil or extract.	
5.04	Apple pulp, dried / [Apple pomace, dried]	Product obtained from the production of apple juice or cider production. It consists principally of internal pulp and outer skins that are dried.	Crude fibre
5.05	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.	Crude fibre
5.06	Buckwheat	Seeds of Fagopyrum Mill.	
5.07	Buckwheat hulls and bran	Product obtained during the milling of buckwheat grains.	Crude fibre
5.08	Buckwheat middlings	Portion of the buckwheat grain immediately under the hull after separation of the flour. It must contain no more hulls than is obtained in the usual process of buckwheat milling, and must contain no more than 10% crude fibre.	Crude fibre

5.09	Canary grass seed	Seeds of <i>Phalaris canariensis</i> .	
5.10	Caraway seed	Seed from <i>Carum carvi</i> L.	
5.11	Carob, dried	Dried fruits of the carob tree <i>Ceratonia siliqua</i> L	Crude fibre
5.12	Carob pods, dried	Product obtained by crushing the dried fruits (pods) of the carob tree <i>Ceratonia siliqua</i> L. and from which the locust beans have been removed.	Crude fibre
5.13	Dried carob pod meal, micronised	Product obtained by micronisation of the dried fruits of the carob tree <i>Ceratonia siliqua</i> L., from which the locust beans have been removed.	Crude fibre Total sugars, calculated as sucrose
5.14	Carob germ	Germ of the bean of the carob tree <i>Ceratonia siliqua</i> L.	Crude protein
5.15	Carob germ, expeller	Product of oil manufacture, obtained by pressing of germ of carob	Crude protein
5.16	Citrus pulp	Product obtained by pressing citrus fruits <i>Citrus</i> spp. It may have been depectinised.	Crude fibre
5.17	Citrus pulp, dried	Product obtained by pressing citrus fruits <i>Citrus</i> spp or during the production of citrus juice, which is subsequently dried. It may have been depectinised (¹³).	Crude fibre
5.18	Broken chestnuts	Product of the production of chestnut flour, consisting mainly of particles of endosperm, with fine fragments of envelopes and a few remnants of chestnut (<i>Castanea</i>).	Crude protein Crude fibre

¹³ If the product is depectinised, it should be stated in the designation

5.19	Coffee skins	Product obtained from dehusked coffee seeds.	Crude fibre
5.20	Cornflower seed	Seed of cornflower.	
5.21	Cucumber seed	Seeds of cucumber.	
5.22	Cypress seed	Seed of <i>Cupressus</i> L.	
5.23	Date fruit	Fruits of <i>Phoenix dactylifera</i> .	
5.24	Date seed	Whole seed of the date plant <i>Phoenix dactylifera</i>	Crude fibre
5.25	Fennel seed	Seed, extract or oil of <i>Foeniculum vulgare</i> .	
5.26	Fig fruit	Fruits of <i>Ficus carica</i> .	
5.27	Garden kress	Seed from garden kress.	Crude fibre
5.28	Graminaceous seed	Seeds normally used to sow pasture.	
5.29	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
5.30	Grape pips	Pips separated from grape pulp, from which the oil has not been removed.	Crude fat Crude fibre
5.31	Grape pips meal	Product obtained during the extraction of oil from grape pips.	Crude fibre

5.32	Hemp seed	Controlled hemp seed with a THC content lower than 0.2%.	
5.33	Locust bean seed	Bean of the carob tree <i>Ceratonia siliqua</i> L.	Crude fibre
5.34	Pectin	Pectin extracted from fruit	
5.35	Perilla seed	Seed of <i>Perilla frutescens</i> L. and its milling products.	
5.36	Pine nut	Seed from <i>Pinus</i> ssp.	
5.37	Plantago seed	Seed of <i>Plantago</i> L.	
5.38	Radish seed	Seed of <i>Raphanus sativus</i> .	
5.39	Red cabbage seed	Seed of <i>Brassica oleracea</i> var. capitata f. Rubra.	
5.40	Red clover seed	Seed of <i>Trifolium pratense</i> .	
5.41	Spinach seed	Seed of <i>Spinacia oleracea</i> L.	
5.42	Thistle seed	Seed from <i>Carduus marianus</i> .	
5.43	Tomato pulp, [tomato pomace]	Product obtained by pressing tomatoes <i>Solanum lycopersicum</i> Karst during the production of tomato juice. It consists principally of tomato peels and seeds	Crude fibre
5.44	Yarrow seed	Seeds of <i>Achillea millefolium</i> .	

5.45	White clover seed	Seed of <i>Trifolium repens</i> L.	
5.46	Fruit pulp ⁽¹⁴⁾	Product obtained during the production of fruit juice and fruit purees. It may have been depectinised ⁽¹³⁾ .	Crude fibre
5.47	Fruit pulp, dried ⁽¹⁴⁾	Product obtained during the production of fruit juice and fruit purees which is subsequently dried. It may have been depectinised ⁽¹³⁾	Crude fibre
5.48	Fruit kernels ⁽¹⁵⁾	Product consisting of the inner, edible seed of a nut or fruit stone.	

¹⁴ The name may be supplemented by the fruit species.

¹⁵ This name may be supplemented by a more accurate description of the fruit kernels concerned

6. Forages and roughage, and products derived thereof

Number	Name	Description	Compulsory declarations
6.01	Beet leaves	Fresh leaves of <i>Beta</i> species.	
6.02	Beet leaves, dried	Dried leaves of <i>Beta</i> species	
6.03	Cereal plants ⁽¹⁶⁾	Fresh, whole plants of cereal species or parts thereof.	
6.04	Cereal plants, dried ⁽¹⁷⁾	Dried whole plants of cereal species or parts thereof.	
6.05	Cereals straw ⁽¹⁷⁾	Straw of cereals	
6.06	Cereal straw, treated ⁽¹⁸⁾	Product obtained by an appropriate treatment of cereal straw.	Sodium, if treated with NaOH
6.07	Clover meal	Product obtained by drying and milling young clover <i>Trifolium</i> spp. It may contain up to 20% young lucerne 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
6.08	Forage meal ⁽¹⁹⁾	Product obtained by drying and milling young forage plants.	Crude protein Crude fibre Ash insoluble, in HCl, if >3,5% of dry matter

¹⁶ This name may be supplemented by a more accurate description of the grain species.

¹⁷ The plant species must be stated in the designation.

¹⁸ The name must be supplemented by an indication of the nature of the chemical treatment carried out.

¹⁹ The species of forage crop may be added to the name.

6.09	Grass plants ⁽¹⁷⁾	Whole plants of grass species or parts thereof.	
6.10	Hemp flour	Flour extracted from dried leaves from <i>cannabis sativa</i> L.	Crude protein
6.11	Horse bean straw	Straw of horse bean.	Crude fibre
6.12	Linseed straw	Straw of linseed (<i>Linum usitatissimum</i> L.)	Crude fibre
6.13	Lucerne, [Alfalfa]	Seeds of young lucerne <i>Medicago sativa</i> L. and <i>Medicago var. Martyn</i>	
6.14	Lucerne, extruded ; [Alfalfa, extruded]	Alfalfa pellets obtained from previously pelleted alfalfa by means of a treatment in humid, warm conditions and under pressure.	
6.15	Lucerne meal; [Alfalfa meal] ⁽²⁰⁾	Product obtained by drying and milling young lucerne <i>Medicago sativa</i> L. and <i>Medicago var. Martyn</i> . It may contain up to 20% young 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
6.16	Lucerne pomace; [Alfalfa pomace]	Dried product obtained by pressing of the juice from lucerne.	Crude protein Crude fibre
6.17	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
6.18	Lucerne solubles	Product obtained during the extraction of proteins from lucerne juice.	Crude protein Crude fibre

²⁰ The term "meal" may be replaced by "pellets". The method of drying may be added to the name.

6.19	Lucerne solubles, dried	Product obtained during the extraction of proteins from lucerne juice and then dried into a powder.	Crude protein Crude fibre
6.20	Pea Straw	Straw of pea.	

7. Other plants and products derived thereof

Number	Name	Description	Compulsory declarations
7.01	Algae	Algae, live or processed, regardless of their presentation, including fresh, chilled or frozen algae.	Crude protein Crude fat Crude ash
7.02	Enriched algae	Algae cells containing components in quantities beyond the standard value observed in cells grown under standard natural conditions. The enrichment is attained by special treatments, including changes in physiological condition, e.g. increasing temperature beyond sublethal values, nutrient limitation, genetic modification, inhibitors, etc.	Crude protein Crude fat Crude ash
7.03	Dried algae	Product obtained by drying algae. This product may have been washed to reduce the iodine content.	Crude protein Crude fat Crude ash
7.04	Algae meal	Product of algae oil manufacture, obtained by extraction of algae.	Crude protein Crude fat Crude ash
7.05	Algal oil	Product of the oil manufacture from algae obtained by extraction.	Crude fat Moisture if > 1%
7.06	Algae extract	Watery or alcoholic extract of algae that principally contains carbohydrates.	
7.07	Barks	Cleaned and dried barks of trees or bushes.	Crude fibre
7.08	Blossoms, dried	All parts of dried blossoms of consumable plants and their extracts.	Crude fibre
7.09	(Sugar) cane molasses	Product obtained during the manufacture or refining of sugar from sugar canes.	Total sugars calculated as sucrose Moisture, if > 30 %
7.10	(Sugar) cane molasses partially-desugared	Product obtained after further extraction of sucrose from sugar cane molasses.	Total sugars calculated as sucrose Moisture, if > 28 %

7.11	(Cane) sugar⁽²¹⁾	Product extracted from sugar canes.	Sucrose
7.12	Cane bagasse	Product obtained during extraction of sugar from sugar canes.	Crude fibre
7.13	Leaves, dried	Dried leaves of consumable plants and their extracts.	Crude fibre
7.14	Lignocellulose	Product obtained by mechanical treatment of natural wood	Crude fibre
7.15	Liquorice root	Root of <i>Glycyrrhiza L.</i>	
7.16	Olive-tree leaves	Fresh olive-tree leaves (<i>Olea europea L</i>)	
7.17	Olive-tree leaves, dried	Dried olive-tree leaves (<i>Olea europea L</i>)	
7.18	Poppy seed	Seeds of <i>Papaver somniferum.</i>	
7.19	Poppy flour	Flour extracted from seed of <i>Papaver somniferum.</i>	Crude protein Crude fat
7.20	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.	Crude ash
7.21	Vegetal carbon	Product obtained by calcination of organic vegetal material	
7.22	Wood	Mature wood or wood fibres	Crude fibre

²¹ This name may be replaced by 'sucrose'

8. Milk products and products derived thereof

Number	Name	Description	Compulsory declarations
8.01	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%
8.02	Buttermilk / Buttermilk concentrate / Buttermilk powder	Product obtained by churning butter out of cream or similar processes. Drying may be applied.	Crude protein Crude fat Lactose Moisture, if > 6%
8.03	Casein	Product obtained from skimmed or buttermilk by drying casein precipitated by means of acids or rennet.	Crude protein Moisture, if > 10%
8.04	Caseinate	Product extracted from curd or casein through use of neutralizing substances and drying.	Crude protein Moisture, if > 10 %
8.05	Cheese and cheese products	Cheese and products made of cheese and of milk based products.	Crude protein Crude fat
8.06	Colostrum	Product secreted by the mammary glands at the time of parturition, precedes the production of milk.	Crude protein
8.07	Dairy by-products	Products obtained when producing dairy products (including, but not limited to: former dairy foodstuffs, centrifuge or separator sludge, rinsed milk mixtures, milk minerals)	Moisture Crude protein Crude fat Total sugars
8.08	Fermented milk products	Products obtained by fermentation process of milk (e.g. yoghurt etc.).	Crude protein Crude fat
8.09	Lactose	The sugar separated from milk or whey by purification and drying.	Lactose Moisture, if > 5%
8.10	Milk / Milk concentrate / Milk powder	Normal mammary secretion obtained from one or more milkings. Drying may be applied.	Crude protein Crude fat Moisture, if > 5%

8.11	Skimmed milk / Skimmed milk concentrate / Skimmed milk powder	Milk whose fat content has been reduced by separation. Drying may be applied.	Crude protein Moisture, if > 5%
8.12	Milk fat	Product obtained by skimming milk.	Crude fat
8.13	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	Condensed and evaporated milk	Condensed and evaporated milk and products obtained by production or processing of these products.	Crude protein Crude fat Moisture, if > 5%
8.15	Milk permeate / Milk permeate powder	Product obtained by filtration (ultra, nano or micro) of milk (penetrating through the membrane) and from which lactose may have been partly be removed. Reverse osmosis and drying may be applied.	Crude ash Crude protein Lactose Moisture, if > 8 %
8.16	Milk retentate / Milk retentate powder	Product obtained by filtration (ultra, nano or micro) of milk (withheld by the membrane). Drying may be applied.	Crude protein Crude ash Lactose Moisture, if > 8 %
8.17	Whey / Whey Concentrate / Whey Powder	Product of cheese, quark or casein manufacturing or similar processes. Drying may be applied.	Crude protein Lactose Moisture if > 8% Crude ash
8.18	Delactosed Whey/ Delactosed Whey powder	Whey from which the lactose has been partly removed. Drying may be applied.	Crude protein Lactose Moisture if > 8% Crude ash
8.19	Whey protein / Whey protein powder	Product obtained by drying the whey protein compounds extracted from whey by chemical or physical treatment. Drying may be applied.	Crude protein Moisture if > 8%
8.20	Demineralised, delactosed whey / Demineralised, delactosed whey powder	Whey from which the lactose and minerals have been partly removed. Drying may be applied.	Crude protein Lactose Crude ash Moisture, if > 8 %
8.21	Whey permeate / Whey permeate powder	Product obtained by filtration (ultra, nano or micro) of whey (penetrating through the membrane) and from which lactose may have been partly removed.	Crude ash Crude protein Lactose

		Reverse osmosis and drying may be applied.	Moisture, if > 8 %
8.22	Whey retentate / whey retentate powder	Product obtained by filtration (ultra, nano or micro) of whey (withheld by the membrane). Drying may be applied.	Crude protein Crude ash Lactose Moisture, if > 8 %

9. Land animal products and products derived thereof

Note: All entries must comply with the restrictions on the use of these ingredients in the relevant EU-legislation

- (a) This name may be supplemented by a more accurate description of
- the animal species processed (e.g. porcine PAP),
 - the naming of the animal species not processed in respect of the ban of intra-species recycling (e.g. poultry-free PAP)
 - the material processed (e.g. bone PAP, greaves PAP, feather PAP, blood PAP, high or low ash PAP, bone fat) or
 - the process used (e.g. defatted PAP, refined fat).

Number	Name	Description	Compulsory declarations
9.01	Albumen, pasteurised	Product obtained from poultry eggs after the separation of shells and yolk, pasteurised and possibly denatured	
9.02	Animal by-products	Whole or parts of warm-blooded land animals, fresh, frozen, cooked or dried	
9.03	Animal fat (a)	Product composed of fat from warm-blooded land animals.	Moisture, if >1%
9.04	Apiculture by-products	Honey, beeswax, royal jelly, propolis, pollen, processed or unprocessed	
9.05	Processed Animal Protein /PAP (a)	Product obtained by heating, drying and grinding whole or parts of warm-blooded land animals from which the fat may have been partially extracted or physically removed.	Crude protein Crude fat Crude ash Moisture, if >8%
9.06	Dried Animal Proteins (a)	Dried animal proteins of food quality derived from gelatine or fat melting operations.	Crude protein Crude fat Crude ash Moisture, if >8%
9.07	Hydrolysed animal proteins (a)	Hydrolysed proteins obtained by chemical, microbiological or enzymatic hydrolysis of animal protein.	Crude protein Moisture, if >8%

9.08	Blood PAP or Blood meal (a)	Product derived from the heat treatment of blood or fractions of blood.	Crude protein Moisture, if > 8%
9.09	Blood products (a)	Products derived from blood or fractions of blood; they include dried/frozen/liquid plasma, dried whole blood, dried/frozen/liquid red cells or fractions thereof and mixtures.	Crude protein Moisture, if >8%
9.10	Bone ash	Mineral residues from the incineration, combustion or gasification of animal by products	Calcium Total Phosphorus
9.11	Catering waste	All waste food 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 >8%
9.12	Collagen (a)	Protein-based product derived from animal bones, hides, skins and tendons	Crude protein Moisture, if >8%
9.13	Eggs	Whole eggs with or without shells	
9.14	Egg products, dried	Product consisting of pasteurised and dried eggs, without shells or a mixture of different proportions of dried albumen and dried egg yolk	Moisture, if > 5%
9.15	Egg powder sugared	Powdered whole or parts of eggs to which one or several types of sugar has been added	Moisture, if > 5%
9.16	Egg shells, dried	Product obtained from poultry eggs, after the content (yolk and albumen) has been removed. Shells are dried.	
9.17	Feather PAP or Feather meal	Product obtained by drying feathers of slaughtered animals.	Crude protein Moisture, if > 8%
9.18	Gelatine (a)	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%
9.19	Greaves (a)	Residual product of the manufacture of tallow, lard and other extracted or physically removed fats of animal origin, fresh, frozen or dried	Crude protein Crude fat Crude ash Moisture, if >8%

9.20	Products of animal origin, or foodstuffs containing products of animal origin	Products that are no longer intended for human consumption for commercial reasons or due to problems of manufacturing or packaging defects or other defects from which no risk to public or animal health; with or without treatment such as fresh, frozen, dried	
9.21	Terrestrial invertebrates	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	

10. Fish, other marine animals and products derived thereof

Number	Name	Description	Compulsory declarations
10.01	Aquatic Invertebrates	Whole or parts of marine invertebrates, in all their life stages, other than species pathogenic to humans and animals; with or without treatment such as fresh, frozen, dried	
10.02	By-products from aquatic animals	Originating from establishments or plants preparing or manufacturing products for human consumption; with or without treatment such as fresh, frozen, dried.	
10.03	Crustacea Meal	Product produced by heating pressing and drying whole or parts of crustacean including wild and farmed shrimp.	Crude protein Crude fat Crude ash, if > 20 % Moisture, if >8 %
10.04	Fish meal ⁽²²⁾	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 %
10.05	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 %
10.06	Fish protein, hydrolysed	Product obtained by acid hydrolysis of whole or parts of fish often concentrated by drying.	Crude protein Crude fat Crude ash, if > 20 % Moisture, if >8 %
10.07	Fishbone meal	Product obtained by heating, pressing and drying parts of fish. It consists principally of fishbone.	Crude ash
10.08	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).	Moisture, if > 1 %
10.09	Fish oil, hydrogenated	Oil obtained from hydrogenation of fish oil.	Moisture, if > 1 %

²² Products containing more than 75% crude protein in the dry matter may be qualified as 'rich in protein'

10.10	Krill oil	Oil obtained from cooked and pressed marine planktonic krill followed by centrifugation to remove water.	Moisture, if > 1 %
10.11	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 %
10.12	Marine annelid meal	Product produced by heating and drying whole or parts of marine annelids, including <i>Nereis virens</i> .	Fat Ash if >20% Moisture if >8%
10.13	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 %
10.14	Marine zooplankton oil	Oil obtained from cooked and pressed marine zooplankton followed by centrifugation to remove water.	Moisture, if > 1 %
10.15	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 %
10.16	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 %

11. Minerals and products derived thereof

Number	Name	Description	Compulsory declarations
11.A.01	Calcium carbonate (²³) / [Limestone]	Product obtained by grinding sources of calcium carbonate, such as limestone or by precipitation from acid solution.	Calcium Ash insoluble in HCl if > 5%
11.A.02	Calcium and magnesium carbonate	Natural mixture of calcium carbonate and magnesium carbonate.	Calcium Magnesium Ash insoluble in HCl if > 5%
11.A.03	Maerl	Product of natural origin obtained from calcareous marine algae, ground or granulated.	Calcium Ash insoluble in HCl if >5%
11.A.04	Lithothamn	Product of natural origin obtained from calcareous marine algae, (<i>Lithothamnium Calcareum</i>) ground or granulated.	Calcium Ash insoluble in HCl if >5%
11.A.05	Calcium chloride	Technically pure calcium chloride.	Calcium Ash insoluble in HCl if >5%
11.A.06	Calcium hydroxide	Technically pure calcium hydroxide.	Calcium Ash insoluble in HCl if >5%
11.A.07	Calcium sulphate anhydrous	Product obtained by grinding calcium sulphate anhydrous or dehydration of calcium sulphate dihydrate. Purity not less than 80% CaSO ₄ .	Calcium Ash insoluble in HCl if >5%
11.A.08	Calcium sulphate hemihydrate	Product obtained by partially dehydrating calcium sulphate dihydrate Purity not less than 80% CaSO ₄ .1/2H ₂ O	Calcium Ash insoluble in HCl if >5%
11.A.09	Calcium sulphate dihydrate	Product obtained by grinding calcium sulphate dihydrate or hydration of calcium sulphate hemihydrate Purity not less than 80% CaSO ₄ .2H ₂ O.	Calcium Ash insoluble in HCl if >5%
11.A.10	Calcium salts of organic acids	Calcium salts of organic acids	Calcium

²³ The nature of the source may be indicated additionally in the name or replace it

11.A.11	Calcium oxide	Technical pure calcium oxide obtained from calcination of naturally occurring limestone	Calcium Ash insoluble in HCl if >5%
11.A.12	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.A.13	Calcium chelate	Based on soya-derived amino acids according to the following formula $\text{Ca}(x)1-3 \cdot n\text{H}_2\text{O}$ (x = anion of any amino acid derived from hydrolysed soya protein)	Calcium , Nitrogen Ash insoluble in HCl if >5%
11.A.14	Calcium glycinate	Based on synthetic glycine according to the following formula $\text{Ca}(x)1-3 \cdot n\text{H}_2\text{O}$ (x=glycine molecule)	Calcium , Nitrogen Ash insoluble in HCl if >5%
11.A.15	Calcium Sulphate / Carbonate	Product obtained during the manufacturing of sodium carbonate.	Calcium, Magnesium, Sodium Ash insoluble in HCl if >10%
11.A.16	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.A.17	Calcium pidolate	Technically pure L-Calcium Pidolate.	Calcium Ash insoluble in HCl if >5%
11.B.01	Magnesium oxide	Calcined magnesium oxide (MgO) not less than 70% MgO.	Magnesium Ash insoluble in HCl if >15%
11.B.02	Magnesium sulphate heptahydrate	Technically pure magnesium sulphate ($\text{MgSO}_4 \cdot 7\text{H}_2\text{O}$).	Magnesium Sulphur ash insoluble in HCl if >15%
11.B.03	Magnesium sulphate monohydrate	Technically pure magnesium sulphate ($\text{MgSO}_4 \cdot 1\text{H}_2\text{O}$).	Magnesium Sulphur ash insoluble in HCl if >15%
11.B.04	Magnesium sulphate anhydrous	Technically pure anhydrous magnesium sulphate (MgSO_4).	Magnesium Sulphur ash insoluble in HCl if >10%

11.B.05	Magnesium propionate	Technically pure magnesium propionate	Magnesium
11.B.06	Magnesium chloride	Technically pure magnesium chloride or solution obtained by natural concentration of sea water after deposit of sodium chloride.	Magnesium, Chloride ash insoluble in HCl if >10%
11.B.07	Magnesium carbonate	Natural magnesium carbonate.	Magnesium ash insoluble in HCl if >10%
11.B.08	Magnesium hydroxide	technically pure magnesium hydroxide.	Magnesium ash insoluble in HCl if >10%
11.B.09	Magnesium potassium sulphate	Technically pure magnesium potassium sulphate.	Magnesium Potassium ash insoluble in HCl if >10%
11.B.10	Magnesium salts of organic acids	Magnesium salts of organic acids	Magnesium
11.B.11	Magnesium chelate	Based on soya-derived amino acids according to the following formula $Mg(x)1-3 \cdot nH_2O$ (x) = anion of any amino acid derived from hydrolysed soya protein	Magnesium, Nitrogen
11.B.12	Magnesium glycinate	Based on synthetic glycine according to the following formula $Mg(x)1-3 \cdot nH_2O$ (x=glycine molecule)	Magnesium , Nitrogen
11.C.01	Dicalcium phosphate ⁽²⁴⁾	Technically pure calcium monohydrogen phosphate obtained from bones or inorganic sources ($CaHPO_4 \cdot xH_2O$)	Calcium Total phosphorus P insoluble in 2% citric acid if >10% Ash insoluble in HCl if >5% Ca/P > 1.2
11.C.02	Mono-dicalcium phosphate	Product obtained chemically and composed of dicalcium phosphate and mono-calcium phosphate ($CaHPO_4 \cdot Ca(H_2PO_4)_2 \cdot H_2O$)	Total phosphorus Calcium P insoluble in 2% citric acid if >10% $0.8 < Ca/P < 1.3$
11.C.03	Defluorinated phosphate	Rock phosphate, calcined and further heat treated for the removal of impurities	Total phosphorus Calcium Sodium

²⁴ The manufacturing process may be included in the name.

			P insoluble in 2% citric acid if >10%
11.C.04	Mono-calcium phosphate	Technically pure calcium-bis dihydrogenphosphate ($\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot x\text{H}_2\text{O}$)	Total phosphorus Calcium P insoluble in 2% citric acid if >10% Ca/P <0.9
11.C.05	Calcium-magnesium phosphate	Technically pure calcium-magnesium phosphate	Calcium Magnesium Total phosphorus P insoluble in 2% citric acid if >10%
11.C.06	Magnesium phosphate	Product consisting of technically pure monobasic and/or dibasic and/or tribasic magnesium phosphate	Total phosphorus Magnesium P insoluble in 2% citric acid if >10% Ash insoluble in HCl if >5%
11.C.07	Mono-ammonium phosphate	Technically pure mono-ammonium phosphate ($\text{NH}_4\text{H}_2\text{PO}_4$)	Total nitrogen Total phosphorus P insoluble in 2% citric acid if >10%
11.C.08	Sodium-calcium-magnesium phosphate	Product consisting of technically pure sodium-calcium-magnesium phosphate	Total phosphorus Magnesium Calcium Sodium P insoluble in 2% citric acid if >10%
11.C.09	Mono-sodium phosphate	Technically pure mono-sodium phosphate ($\text{NaH}_2\text{PO}_4 \cdot x\text{H}_2\text{O}$)	Total phosphorus Sodium P insoluble in 2% citric acid if >10%
11.C.10	Mono-potassium phosphate	Technically pure mono-potassium phosphate ($\text{KH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$)	Total phosphorus Potassium P insoluble in 2% citric acid if >10%
11.C.11	Di-sodium phosphate	Technically pure di-sodium phosphate ($\text{Na}_2\text{HPO}_4 \cdot \text{H}_2\text{O}$)	Total phosphorus Sodium P insoluble in 2% citric acid if >10%
11.C.12	Di-potassium phosphate	Technically pure di-potassium phosphate ($\text{K}_2\text{HPO}_4 \cdot \text{H}_2\text{O}$)	Total phosphorus Potassium P insoluble in 2% citric acid if >10%

11.C.13	Phosphoric acid	Defluorinated feed grade phosphoric acid	Total phosphorus
11.C.14	Calcium sodium phosphate	Technically pure calcium sodium phosphate	Total phosphorus Calcium Sodium P insoluble in 2% citric acid if >10%
11.C.15	Di-ammonium phosphate	Technically pure di-ammonium phosphate ((NH ₄) ₂ HPO ₄)	Total nitrogen Total phosphorus P insoluble in 2% citric acid if >10%
11.C.16	Sodium tri-polyphosphate	Technically pure sodium tri-polyphosphate	Total phosphorus Sodium P insoluble in 2% citric acid if >10%
11.C.17	Tri-calcium phosphate	Technically pure tricalcium phosphate from bones or inorganic sources (Ca ₃ (HPO ₄) ₂ .xH ₂ O)	Calcium Total phosphorus P insoluble in 2% citric acid if >10% Ca/P > 1.3
11.C.18	Sodium and magnesium phosphate	Technically pure sodium-magnesium phosphate	Total phosphorus Magnesium Sodium P insoluble in 2% citric acid if >10%
11.C.19	Trisodium Phosphate	Technically pure tri sodium phosphate (Na ₃ PO ₄)	Total phosphorus Sodium P insoluble in 2% citric acid if >10%
11.C.20	Magnesium Hypophosphite	Technically pure magnesium hypophosphite (Mg(H ₂ PO ₂) ₂ , 6H ₂ O)	Magnesium Total phosphorus P insoluble in 2% citric acid if >10%
11.D.01	Sodium chloride (²²)	Technically pure sodium chloride or product obtained by grinding natural sources of sodium chloride, such as (rock) and (marine) salt.	Sodium ash insoluble in HCl if >10%
11.D.02	Sodium bicarbonate	Technically pure sodium bicarbonate (NaHCO ₃)	Sodium ash insoluble in HCl if >10%
11.D.03	Sodium/ammonium (bi)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.D.04	Sodium carbonate	Technically pure sodium carbonate (Na ₂ CO ₃)	Sodium ash insoluble in HCl if >10%

11.D.05	Sodium sulphate	Technically pure sodium sulphate	Sodium ash insoluble in HCl if >10%
11.D.06	Sodium salts of organic acids	Sodium salts of organic acids	Sodium
11.D.07	Sodium glycinate	Based on synthetic glycine according to the following formula $\text{Na}(x)1-3 \cdot n\text{H}_2\text{O}$ (x=glycine molecule)	Sodium , Nitrogen
11.D.08	Sodium sesquicarbonate	Technically pure sodium sesquicarbonate ($\text{Na}_3\text{H}(\text{CO}_3)_2$)	Sodium ash insoluble in HCl if >10%
11.E.01	Potassium chloride	Technically pure potassium chloride or product obtained by grinding natural sources of potassium chloride	Potassium Ash insoluble in HCl if >10%
11.E.02	Potassium sulphate	Technically pure potassium sulphate (K_2SO_4)	Potassium Ash insoluble in HCl if >10%
11.E.03	Potassium carbonate	Technically pure potassium carbonate (K_2CO_3).	Potassium, Ash insoluble in HCl if >10%
11.E.04	Potassium bicarbonate	Technically pure potassium bicarbonate (KHCO_3).	Potassium, Ash insoluble in HCl if >10%
11.E.05	Potassium salts of organic acids	Potassium salts of organic acids	Potassium
11.F.01	Flower of sulphur	Technically pure powder obtained from natural deposits of the mineral	Sulphur
11.G.01	Attapulgite	Natural magnesium-aluminium-silicon mineral	Silica
11.G.02	Quartz	Naturally occurring mineral obtained by grinding sources of quartz.	Silica
11.G.03	Cristobalite	Silicon dioxide obtained from the re-crystallisation of quartz	Silica

12. Miscellaneous

Note: feed materials listed in this category may contain technically unavoidable packaging residues.

Number	Name	Description	Compulsory declarations
12.01	Ammonium chloride	Technically pure ammonium chloride	Chloride, Nitrogen
12.02	Ammonium sulphate	Technically pure ammonium sulphate	Sulphur, Nitrogen
12.03	Ammonium salts of organic acids	Ammonium salts of organic acids	Nitrogen
12.04	Feed beer	Product of the brewing process which is unsaleable as a human beverage.	Alcohol content
12.05	Caramelized sugar	Product obtained by the controlled heating of any sugar.	Total sugars, calculated as sucrose
12.06	Chondroitin sulphate	Product obtained by extraction from tendons, bones and other animal tissues containing cartilage and soft connective tissues.	Sodium
12.07	Dextrin	Dextrin is partially acid hydrolysed starch.	
12.08	Dextrose	Dextrose is obtained after hydrolysis of starch and consists of purified, crystallised glucose, with or without crystal water.	Sugars
12.09	Fatty acids	Product obtained during the deacidification, by means of lye or by distillation of oils and fats of unspecified vegetable or animal origin. Also, product obtained by various ways of processing of fats and oils or related oleochemical feed stocks as practised by fatty acid manufacturers.	Crude fat Moisture, if > 1 %

12.10	Fatty acids esterified with glycerol⁽²⁵⁾	Glycerides obtained by the esterification of glycerol of vegetable origin with fatty acids	Moisture, if > 1% Crude fat
12.11	Mono and diglycerides of fatty acids	Mono- and diglycerides of fatty acids consist of mixtures of glycerol, mono-, di- and triesters of fatty acids occurring in food oils and fats. They may contain small amounts of free fatty acids and glycerol.	Crude fat
12.12	Salts of fatty acids	Product obtained by reaction of fatty acids with calcium, magnesium, sodium or potassium compounds	Crude fat ⁽²⁶⁾ Moisture Ca or Na or K or Mg (when appropriate)
12.13	Fructose	Fructose occurs 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
12.14	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 (cell wall in fungi and many higher organisms (normal constituents of mucopolysaccharides of skeletal and soft connective tissue)	Sodium or Potassium depending on the source
12.15	Glucose molasses	Product produced during refining process of glucose syrups.	Total sugars
12.16	Glucose syrup	Glucose syrup is a purified and concentrated aqueous solution of nutritive saccharides obtained through hydrolysis from starch.	Total sugars, Moisture if > 30%
12.17	Glycerine, crude	Product of biodiesel production (methyl or ethyl esters of fatty acids), obtained by transesterification of oils and fats of unspecified vegetable and animal origin. Mineral and organic salts might remain in the glycerine. (Maximum content of methanol 0.5 %) Also a product of oleochemical processing of mineral fats and oils, including trans-esterification, hydrolysis or saponification.	Glycerol Potassium Sodium
12.18	Glycerine	Product of biodiesel production (methyl or ethyl esters of fatty acids), obtained by transesterification of oils and fats of unspecified vegetable and animal origin with subsequent refining of the glycerine. (Minimum content of glycerol: 99 % of dry matter).	Glycerol Potassium Sodium

²⁵ The name may be amended or supplemented to specify the fatty acids used.

²⁶ After hydrolysis

		Also a product of oleochemical processing of mineral oils and fats, including trans-esterification, hydrolysis or saponification.	
12.19	Isomalt	Sugar alcohol obtained from sucrose after enzymatic conversion and hydrogenation.	
12.20	Maltodextrin	Maltodextrin is the partially hydrolysed starch.	
12.21	Mannitol	Mannitol is a sugar alcohol with the formula (C ₆ H ₈ (OH) ₆).	
12.22	Methyl Sulphonyl Methane	Organo-sulfur compound obtained by synthetic way which is identical to the naturally occurring source in plants (CH ₃) ₂ SO ₂ .	Sulphur
12.23	Peat	Product from the natural decomposition of plant (mainly sphagnum) in anaerobic and oligotrophic environment.	Crude Fibre
12.24	Products from the bakery and pastry industry	Products obtained during and from the production bread, biscuits, cakes, wafers or pastry goods. They may be dried.	Starch Total sugars, calculated as sucrose, Crude fat, if > 5%
12.25	By products from processing fresh fruit and vegetables	By-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 > 5 %
12.26	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.	
12.27	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
12.28	Products of the ice-cream industry	Products obtained when producing ice-cream. They may be dried.	Starch Total sugars, calculated as sucrose, Crude fat

12.29	Product from processing plants, spices, and herbs	Products obtained from freezing or drying plants, spices, and herbs or their parts.	
12.30	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 > 5 % If the product comes from an agro-industrial process and has a moisture content > 50 %, there are no compulsory declarations.
12.31	Products and by-products of the sauces production	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 fat
12.32	Products and by-products from the savoury snacks industry	Products and by-products 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.	
12.33	Products from the ready-to-eat food industry	Products obtained during the production of ready to eat food. They may be dried.	
12.34	By-product from soybean preparation	By-products obtained when processing soybeans to obtain soybean preparation.	Crude protein
12.35	Plants by-products from spirits production	Product obtained by extracting the essential oils from several plants (seeds such as juniper and anise) in spirits production	
12.36	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
12.37	Polydextrose	It is a randomly bonded bulk polymer of glucose produced by thermal polymerisation of D-Glucose.	
12.38	Propylene glycol	Also called 1,2-propanediol or propane-1,2-diol, is an organic compound (a diol or double alcohol) with formula C ₃ H ₈ O ₂ or HO-CH ₂ -CHOH-CH ₃ . It is a viscous liquid with a faintly sweet taste, hygroscopic and miscible with water, acetone, and chloroform.	

12.39	Sorbitol	Also known as glucitol is a sugar alcohol. It is obtained by reduction of glucose changing the aldehyde group to an additional hydroxyl group	
12.40	Starch	Technically pure starch.	Starch
12.41	Starch, pre-gelatinised	Product consisting of starch expanded by heat treatment.	Starch
12.44	Starch mixture	Product consisting of native and/or modified food starch obtained from different botanical sources.	Starch
12.45	Starch hydrolysates cake	Product from starch hydrolysis. It consists of protein fat and filter aid (e.g. diatomaceous earth , wood fibre)	Moisture if <25% - 45 % If moisture <25%: -Crude fat - Crude protein
12.46	Xylose	Sugar extracted from wood	

13. Fermentation by-products

Name of product	Designation of nutritive principle of identity of microorganism	Culture substrate (specifications, if any)	Compulsory Declarations	Comments
<p>1. Proteins obtained from the following groups of micro-organisms</p> <p><i>1.1 Bacteria</i></p> <p><i>1.1.1 Bacteria cultivated on methanol</i></p> <p>Protein product of fermentation obtained by culture of <i>Methylophilus methylotrophus</i> on methanol</p>	<p><i>Methylophilus methylotrophus</i> NCIB strain 10.515</p>	<p>Methanol</p>	<p>Crude protein min. 68 %²⁷ Reflectance index at least 50²⁸</p>	
<p><i>1.1.2 Bacteria cultivated on natural gas</i></p> <p>Protein product of fermentation from natural gas obtained by culture of <i>Methylococcus capsulatus</i>(Bath), <i>Alcaligenes acidovorans</i>, <i>Bacillus Brevis</i> et <i>Bacillus firmus</i>, and the cells of which have been killed</p>	<p><i>Methylococcus capsulatus</i>(Bath) NICB strain 11132, <i>Alcaligenes acidovorans</i> NCIMB strain 12387, <i>Bacillus Brevis</i> strain NCIMB strain 13288 <i>Bacillus firmus</i> strain NCIMB strain 13280</p>	<p>Natural gas. (approx. 91% methane 5% ethane 2% propane 0.5% isobutane 0.5% n-butane) ammonia, mineral salts</p>	<p>Crude protein min. 65 %²⁹</p>	
<p><i>1.1.3 Bacteria from fermentation of amino acids with Escherichia Coli</i></p>	<p><i>Escherichia Coli</i> K12</p>	<p>Substrates of vegetable or chemical origin,</p>	<p>Crude protein</p>	

²⁷ Information in Annex of Directive (EC) No.82/471

²⁸ Information in Annex of Directive (EC) No.82/471

²⁹ Information in Annex of Directive (EC) No.82/471

Protein product of fermentation from substrates of vegetable or chemical origin obtained by culture of <i>Escherichia Coli K12</i> , and the cells of which have been killed, untreated or hydrolysed		ammonia, mineral salts		
<p>1.1.4 Bacteria from fermentation of amino acids with <i>Corynebacterium Glutamicum</i></p> <p>Protein product of fermentation from substrates of vegetable or chemical origin obtained by culture of <i>Corynebacterium Glutamicum</i> , and the cells of which have been killed, untreated or hydrolysed</p>	<i>Corynebacterium Glutamicum</i>	Substrates of vegetable or chemical origin, ammonia, mineral salts	Crude protein	
<p>1.2 Yeasts</p> <p>1.2.1 Yeasts cultivated on substrates of animal or vegetable origin</p> <p>All yeasts and part thereof</p> <ul style="list-style-type: none"> • Obtained from micro-organisms and substrates listed in columns 3 • The cells which have been killed. • In liquid / paste/ dry form <p>1.2.2 Yeasts cultivated</p>	<p><i>Saccharomyces cerevisiae</i>, <i>Saccharomyces carls-bergiensis</i> <i>Kluyveromyces lactis</i> <i>Kluyveromyces fragilis</i> <i>Torulaspora delbrueckii</i> <i>Candida utilis/ alias Pichia jadinii</i></p>	Substrates mostly of vegetable or chemical ³⁰ origin, such as for example: Molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar, hydrolyzed vegetable fibres, etc...	Moisture, if <75% or >97%	

³⁰ The chemical substrates refer to the chemical elements used as nutriment for the fermentation (as the fermentation substrates used to lack some chemical elements), such as for example: ammonia, mineral salts, phosphoric acids, vitamins etc...

<i>on substrates other than given in 1.2.1</i>				
1.3 Algae				
<p>1.4 Lower fungi</p> <p>1.4.1 Products from production of antibiotics by fermentation</p> <p>1.4.1.1 Mycelium, wet by-product from the production of penicillin, ensiled by means of <i>Lactobacillus brevis</i>, <i>L. plantarum</i>, sake, collenoid and <i>Streptococcus lactis</i> to inactivate the penicillin and heat treated</p>	Nitrogenous compound <i>Penicillium chrysogenum</i> ATCC48271	Different sources of carbohydrates and their hydrolysates		
2. Non-protein nitrogenous compounds				
<p>2.3 By-products from the production of amino acids by fermentation</p> <p>2.3.1 concentrated liquid by-products from production of L-glutamic acid by fermentation with <i>Corynebacterium melassecola</i></p> <p>2.3.2 concentrated liquid by-products from production of L-Lysine monohydrochloride by fermentation with</p>	<p>Ammonium salts and other nitrogenous compounds</p> <p>Ammonium salts and other nitrogenous compounds</p>	<p>Sucrose, molasses, starch products and their hydrolysates</p> <p>Sucrose, molasses, starch products and their hydrolysates</p>	<p>Crude protein</p> <p>Crude protein</p>	

<i>Brevibacterium lactofermentum</i>				
2.3.3	Liquid by-products from production of amino acids by fermentation with <i>Corynebacterium glutamicum</i>	<i>Corynebacterium Glutamicum</i>	Substrates of vegetable or chemical origin, ammonia, mineral salts	Crude Protein
2.3.4	Liquid by-products from production of amino acids by fermentation with <i>Escherichia coli</i>	<i>Escherichia Coli K12</i>	Substrates of vegetable or chemical origin, ammonia, mineral salts	Crude Protein
2.3.5	By-product of solid state fermentation of <i>Aspergillus niger</i> of enzyme production	<i>Aspergillus niger</i>		
			Wheat and malt	
4. 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		Protein, Ammonium salts and other nitrogenous compounds	Substrates mostly of vegetable or chemical ³¹ origin, such as for example: Molasses, sugar syrup, alcohol, distillery residues, cereals and products containing starch, fruit juice, whey, lactic acid, sugar,	Crude protein Moisture, if > 35%

³¹ The chemical substrates refer to the chemical elements used as nutriment for the fermentation, such as for example: ammonia, mineral salts, phosphoric acids, vitamins etc...

fermentation microorganisms used.		hydrolyzed vegetable fibres, etc...		
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