

Commission Regulation (EU) No 242/2010 of 19 March 2010 creating the Catalogue of feed materials

Text with EEA relevance

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(Text with EEA relevance)

THE EUROPEAN COMMISSION,

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

Having regard to Regulation (EC) No 767/2009 of the European Parliament and of the Council of 13 July 2009 on the placing on the market and use of feed, amending European Parliament and Council Regulation (EC) No 1831/2003 and repealing Council Directive 79/373/EEC, Commission Directive 80/511/EEC, Council Directives 82/471/EEC, 83/228/EEC, 93/74/EEC, 93/113/EC and 96/25/EC and Commission Decision 2004/217/EC [1], and in particular Article 24(2) thereof,

After consulting the Standing Committee on the Food Chain and Animal Health,

Whereas:

(1) Article 24 of Regulation (EC) No 767/2009 provides for the creation of a catalogue of feed materials.

(2) The first version of that catalogue should therefore be created.

HAS ADOPTED THIS REGULATION:

Article 1

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

Article 2

This Regulation shall enter into force on the 20th day following its publication in the Official Journal of the European Union.

It shall apply from 1 September 2010.

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

Done at Brussels, 19 March 2010.

For the Commission

The President

José Manuel Barroso

[1] OJ L 229, 1.9.2009, p. 1.

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ANNEX

CATALOGUE OF FEED MATERIALS

PROVISIONS REGARDING THE GLOSSARY

The glossary given below refers to the main processes used for the preparation of feed materials mentioned in this Annex. Where the names of these feed materials include a common name or qualifier from this glossary, the process to be used must be in accordance with the given definition.

| Process | Definition | Common name/qualifier |

(1) | (2) | (3) | (4) |

1 | Concentration [1] | Increase in certain contents by removing water or other constituents | Concentrate |

2 | Decortication [2] | Complete or partial removal of outer layers from grains, seeds, fruits, nuts and others | Decorticated, partially decorticated |

3 | Drying | Dehydration by artificial or natural processes | Dried (sun or artificially) |

4 | Extraction | Removal either by organic solvent of fat or oil from certain materials or by aqueous solvent of sugar or other water-soluble components. In the case of the use of organic solvent, the resulting product must be technically free of such solvent | Extracted (in the case of oil-containing materials), molasses, pulp (in the case of products containing sugar or other water-soluble components) |

5 | Extrusion | Pressing of material through an orifice under pressure. (See also pregelatinisation) | Extruded |

6 | Flaking | Rolling of moist heat-treated material | Flakes |

7 | Flour milling | Physical processing of grain to reduce particle size and facilitate separation into constituent fractions (principally flour, bran and middlings) | Flour, bran, middlings [3], feed |

8 | Heating | General term covering a number of heat treatments carried out under specific conditions to influence the nutritional value or the structure of the material | Toasted, cooked, heat treated |

9 | Hydrogenation | Transformation of unsaturated glycerides into saturated glycerides (of oils and fats) | Hardened, partially hardened |

10 | Hydrolysis | Breakdown into simpler chemical constituents by appropriate treatment with water and possibly either enzymes or acid/alkali | Hydrolysed |

11 | Pressing [4] | Removal by mechanical extraction (by a screw or other type of press), with or without a slight heating, of fat/oil from oil-rich materials or of juice from fruits or other vegetable products | Expeller [5] (in case of oil-containing materials), pulp, pomace (in case of fruits, etc.), pressed pulp (in case of sugar-beet) |

12 | Pelleting | Special shaping by compression through a die | Pellet, pelleted |

13 | Pregelatinisation | Modification of starch to improve markedly its swelling properties in cold water | Pregelatinised [6], puffed |

14 | Refining | Complete or partial removal of impurities in sugars, oils, fats and other natural materials by chemical/physical treatment | Refined, partially refined |

15 | Wet-milling | Mechanical separation of the component parts of kernel/grain, sometimes after steeping in water, with or without sulphur dioxide, for the extraction of starch | Germ, gluten, starch |

16 | Crushing | Mechanical processing of grain or other feed materials to reduce their size | Crushed, crushing |

17 | Desugaring | Complete or partial removal of mono- and disaccharides from molasses and other material containing sugar by chemical or physical means | Desugared, partially desugared |

Non-exclusive list of the main feed materials

## 1. CEREAL GRAINS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

1.01 | Oats | Grains of Avena sativa L. and other cultivars of oats | |

1.02 | Oat flakes | Product obtained by steaming and rolling dehusked oats. It may contain a small proportion of oat husks | Starch |

1.03 | Oat middlings | By-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 |

1.04 | Oat hulls and bran | By-product obtained during the processing of screened oats into oat groats. It consists principally of oat hulls and bran | Crude fibre |

1.05 | Barley | Grains of Hordeum vulgare L. | |

1.06 | Barley middlings | By-product obtained during the processing of screened, dehusked barley into pearl barley, semolina or flour | Crude fibre |

1.07 | Barley protein | Dried by-product of starch production from barley. It consists principally of protein obtained from starch separation | Crude protein Starch |

1.08 | Rice, broken | By-product of preparation of polished or glazed rice Oryza sativa L. It consists principally of undersized and/or broken grains | Starch |

1.09 | Rice bran (brown) | By-product of the first polishing of dehusked rice. It consists principally of particles of the aleurone layer, endosperm and germ | Crude fibre |

1.10 | Rice bran (white) | By-product of the polishing of dehusked rice. It consists principally of particles of the aleurone layer, endosperm and germ | Crude fibre |

1.11 | Rice bran with calcium carbonate | By-product of the polishing of dehusked rice. It consists principally of silvery skins, particles of the aleurone layer, endosperm and germ; it contains varying amounts of calcium carbonate resulting from the polishing process | Crude fibre Calcium carbonate |

1.12 | Fodder meal of parboiled rice | By-product of the polishing of dehusked precooked rice. It consists 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 |

1.13 | 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 |

1.14 | Rice germ expeller | By-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 |

1.15 | Rice germ, extracted | By-product of oil manufacture obtained by extraction of the germ of rice to which parts of the endosperm and testa still adhere | Crude protein |

1.16 | Rice starch | Technically pure rice starch | Starch |

- 1.17 | Millet | Grains of *Panicum miliaceum* L. ||
- 1.18 | Rye | Grains of *Secale cereale* L. ||
- 1.19 | Rye middlings [7] | By-product of flour manufacture, obtained from screened rye. It consists principally of particles of endosperm, with fine fragments of the outer skins and some grain waste | Starch |
- 1.20 | Rye feed | By-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 |
- 1.21 | Rye bran | By-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 | Crude fibre |
- 1.22 | Sorghum | Grains of *Sorghum bicolor* L. Moench s.l. ||
- 1.23 | Wheat | Grains of *Triticum aestivum* L., *Triticum durum* Desf. and other cultivars of wheat ||
- 1.24 | Wheat middlings [8] | By-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 waste | Starch |
- 1.25 | Wheat feed | By-product of flour 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 |
- 1.26 | Wheat bran [9] | By-product of flour 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 |
- 1.27 | Wheat germ | By-product of flour milling consisting essentially of wheat germ, rolled or otherwise, to which fragments of endosperm and outer skin may still adhere | Crude protein Crude fat |
- 1.28 | Wheat gluten | Dried by-product of the manufacture of wheat starch. It consists principally of gluten obtained during the separation of starch | Crude protein |
- 1.29 | Wheat gluten feed | By-product of the manufacture of wheat starch and gluten. It is composed of bran, from which the germ has been partially removed or not, and gluten, to which very small amounts of the components of the screening of the grain as well as very small amounts of residues of the starch hydrolysis process may be added | Crude protein Starch |
- 1.30 | Wheat starch | Technically pure starch obtained from wheat | Starch |
- 1.31 | Pre-gelatinised wheat starch | Product consisting of wheat starch largely expanded by heat treatment | Starch |
- 1.32 | Spelt | Grains of spelt *Triticum spelta* L., *Triticum dioccum* Schrank, *Triticum monococcum* ||
- 1.33 | Triticale | Grains of *Triticum X Secale* hybrid ||
- 1.34 | Maize | Grains of *Zea mays* L. ||
- 1.35 | Maize middlings [10] | By-product of the manufacture of flour or semolina from maize. It consists principally of fragments of the outer skins and of particles of grain from which less of the endosperm has been removed than in maize bran | Crude fibre |

1.36 | Maize bran | By-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 |

1.37 | Maize germ expeller | By-product of oil manufacture, obtained by pressing of dry or wet processed maize germ to which parts of the endosperm and testa may still adhere | Crude protein Crude fat |

1.38 | Maize germ, extracted | By-product of oil manufacture, obtained by extraction of dry or wet processed maize germ to which parts of the endosperm and testa may still adhere | Crude protein |

1.39 | Maize gluten feed [11] | By-product of the wet manufacture of maize starch. It is composed of bran and gluten, to which the broken maize obtained from screening at an amount no greater than 15 % of the product and/or the residues of the steeping liquor used for the production of alcohol or other starch-derived products, may be added. The product may also include residues from the oil extraction of maize germs obtained also by a wet process | Crude protein Starch Crude fat, if > 4,5 % |

1.40 | Maize gluten | Dried by-product of the manufacture of maize starch. It consists principally of gluten obtained during the separation of the starch | Crude protein |

1.41 | Maize starch | Technically pure starch obtained from maize | Starch |

1.42 | Pre-gelatinised maize starch [12] | Product consisting of maize starch largely expanded by heat treatment | Starch |

1.43 | Malt culms | By-product of malting, consisting mainly of dried rootlets of germinated cereals | Crude protein |

1.44 | Brewers' dried grains | By-product of brewing obtained by drying residues of malted and unmalted cereals and other starchy products | Crude protein |

1.45 | Distillers' dried grain [13] | By-product of alcohol distilling obtained by drying solid residues of fermented grain | Crude protein |

1.46 | Distillers' dark grains [14] | By-product of alcohol distilling obtained by drying solid residues of fermented grain to which pot ale syrup or evaporated spent wash has been added | Crude protein |

## 2. OIL SEEDS, OIL FRUITS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

2.01 | Groundnut, partially decorticated, expeller | By-product of oil manufacture, obtained by pressing of partially decorticated groundnuts *Arachis hypogaea* L. and other species of *Arachis*. (Maximum crude fibre content 16 % in the dry matter) | Crude protein Crude fat Crude fibre |

2.02 | Groundnut, partially decorticated, extracted | By-product of oil manufacture, obtained by extraction of partially decorticated groundnuts. (Maximum crude fibre content 16 % in the dry matter) | Crude protein Crude fibre |

2.03 | Groundnut, decorticated, expeller | By-product of oil manufacture, obtained by pressing of decorticated groundnuts | Crude protein Crude fat Crude fibre |

2.04 | Groundnut, decorticated, extracted | By-product of oil manufacture, obtained by extraction of decorticated groundnuts | Crude protein Crude fibre |

- 2.05 | Rape seed [15] | Seeds of rape *Brassica napus* L. ssp. *oleifera* (Metzg.) Sinsk., of Indian sarson *Brassica napus* L. Var. *Glauca* (Roxb.) O.E. Schulz and of rape *Brassica napa* ssp. *oleifera* (Metzg.) Sinsk. (Minimum botanical purity 94 %) ||
- 2.06 | Rape seed, expeller [15] | By-product of oil manufacture, obtained by pressing of seeds of rape. (Minimum botanical purity 94 %) | Crude protein Crude fat Crude fibre |
- 2.07 | Rape seed, extracted [15] | By-product of oil manufacture, obtained by extraction of seeds of rape. (Minimum botanical purity 94 %) | Crude protein |
- 2.08 | Rape seed hulls | By-product obtained during dehulling of rape seeds | Crude fibre |
- 2.09 | Safflower seed, partially decorticated, extracted | By-product of oil manufacture, obtained by extraction of partially decorticated seeds of safflower *Carthamus tinctorius* L. | Crude protein Crude fibre |
- 2.10 | Copra expeller | By-product of oil manufacture, obtained by pressing the dried kernel (endosperm) and outer husk (tegument) of the seed of the coconut palm *Cocos nucifera* L. | Crude protein Crude fat Crude fibre |
- 2.11 | Copra, extracted | By-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 |
- 2.12 | Palm kernel expeller | By-product of oil manufacture, obtained by pressing of palm kernels *Elaeis guineensis* Jacq., Corozo *oleifera* (HBK) L. H. Bailey (*Elaeis melanococca* auct.) from which as much as possible of the hard shell has been removed | Crude protein Crude fibre Crude fat |
- 2.13 | Palm kernel, extracted | By-product of oil manufacture, obtained by extraction of palm kernels from which as much as possible of the hard shell has been removed | Crude protein Crude fibre |
- 2.14 | Soya (bean), toasted | Soya beans (*Glycine max.* L. Merr.) subjected to an appropriate heat treatment. (Urease activity maximum 0,4 mg N/g × min.) ||
- 2.15 | Soya (bean), extracted, toasted | By-product of oil manufacture, obtained from soya beans after extraction and appropriate heat treatment. (Urease activity maximum 0,4 mg N/g × min.) | Crude protein Crude fibre, if > 8 % |
- 2.16 | Soya (bean), dehulled, extracted, toasted | By-product of oil manufacture, obtained from dehulled soya beans after extraction and appropriate heat treatment. (Maximum crude fibre content 8 % in the dry matter.) (Urease activity maximum 0,5 mg N/g × min.) | Crude protein |
- 2.17 | Soya (bean) protein concentrate | Product obtained from dehulled, fat extracted soya beans, subjected to a second extraction to reduce the level of nitrogen-free extract | Crude protein |
- 2.18 | Vegetable oil [16] | Oil obtained from plants | Moisture, if > 1 % |
- 2.19 | Soya (bean) hulls | By-product obtained during dehulling of soya beans | Crude fibre |
- 2.20 | Cotton seed | Seeds of cotton *Gossypium* ssp. from which the fibres have been removed | Crude protein Crude fibre Crude fat |
- 2.21 | Cotton seed, partially decorticated, extracted | By-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) | Crude protein Crude fibre |

- 2.22 | Cotton seed expeller | By-product of oil manufacture, obtained by pressing of seeds of cotton from which the fibres have been removed | Crude protein Crude fibre Crude fat |
- 2.23 | Niger seed expeller | By-product of oil manufacture, obtained by pressing of seeds of the niger plant *Guizotia abyssinica* (L.f.) Cass. (Ash insoluble in HCl: maximum 3,4 %) | Crude protein Crude fat Crude fibre |
- 2.24 | Sunflower seed | Seeds of the sunflower *Helianthus annuus* L. ||
- 2.25 | Sunflower seed, extracted | By-product of oil manufacture, obtained by extraction of seeds of the sunflower | Crude protein |
- 2.26 | Sunflower seed, partially decorticated, extracted | By-product of oil manufacture, obtained by extraction of seeds of the sunflower from which part of the husks has been removed. (Maximum crude fibre 27,5 % in the dry matter) | Crude protein Crude fibre |
- 2.27 | Linseed | Seeds of linseed *Linum usitatissimum* L. (Minimum botanical purity 93 %) ||
- 2.28 | Linseed expeller | By-product of oil manufacture, obtained by pressing of linseed. (Minimum botanical purity 93 %) | Crude protein Crude fat Crude fibre |
- 2.29 | Linseed, extracted | By-product of oil manufacture, obtained by extraction of linseed. (Minimum botanical purity 93 %) | Crude protein |
- 2.30 | Olive pulp | By-product of oil manufacture, obtained by extraction of pressed olives *Olea europaea* L. separated as far as possible from parts of the kernel | Crude protein Crude fibre |
- 2.31 | Sesame seed expeller | By-product of oil manufacture, obtained by pressing of seeds of the sesame plant *Sesamum indicum* L. (Ash insoluble in HCl: maximum 5 %) | Crude protein Crude fibre Crude fat |
- 2.32 | Cocoa bean, partially decorticated, extracted | By-product of oil manufacture, obtained by extraction of dried and roasted cocoa beans *Theobroma cacao* L. from which part of the husks has been removed | Crude protein Crude fibre |
- 2.33 | Cocoa husks | Teguments of the dried and roasted beans of *Theobroma cacao* L. | Crude fibre |
3. LEGUME SEEDS, THEIR PRODUCTS AND BY-PRODUCTS
- Number | Name | Description | Compulsory declarations |
- (1) | (2) | (3) | (4) |
- 3.01 | Chick peas | Seeds of *Cicer arietinum* L. ||
- 3.02 | Guar meal, extracted | By-product obtained after extraction of the mucilage from seeds of *Cyanopsis tetragonoloba* (L.) Taub. | Crude protein |
- 3.03 | Ervil | Seeds of *Ervum ervilia* L. ||
- 3.04 | Chickling vetch [17] | Seeds of *Lathyrus sativus* L. submitted to an appropriate heat treatment ||
- 3.05 | Lentils | Seeds of *Lens culinaris* a.o. Medik ||
- 3.06 | Sweet lupins | Seeds of *Lupinus* ssp. low in bitter seed content ||
- 3.07 | Beans, toasted | Seeds of *Phaseolus* or *Vigna* ssp. submitted to an appropriate heat treatment to destroy toxic lectines ||
- 3.08 | Peas | Seeds of *Pisum* ssp. ||

3.09 | Pea middlings | By-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 |

3.10 | Pea bran | By-product obtained during the manufacture of pea meal. It is composed mainly of skins removed during the skinning and cleaning of peas | Crude fibre |

3.11 | Horse beans | Seeds of *Vicia faba* L. ssp. *faba* var. *equina* Pers. and var. *minuta* (Alef.) Mansf. | |

3.12 | Monantha vetch | Seeds of *Vicia monanthos* Desf. | |

3.13 | Vetches | Seeds of *Vicia sativa* L. var. *sativa* and other varieties | |

#### 4. TUBERS, ROOTS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

4.01 | (Sugar) beet pulp | By-product of the manufacture of sugar, consisting of extracted and dried pieces of sugar beet *Beta vulgaris* L. ssp. *vulgaris* var. *altissima* Doell. (Maximum content of ash insoluble in HCl: 4,5 % of dry matter) | Content of ash insoluble in HCl, if > 3,5 % of dry matter. Total sugar calculated as sucrose, if > 10,5 % |

4.02 | (Sugar) beet molasses | By-product consisting of the syrupy residue collected during the manufacture or refining of beet sugar | Total sugar calculated as sucrose Moisture, if > 28 % |

4.03 | (Sugar) beet pulp, molassed | By-product of the manufacture of sugar comprising dried sugar-beet pulp, to which molasses have been added. (Maximum content of ash insoluble in HCl: 4,5 % of dry matter) | Total sugar calculated as sucrose Content of ash insoluble in HCl, if > 3,5 % of dry matter |

4.04 | (Sugar) beet vinasse | By-product obtained after the fermentation of beet molasses in the production of alcohol, yeast, citric acid and other organic substances | Crude protein Moisture, if > 35 % |

4.05 | (Beet) Sugar [18] | Sugar extracted from sugar beet | Sucrose |

4.06 | Sweet potato | Tubers of *Ipomoea batatas* (L.) Poir, regardless of their presentation | Starch |

4.07 | Manioc [19] | Roots of *Manihot esculenta* Crantz, regardless of their presentation. (Maximum content of ash insoluble in HCl: 4,5 % of dry matter) | Starch Content of ash insoluble in HCl, if > 3,5 % of dry matter |

4.08 | Manioc starch [20], puffed | Starch obtained from manioc roots, greatly expanded by appropriate heat treatment | Starch |

4.09 | Potato pulp | By-product of the manufacture of potato starch (*Solanum tuberosum* L.) | |

4.10 | Potato starch | Technically pure potato starch | Starch |

4.11 | Potato protein | Dried by-product of starch manufacture composed mainly of protein substances obtained after the separation of starch | Crude protein |

4.12 | Potato flakes | Product obtained by rotary drying of washed, peeled or unpeeled steamed potatoes | Starch Crude fibre |

4.13 | Potato juice condensed | By-product of the manufacture of potato starch from which proteins and water have been partly removed | Crude protein Crude ash |

4.14 | Pre-gelatinised potato starch | Product consisting of potato starch largely solubilised by heat treatment | Starch |

## 5. OTHER SEEDS AND FRUITS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

5.01 | Carob pods | Product obtained by crushing the dried fruits (pods) of the carob tree *Ceratonia siliqua L.*, from which the locust beans have been removed | Crude fibre |

5.02 | Citrus pulp | By-product obtained by pressing citrus fruits *Citrus* ssp. during the production of citrus juice | Crude fibre |

5.03 | Fruit pulp [21] | By-product obtained by pressing pomaceous or stone fruit during the production of fruit juice | Crude fibre |

5.04 | Tomato pulp | By-product obtained by pressing tomatoes *Solanum lycopersicum Karst.* during the production of tomato juice | Crude fibre |

5.05 | Grape pips, extracted | By-product obtained during the extraction of oil from grape pips | Crude fibre, if > 45 % |

5.06 | Grape pulp | 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, if > 25 % |

5.07 | Grape pips | Pips extracted from grape pulp, from which the oil has not been removed | Crude fat Crude fibre, if > 45 % |

## 6. FORAGES AND ROUGHAGE

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

6.01 | Lucerne meal [22] | Product obtained by drying and milling young lucerne *Medicago sativa L.* and *Medicago var. Martyn*. It may contain up to 20 % young clover or other forage crops dried and milled at the same time as the lucerne | Crude protein Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter |

6.02 | Lucerne pomace | Dried by-product obtained by pressing of the juice from lucerne | Crude protein |

6.03 | Lucerne protein concentrate | Product obtained by artificially drying fractions of lucerne press juice, which has been centrifuged and heat treated to precipitate the proteins | Carotene Crude protein |

6.04 | Clover meal [22] | Product obtained by drying and milling young clover *Trifolium 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 |

6.05 | Grass meal [22] [23] | Product obtained by drying and milling young forage plants | Crude protein Crude fibre Ash insoluble in HCl, if > 3,5 % of dry matter |

6.06 | Cereals straw [24] | Straw of cereals |

6.07 | Cereals straw, treated [25] | Product obtained by an appropriate treatment of cereals straw | Sodium, if treated with NaOH |

## 7. OTHER PLANTS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

7.01 | (Sugar) cane molasses | By-product consisting of the syrupy residue collected during the manufacture or refining of sugar from sugar cane *Saccharum officinarum* L. | Total sugar calculated as sucrose Moisture, if > 30 % |

7.02 | (Sugar) cane vinasse | By-product obtained after the fermentation of cane molasses in the production of alcohol, yeast, citric acid or other organic substances | Crude protein Moisture, if > 35 % |

7.03 | (Cane) sugar [26] | Sugar extracted from sugar cane | Sucrose |

7.04 | Seaweed meal | Product obtained by drying and crushing seaweed, in particular brown seaweed. This product may have been washed to reduce the iodine content | Crude ash |

## 8. MILK PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

8.01 | Skimmed-milk powder | Product obtained by drying milk from which most of the fat has been separated | Crude protein Moisture, if > 5 % |

8.02 | Buttermilk powder | Product obtained by drying the liquid which remains after butter churning | Crude protein Crude fat Lactose Moisture, if > 6 % |

8.03 | Whey powder | Product obtained by drying the liquid which remains after cheese, quark and casein making or similar processes | Crude protein Lactose Moisture, if > 8 % Crude ash |

8.04 | Whey powder, low in sugar | Product obtained by drying whey from which the lactose has been partly removed | Crude protein Lactose Moisture, if > 8 % Crude ash |

8.05 | Whey protein powder [27] | Product obtained by drying the protein compounds extracted from whey or milk by chemical or physical treatment | Crude protein Moisture, if > 8 % |

8.06 | Casein powder | Product obtained from skimmed or buttermilk by drying casein precipitated by means of acids or rennet | Crude protein Moisture, if > 10 % |

8.07 | Lactose powder | The sugar separated from milk or whey by purification and drying | Lactose Moisture, if > 5 % |

## 9. LAND ANIMAL PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

9.01 | Meat meal [28] | 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. The product must be substantially free of hooves, horn, bristle, hair and feathers, as well as digestive tract content (minimum crude protein content 50 % in dry matter). (Maximum total phosphorus content: 8 %) | Crude protein Crude fat Crude ash Moisture, if > 8 % |

9.02 | Meat-and-bone meal [28] | 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. The product must be substantially free of hooves, horn, bristle, hair and feathers, as well as digestive tract content | Crude protein Crude fat Crude ash Moisture, if > 8 % |

9.03 | Bone meal | Product obtained by heating, drying and finely grinding bones of warm-blooded land animals from which the fat has been largely extracted or

physically removed. The product must be substantially free of hooves, horn, bristle, hair and feathers, as well as digestive tract content | Crude protein Crude ash Moisture, if > 8 % |

9.04 | Greaves | Residual product of the manufacture of tallow, lard and other extracted or physically removed fats of animal origin | Crude protein Crude fat Moisture, if > 8 % |

9.05 | Poultry meal [28] | Product obtained by heating, drying and grinding by-products from slaughtered poultry. The product must be substantially free of feathers | Crude protein Crude fat Crude ash Ash insoluble in HCl if > 3,3 % Moisture, if > 8 % |

9.06 | Feather meal, hydrolysed | Product obtained by hydrolysing, drying and grinding poultry feathers | Crude protein Ash insoluble in HCl if > 3,4 % Moisture, if > 8 % |

9.07 | Blood meal | Product obtained by drying the blood of slaughtered warm-blooded animals. The product must be substantially free of foreign matter | Crude protein Moisture, if > 8 % |

9.08 | Animal fat [29] | Product composed of fat from warm-blooded land animals | Moisture, if > 1 % |

## 10. FISH, OTHER MARINE ANIMALS, THEIR PRODUCTS AND BY-PRODUCTS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

10.01 | Fish meal [30] | Product obtained by processing whole or parts of fish from which part of the oil may have been removed and to which fish solubles may have been re-added | Crude protein Crude fat Crude ash, if > 20 % Moisture, if > 8 % |

10.02 | Fish solubles, condensed | Product obtained during manufacture of fish meal which has been separated and stabilised by acidification or drying | Crude protein Crude fat Moisture, if > 5 % |

10.03 | Fish oil | Oil obtained from fish or parts of fish | Moisture, if > 1 % |

10.04 | Fish oil, refined, hardened | Oil obtained from fish or parts of fish which has been refined and subjected to hydrogenation | Iodine number Moisture, if > 1 % |

## 11. MINERALS

Number | Name | Description | Compulsory declarations |

(1) | (2) | (3) | (4) |

11.01 | Calcium carbonate [31] | Product obtained by grinding sources of calcium carbonate, such as limestone, oyster or mussel shells, or by precipitation from acid solution | Calcium Ash insoluble in HCl if > 5 % |

11.02 | Calcium and magnesium carbonate | Natural mixture of calcium carbonate and magnesium carbonate | Calcium Magnesium |

11.03 | Calcareous marine algae (Maerl) | Product of natural origin obtained from calcareous algae, ground or granulated | Calcium Ash insoluble in HCl if > 5 % |

11.04 | Magnesium oxide | Technically pure magnesium oxide (MgO) | Magnesium |

11.05 | Magnesium sulphate | Technically pure magnesium sulphate (MgSO<sub>4</sub> 7H<sub>2</sub>O) | Magnesium Sulphur |

11.06 | Dicalcium phosphate [32] | Precipitated calcium monohydrogen phosphate from bones or inorganic sources (CaHPO<sub>4</sub> H<sub>2</sub>O) | Calcium Total phosphorus |

- 11.07 | Mono-dicalcium phosphate | Product obtained chemically and composed of equal parts of dicalcium phosphate and mono-calcium phosphate ( $\text{CaHPO}_4$  -  $\text{Ca}(\text{H}_2\text{PO}_4)_2 \cdot \text{H}_2\text{O}$ ) | Total phosphorus Calcium |
- 11.08 | Defluorinated rock-phosphate | Product obtained by grinding purified and appropriately defluorinated natural phosphates | Total phosphorus Calcium |
- 11.09 | Degelatinised bone meal | Degelatinised, sterilised and ground bones from which the fat has been removed | Total phosphorus Calcium |
- 11.10 | Monocalcium phosphate | Technically pure calcium-bis (dihydrogenphosphate) ( $\text{Ca}(\text{H}_2\text{PO}_4)_2 \times \text{H}_2\text{O}$ ) | Total phosphorus Calcium |
- 11.11 | Calcium-magnesium phosphate | Technically pure calcium-magnesium phosphate | Calcium Magnesium Total phosphorus |
- 11.12 | Mono-ammonium phosphate | Technically pure mono-ammonium phosphate ( $\text{NH}_4\text{H}_2\text{PO}_4$ ) | Total nitrogen Total phosphorus |
- 11.13 | Sodium chloride [31] | Technically pure sodium chloride or product obtained by grinding natural sources of sodium chloride, such as (rock) and (marine) salt | Sodium |
- 11.14 | Magnesium propionate | Technically pure magnesium propionate | Magnesium |
- 11.15 | Magnesium phosphate | Product consisting of technically pure (dibasic) magnesium phosphate ( $\text{MgHPO}_4 \times \text{H}_2\text{O}$ ) | Total phosphorus Magnesium |
- 11.16 | Sodium-calcium-magnesium phosphate | Product consisting of sodium-calcium-magnesium phosphate | Total phosphorus Magnesium Calcium Sodium |
- 11.17 | Mono-sodium phosphate | Technically pure mono-sodium phosphate ( $\text{NaH}_2\text{PO}_4 \cdot \text{H}_2\text{O}$ ) | Total phosphorus Sodium |
- 11.18 | Sodium bicarbonate | Technically pure sodium bicarbonate ( $\text{NaHCO}_3$ ) | Sodium |

## 12. MISCELLANEOUS

- Number | Name | Description | Compulsory declarations |  
 (1) | (2) | (3) | (4) |

- 12.01 | Bakery and pasta products and by-products [33] | Product or by-product obtained from the manufacture of bread, including fine bakers' wares, biscuits or pasta | Starch Total sugar calculated as sucrose |
- 12.02 | Confectionery products and by-products [33] | Product or by-product obtained from the manufacture of confectionery including chocolate | Total sugar calculated as sucrose |
- 12.03 | Products and by-products of pastry and ice-cream making [33] | Product or by-product obtained from the manufacture of pastry, cakes or ice-cream | Starch Total sugar expressed as sucrose Crude fat |
- 12.04 | Fatty acids | By-product obtained during the deacidification, by means of lye or by distillation of oils and fats of unspecified vegetable or animal origin | Crude fat Moisture, if > 1 % |
- 12.05 | Salts of fatty acids [34] | Product obtained by saponification of fatty acids with calcium, sodium or potassium hydroxide | Crude fat Ca (or Na or K, when appropriate) |

## 13. PRODUCTS AND BY-PRODUCTS FROM FERMENTATION PROCESSES AND AMMONIUM SALTS

2 | 3 | 4 |

Name of product | Designation of nutritive principle or identity of micro-organism |  
Culture substrate (specifications, if any) |

1.1.1.1.Protein product of fermentation obtained by culture of *Methylophilus methylotrophus* on methanol | *Methylophilus methylotrophus* NCIB strain 10.515 |  
Methanol |

1.1.2.1.Protein product of fermentation from natural gas obtained by culture of:  
*Methylococcus capsulatus* (Bath), *Alcaligenes acidovorans*, *Bacillus brevis* et *Bacillus firmus*, and the cells of which have been killed | *Methylococcus capsulatus* (Bath)  
NCIMB strain 11132 *Alcaligenes acidovorans* NCIMB strain 12387 *Bacillus brevis*  
strain NCIMB strain 13288 *Bacillus firmus* strain NCIMB strain 13280 | Natural gas:  
(approx. 91 % methane, 5 % ethane, 2 % propane, 0,5 % isobutane, 0,5 % n-butane, 1 % other components), ammonia, mineral salts |

All yeasts — obtained from the microorganisms and substrates listed in columns 3 and 4 respectively — the cells of which have been killed — | *Saccharomyces cerevisiae*,  
*Saccharomyces carlsbergensis* *Kluyveromyces lactis*, *Kluyveromyces fragilis* *Candida guilliermondii* | Molasses, distillery residues, cereals and products containing starch,  
fruit juice, whey, lactic acid and hydrolysed vegetable fibres |

1.4.1.1.Mycelium, wet by-product from the production of penicillin, ensiled by means  
of *Lactobacillus brevis*, *plantarum*, sake, *collenoides* and *Streptococcus lactis* to  
inactivate the penicillin and heat treated | Nitrogenous compound *Penicillium chrysogenum* ATCC 48271 | Different sources of carbohydrates and their hydrolysates |

2.2.1.Ammonium lactate, produced by fermentation with *Lactobacillus bulgaricus* |  
 $\text{CH}_3\text{CHOHCOONH}_4$  | Whey |

2.2.2.Ammonium acetate in aqueous solution |  $\text{CH}_3\text{COONH}_4$  | — |

2.2.3.Ammonium sulfate in aqueous solution |  $(\text{NH}_4)_2\text{SO}_4$  | — |

2.3.1.Concentrated liquid by-products from the production of L-glutamic acid by  
fermentation with *Corynebacterium melassecola* | Ammonium salts and other  
nitrogenous compounds | Sucrose, molasses, starch products and their hydrolysates |

2.3.2.Concentrated liquid by-products from the production of L-lysine  
monohydrochloride by fermentation with *Brevibacterium lactofermentum* |  
Ammonium salts and other nitrogenous compounds | Sucrose, molasses, starch  
products and their hydrolysates |

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

[2] "Decortication" may be replaced by "dehulling" or "dehusking" where appropriate,  
in which case the common qualifier should be "dehulled" or "dehusked".

[3] In French the name "issues" may be used.

[4] In French "Pressage" may be replaced by "Extraction mécanique" where  
appropriate.

[5] Where appropriate the word "expeller" may be replaced by "cake".

[6] In German the qualifier "aufgeschlossen" and the name "Quellwasser" (referring to  
starch) may be used.

- [7] Products containing more than 40 % starch may be qualified as "rich in starch". They may be referred to in German as "Roggennachmehl".
- [8] Products containing more than 40 % starch may be qualified as "rich in starch". They may be referred to in German as "Weizennachmehl".
- [9] If this ingredient has been subjected to a finer milling the word "fine" may be added to the name or the name may be replaced by a corresponding denomination.
- [10] Products containing more than 40 % starch may be named as "rich in starch". They may be referred to in German as "Maisnachmehl".
- [11] This name may be replaced by "corn gluten feed".
- [12] This name may be replaced by "extruded maize starch".
- [13] The name may be supplemented by the grain species.
- [14] This name may be replaced by "distillers" dried grains and "solubles". The name may be supplemented by the grain species.
- [15] Where appropriate the indication "low in glucosinolate" may be added. "Low in glucosinolate" is as defined in European Union legislation.
- [16] The name must be supplemented by the plant species.
- [17] This name must be supplemented by an indication of the nature of the heat treatment.
- [18] This name may be replaced by "sucrose".
- [19] This name may be replaced by "tapioca".
- [20] This name may be replaced by "tapioca starch".
- [21] The name may be supplemented by the fruit species.
- [22] The term "meal" may be replaced by "pellets". The method of drying may be added to the name.
- [23] The species of forage crop may be added to the name.
- [24] The cereal species must be indicated in the name.
- [25] The name must be supplemented by an indication of the nature of the chemical treatment carried out.
- [26] This name may be replaced by "sucrose".
- [27] This name may be replaced by "milk albumin powder".
- [28] Products containing more than 13 % fat in the dry matter must be qualified as "rich in fat".
- [29] This name may be supplemented by a more accurate description of the type of animal fat depending on its origin or production process (tallow, lard, bone fat, etc.).
- [30] Products containing more than 75 % crude protein in the dry matter may be qualified as "rich in protein".
- [31] The nature of the source may be indicated additionally in the name or replace it.
- [32] The manufacturing process may be included in the name.
- [33] The name may be amended or supplemented to specify the agri-food process from which the feed material was obtained.
- [34] The name may be supplemented by an indication of the salt obtained.

