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### **Report Highlights:**

On March 3, 2021, MARA published an updated feed catalog consolidating the 2012 version and subsequent revisions issued over the last several years. MARA indicated that, going forward, the feed catalog will be updated in a timely manner based on new revisions. All feed and feed ingredients must be listed in the MARA catalog in order to be eligible for import into China. This report contains an UNOFFICIAL translation of the catalog but U.S. exporters should remain aware that the original catalog, in Chinese, is the authoritative source. Exporters should consult with their importers for the most accurate definition of a "raw material" and ensure that their product is listed before exporting to China.

THIS REPORT CONTAINS ASSESSMENTS OF COMMODITY AND TRADE ISSUES MADE BY USDA STAFF AND NOT NECESSARILY STATEMENTS OF OFFICIAL U.S. GOVERNMENT POLICY

On March 3, 2021, China's Ministry of Agriculture and Rural Affairs (MARA) published an updated feed catalog based on the 2012 version of the Ministry of Agriculture (MOA) *Catalogue of Raw Materials for Feedstuff* (hereinafter referred to as "the Catalogue") that consolidates and incorporates subsequent revisions issued over the last several years. MARA indicates that, going forward, the feed catalog will be updated in a timely manner based on new revisions. The catalog specifies the raw materials approved for use in animal feed. The original Catalogue was published in MOA's <u>No. 1773 Announcement</u> on June 1, 2012, and entered into effect on January 1, 2013.

All feed and feed ingredients imported into China must be listed in the MARA Catalogue to be eligible for import as a feedstuff or feed component. This report contains an UNOFFICIAL translation of the Catalogue. U.S. exporters should be aware that the <u>original Catalogue</u>, in Chinese, is the authoritative source of information. Exporters should consult with their importers for the most accurate definition of a "raw material" and ensure the raw material is listed in the Catalogue before exporting to China.

Begin Unofficial Translation

# **Catalogue of Raw Materials for Feedstuff**

The *Catalogue of Raw Materials for Feedstuff* (hereinafter referred to as "the Catalogue") was promulgated by the Ministry of Agriculture of the People's Republic of China by its No. 1773 Announcement on June 1, 2012, and the Catalogue came into effect on January 1, 2012. Subsequent revisions have been made by the Ministry of Agriculture and Rural Affairs of the People's Republic of China.

In accordance with No. 1773 Announcement and subsequent revisions promulgated by the Ministry of Agriculture, the Catalogue is hereby organized and summarized as follows, and will be updated in a timely manner based on the approval and revision for all parties' reference.

Announcement of promulgation and revision of the *Catalogue of Raw Materials for Feedstuff* (as of March 2021)

No. 1773 Announcement of the Ministry of Agriculture of the People's Republic of China on June 1, 2012

No. 2038 Announcement of the Ministry of Agriculture of the People's Republic of China on December 19, 2013

No. 2133 Announcement of the Ministry of Agriculture of the People's Republic of China on July 24, 2014

No. 2249 Announcement of the Ministry of Agriculture of the People's Republic of China on April 22, 2015

No. 2634 Announcement of the Ministry of Agriculture of the People's Republic of China on December 28, 2017

No. 22 Announcement of the Ministry of Agriculture and Rural Affairs of the People's Republic of China on April 27, 2018

No. 356 Announcement of the Ministry of Agriculture and Rural Affairs of the People's Republic of China on November 16, 2020

### **Part I General Provisions**

I. The raw materials for feedstuff mentioned in the Catalogue refer to feeding materials (including carriers and diluents) derived from animals, plants, microorganisms or minerals, which are used to process feedstuff but are not feed additives. The raw materials for feedstuff used by feed production enterprises should fall within the varieties specified in the Catalogue and meet the requirements of the Catalogue.

II. Substances not mentioned in this Catalogue should only be used as raw materials for feedstuff upon announcement by the Ministry of Agriculture on inclusion of these substances into this Catalogue based on scientific evaluation.

III. The raw materials for feedstuff produced, traded or used in accordance with the Catalogue should meet the requirements of mandatory standards such as *Hygienical Standard for Feeds* and *Feed Label*.

IV. Part II of the Catalogue provides the names and definitions of commonly used feed ingredient processing terms and the description of finished products. Any corresponding term referred to in Part III should have the meaning in consistence with the definition specified in Part II.

V. The list of the raw materials for feedstuff in Part III of the Catalogue provides the names of the raw materials, and the product name marked on the feed ingredient label should be consistent with the "raw material name" in the list; the raw material name used in the "raw material composition" in the feed product label should also be consistent with the "raw material name" in the list. The square brackets listed in the "raw material name" column are the common aliases names of raw materials for feedstuff, which can be equally used with the names before the brackets. The parentheses listed in the "raw material name" column are the different physical forms of the relevant raw materials, which should be selected subject to the actual product.

VI. The raw material number in Part III of the Catalogue adopts a three-level numbering format, and the first level represents the major category number; the second level represents different sources of raw materials under the same major category; the third level represents different products under the same source of raw materials. In principle, the second level and the third level are arranged in the phonetic order of the first Chinese character.

VII. Quality requirements or hygienical characteristic indicators specified in the "mandatory labeling requirements" in Part III of the Catalogue should be listed in items such as the guaranteed analysis value in the raw material label.

VIII. In accordance with the *Regulations on the Administration of Feed and Feed Additives*, the *Administrative Measures for the Production License of Feed and Feed Additives* and the *Administrative Measures for the Registration of Imported Feed and Feed Additives*, the single feed varieties listed in Part IV of the Catalogue fall within the product for which the production license and import registration license should be applied. A single feed product that has not obtained a production license or import registration license should not be produced, traded and used as a feed ingredient.

IX. The production or use of raw materials for feedstuff involving genetically modified animals, plants, and microorganisms should also comply with the relevant provisions specified in the *Regulations on the Safety Control of Genetically Modified Organisms in Agriculture*.

X. When using the raw materials listed in the Catalogue, feed production enterprises should select and use them in a reasonable manner based on the feeding objects and the characteristics of the raw materials in accordance with the principles and requirements for ensuring the quality and safety of feed and farmed animals.

XI. Unless otherwise specially specified in the Catalogue, the botanical purity of plant raw materials for feedstuff should usually not be less than 95%.

XII. If rumen protection is applied to raw materials for feedstuff, the rumen protected method should be indicated on the raw material label.

Code No.	Processing technique	Definition	Commonly used Name/Description
1	Ammoniation	Treat roughage with ammonia or ammonium salts, to improve its quality and increase its utilization ratio.	Ammoniation
2	Pasteurisation	Heat material to certain temperature for a certain period of time, and then rapidly cooled down to eliminate the harmful microbes in the material.	Pasteurisation
3	Popping	Grain heated or roasted/toasted for slaking without adding water, to make it expand, and with cracks on the surface.	Popping
4	Peeling	Completely or partially remove the peel or inner shell from grains, beans, seeds, fruits or vegetables.	Peeling
5	extraction	To realize the process of dissolving and separating the solute by using the liquid having both gas and liquid characteristics in the supercritical region and its ability to dissolve the solute in a wide range with pressure and temperature changes. Generally, use carbon dioxide as the extractant.	Supercritical extraction
6	Ultra-filtration	Filter liquid with filtering film of 0.002- 0.1 µm diameter.	Ultra-filtration
7	Deoderization	The process of removing fishy or foul smell from a material (for example, fish meal).	Deoderization
8	Fermentation	To use yeast, fungus or bacteria under the control of aerobic or anaerobic conditions, to proliferate thalli, decompose material or create particular metabolic substance.	Fermentation
9	Crushing	To make small particles through mechanic striking, cutting or grinding.	Crushing

### Part II - Feed Ingredient Processing Terms

Code No.	Processing technique	Definition	Commonly used Name/Description
10	Fractionation	To separate the component of various test weight and grain diameter (size) in the material through sieving or air flow.	Fractionation
11	Aspiration	To grade materials or remove foreign substance with air (wind power) by making use of the difference in suspending speed between materials or between materials and foreign substances.	Aspiration
12	Drying	To dehydrate the material or eliminate other volatile substances.	Drying
13	Malting	To make grain into malt, in order to activate its enzyme that can degrade starch into fermentable carbohydrate, and degrade protein into amino acid and peptide.	Malt
14	Filtration	To separate solid and liquid mixture with porous medium or membrane.	Filtration
15	Roasting/ Toasting	To put the material in a heating environment such as fire, heat, electricity or microwave for roasting/toasting and drying in order to improve digestibility, darken colors or reduce natural anti- nutritional factors.	Roasting/ Toasting
16	Mixing	To stir the material with mechanical force, compressed-air or ultrasonic to achieve uniform distribution and strengthen heat exchange.	Mixing/stirring
17	Extrusion/ Extruding	To squeeze the material out of the die hole by pushing, pressing and heating with a screw to make it extrude into products of particular shape.	Extrusion/ Extruding

Code No.	Processing technique	Definition	Commonly used Name/Description
18	Expansion, Expanding	To squeeze the material out of the die by pressing with a screw to make it expand while releasing the pressure, thus to form irregular shape. Usually, the pressure and temperature for expanding is lower than extruding.	Expansion, Expanding
19	Heating	To process the material by increasing the temperature under pressure or not.	Heating treatment
20	Basification	To add alkaline substance to the material to change it from acidity into alkali (to increase pH value).	Basification
21	Gelling	To create solid gelling material of different gelling density (with or without the use of gelling agent).	Gelling
22	Crystallization	The process of forming solid crystal in the liquid solution and separating from the liquid for purification.	Crystallization
23	Soaking/ Steeping	To moisten and soften the material (usually seeds) under certain circumstance, in order to shorten steaming and boiling, or facilitate removal of peels, or quicken water absorption to promote malting process, or reduce the density of natural anti- nutritional factors.	Soaking/ Steeping
24	Extraction	To extract oil from the material with the use of organic solvent, or extract sugar or water soluble substance with the use of water or water solvent.	Extraction
25	Refining	To remove all or partial foreign substance with physical or chemical methods.	Refining
26	Condensation	The process of changing the material from gas into liquid.	Condensation

Code No.	Processing technique	Definition	Commonly used Name/Description
27	Chilling	The process of lowering temperature of the material to above ice point.	Chilling
28	Rumen protection /By-pass rumen	To prevent or slow down the process of nutrients degrading in rumen by physical means such as heating, pressing, steaming, or by using of processing aids.	Rumen protection/ By-pass rumen
29	Rice whitening	The process of whitening rough rice.	Rice whitening
30	Grinding/ Milling	To reduce granularity of solid grain with the dry method or wet method.	Grinding/ Milling
31	Concentration	To increase the density of the main material by dehydrating the water or other liquid component.	Concentration
32	Polishing	During the course of grain processing, to use roller to reduce its roughness and brighten the surface.	Polishing
33	Spray drying	To atomize the liquid material and dry it with hot air.	Spray drying
34	Puffing	To put the material to normal pressure from high temperature and high pressure. Moisture in the material shall evaporate quickly due to the sudden drop of the pressure, with a result that the material tissue puffs into sponge like form.	Puffing
35	Bleaching	The process of removing natural color of the material.	Bleaching
36	Steaming	To heat the material with steam to increase the temperature and moisture in order to change its physicochemical properties.	Steaming
37	Slicing	To cut the material into slices.	Slicing

Code No.	Processing technique	Definition	Commonly used Name/Description
38	Chopping/ Cutting	To reduce the granularity by cutting the material with a knife or other sharp devices.	Chopping/ Cutting
39	Hydrogenation	With the use of catalyst, convert the glycerate or free fat acids (FFA) from unsaturated state into saturated state, or convert reducing sugar into polyols.	Hydrogenation
40	Cleaning	To remove foreign substance in the material by screening, winnowing, magnetic separation or other means.	Cleaning
41	Ensiling	To cut green plants into pieces, and go through lactic acid fermentation under anaerobic condition after being pressed, ventilated, and sealed, in order to increase storage time.	Ensiling
42	Desugaring	To remove all or partial monosaccharide and disaccharide of treacle other substance containing sugar.	Desugaring
43	Blanching	To treat the organic substance through heat treatment, and then put it into cold water for chilling. The purpose is to make crude enzyme change its nature, and make the tissue soft or remove its original odor of the material.	Blanching
44	Melting	The process of heating the material to make it change from solid to liquid.	Melting
45	Rubbing	To rub and tore up the material such as straw	Rubbing
46	Emulsification	To mix two kinds of liquids which are not solutrope (for example, oil and water) to form colloidal suspension.	Emulsification

Code No.	Processing technique	Definition	Commonly used Name/Description
47	Sieving/ Screening	To grade the material or remove foreign substance by sieving/screening by making use of the algebra measurement difference between the materials or foreign substance.	Sieving/ Screening
48	Hydrolysis	To make the material decompose into simple tiny molecular substance with the use of enzyme or acid or alkali under proper conditions and water.	Hydrolysis
49	Detoxification	To remove or destroy harmful and toxic substance, or reduce its density with physical, chemical or biological methods.	Detoxification
50	Depectinising	To extract colloid from the material, mainly removing colloid substance such as phosphatide from rough vegetable oil extracted from crude oil.	Depectinising
51	Dehulling/ Dehusking	To remove the crust of plants such as beans, grains or seeds with physical methods.	Dehulling/ Dehusking
52	Desalination	To remove sodium salt from the material by ion exchanging or film filtering.	Desalination
53	Deoiling/ Defatting/ Skimming	To remove fat from the material.	Deoiling/ Defatting/ Skimming
54	Flaking/ Rolling	To change the shape or size of seed-like feed ingredients through extruding between a pair of rollers, may go through water treatment or tempering treatment beforehand.	Flaking/ Rolling
55	Pressing	To remove liquid component from solid material such as fat, moisture, juice with mechanical force or hydraulic pressure.	Seed cake/fruit juice/fruit residue/ syrup

Code No.	Processing technique	Definition	Commonly used Name/Description
56	Smoking	The process of exposing food to smoke from burning plant materials (usually wood) for flavoring, cooking, or food preserving.	Smoking
57	Liquefying	To change solid or gas into liquid.	Liquefying
58	Frying	To boil the material in the oil.	Frying
59	Pregelatinization	To change the nature of starch in order to have significant improvement of its expanding properties in cold water.	Pregelatinization
60	Granulation	To process feed ingredient to produce particular granularity and uniformity.	Granulation
61	Evaporation	To produce concentrated substance through evaporating or steaming.	Evaporation
62	Parboiling	To heat the soaked paddy with steam under certain temperature and pressure, which is one of the procedures of heat treatment for parboiling rice. The purpose is to increase the productivity of the rice, improve storage properties and the edible quality.	Parboiling
63	Distillation	To boil the liquid and collect the volatile gas into a separate utensil to separate the various component of the liquid.	Distillation
64	Cooking	To have the material go through heat- moisture treatment or pressure treatment in a particular facility at particular time to make starch gelatinize, and protein nature change and sterilization.	Cooking
65	Flour milling	A series of procedure to shred dry grain and make all parts separate to produce flour/ bran / all purpose flour preset quality.	Flour/ bran / all purpose flour

Code	Processing	Definition	Commonly used
No.	technique		Name/Description
66	Pelleting	To squeeze the powder material, with or without tempering, out of the extruding die pore to form pellets.	Pelleting

# Part III: List of the Raw Materials for Feedstuff

1. Grains and their processed products

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.1	Barley and its processed products		
1.1.1	Barley	Seeds of barley, including <i>Hordeum vulgare</i> L. and naked barleys ( <i>Hordeum vulgare</i> var. <i>nudum</i> ). It may be rumen protected.	
1.1.2	Barley by-product flour	One of the byproducts made from the raw material of barley through milling, comprised of aleurone layer, albumen and a bit of fine bran.	Starch Crude protein Crude fiber
1.1.3	Barley albumen powder	A byproduct with protein as the main composition when bran and starch are separated from barley.	Crude protein
1.1.4	Barley flour	A powdery product formed when barley is processed through milling, mainly containing barley flour with a bit of fine bran and germ.	Starch Crude protein
1.1.5	Slurry powder of barley flour	A product made from the liquid byproduct when it is concentrated and dried after barley is processed to extract protein and starch by wet process.	Crude protein
1.1.6	Barley bran	Bran separated from barley when it is milled into flour.	Crude fiber
1.1.7	Barley hull	Shell of barley removed by husking process.	Crude fiber
1.1.8	Barley sugar residue	A byproduct obtained when barley is produced into starch sugar.	Crude protein Moisture
1.1.9	Barley fiber	Fiber extracted from barley seeds, or fiber products extracted during the production of barley starch.	Crude fiber
1.1.10	Barley fiber residue [barley hull]	A byproduct obtained when barley is processed to get starch, mainly comprised of cellulose and a bit of albumen.	Crude fiber
1.1.11	Germed barley	A product obtained when barley is germinated.	Crude protein Crude fiber
1.1.12	Germed barley powder	A product obtained when germed barley is dried and milled.	Crude protein Crude fiber
1.1.13	Germed barley root	A byproduct obtained when germed barley or malt is cleaned up, mainly comprised of malt root, barley fine flour, husk and broken malts.	Crude protein Crude fiber

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.1.14	Roasted barley	A product obtained when barley is properly roasted.	Starch Crude protein
1.1.15	Slurry-sprayed barley hull	A product obtained from the byproduct obtained when using barley to produce starch and germ is sprayed with barley soak solution and then dried.	Crude protein Crude fiber
1.1.16	Expanded barley	A product obtained when barley is processed by expanding treatment under the conditions of certain temperature and pressure.	Starch Starch gelatinization
1.1.17	Full barley flour	A product obtained when the full barley seed is milled without removing any husk.	Starch Crude protein
1.1.18	Rolled barley	A product obtained when barley is steamed and milled, of which there may be a bit of husk. It is rumen protected.	Starch Starch gelatinization
1.1.19	Barley grass powder <sup>e</sup>	A product obtained by drying and milling barley seedlings.	Crude protein Crude fiber Moisture
1.2	Paddy and its processed	products	
1.2.1	Paddy	Seeds of cultivated paddy ( <i>Oryza sativa</i> L.), a herbal plant of Poaceae family.	
1.2.2	Brown rice	A product obtained when paddy is hulled. Comprised of cortex, albumen and germ.	Starch Crude fiber
1.2.3	Coarse rice powder	A product obtained from coarse rice when it is milled.	Starch Crude protein Crude fiber
1.2.4	Rice <sup>e</sup>	A product obtained when paddy is dehulled and removed off the cortex, which can be named rice and can be indicated as indica rice, japonica rice, glutinous rice according to its category, or black rice, red rice, etc. according to its special varieties.	Starch Crude protein
1.2.5	Rice shorts	A byproduct obtained when rice is processed into flour and starch (including wet and dry milling and screening).	Starch Crude protein Crude fiber
1.2.6	Rice albumen powder	A byproduct obtained when rice is processed into starch by wet milling, screening, separating, concentrating and drying.	Crude protein

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.2.7	Rice powder	A product obtained when rice is milled.	Starch Crude protein
1.2.8	Enzymatic rice protein	A product obtained when rice albumen powder is enzymatically hydrolyzed and dried.	Acid-soluble protein (Trichloroacetic acid soluble protein) Crude protein Crude ash Calcium content
1.2.9	Rice polished powder	A powdery byproduct obtained during polishing of dehulled rice.	Crude protein Crude fiber
1.2.10	Rice sugar residue	A byproduct obtained when rice is processed into starch sugar.	Crude protein Moisture
1.2.11	Rice hull powder [rice chaff]	A product obtained from the glumes and the husk separated from paddy shelling, when it is crushed.	Crude fiber
1.2.12	Rice oil [rice bran oil]	The oil pressed or extracted from rice bran. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
1.2.13	Rice bran	The cortex separated from coarse rice during rice milling, containing a bit of germ and albumen.	Crude fat Acid value Crude fiber
1.2.14	Rice bran cake	A byproduct obtained from rice bran when oil is pressed.	Crude protein Crude fat Crude fiber
1.2.15	Rice bran meal (de-fat rice bran)	A byproduct obtained from rice bran or rice bran cake when oil is solvent extracted.	Crude protein Crude fiber
1.2.16	Puffed rice (powder)	A product obtained when rice or broken rice is processed by extruded treatment under the conditions of certain temperature and pressure.	Starch Starch gelatinization
1.2.17	Broken rice	Broken rice particles (including rice tips) from paddy milling.	Starch Crude protein
1.2.18	Rice coarse bran	The rice bran containing husk naturally produced during paddy milling; no rice hull powder is allowed to add in except for ineluctable mixes or impurities.	Crude fat Crude fiber Acid value

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
			Crude fat
1.2.19	Stabilized rice bran	The rice bran treated by methods of destroying amylase such as extrusion, expansion, microwave.	Crude fiber
			Acid value
1.2.20	Rolled rice	A product obtained from pregelatinized rice when it is	Starch
1.2.20	Rohed field	pelleted.	Starchgelatinization
1 2 21	Duranlatining during	A product obtained from rice or broken rice when it is	Starch
1.2.21	Pregelatinized rice	treated by pregelatinized process such as moist heat and pressure.	Starchgelatinization
		A byproduct obtained from parboiled rice when the	Crude protein
1.2.22	Parboiled rice powder	dehulled brown rice is roughly processed, mainly comprised of seed capsule, aleurone layer, albumen and	Crude fiber
		germ. It is treated by Calcium carbonate	Calcium carbonate
1.2.23	Rice germ <sup>e</sup>	A product mainly containing germ extracted during rice processing.	Crude protein Crude fat
			Crude protein
1.2.24	Rice germ meal <sup>e</sup>	A byproduct obtained from crushing rice germ for oil.	Crude fat
			Crude fiber
1.3	Sorghum and its process	sed products	
1.3.1	Sorghum	Seeds of Sorghum (Sorghum bicolor L.).	
		One of the byproducts obtained from the raw material of	Starch
1.3.2	Sorghum flour	sorghum by milling, comprised of aleurone layer, albumen and a bit of fine bran.	Crude fiber
	Slurry powder of	A product made from the liquid byproduct when it is	Crude protein
1.3.3	Sorghum flour	concentrated and dried after Sorghum is processed to extract protein and starch by wet process.	Moisture
		The mixture of the cortex, germ and a bit of albumen	Crude fat
1.3.4	Sorghum bran	separated from Sorghum during Sorghum rice milling.	Crude fiber
			Starch
1.3.5	Sorghum kernel	A product obtained when Sorghum seed is dehulled	Crude protein
1.3.6	De-hulled Sorghum	A powdery product obtained when the seed capsule and germ are removed off Sorghum seed with the albumen	Starch
1.3.0	flour	being milled at proper fineness	Crude protein
107		A product obtained when the full Sorghum seed is milled	Starch
1.3.7	Full Sorghum flour	without removing any husk.	Crude protein

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements	
1.4	Rye and its processed products			
1.4.1	Rye	Seeds of Rye (Secale cereale L.).		
1.4.2	Rye 2 <sup>nd</sup> class flour	One of the byproducts obtained from the raw material of Rye by milling, comprised of aleurone layer, albumen and a bit of fine bran.	Starch Crude fiber	
1.4.3	Rye flour	A powdery product made when rye is processed through milling, mainly containing rye flour with a bit of fine bran and germ.	Starch Crude protein	
1.4.4	Rye bran	The cortex separated from rye during being milled into flour.	Starch Crude fiber	
1.4.5	Full Rye flour	A product obtained when the full rye seed is milled without removing any husk.	Starch Crude protein	
1.5	Distiller's dried grains		1	
1.5.1	Dried grain from liquor distilling	The product obtained from residue that is dried and crushed when it is fermented in solid state and distilled and extracted with one or several grains or potatoes as raw materials and rice hull as filling materials during the production of liquor.	Crude protein Crude ash Crude fiber	
1.5.2	Dried grain from yellow wine distilling	The product obtained from filtered residue from the raw material that is fermented when it is dried during the production of yellow wine.	Crude protein Crude fat Crude fiber	
1.5.3	<ul> <li>distillers dried grain</li> <li>[DDG]</li> <li>1. barley</li> <li>2. rice</li> <li>3. corn</li> <li>4. sorghum</li> <li>5. wheat</li> <li>6. rye</li> <li>7. grain</li> <li>8. potatoes</li> </ul>	The product obtained in the way that when the grain seeds or the potatoes are fermented by yeast and then distilled to remove ethanol, the filtered residue from the remaining stillage is concentrated and dried. The product shall be marked with specific source of grain. According to different varieties of grains, it can be divided into barley DDG, rice DDG, corn DDG, sorghum DDG, wheat DDG, and rye DDG. The product from two or more than two kinds of grain seeds is called grain DDG. It is rumen protected.	Crude protein Crude fat Crude fiber Moisture	

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.5.4	distillers dried soluble [DDS] 1. barley 2. rice 3. corn 4. sorghum 5. wheat 6. rye 7. grain 8. potatoes	The product obtained in the way that when the grain seeds or the potatoes are fermented by yeast and then distilled to get out of the ethanol, the filtered residue from the remaining stillage is concentrated and dried. The product shall be marked with specific source of grain. According to different varieties of grains, it can be divided into barley DDS, rice DDS, corn DDS, sorghum DDS, wheat DDS, and rye DDS. The product from two or more than two kinds of grain seeds is called grain DDS. It is rumen protected.	Crude protein Crude fat Moisture
1.5.5	Dried beer residue	The product obtained from filtered residue after saccharification when it is dried during the process using barley as the main raw material to produce beer.	Crude protein Crude fat Crude fiber
1.5.6	<ul> <li>distillers dried grains with soluble [DDGS]</li> <li>1. barley</li> <li>2. rice</li> <li>3. corn</li> <li>4. sorghum</li> <li>5. wheat</li> <li>6. rye</li> <li>7. grain</li> <li>8 .potatoes</li> </ul>	The product obtained in the way that when the grain seeds or the potatoes are fermented by yeast and then distilled to get out of ethanol, the filtered residue from the remaining stillage (distillers' solution, at least containing 3/4 solid component) is concentrated and dried. The product shall be marked with specific source of grain. According to different varieties of grains, it can be divided into barley DDGS, rice DDGS, corn DDGS, sorghum DDGS, wheat DDGS, and rye DDGS. The product from two or more than two kinds of grain seeds is called grain DDGS. It is rumen protected.	Crude protein Crude fat Crude fiber Moisture

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.5.7	<ul> <li>distillers wet grains</li> <li>[DWG]</li> <li>1. barley</li> <li>2. rice</li> <li>3. corn</li> <li>4. sorghum</li> <li>5. wheat</li> <li>6. rye</li> <li>7. grain</li> </ul>	The filtered residue obtained in the way that when the grain seeds or the potatoes are fermented by yeast and then distilled to get out of the ethanol, when the remaining stillage is filtered. The product shall be marked with specific source of grain. According to different varieties of grains, it can be divided into barley DWG, rice DWG, corn DWG, sorghum DWG, wheat DWG, and rye DWG. The product from two or more than two kinds of grain seeds is called grain DWG.	Crude protein Crude fat Crude fiber Moisture
1.5.8	<ul> <li>8. potatoes</li> <li>distillers wet soluble [DWS]</li> <li>1. barley</li> <li>2. rice</li> <li>3. corn</li> <li>4. sorghum</li> <li>5. wheat</li> <li>6. rye</li> <li>7. grain</li> <li>8. potatoes</li> </ul>	The filtered residue obtained in the way that when the grain seeds or the potatoes are fermented by yeast and then distilled to get out of the ethanol, when the remaining stillage is filtered. The product shall be marked with specific source of grain. According to different varieties of grains, it can be divided into barley DWS, rice DWS, corn DWS, sorghum DWS, wheat DWS, and rye DWS. The product from two or more than two kinds of grain seeds is called grain DWS.	
1.5.9	Distillers grain syrup <sup>e</sup>	A product obtained from evaporation and concentration of distiller mash when grain is fermented and distilled during wine production.	Crude protein Moisture
1.6	Buckwheat and its processed products		
1.6.1	Buckwheat	Achene of the cultivated Buckwheat ( <i>Fagopyrum esculentum</i> ), a yearly plant of Polygonaceae family.	
1.6.2	Buckwheat flour	One of the byproducts obtained from the raw material of Buckwheat by milling, comprised of aleurone layer, endosperm and a bit of fine bran.	Starch Crude fiber
1.6.3	Buckwheat bran	The cortex separated from Buckwheat during being milled into flour.	Starch Crude fiber

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements	
1.6.4	Whole Buckwheat	A product obtained when the full Buckwheat seed is milled	Starch	
	flour	without removing any husk.	Crude protein	
1.7	Screenings			
	Screenings			
	1. barley			
	2. rice			
	3. com			
	4. sorghum	The shriveled or broken seeds, seed capsule and hull of the grain seeds screened out during the cleaning. According to		
1.7.1	5. wheat	the different varieties of grains, it can be divided into barley screenings, rice screenings, corn screenings, sorghum	Crude fiber	
1./.1	6. rye	screenings, wheat screenings, rye screenings, buckwheat	Crude ash	
	7. buckwheat	screenings, millet screenings, broomcorn millet screenings, triticale screenings and oat screenings.		
	8. millet			
	9. broomcorn millet			
	10. triticale			
	11. oat			
1.8	Millet and its processed	products		
1.8.1	Millet [glutinous millet]	Seeds of cultivated millet ( <i>Panicum miliaceum</i> L.), a herbal plant in Polygonaceae family.		
1.8.2	Millet flour	A powdery product obtained when millet (peeled or not) is	Starch	
		milled.	Crude protein	
			Crude fat	
1.8.3	Millet bran	The cortex separated from coarse millet during rice milling, containing a bit of germ and albumen.	Crude fiber	
			Acid value	
1.9	Broomcorn millet and it	Broomcorn millet and its processed products		
1.9.1	Broomcorn millet [foxtail millet]	Seeds of Broomcorn millet (Setaria italica var. germanica).		
1.9.2	Milled foxtail millet	The part left when the cortex of Broomcorn millet is peeled,	Starch	
		it can be divided into Japonica millet and glutinous millet.	Crude fat	

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.9.3	Flour of milled foxtail millet	A powdery product obtained when foxtail millet is milled.	Starch
1.9.8			Crude protein
1.9.4	Bran of milled foxtail	The cortex of coarse foxtail millet that is milled out by the	Crude fat
1.511	millet	milling machine.	Crude fiber
1.10	Triticale and its processe	ed products	I
1.10.1	Triticale	Seeds of Triticale ( <i>Triticum X Secale cereale</i> L.), a new seed formed from crossbreed hybrid chromosome doubling of Triticale.	
1.10.2	Whole triticale flour	A product obtained when the full Triticale seed is milled	Starch
1.10.2	whole unicale nour	without removing any husk.	Crude protein
1.10.3	Triticale by-product	One of the byproducts obtained from the raw material of Triticale by milling, comprised of aleurone layer, albumen	Starch
1.10.5	flour	and a bit of fine bran.	Crude fiber
1 10 4	Triticale flour	The product made from Triticale by milling, mainly comprised of Triticale flour, containing a bit of fine bran and germ powder.	Starch
1.10.4			Crude protein
1.10.5	Triticale bran	The cortex separated from Triticale during being milled into flour.	Starch
1.10.5			Crude fiber
1.11	Wheat and its processed	products	1
1.11.1	Wheat	Seeds of wheat ( <i>Triticum aestivum</i> L.). It is rumen protected.	
1.11.2	Germed wheat	Wheat is germinated	Crude protein
	[germinated wheat]		Crude fiber
1.11.3	Wheat gluten [vital	gluten][wheat compositions such as other carbohydrates. Due to high	Crude protein
1.11.5	albumen powder ]		Water absorption
1.11.4	Slurry-sprayed wheat	A product obtained from the byproduct obtained when using wheat to produce starch and germ is sprayed with	Crude protein
1.11.4	bran	using wheat to produce starch and germ is sprayed with wheat soak solution and then dried.	Crude fiber
		A product obtained when wheat is processed by expanding	Starch
1.11.5	Expanded wheat	treatment under the conditions of certain temperature and	Crude protein
		pressure.	Starch gelatinization

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
			Starch
1.11.6	Whole wheat flour	A product obtained when the whole wheat seed is milled without removing any husk.	Crude protein
			Gluten quantity
1.11.7	Wheat by-product	One of the byproducts obtained from the raw material of wheat by milling, comprised of aleurone layer, albumen and	Starch
1.11.7	flour	a bit of fine bran.	Crude fiber
			Starch
1.11.8	Wheat by-product flour [flour]	The powdery product made from wheat by milling, mainly comprised of wheat flour, containing a bit of fine bran and	Crude protein
		germ powder.	Gluten quantity
	Slurry powder of	A product made from the liquid byproduct when it is	Crude protein
1.11.9	wheat flour	concentrated and dried after wheat is processed to extract protein and gluten powder.	Moisture
1.11.10	Wheat bran[bran]	The cortex separated from wheat during being milled into flour.	Crude fiber
	Wheat germ	A byproduct obtained from the germ together with a bit of bran and albumen extracted when wheat is milled.	Crude protein
1.11.11			Crude fat
1 11 10			Crude protein
1.11.12	Wheat germ cake	A byproduct obtained from wheat germ after oil is pressed.	Crude fat
1.11.13	Wheat germ meal	A byproduct obtained from wheat germ after oil is extracted.	Crude protein
1.11.14	Wheat germ oil	The oil made from wheat germ when it is pressed or extracted. The product shall be provided by qualified food	Acid value
	Wheat hydrolyzed	manufacturers.         A product obtained after gluten powder is hydrolyzed	Peroxide number
1.11.15	protein	partially.	Crude protein
1.11.16	Wheat sugar residue	A byproduct obtained from wheat when starch sugar is	Crude protein
1.11.10	wheat sugar residue	extracted.	Moisture
1.11.17	Wheat fiber	Fiber extracted from seeds of wheat, or fiber products extracted during the production of wheat starch.	Crude fiber
1.11.18	Wheat fiber residue	A byproduct obtained from wheat when starch is extracted,	Crude fiber
. •	[wheat hull]	mainly comprised of cellulose and a bit of albumen.	Moisture
			Starch
1.11.19	Rolled wheat	A product obtained when husked wheat is steamed and milled, of which there may be a bit of husk. It is rumen protected.	Crude protein

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.11.20	Pregelatinized wheat	A product obtained from crushed or broken wheat when it is treated by pregelatinized process such as moist heat and pressure.	Starch Crude protein Starch gelatinization
1.12	Oat and its processed pro	oducts	
1.12.1	Oat	Seeds of oat (Avena sativa L.). It is rumen protected.	Rumen-protected method
1.12.2	Puffed oat	A product obtained when oat is processed by expanding treatment under the conditions of certain temperature and pressure.	Starch Starchgelatinization
1.12.3	Whole oat flour	A product obtained when whole oat seed is milled without removing any husk.	Starch Crude protein
1.12.4	De-husked oat	The husked seeds of oat, processed by steam treatment.	Starch
1.12.5	Oat by-product flour	One of the byproducts obtained from the raw material of oat by milling, comprised of aleurone layer, albumen and a bit of fine bran.	Starch Crude fiber
1.12.6	Oat flour	The powdery product made from oat by milling, mainly comprised of oat flour, containing a bit of fine bran and germ powder.	Starch Crude protein
1.12.7	Oat bran	The cortex separated from oat during being milled into flour.	Crude fiber
1.12.8	Oat hull	Hull separated from oat by peeling process.	Crude fiber
1.12.9	Rolled oat	A product obtained when husked oat is steamed and milled, of which there may be a bit of husk.	Starch Crude protein
1.12.10	Oat seedlings powder <sup>e</sup>	A product obtained when oat seedlings are dried and crushed.	Crude protein Crude fiber Moisture
1.13	Corn and its processed p	roducts	1
1.13.1	Corn	Seeds of corn (Zea mays L. ssp. Mays). It is rumen protected.	Rumen-protected method
1.13.2	Slurry-sprayed corn hull	A product obtained from the byproduct obtained when corn soak solution is sprayed on the corn hull and then dried.	Crude protein Crude fiber

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.13.3	Expanded corn	A product obtained when corn is processed by expanding treatment under the conditions of certain temperature and	Starch Starch gelatinization
1.13.4	De-hulled corn	A product obtained when corn seeds are de-hulled.	Starch
		A product obtained when husked corn is steamed and	Crude protein Starch
1.13.5	Rolled corn	milled, of which there may be a bit of husk.	Starchgelatinization
1.13.6	Corn by-product flour	A byproduct obtained from production of corn flour and corn grits, mainly comprised of corn capsule and some broken corn.	Starch Crude fiber
1.13.7	Corn albumen powder	The product rich in protein obtained from the yellow slurry water left when starch is extracted from corn through degerming, crushing, and deslagging, the crude protein content shall not be less than 50% (in dry basis).	Crude protein Crude fiber Moisture
1.13.8	Residue of corn starch	The filtered residue obtained from corn when it is crushed, liquefied and filtered during the deep processing using corn to produce citric acid and alike, and then dried.	Starch Crude protein Crude fat Moisture
1.13.9	Corn flour	A powdery product obtained when corn is processed through removing impurities, degerming (or not) and milling.	Starch Crude protein
1.13.10	Slurry powder of corn	The product obtained when corn soak liquid is filtered, concentrated, and spray-dried at low temperature.	Crude protein Sulfur dioxide
1.13.11	Enzymatic corn protein	A product obtained when corn albumen powder is enzymatically hydrolyzed and dried.	Acid-soluble protein (Trichloroacetic acid soluble protein) Crude protein Crude ash Calcium content
1.13.12	Corn germ	A byproduct obtained from the germ extracted from corn seeds during processing, containing a bit of corn hull and albumen.	Crude protein Crude fat
1.13.13	Corn embryo cake	A byproduct obtained from the corn germ when oil is pressed.	Crude protein Crude fat
1.13.14	Corn embryo meal	A byproduct obtained from the corn germ when oil is extracted.	Crude protein
1.13.15	Corn hull	The cortex separated from corn during being milled into flour.	Crude fiber
1.13.16	Corn pieces [corn particle]	A granular product obtained from corn through removing impurities, degerming, milling and screening.	Starch Crude protein

Raw material No.	Raw material name	Feature description	Mandatory labeling requirements
1.13.17	Residue of corn sugar	A byproduct obtained from production of starch from corn.	Starch Crude protein Crude fat Moisture
1.13.18	Powder of corn cob	A powdery product obtained from the core spike-stalk of corn when it is milled.	Crude fiber
1.13.19	Corn oil [corn germ oil]	The oil made from corn gem when it is pressed or extracted. The product shall be provided by qualified food manufacturers.	Crude fat Acid value Peroxide number
1.13.20	Corn bran <sup>e</sup>	A mixture containing the cortex separated during corn processing, a bit of germ and albumen.	Crude fat Crude fiber
1.14	Others		
1.14.1	enenopourum quinou	Seeds of Chenopodium quinoa Willd. The saponin contained in the seed coat has been removed.	
1.14.2	Coix [semen coicis, Coix seed] <sup>e</sup>	Seed kernels of Coix chinensis Tod.	Starch Crude protein

#### 2. Oil seeds and their processed products

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.	
2.1	Almond and its processed products			
2.1.1	Almond kernel cake	The byproduct after oil is pressed from the almond kernel ( <i>Amygdalus Communis Linn.</i> ) or apricot ( <i>Armeniaca vulgaris Lam.</i> ) kernel	Crude protein Crude fat Crude fiber	
2.1.2	Almond kernel meal	The byproduct after oil is extracted from the almond or apricot kernel.	Crude protein Crude fiber	
2.1.3	Almond kernel oil	The oil expressed or extracted from the almond or apricot kernel. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number	
2.2	Rapeseeds and its proce	essed products		
2.2.1	Rape seeds [rapeseeds]	A tiny globular seed of cultivated rapes, a cruciferae herbaceous plant ( <i>Brassica napus L. ssp.</i> , including Brassica napus L. B. campestris and B. juncea, double-low rape and Canola rape). It is rumen protected.		
2.2.2	Rape cake [rapeseed cake]	The byproduct after oil is extracted from the rapeseeds. It is rumen protected.	Crude protein Crude fat	
2.2.3	Rapeseed protein	The product made from rapeseeds or rapeseed cake or meal with the protein content more than 50% (in dry basis).	Crude protein	
2.2.4	Rapeseed coat	The seed capsule from rapeseeds through decortications process.	Crude fat Crude fiber	
2.2.5	Rapeseed meal [rape meal]	The byproduct after oil is extracted from the rapeseeds by pre- pressure leaching or direct solvent extraction or the byproduct extracted from rapeseed cake. It is rumen protected.	Crude protein Crude fiber	
2.2.6	Rapeseed oil [rape oil]	The oil expressed or extracted from the rapeseeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number	
2.2.7	Expanded rapeseeds	The product obtained from expanding treatment under certain temperature and pressured conditions. It is rumen protected.	Crude protein Crude fat	

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.2.8	Double-low rapeseeds	The rapeseed with the erucic acid content of the fatty acid in the oil of rapeseed not higher than $5.0\%$ and the glucosinolate content in the cake meal not higher than $45.0\mu$ mol/g. It is rumen protected.	Erucic acid Glucosinolate
2.2.9	Double-low rapeseed meal [double-low rape meal]	The byproduct after oil is extracted from the double-low rapeseeds by pre-pressure leaching or direct solvent extraction or the byproduct extracted from double-low rapeseed cake. It is rumen protected.	Crude protein Crude fiber Glucosinolate
2.3	Soybean and its process	ed products	
2.3.1	Soybean	The seed of Leguminous herbs (Glycine max. L. Merr.).	
2.3.2	Isolated protein of soybean	A product with the protein content more than 90% (in dry basis), made from the raw material of low-temperature soybean meal, from which the protein and other soluble components are extracted out based on the principle of alkali-solution and acid-isolation, with then protein being separated out at the isoelectric.	Crude protein
2.3.3	Soybean lecithin oil (soybean lecithin fish meal) <sup>a</sup>	The oil-containing phospholipid separated in the degumming process of soybean crude oil and obtained by vacuum dehydration; or the product obtained when soybean lecithin oil is mixed with carriers (corn flour, powder of corn cob, rice hull powder, bran) and dried; Crude fat $\geq$ 50%.	Acetone insoluble Crude fat Acid value Moisture
2.3.4	Enzymatic soybean protein	A product obtained when soybean or its processed products (dehulled bean meal/concentrated protein of soybean) is enzymatically hydrolyzed and dried.	Acid-soluble protein (Trichloroacetic acid soluble protein) Crude protein Crude ash Calcium
2.3.5	Concentrated protein of soybean	A product with the protein content more than 65% (in dry basis), obtained when the nonprotein components are removed from the low-temperature soybean cake or meal.	Crude protein
2.3.6	Soybean germ meal [Soybean germ flour]	A product obtained from the soybean germ when oil is extracted.	Crude protein Crude fiber
2.3.7	Soybean germ oil	The oil made from soybean germ when it is pressed or extracted. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.3.8	Soybean hull	The seed capsule from soybean through decortication process.	Crude protein Crude fiber
2.3.9	Soybean sieve residue	The deflated or broken seeds, seed coats and hulls sieved during the cleaning process of soybean seeds.	Crude fiber
			Crude ash Moisture
2.3.10	Soybean molasses	A dope with total sugar more than 55% and crude protein more than 8% (in dry basis) concentrated from watery ethanol extraction in the production of alcohol leached soy protein concentrate.	Total sugar
2.3.10	Soydean molasses		Sucrose
			Crude protein
2.3.11	Soybean fiber	The fiber extracted from soybeans.	Crude fiber

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.3.12	Soybean oil [bean oil]	The oil expressed or extracted from the soybean. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.3.13	Bean cake (soybean cake) <sup>a</sup>	The byproduct after oil is extracted from the soybeans. It is rumen protected.	Crude protein Crude fat
2.3.14	Bean meal (soybean meal) <sup>a</sup>	The byproduct after oil is extracted from the soybeans by pre- pressure leaching or direct solvent extraction or the byproduct extracted from soybean cake. Or the product obtained from soybean embryo flakes by the expanded oil extraction process after oil is extracted. It is rumen protected.	Crude protein Crude fiber
2.3.15	Bean residue (Soybean residue) <sup>a</sup>	The byproduct after soybean is immersed, milled and processed into soybean products or the protein is extracted.	Crude protein Crude fiber
2.3.16	Roasted soybean (powder)	A product made from roasted soybean or when it is crushed. It is rumen protected.	
2.3.17	Expanded soybean [expanded soybean powder]	A product obtained from full-fat soybean through cleaned, broken (ground), expanded.	Crude protein Crude fat
2.3.18	Expanded soybean protein [soybean tissue protein]	A product obtained from soybean isolate protein and soybean concentrated protein through expansion under certain conditions of temperature and pressure.	Crude protein
2.3.19	Expanded soybean meal <sup>a</sup>	A product obtained from the soybean meal through expansion.	Crude protein Crude fiber
2.4	Tomato seeds and its pr	ocessed products	
2.4.1	Tomato seed meal	The byproduct after oil is pressed or extracted from the seeds of tomato ( <i>Lycopersicon esculentum</i> ).	Crude protein Crude fiber
2.4.2	Tomato seed oil	The oil pressed or extracted from the tomato seeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.5	Olive and its processed	products	1
2.5.1	Olive cake [Olea europaea cake]	The byproduct after oil is pressed from the elliptic to ovate fruits of a evergreen oil tree in Oleaceae family ( <i>Olea europaea L.</i> ).	Crude protein Crude fat Crude fiber

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.	
2.5.2	Olive meal [Olea europaea meal]	The byproduct obtained after oil is extracted from olive.	Crude protein Crude fat	
			Crude fiber	
2.5.3	Olive oil	The oil pressed or extracted from the olive fruits. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number	
2.6	Walnut and its processed products			
2.6.1	Walnut kernel cake	The byproduct after oil is pressed from the hulled or partially hulled walnuts ( <i>Juglans regia</i> ) (with hull rate $\leq 30\%$ ).	Crude protein Crude fat Crude fiber	
2.6.2	Walnut kenel meal	The byproduct after oil is extracted from the walnut kernel by pre- pressure leaching or direct solvent extraction or the byproduct extracted from walnut kernel cake.	Crude protein Crude fiber	
2.6.3	Walnut kernel oil	The oil pressed or extracted from the walnut kernel. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number	
2.7	Safflower seed and its processed products			
2.7.1	Safflower seed	The seeds of a feverfew, safflower (Carthamus tinctorius L. ).		
2.7.2	Safflower seed cake	The byproduct obtained after oil is pressed from safflower seed (kernel).	Crude protein Crude fat Crude fiber	
2.7.3	Safflower seed hull	The product obtained when the kernel is removed from safflower seed.	Crude fiber	
2.7.4	Safflower seed meal	The byproduct obtained after oil is extracted from safflower seed (kernel).	Crude protein Crude fiber	
2.7.5	Safflower seed oil	The oil pressed or extracted from the safflower seed (kernel). The product shall be provided by qualified food manufacturers.	Acid value Peroxide number	
2.8	Chinese prickly ash seed and its processed products			
2.8.1	Chinese prickly ash seed	The seeds from the dried and mature fruit of a plant in Zanthoxylum species in rutaceae family, green prickly ash ( <i>Zanthoxylun schinifolium</i> ) or prickly ash ( <i>Zanthoxylum bungeanum</i> ).		

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.8.2	Prickly ash seed cake [prickly ash seed cake]	The byproduct obtained from Chinese prickly ash seed after oil is expressed	Crude protein Crude fat
			Crude fiber
2.8.3	Prickly ash seed meal [Prickly ash meal]	The byproduct after oil is extracted from the Chinese prickly ash seed by pre-pressure leaching or direct solvent extraction or the byproduct extracted from Chinese prickly ash seed cake.	Crude protein Crude fiber
2.8.4	Prickly ash oil	The oil expressed or extracted from the Prickly ash seeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.9	Peanut and its processed	d products	
2.9.1	Peanut	The elliptic seeds of the legume of a herb in the pea family, peanut ( <i>Arachis hypogaea L</i> .), with the seed capsule in black, white and mauve.	
2.9.2	Peanut cake [Peanut kernel cake]	The byproduct obtained after oil is pressed from the dehulled or partially dehulled peanuts (with hull rate $\leq 30\%$ ).	Crude protein Crude fat Crude fiber
2.9.3	Peanut protein	A product with the protein content more than 65% (in dry basis), made from peanuts and peanut meal.	Crude protein Crude fiber
2.9.4	Peanut red skin	The seed capsule of peanut kernel, containing rich tannic acid and thiamin.	Crude fiber
2.9.5	Peanut hull	Enclosure of peanut.	Crude fiber
2.9.6	Peanut meal [Peanut kernel meal]	The byproduct after oil is extracted from peanut by pre-pressure leaching or direct solvent extraction or the byproduct extracted	Crude protein Crude fat
	kerner meurj	from peanut cake.	Crude fiber
2.9.7	Peanut oil	The oil expressed or extracted from the peanut (kernel). The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.10	Cocoa and its processed products		
2.10.1	Cocoa cake (powder)	The byproduct obtained after oil is pressed from the dehulled cocoa bean ( <i>Theobroma cacao</i> L.).	Crude protein Crude fat
			Crude fiber

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.10.2	Cocoa oil [Cocoa grease]	The oil pressed or extracted from the cocoa bean. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.11	Sunflower seed and its processed products		
2.11.1	Sunflower seed [helianthus seed]	The seeds of a short egg-shaped achene of a composite herb ( <i>Helianthus annuus L</i> .). It is rumen protected.	Rumen-protected method
2.11.2	Sunflower head flour [Sunflower disk flour]	The product obtained from the residue that is crushed and dried after the sunflower seeds are removed from the sunflower disk.	Crude fiber Crude ash
2.11.3	Sunflower seed hull [helianthus hull]	Hull of Sunflower seed.	Crude fiber
2.11.4	Sunflower seed kernel cake [helianthus seed kernel cake]	The byproduct obtained after oil is pressed from the partially dehulled Sunflower seeds.	Crude protein Crude fat Crude fiber
2.11.5	Sunflower seed kernel meal [helianthus seed kernel meal]	The byproduct after oil is extracted from partially dehulled Sunflower seeds by pre-pressure leaching or direct solvent extraction. It is rumen protected.	Crude protein Crude fiber
2.11.6	Sunflower seed oil [helianthus seed oil]	The oil expressed or extracted from the sunflower seeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.12	Cotton seed and its processed products		
2.12.1	Cotton seed	The seed of the capsule of a herb in malvaceae family or a perennial shrub, cotton, ( <i>Gossypium spp.</i> ). It is banned for use for aquatic feed. It is rumen protected.	
2.12.2	Cottonseed kernel cake	Cottonseed cake with lower hull content rate is called cotton seed kernel cake according to the hull content.	Crude protein Crude fat Crude fiber Free gossypol
2.12.3	Cottonseed cake [cotton cake]	The byproduct obtained after oil is pressed from the de-linted and dehulled cotton seeds.	Crude protein Crude fat Crude fiber Free gossypol
2.12.4	Cottonseed protein <sup>a</sup>	A product with the protein content more than 50% (in dry basis), made from cotton seeds or cottonseed meal.	Crude protein Free gossypol

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.12.5	Cottonseed hull	The product mainly comprised of hulls when the hull and kernel of cotton seed is separated.	Crude fiber
2.12.6	Enzymatic cottonseed protein	A product obtained when cottonseed or cottonseed albumen powder is enzymatically hydrolyzed and dried.	Acid-soluble protein (Trichloroacetic acid soluble protein) Crude protein Crude ash Free gossypol Calcium
2.12.7	Cottonseed meal [cotton meal]	The byproduct after oil is extracted from cotton seeds by pre- pressure leaching or direct solvent extraction when it is delinted and husked and the kernel is separated from the hull or the byproduct extracted from cottonseed cake. It is rumen protected.	Crude protein Crude fiber Free gossypol
2.12.8	Cottonseed oil [cotton oil]	The oil expressed or extracted from the cotton seeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.12.9	Dephenolized cottonseed protein [detoxified cottonseed protein]	The product obtained with crude protein content not less than 50%, free gossypol content not more than 400mg/kg, and the ratio of amino acids to crude protein not less than 87% by using cottonseed as raw material under low temperature conditions after it is softened, germ-flattened, leached and extracted, and then gossypol is extracted and removed in a free state.	Crude protein Crude fiber Free gossypol Ratio of amino acids to crude protein
2.13	Kapok seed and its proc		
2.13.1	Kapok seed cake	The byproduct obtained after oil is pressed from Kapok seed ( <i>Ceiba pentadra</i> L. <i>Gaertn</i> .).	Crude protein Crude fat Crude fiber
2.13.2	Kapok seed meal	The byproduct after oil is extracted from Kapok seed by pre- pressure leaching or direct solvent extraction or the byproduct extracted from Kapok seed cake.	Crude protein Crude fiber
2.13.3	Kapok seed oil	The oil pressed or extracted from the Kapok seed. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.14	Grape seed and its processed products		
2.14.1	Grape seed meal	The byproduct obtained after oil is extracted from the seeds of grape ( <i>Vitis vinifera</i> ).	Crude protein Crude fiber
2.14.2	Grape seed oil	The oil extracted from the grape seed. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.15	Seabuckthorn seed and its processed products		

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
			Crude protein
2.15.1	Seabuckthorn seed cake	The byproduct obtained after oil is pressed from the seeds of Seabuckthorn ( <i>Hippophae rhamnoides Linn.</i> ).	Crude fat
		Scabackalom (Hypophae mannolaes Linn.).	Crude fiber
2.15.2	Seabuckthorn seed meal	The byproduct obtained after oil is pressed from Seabuckthorn seeds by leaching or supercritical fluid extraction.	Crude protein
2.13.2			Crude fiber
2 15 2	Sachualtham good ail	The oil pressed or extracted from Seabuckthorn seeds. The product	Acid value
2.15.3	Seabuckthorn seed oil	shall be provided by qualified food manufacturers.	Peroxide number
2.16	Wild jujube and its processed products		
		The byproduct obtained after oil is extracted from the seeds of Wild	Crude protein
2.16.1	Wild jujube meal	jujube (Ziziphus jujube var. spinosa).	Crude fiber
2.16.2	Wild jujube oil	The oil extracted or extracted from the Wild jujube kernel. The product shall be provided by qualified food manufacturers.	Acid value
2.16.2 W			Peroxide number
2.17	Yellow horn and its processed products		
0.15.1	Yellow horn seed	The byproduct obtained after oil is expressed from the seeds of	Crude protein
2.17.1	meal	Yellow horn (Xanthoceras sorbifolia Bunge).	Crude fiber
0.15.0		The oil expressed or extracted from Yellow horn seed. The product	Acid value
2.17.2	Yellow horn seed oil	shall be provided by qualified food manufacturers.	Peroxide number
2.18	Linseed and its processed products		
2.18.1	Linseed [flax seed]	The seed of flax (Linum usitatissimum L.)It is rumen protected.	
			Crude protein
2.18.2	Flax cake [Linseed cake, Linseed kernel	The byproduct obtained after oil is expressed from linseed.	Crude fat
	cake, flax cake]		Crude fiber
2.18.3	Flax meal [Linseed		Crude protein
	meal, Linseed kernel meal, flax meal]	The byproduct obtained after oil is extracted from Linseed kernel.	Crude fiber
0.10.1		The oil pressed or extracted from Linseed. The product shall be	Acid value
2.18.4	Linseed oil	provided by qualified food manufacturers.	Peroxide number

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
			Crude protein
2.18.5	Linseed flour <sup>e</sup>	A powdery product obtained through the process of milling.	Crude fat
		reportery product obtained unough the process of mining.	Crude fiber
2.19	Coconut and its process	sed products	1
			Crude protein
2.19.1	Coconut cake	The byproduct obtained after oil is pressed from the raw material of albumen (namely the coconut pulp) of the dried coconut ( <i>Cocos nucifera L.</i> ).	Crude fat
			Crude fiber
2.19.2	Coconut meal	The byproduct obtained after oil is pressed or extracted by pre- pressure leaching or direct solvent extraction from the raw material	Crude protein
2.19.2	Coconut mean	of albumen (namely the coconut pulp) of the dried coconut ( <i>Cocos nucifera L.</i> ).	Crude fiber
		The oil pressed or extracted from the coconut albumen. The	Acid value
2.19.3	Coconut oil	product shall be provided by qualified food manufacturers.	Peroxide number
2.20	Oil palm and its proces	sed products	
		The oily unprocessed defatted and unseparated fruit (pulp) on the ears of Palm fruit ( <i>Trachycarpus fortunei</i> Hook.).	Crude fat
2.20.1			Crude protein Crude fiber
			Crude protein
2.20.2	Palm cake [Palm kernel cake]	The byproduct obtained after oil is pressed from Palm kernel.	Crude fat
			Crude fiber
2.20.3	Palm meal [Palm kernel meal]	The byproduct obtained after oil is extracted from Palm kernel.	Crude protein Crude fiber
2.20.4	Palm kernel	The kernel of the fruit of oil palm when it is dehusked.	
2.20.5	Palm kernel oil	The oil pressed or extracted from the Palm kennel. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
		The oil pressed or extracted from the Palm pulp; or the granular	
2.20.6	Palm oil (Palm fat powder) <sup>a</sup>	powder obtained from Palm oil by heating, spraying and cooling. No carrier shall be added to the product, Crude fat $\geq$ 99.5%. The product shall be provided by qualified food manufacturers	Acid value Peroxide number
2.21	product shall be provided by qualified food manufacturers.     Provided half of the foot manufacturers.       Evening Primrose seed and its processed products     Provided half of the foot manufacturers.		
2.21.1	Evening Primrose seed	Seeds of Evening Primrose ( <i>Oenothera biennis L.</i> ).	
	Evening Primrose	The byproduct obtained after oil is coldly pressed and extracted	Crude protein
2.21.2	seed meal	from Evening Primrose seed.	Crude fiber
0.01.0	Evening Primrose T	The oil coldly pressed or extracted from Evening Primrose seed.	Acid value
2.21.3	seed oil	The product shall be provided by qualified food manufacturers.	Peroxide number

Raw mater ial No.	Raw material name	Feature description	Mandatory labeling requirements.
2.22	Sesame and its processed products		
2.22.1	Sesame seed	Seeds of Sesame (Sesamum indicum L.).	
2.22.2	Sesame cake [Oleum Sesame cake]	The byproduct obtained after oil is pressed from Sesame seed.	Crude protein Crude fat Crude fiber
2.22.3	Sesame meal	The byproduct after oil is extracted from Sesame seed by pre- pressure leaching or direct solvent extraction or the byproduct extracted from Sesame seed cake.	Crude protein Crude fiber
2.22.4	Sesame oil	The oil pressed or extracted from Sesame seed. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.23	Purple perilla and its processed products		
2.23.1	Purple perilla seed	Seeds of Purple perilla(Perilla frutescens).	
2.23.2	Purple perilla cake [Purple perilla seed cake]	The byproduct obtained after oil is pressed from Purple perilla( <i>Perilla frutescens</i> ).	Crude protein Crude fat Crude fiber
2.23.3	Purple perilla meal [Purple perilla seed meal]	The byproduct obtained after oil is extracted from Purple perilla seeds or Purple perilla cake.	Crude protein Crude fiber
2.23.4	Purple perilla oil	The oil pressed or extracted from the Purple perilla seeds. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.24	Others	1	1
2.24.1	Hydrogenated Fat	The product obtained from the vegetable grease from hydrogenation reaction. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
2.24.2	Borage oil <sup>e</sup>	The oil pressed or extracted from the Borage ( <i>Borago officinalis</i> L.) seeds.	Acid value Peroxide number

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
3.1	Hyacinth bean and its p	rocessed products	
3.1.1	Hyacinth bean	Seeds of hyacinth bean in hyacinth bean species in butterfly flower subfamily in legume family ( <i>Lablab purpure us</i> L.).	
3.1.2	Dehulled hyacinth bean	Product of hyacinth bean seed dehulled by shelling technology.	Crude protein Crude fiber
3.2	French bean and its pro	cessed products	
3.2.1	French bean [Kidney Bean]	Seeds of kidney bean in kidney bean species in legume family ( <i>Phaseolus vulgaris</i> L.).	
3.3	Broad bean and its proc	ressed products	•
3.3.1	Broad bean	Seeds of a plant in legume family and broad bean species ( <i>Vicia fib</i> L.).	
3.3.2	Broad bean gluten meal	The powdery byproduct obtained from the starch slurry that is dried when amylum is separated from the broad bean.	Crude protein
3.3.3	Broad bean seed capsule	Seed capsule of broad bean seed dehulled by shelling technology.	Crude fiber
	capsule	technology.	Crude ash
3.3.4	Dehulled broad bean	Product of broad bean seed dehulled by shelling technology	Crude protein Crude fiber
3.3.5	Flaked broad bean	Product obtained from the hulled broadband through being steamed and grounded.	Crude protein
3.4	Guar seed and its proce	ssed products	
3.4.1	Guar bean <sup>a</sup>	Seeds of guar bean in legume family and guar bean species ( <i>Cyamopsis tetragonoloba</i> L.).	
3.4.2	Guar germ meal	The byproduct obtained from the germ of guar seed ( <i>Cyamopsis tetragonoloba</i> L.) after guar gum is extracted.	Crude protein
3.4.3	Guar meal	The byproduct obtained from guar seed after guar gum is extracted.	Crude protein
3.5	Red bean and its proces	sed products	<u> </u>
3.5.1	Red bean [small red bean]	Seeds of a plant in red bean species in legume family ( <i>Vigna angularis</i> ).	
3.5.2	Red bean capsule	Seed capsule of red bean seeds dehulled by decortication process.	Crude fiber Crude ash
3.5.3	Red bean residue	The byproduct obtained from red bean when starch and	Crude fiber

3. Seeds of legume crops and their processed products (soybean and its processed products refer to Part II)

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
		protein are extracted by wet extraction.	Crude ash
			Moisture
3.6	Carob bean and its pro	ocessed products	
			Crude protein
3.6.1	Carob flour	The product obtained from seeds of algaroba in legume family and algaroba species ( <i>Ceratonia siliqua</i> L.) and bean pods that	Crude fiber
		are crushed together.	Total sugar
3.7	Green bean and its proc	cessed products	
3.7.1	Green bean	Seeds of a plant (Vigna radiate L.).	
3.7.2	Green bean gluten meal	The powdery byproduct obtained from the starch slurry that is dried when amylum is separated from the green bean.	Crude protein
272		Seed capsule of green bean seeds dehulled by decortication	Crude fiber
3.7.3	Greenbean capsule	process.	Crude ash
			Crude fiber
3.7.4	Greenbean residue	The byproduct obtained from green bean when amylum and protein are extracted by wet extraction.	Crude ash
		protein are extracted by wet extraction.	Moisture
3.8	Pea and its processed p	roducts	I
3.8.1	Pea	Seeds of a plant in pea species in legume family( <i>Pisum sativum L</i> .). It is rumen protected.	Rumen-protected method
3.8.2	Dehulled pea	Product obtained by dehulling the capsule of pea seeds.	Crude protein
			Crude fiber Crude protein
3.8.3	Pea byproduct meal	The byproduct obtained from pea milling, mainly comprised of albumen and some capsules.	Crude fiber
3.8.4	Pea meal	Product obtained by breaking pea.	Crude protein
			Crude fiber
3.8.5	Pea gluten meal	The powdery byproduct obtained from the starch slurry that is dried when amylum is separated from the pea.	Crude protein
3.8.6	Pulp powder of pea meal	The liquid byproduct obtained from pea when starch and protein are extracted by wet extraction, mainly comprised of soluble protein and carbohydrate.	Crude protein Moisture
2.0.7			Crude fiber
3.8.7	Pea capsule	Seed capsule of pea seeds dehulled by decortication process.	Crude ash
3.8.8	Pea fiber	The fiber extracted from pea.	Crude fiber
3.8.9	Pea residue	The byproduct obtained from pea when starch and protein are extracted by wet extraction.	Crude fiber

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
			Crude ash
			Moisture
3.8.10	Flaked pea	Product obtained from the hulled pea through being steamed and ground.	Crude protein
3.9	Chickpea and its proces	ssed products	I
3.9.1	Chickpea	Seeds of a plant in chickpea species in legume family ( <i>Cicer arietinum L.</i> ).	
3.10	Lupin and its processed	l products	I
3.10.1	Lupin	Seeds of a plant in lupin species in legume family ( <i>Lupinus polyphyllus</i> .) with lower content of bitter substance.	
3.10.2	Dehulled Lupin	Product obtained by dehulling the capsule of lupin seeds.	Crude protein Crude fiber
3.10.3	Lupin capsule	Seed capsule of lupin seeds dehulled by decortication process.	Crude fiber Crude ash
3.10.4	Lupin residue	The byproduct obtained from lupin when protein or oligosaccharide components are extracted.	Crude fiber Crude ash Moisture
3.11	Others		
3.11.1	Bean pod	Bean pods of the seeds of the plants in legume family as listed in this Catalogue, the product name shall be indicated with the source of the raw materials, for example, bean pod of pea.	Crude fiber
3.11.2	Bean pod meal	A product obtained by breaking from bean pods of the seeds of the plants in legume family as listed in the Catalogue, the product name shall be indicated with the source of the raw materials, for example: carob pod meal.	Crude fiber
3.11.3	Roastedbean	A product obtained from the seeds of the plants in bean species ( <i>Phaseolus</i> L.) or in cowpea species ( <i>Vigna</i> Savi.) in legume family when properly roasted. The product name shall be indicated with the source of the raw materials, for example: roasted bean. It is rumen protected.	Crude protein
3.12	Lentil and its processed products <sup>e</sup>	·	
3.12.1	Lentil [Lens] <sup>e</sup>	Seeds of lentil in lentil species in legume family ( <i>Lens culinaris</i> ).	

### 4. Tuber and root tuber and their processed products

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.	
4. 1	White turnip and its processed products		I	
4.1.1	Dried turnip (slice, dice, powder and particles)	The product in different shapes obtained from white turnip ( <i>Raphanus sativus</i> ) through the process of dicing, drying and breaking. The product name shall be indicated with the product shape, for example: dried white turnip.	Moisture	
4.2	Garlic and its processed	d products		
4.2.1	Garlic podwer (slice)	White to yellow powder or slice obtained from garlic of the genus Allium in the lily family ( <i>Allium sativum L.</i> ) by breaking or slicing.		
4.2.2	Garlic residue	The byproduct obtained after oil is expressed from garlic.	Crude fiber Moisture	
4.3	Sweet potato and its pr	Sweet potato and its processed products		
4.3.1	Dried Sweet potato [the name alike] (slice, dice, powder and particles)	The product in different shapes obtained from the tuber of Sweet potato ( <i>Ipomoea batatas</i> ) of Solanales, Convolvulaceae, Ipomoea through the process of dicing, drying and breaking. The product name shall be indicated with the product shape, for example: Dried Sweet potato.	Moisture	
			Crude fiber	
4.3.2	Sweet potato residue	The byproduct obtained after starch is extracted from sweet potato.	Crude ash Moisture	
4.3.3	Dried purple sweet potato (slice, dice, powder and particles)	The product in different shapes obtained from the tuber of purple sweet potato ( <i>Ipomoea batatas</i> ( <i>L.</i> ) <i>Lam</i> ) of Convolvulaceae, Ipomoea through the process of dicing, drying and breaking. The product name shall be indicated with the product shape, for example: dried purple sweet potato.	Moisture	
4.4	Carrot and its processe	d products		
4.4.1	Dried carrot (slice, dice, powder and particles)	The product in different shapes obtained from carrot (a biennial Eurasian plant <i>Daucus carota L.</i> ) through the process of dicing, drying and breaking. The product name shall be indicated with the product shape, for example: Dried carrot.	Moisture	
			Crude fiber	
4.4.2	Carrot residue	The byproduct obtained after carrot is pressed for juice or extracted for carotene.	Crude ash	
			Moisture	
4.5	Chiccory and its proces	ssed products	I	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
4.5.1	Dried chicory root (slice, dice, powder and particles)	The product in different shapes obtained from chicory root (a composite plant <i>Cichorium intybus L.</i> ) through the process of drying and breaking. The product name shall be indicated with the product shape, for example: chicory root powder.	Moisture Total sugar
4.5.2	Chicory residue	The byproduct obtained from chicory when it is prepared into Inulin or spicery, comprised of chicory slice through leaching or pressing.	Crude fiber Crude ash Moisture
4.6	Jerusalem artichoke an	d its processed products	
4.6.1	Inulin	The levan extracted from the tuber of Jerusalem artichoke (a composite plant of the genus <i>Helianthus tuberosus L</i> .). The product shall be provided by qualified food manufacturers.	Inulin
4.6.2	Jerusalem artichoke residue	The byproduct obtained from Jerusalem artichoke when inulin is extracted.	Crude fiber Crude ash Moisture
4.7	Potato and its processe	d products	
4.7.1	Dried potato [the name alike] (slice, dice, powder and particles)	The product in different shapes obtained from potato ( <i>Solanum tuberosum</i> L.) through the process of dicing, slicing, drying and breaking. The product name shall be indicated with the product shape, for example: dried potato.	Moisture
4.7.2	Potato protein powder	The powdery products obtained from potato that is dried when amylum is separated, the main composition id protein.	Crude protein
4.7.3	Potato residue	The byproduct obtained from potato after starch and protein are extracted.	Crude fiber Crude ash Moisture
4.8	Konjac and its process	ed products	
4.8.1	Dried konjak (slice, dice, powder and particles)	The product in different shapes obtained from the tuber of konjak (a plant of genus of the Araceae, <i>Amorphophalms konjac.</i> ) through the process of drying and breaking. The product name shall be indicated with the product shape, for example: Dried konjak.	Moisture
4.9	Cassava and its process	l sed products	<u> </u>

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
4.9.1	Dried cassava (slice, dice, powder and particles)	The product in different shapes obtained from cassava ( <i>Manihot esculenta</i> ) through the process of dicing, slicing, drying and breaking. The product name shall be indicated with the product shape, for example: Dried cassava.	Moisture
			Crude fiber
4.9.2	Cassava residue	The byproduct obtained from Cassava after starch is extracted.	Crude ash
			Moisture
4.10	Lotus root and its proc	essed products	
4.10.1	Dried lotus root (slice, dice, powder and particles)	The product in different shapes obtained from lotus root through the process of dicing, slicing, drying and breaking. The product name shall be indicated with the product shape, for example: Dried lotus root.	Moisture
4.11	Beet and its processed products		
	1.1       Beet meal [residue]       The byproduct obtained from beet (the tuber of a plant of beet genus of the family Chenopodiaceae, <i>Beta vulgaris</i> L.) when sugar is refined, comprised of sliced beet after leaching or expression.		Crude fiber
4.11.1			Crude ash Moisture
		A product obtained from the raw materials of beet meal to be added into waste molasses in the form of particle.	Crude fiber
4.11.2	Beet meal particles		Crude ash
			Moisture
			Crude ash
4.11.3	Beet molasses	A liquid byproduct obtained from the beet when sugar is refined.	Moisture
			Total sugar
	Sucrose	See 13.4.1	
4.12	Edible melon and its processed products		
4.12.1	melon	The product obtained from edible melons when the melon seeds are removed through drying process, the product name shall be indicated with the source of raw materials, for example: pumpkin.	Moisture
4.12.2	melon seeds	The product obtained from the seeds of the edible melons through drying process, the product name shall be indicated with the source of raw materials, for example: pumpkin seed.	Crude protein

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
5.1	Capsicum and its processed products		
5.1.1	Capsicum(powder)	The product obtained from Capsicum ( <i>Capsicum annuum</i> ) when it is dried and crushed.	Crude protein Crude ash
5.1.2	Capsicum residue	The byproduct obtained from Capsicum capsule when haematochrome is extracted.	Crude protein Crude ash
5.1.3	Capsicum seed meal	The byproduct obtained from Capsicum seeds after oil is extracted.	Crude protein Crude fiber
5.1.4	Capsicum seed oil <sup>a</sup>	The oil pressed or extracted from the capsicum seed. The product shall be provided by qualified food manufacturers.	Acid value Peroxide number
5.2	Fruit and nut and their	processed products	
5.2.1	Dried avocado (slice, dice, powder)	The product in different shapes obtained from avocado ( <i>Persea americana</i> Mill.) through the process of dicing, slicing, drying and breaking. The product name shall be indicated with the product shape, for example: dried avocado.	Total sugar Moisture
5.2.2	Concentrated juice of avocado [Avocado]	The product obtained from the concentrated juice of avocado that is pressed. The product shall be provided by qualified food manufacturers.	Total sugar Moisture
5.2.3	nuts	Edible nut kernel or fruit kernel, the product name shall be indicated with the source of raw materials.	Crude protein Crude fat
5.2.4	Fruit residue	The byproduct obtained during extraction of fruit juices or processing of fruit products, the product name shall be indicated with the source of raw materials, for example: orange residue.	Crude fiber Crude ash Moisture
5.2.5	Fruit (juice, paste, slice, dried fruit, powder) <sup>e</sup>	Edible fresh fruit, or fruit juice, fruit paste, fruit slice, dried fruit, fruit powder, etc. obtained by processing fresh fruit. Spoiled raw materials shall not be used. The product name shall be indicated with the source of raw materials, for example: apple.	Total sugar Moisture
5.3	Jujube and its processed	· · · · · · · · · · · · · · · · · · ·	
5.3.1	Jujube	Edible jujube (Ziziphus jujuba).	
5.3.2	Jujube powder	The product obtained from edible jujube ( <i>Ziziphus jujuba</i> ) when it is dried and crushed.	Crude fiber Crude ash
5.4	Vegetable and its proce		ı
5.4.1	(juice, paste, slice, dried vegetable,	Edible fresh vegetable, or vegetable juice, vegetable paste, vegetable slice, dried vegetable, vegetable powder, etc. obtained by processing fresh vegetable.	Crude fiber

powder) <sup>e</sup>	Spoiled raw materials shall not be used. The product	Moisture
	name shall be indicated with the source of raw	
	materials, for example: spinach.	

### 6. Forage grass, coarse fodder and their processed products

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
6.1	Hay and its process	ed products	I
6.1.1	grass particles(block)	The product obtained from the harvested forage grasses after natural seasoning or drying dehydration, crushing and pellet fabrication or compact briquetting, which shall not have any toxic or harmful grass. The product name shall be indicated with the variety of the grass, for example: Lucerne particles or blocks.	Crude protein NDF
6.1.2	hay	The product obtained from the harvested forage grasses after natural seasoning or drying dehydration, which shall not have any toxic or harmful grass. The product name shall be indicated with the variety of the grass, for example: Lucerne hay.	Crude protein NDF
6.1.3	hay powder	The product obtained from the harvested forage grasses after natural seasoning or drying dehydration and crushing, which shall not have any toxic or harmful grass. The product name shall be indicated with the variety of the grass, for example: alfalfa hay powder.	Crude protein NDF
6.1.4	Alfalfa residue	The byproduct obtained from alfalfa powder by extracting alfalfa Polysaccharide and other components with water, which can be dried, crushed or extruded into particles.	Crude protein NDF
6.2	Straw and its proces	ssed products	
6.2.1	ammoniated straw	The products obtained from the raw materials of corn straw, wheat straw, paddy straw when the seeds are harvested, which are fermented for some time at the suitable temperature when they are sprayed with ammonia source such as ammonia liquid, carbamide and ammonium bicarbonate to a scale under the closed condition. The product name shall be indicated with the variety of the crops, for example: corn ammoniated straw. In case of the raw materials comprised of several kinds of straws, the product name shall be directly marked with ammoniated straw.	Crude ash NDF Ammonia source type
6.2.2	alkalized straw	The products obtained from the raw materials of corn straw, wheat straw, paddy straw that are immersed or sprayed by sodium hydroxide or limewater (potassium hydroxide). The product name shall be indicated with the variety of the crops, for example: corn alkalized straw. In case of the raw materials comprised of several kinds of straws, the product name shall be directly marked with alkalized straw.	Crude ash NDF

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
6.2.3	straw	The stem, leaves (spikelets) of mature crops. The product name shall be indicated with the variety of the crops, for example: corn straw.	Crude ash NDF
6.2.4	straw powder	The products obtained from the stem, leaves (spikelets) of mature crops when it is dried naturally or artificially and crushed. The product name shall be indicated with the variety of the crops, for example: corn straw powder.	Crude ash NDF
6.2.5	straw pellets (blocks)	The products obtained from the stem, leaves (spikelets) of mature crops when it is dried naturally or artificially and crushed, pelleted or pressed for blocks. The product name shall be indicated with the variety of the crops, for example: corn straw pellets or blocks.	Crude ash NDF
6.3	Green forage	I	I
6.3.1	green and coarse fodder	These refer to the fresh stems and leaves of the feed plants, mainly including natural forage grasses, cultivated forage grasses, field weeds, vegetable leaves and aquatic plants. The product shall not have any toxic or harmful grass. The product name shall be indicated with the variety of the grass,	Crude protein NDF moisture
6.4	Silage fodder	for example: alfalfa.	
6.4.1	semi-dried silage fodder	It is also called low moisture silage fodder, a product obtained from the silage raw materials that are pre-dried and evaporated to lower the moisture to 40%-50% for silage. It is possible to use silage additives. The product name shall be indicated with the variety of the silage raw materials, for example: corn semi-dried silage fodder.	Crude ash NDF moisture Type & dosage of silage additives
6.4.2	yellow silage fodder	The products of coarse fodders obtained from the raw materials of crop straws when the seeds are harvested, which are fermented by anaerobic lactic acid under the closed and anoxia condition, where the additives such as microbial agents, acidifier acidulant and enzyme preparations are added and proper amount of water is possible to be added. The products packed in pressed bags are included. The product name shall be indicated with the variety of the crops, for example: corn yellow silage fodder.	Crude ash NDF moisture Type & dosage of silage additives
6.4.3	silage fodder	The products of coarse fodders obtained from the green and coarse fodder when it is cut up with a moisture content of 65%~75%, which are fermented by anaerobic lactic acid under the closed and anoxia condition. The product name shall be indicated with the variety of coarse fodders, for example: corn silage fodder.	Crude ash NDF moisture Type & dosage of silage additives

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
6.5	Other coarse fodder	S	
6.5.1	Stems and leaves of shrubs and trees	These refer to the fresh or dried edible stems and leaves picked from the mature plants of the perennial woody plants below the height of 3 m, as well as all kinds of trees. The product name shall be indicated with the variety of shrubs and trees, for example: stems and leaves of Populus lasiocarpa.	Crude ash NDF moisture
6.5.2	Stems and leaves powders of shrubs and trees	The products obtained from edible stems and leaves picked from the mature plants of the perennial woody plants below the height of 3 m, as well as all kinds of trees when it is dried and crushed. The product name shall be indicated with the variety of shrubs and trees, for example: pine needle meal.	Crude ash NDF moisture
6.5.3	Stems and leaves pellet (blocks) of shrubs and trees	The products obtained from edible stems and leaves picked from the mature plants of the perennial woody plants below the height of 3 m, as well as all kinds of trees when it is dried, crushed and pelleted. The product name shall be indicated with the variety of shrubs and trees, for example: Populus lasiocarpa particles.	Crude ash NDF moisture
6.5.4	Stems and leaves of paper mulberry <sup>e</sup>	Fresh or dried stems and leaves of paper mulberry ( <i>Broussonetia papyrifera</i> (Linn.) L'Hér. ex Vent.).	Crude protein NDF Moisture
6.5.5	Stems and leaves of horseradish tree e	Fresh or dried stems and leaves of feeding horseradish tree ( <i>Moringa</i> ).	Crude protein NDF Moisture

7. Other plants and algae and their processed products

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.		
7.1	Sugarcane and its processed products				
7.1.1	Sugarcane molasses	The thick liquid obtained from the sugarcane ( <i>Saccharum officinarum</i> ) when the sugar is extracted by sugar manufacturing, or the liquid product obtained from sugarcane molasses when the sugar is refined and extracted.	Sucrose Moisture		
7.1.2	Sugarcane residue	The plant segment left when the sugar is extracted from the sugar cane, mainly comprised of fiber.	Crude fiber Moisture		
	Sucrose	See 13.4.1 and 13.4.3			
7.2	Yucca and its processe	ed products	1		
7.2.1	Yucca powder	A powdery product made from yucca ( <i>Yucca filamentosa L</i> .) when it is dried and crushed.	Moisture Ammonia-adsorbed amount		
7.2.2	Yucca <sup>e</sup>	A plant of yucca species in Liliaceae family ( <i>Yucca schidigera</i> Roezl.).	Crude fiber		
7.2.3	Yucca juice <sup>e</sup>	The juice pressed from yucca, or the product obtained from yucca concentrated juice.			
7.3	Stevia rebaudiana and	its processed products			
7.3.1	Stevia rebaudiana residue	A byproduct obtained from stevia rebaudiana when Inulin is extracted.	Crude protein Crude fiber Crude ash Moisture		
7.4	Marigold and its proce	essed products			
7.4.1	Marigold residue	A byproduct obtained from Marigold ( <i>Tagetes erecta</i> )when lutein is extracted	Crude protein Crude fiber Crude ash Moisture		
7.4.2	Marigold powder <sup>e</sup>	A powdery product made from Marigold when it is dried and crushed.	Crude fiber Crude ash Lutein		

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.5	Algae and its processe	d products	
7.5.1	Algae	The edible large-seaweeds (such as kelp, giant kelp and false ceylon moss) or the leftover materials of the edible large-seaweeds processed by food manufacturers which can be refrigerated, frozen, dried and crushed. The product name shall be indicated with seaweed varieties and product physical properties, for example: seaweed powder.	Crude protein Crude ash
7.5.2	Algae residue	The byproduct obtained from edible large-seaweeds after active ingredients are extracted. The product name shall be indicated with the source of raw materials used, for example: algae residue.	Total sugar Crude ash Moisture
7.5.3	Schizochytrium powder	The DHA-rich algae powder made from <i>Schizochytrium</i> sp. and processed through fermentation, separation, drying, etc.	Crude fat DHA
7.5.4	Spirulina powder	The product made from spirulina ( <i>Spirulina platensis</i> ) when it is dried and crushed.	Crude protein Crude ash
7.5.5	Nannochloropsis powder	The EPA-rich algae powder made from <i>Nannochloropsis</i> sp. and processed through cultivation, concentration, and drying, etc.	Crude fat EPA
7.5.6	Microalgae meal	The byproduct obtained when it is dried after the fat is extracted from Schizochytrium powder, Nannochloropsis powder or chlorella powder.	Crude protein Crude ash
7.5.7	Chlorella powder	The EPA and DHA rich algae powder made from <i>Chlorella</i> sp. and processed through cultivation, concentration, and drying, etc.	Crude fat EPA DHA
7.5.8	Euglena [Euglena viridis] <sup>e</sup>	Euglena and its dried products.	
7.5.9	Haematococcus Pluvialis powder <sup>e</sup>	The astaxanthin-containing algae powder made from Haematococcus Pluvialis and processed through cultivation, concentration, and drying, etc.	Crude fat Astaxanthin
7.5.10	Algae oil	The oil pressed or extracted from algae as listed in the Catalogue. The product name shall be indicated with the source of the raw materials, for example, schizochytrium oil.	Crude fat Acid value Peroxide number
7.6	Other edible natural pl such plants when it is	ants (just refer to the products obtained from such plants or the dried and crushed) <sup>a</sup>	specific section of
7.6.1	Truestar anisetree	The fruit of truestar anisetree ( <i>Illicium verum Hook.f.</i> ), a plant of Magnoliaceae, Genus Illicium Linn.	
7.6.2	White hyacinth bean	Mature seed of hyacinth bean ( <i>Dolichos lablab L.</i> ), a plant of the pea family.	
7.6.3	Lily	Dried Fleshy pannaria of tigerlily ( <i>Lilium lancifolium</i> Thunb.), lily ( <i>Lilium brownii</i> F.E. Brown var. <i>viridulum</i> Baker), or ( <i>Lilium pumilum</i> DC.), a plant of Liliaceae species in Liliaceae family.	
7.6.4	Herb peony root	Dried root of peony ( <i>Paeonia lactiflora Pall.</i> ), a plant of the buttercup family.	
7.6.5	Lagehead atractylodes	Dried root of Lagehead atractylodes ( <i>Atrctylodes macrocephala Koidz.</i> ), a plant of feverfew.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.6	Cedar seed kernel	Dried and mature Cedar seed kernel of arborvitae ( <i>Platycladus orientalis (L.) Franco</i> ), a plant of Cupressaceae family.	
7.6.7	Mint	The overground part of mint ( <i>Mentha haplocalyx Briq.</i> ), a plant of labiate family.	
7.6.8	Malaytea scurfpea	Dried and mature fruit of Malaytea scurfpea ( <i>Psoralea corylifolia L.</i> ), a plant of pea family.	
7.6.9	Atractylis	Dried root of Atractylis ( <i>Atractylodes lancea (Thunb.) DC.</i> ) or ( <i>Atractylodes chinensis (DC.) Koidz</i> ), a plant of the Composite family.	
7.6.10	Oriental arborvitae	Dried branches and leaves of Oriental arborvitae ( <i>Platycladus orientalis (L.) Franco</i> ), a plant of the Cupressaceae family.	
7.6.11	Plantain	Dried herb of Plantain ( <i>Plantago asiatica L.</i> ) or ( <i>Plantago depressa Willd.</i> ) a plant of the Plantaginaceae family.	
7.6.12	Plantain seed	Dried and mature Plantain seed ( <i>Plantago asiatica L.</i> ) or ( <i>Plantago depressa Willd.</i> ) a plant of the Plantaginaceae family.	
7.6.13	Radix paeoniae rubra	Dried root of peony ( <i>Paeonia lactiflora Pall.</i> ) or ( <i>Paeonia veitchii Lynch</i> ), a plant of the buttercup family.	
7.6.14	Hemlock parsley	Dried root of Hemlock parsley ( <i>Ligusticum chuanxiong Hort.</i> ), a plant of the parsley family.	
7.6.15	Acanthopanax	Dried root, roots stem or stem of Acanthopanax (Acanthopanax senticosus (Rupr. Et Maxim.) Harms), a plant of Acanthopanax Miq. In Araliaceae.	
7.6.16	Thistle	The overground part or root of Thistle <i>Cirsium japonicum DC</i> .), a plant of composite family.	
7.6.17	Tasteless preserved soybean	The processed product fermented from the mature seeds of soybean ( <i>Glycine max (L.) Merr.</i> ), a plant of pea family.	
7.6.18	Henon bamboo leaf	Dried stems or leaves of henon bamboo leaf ( <i>Lophatherum gracile Brongn</i> ), a plant of Gramineae family.	
7.6.19	Angelica	Dried root of Angelica ( <i>Angelica sinensis (Oliv.) Diels</i> ), a plant of Umbeliferae family.	
7.6.20	Codonopsis pilosula	Dried root of Codonopsis pilosula ( <i>Codonopsis pilosula</i> ( <i>Franch.</i> ) Nannf.), ( <i>Codonopsis pilosula Nannf. Var.</i> modesta (Nannf.) L. T. Shen) or ( <i>Codonopsis tangshen</i> Oliv.), a plant of ampanulaceae family.	
7.6.21	Cortex lycii radicis	Dried root or skin of medlar ( <i>Lycium chinense Mill.</i> ) or ( <i>Lycium barbarum L.</i> ), a plant of Solanaceae family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.22	Clove	Dried bud of clove ( <i>Eugenia caryophyllata Thunb.</i> ), a plant of Syzygium species and Myrtaceae family.	
7.6.23	Eucommia bark	Dried bark of eucommia bark ( <i>Eucommia ulmoides Oliv.</i> ), a plant of eucommia species and eucommia family.	
7.6.24	Eucommia leaf	Dried leaf of eucommia bark ( <i>Eucommia ulmoides Oliv.</i> ), a plant of eucommia species and eucommia family.	
7.6.25	Chinese torreya seed	Dried and mature seeds of Chinese torreya ( <i>Torreya grandis Fort.</i> ), a plant of Taxaceae family.	
7.6.26	Finger citron	Fruit of finger citron ( <i>Citrus medica L. var. sarcodactylis Swingle</i> ), a plant of Rutaceae family.	
7.6.27	Tuckahoe	Dried sclerotium of tuckahoe ( <i>Poria cocos (Schw.)Wolf</i> ), a fungi of Polyporaceae family.	
7.6.28	Liquorice	Dried root and rootstock of liquorice (Glycyrrhiza uralensis Fisch.), (Glycyrrhiza inflata Bat.) or (Glycyrrhiza glabra L.), a plant of pea family.	
7.6.29	Dried ginger	Dried root of ginger ( <i>Zingiber officinale Rosc.</i> ), a plant of ginger family.	
7.6.30	Lesser galangal	Dried root of lesser galangal ( <i>Alpinia officinarum Hance</i> ), a plant of ginger family.	
7.6.31	Root of kudzu vine	Dried root of kudzu vine ( <i>Pueraria lobata (Willd) Ohw</i> i), a plant of pea family.	
7.6.32	Wolfberry fruit	Dried and mature fruit of medlar ( <i>Lycium barbarum L.</i> ), a plant of Solanaceae family.	
7.6.33	Drynariae	Dried rootstock of Drynaria fortune ( <i>Drynaria fortunei</i> ( <i>Kunze</i> ) J. Sm.), a plant of Polypodiaceae family.	
7.6.34	Lotus leaf	Dried leaf of lotus ( <i>Nelumbo nucifera Gaertn.</i> ), a plant of Nymphaeaceae family.	
7.6.35	Myrobalan	Dried and mature fruit of Myrobalan ( <i>Terminalia chebula</i> <i>Retz</i> ) or ( <i>Terminalia chebula Retz. Var. tomentella Kurt.</i> ), a plant of Combretaceae family.	
7.6.36	Black sesame	Dried and mature seeds of <i>Sesamum indicum L.</i> , a plant of Pedaliaceae family.	
7.6.37	Rhodiola rosea	Dried root and rootstock of ( <i>Rhodiola crenulata</i> ( <i>Hook.f.et Thoms.</i> ) <i>H. Ohba</i> ), a plant of crassulacaae family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.38	Magnolia bark	Dried bark, root bark and branch bark of cortex magnoliae officinalis ( <i>Magnolia officinalis Rehd.et Wils.</i> ), ( <i>Magnolia officinalis Rehd. et Wils. Var. biloba Rehd. et Wils.</i> ), a plant of magnolias family.	
7.6.39	Magnolia flower	Dried buds of cortex magnoliae officinalis ( <i>Magnolia</i> officinalis Rehd. et Wils.), ( <i>Magnolia officinalis Rehd. et Wils. Var. biloba Rehd. et Wils.</i> ), a plant of magnolias family.	
7.6.40	Fenugreek	Seeds of fenugreek ( <i>Trigonella foenum-graecum L.</i> ), a plant of pea family.	
7.6.41	Bunge prickly ash	Dried and mature seed capsule of Bunge prickly ash ( <i>Zanthoxylun schinifolium Sib. et Zucc</i> )or ( <i>Zanthoxylum bungeanum Maxim</i> ), a plant of genus Zanthoxylum and Rutaceae family.	
7.6.42	Pagoda tree fruit	Dried and mature fruit of Pagoda tree ( <i>Sophora japonica L</i> .), a plant of pea family. Also called as Nepeta japonica Maxim.	
7.6.43	Solomonseal	Dried rootstock of Solomonseal ( <i>Polygonatum kingianum</i> <i>Coll. et Hemsl.</i> ), ( <i>Polygonatum sibiricum Red.</i> ) or ( <i>Polygonatum cyrtonema Hua.</i> ), a plant of Liliaceae family.	
7.6.44	Radix astragali	Dried rootstock of Radix astragali ( <i>Astragalus</i> membranaceus(Fisch.)Bge.var.mongholicus(Bge.)Hsiao) or ( <i>Astragalus membranaceus</i> (Fisch.)Bge.), a plant of pea family.	
7.6.45	Ageratum	Dried aboveground part of Ageratum ( <i>Agastache rugosus</i> ( <i>Fisch. Et Mey.</i> ) <i>O.Ktze</i> ), a plant of the genus Ageratum and the mint family.	
7.6.46	Asiatic centella	Dried herb of asiatic centella ( <i>Centella asiatica (L.) Urb.</i> ), a plant of the parsley family.	
7.6.47	Curcuma	Dried rootstock of curcuma ( <i>Curcuma longa L.</i> ), a plant of Curcuma genus and ginger family.	
7.6.48	Gynostemma pentaphylla	A plant of gynostemma pentaphylla( <i>Gynostemma L</i> .)in Cucurbitaceae family.	
7.6.49	Platycodon	Dried root of Platycodon ( <i>Platycodon grandiflorum</i> (Jacq.) A. DC.), a plant of Platycodon A. DC. Species in Campanulaceae family.	
7.6.50	Gold Buckwheat Rhizome	Dried roots of gold buckwheat ( <i>Fagopyrum dibotrys</i> ( <i>D.Don</i> ) <i>Hara</i> ), a plant of Polygonaceae family.	
7.6.51	Honeysuckle	Dried buds or half-opened flower of honeysuckle ( <i>Lonicera japonica Thunb.</i> ), a plant of Caprifoliaceae family.	
7.6.52	Cherokee rose	Dried and mature fruit of Cherokee rose ( <i>Rosa laevigata Michx</i> .), a plant of Rosaceae family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.53	Leek seeds	Dried and mature seeds of leek ( <i>Allium tuberosum Rottl. Ex Speng.</i> ), a plant of Liliaceae family.	
7.6.54	Chrysanthemum	Dried capitulum of Chrysanthemum ( <i>Chrysanthemum morifolium Ramat.</i> ), a plant of composite genus and composite family.	
7.6.55	Orange peel	Mature peel of orange ( <i>Pericarpium Citri Reticulatae</i> ) and cultivated varieties.	
7.6.56	Cassia seed	Dried and mature seeds of Sicklesenna ( <i>Cassia obtusifolia L</i> .) or ( <i>Cassia tora L</i> .), a plant of pea family.	
7.6.57	Radish seed	Mature seeds of turnip ( <i>Raphanus sativus L.</i> ), a plant of crucifer family.	
7.6.58	Lotus seed	The dried mature seeds of lotus ( <i>Nelumbo nucifera</i> Gaertn.), a plant in nelumbo species, in nelumboideae subfamily and nymphaeaceae family.	
7.6.59	Aloe	The dried substance of the concentrated juice from the leaf of Aloe vera ( <i>Aloe barbadensis Miller</i> ), a plant of aloe genus, Liliaceae family. Also called as "old aloe".	
7.6.60	Fructus momordicae	Dried fruit of Fructus momordicae ( <i>Siraitia grosvenorii</i> ( <i>Swingle</i> ) <i>C. Jeffrey ex A.M. Lu et Z.Y. Zhang</i> ), a plant of Cucurbitaceae family.	
7.6.61	Purslane	The dried aboveground part of Purslane ( <i>Portulaca oleracea L</i> .), a plant of Portulacaceae genus, Portulacaceae family	
7.6.62	Liriope	Dried tuber of dwarf lilyturf ( <i>Ophiopogon japonicus (L.f)</i> <i>KerGawl</i> ), a plant of Liliaceae family.	
7.6.63	Rose	Dried buds of rose ( <i>Rosa rugosa Thunb.</i> ), a plant of Rosaceae family.	
7.6.64	Papaya	Dried and mature fruit of wrinkled papaya ( <i>Chaenomeles speciosa (Sweet)Nakai</i> .), a plant of papaya plant of Rosaceae family.	
7.6.65	Radix Aucklandiae	Dried root of Radix Aucklandiae ( <i>Aucklandia lappa Decne.</i> ), a plant of composite family.	
7.6.66	Burdock seed	Dried and mature seeds of burdock ( <i>Arctium lappa L.</i> ), a plant of composite family.	
7.6.67	Fruit of glossy privet	Dried and mature fruit of glossy privet ( <i>Ligustrum lucidum Ait.</i> ), a plant of Ligustrum genus, Oleaceae family.	
7.6.68	Dandelion	Dried whole plant of dandelion ( <i>Toraxacum mongolicum</i> <i>Hand. Mazz.</i> ), ( <i>Toraxacum borealisinense Kitam.</i> ) or several plants of the same family, a plant of composite family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.69	Cattail pollen	Dried pollen of cattail ( <i>Typha angustifolia L.</i> ) and ( <i>Typha orientalis Presl</i> ) or the plants of the same family, a plant of Typhaceae family.	
7.6.70	Radix rubiae	Dried root and root stem of radix rubiae ( <i>Rubia cordifolia L</i> .), a plant of Rubiaceae family.	
7.6.71	Green Tangerine Peel	Dried young fruit or the peel of unripe fruit of orange ( <i>Citrus reticulata Blanco</i> ) and the cultivated variations, a plant of Rutaceae family.	
7.6.72	Ginseng	Dried root and root stem of ginseng (Panax ginseng C.A. Mey.), a plant of Panax species in Araliaceae family.	
7.6.73	Ginseng leaf	Dried leaf of ginseng ( <i>Panax ginseng C. A. Mey.</i> ), a plant of Araliaceae family.	
7.6.74	Nutmeg	Dried kernel of nutmeg ( <i>Myristica fragrans Houtt.</i> ), a plant of Myristicaceae family.	
7.6.75	Bark of white mulberry root	Root bark of mulberry ( <i>Morus alba L.</i> ), a plant of Moraceae family.	
7.6.76	Mulberry fruit	Dried fruit of mulberry ( <i>Morus alba L.</i> ), a plant of Moraceae family.	
7.6.77	Mulberry leaf	Dried leaf of mulberry ( <i>Morus alba L.</i> ), a plant of Moraceae family.	
7.6.78	Mulberry branch	Dried wand of mulberry ( <i>Morus alba L.</i> ), a plant of Moraceae family.	
7.6.79	Sea buckthorn	Dried and mature fruit of seabuckthorn ( <i>Hippophae rhamnoides L.</i> ), a plant of seabuckthorn genus, Elaeagnaceae family.	
7.6.80	Yam	Dried tuber of yam ( <i>Dioscorea opposita Thunb.</i> ), a plant of Dioscorea genus, Dioscorea family.	
7.6.81	Hawk thorn	Dried and mature fruit of hawthorn, ( <i>Crataegus pinnatifida Bge.var. major N.E.Br.</i> ) or ( <i>Crataegus pinnatifida Bge.</i> ), a plant of Crataegus genus, Rosaceae family.	
7.6.82	Cornel	Dried and mature pulp of Cornel ( <i>Cornus officinalis Sieb.et Zucc.</i> ), a plant of cornus genus, Cornaceae family.	
7.6.83	Ginger	Fresh tuber of ginger ( <i>Zingiber officinale Rosc.</i> ), a plant of Zingiber genus, Zingiberaceae family.	
7.6.84	Skunk bugbane	Dried rootstock of skunk bugbane ( <i>Cimicifuga heracleifolia</i> Kom.), ( <i>Cimicifuga dahurica</i> (Turcz.) Maxim.) and ( <i>Cimicifuga foetida</i> L.), a plant of Cimicifuga species in Ranunculaceae family.	
7.6.85	Vine of polygonum multiflorum	Dried vine of Polygonum multiflorum ( <i>Polygonum multiflorum Thunb.</i> ), a plant of Polygonaceae family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.86	Tamarind pulp	Fruit of Tamarind ( <i>Tamarindus indica L</i> .), a tree of pea family.	
7.6.87	Seed of wild jujube	Dried and mature seeds of wild jujube ( <i>Ziziphus jujuba Mill.</i> <i>Var. spinosa (Bunge) Hu ex H. F.Chou</i> ), a plant of cbuckthorn family.	
7.6.88	Lucid asparagus	Tuber of Lucid asparagus ( <i>Asparagus cochinchinensis</i> ( <i>Lour.</i> ) <i>Merr.</i> ), a plant of asparagus genus, Liliaceae family.	
7.6.89	Tuckahoe	Dried rootstock of Tuckahoe ( <i>Smilax glabra Roxb.</i> ), a plant of smilax of Liliaceae family.	
7.6.90	Cuscuta	Dried and mature seeds of dodder, ( <i>Cuscuta australis R.Br.</i> ) or ( <i>Cuscuta chinensis Lam.</i> ), a plant of Cuscuta genus, Convolvulaceae family.	
7.6.91	Acanthopanax	Dried root bark of cortex acanthopanacis radicis ( <i>Acanthopanax gracilistylus W.W. Smith</i> ), a plant of Araliaceae family.	
7.6.92	Smoked plum	Dried and nearly mature fruit of plum ( <i>Prunus mume</i> ( <i>Sieb</i> .) <i>Sieb.et Zucc</i> .), a plant of Rosaceae family.	
7.6.93	Magnolia vine fruit	Dried and mature fruit of Magnolia vine ( <i>Schisandra chinensis</i> (Turcz.) Baill.), a plant of Schisandra species in Magnoliacene family.	
7.6.94	Fresh cogongrass rhizome	Fresh roots of cogongrass rhizome ( <i>Imperata cylindrica</i> <i>Beauv. Var. major (Nees) C.E. Hubb.</i> ), a plant of Poaceae family.	
7.6.95	Cyperus rotundus	Dried rootstock of sedge ( <i>Cyperus rotundus L.</i> ), a plant of Cyperus genus, Cyperaceae family.	
7.6.96	Chinese Mosla Herb	Dried aboveground part of Chinese Mosla Herb ( <i>Mosla</i> chinensis Maxim.) or ( <i>Mosla chinensis Jiangxiangru</i> ), a plant of Labiatae family.	
7.6.97	Thistle	Dried aboveground part of thistle ( <i>Cirsium (willd.)MB.</i> ), a plant of Cirsium genus, composite family.	
7.6.98	Allium macrostemon	Bulb of scallion ( <i>Allium macrostemon Bge</i> ) or ( <i>Allium chinense</i> ), a plant of Liliaceae family.	
7.6.99	Acacia flower	Flower of locust ( <i>Robinia pseudoacacia</i> L.), a plant of robinia species in legume family, which can be dried and crushed.	
7.6.100	Poplar flower	Flower of a plant of <i>Populus</i> L. species in Salicaceae family, which can be dried and crushed.	
7.6.101	Chrysanthemum indicum	Dried capitulum of Chrysanthemum indicum ( <i>Chrysanthemum indicum L</i> .), a plant of composite family.	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
7.6.102	Motherwort	Fresh or dried aboveground part of motherwort ( <i>Leonurus japonicus Houtt.</i> ), a plant of Leonurus genus, Labiatae family.	
7.6.103	Coix seed	Dried and mature kernel of semen coicis ( <i>Coix lacryma-jobi</i> L. var. mayuen (Roman) Stapf), a plant of Coix genus, Poaceae family.	
7.6.104	Fructus zingiberis nigri	Dried and mature fruit of galangal ( <i>Alpinia oxyphylla Miq</i> ), a plant of Zingerberaceae family.	
7.6.105	Ginkgo leaf	Dried leaf of ginkgo leaf ( <i>Ginkgo biloba L</i> .), a plant of Ginkgo genus, Ginkgoaceae family.	
7.6.106	Cordate houttuynia	Fresh herb or dried aboveground part of heartleaf houttuynia ( <i>Houttuynia cordata Thunb.</i> ), a plant of Houttuynia genus, Saururaceae family.	
7.6.107	Drug solomonseal	A plant of Polygonatum Canaliculatum ( <i>Polygonatum</i> odoratum (Mill.) Druce), in Liliaceae family.	
7.6.108	Polygala	Dried root of polygala ( <i>Polygala tenuifolia Willd</i> .) or ( <i>Polygala sibirica L</i> .), a plant of polygalaceae family.	
7.6.109	Cowberry	Fruit or leaf of a plant of cowberry ( <i>Vaccinium L.</i> ), in Ericaceae family.	
7.6.110	Herba lycopi	Dried aboveground part of pachyrhizus ( <i>Lycopus lucidus Turcz. Var.hirtus Regel</i> ), a plant of Labiatae family.	
7.6.111	Rhizoma alismatis	Dried tuber of rhizoma alismatis ( <i>Alisma orientale (Sam.)</i> <i>Juzep</i> ), a plant of Alismatceae family.	
7.6.112	Prepared tuber of Polygonum multiflorum	Processed tuber of Polygonum multiflorum (Fallopia multiflora).	
7.6.113	Trifoliate orange	Dried young fruit or the peel of unripe fruit of trifoliate orange ( <i>Citrus aurantium L.</i> ) and the cultivated variations, a plant of Rutaceae family.	
7.6.114	Rhizome of wind- weed	Dried rootstock of rhizome of wind-weed ( <i>Anemarrhena asphodeloides Bge.</i> ), a plant of Liliaceae family.	
7.6.115	Leaf of purple perilla	Dried leaf (or wand) of purple perilla ( <i>Perilla frutescens (L.)</i> <i>Brltt.</i> ),a plant of Perilla genus, Labiatae family.	
7.6.116	Green tea <sup>e</sup>	The product made from new leaves or buds of tea trees without fermentation, and processed through de-enzyme, shaping, drying, etc.	
7.6.117	Rosemary <sup>e</sup>	Dried stem, leaf or flower of rosemary ( <i>Rosmarinus</i> officinalis), a plant of Rosmarinus species in Labiatae family.	

### 8. Dairy products and their byproducts

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.		
8.1	Cheese products				
8.1.1	Cheese [Cottage cheese]	Edible cheese, Processing such as dehydrated drying, grinding and crushing according to the requirements of use. The product shall be provided by qualified dairy product manufacturers.	Protein Fat Moisture		
8.2	Casein and its process	sed products	I		
8.2.1	Casein	The product obtained from the raw materials of skim milk, of which the casein in the milk is agglutinated by acid, salt and rennin and then it is dehydrated and crushed. The protein content in the product is no less than 80%. The product shall be provided by qualified dairy product manufacturers.	Protein Lysine		
8.2.2	Hydrolyzed casein	The product obtained from casein when it is hydrolyzed by enzyme and then dried. The protein content in the product is no less than 74%.	Protein Lysine		
8.3	Cream and its process	l ed products	<u> </u>		
8.3.1	Cream [butter]	The product made from the raw materials of milk and /or single cream (fermented or non-fermented), into which other raw materials, food additives and nutrition enhancers can be added or not added and then is processed into the finished product with the fat content more than 80%. The product shall be provided by qualified dairy product manufacturers.	Fat Moisture Acid value Peroxide number		
8.3.2	Low fat cream	The product made from the part containing fat separated from the milk, into which other raw materials, food additives and nutrition enhancers can be added or not added and then is processed into the finished product with the fat content ranging from 10%80%. The product shall be provided by qualified dairy product manufacturers.	Fat Moisture Acid value Peroxide number		
8.4	Milk and Milk powde	ſ	I		
8.4.1	milk	Raw cow milk or goat milk, including full cream, degreased, partially degreased and blended milk. The product name shall be marked with the source of animal species and product type, for example: full cream cow's milk and degreased goat's milk. The product shall be provided by qualified dairy product manufacturers. The product is only for pet feed (food).	Protein Fat Only for pet feed (food)		
8.4.2	Colostrum (powder)	Milk produced by milk-producing animals (cow or goat) during the first 5 days after delivery or processed into powdery products. The product name shall be marked with the source of animal species, for example: bovine colostrum and goat colostrum powder. The product shall be provided by qualified dairy product manufacturers.	Protein Fat IgG <sup>c</sup>		

		The powdery products made from raw milk of cow or goat,			
8.4.3	milk powder [dried milk]	including full cream, degreased, partially degreased and blended milk powders. The product name shall be marked with the source of animal species and product type, for example: full cream cow's milk and degreased goat's milk. The product shall be provided by qualified dairy product manufacturers.	Protein Fat		
8.5	Whey and its processed products				
8.5.1	Whey powder	The powdery products made from whey when it is dried. The product shall be provided by qualified dairy product manufacturers.	Protein Crude ash Lactose		
8.5.2	Isolated lactalbumin	One of Lactalbumin powders with the protein content of not less than 90%. The product shall be provided by qualified dairy product manufacturers.	Protein Crude ash		
8.5.3	Concentrated lactalbumin	One of Lactalbumin powders with the protein content of not less than 34%. The product shall be provided by qualified dairy product manufacturers.	Protein Crude ash Lactose		
8.5.4	Milk calcium [milk minerals]	The product of high calcium content separated from whey with calcium content not less than 22%. The product shall be provided by qualified dairy product manufacturers.	Calcium Phosphorus Crude ash		
8.5.5	Lactalbumin powder	The powdery product made from whey by the processes of insolation, concentration, and dryness, with the protein content of not less than 25%. The product shall be provided by qualified dairy product manufacturers.	Protein Crude ash Lactose		
8.5.6	Desalinated whey powder	The powdery product made from when it is desalinated and dried, with the Lactose content of not less than 61% and the content of Crude ash of not higher than 3%. The product shall be provided by qualified dairy product manufacturers.	Protein Crude ash Lactose		
8.6	Lactose and its processed products				
8.6.1	Lactose	The product obtained from low-protein whey when it is evaporated, crystallized and dried with the Lactose content at not less than 98%. The product shall be provided by qualified dairy product manufacturers.	Lactose		
			L		

## 9. Terrestrial animal products and their byproducts

Raw material No.	Name	Feature description	Mandatory mark requirements.		
9.1	Products of animal oil and fat				
9.1.1	Animal oil and fat	The fat obtained by boiling and extracting the part containing fat obtained when edible animal tissue is cut up. Raw materials should come from a single animal species, fresh and without deterioration or refrigerated or frozen fresh processing. Do not use animal tissue contaminated by epidemic diseases and contain prohibited substances. No free fatty acid or other fat from non food-producing animals can be added into this product. The total fatty acid shall be not less than 90%, the non-saponifiable matter shall be no more than 2.5% and the insoluble impurities shall be no more than 1% in the product. The product name shall be marked with specific source of the fat, for example: lard oil.	Crude fat Non-saponifiable matter Acid value MDA		
9.1.2	Animal oil residue(cake)	Solid residue obtained by boiling and extracting the part containing fat obtained when edible animal tissue is cut up. Raw materials should come from a single animal species, fresh and without deterioration or refrigerated or frozen fresh processing. Do not use animal tissue contaminated by epidemic diseases and contain prohibited substances. The product name shall be marked with specific source of the oil residue, for example: lard oil residue.	Crude protein Crude fat		
9.2	Insects and the proces	sed products	I		
9.2.1	Silkworm chrysalis (powder)	A product obtained from silkworm chrysalis when it is dried. It can be crushed.	Crude protein Crude fat Acid value		
9.2.2	silkworm chrysalis meal [degreased silkworm chrysalis (powder)]	A product obtained from silkworm chrysalis (powder) when it is degreased.	Crude protein Crude fat Acid value		
9.2.3	Bee pollen	A crumb substance formed by the stamen anther in angiosperms or the pollen cells in the sporangiole of gymnosperm collected by bees. The product shall be provided by qualified food manufacturers.	Total sugar		

Raw material No.	Name	Feature description	Mandatory mark requirements.	
9.2.4	Propolis	The dried secretion from Italian bee ( <i>Apis mellifera L.</i> ), an insect of Apidae family, it can be properly processed. The product shall be provided by qualified food manufacturers.	Total sugar	
9.2.5	Beeswax	The wax excreted by bees ( <i>Apis cerana</i> <i>Fabricius</i> ) or ( <i>Apis mellifera L.</i> ), an insect of Apidae family, it can be properly processed. The product shall be provided by qualified food manufacturers.	Crude fat	
9.2.6	Bee honey	A honey brewed by bees ( <i>Apis cerana</i> <i>Fabricius</i> ) or ( <i>Apis mellifera L.</i> ), an insect of Apidae family, it can be properly processed. The product shall be provided by qualified food manufacturers.	Total sugar	
9.2.7	Insect (powder)	The product obtained from insect when it is dried and the insect can be crushed. This kind of insect can be processed provided that no impact would be made to the public health and animal health. The product name shall be marked with the source of insect, for example: mealworm (powder).	Crude protein Crude fat Acid value	
9.2.8	Degreasedinsect powder	The product obtained from degreased insect (powder) by using methods such as supercritical extraction. This kind of insect can be processed provided that no impact would be made to the human health and animal health. The product name shall be marked with the source of insect, for example: degreased mealworm powder.	Crude protein Crude fat	
9.3	Visceral, hoof, horn, claw, feather and their processed products			
9.3.1	Intestinal mucosa protein powder	A product obtained from the remains after heparin sodium is extracted from the small intestinal mucosa of edible animals, when it is deodorized, desalinated, hydrolyzed and dried. Animal tissues with diseases and prohibited substances shall not be used.	Crude protein Crude ash Salinity	
9.3.2	Animal viscera	The fresh viscera of edible animals which can be freshly used or refrigerated, frozen, steamed, dried and smoked. The raw materials shall be derived from the same source of animal species, and animal tissues with diseases and prohibited substances shall not be used. The product name shall be marked with the preservation (processing) method, the specific animal species and the name of visceral, and the physical form shall be marked in the product name. For example: fresh pork liver, frozen pork lung, cooked pork heart, smoked pork intestine, and dehydrated pork liver pellets. The product is only for pet feed (food).	Crude protein Moisture Only for pet feed (food)	

Raw material No.	Name	Feature description	Mandatory mark requirements.
9.3.3	Visceral meal	A product obtained from the fresh or refrigerated, frozen visceral of edible animal when it is cooked by high temperature, dried, and crushed. The raw materials shall be derived from the same source of animal species. Except for inevitable mixture, hoofs, horns, teeth, hair, feathers and digestive contents shall not be contained, and animal tissues with diseases and prohibited substances shall not be used. The product name shall be marked with the animal species. If it can be determined from which visceral the raw material comes from, the product name can be indicated with the name of the visceral, for example: chicken visceral meal, swine visceral meal, and swine liver meal.	Crude protein Crude fat Pepsin digestibility
9.3.4	Animal organs	The fresh organs of edible animal which can be freshly cooked or refrigerated, frozen, steamed, dried and smoked. The raw materials shall be derived from the same source of animal species, and animal tissues with diseases and prohibited substances shall not be used. The product name shall be marked with the specific animal species, for example: lamb hoofs, and pork ears. The product is only for pet feed (food).	Only for pet feed (food)
9.3.5	Animal hydrolysate	Products obtained from clean meat, visceral and organs of food animals when they are milled, crushed, and hydrolyzed, which can be liquid, semi-solid or processed solid powder. The raw materials shall be derived from the same source of animal species, and shall be fresh without deterioration or refrigerated and frozen for preservation. Except for inevitable mixture, hoofs, horns, teeth, hair, feathers and digestive contents shall not be contained, and animal tissues with diseases and prohibited substances shall not be used. The product name shall be marked with the specific animal species and physical forms, for example: swine hydrolysate, hydrolyzed bovine paste, and hydrolyzed chicken meal. The product is only for pet feed (food).	Crude protein PH value Moisture Only for pet feed (food)
9.3.6	Expanded feather meal	A product obtained from the poultry feather when it is expanded and crushed. Deterioated or disease contaminated poultry feathers shall not be used for the raw materials.	Crude protein Crude ash Pepsin digestibility
9.3.7	skin	The fresh skin of edible animal which can be freshly cooked or refrigerated, frozen, steamed, dried and smoked. The raw materials shall be derived from the same source of animal species, and deterioated or disease contaminated animal skin shall not be used and leather and tanning byproducts shall not be used. The product name shall be marked with the specific animal species, for example: buffalo skin. The product is only for pet feed (food).	Crude protein Moisture Only for pet feed (food)

Raw material No.	Name	Feature description	Mandatory mark requirements.
9.3.8	Poultry claw skin meal	A product obtained from the cutin-like scarfskin getting off during processing the poultry claws when it is dried and crushed. The product name shall be marked with the name of specific animal, for example: chick claw skin meal.	Crude protein Crude fat Crude ash
9.3.9	Hydrolyzed hoof and horn meal	A product obtained from the hoof and horn of animals when it is hydrolyzed, dried and crushed. If the source of raw material of a specific animal can be confirmed, the product name shall be marked with the name of such animal, for example: hydrolyzed swine hoof meal.	Crude protein Pepsin digestibility
9.3.10	Hydrolyzed animal hair meal	A product obtained from the clean and undecomposed poultry feather from which no amino acid is extracted when it is hydrolyzed, dried and crushed. Pepsin digestibility in this product shall not be less than 75%.	Crude protein Crude ash Pepsin digestibility
9.3.11	Hydrolyzed feather meal	A product obtained from the poultry feather when it is hydrolyzed, dried and crushed. Deterioated and disease contaminated poultry feathers shall not be used for the raw materials. Pepsin digestibility in this product shall not be less than 75%. The product name shall be marked with the hydrolysis method (enzymatic hydrolysis, acidolysis, alkaline hydrolysis, high temperature and high pressure hydrolysis), for example: enzymatic feather meal.	Crude protein Crude ash Pepsin digestibility
9.4	Egg and its processed	products	
9.4.1	Egg powder	A product obtained from the egg liquid of the edible eggs when it is pasteurized, dried and crushed, and the product shall not contain any eggshell or other non-egg substances.	Crude protein Crude ash
9.4.2	Yolk powder	A product obtained from the yolk of the edible eggs when it is pasteurized, dried, hydrolyzed and crushed, and the product shall not contain any eggshell or other non-egg substances.	Crude protein Crude fat
9.4.3	Egg-shell meal	A product obtained from the eggshell when it is sterilized, dried and crushed,	Crude ash Calcium
9.4.4	Egg white powder	A product obtained from the egg white of the edible eggs when it is pasteurized, dried, hydrolyzed, and the product shall not contain any eggshell or other non-egg substances.	Crude protein

Raw material No.	Name	Feature description	Mandatory mark requirements.
9.4.5	Egg <sup>f</sup>	Fresh hen eggs with shells or not that have not been processed or only have been treated with preservation techniques such as refrigeration and film coating.	Crude protein Crude fat Crude ash (for hen eggs with shells)
9.5	Earth-worm and its pro	pcessed products	
9.5.1	Earth-worm powder	A product obtained from earth-worm when it is dried, crushed.	Crude protein Crude ash
9.6	Meat, bone and their p	rocessed products	
9.6.1	bone	The fresh bones of edible animal which can be freshly cooked or refrigerated, frozen, steamed, and dried. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal bones shall not be used. The product name shall be marked with the preservation (processing) method and the specific animal species, for example: fresh bovine bone, frozen porcine cartilage. The product is only for pet feed (food).	Calcium Ash Moisture Only for pet feed (food)
9.6.2	Bone meal (particle)	A product obtained from the undecomposed bone of edible animals when it is pasteurized, dried, crushed. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal bones shall not be used. The product name shall be marked with the specific animal species, for example: swine bone meal, bovine bone particle.	Crude ash Calcium Total phosphorus
9.6.3	Osseocolla	Protein products obtained from bones of edible animals when they are crushed, de-oiled and hydrolyzed. Diseased and spoiled animal bones shall not be used for the raw materials.	Jelly strength Brinell viscosity Crude ash
9.6.4	bone marrow	The fresh soft tissues in the bone cavity of edible animals which can be freshly cooked or refrigerated, frozen, steamed, and dried. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal bones shall not be used. The product name shall be marked with the preservation (processing) method and the animal species, for example: fresh bovine bone marrow. The product is only for pet feed (food).	Crude protein Crude fat Moisture Only for pet feed (food)
9.6.5	Gelatin	A soluble protein product obtained from the collagen in the skin, bone, ligament and hamstring of edible animals when it is hydrolyzed. Diseased and spoiled animal tissues shall not be used for the raw materials and no leather and tanning byproducts shall be used. Products shall be provided by qualified food or drug manufacturers.	Jelly strength Brinell viscosity Crude ash

Raw material No.	Name	Feature description	Mandatory mark requirements.
9.6.6	meat	The fresh meat or meat with bones and skin of edible animal which can be freshly cooked or refrigerated, frozen, steamed, dried and smoked. The raw materials shall be derived from the same source of animal species, and animal tissues with diseases and containing prohibited substances shall not be used. The product name shall be marked with the preservation (processing) method and the animal species, for example: fresh mutton, frozen pork, cooked chicken, dried beef, and smoked chicken. The product is only for pet feed (food).	Crude protein Crude fat Moisture Only for pet feed (food)
9.6.7	meat meal	A product obtained from the remains when the fresh edible animal is processed into food, which is steamed by high temperature, sterilized, degreased, dried, and crushed. Except for the ineluctable intermix, no hoof, horn, animal hair, feather, leather or alimentary canal contents can be added into; nor can bone be added additionally; nor can animal tissues of disease be used. The total phosphorus content shall not be less than 3.5%, the calcium content shall not be 2.2 times more than that of phosphorus and the pepsin digestibility shall not be less than 88% in the product. The product name shall be marked with the name of specific animal, for example: chicken meal.	Crude protein Crude fat Total phosphorus Pepsin digestibility Acid value
9.6.8	meat and bone meal	A product obtained from the remains and bones when the fresh edible animal is processed into food, which is steamed by high temperature, sterilized, degreased, dried, and crushed. Except for the ineluctable intermix, no hoof, horn, animal hair, feather, leather or alimentary canal contents can be added into; nor can bone be added additionally; nor can animal tissues of disease be used. The total phosphorus content shall not be less than 3.5%, the calcium content shall not be 2.2 times more than that of phosphorus and the pepsin digestibility shall not be less than 88% in the product. The product name shall be marked with the name of specific animal, for example: chicken bone meal.	Crude protein Crude fat Total phosphorus Pepsin digestibility Acid value
9.6.9	Bone-derived calcium phosphate <sup>a</sup>	The product obtained when bones of the edible animal are crushed, and the resulting solution that is soaked in hydrochloric acid is neutralized with lime milk, and then dried and crushed, with the phosphorus content not less than 16.5%, and the chlorine content not more than 3%.	Crude ash Total phosphorus Calcium Chlorine
9.6.10	De-gelatinized bone meal	A product obtained from the undecomposed animal bones when it is de-gummed, dried, and crushed. Diseased and spoiled animal bones shall not be used for the raw materials.	Crude ash Total phosphorus Calcium

Raw material No.	Name	Feature description	Mandatory mark requirements.		
9.7	Blood products				
9.7.1	Spray dried plasma protein flour	A product obtained from the raw material of blood plasma isolated from the fresh blood of a slaughtered food animal when it is sterilized, dried by spray. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal blood shall not be used. The product name shall be marked with the name of specific animal, for example: spray dried swine plasma protein flour.	Crude protein IgG or IgY		
9.7.2	Spray driedblood cell powder	A product obtained from the raw material of blood cells isolated from the fresh blood of a slaughtered edible animal when it is sterilized, dried by spray. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal blood shall not be used. The product name shall be marked with the name of specific animal, for example: spray dried swine blood cell powder.	Crude protein		
9.7.3	Hydrolyzedblood powder	A product obtained from the raw material of the fresh blood of a slaughtered edible animal when it is hydrolyzed, dried by spray. The raw materials shall be derived from the same source of animal species, and diseased and spoiled animal blood shall not be used. The product name shall be marked with the name of specific animal, for example: hydrolyzed blood powder.	Crude protein Pepsin digestibility		
9.7.4	Hydrolyzed blood cell powder	A product obtained from the blood corpuscle isolated from the fresh blood of a slaughtered edible animal when it is ruptured, sterilized, enzymolized, concentrated, dried by spray. The raw materials shall be derived from the same source of animal species, and deteriorated and disease contaminated animal blood shall not be used. The product name shall be marked with the name of specific animal, for example: hydrolyzed swine blood cell powder.	Crude protein Pepsin digestibility		
9.7.5	Hydrolyzed globin powder	A product obtained from the blood corpuscle isolated from the fresh blood of the slaughtered edible animals when it is ruptured, sterilized, enzymolized, and separated to obtain globin, which is then concentrated, dried by spray. The Crude protein content in the product shall be not less than 90%.	Crude protein Lysine		

Raw material No.	Name	Feature description	Mandatory mark requirements.
9.7.6	Blood powder	A product obtained from the fresh blood of a slaughtered edible animal when it is dried. The raw materials shall be derived from the same source of animal species, and deteriorated and disease contaminated animal blood shall not be used. The Crude protein content in the product shall be not less than 85%. The product name shall be marked with the name of specific animal, for example: chicken blood powder.	Crude protein
9.7.7	Hemoglobin powder	A product obtained from the blood corpuscle isolated from the fresh blood of the slaughtered edible animals when it is ruptured, sterilized, enzymolized, and separated to obtain haemachrome, which is then concentrated, dried by spray. The ferroporphyrin content in the product shall be not less than 1.2%. (Calculated by iron).	Crude protein Ferroporphyrin (Heme Iron)

### 10. Fish, other aquatic organism and their byproducts

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
10.1	Shellfish and its byproducts		
10.1.1	shellfish	Fresh and edible shellfish, which can be freshly cooked or refrigerated, frozen, steamed and dried according to the requirements of use. The type of shellfish shall be indicated in the product name, such as scallops and oysters.	
10.1.1	Shell powder	A product obtained from the shell of shellfish when it is dried and crushed.	Crude ash Calcium
10.1.2	Dried conch powder	A product obtained from the remains of dried scallop (except the shell) processed by food manufacturers when it is dried and crushed.	Crude protein Crude fat TVB-N
10.2	Crustaceans and their	byproducts	
10.2.1	Shrimp	Fresh shrimp, which can be freshly cooked or refrigerated, frozen, steamed and dried according to the requirements of use.	
10.2.2	Krill meal	A product obtained from euphausiid shrimp ( <i>Euphausia superba</i> ) when it is dried and crushed.	Crude protein Crude ash Salinity TVB-N
10.2.3	Shrimp meal	A product obtained from the shrimp when it is cooked, dried and crushed.	Crude protein Crude ash Salinity TVB-N
10.2.4	Shrimp paste	A paste obtained from the shrimp when the oil is isolated, enzymolized and concentrated.	Crude protein Crude ash Moisture TVB-N
10.2.5	Shrimp shell powder	A product obtained from shrimp head or the shrimp shell separated by food manufacturers for processing peeled shrimp, when it is dried and crushed.	Crude ash
10.2.6	Shrimp oil	A product obtained from the crude oil from ocean shrimps when it is cooked and pressed and then refined.	Fat Acid value Iodine value

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
10.2.7	Crab	Fresh crab, which can be freshly cooked or refrigerated, frozen, steamed and dried according to the requirements of use.	
10.2.8	Crab powder	A product obtained from the raw materials of crab or some part of the crab when it is cooked, pressed, dried and crushed. Crude protein content in the product shall be not less than 25%.	Crude protein Crude ash TVB-N
10.2.9	Crab shell powder	A product obtained from the raw materials of crab shell when it is dried and crushed.	Crude ash
10.3	Aquatic mollusk and	their byproducts	I
10.3.1	Cuttlefish	Fresh cuttlefish, which can be freshly cooked or refrigerated, frozen, steamed and dried according to the requirements of use.	
10.3.2	Cuttlefish powder	A product obtained from the raw materials of cuttlefish or some part of the cuttlefish when it is cooked, pressed, dried and crushed.	Crude protein Crude fat Crude ash TVB-N
10.3.3	Cuttlefish paste	A paste obtained from the leftover materials such as cuttlefish viscera when the grease is isolated, enzymolized, concentrated.	Crude protein Crude fat Crude ash Moisture TVB-N
10.3.4	Cuttlefish visceral meal	A product obtained after cuttlefish paste is mixed with the carrier and dried. The carrier used shall be the raw material permitted in the feed regulations, and the carrier's name shall be indicated on the label.	Crude protein Crude ash Carrier name TVB-N
10.3.5	Cuttlefish oil	The oil separated from cuttlefish viscera.	Crude fat Acid value Iodine value
10.3.6	Squid	Fresh squid, which can be freshly cooked or refrigerated, frozen, steamed and dried according to the requirements of use.	Crude fat Acid value
10.3.7	Squid powder	A product obtained from the raw materials of Squid or some part of the Squid when it is cooked, pressed, dried and crushed.	Crude protein Crude fat TVB-N
10.3.8	Squid paste	A paste obtained from the leftover materials such as Squid viscera when the oil is isolated, enzymolized, concentrated.	Crude protein

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
			Crude fat
			Crude ash
			Moisture
			TVB-N
10.3.9	Squid visceral meal	A product obtained after squid paste is mixed with the carrier and dried. The carrier used shall be the raw material permitted in the feed regulations, and the carrier's name shall be indicated on the label.	Crude protein Crude ash Carrier name TVB-N
			Crude fat
10.3.10	Squid oil	The oil separated from squid viscera.	Acid value
			Iodine value
10.4	Fish and its byproduc	t	
10.4.1	Fish	Whole fresh fish or partial fish, which can be freshly cooked or	Crude protein
10.4.1	FISH	refrigerated, frozen, steamed and dried according to the requirements of use. Fish contaminated by disease and others shall not be used.	Moisture
			Crude protein
		A product obtained from the whole fish of white-flesh fish	Crude fat
10.4.2	White fish meal	such as cod, plaice and snakehead or the remains of fish after processed into aquatic products (including fish bones, fish viscera, fish head, fish tail, fish skin, fish eyes, fish scales and fish fins), when it is cooked, pressed, degreased, dried and crushed.	Crude ash
10.4.2			Lysine
			Histamine
			TVB-N
			Crude protein
10.4.3	Hydrolyzed fish protein powder	A product obtained from the raw materials of fish or some part of fish when it is concentrated, hydrolyzed, dried. Crude	Crude fat
	protein powder	protein in the product shall be not less than 50%.	Crude ash
			Crude protein
		A product obtained from the whole fish or the cut-up fish, when it is cooked, pressed, degreased, dried and crushed. Fish	Crude fat
10.4.4	Fish meal	soluble paste can be added in during dryness. Fish contaminated by disease and others shall not be used. If the	Crude ash
		raw material of the product is derived from freshwater fish, the	Lysine
		product shall be marked with "freshwater fish meal".	TVB-N
			Crude protein
10.4.5	Fish paste	A paste obtained from the leftover materials such as fresh fish viscera when the grease is isolated, enzymolized, concentrated.	Crude ash
			Moisture

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
			TVB-N
			Calcium
10.4.6	Fish bone powder	A product obtained from the fish bone when it is crushed and dried.	Phosphorus
			Crude ash
			Crude protein
10.4.7	Fish spareribs meal	A product obtained from the remains of fish (including fish bones, fish viscera, fish head, fish tail, fish skin, fish eyes, fish	Crude fat
10.4.7	Tish sparenos near	scales and fish fins) left in processing fish products when it is cooked, dried and crushed.	Crude ash
			TVB-N
			Crude protein
10.4.8	Fish soluble paste	A product obtained from the pressed liquid left in processing fishmeal when it is degreased, concentrated or hydrolyzed and	Crude fat
	then re-concentrated. Moisture in the product shall be less than 50%.	-	TVB-N
		Moisture	
	Powder of fish soluble paste	A product obtained after Fish soluble paste is mixed with the carrier when it is dried by spray or dried at low temperature. The carrier used shall be the raw material permitted in the feed regulations, and the carrier's name shall be indicated on the	Crude protein
10.4.0			Salinity
10.4.9			TVB-N
		label.	Carrier name
10.4.10	Fish and shrimp meal	A product obtained from fishes, shrimps, crabs or other aquatic animals and their processed byproducts when they are cooked, pressed, dried and crushed. Diseased and contaminated fish shall not be used.	Crude protein Crude fat TVB-N Crude ash
			Crude fat
10.4.11	Fish oil	A product obtained from the crude oil from the whole fish or certain part of fish, when it is cooked, pressed, and then	Acid value
10.4.11		refined.	Iodine value
			MDA
10.4.12	Fish cream <sup>b</sup>	Liquids obtained when feed-grade or food-grade formic acid (the addition amount does not exceed 5% of the fresh weight of the fish) is used for preservation and then it is liquefied and filtered at a certain temperature after the fresh fish or chilled fish is minced, which can be concentrated in vacuum. The TVB-N content is not more than 50 mg/100g, and the histamine content is not more than 300 mg/kg.	Crude protein Crude fat Moisture TVB-N Histamine
10.4.13	Low-fat fish meal <sup>b</sup>	A product obtained from fish meal when it is leached and degreased with n-hexane. The crude protein content is not less than 68%, the crude fat content is not more than 6%, the TVB- N content is not more than 80 mg/100g, the histamine content is not more than 500 mg/kg, and the n-hexane residue is not more than 500 mg/kg. The raw fish meal shall be a qualified	Crude protein Crude fat Crude ash Lysine Moisture TVB-N

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
		product provided by a qualified feed fish meal manufacturer.	Histamine
10.4.14	Fish skin <sup>e</sup>	A product obtained from fish skin when it is dried during the processing of fish products.	Crude protein Moisture
10.5	Others		
10.5.1	Artemia egg	Artemia and its eggs.	Empty egg rate Hatching rate

#### 11. Minerals

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
11.1	Natural minerals		J
11.1.1	Attapulgite(powder)	A mineral of natural hydrous silicate of potassium and magnesium and aluminum, maybe in particle or powder when it is crushed.	Magnesium Moisture
	Shell powder	See 10.1.2	
			Calcium
11.1.2	Zeolite powder	A product obtained from natural clinoptilolite or mordenite	Methylene blue absorbed amount
11.1.2	Zeome powder	when it is crushed.	Ammonia-adsorbed amount
			Moisture
11.1.3	Kaoline	Natural minerals containing mineral elements, mainly kaolinite cluster ore, with the content of hydrated aluminosilicate not less than 65%. Their content shall not exceed 2.5% in	Plumbum Moisture
11.1.4	Meerschaum	compound feed and shall not contain asbestos. A clay mineral of hydrous magnesium-rich silicate.	Moisture
11.1.5	French chalk	A product obtained from saline mineral of natural hydrated magnesium silicate when it is selected, purified, crushed and dried.	Moisture
11.1.6	Medical stone	A natural and inorganic aluminosilicate.	Moisture
			Moisture
11.1.7	Montmorillonite	A mineral formed by tiny hydrated aluminosilicate, generally in shape of block or soil, which is the functional component of bentonite, therefore, it is required to be purified from bentonite.	Ammonia- adsorbed amount
			Methylene blue
			absorbed amount
11.1.8	Bentonite [amargosite]	A claystone bentonite-claystone taking bentonite as the major composition.	Moisture
11.1.9	Crushed sand	A kind of sand made from limestone, calcite, precipitated chalk and chalk that contain natural magnesium carbonates when it is directly crushed by machine. Calcium content shall be not less than 35%.	Calcium
11.1.10	Vermiculite	A product obtained from natural minerals of magnesium silicate, iron and aluminum, when it is heated and expanded. It shall not contain asbestos.	Moisture
			Fluorine
11.1.11	Sodium humata a	A meduat attained in a most that where the limit areas of the	Soluble humic acid
11.1.11	Sodium humate <sup>a</sup>	A product obtained in a way that when the liquid supernatant obtained after turf, lignite or weathered coal is crushed to fully	Moisture

		react with the sodium hydroxide solution is concentrated and dried, with the soluble humic acid not less than 55%, and the moisture content not more than 12%.	
11.1.12	Diatomite <sup>b</sup>	(sinceous remains of diatons) and processed by drying, roasting, pickling, grading. Its inclusion shall not exceed 2% in compound food. The modult quality stendards shall be	Moisture Non-silicon substance

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
12.1	Fermentative products of cake, meal and residue		
12.1.1	Fermented soybean meal	A product as the raw material of protein feedstuff made in a way that taking soybean meal as the main raw material ( $\geq$ 95%) and bran and corn peel as the auxiliary materials, a solid fermentation is conducted by the feeding microorganism strains as listed in the Catalogue of Variety of Feedstuff Additives as approved for use by the Ministry of Agriculture, and then it is dried.	Crude protein Moisture Acid-soluble protein Stachyose
12.1.2	Fermented_fruit residue	A product obtained from the raw material of fruit residue made in a way that a solid fermentation is conducted by the feeding microorganism strains as listed in the Catalogue of Variety of Feedstuff Additives as approved for use by the Ministry of Agriculture. The product name shall be marked with specific source of the raw materials, for example, fermented apple residue.	Crude fiber Crude ash Moisture
12.1.3	Fermented cottonseed protein	A product containing more than 50% of crude protein made in a way that taking highly-dehulled cottonseed meal or cottonseed protein as the main raw material ( $\geq$ 95%) and bran and corn peel as the auxiliary materials, a solid fermentation is conducted by the yeast and bacillus as listed in the <i>Catalogue</i> of Variety of Feedstuff Additives as approved for use by the Ministry of Agriculture, and then dried, and then it is dried.	Crude protein Acid soluble protein Free gossypol Moisture
12.1.4	Fermented distiller's grains of saccharomyces cerevisiae	A product obtained from fresh white liquor distiller's grains as substrate when it is fermented in solid state with saccharomyces cerevisiae, autolyzed, dried, crushed.	Crude protein Crude fiber Acid soluble protein Lignin
12.2	Single cell protein		
12.2.1	Candida utilis protein	A powdery product made in a way that taking corn soaking liquid, glucose, glucose mother liquor, etc. as culture medium, a liquid fermentation is conducted by candida utilis, then it is sprayed and dried.	Crude protein Crude ash
12.2.2	Beer yeast powder	A product obtained from the waste yeast produced during beer fermentation process, mainly comprised of beer yeast cells, when it is dried.	Crude protein Crude ash
12.2.3	Beer yeast slurry	The muddy waste yeast produced during beer fermentation process, mainly comprised of beer yeast cells with a little amount of beer.	Crude protein Crude ash
12.2.4	Food yeast powder <sup>a</sup>	The product obtained when the waste yeast produced in the production process of food yeast and is dried, which is mainly composed of saccharomyces cerevisiae cells.	Crude protein Crude ash

## 12. Microbial fermentative products and their byproducts

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
12.2.5	Yeast hydrolysate <sup>a</sup>	The product obtained from the microbic biomass fermented in liquid state with <i>Saccharomyces cerevisiae</i> as the strain when it is concentrated and dried after autolysis or catalyzed hydrolysis with exogenous enzyme. The yeast soluble is not extracted, and the crude protein content is not less than 35%.	Crude protein (On dry basis) Crude ash Moisture Mannan Amino nitrogen
12.2.6	Cultured product of saccharomyces cerevisiae <sup>a</sup>	The product obtained with saccharomyces cerevisiae as the strain when it is fermented in solid state, then concentrated and dried.	Crude protein Crude ash Moisture Mannan
12.2.7	Extract of saccharomyces cerevisiae <sup>a</sup>	The product obtained in a way when the microbic biomass fermented in liquid state with Saccharomyces cerevisiae is autolyzed or catalytically hydrolyzed or mechanically broken to separate soluble components, and then concentrated or dried.	Crude protein Crude ash
12.2.8	Cell wall of saccharomyces cerevisiae <sup>a</sup>	The product obtained in a way when the microbic biomass fermented in liquid state with Saccharomyces cerevisiae is autolyzed or catalytically hydrolyzed or mechanically broken to separate cell wall, and then concentrated or dried.	Moisture Mannan
12.3	Products made of bacterial protein feeds obtained from specific microorganism and specific culture medium (Microbial cells being dormant or inactivated)		
12.3.1	Glutamic acid residue [flavor essence residue]	The solid residue left when Corynebacterium glutamicum and the culture medium comprised of the RBCL such as sucrose, molasses, amylum or other hydrolyzed liquid as well as ammonium salt (or other minerals) are used to produce L- glutamic acid through fermentation. The microbic biomass shall be inactivated and can be dried.	Crude protein Crude ash Moisture Ammonium salt
12.3.2	Nucleotide residue	The solid residue left when the substrate composed of Corynebacterium glutamicum, plant-derived components such as sucrose, molasses, starch or its hydrolysate, and ammonium salts (or other minerals) are used to produce 5'-inosinic acid disodium and 5'-guanylic acid disodium through fermentation. The microbic biomass shall be inactivated and can be dried.	Crude protein Crude ash Ammonium salt Moisture
12.3.3	Lysine residue	The solid residue left when Corynebacterium glutamicum and the culture medium comprised of the RBCL such as sucrose, molasses, amylum or other hydrolyzed liquid as well as ammonium salt (or other minerals) are used to produce L- Lysine through fermentation. The microbic biomass shall be inactivated and can be dried.	Crude protein Crude ash Moisture Ammonium salt
12.3.4	Coenzyme Q10 residue <sup>d</sup>	Solid byproducts obtained in a way when Rhodobacter sphaeroides and main raw materials composed of glucose, corn steep liquor, inorganic salts are fermented to produce coenzyme Q10. The microbic biomass shall be inactivated and dried. The product is only for livestock and poultry feed.	Crude protein Crude ash Ammonium salt Moisture
12.4	Fermented byproducts	s of meals and residues	

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
12.4.1	<ul> <li> vinegar meal</li> <li>1. sticky rice</li> <li>2. sorghum</li> <li>3. wheat bran</li> <li>4. rice bran</li> <li>5. sweet potato</li> <li>6. fruit</li> <li>7. grains</li> </ul>	The solid byproducts obtained in a way that the substances as listed as the raw materials are brewed by Aspergillus oryzae, Aspergillus niger, beer yeast and Acetobacter and vinegar is extracted. In case of the product source is a single raw material, the product name shall be marked with the source, for example: vinegar meal of sticky rice.	Crude protein Crude fiber Crude ash Moisture
	Products of grain lees	See 1.5.	
12.4.2	Sauce meal	The solid byproducts obtained in a way that the raw materials of soybean, pea, broad bean, bean cake, wheat bran and common salt are brewed by Aspergillus oryzae, yeast and lactobacillus to produce sauce when the residue sterilized and dried.	Crude protein Crude fat Common salt
12.4.3	Citric acid meal	The solid product obtained from the filter residue remaining from filtering fermentation broth when it is dehydrated and dried, while the plant derived raw materials containing amylum is fermented to produce citric acid. This product can be crushed.	Crude protein Crude ash
12.4.4	Grape lees (slurry)	A byproduct obtained from grape juice produced by industrial method, comprised of the liquid/mash when grape juice is isolated to be fermented.	Crude protein Crude ash
12.4.5	Fermented concentrate solution of beet molasses yeast <sup>a</sup>	The product obtained from beet molasses when the residual liquid is concentrated after it is fermented in liquid state to produce yeast.	Potassium Salinity Betaine Non-protein nitrogen
12.5	Others	·	
12.5.1	Edible ethanol [Edible alcohol] <sup>e</sup>	Edible alcohol with water content made from grains, potatoes, molasses or other edible crops when they are fermented and distilled. Products shall be provided by qualified food manufacturers.	Ethanol Methanol Aldehyde

#### 13. Other raw materials for feedstuff

Raw material No.	Raw material name	Feature description	Mandatory mark requirements.
13.1	Amylum and its processed products		
13.1.1	Amylum	A product obtained from the edible vegetal raw materials such as grains, beans, root tubers and tubers by amylum preparation process (extraction, dehydration and dryness). The product name shall be marked with the source of vegetal raw materials, for example: corn amylum. The product shall be provided by qualified food manufacturers.	Amylum Moisture
13.1.2	Dextrin	The small molecule intermediary products obtained from amylum when it is under the hydrolysis reaction by acid or enzyme at a lower controlling degree. The product shall be provided by qualified food manufacturers.	Moisture Reducing sugar Glucose equivalent
13.2	Food products and their	byproducts	
13.2.1	Processed products and byproducts of fruit and vegetables	The dried or frozen products obtained from processing of fresh fruits and vegetables in food industry. This kind of product can be processed or used provided that no impact would be made to the public health and animal health. The product name shall be marked with the specific name of corresponding fruit, vegetable and flavoring type, for example: tomato peel residue.	Crude fiber Acid insoluble ash Amylum Crude fat
13.2.2	Products and byproducts of food industry	The residue food <sup>1</sup> and byproducts obtained from the production of (instant pasta and dried noodle, biscuit and pastry, sausages and candies) in food industry (It only refers to the part of the above-mentioned food that cannot become a commodity due to its leftovers, incompleteness, scattering, and mixed specifications during the production process.). These products can be dried. This kind of product can be processed or used provided it has no impact on public health and animal health. The product name shall be marked with the specific type and source, for example: ham sausage meal. Note 1: Residue foods: products produced for the purpose of human food, which are no longer used for human consumption due to manufacturing, packaging and other defects, but do not pose a risk to humans or animals.	Crude protein Crude fat Moisture Salinity Shelf life
13.3	Edible fungus and its processed products		
13.3.1	Pleurotus eryngii var. tuoliensia (Pleurotus nebrodensis)	Pleurotus nebrodensis ( <i>Pleurotus</i> <i>eryngii</i> var. <i>tuoliensia</i> ), an edible fungus of Pleurotaceae species in Pleurotus family, and its dried products.	
13.3.2	Eryngium foetidum oyster cap (Pleurotus eryngii)	Eryngium foetidum (Pleurotus eryngii), an edible fungus of Pleurotaceae species in Pleurotus family, and its dried products.	

13.3.3	Oyster mushroom <sup>e</sup>	Oyster mushroom ( <i>Pleumtus ostreatus</i> ), an edible fungus of Pleurotaceae species in Pleurotus family, and its dried products.	
13.3.4	Shii-take <sup>e</sup>	Shii-take ( <i>Lentinus edodes</i> (Berk.)Sing), an edible fungus of Lentinus species in Omphalotaceae family, and its dried products.	
13.3.5	Flammulina velutipes [Needle mushroom] °	Flammulina velutipes ( <i>F. velutipes</i> ), an edible fungus of Flammulina species in Marasmiaceae family, and its dried products.	
13.3.6	Agric [Black fungus]	Agric ( <i>Auricularia auricula</i> (L.ex Hook. ) Underwood), an edible fungus of Auricularia species in Auricularia family, and its dried products.	
13.3.7	White fungus <sup>e</sup>	White fungus ( <i>Tremella</i> ), an edible fungus of Tremella species in Tremella family, and its dried products.	
13.3.8	Agaricus bisporus	Agaricus bisporus, an edible fungus of Agaricus species	
	[White mushroom] <sup>e</sup>	and its dried products.	
13.3.9	Ganoderma lucidum <sup>f2</sup>	Fruit body of fungus in Polyporaceae family, <i>Ganoderma lucidum</i> (Leyss. ex Fr.) Karst. or <i>Ganoderma sinense</i> Zhao, Xu et Zhang, and its dried products.	Moisture
13.3.10	Agaricus Blazei Murrill <sup>f</sup>	Agaricus Blazei Murrill ( <i>Agaricus subrufescens</i> ) of Agaricus species in Agaricus family, and its dried products.	Moisture
13.4	Saccharides		
13.4.1	White sugar [Sucrose]	The refined sugar made from the raw materials of sugar cane or beet through sugar manufacturing with main composition of sucrose. The product shall be provided by qualified food manufacturers.	Total sugar
13.4.2	Fructose	Ketohexose, one of monosaccharide, a geometric isomer of grapesugar. The product shall be provided by qualified food manufacturers.	Fructose Specific rotation
13.4.3	Brown sugar [Sucrose]	Red crystal of molasses obtained from the raw materials of sugar cane or beet when it is pressed and concentrated with the main composition of sucrose. The product shall be provided by qualified food manufacturers.	Total sugar
13.4.4	Malt dust	Disaccharide formed by key-type connection with two glucose molecules, $\alpha$ -1 and 4- indicant, a product obtained from imperfect hydrolysis when amylum is acted by $\beta$ amylbenzene. The product shall be provided by qualified food manufacturers.	Total sugar
13.4.5	Xylose	Pentose, one of monosaccharide, made from the raw material of corn core through the processes of hydrolysis, discoloration, purification, evaporation, crystallization, and dryness under the condition of sulfuric acid catalyst. The product shall be provided by qualified food manufacturers.	Xylose Specific rotation

13.4.6	Dextrose	Aldohexose, one of monosaccharide, a geometric isomer of fructose, maybe containing one crystal water. The product shall be provided by qualified food manufacturers.	Dextrose Specific rotation
13.4.7	Glucosamine (NAG) <sup>a</sup>	One part of Chitosan andchitin structure prepared from the ectoskeleton of shellfish and other arthropod by hydrolysis or from the grains (such as corn or wheat) by fermentation.	Glucosamine hydrochloride
13.4.8	Glucose syrup	The water solution of highly purified and concentrated nutrient sugars obtained from amylum by hydrolysis. The product shall be provided by qualified food manufacturers.	Moisture Total sugar
13.5	Cellulose and its processed products		
13.5.1	Cellulose	The product obtained from natural wood processed by machinery, with cellulose as its main component.	Crude fiber Crude ash Moisture

## Part IV Single Raw Material Feedstuff Varieties

- 1.1.3 Barley albumen powder
- 1.2.6 Rice albumen powder
- 1.2.8 Enzymatic rice protein
- 1.5.1 Dried liquor residue
- 1.5.2 Dried yellow wine residue
- 1.5.3 \_\_\_\_\_distillers dried grain [DDG]
- 1.5.4 \_\_\_\_\_distillers dried soluble [DDS]
- 1.5.5 Dried beer residue
- 1.5.6 Distillers dried grains with soluble [DDGS]
- 1.11.3 Wheat gluten [vital wheat gluten] [wheat albumen powder]
- 1.11.15 Wheat protein hydrolysate
- 1.13.2 Slurry-sprayed corn hull
- 1.13.7 Corn albumen powder
- 1.13.10 Slurry powder of corn
- 1.13.11 Enzymatic corn protein
- 2.2.3 Rapeseed protein
- 2.2.5 Rape seed meal [rape meal]
- 2.2.9 Double-low rapeseed meal [double-low rape meal]
- 2.3.2 Isolated protein of soybean
- 2.3.4 Enzymatic soybean protein
- 2.3.5 Concentrated protein of soybean
- 2.3.10 Soybean molasses
- 2.3.14 Soybean meal
- 2.3.18 Expanded soybean protein [soybean tissue protein]

- 2.3.19 Expanded soybean meal
- 2.9.3 Peanut protein
- 2.9.6 Peanut meal [Peanut kernel meal]
- 2.12.4 Cottonseed protein
- 2.12.6 Enzymatic cottonseed protein
- 2.12.7 Cottonseed meal [cotton meal]
- 2.12.9 Dephenolized cottonseed protein [detoxified cottonseed protein]
- 3.3.2 Broad bean gluten meal
- 3.7.2 Green bean gluten meal
- 3.8.5 Pea gluten meal
- 4.7.2 Potato albumen powder
- 7.5.2 \_\_Algae residue
- 7.5.3 Schizochytrium powder
- 7.5.4 Spirulina powder
- 7.5.5 Nannochloropsis powder
- 7.5.6 Microalgae meal
- 7.5.7 Chlorella powder
- 9.1.1 <u>oil</u>
- 9.1.2 \_\_oil residue (cake)
- 9.3.1 DPS
- 9.3.3 Visceral meal
- 9.3.5 Animal hydrolysate
- 9.3.6 Expanded feather meal
- 9.3.9 Hydrolyzed hoof and horn meal
- 9.3.10 Hydrolyzed animal hair meal
- 9.3.11 Hydrolyzed feather meal

- 9.4.1 Egg powder
- 9.4.2 Yolk powder
- 9.4.3 Egg-shell meal
- 9.4.4 Egg white powder
- 9.6.2 <u>bone meal (particle)</u>
- 9.6.7 meat meal
- 9.6.8 <u>meat and bone meal</u>
- 9.6.9 Acidified bone meal [bone calcium phosphate]
- 9.6.10 Degelatinized bone meal
- 9.7.1 Spray dried \_\_\_\_ plasma protein flour
- 9.7.2 Spray dried \_\_\_\_ blood cell powder
- 9.7.3 Hydrolyzed \_\_ blood powder
- 9.7.4 Hydrolyzed <u>blood cell powder</u>
- 9.7.5 Hydrolyzed globin powder
- 9.7.6 <u>blood</u> powder
- 9.7.7 Hemoglobin powder
- 10.2.2 Euphausiid krill meal
- 10.2.3 Shrimp meal
- 10.4.2 White fish meal
- 10.4.3 Hydrolyzed fish protein powder
- 10.4.4 Fish meal
- 10.4.7 Fish spareribs meal
- 10.4.8 Fish soluble paste
- 10.4.9 Powder of fish soluble paste
- 10.4.10 Fish shrimp meal
- 10.4.11 Fish oil

- 10.4.13 Low fat fish meal [Low-fat fish meal] <sup>b</sup>
- 11.1.11 Sodium humate <sup>a</sup>
- 12.1.1 Fermented soybean meal
- 12.1.2 Fermented \_\_\_\_\_fruit residue
- 12.1.3 Fermented cottonseed protein
- 12.1.4 Fermented distiller's grains of saccharomyces cerevisiae
- 12.2.1 Candida utilis protein
- 12.2.2 Beer yeast powder
- 12.2.4 Food yeast powder <sup>a</sup>
- 12.2.5 Yeast hydrolysate <sup>a</sup>
- 12.2.6 Culture of saccharomyces cerevisiae <sup>a</sup>
- 12.2.7 Extract of saccharomyces cerevisiae <sup>a</sup>
- 12.2.8 Cell wall of saccharomyces cerevisiae <sup>a</sup>
- 12.3.1 Glutamic acid residue
- 12.3.2 Nucleotide residue
- 12.3.3 Lysine residue
- 12.3.4 Coenzyme Q10 residue <sup>d</sup>
- 12.4.3 Citric acid meal
- 12.4.5 Fermented concentrate solution of beet molasses yeast <sup>a</sup>
- 13.4.7 Glucosamine (NAG) <sup>a</sup>

## Notes:

a. Revised by No. 2038 Announcement of the Ministry of Agriculture of the People's Republic of China on December 19, 2013;

b. Revised by No. 2133 Announcement of the Ministry of Agriculture of the People's Republic of China on July 24, 2014;

c. Revised by No. 2249 Announcement of the Ministry of Agriculture of the People's Republic of China on April 22, 2015, and the mandatory labeling requirement of "The product is only for pet feed (food)" was deleted;

d. Revised by No. 2634 Announcement of the Ministry of Agriculture of the People's Republic of China on December 28, 2017.

e. Revised by No. 22 Announcement of the Ministry of Agriculture and Rural Affairs of the People's Republic of China on April 27, 2018;

f. Revised by No. 356 Announcement of the Ministry of Agriculture and Rural Affairs of the People's Republic of China on November 16, 2020.

End Translation

# Attachments:

No Attachments.