"The Official Gazette of the Federal Republic of Yugoslavia", No. 20/2000

Based on the Articles 9 and 11 of the Law on Standardization ("The Official Gazette of the Federal Republic of Yugoslavia", No. 30/96 and 59/98) and Article 2, paragraph 3 of the Decree on Manner of Drafting and Enactment of Technical Regulations and Keeping the Register of these Regulations ("The Official Gazette of the Federal Republic of Yugoslavia", No. 4/97),

The Federal Minister for Agriculture enacts

T H E R U L E B O O K

ON QUALITY AND OTHER REQUIREMENTS FOR ANIMAL FOOD

I. BASIC PROVISIONS

Article 1.

This Rulebook prescribes the quality and other requirements for animal food (herein after referred to as: products) which have to be fulfiled in production and circulation.

Article 2.

The requirements prescribed by this Rulebook for the group of related products shall be applied for products for which this Rulebook doesn’t prescribe quality and other requirements.

The producer is obliged to prescribe the producer specification for products referred ton in paragraph 1 of this Article, as well and for products for which the obligation of producer specification is explicitly prescribed.

The producer specification, besides the data referred to in Article 4 of this Rulebook, has to contain the short description of technological production procedure, the type and quantity of used raw materials in relation to the net quantity of products and the report on performed examination of indexes of quality of products (health safety, organoleptic, physical and chemical characteristics).

The producer keeps the record about prescribed producer specifications, which shall contain the following data:

1) the record keeping number of the specificatione;

2) the name of the product and its trading name, if the product has it;

3) the date of enactment of the producer specification;

4) the name and the seat of the producer;

5) the date of beginning of production in accordance with the producer specification;

6) the date of perfomed examination of the content of the product;

7) the functional group of used additives and their name or numerical indication of additive, for example: antioxidans (butilhydroxitoluol BHT or antioxsidans E 324);

8) the expiration date;

9) the manner of maintenance.

Article 3.

The products are placed into circulation in their original package, in package made of material which ensures preservation of the quality of products until the moment of their opening within the expiration date, unless this Rulebook prescribes otherwise for particular products.

Article 4.

All products which are placed into circulation in their original package, have to bear on their wrapper, pot or the label for the single package the declaration which shall contain the following data:

1) the name of the product and its trading name, if the product has it;

2) the name and the seat of the producer;

3) the date of production and the expiration date or just data "to be used by";

4) the net quantity (the mass or cubage) of the product;

5) the basic raw materials of the product by their descending sequence of quantities, unless this Rulebook prescribes otherwise;

6) the group of used additives and their name or the numerical indication of the additive, for example: antioxidans (butilhydroxitoluol BHT or antioxsidans E 324), prescribed by this Rulebook;

7) the manner of usage;

8) the manner of maintenance;

9) the type and the quantity of substances for denaturisation;

10) the other data of interest for consumers.

The products which are placed into circulation in the bulk condition, the data referred to in paragraph 1 of this Article, shall be on the container and in the documentation which accompany the shipment in transportation. The declaration has to be easily visible, clear, readable and undelible.

The letters used for printing the name of the product and the name of the producer have to bigger than letters used for printing the text of the declaration.

The declaration shall not contain signs (names, pictures, paintings, etc) which may lead the producer into confusion with respect to the origin and the quality of the product.

Article 5.

Besides the data referred to in Article 4 of this Rulebook, the declaration shall contain:

1) for nutrients for which the category of quality is prescribed –the indication of quality;

2) for nutrients with added non-protein azote compositions:

   a) the type and the quantity of used bearer;

   b) the type and quantity of added non-protein azote composition;

   v) the protein equivalent of nutrients;

3) for dessicated animal powder-the data on the type of powder and on foilt on which the powder was produced;

4) for pre-blendings and blendings:

   a) the basic ingredients by sequence of their presence;

   b) the name of non-protein azote composition, the share of mass of non-protein azote composition and protein equivalent from non-protein azote, if the pre-blending, i.e. blending contains non-protein sources of azote;

   v) the chemical content of pre-blending, i.e. blending, at that the content of water, raw proteins, raw fats, raw cellulose, raw ash (herein after referred to as: proteins, fats, cellulose and ash), calcium, (Ca), phosphate (P) and natrium (Na);

   g) the type of used bearer (for pre-blendings);

   d) words "produced in accordance with the producer specification", for pre-blendings and blendings produced in accordance with the producer specification.

Article 6.

In case that producer doesn't pack products, the declaration shall contain, besides the data referred to in Article 4 of this Rulebook, the name and the seat of the company which performed packaging of products.

The declaration for imported product shall contain, besides the data referred to in Article 4 of this Rulebook, the name of the country of origin.

Article 7.

If the net quantity of product which is placed into circulation in its original package, doesn't exceed 100 g, i.e. 100 ml, the declaration shall contain only: the name of the product, the name and the seat of producer or company which packed the product, the net quantity of product, the basic raw materials for the product or numerical indication of allowed additives, the date of production and the expiration date or the data "to be used by".

Article 8.

The coloring, savouring and aromatization of products with chemical substances, adding to products other chemical substance, hormones, sedatives and tireostatics and exposition of products to ionizating or ultraviolet rays is prohibited, unless this Rulebook prescribes otherwise.

Article 9.

The products shall be stored, transported and preserved during the production and circulation in a manner which ensure maintenance of their quality until the moment of opening within the expiration date, in a manner prescribed with this Rulebook.

II. SPECIAL PROVISIONS

ANIMAL FEED

Article 10.

In terms of this Rulebook, the products means product made by determined technological procedure from appropriate raw materials, and that in form of:

1) nutrients;

2) pre-blendings;

3) blendings.

Nutrients

Article 11.

In terms of this Rulebook, the nutrients are products of plant, animal and mineral origin, produced naturally or in industrial production, which are used for animal feeding and for production of preblendings and blendings.

In terms of this Rulebook, the nutrients are as follows:

1) granulose nutrients;

2) milling wheat products;

3) starch industry products;

4) alcohol and brew industry products;

5) sugar industry products and sugar industry subsidiary products and ascorbin industry products;

6) oil industry products;

7) dessicated plant products;

8) other plant products;

9) nutrients of animal origin;

10) nutrients with added non-protein azote compositions;

11) mineral nutrients.

1. Granulose nutrients

Article 12.

In terms of this Rulebook, granulose nutrients are cereals, leguminosae, soya and other kernels.

Article 13.

In terms of this Rulebook, wheats are the following types:

Ordinal number	The variety of wheat	The description of wheat
1	Wheat	The kernel of cultural varieties of wheat (Triticum sativum, Triticum durum)
2	Shredded wheat	Pulverized and minced kernels of wheat
3	Rye	The kernel of cultural varieties of rye

		(Secale cereale)
4	Barley	The kernel of cultural varieties of four-row barley (Hordeum vulgare)
5	Oat (corn)	The kernel of cultural varieties of oat (Avena sativa)
6	Sirak I (Milodura)	The kernel of cultural varieties of sorghum (Andropogon sorghum californicum) With maximum 1% of tannin
7	Rice	Whole and crushed kernels of peeled rice (Oryza sativa) with at least 93% of peeled kernels
8	Crushed kernels of wheat	Subsidiary products during treshing, combaining kombajniranje and preparation of wheat
9	Millet	The kernel of millet (Pannicum milliaceum)
10	Maize	The kernel of maize (Zea mays)

Article 14.

The wheat has to fulfil the folowing conditions:

1) the appearance and the color should be typical for the variety of wheat;

2) the kernel should be whole and with typical aroma;

3) it may not contain more than 14% of humidity;

4) it may not contain more than 3% of impurities, and that, up to 1% of non-organic impurities and up to 2% or organic impurities, of that up to 0,4% may be mildew and spurred rye and up to 0,1% of kernels of weeds which are harmful for animal health (Lolium lemulentum, Lolium remotum. Datura stramonium) and spurred kernels;

5) it may not contain more than 3% of defectiv kernels, of that up to 3% of kernels with chaf;

6) it may not contain more than 4% of worn kernels and has to be without live insects;

7) it may not contain more than 5% of crushed, parsimonious and germinated kernels, of that up to 1 % of kernels damaged by artificial dessication, with the exception of maize for which is allowed to contain up to 8% of crushed kernels and up to 2% of parsimonious and germinated kernels;

8) it may not contain more than 10% of impurities referred to in items 4 to 7 of this Article, with the exception of maize for which is allowed to contain up to 14% of impurities.

The kernels of other wheats are not considered as impurities if their presence is not higher than 10%.

Article 15.

The maize-cob shall contain the following conditions:

1) the kernel has to be healthy and without signs of chaf;

2) it may not contain more than 14% of humidity;

3) the relation between kernels and spike has to be at least 78%:22%.

Article 16.

The leguminosae, in terms of this Rulebook, are the following varieties:

The ordinal number	The variety of leguminosae	The description
1	Peas	All varieties of edible and animal peas (Pisum sativum i P. arvense)
2	Horsebean	Cultural varieties of horsebean (Vicia faba)
3	Sweet pea	The kernel of cultural varieties of sweet pea (Vicia sativa, Vicia panonica)
4	Soya	The kernel of cultural varieties of soya (Glicine hispida)
5	Guar	The kernel of guar Cyamopsis psoraloides, Cyamopsis tetragonalis) thermal treated
6	Lupina	The kernels of cultural varieties and species of lupina (Lupinus luteus, Llangustifolius)
7.	Beans	The kernels of beans (Phascolum vulgaris)
8.	Lens (lentil)	(Lens esculenta)
9.	Chick-pea	(Cicer arietinum)

Article 17.

The leguminosae have to fulfil the following conditions:

1) to have color typical for variety leguminosae;

2) to have typical aroma and taste;

3) they may not contain more than 14% of humidity;

4) they may not contain more than 5% of impurities, of that:

- non-organic impurities at most 1 %,

- organic impurities at most 3,5% of that it may contain the seed of poisonous plants up to 0,5%;

- defective kernels, damaged, un-developed, parsimonious and germinated kernels at most 5%;

5) they may not contain the seed of elvish hair (Cuscuta spp.).

The kernels of other leguminosae are not considered as impurities if their share doesn't exceed 10%.

Article 18.

In terms of this Rulebook, the soya (Glicine hispida), means treated soya seed (toasted, hydro-thermal processed, micronized, extruded).

Article 19.

The soya has to fulfil the following conditions:

1) to have color typical for the variety of soya;

2) to have typical aroma and taste;

3) it may not contain more than 10% of humidity;

4) it may not contain more than 5% of impurities, of that:

- non-organic impurities at most 1 %;

- organic impurities at most 3,5%, of that it may contain the seed of poisonous plants up to 0,5%;

5) defective kernels, damaged, un-developed, parsimonious and germinated kernels at most 5%;

6) it may not contain the seed of elvish hair (Cuscuta spp.);

7) it has to contain at least 34% of proteins;

8) it has to contain at least 16% of fats;

9) it has to contain at least 7% of celluloses;

10) it has to contain at most 6% of ash and

11) activity of urea up to 0,4 (mgN/g) min.

Article 20.

Other kernels have to fulfil the following conditions:

1) to have color typical for the plant variety from which they originate from;

2) to have typical natural aroma and taste;

3) they may not contain more than 14% of humidity;

4) they may not contain more than 5% of total impurities.

2. The milling wheat products

Article 21.

In terms of this Rulebook, the milling wheat products are products made by mechanical processing of wheat.

Article 22.

The milling wheat products have to fulfil the requirements referred to in Chart 1.

Chart 1

Ordinal number	The type of milling wheat product	The description	Proteins %, at least	Humidity % at most	Starch % at least	Cellulose % at most	Ash % at most
1	2	3	4	5	6	7	8
1	Wheat animal flour	The product made by milling of wheat, light-umber to red-yellow color; without bitterness, rancidity and sourness; with size allowing 95% to pass through the sieve with square openings with size of 1mm, and the remaining through the sieve with square openings with size of 2mm	12	14,5	30	8	5

2	Wheat bran	The product made by milling wheat and after separation of wheat and semolina; it is consisted mostly of the coat of the kernel ans parts of endosperm; the color is similar to the color of wheat kernel-light-umber; without bitterness, with size allowing 90% to pass through the sieve of square openings with size of 1,6 mm, and the remaining through the sieve of square openings with size of 4mm. Contains non-organic impurities up to 0,5% and organic up to 0,4%	12	14,5	Not to be determined	11	7
3	Wheat sprouts	The product made by separation of sprouts from cleaned wheat in the production of flour. It is consisted mostly of sprouts with presence of flour and bran; color light-yellow and aroma similar to aroma of wheat	20	13	Not to be determined	4	5
4	Maize animal flour	The product made by milling the maize kernels; light-yellow color; aroma similar to maize shredded wheat; without bitterness and rancidity	8	14	58	6	5
5	Maize bran	The product made in production of maize flour, i.e. maize semolina. It is consisted of the coat of the maize kernel	9	14	Not to be determined	10,5	2,5
6	Maize bran made by wet germination	The product made in production of maize flour, i.e. maize semolina. It is consisted of the coat of the maize kernel	18	14	15	18	1
7	Maize sprouts	The product made by separation of the sprout from the maize kernel; it is consisted mostly of sprouts and parts of the coat of the kernel and endosperm	12	12	Not to be determined	8	4

8	Maize sprouts made by wet procedure	The product made by separation of the sprout from the maize kernel; it is consisted mostly of sprouts an dparts of the coat of the kernel and endosperm	18	14	18	25	2,5
9	Rye animal flour	The product made by milling the rye; grey-umber color, with size allowing 95% of kernels to pass through the sieve with square openings with the size of 1 mm, and remaining through the sieve with square openings with the size of 2 mm	10	14,5	30	5	5
10	Rye bran	The product made by milling of rye,a nd after separation of flour and semolina it is consisted mostly of the coat of the kernel and parts of endosperm; color grey-umber to green	12	14,5	Not to be determined	11	6
11	Rice bran	The product made by peeling and policing the rice; it is consisted of the coat of the kernel and parts of endosperm; the color, taste and aroma have to be typical for un-peeled kernel of rice	19	14	Not to be determined	10	9
12	Rice bran with removed fat	The product made of the rice kernel as referred to in item 9, but with removed fat from it	13	14	Not to be determined	Not to be determined	12

Article 23.

The milling wheat products may not contain impurities of non-organic and organic origin and have to have aroma and taste typical for the raw material from which they were produced.

3. The starch industry products

Article 24.

The starch industry products have to fufil the requirements referred to in Chart 2.

Chart 2

The ordinal number	The type of starch industry product	The description	Proteins % at least	Humidity % at most	Celluloses % at most	Ash % at most
1	2	3	4	5	6	7
1	Maize gluten-I quality	The product made in production of maize starch; it is consisted mostly of maize gluten, starch and the coat of the kernel; light-yellow color; the aroma typical for shredded wheat; with modest sour taste	60	13	4	3
2	Maize gluten-II quality	The product made in production of maize starch; it is consisted mostly of maize gluten, starch and the coat of the kernel; light-yellow color; the aroma typical for shredded wheat; with modest sour taste	50	13	4	3
3	Maize gluten flour	The product made in production of maize starch; it is consisted mostly of maize gluten, starch and the coat of the kernel; with higher presence of small brans; light-yellow color; the aroma typical for shredded wheat; with modest sour taste	22	13	10	6
4	Maize sediment	The product made in production of maize starch by mixing gluten, big and small brans, buckshot or of bannocks of maize sprouts and extracts of watering	17	13	15	6
5	Maize sediment with the maize extract	The product made in production of maize starch by mixing maize brans, maize extract and bannocks of maize sprouts; light-brown color and aroma typical for maize extract, with light sour taste	14	13	15	6
6	Wheat gluten	The product made in production of wheat starch; it is consisted mostly of wheat gluten with smaller quantities of the coat of the kernel and starch; brown color; with aroma typical for shredded wheat	60	12	3	2

7	Wheat gluten flour	The product made in production of wheat starch; it is consisted mostly of wheat gluten with smaller quantities of the coat of the kernel and more starch; color brown; aroma typical for the shredded wheat	20	13	Not to be determined	Not to be determined
8	Vapourized maize extract (korinstip)	The product made by evaporization of maize extract	20	50	Not to be determined	9
9	Dextroses - monohydrate and anhydrated dextrose	Products made by hydrolysis of starch. In accordance with the description governing the quality of starch and starch products for foodstuff purposes.				

4. The alcohol and brew industry products

Article 25.

The alcohol and brew industry products have to fulfil the conditions referred to in Chart 3.

Chart 3

The ordinal number	The type of alcohol and brew industry product	The description	Proteins % At least	Humidity % at most	Raw fibres % at most	Ash % at most
1	2	3	4	5	6	7
1	The dessicated animal powder - I quality	The product made by reproduction of funghi of powder (Torula species) on different foilts; light-green to light-grey color and with aroma typical for the powder	60	10	2	7
2	The dessicated animal powder - II quality	The product made by reproduction of funghi of powder (Torula species) on different foilts; light-green to light-grey color and with aroma typical for the powder	50	10	2	8
3	The dessicated animal powder - III quality	The product made by reproduction of funghi of powder on different foilts; light-green to light-grey color and with aroma typical for the powder	40	10	2	8

4	The dessicated pivski trop (treber; mlata)	The product made as the remaining in the production of beer; consisted of barley malt and kernels of wheat; light-brown color; with aroma as the wheat which was used for the production of beer	25	12	16	8
5	The dessicated beer powder (Saccharomyces)	The product made in the production of beer after the fermentation; consisted of funghi of brew powder (Saccharomyces species) the remaining of the foilt and the product of the fermentation; grey to black-gery color	40	11	1	10
6	Sifted beer trope	The product made by sifting the dessicated beer trope	32	10	13	4
7	The crude fraction of beer trope	The product made by sifting the dessicated beer trope	20	10	18	8
8	Barley malt sprouts	The product made by separation of sprouts from the malt in the production of beer; light-brown to dark-brown color; without aroma of putridity	20	12	14	7
9	The dessicated trope	The product made by dessication of remainings in the production of alcohol from raw materials rich with starch (wheat, potato etc.); with the color, aroma and taste typical for the raw material from which was produced sop; impurities up to 2%	Not to be determined	12	Not to be determined	Not to be determined
10	Vapourized molasses sop (Vinasa) in ash, 8% of potassium	The product made by vapourization of molasses sop	15	35	Not to be determined	22

5. The sugar industry products and sugar industry subsidiary products and ascorbin industry products

Article 26.

The sugar industry products and sugar industry subsidiary products and ascorbin industry products have to fulfil the following conditions referred to in the chart 4.

Chart 4

The ordinal number	The type of the product	The description	Protein % At least	Humidity % At most	Saccharose % at least	Ash % At most
1	2	3	4	5	6	7
1	Dry noodle of sugar beet	Dessicated and longated noodles of sugar beet; without aroma on acida, chaf and disintegration	Not to be determined	12	Not to be determined	7
2	Dry noodle of sugar beet with molasses	Dessicated noodles of sugar beet with added molasses; aroma and taste of molasses	Not to be determined	14	10	8
3	Dry noodle of sugar beet with added molasses sop	Dessicated noodles with added molasses sop; aroma typical for vapourized molasses sop; taste on sugar beet	Not to be determined	14	Not to be determined	8
4	Flour of scrollings and crushed parts of sugar beet	The product made by pressing an dessication of scrollings and crushed parts of sugar beet	Not to be determined	12	35	8
5	Molasses	The syrup which remains in the production of sugar from which under normal conditions of crystallization of sugar, the sugar may not be produced anymore				
6	Lug L. Sorboza	The vapourized remaining in the production of vitaminee C from crystal D glucose which is made by enzym hydrolysis of starch; dark-brown color; delicious aroma	Not to be determined	14	53	Not to be determined

6. Oil industry products

Article 27.

In terms of this Rulebook, the oil industry products, means bannocks, buckshots and husks made in processing of oil oils.

The bannocks are products made by pressing (hydraulic or mechanical procedure) in the production of oil of technically prepared (peeled, milled, heated and similar) seeds, sprouts and cores.

The buckshots are products made by extraction in the production of oil of technically prepared (peeled, milled, heated and pressed) seeds, sprouts and cores.

The husks are cellulose coats of the seed of oil oils with less content of oil and proteins and with the humidity content up to 12% and which are used in production of blendings.

Article 28.

The bannocks and buckshots have to fulfil the following conditions:

1) to have aroma typical for the raw material from which they were produced, to be without aroma of putridity or dissolvent used for extraction and have to be without signs of rancidity;

2) they may not contain more than 1 % of total impurities, and if produced of peeled peanuts, the content of total impurities may be at most 2%;

3) the bannocks may not contain more than 12% of fats, and buckshots more than 3% of fats.

Article 29.

The bannocks and buckshots have to fulfil the following quality conditions referred to in Chart 5.

Chart 5

The ordinal number	The type of the bannock or buckshot	The description	Protein % At least	Humidity % At most	Celluloses % at least	Ash % At most
1	2	3	4	5	6	7
1	The bannock made of partially peeled seeds of sunflower	The product made by pressing partially peeled seeds of sunflower (Helilantus annus); grey to dark-grey color	35	12	20	6
2	The buckshot of partially peeled seeds of sunflower - I quality	The product made of partially peeled seeds of sunflower (Helilantus annus) by extraction and separation	44	12	12	8
3	The buckshot of partially	The product made by pressing and extracting partially peeled seeds of sunflower (Helilantus annus)	37	12	18	8

	peeled seeds of sunflower - II quality					
4	The buckshot of sunflower seeds with decreased content of proteins - III quality	The product made by extraction, pressing and separation of crude fraction of buckshot of partially peeled seeds of sunflower	33	12	21	8
5	The buckshot od of sunflower seeds with increased content of husks - IV quality	The product made of buckshots with decreased content of proteins and husks of sunflower seeds	20	12	34	
6	The soya bannock	The product made by pressing soya seeds (Glycina hispida); light-yellow to light-brown color; of total quantity of proteins, 15 % has to be soluble in water; the activity of urea at most 0,5 (mgN/g) min	38	12	9	8
7	The buckshots with peeled soya kernels - I quality	The product made by extraction odf peeled and heated soya kernels; (Glycina hispida) light-yellow to light-brown color; the activity of urea at most 0,4 (mg N/g) min	48	12	3,5	6
8	The buckshot of partially peeled soya seeds - II quality	The product made by extraction of thermal processed soya kernel (Glycina hispida) light-yellow to light-brown color; of total quantity of proteins, 15 % has to be soluble in water; the activity of urea at most 0,4 (mg N/g) min	44	12	7	7
9	The buckshot of un-peeled soya kernels -	The product made by extraction of thermal processed soya kernels; (Glycina hispida) the activity of urea at most 0,4 (mg N/g) min	40	12	9	8

III quality

10	The bannock of partially peeled peanuts seeds	The product made by pressing partially peeled peanuts seeds (Arachis hypogea)	40	12	11	5
11	The buckshot of partially peeled peanuts seeds	The product made by extraction of oil from partially peeled peanuts seeds (Arachis hypogea)	48	12	8	5
12	The bannock of pumpkin seeds	The product made by pressing peeled pumpkin seeds (Cucurbita maxima; Cucurbita melanosperma; Cucurbita moshata etc.)	49	12	7	8
13	The buckshot of pumpkin seeds	The product made by extraction of peeled and partially peeled pumpkin seeds	45	12	14	9
14	The bannock of oil rape	The product made by pressing the oil rape seeds (Brassica napus oleifera) and ogrštice (Brassica rapaoleifera); green-yellow color	27	10	12	8
15	The buckshot of oil rape - I quality	The product made by extraction of oil rape (Brassica napus oleifera) with at most 40 mmol/g of glucosezinolate	36	10	12,5	9
16	The buckshot of oil rape - II quality	The product made by extraction of oil rape (Brassica napus oleifera) with increased content of glucosezinolate more than 40 mmol/g	36	10	12,5	9
17	The bannock of cotton seeds	The product made by pressing the disintegrated cotton seeds (Gossypium vitifolum) yellow to umber-green color; with at most 120 mg/kg of gossipole	32	11	17	6
18	The buckshot of cotton seeds	The product made by extraction of disintegrated cotton seeds with at most 1 200 mg/kg of gossipole	40	10	13	8
19	The bannock of poppy	The product made by pressing the poppy seeds (Papaver rhoeas); grey to brown color	36	10	11	11

	seeds					
20	The buckshot of poppy seeds	The product madeby extraction of poppy seeds (Papaver rhoeas)	38	10	11	12,5
21	The bannock of line seeds	The product made by pressing the line seeds (Linum usitatissimum); light-yellow to light-brown color	30	10	9	7
22	The buckshot of line seeds	The product made by extraction of line seeds; light-yellow to light-brown color color; impurities at most 7%	34	10	9	6
23	The bannock of sesame seeds	The product made by extraction and pressing the sesame seeds (Sesamum imadicum); light-yellow color	35	10	6,5	11
24	The buckshot of sesame seeds	The product made by extraction of sesame seeds (Sesamum imadicum); light-yellow color	38	10	6,5	11
25	The bannock of palm stones	The product made by pressing the core of palm stone (Elacis species); light-grey to dark-grey color	15	10	24	4
26	The bannock of copra	The product made by pressing dessicated endosperm of seeds of coconut palm (Cocus nucifera); light-brown color	18	12	12	7
27	The buckshot of stinging nettle	The product made by extraction of dessicated endosperm of seeds of coconut palm; light-brown color	20	12	14	7
28	The bannock of dry germinated maize sprouts	The product made by pressing germinated sprouts of maize with presence of remainings of husk endosperm; umber-yellow color	11	12	7	8
29	The bannock of wet germinated maize sprouts	The product made by pressing maize sprouts in wet procedure in the production of starch; contains parts of endosperm and husk; umber-yellow color	18	10	8,5	3
30	The buckshot of maize sprouts	The product made by extraction of maize sprouts by wet procedure; umber-yellow color	20	12	9	4

31	The buckshot of wheat sprouts	The product made by extraction of wheat sprouts	25	12	Not to be determined	6

7. The dessicated plant products

Article 30.

Sušeni biljni producti, u smislu ovog pravilnika, jesu biljke ili njihovi delovi osušeni do stepena u kom se mogu čuvati bez kvarenja i koje moraju da ispune conditions date u tabeli 6.

Tabela 6

The ordinal number	The type of plant products	The description	Protein % At least	Humidity % At most	Celluloses % at least	Ash % At most
1	2	3	4	5	6	7
1	The flour of lucerne - I quality	The product made by artificial dessication and milling of stipe and leaves of young lucerne (Medicago sativa) dark-green to light-green color; without alien aroma; minced to the extent that 94% of flour pass through the sieve with square openings with the size of 1,6 mm and the remaining through the sieve with square openings with the size of 4 mm; β karotin at least 200 mg/kg; the impurities of other plants growing with the lucerne at most primese 10 %	20	12	21	12
2	The flour of lucerne - II quality	The product made by artificial dessication and milling of stipe and leaves of young lucerne (Medicago sativa); dark-green color, without alien aroma; minced as referred to under number 1. β karotin at least 150 mg/kg; the	17	12	25	12

		impurities of other plants growing with the lucerne at most 10%				
3	The flour of lucerne - III quality	The product made by artificial dessication and milling of stipe and leaves of young lucerne (Medicago sativa); light-green to green-yellow color; minced as referred to under number 1. β karotin at least 100 mg/kg; the impurities of other plants growing with the lucerne at most 10%	15	13	28	13
4	The flour of lucerne - IV quality	The product made by artificial dessication and milling of stipe and leaves of young lucerne (Medicago sativa); light-green to green-yellow color; minced as referred to under number 1. β karotin at least 30,6 mg/kg; the impurities of other plants growing with the lucerne at most 10%	12	13	31	13
5	The protein - karotin concentrate of lucerne (PKKL)	The product made by coagulation and dessication of proteins from the green juice of lucerne; dark-green color; β karotin at least 500 mg/kg and at least 1 000 mg/kg of total xanthophylls	50	5		3
6	The flour of grasses (Gramine a)	The product made by dessication and milling of young grasses growing together; light-green color; minced as referred to under number 1, with at least 170 mg/kg of karotin	14	12		25
7	The milled plant of maize	The product made by milling the whole plant of maize together with the corn-cob in milk or wax maturity; yellow to light-brown color	6	12	30	Not to be determined

8	Tapioka (manioka; kasava)	The dessicated and previously washed products of bulbs (manioca flour; pellets etc); grey to umber-grey color with at least 65% of starch	13	5,5		Not to be determined
9	The dessicated shuck of grape	The product made by dessication of remainings during the processing of grape in brown color	10	10	24	9
10	The flour of peas	The product made by dessication of peas plant with harvests, light-green to light-brown color	16	10	24	9
11	The flour of peas plant	The product made by dessication and milling of peas plant after separation of kernels. Light-green to light-brown color with at least 30% of azote extractive substances	12	12	30	Not to be determined
12	The flour of soya plant	The product made by dessication and milling of stipe,leaves and harvests of green soya plant; green to dark-green color	15	12	25	30

8. The other plant products

Article 31.

In terms of this Rulebook, the other plant products are asfollows: vegetable fats, vegetable oils, fat acids, protected fats for nourishment of ruminants, soya semolina, soya flour and carob.

Article 32.

The products referred to in Article 31 of this Rulebook have to fulfil the conditions referred to in Chart 7.

Chart 7

The ordinal numberbroj	The type of plant products	The description	Proteins % at least	Humidity % At most	Cellulose % At most	Ash % At most

1	2	3	4	5	6	7
1	The edible vegetable fat Edible vegetable oil	The product which is consisted of vegetable fat, i.e. vegetable oil; peroxide number at most 40 mmol H_2O_2	Not to be determined	Not to be determined	Not to be determined	Not to be determined
2	The fat acid	The product made by rafination of vegetable fats and oils with at most 5% non-soap substance and vaporable substances	Not to be determined	5	Not to be determined	Not to be determined
3	The protected fats for nourishment of ruminants	The product made by combination of plant and animal fats in the chemical reaction with calcium and it contains at most of 9% calcium and at most 84% of fats. Light-brown color	Not to be determined	5	Not to be determined	11
4	The soya semolina	The product made by peeling and extruding soya kernels whose activity of urea is at most 0,4 (mg N/g) min and at least 18% of oils	38	8	4,5	5,5
5	The soya flour	The product made by peeling, pressing and by extraction of fats from soya kernels, dobijen ljuštenjem, presovanjem i extraction fati zrna soje, whose activity of urea is up to 0,4 (mg N/g) min	47	8	3,5	6,5
6	The carob	The product made by crushing or milling the carob harvests (Ceratonij siliqna) without stones, with at least 30% of saccharine	Not to be determined	15	Not to be determined	4,5

9. The nutrients of animal origin

Article 33.

In terms of this Rulebook, the nutrients of animal origin are products made by processing of animal parts and their products, as it follows: fish flour, fish processing products, subsidiary products of slaughtering and processing of poultry, meat flour, meat-bone flour and derma flour, blood flour, liver flour, graves, fat and fish oil, milk without fat, whey, albumin and kazein.

The products referred to in paragraph 1 of this Article, have to fulfil the quality conditions referred to in charts 8 to 13.

The fish flour

Chart 8

The chemical content	The product made by dessication and milling of fish and parts thereof; brown to umber-brown color; with aroma on fish without rancidity; minced to extent that 90% of flour pass through the sieve with square openings with the size of 1,6 mm, and the remaining through the sieve with square openings with the size of 4 mm				
	THE CATEGORY OF QUALITY				
	I	II	III	IV	The flour weeds of fresh-water fish
Proteins, %, at least	70	65	60	55	50
The digestibility of proteins in sour pepsin, % at least	90	88	88	88	80
The humidity, %, at most	10	10	10	10	10
The fat, %, at most	5	10	10	10	15
The ash, %, at most	15	18	20	25	25
NaCl, %, at most	4	4	4	4	4

The fish processing products

Chart 9

	Fish wastes flour	Dissoluble fish proteins	Dessicated fish juice
The chemical content	The product made by separation and milling of fish; brown to umber-brown color; aroma on fish without rancidity; minced to the extent that 90% of flour pass through the sieve with square openings with the size of 2 mm, and the remaining through the sieve with square openings with the size of 4 mm	The product made during the special processing of fish; bones are removed	The product made during the pressing of fish in the production of fish flour
The proteins, % at least	40	80	60
The humidity, % at most	10	5	9
The fat, % at most	15	7	Not to be determined
The ash, % at least	35	7	Not to be determined

The subsidiary products of slaughtering and processing of poultry

Tabela 10

The chemical content	The flour of feathers made during the slaughtering of poultry	The flour of wastes during the slaughtering of poultry, without the content of feathers	The flour of wastes during the slaughtering and processing of poultry meat
	The product made by hydrolysis and milling of feathers	The product made of wastes during the slaughtering of poultry; without the content of feathers	The product made by processing of subsidiary products during slaughtering of poultry; dead poultry and wastes of incubation
	The minced flour of feathers shall be such to allow 95% of flour to pass through the sieve with square openings with the size of 1,6mm, and for other two up to 90% of flour pass through the sieve with the same openings; the remaining of flour pass through the sieve with the square openings with the size of 4mm		
Proteins, %, at least	75	55	60

The digestibility of proteins in sour pepsin, % at least	76	78	78
The humidity, % at most	11	10	10
The ash, % at most	35	25	20
The fat, % at most	Not to be determined	10	10
Stabilised fat, % at most	Not to be determined	15	15

The meat flour, meat-bone flour and derma flour

Chart 11

The chemical content	The meat flour	The meat –bone flour	The derma flour
	The product made by processing of non-edible slaughtering products with ceratine substances; brown to dark-brown color; minced to the extent that 95% of flour pass through the sieve with square openings with the size of 1,6mm, the remaining	The product made by dessication and milling of meat and bones of animal or their corpses; dark-brown color, aroma without rancidity and typical for the bone flour. Minced to the extent that 90% of flour pass through the sieve with	Product dobijen preradom otpadaka kože bez dlaka, sa pripadajućim mesnim delom

	of flour pass through the sieve with the square openings with the size of 4mm	square openings with the size of 1,6mm, the remaining of flour pass through the sieve with the square openings with the size of 4mm				
	The category of quality	The category of quality				
	I	II	I	II	III	
Proteins, % at least	60	55	50	45	40	80
The digestibility of proteins in sour pepsin, % at least	83	83	83	83	83	83
The humidity, % at most	10	10	10	10	10	10
The fat, % at most	10	10	10	10	15	10
Stabilised fat, % at most	Not to be determined	15	15	15	15	15
The ash, % at most	15	25	30	35	45	8

The blood flour, liver flour, graves, fat and fish oil

Chart 12

	The blood flour	The liver flour	The graves	The fat	The fish oil
The chemical content	The product made by dessication of blod of slaughter animals.	The product made by dessication and milling of animal livers; stabilised	The remaining after maceration of fats	The fat of warm-blood animals	

	Minced to the extent that 95% of blood and liver flour pass through the sieve with square openings with the size of 1,6mm, the remaining of flour pass through the sieve with the square openings with the size of 4mm				
Proteins, % at least	80	60	40	Not to be determined	Not to be determined
The humidity, % at most	10	10	10	2	Not to be determined
The fat, % at most	5	18	Not to be determined	Not to be determined	Not to be determined
The ash, % at most	4	3	Not to be determined	Not to be determined	Not to be determined
The peroxide number mmol 1,20/kg, % at most	40	40	40	40	Not to be determined
The acid level, % at most	Not to be determined	Not to be determined	55	55	120

The milk without fat, whey, albumin and kazein

Chart 13

The ordinal nu,ber	The type of nutrient	The description	The proteins % at least	The humidity % at most	The fat % at most	The ash % at most	The lactose % at most
1	2	3	4	5	6	7	8
1	The milk without fat in powder	The product made by vaporization of water from the milk without fat;	33	5	1,25	8	Not to be determined

		yellow color; with aroma characteristic for the milk					
2	The whey in powder	The product made by vaporization of water from the whey; white to light-yellow color; with aroma characteristic for the whey	11	7	1	8	60
3	De-lactose whey in powder	The product made by separation of lactose from the whey by dessication; yellow-brown color; with aroma of fresh whey	14	7	1	16	50
4	Lactoalbumin	The product made after sedimentation of kazein and lactoglobulin from the milk and by dessication; white to light-yellow color	75	8	Not to be determined	25	Not to be determined
5	The sour kazein	The product made from the milk by sedimentation with usage of acids or enzyms; white to light-yellow color; the kernels of darker color without impurities	66	12	1,5	7	Not to be determined
6	Kazein sweet		Not to be determined	Not to be determined	Not to be determined	5,5	Not to be determined

10. The nutrients with added non-protein azote compositions

Article 34.

In terms of this Rulebook, the nutrients with added non-protein azote compositions, are the nutrients which by their physical and chemical characteristics limit the toxines of urea, ammonia and other azote compositions and enable their better utilitization in the nourishment of ruminants.

The content of humidity in products referred to in paragraph 1 of this Article may not be higher than 12%.

11. The mineral nutrients

Article 35.

In terms of this Rulebook, the mineral nutrients are non-organic compositions intended for meeting the needs of animals for calcium, phosphorus, natrium, potassium, magnesium, sulphate and chlorine.

The products referred to in paragraph 1 of this Article have to fulfil the conditions referred to in the chart 14.

Chart 14

The ordinal number	The type of mineral nutrients	The description	The quality conditions
1	2	3	4
1	The bone flour	The product made by industrial processing of bones from which were removed fats and collagen	White to light-yellow color; minced to the extent that 95% of flour pass through the sieve with square openings with the size of 0,4 mm, and the remaining of flour pass through the sieve with the square openings with the size of 1,0mm. The content of phosphorus at least 12% The relation calcium- phosphorus 1,8-2,0:1 The content of humidity at most 6% The content of fat at most 1,5%
2	The raw bone flour	The product made by industrial processing of bones from which was removed fat	White to light-yellow color; minced to the extent that 98% of flour pass through the sieve with square openings with the size of 1 mm, and the remaining of flour pass through the sieve with the square openings with the size of 2 mm. The content of proteins at least 24% The content of phosphorus at least 8% The relation calcium-phosphorus 1,8-2,0:1 The content of humidity at most 8% The content of fat at most 4%
3	The salt for nourishment of animals	Technically clean natrium-chloride and that as milled salt or as briquetted salt for the nourishment of animals	The milled salt has to be minced to the extent that 95% of salt pass through the sieve with square openings with the size of 0,4 mm, and the remaining of flour pass through the sieve with the square openings with the size of 2 mm. The content of natrium at least 38% The content of humidity at most 2 %

			The content of calcium at most 0,15% The content of iodine in form of potassium-iodine at least 0,0038% The content of impurities irresolvable in water at most 3,5%
4	Calciumlactate	Technically clean calciumlactate $Ca[CH_3CH(OH)COO]_2$	The clearness of the product is 97% Calcium at least 12%
5	Calciumgluconat	Technically clean calciumgluconat $Ca[HOCH_2(CHOH)_4COO]_2$	The clearness of the product is 97% Calcium at least 8,5%
6	Calciumcarbonate	The animal chalk - Calciumcarbonate for animal feeding ($CaCO_3$); technically clean; milled	White to light-grey color; minced to the extent that the product pass through the sieve with square openings with the size of 0,2 mm without remainings The content of calcium at least 36% The content of humidity at most 2% The content of magnesium at most 1% The content of impurities at most 1%
7	Raw calciumphosphate	The product made by milling natural phosphates from which the flour was removed; consisted mostly threecalciumphosphate $[Ca_3(PO_4)]_2$	The content of phosphate solvable in mineral acids nim kiselinama at least 14% The content of calcium at most 31% The content of fluor at most 0,20%
8	Calciumphosphate	Technically clean threecalciumphosphate $Ca_3(PO_4)_2$	The content of phosphorus at least 18% The content of calcium at most 35%
9	Calcium-dihydrogenphosphate-monohydrate	Technically clean calcium-dihydrogenphosphate-monohydrate $Ca(H_2P0_4)H_2O$	The content of phosphorus at least 22% The content of calcium at most 15% The content of fluor at most 0,20%

10	Calcium-hydrogenphosphate	Waterless calcium-hydrogenphosphate ($CaHPO_4$)	It has to be minced to the extent that 60% pass through the sieve with square openings with the size of 0,71 mm; 95% pass through the sieve with the square openings with the size of 0,5 mm and 100% pass through the sieve with the square openings with the size of 1 mm The content of calcium at most 29% The content of phosphorus solvable in mineral acid at least 21% The content of fluor at most 0,20%
11	Calcium-hydrogenphosphate-dihydrate	Technically clean calcium-hydrogenphosphate -dihydrat ($CaHPO_4 . 2H_20$)	It has to be minced to the extent that 60% pass through the sieve with square openings with the size of 0,71 mm; 95% pass through the sieve with the square openings with the size of 0,5 mm and 100% pass through the sieve with the square openings with the size of 1 mm The content of calcium at most 23% The content of phosphorus solvable in mineral acid at least 16% The content of fluor at most 0,20%
12	The mixture of calcium-dihydrogenphosphate and calcium-hydrogenphosphate	The mixture of calcium-dihydrogenphosphate [$(Ca(H_2PO_4)_2)$] and calcium-hydrogenphosphate ($CaHPO_4$) in equal relation	The content of phosphorus at least 18% The content of calcium at most 26% The content of fluor at most 0,20%
13	Natrium-phosphate	Technically clean natrium- phosphate ($NaPO_4$)	The content of natrium at least 42% The content of phosphorus at least 17% The content of fluor at most 0,20%
14	Natrium-dihydrogenphosphate	Technically clean waterless natrium-dihydrogenphosphate (NaH_2P0_4)	The content of natrium at least 19% The content of phosphorus at least 25% The content of fluor at most 0,20%
15	Natrium-dihydrogenphosphate -dihydrate	Technically clean natrium-dihydrogenphosphate -dihydrate ($NaH_2PO_4.2H_2O$)	The content of natrium at least 14% The content of phosphorus at least 19% The content of fluor at most 020%
16	Natrium-hydrogenphosphate waterless	Technically clean waterless natrium-hydrogenphosphat	The content of natrium at least 32% The content of phosphorus at least 21% The content of fluor at most 0,20%

		e (Na_2HPO_4)	
17	Natrium-hydrogenphosphate -dodekahydrate	Technically clean natrium-hydrogenphosphate dodekahydrate ($Na_2HPO_6 . 12H_2O$)	The content of natrium at least 12% The content of phosphorus at least 8% The content of fluor at most 0,20%
18	Natrium-threepolyphosphate	Technically clean natrium-threepolyphosphate ($(Na_3P_3O)_{10}$)	The content of phosphorus at least 24% The content of natrium at least 29% The content of fluor at most 0,20%
19	Natrium-magnesiumphosphate	Technically clean natrium-magnesiumphosphate ($NaMgPO_4$)	The content of phosphorus at least 17% The content of natrium at least 8% The content of magnesium at least 8%
20	Natriumsulphide	Technically clean natriumsulphide Na_2SO_4	The content of sulphates at least 20% The content of natrium at least 30% The clearness 95%
21	Natrium-hydrogencarbonate	Technically clean natrium hydrogencarbonate ($NaHCO_3$)	The clearness 99%
22	Magnesium-dihydrogenphosphate -threehydrate	Technically clean magnesium-dihydrogenphosphate -threehydrate [$Mg(H_2P0_4)_2 . 3H_20$]	The content of phosphorus at least 21,5% The content of magnesium at least 8%
23	Magnesium-hydrogenphosphate -threehydrate	Technically clean magnesium-hydrogenphosphate - threehydrate ($MgHPO_4 . 3H_2O$)	The content of phosphorus at least 17% The content of magnesium at least 13%
24	Magnesium-phosphate - pentahydrate	Technically clean magnesium-phosphate - pentahydrate ($MgPO_4 . 5H_2O$)	The content of phosphorus at least 17% The content of magnesium at least 20%
25	Magnesiumoxyde	Technically clean magnesiumoxyde	The content of magnesium at least 50%

		(MgO)	
26	Magnesiumcarbonate	Technically clean magnesiumcarbonate ($MgCO_3$)	The content of magnesium at least 26%
27	Magnesium-chlorid-heksahydrate	Technically clean magnesium-chlorid-heksahydrate ($MgCl \cdot 6H_2O$)	The content of magnesium at least 11%
28	Magnesium-sulphide-heptahydrate	Technically clean magnesium-sulphide-heptahydrate ($MgSO_4 \cdot 7H_2O$)	The content of magnesium at least 9%
29	Sulphate	Technically clean sulphate – sulphate flower	The clearness 97%
30	Ammonium-dihydrogenphosphate	Technically clean ammonium-dihydrogenphosphate ($NH_4H_2PO_4$)	The content of phosphorus at least 24% The content of azote at least 10% The content of fluor at most 0,20 %
31	Ammonium-hydrogen-phosphate	Technically clean ammonium-hydrogen-phosphate [$(NH_4)2HPO_4$]	The content of phosphorus at least 22% The content of azote at least 18% The content of fluor at most 0,20 %

Note: The Article 36 doesn't exist in published text.

The pre-blendings

Article 37.

In terms of this Rulebook, the pre-blendings are products with the high content of vitaminees, mineral substances, amino acids and allowed aditives, which are homogenically blended with the bearer. They are used for the nourishment of animals in combination with nutrients or they are used for production of blendings.

The pre-blendings are produced in accordance with the producer specification.

Article 38.

The bearer in the pre-blending may be every nutrient regulated by this Rulebook or mixture of these nutrients.

Article 39.

The bearer which was used in pre-blendings has to maintain the stability and improve physical characteristics of ingredients in the pre-blending.

Article 40.

Choosing the bearer is conditioned with the granulation, mass of sipping, liquidity and electrostatical characteristics of the ingredients in the pre-blending.

Article 41.

The bearers may not hygroscopic and they may not contain substances which are incompatible with the ingredients in the pre-blending, they may not cause chemical instability of ingredients in the pre-blending and spontaneous chemical reaction of ingredients in the pre-blending.

Article 42.

The pre-blending has to be homogenically blended for the ingredient which is blended in relation 1:100 000, with the fluctuation coefficient of at most 5%.

Article 43.

The pre-blendings are placed into circulation as:

1) mineral pre-blendings;

2) vitaminee pre-blendings;

3) vitaminee-mineral pre-blendings;

4) other pre-blendings.

Article 44.

In terms of this Rulebook, the mineral pre-blendings are pre-blendings which contain mixtures of allowed minerals.

Article 45.

In terms of this Rulebook, the vitaminee pre-blendings are pre-blendings which contain only vitaminees.

Article 46.

In terms of this Rulebook, the vitaminee-mineral pre-blendings, are pre-blendings which contain allowed minerals and vitaminees.

Article 47.

In terms of this Rulebook, the other pre-blendings are amino-acids pre-blendings, pre-blendings of non-protein azote compositions and other pre-blendings which contain allowed additives.

The blendings

Article 48.

In terms of this Rulebook, blendings are products made by blending of nutrients and additives for animal food in such relation that they may serve as complete or additional animal food.

Article 49.

The blendings are produced as:

1) complete blendings which are used to meet the need of animals for nutritive substances;

2) additiinal blendings, which serve to complete nutrients with which they are blended with their nutritive substances.

Article 50.

The blendings have to fulfil the following:

1) to have color typical for used nutrients and additives for animal food;

2) to have aroma and taste typical for the aroma and taste of used nutrients and additives for animal food, to be without bitterness and rancidity and without aroma on chaf.

Article 51.

The level of blending (homogenic) of blending has to be such that the daily meal contains all prescribed (declared) ingredients.

The blending has to be homogenically blended for the ingredient which is blended in relation 1:10 000, with fluctuation coefficient less than 10%.

Article 52.

The blendings for nourishment of pigs are placed into circulation as complete and as additional blendings for nourishment of pigs.
The complete blendings for nourishment of pigs are as follows:

1) the complete blending for nourishment of piggies;

2) the complete blending for piggies I – with weight up to 15 kg;

3) the complete blending for piggies II - with weight of 15 up to 25 kg;

4) the complete blending for pigs in growth and fattening I - with weight of 25 to 60 kg;

5) the complete blending for pigs in growth and fattening II - with weight of 60 to 100 kg;

6) the complete blending for pregnant sows and young sows;

7) the complete blending for lactate sows and boars.

The additional blendings for nourishment of pigs are as follows:

1) the additional blending for piggies;

2) the additional blending for fattening pigs;

3) the additional blending for breeeding pigs.

Non-protein azote (NPN) may not be added in complete and additional blendings for nourishment of pigs.

Article 53.

The complete blendings for nourishment of pigs have to fuflil the conditions referred to in charts 15 and 16.

Chart 15

The ordinal number	The chemical content	The complete blending for fetrlysineg of piggies	The complete blending for piggies I up to 15 kg	The complete blending for piggies II of 15 up to 25 kg	The complete blending for pigs in growth and fattening I of 25 kg up to 60 kg
1	2	3	4	5	6

1	Proteins, %, at least	22	20		18	16
2	Fat, %, at least	7	5		Not to be determined	Not to be determined
3	Humidity, %, at most	12	12		13,5	13,5
4	Celulloseasa, %, at most	4	4		5	6
5	Ash, %, at most	8	8		8	8
6	Calcium, %	0,8 do 1,0	0,8 to 1,0		0,7 to 0,9	0,6 to 0,8
7	Phosphorus, %, at least	0,65	0,60		0,60	0,55
8	Natrium, %	0,15 do 0,25	0,15 to 0,25		0,15 to 0,25	0,15 to 0,25
9	Zinc, mg/kg, at least			100	100	100
10	Copper, mg/kg, at least			20	20	20
11	Iron, mg/kg, at least			120	120	100
12	Manganese, mg/kg, at least			30	30	30
13	Iodine, mg/kg, at least			0,5	0,5	0,5
14	Selenium, mg/kg, at least			0,1	0,1	0,1
15	Vitamine A, IJ/kg, at least			15.000	15.000	7.000
16	Vitamine D_3, IJ/kg, at least			1.500	1.500	1.000
17	Vitamine E, mg/kg, at least			40	40	Not to be determined

18	Vitamine B, mg/kg, at least	0, 0,02 0 2	0,02	Not to be determined
19	The metabolisme energy, computing, MJ/kg, at least	1 13,0 3, 5	13,0	12,5
20	Lysine, %. at least	1, 1,2 3	1,0	0,8
21	Methionine+cystine, %, at least	0, 0,70 7 5	0,60	0,45

Tabela16

The ordinal number	The chemical content	The complete blending for pigs in growth and fattening II - with weight of 60 up to 100 kg;	The complete blending for pregnant sows and young sows	The complete blending for lactate sows and boars
1	2	3	4	5
1	Proteins, % at least	14	13	16
2	Humidity, %, at most	13,5	13,5	13,5
3	Celulloses, %, at most	7	9	7
4	Ash, %, at most	8	8	8
5	Calcium, %	0,5 to 0,7	0,75 to 1,00	0,75 to 1,00
6	Phosphorus, % at least	0,50	0,55	0,55
7	Natrium, %	0,15 to 0,25	0,15 to 0,25	0,15 to 0,25
8	Zinc, mg/kg at least	100	100	100
9	Copper, mg/kg, at least	20	20	20
10	Iron, mg/kg, at least	100	100	100
11	Manganese, mg/kg, at least	20	20	20
12	Iodine, mg/kg, at least	0,5	0,5	0,5
13	Selenium, mg/kg, at least	0,1	0,1	0,1
14	Vitamine A, IJ/kg, at least	7.000	8.000	8.000
15	Vitamine D_3, IJ/kg, at least	1.000	1.000	1.000
16	Vitamine E, mg/kg, at least	Not to be determined	25	25
17	Vitamine B_{12}, mg/kg, at	Not to be determined	0,02	0,02

	least			
18	The metabolisme energy, computing, MJ/kg, at least	12,5	12,0	13,0
19	Lysine, %, at least	0,65	0,55	0,75
20	Methionine+cystine, %, at least	0,40	0,30	0,40

Article 54.

The additional blendings for nourishment of pigs have to fulfil the conditions referred to in chart 17.

Chart 17

The ordinal number	The chemical content	The additional blending for piggies	The additional blending for fattening pigs	The additional blending breeeding pigs
1	2	3	4	5
1	Proteins, %, at least	40	35	35
2	Humidity, %, at most	12	12	12
3	Ash, %, at most	14	14	14
4	Calcium, %	2,0 to 2,7	2,2 to 2,7	3,0 to 3,4
5	Phosphorus, % at least	1,8	1,5	1,7
6	Natrium, %	0,5 to 0,7	0,5 to 0,7	0,5 to 0,7
7	Zinc, mg/kg, at least	300	400	400
8	Copper, mg/kg, at least	80	80	80
9	Iron, mg/kg, at least	350	400	400
10	Manganese, mg/kg, at least	90	80	80
11	Iodine, mg/kg, at least	2,0	2,0	2,0
12	Selenium, mg/kg, at least	0,3	0,3	0,3
13	Vitamine A, IJ/kg, at least	40.000	25.000	30.000
14	Vitamine D_3, IJ/kg, at least	4.000	3.500	3.600
15	Vitamine E, mg/kg, at least	100	Not to be determined	100
16	Vitamine B_{12}, mg/kg, at least	0,07	Not to be determined	0,07
17	Lysine, %, at least	3,3	2,0	2,1

18	Methionine+cystine, %, at least	1,7	1,0	1,0

Article 55.

The blendings for nourishment of cattle are placed into circulation as complete blendings for nourishment of cattle and as additional blendings for nourishment of cattle.

The complete blendings for nourishment of cattle as as follows:

1) the complete blending- the substitute of milk for calves;

2) the complete blending for calves I - initial;

3) the complete blending for calves II – with weight of 50 kg up to 100 kg;

4) the complete blending for calves in growth and fattening III - with weight of 100 kg up to 250 kg;

5) the complete blending for fattening of bullocks I - with weight of 250 up to 350 kg;

6) the complete blending for fattening of bullocks II - with weight over 350 kg;

7) the complete blending for milker cows;

8) the complete blending for milker cows up to 20 l/day of milk;

9) the complete blending for milker cows over 20 l/day of milk;

10) the complete blending for high cows with younge and heifers;

11) the complete blending for breeeding bulls.

The additional blendings for nourishment of cattle are as follows:

1) the additional blending for calves with weight of 100 up to 250 kg;

2) the additional blending for fattening of bullocks (both phases of fattening);

3) the additional blending for milker cows.

The non-protein azote (NPN) may not be added in complete blending- the substitute of milk for calves, in complete blending for calves I - initial and complete blending for calves II – with weight of 50 kg up to 100 kg.

Article 56.

The complete blendings for nourishment of cattle have to fulfil the following conditions referred to in charts 18 and 19.

Chart 18

The ordinal number	The chemical content	The complete blending- the substitute of milk for calves	The complete blending for calves I - initial;	The complete blending for calves II – with weight of 50 kg up to 100 kg;
1	2	3	4	5
1	Milk without fat in powder, %	50	Not to be determined	Not to be determined
2	Proteins, %, at least	22	20	18
3	Fat, %, at least	12	5	5
4	Humidity, %, at most	6	12	13,0
5	Celulloses, %, at most	2	6	8
6	Ash, % at most	8	8	8
7	Calcium, %	0,9 to 1,1	0,6. to 0,8	0,6. to 0,8
8	Phosphorus, %	0,7 to 0,9	0,4 to 0,6	0,4 to 0,6
9	Natrium, %	0,3 to 0,4	0,2 to 0,3	0,2 to 0,3
10	Vitamine A, IJ/kg, at least	12.000	8.000	8.000
11	Vitamine D_3, IJ/kg, at least	1.500	1.000	1.000
12	Vitamine E, mg/kg, at least	20	20	20
13	Cobalt, mg/kg, at least	0,1	0,1	0,1
14	Copper, mg/kg, at least	8	5	5
15	Zinc, mg/kg, at least	50	50	50
16	Iron, mg/kg, at least	60	50	30
17	Manganese, mg/kg, at least	30	30	20
18	Iodine, mg/kg, at least	0,5	0,6	0,6
19	Selenium, mg/kg, at least	0,1	0,1	0,1
20	Oat units/kg, computing, at least	Not to be determined	0,9	0,9

Chart 19

The ordinal number	The chemical content	The complete blending for calves in growth and fattening III - with weight of 100 kg up to 250 kg	The complete blending for fattening of bullocks I - with weight of 250 up to 350 kg	The complete blending for fattening of bullocks II - with weight over 350 kg	The complete blending for milker cows	The complete blending for milker cows up to 20 l/day of milk	The complete blending for milker cows over 20 l/day of milk	The complete blending for high cows with younge and heifers	The complete blending for breeeding bulls
1	2	3	4	5	6	7	8	9	10
	Proteins, %, at least	16	14	12	12	15	18	14	16
2	Protein equivalent from NPN 1)	20	35	25	20	20	20	0 2)	0 2)
3	Humidity, %, at most	13,5	13,5	13,5	13,5	13,5	13,5	13,5	13,5
4	Celulloses, %, at most	12	15	10	10	10	10	20	15
5	Ash, %, at most	10	10	10	10	10	10	12	10
6	Calcium, %	0,8 to 1,0	0,6 to 0,8	0,9 to 1,1	0,9 to 1,1	0,9 to 1,1	0,9 to 1,1	0,9 to 1,2	0,8 to 1,0
7	Phosphorus, %	0,5 to 0,7	0,4 to 0,6	0,6 to 0,8	0,6 to 0,8	0,6 to 0,8	0,6 to 0,8	0,6 to 0,8	0,6 to 0,8
8	Natrium, %	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,4
9	Magnesium, mg/kg at least	40	40	40	40	40	40	150 to 300	150 to 300
10	Vitamine A, IJ/kg, at least	7.500	7.500	10.0000	10.000	10.000	10.000	6.000	5.000
11	Vitamine D_3, IJ/kg, at least	1.000	1.000	1.500	1.500	1.500	1.500	1.500	1.000
12	Vitamine E, mg/kg, at least	10	10	10	20	20	20	15	15
13	Cobalt, mg/kg, at least	0,1	0,1	0,05	0,05	0,05	0,05	0,1	0,1

14	Copper, mg/kg, at least	5	5	5	5	5	5	10	5
15	Zinc, mg/kg, at least	20	20	20	20	20	20	30	30
16	Iron, mg/kg, at least	20	20	20	20	20	20	40	30
17	Manganese, mg/kg, at least	20	20	20	20	20	20	30	30
18	Iodine, mg/kg, at least	0,6	0,6	0,6	0,6	0,6	0,6	0,3	0,3
19	Selenium, mg/kg, at least	0,1	0,1	0,1	0,1	0,1	0,1	0,2	0,2
20	Oat units/kg, computing, at least	0,95	1,0	0,9	0,9	0,9	0,8	0,8	1,0

1) NPN – non-protein azote.

2) The non-protein azote (NPN) may not be added in the complete blending for high cows with younge and heifers and in the complete blending for breeeding bulls.

Article 57.

The additional blendings for nourishment of cattle have to fulfil the following conditions referred to in chart 20.

Chart 20

The ordinal number	The chemical content	The additional blending for calves with weight of 100 up to 250 kg	The additional blending for fattening of bullocks	The additional blending for milker cows
1	Proteins, %, at least	35	30	30
2	Protein equivalent from NPN, %, at most	25	30	25
3	Humidity, %, at most	12	12	12
4	Celulloses, %, at most	10	10	10
5	Ash, %, at most	12	12	12
6	Calcium, %	3,0 to 3,6	3,0 to 3,6	2,7 to 3,4
7	Phosphorus, %	2,0 to 2,6	2,0 to 2,6	1,8 to 2,4

8	Natrium, %	0,8 to 1,1	0,8 to 1,1	0,6 to 0,9
9	Magnesium, mg/kg, at least	180	200	140
10	Vitamine A, IJ/kg, at least	20.000	30.000	30.000
11	Vitamine D_3, IJ/kg, at least	3.000	4.000	4.000
12	Vitamine E, mg/kg, at least	Not to be determined	Not to be determined	50
13	Cobalt, mg/kg, at least	0,3	0,3	0,2
14	Copper, mg/kg, at least	15	15	15
15	Zinc, mg/kg, at least	60	100	80
16	Iron, mg/kg, at least	60	70	80
17	Manganese, mg/kg, at least	60	70	80
18	Iodine, mg/kg, at least	1,8	2,0	1,8
19	Selenium, mg/kg, at least	0,3	0,4	0,3

Article 58.

The blendings for nourishment of sheep are placed into circulation as complete and as additional blendings.

The complete blendings for nourishment of sheep are as follows:

1) the complete blending –the substitute of milk for lambs;

2) the complete blending for lambs in growth and in fattening I –with weight up to 15 kg;

3) the complete blending for lambs in growth and in fattening II - with weight of 15 up to 30 kg;

4) the complete blending for lambs in growth and in fattening III - with weight of 30 up to 50 kg;

5) the complete blending for sheep with young and dviske;

6) the complete blending for lactic sheep;

7) the complete blending for breeeding aries.

The additional blendings for nourishment of sheep are as follows:

1) the additional blending for lambs in growth and fattening;

2) the additional blending for sheep with young and milker sheep.

Article 59.

The complete blendings for nourishment of sheep have to fulfil the following conditions referred to in charts 21 i 22.

Chart 21

The ordinal number	The chemical content	The complete blending –the substitute of milk for lambs	The complete blending for lambs in growth and in fattening I –with weight up to 15 kg	The complete blending for lambs in growth and in fattening II - with weight of 15 up to 30 kg	The complete blending for lambs in growth and in fattening III - with weight of 30 up to 50 kg
1	2	3	4	5	6
1	The milk without fat in powder, %, at least	50	Not to be determined	Not to be determined	Not to be determined
2	Proteins, %, at least	22	18	16	14
3	Protein equivalent from NPN, %, at most	0 1)	0 1)	15	20
4	Humidity, %, at most	6	13	13,5	13,5
5	Fat, %, at least	12	Not to be determined	Not to be determined	Not to be determined
6	Celulloses, %, at most	2	6	8	10
7	Ash, %, at most	8	8	8	8
8	Calcium, 5 %	0,9 to 1,1	0,8 to 1,0	0,8 to 1,0	0,8 to 1,0
9	Phosphorus, %	0,7 to 0,9	0,5 to 0,7	0,5 to 0,7	0,5 to 0,7
10	Natrium, %	0,3 do 0,4	0,3 do 0,4	0,2 do 0,3	0,2 do 0,3
11	Iron, mg/kg, at least	60	50	40	40
12	Zinc, mg/kg, at least	50	50	40	30
13	Manganese, mg/kg, at least	30	30	30	30
14	Copper, mg/kg, at least	8	5	5	5
15	Iodine, mg/kg, at least	0,6	0,6	0,6	0,6
16	Cobalt, mg/kg, at least	0,1	0,1	0,1	0,1
17	Selenium, mg/kg, at least	0,1	0,1	0,1	0,1

18	Vitamine A, IJ/kg, at least	12 000	7 500 6 000	6 000	
19	Vitamine D_3 IJ/kg, at least	1 500	1 200 1 000		1 000
20	Vitamine E, mg/kg, at least	20	15	15	15
21	Oat units/kg, computing, at least	Not to be determined	0,9	0,9	0,9

1) The non-protein azote (NPN) may not be added in the complete blending for nourishment of sheep.

Chart 22

The ordinal number	The chemical content	The complete blending for sheep with young and dviske	The complete blending for lactic sheep	The complete blending for breeeding aries
1	Proteins, %, at least	14	16	17
2	Humidity, %, at most	13,5	13,5	13,5
3	Protein equivalent from NPN %, at most	25	25	0 1)
4	Celulloses, %, at most	15	15	15
5	Ash, %, at most	10	8	8
6	Calcium, %	0,8 to 1,00	0,8 to 1,00	0,8 to 1,00
7	Phosphorus, %	0,5 to 0,8	0,5 to 0,8	0,5 to 0,8
8	Natrium, %	0,2 to 0,4	0,2 to 0,4	0,2 to 0,4
9	Iron, mg/kg, at least	20	30	30
10	Zinc, mg/kg, at least	40	40	40
11	Manganese, mg/kg, at least	30	30	30
12	Iodine, mg/kg, at least	0,6	0,6	0,6
13	Cobalt, mg/kg, at least	0,1	0,1	0,1
14	Copper, mg/kg, at least	5	5	5
15	Selenium, mg/kg, at least	0,1	0,1	0,1
16	Vitamine A, IJ/kg, at least	3 000	3 000	3 000
17	Vitamine D_3, IJ/kg, at least	350	350	350
18	Vitamine E, mg/kg, at least	10	15	15
19	Oat units/kg, computing, at least	0,95	0,95	0,95

1) The non-protein azote (NPN) may not be added in the complete blending for breeeding aries.

Article 60.

The additional blendings for the nourishment of sheep have to fulfil the following conditions referred to in chart 23.

Chart 23

The ordinal number	The chemical content	The additional blending for lambs in growth and fattening	The additional blending for sheep with young and milker sheep
1	2	3	4
1	Proteins, %, at least	30	32
2	Protein equivalent from NPN, %, at most	0 1)	20
3	Humidity, %, at most	12	12
4	Celulloses, %, at most	10	10
5	Ash, %, at most	10	10
6	Calcium, %	2,5 do 2,8	2,9 do 3,5
7	Phosphorus, %	1,5 do 2,0	1,8 do 2,4
8	Natrium, %	0,6 do 0,8	0,6 do 0,8
9	Vitamine A, IJ/kg, at least	20 000	30 000
10	Vitamine D_3, IJ/kg, at least	3 000	4 500
11	Vitamine E, mg/kg, at least	45	40
12	Cobalt, mg/kg, at least	0,3	0,3
13	Copper, mg/kg, at least	15	15
14	Zinc, mg/kg, at least	150	90
15	Iron, mg/kg, at least	150	60
16	Manganese, mg/kg, at least	90	90
17	Iodine, mg/kg, at least	1,8	1,8
18	Selenium, mg/kg, at least	0,3	0,3

1) The non-protein azote (NPN) may not be added in the additional blending for lambs in growth and fattening.

Article 61.

The blendings for nourishment of horses ar placed into circulation as complete blendings for nourishment of horses, as it follows:

1) the complete blending for suckling stallions I;

2) the complete blending for non-suckling stallions II;

3) the complete blending for colt from 12 to 18 months I;

4) the complete blending for colt from 18 to 24 months II;

5) the complete blending for pregnant mares;

6) the complete blending for lactic mares;

7) the complete blending for running horses;

8) the complete blending for breeeding stud-horses.

The non-protein azote (NPN) may not be added in complete blendings for nourishment of horses.

Article 62.

The complete blendings for nourishment of horses have to fulfil the following Conditions referred to in charts 24 i 25.

Chart 24

The ordinal number	The chemical content	The complete blending for suckling stallions I	The complete blending for non-suckling stallions II	The complete blending for colt from 12 to 18 months I	The complete blending for colt from 18 to 24 months II
I	2	3	4	5	6
1	The milk without fat in powder % at least	35	Not to be determined	Not to be determined	Not to be determined
2	Raw proteins, %, at least	19,0	17,0	13,0	11,0
3	Lysine, %, at least	0,7	0,6	0,5	0,4
4	Fat, %, at least	8,0	Not to be determined	Not to be determined	Not to be determined
5	Humidity, %, at most	6	13	13	13,5
6	Celulloses, %, at most	3,0	8,0	8,0	8,0
7	Ash, %, at most	8,0	8,0	8,0	8,0
8	Calcium, %	0,6-0,8	0,5-0,7	0,5-0,7	0,5-0,7
9	Phosphorus, %	0,3-0,5	0,3-0,5	0,3-0,5	0,3-0,5
10	Natrium, %, at least	0,2	0,3	0,3	0,3

11	Magnesium, % at least	0,06	0,07	0,07	0,07
12	Vitamine A, IJ/kg, at least	7 650	11 500	9 500	7 650
13	Vitamine D_3, IJ/kg, at least	1 430	1 150	960	960
14	Vitamine E, mg/kg, at least	19	17,0	14,0	14,0
15	Vitamine B_{12}, IJ/kg, at least	0,01	0,04	0,04	0,04
16	Cobalt, mg/kg, at least	0,1	0,1	0,1	0,1
17	Copper, mg/kg, at least	19,0	14,0	14,0	14,0
18	Zinc, mg/kg, at least	43	43	38,0	38,0
19	Iron, mg/kg, at least	62,0	67,0	48,0	48,0
20	Manganese, mg/kg, at least	27,0	29,0	38,0	38,0
21	Iodine, mg/kg, at least	0,5	0,5	0,1	0,1
22	Selenium, mg/kg, at least	0,1	0,1	0,1	0,1
23	The digestible energy, computing, MJ/kg, at least	11,9	11,5	9,6	8,1

Chart 25

The ordinal number	The chemical content	The complete blending for pregnant mares	The complete blending for lactic mares	The complete blending for running horses	The complete blending for breeeding stud-horses
1	The milk without fat in powder, % at least	Not to be determined	Not to be determined	Not to be determined	Not to be determined
2	Raw proteins, %, at least	15,0	13,0	11,0	11,0
3	Lysine, %, at least	0,7	0,7	0,5	0,7
4	Fat, %, at least	Not to be determined	Not to be determined	Not to be determined	Not to be determined
5	Humidity, %, at most	13,5	13,5	13,5	13,5
6	Celuloza, %, at most	8,0	8,0	8,0	8,0
7	Ash, %, at most	8,0	8,0	8,0	8,0
8	Calcium, %	0,8-0,10	0,8-0,10	0,6-0,8	0,6-0,8
9	Phosphorus, %	0,6-0,8	0,6-0,8	0,4-0,6	0,4-0,6
10	Natrium, %, at most	0,2	0,2	0,3	0,2
11	Magnesium, % at least	0,06	0,06	0,05	0,05

12	Vitamine A, IJ /kg, at least	12900	12900	12900	12900
13	Vitamine D_3, IJ/kg, at least	1450	1150	1150	1150
14	Vitamine E, mg/kg, at least	53,0	48,0	48,0	53,0
15	Vitamine B_{12}, IJ/kg, at least	0,04	0,04	0,04	0,04
16	Cobalt, mg/kg, at least	0,1	0,1	0,1	0,1
17	Copper, mg/kg, at least	10,0	10,0	10,0	10,0
18	Zinc, mg/kg, at least	38,0	38,0	38,0	38,0
19	Iron, mg/kg, at least	48,0	48,0	62,0	48,0
20	Manganese, mg/kg, at least	38,0	38,0	38,0	38,0
21	Iodine, mg/kg, at least	0,1	0,1	0,1	0,1
22	Selenium, mg/kg, at least	0,1	0,1	0,1	0,1
23	The digestible energy, computing, MJ/kg, at least	8,6	8,6	11,5	7,6

Article 63.

The blendings for nourishment of poultry are placed into circulation as blendings for nourishment of chicken and as blendings for nourishment of turkey.

The non-protein azote (NPN) may not be added in blendings for nourishment of poultry.

Article 64.

The blendings for nourishment of chicken are placed into circulation as complete blendings for nourishment of chicken and as additional blendings for nourishment of chicken.

The complete fodder blendings for nourishment of chicken are as follows:

1) the complete blending for fattening of pullet I;

2) the complete blending for fattening of pullet II;

3) the complete blending for fattening of pullet III;

4) the complete blending for breeeding pullet I;

5) the complete blending for breeeding pullet II;

6) the complete blending for breeeding pullet III;

7) the complete blending for bringer of eggs for consumption I;

8) the complete blending for bringer of eggs for consumption II;

9) the complete blending for reproductive bringers I;

10) the complete blending for reproductive bringers II.

The additional blendings for nourishment of chicken are as follows:

1) the additional blending for fattening of pullet;

2) the additional blending for bringer of eggs for consumption.

Article 65.

The complete blendings for nourishment of chicken have to fulfil the following conditions referred to in charts 26 and 27.

Chart 26

The ordinal number	The chemical content	The complete blending for fattening of pullet I	The complete blending for fattening of pullet II	The complete blending for fattening of pullet III	The complete blending for breeeding pullet I	The complete blending for breeeding pullet II
1	Proteins, %, at least	22	19	17	19	17
2	Fats, %, at least	5	5	Not to be determined	Not to be determined	Not to be determined
3	Humidity, % at most	13,5	13,5	13,5	13,5	13,5
4	Celulloses, %, at most	4	4	5	5	6
5	Ash, %, at most	8	8	8	8	8
6	Calcium, %	0,9 to 1,1	0,8 to 1,0	0,7 to 0,9	0,9 to 1,1	0,9 to 1,1
7	Phosphorus, %	0,65 to 0,75	0,6 to 0,7	0,5 to 0,6	0,6 to 0,7	0,6 to 0,7
8	Phosphorus usable, % at least	0,40	0,35	0,30	0,35	0,35
9	Natrium, %	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2
10	Manganese, mg/kg, at least	80	80	Not to be determined	80	80
11	Zinc, mg/kg, at least	50	50	Not to be determined	50	50
12	Iron, mg/kg, at least	40	40	Not to be determined	30	30
13	Copper, mg/kg, at least	8	8	Not to be determined	8	8

14	Iodine, mg/kg, at least	0,8	0,8	Not to be determined	0,5	0,5
15	Selenium, mg/kg, at least	0,15	0,15	Not to be determined	0,15	0,15
16	Vitamine A, IJ/kg, at least	12000	10000	Not to be determined	10000	10000
17	Vitamine D, IJ/kg, at least	2000	1800	Not to be determined	1500	1500
18	Vitamine E, mg/kg, at least	30	25	Not to be determined	10	10
19	Vitamine B_2, mg/kg, at least	6	6	Not to be determined	4	4
20	The metabolism energy, computing MJ/kg, at least	13,0	13,0	13,0	11,5	11,5
21	Lysine, %, at least	1,15	0,90	Not to be determined	1,0	0,75
22	Methionine+cystine, %, at least	0,85	0,70	Not to be determined	0,75	0,60

Chart 27

The ordinal number	The chemical content	The complete blending for breeeding pullet III	The complete blending for bringer of eggs for consumption I	The complete blending for bringer of eggs for consumption II	The complete blending for reproductive bringers I	The complete blending for reproductive bringers II
1	2	3	4	5	6	7
1	Proteins, %, at least	15	16,5	15	16,5	15
2	Humidity, %, at most	13,5	13,5	13,5	13,5	13,5
3	Celulloses, %, at most	7	8	8	8	8
4	Ash, %, at most	8	13	13	13	13
5	Calcium, %	1,0 to 1,2	3,2 to 3,8	3,2 to 3,8	3,0 to 3,8	2,8 to 3,8
6	Phosphorus, %	0,6 to 0,7	0,65 to 0,75	0,6 to 0,7	0,6 to 0,7	0,6 to 0,7
7	Phosphorus usable, % at least	0,35	0,35	0,30	0,35	0,35
8	Natrium, %	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2

9	Manganese, mg/kg, at least	80	80	80	80	80
10	Zinc, mg/kg, at least	50	60	60	60	60
11	Iron, mg/kg, at least	30	40	40	40	40
12	Copper, mg/kg, at least	8	6	6	6	6
13	Iodine, mg/kg, at least	0,5	0,5	0,5	0,5	0,5
14	Selenium, mg/kg, at least	0,15	0,15	0,15	0,15	0,15
15	Vitamine A, IJ/kg, at least	10000	10000	10000	15000	15000
16	Vitamine D_3, IJ/kg, at least	1500	1500	1800	2000	2000
17	Vitamine E, mg/kg, at least	10	15	10	20	20
18	Vitamine B_2, mg/kg, at least	2	3	2	4	4
19	The metabolism energy, computing, MJ/kg, at least	11,5	11,5	11,5	11,5	11,0
20	Linolyn acid, %, at least	Not to be determined	1,0	0,9	0,9	0,75
21	Lysine, %, at least	0,6	0,75	0,7	0,75	0,65
22	Methionine+cystine, %, at least	0,4	0,65	0,6	0,65	0,6

Article 66.

The additional blendings for nourishment of chicken have to fufil the following conditions referred to in chart 28.

Chart 28

The ordinal number	The chemical content	The additional blending for fattening of pullet	The additional blending for bringer of eggs for consumption
1	Proteins, %, at least	40	30
2	Humidity, %, at least	13	13
3	Celulloses, %, at most	8	10
4	Ash, %, at most	16	30
5	Calcium, %	2,8 to 3,0	8 to 10
6	Phosphorus, %	1,7 to 1,9	1,8 to 2,0

7	Phosphorus usable, %, at least	1,0	1,0
8	Natrium, %	0,45 to 0,7	0,45 to 0,6
9	Manganese, mg/kg, at least	240	240
10	Zinc, mg/kg, at least	150	180
11	Iron, mg/kg, at least	120	120
12	Copper, mg/kg, at least	24	24
13	Iodine, mg/kg, at least	2,4	1,8
14	Selenium, mg/kg, at least	0,4	0,4
15	Vitamine A, IJ/kg, at least	35000	25000
16	Vitamine D_3, IJ/kg, at least	6000	3500
17	Vitamine E, mg/kg, at least	90	40
18	Vitamine B_2, mg/kg, at least	20	10
19	Linolyn acid, %, at least	Not to be determined	2,5
20	Lysine, %, at least	2,5	1,6
21	Methionine+cystine, %, at least	1,5	1,1

Article 67.

The blendings for nourishment of turkey are placed into circulation as complete blendings for nourishment of turkey, as it follows:

1) the complete blending for turkey in growth and fattening I;

2) the complete blending for turkey in growth and fattening II;

3) the complete blending for turkey in growth and fattening III;

4) the complete blending for turkey in fattening IV;

5) the complete blending for breeeding turkey;

6) the complete blending for bringer turkey.

Article 68.

The complete blendings for nourishment of turkey have to fulfil the following conditions referred to in charts 29 and 30.

Chart 29

The ordinal number	The chemical content	The complete blending for turkey in growth and fattening I	The complete blending for turkey in growth and fattening II	The complete blending for turkey in growth and fattening III

1	2	3	4	5
1	Proteins, %, at least	28	24	20
2	Celulloses, %, at most	4,0	5,0	6,0
3	Ash, %, at most	9,0	9,0	9,0
4	Humidity, %, at most	13	13	13
5	Calcium, %	1,2 to 1,4	1,1 to 1,3	1,0 to 1,2
6	Phosphorus, %	0,9 to 1,0	0,8 to 0,9	0,7 to 0,8
7	Phosphorus usable, % at least	0,7	0,62	0,55
8	Natrium, %	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2
9	Manganese, mg/kg, at least	80	80	80
10	Zinc, mg/kg, at least	50	50	50
11	Iron, mg/kg, at least	40	40	40
12	Copper, mg/kg, at least	8	8	8
13	Iodine, mg/kg, at least	0,8	0,8	0,8
14	Selenium, mg/kg, at least	0,15	0,15	0,15
15	Vitamine A, IJ/kg, at least	15000	12000	12000
16	Vitamine D3, IJ/kg, at least	3000	2500	2500
17	Vitamine E, mg/kg, at least	25	25	25
18	Vitamine B_2, mg/kg, at least	8	8	6
19	Vitamine B_{12}, mg/kg, at least	0,02	0,02	0,01
20	Biotin, mg/kg, at least	0,2	0,2	0,1
21	The metabolism energy, computing, MJ/kg, at least	11,8	12,1	12,5
22	Linolyn acid, %, at least	1,0	1,0	1,0
23	Lysine, %, at least	1,7	1,4	1,1
24	Methionine+cystine, %, at least	1,0	0,9	0,85

Chart 30

The ordinal	The chemical content	The complete blending for turkey in	The complete blending for breeeding turkey	The complete blending for bringer turkey

numb er		fattening IV		
1	Proteins, % at least	16	15	16
2	Celulloses, %, at most	6,0	6,0	6,0
3	Ash, %, at most	9,0	9,0	12,0
4	Humidity, %, at most	13,5	13,5	13,5
5	Calcium, %	0,9 to 1,1	0,75 to 0,95	2,4 to 2,7
6	Phosphorus, %	0,55 to 0,65	0,6 to 0,7	0,6 to 0,7
7	Phosphorus usable, % at least	0,4	0,4	0,45
8	Natrium, %	0,15 to 0,2	0,15 to 0,2	0,15 to 0,2
9	Manganese, mg/kg, at least	50	50	60
10	Zinc, mg/kg, at least	50	50	50
11	Iron, mg/kg, at least	40	40	40
12	Copper, mg/kg, at least	8	8	8
13	Iodine, mg/kg, at least	0,8	0,8	0,8
14	Selenium, mg/kg, at least	0,15	0,15	0,15
15	Vitamine A, IJ/kg, at least	10000	8000	12000
16	Vitamine D_3, IJ/kg, at least	2000	1500	2500
17	Vitamine E, mg/kg, at least	20	20	20
18	Vitamine B2, mg/kg, at least	6	6	6
19	Vitamine B_{12}, mg/kg, at least	0,01	0,01	0,02
20	Biotin, mg/kg, at least	0,1	0,1	0,2
21	The metabolism energy, computing, MJ/kg, at least	12,8	11,7	11,7
22	Linolyn acid, %, at least	1,0	1,0	1,0
23	Lysine, %, at least	0,6	0,7	0,8
24	Methionine+cystine, %, at least	0,6	0,55	0,6

Article 69.

The blendings for nourishment of drakes and geese are produced in accordance with the producer specification.

Article 70.

The blendings for nourishment of goat are produced in accordance with the producer specification.

Article 71.

The blendings for nourishment of rabbits are placed into circulation as complete blendings, as it follows:

1) the complete blending for young rabbits I;

2) the complete blending for rabbits in growth and fattening II;

3) the complete blending for pregnant female rabbits;

4) the complete blending for lactic female rabbits.

The non-protein azote (NPN) may not be added in complete blendings for nourishment of rabbits.

Article 72.

The complete blending for nourishment of rabbits have to fulfil the following conditions referred to in chart 31.

Chart 31

The ordinal number	The chemical content	The complete blending for young rabbits I	The complete blending for rabbits in growth and fattening II	The complete blending for pregnant female rabbits	The complete blending for lactic female rabbits
1	Proteins, %, at least	16	15	17	18
2	Humidity, %, at most	13,5	13,5	13,5	13,5
3	Celulloses, %	10 to 12	13 to 15	12 to 14	10 to 12
4	Ash, %, at most	8	8	8	8
5	Calcium, %	0,8 to 1,0	0,9 to 1,1	0,8 to 1,0	0,9 to 1,1
6	Phosphorus, %	0,7 to 0,8	0,65 to 0,80	0,5 to 0,70	0,7 to 0,85
7	Natrium, %	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3
8	Vitamine, A, IJ/kg, at least	10000	8000	10000	10000
9	Vitamine D, IJ/kg, at least	1500	1200	1500	1500
10	Vitamine E, mg/kg, at least	30	25	50	50
11	Vitamine K, mg/kg, at least	1	1	1	1
12	Cobalt, mg/kg, at least	0,1	0,1	0,1	0,1

13	Copper, mg/kg, at least	5	5	5	5
14	Zinc, mg/kg, at least	40	60	60	60
15	Iron, mg/kg, at least	40	60	60	60
16	Manganese mg/kg, at least	20	20	20	20
17	Iodine, mg/kg, at least	0,6	0,6	0,6	0,6
18	Lysine, %, at least	0,7	0,6	0,7	0,8
19	Methionine+cystine, %, at least	0,6	0,5	0,6	0,65
20	TDN, computing, %, at least	60	65	60	65

Article 73.

The complete blendings for nourishment of fish are placed into circulation as it follows:

1) the complete blending for progeny of carp;

2) the complete blending for fattening of carp;

3) the complete blending for progeny of trout;

4) the complete blending for fattening of trout.

The non-protein azote (NPN) may not be added in complete blendings for nourishment of fish.

Article 74.

The complete blendings for nourishment of fish have to fulfil the following conditions referred to in chart 32.

Chart 32

The ordinal number	The chemical content	The complete blending for progeny of carp	The complete blending for fattening of carp	The complete blending for progeny of trout	The complete blending for fattening of trout
1	2	3	4	5	6
1	Proteins, %, at least	35	20	50	40
2	Humidity, %, at most	12	12	10	10
3	Celulloses, %, at most	6	10	3	4
4	Ash, % at most	10	8	12	12
5	Calcium, %	0,9 to 1,8	0,9 to 1,1	1,6 to 3,0	1,6 to 3,0

6	Phosphorus, %	0,8 to 1,5	0,8 to 1,0	1,4 to 1,8	1,4 to 1,8
7	Natrium, %	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3	0,2 to 0,3
8	Vitamine A, IJ/kg, at least	6000	4000	12000	10000
9	Vitamine D, IJ/kg, at least	1000	600	1200	800
10	Vitamine E, mg/kg, at least	40	30	70	70
11	Vitamine B_1, mg/kg, at least	5	5	12	12
12	Vitamine B_2, mg/kg, at least	10	10	20	20
13	Vitamine B_{12}, mg/kg, at least	0,02	0,02	0,03	0,03
14	Vitamine C, mg/kg, at least	150	150	500	500
15	Vitamine K, mg/kg, at least	4	4	5	5
16	Biotin, mg/kg, at least	1	1	1	1
17	Iron, mg/kg, at least	30	30	40	40
18	Copper, mg/kg, at least	5	5	5	5
19	Manganese, mg/kg, at least	30	30	30	30
20	Cobalt, mg/kg, at least	1	1	1	1
21	Zinc, mg/kg, at least	30	30	40	40
22	Iodine, mg/kg, at least	1	1	1	1
23	Selenium, mg/kg, at least	0,1	0,1	0,1	0,1
24	Lysine, %, at least	1,6	1,1	2,0	1,8
25	Methionine+cystine, %, at least	1,2	0,8	1,8	1,6

Article 75.

The blendings for nourishment of trouts have to be in form of pellets.

The blendings for other categories of carp and trouts and for other types and categories of fish are produced in accordance with the producer specification.

Article 76.

The blendings used for nourishment of dogs, cats, decorative birds, game and furry animals are produced in accordance with the producer specification.

Article 77.

The content of humidity in blendings which are produced in accordance with the producer specification has to be compatible with the content of humidity prescribed by this Rulebook, but it may not exceed:

1) in mineral blendings 7%;

2) in substitute for milk 8%;

3) in other blendings 13,5%;

4) in molasses blendings 15%.

THE ADDITIVES FOR ANIMAL FOOD

Article 78.

In terms of this Rulebook, the additives for animal food, are substances which are added to animal food with the purpose of improvement of its biological nutritive value, better usage and prolongation of duration, more simple technological procedure in the preparation of blendings and coloring of animal meat and poultry eggs.

Article 79.

The additives for animal food are as follows:

1) vitamines and provitamines;

2) microelements and minerals;

3) non-protein azote compositions;

4) amino acids;

5) other allowed additives.

The additives referred to in paragraph 1 of this Article are added to animal food in quantities prescribed by this Rulebook.

Article 80.

In terms of this Rulebook, the vitamines and provitamines are also substances with similar effect such as: calcium-pantotenat, holinchloride, inositol, folna acid, etc.

The parallel usage of vitamines D_2 i D_3 in the animal food is not allowed.

Article 81.

In terms of this Rulebook, the microelements and minerals, are compositions of iron, iodine, cobalt, copper, manganese, molybdenum, selenium, zinc and other microelemenats.

Article 82.

In terms of this Rulebook, the compositions of iron are as follows:

1) Iron (Fe);

2) iron - (II) - carbonate $FeCO_3$;

3) iron - (II) - hlorid, tetrahidrat $FeCl \times 4H_2O$;

4) iron - (III) - chloride, heksahydrate $FeCl_3 \times 6H_2O$;

5) iron - (II) - citrat, heksahydrate $Fe_3(C_6H_5O_7)_2 \times 6H_2O$;

6) iron - (II) - fumarat $FeC_4H_2O_4$;

7) iron - (II) - lactat, threehydrate $Fe(C_3H_5O_3)_2 \times 3H_2O$;

8) iron - (III) - oxyde FeO_3;

9) iron - (II) - sulphide, heptahydrate $FeSO_4 \times 7H_2O$;

10) iron - (II) - sulphide, monohydrate $FeSO_4 \times H_2O$.

Article 83.

In terms of this Rulebook, the compositions of iodine are as follows:

1) Iodine (J);

2) calciumiodineat, heksahydrate $Ca(JO_3)_2 \times 6H_2O$;

3) calciumiodineat, anhydrated $Ca(JO_3)_2$;

4) potassiumiodineid KJ;

5) natriumiodineid NaJ.

Article 84.

In terms of this Rulebook, the compositions of cobalt are as follows:

1) Cobalt (Co);

2) cobalt - (II) - acetat, tetrahydrate $Co(CH_3COO)_2 \times 4H_2O$;

3) bazni cobalt - (II) - carbonate, monohydrate $2CoCO_3 \times 3Co(OH)_2 \times H_2O$;

4) cobalt - (II) - hlorid, heksahydrate $CoCl \times 6H_2O$;

5) cobalt - (II) - nitrate, heksahydrate $Co(NO_3)_2 \times 6H_2O$

6) cobalt - (II) - sulphide, monohydrate $CoSO_4 \times H_2O$;

7) cobalt - (II) - sulphide, heptahydrate $CoSO_4 \times 7H_2O$.

Article 85.

In terms of this Rulebook, the compositions of copper are as follows:

1) Copper (Cu);

2) copper - (II) - acetat, monohydrate $Cu(CH_3COO)_2 \times H_2O$;

3) bazni copper - (II) - carbonate, monohydrate $CuCO_3 \times Cu(OH)_2 \times H_2O$;

4) copper - (II) - hlorid, dihydrate $CuCl_2 \times 2H_2O$;

5) copper - (II) - metionat $Cu(C_5H_{10}NO_2S)_2$;

6) copper - (II) - oxyde CuO;

7) copper - (II) - sulphide, pentahydrate $CuSO_4 \times 5H_2O$;

8) copper - (II) - sulphide, monohydrate $CuSO_4 \times H_2O$.

Article 86.

In terms of this Rulebook, the compositions of manganese are as follows:

1) Manganese (Mn);

2) manganese - (II) - carbonate $MnCO_3$;

3) manganese - (II) - chloride, tetrahydrate $MnCl_2 \times 4H_2O$;

4) manganese - (II) - oxyde MnO;

5) manganese - (III) - oxyde Mn_2O_3;

6) secondary manganese - (II) - phosphate, threehydrate $MnHPO_4 \times 3H_2O$;

7) manganese - (II) - sulphide, tetrahydrate $MnSO_4 \times 4H_2O$;

8) manganese - (II) - sulphide, monohydrate $MnSO_4 \times H_2O$.

Article 87.

In terms of this Rulebook, the compositions of zinc are as follows:

1) Zinc (Zn);

2) zincacetat, dihydrate $Zn(CH_3 \times COO)_2 \times 2H_2O$;

3) zinc carbonate $ZnCO_3$;

4) zinc chloride, monohydrate $ZnCl_2 \times H_2O$;

5) zinclaktat, threehydrate $Zn(C_3H_5O_3)_2 \times 3H_2O$;

6) zincoxyde ZnO;

7) zincsulphide, heptahydrate $ZnSO_4 \times 7H_2O$;

8) zincsulphide, monohydrate $ZnSO_4 \times H_2O$.

Article 88.

In terms of this Rulebook, the compositions of molybdenum are as follows:

1) Molybdenum (Mo);

2) Ammoniummolibdate $(NH_4)_6 Mo_7O_{24} \times 4H_2O$

3) Natriummolibdate $Na_2MoO_4 \times 2H_2O$.

Article 89.

In terms of this Rulebook, the compositions of selenium are as follows:

1) Selenium (Se);

2) natriumseleniumat Na_2SeO_4;

3) natriumseleniumit Na_2SeO_3.

Article 90.

The usage of organically conjuncted microelemenats in additives for animal food is allowed.

Article 91.

In terms of this Rulebook, the non-protein azote compositions are as follows:

1) urea (carbamid); white color, without aroma, the content of humidity at most 0,5% and granulated in a manner that at least 90% of kernels pass through the sieve with square openings with the size of 1 mm, and at most 20% of kernels pass through the sieve with square openings with the size of 0,5 m. The content of azote in urea have to be at least 42% calculated on dry substance, i.e. the

protein equivalent has to be 42 x 6,25; the usage of urea which is not technologically processed and homogenized is prohibited;

2) ammonium-sulphide $(NH_4)_2SO_4$, is powder of white color, with salt taste and it contains at least 21% of azote. It has to be minced to the extent that 98% of particles of ammonium-sulphide pass through the sieve with square openings with the size of 1 mm, and at least 92% of particles pass through the sieve with square openings with the size of 0,5 m;

3) ammonium-bicarbonate (NH_4HCO_3), is powder of white color, with salt taste and it contains at least 17,5% of azote. It has to be minced to the extent that 98% of particles of ammonium-bicarbonate pass through the sieve with square openings with the size of 1 mm, and at least 92% of particles pass through the sieve with square openings with the size of 0,5 m;

4) ammonium-acetate (CH_3COONH_4), is powder of white color and it contains at least 18,0% of azote azota. It has to be minced to the extent that 98% of particles of ammonium- acetate pass through the sieve with square openings with the size of 1 mm, and at least 92% of particles pass through the sieve with square openings with the size of 0,5 m;

5) biuret ($C_2H_5O_2N_3$), in the form of white powder (kernel);

6) liquid waterless ammonia;

7) urea-phosphate, which contains 17% of azote and 19% of phosphorus.

Article 92.

The non-protein azote compositions have to be used with the bearer, with the previous homogenisation.

Article 93.

In terms of this Rulebook, the amino acids are amino acids in clean form, as well and hydroxyanaloges of their amino acids and their salts.

Article 94.

In terms of this Rulebook other allowed additives are antioxidances, preserving agents, aromas, amplifiers of aroma, emulgators, stabilisators, condensators, conjuction substances, substances for jelly, colors, substances for prevention of condensation and achivement of slipperiness, acids, bases, salts, enzymes and sweetening substances.

Article 95.

The additives referred to in charts 33 to 38 may be used in the production of animal food.

Chart 33

ANTIOXSIDANSI

E number	The allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of additive, maximum	The note in limitation in the application
1	2	3	4	5	6	7
E 300	L ascorbin acid	$C_6H_8O_6$	all			
E 320	Butylhydroxyanisol (BHA)	$C_{11}H_{16}O_2$	all		150*	
E 321	Butylhydroxytoluol (BHT)	$C_{15}H_{24}O$	all		150*	
E 324	Ethoxyquin	$C_{14}H_{19}ON$	all		150*	
E 302	Calcium-L-ascorbat	$C_{12}H_{14}O_{12}Ca$ x $2H_2O$	all			
E 303	5,6-diacethyl-L-Ascorbin acid	$C_{10}H_{12}O_8$	all			
E 312	Dodecylgallat	$C_{19}H_{30}O_5$	all		100**	
E 301	Natrium-L-ascorbat	$C_6H_7O_6Na$	all			
E 311	Octylgallat	$C_{15}H_{22}O_5$	all		100**	
E 310	Propylgallat	$C_{10}H_{12}O_5$	all		100**	
E 304	6-Palmitoyl-L-ascorbin acid	$C_{22}H_{38}O_7$	all			
E 306	Strong tocopherol natural extract		all			
E 307	Synthetic Alpha-tocopherol	$C_{29}H_{50}O_2$	all			
E 309	Sintetički Delta Tocopherol	$C_{27}H_{46}O_2$	all			
E 308	Synthetic Gamma Tocopherol	$C_{28}H_{48}O_2$	all			

* Alone or together.
** Alone or with other galates.

Chart 34

AROMA AND AMPLIFIERS OF APPETITE

All natural aromas and their compatible appropriate synthetic substances

E number	Allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of additive, maximum	The note in limitation in the application
E 954 I	Saccharin	$C_7H_5NO_3S$	piggies	4 months	150	
E 954 II	Saccharincalcium	$C_7H_3NCaO_3S$	piggies	4 months	150	
E 954 III	Saccharinnatrium	$C_7H_4NNaO_3S$	piggies	4 months	150	
E 959	Neohesperidin-Dihydrochalcon	$C_{28}H_{36}O_{15}$	piggies, dog, calves, sheep	4 months	35 35 30 30	

Chart 35

THE CONJUNCTION SUBSTANCES

The substances against cloging and fastening substances

E number	Allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of additive, maximum	The note in limitation in the application
E 558	Bentonit		all		20000	
E 563	Magnesium-silicat without-azbestos		all		20000	
E 598	Calciumaluminat, synthetic		poultry rabbits pigs milker cows fattening bullocks calves sheep goat		20000 20000 20000 8000 8000 8000 8000 8000	

E 552	Kalciumskilikat synthetic		all			
E 470	Kalciumstearat	$C_{36}H_{70}O_4Ca$	all			
E 516	Kalciumsulphide-Dihydrate	$CaSO_4 \times 2H_2O$	all		30000	
E 330	Citric acid	$C_6H_8O_7$	all			
E 470	Kaliumstearat	$C_{18}H_{35}O_2K$	all			
E 565	Ligninsulfonat		all			
E 554	Natriumaluminiumsilikat, synthetic		all			
E 470	Natriumstearat	$C_{18}H_{35}O_2Na$	all			
E 599	Perlit	Natural natrium-aluminium silikat without-azbestos	all			
E 562	Meerschaum		all		20000	
E 551 b	Siliciumdioxyde, colloidal		all			
E 559	Aluminiumsilikat Kaolinite clay without-azbestos		all			
E 561	Fermikulit without-azbestos	Natural magnesium - aluminium-iron silikat	all			
E 551	Silica-dioxyde amorphous		all			

Chart 36

THE EMULGATORS, STABILISATORS AND CONDENSATORS

E number	Allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of	The note in limitation in

					additive, maximum	the application
1	2	3	4	5	6	7
E 406	Agar-Agar		all			
E 400	Algin acid		all			
E 403	Amoniumalginat		all with the exception of decorative fish			
E 404	Kalciumalginat		all			
E 482	Kalciumstearoilaktil 2-lactate		all			
E 466	Karboksilmethylcelluloses		all			
E 407	Karagen		all			
E 460 A	Celluloses powder		all			
E 486	Dextran		all			
E 462	Ethylcelluloses		all			
E 422	Glycerine		all			
E 484	Glycerine - Poliethylen-Glikolricinoleat		all			
E 412	Guarrubber		all			
E 414	Rubberarabika		all			
E 464	Hydroxipropilmethyl -celulloses		all			
E 463	Hydroxipropil celluloses		all			
E 410	Karubarubber		all			
E 402	Kaliumalginat		all			
E 322	Lecithin		all			
E 421	Manit		all			
E 465	Methylethylcellulose s		all			
E 461	Methylcelluloses		all			
E 460	Microcrystal celluloses		all			
E 472	Mono and diglyceride estri of fat acids a) citric acid b) vinegar acid v) lactic acid g) monoacethyl and diacethyl tartaric acid		all			

d) tartaric acid

E 477	Monoestar 1,2 Propandiol		all		
E471	Mono and diglycerides of fat acids		all		
E 401	Natriumalginat		all		
E 481	Natrium stearoilaktil-2-lactate		all		
E 440	Pectin		all		
E 450 B	Pentanatriumtriphosphate		Dog, cat	5000*	
E 496	Poliethylenglikol 6000		all	300	
E 475	Poliglycerinestri of fat acids		all		
E 432	Polioksiethylen (20) Sorbitan-Monoluarat		all	5000*	Only in substitutes for milk
E 433	Polioksiethylen (20) Sorbitan-Monopalmitat		all	5000*	Only in substitutes for milk
E 434	Polioksiethylen (20) Sorbitan-Monopalmitat		all	5000*	Only in substitutes for milk
E 435	Polioksiethylen (20) Sorbitan-Monostearat		all	5000*	Only in substitutes for milk
E 436	Polioksiethylen (20) Sorbitan-Tristearat		all	5000*	Only in substitutes for milk
E 405	1,2-Propandiol-Alginat		all		
E 420	Sorbitol		all		
E 493	Sorbitan-Monolaurat		all		
E 494	Sorbitan-Monooleat		all		
E 495	Sorbitan-Monopalmitat		all		
E 491	Sorbitan-Monostearat		all		
E 492	Sorbitan-Tristearat		all		
E 483	Stearoil tartarat		all		
E 413	Tragant		all		

E 415	Ksantanguma	all	
E 473	Estri of saccharine (Estri of fat acids and sacharose)	all	
E 474	Saccharosoglyceride	all	

* Alone or with other polisorb.

THE COLORING SUBSTANCES, INCLUDING PIGMENTS

Karotinoidi and xanthophyll

Chart 37

E number	Allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of additive, maximum	The note in limitation in the application
E 161 j	Astaxantine	$C_{40}H_{52}O_4$	trouts		100	
E 160 e	Beta-Apo-8-karotinal	$C_{30}H_{40}O$	poultry		80*	
E 160	Beta- Apo-8-karotin acid-ethylester	$C_{32}H_{44}O_2$	poultry		80*	
E 161 g	Kantaxantine	$C_{40}H_{56}O_2$	poultry, dogs, cats, salmon and trouts		80*	
E 160 c	Kapsantine	$C_{40}H_{56}O_3$	poultry		80*	
E 161 i	Citranaxantine	$C_{33}H_{44}O$			80*	
E 161 c	Kriptoxantine	S40N5bO			80*	
E 161 b	Lutein	$C_{40}H_{56}O_2$			80*	
E 161 x	Zeaxantine	$C_{40}H_{56}O_2$	All, with the exception of gods and cats			
E 160 a	Beta karotin	$C_{40}H_{56}$	canary			

* Single or together with other karotines and xanthophyll.

THE PRESERVING AGENTS

Tabela 38

E number	Allowed additives	The chemical sign	The type of animal	Age	The allowed quantity of additive, maximum	The note in limitation in the application
1	2	3	4	5	6	7
E 236	Formic acid	CH_2O_2	all			
E 295	Ammonium formiat	CH_5O_2N	all			
E 284	Ammoniumpropionat	$C_3H_9O_2N$	all			
E 296	DL-apple acid	$C_4H_6O_5$	all			
E 263	Kalciumacetate	$C_4H_6O_4Ca$	all			
E 333	Calciumcitrate		all			
E 238	Calciumformiat	$C_2H_2O_4Ca$	all			
E 327	Kalciumlactate	$C_6H_{10}O_6Ca$	all			
E 282	Kalciumpropionate	$C_6H_{10}O_4Ca$	all			
E 203	Kalciumsorbate	$C_{12}H_{14}O_4Ca$	all			
E 330	Citric acid	$C_6H_8O_7$	all			
E 260	Vinegar acid	$C_2H_4O_2$	all			
E 240	Formaldehyde	CH_2O	All pigs	6 months		
E 297	Fumaric acid	$C_4H_4O_4$	all			Only for silage
E 261	Potassiumacetate	$C_2H_3O_2K$	all			
E 332	Potassiumcitrate		all			
E 326	Potassiumlactate	$C_3H_5O_3K$	all			
E 283	Potassiumpropionate	$C_3H_5O_2K$	all			
E 202	Potassiumsorbate	$C_6H_7O_2K$	all			
E 336	L-Potassiumtartarate		all			

E 270	Lactic acid	$C_3H_6O_3$	all		
E 331	Natriumcitrate		all		
E 262	Natriumdiacetate	$C_4H_7O_4Na$	all		
E 237	Natrium-formiat	CHO_2Na	all		
E 222	Natriumbisulphit	$NaHSO_3$	Dog	500	
E 223	Natriummetabisulpfit	$Na_2S_2O_5$	Dog	500	
E 337	Natrium-potassiumtartarate	$C_4H_4O_6KNa \times 4H_2O$	all		
E 325	Natriumlactate	$C_3H_5O_3Na$	all		
E 250	Natriumnitrit	$NaHO_2$	Dog, cat	100	
E 281	Natriumpropionate	$C_3H_5O_2Na$	all		
E 201	Natriumsorbate	$C_6H_7O_2Na$	all		
E 335	L-natriumtartarate		all		
E 338	Ortophosphorus acid	H_3PO_4	all		Only for silage
E 490	1,2-Propandiol	$C_3H_8O_2$	dog	53000	
E 280	Propion acid	$C_3H_6O_2$	all		Only for silage
E 507	Hydrochloric acid	HCl	all		Only for silage
E 513	Sulphate acid	H_2SO_4	all		Only for silage
E 200	Sorbin acid	$C_6H_8O_2$	all		Only for silage
E 334	L-tartaric acid	$C_4H_6O_6$	all		Only for silage

Article 96.

With the purpose of differentiation of animal food from foodstuff of same origin, the animal food is denatured.

For denaturation of animal food, the following may be used:

1) the organic nutrient which is allowed by this Rulebook in quantity of at most 2%;

2) the mineral nutrient which is allowed by this Rulebook in quantity of at most 0,5%;

3) woodcoal, in quantity of at most 0,5%.

III. THE PACKAGING, TRANSPORTATION AND MAINTENANCE OF ANIMAL FOOD

Article 97.

The products may be transported and stored in the bulk condition or packed in the appropriate packaging material. The appropriate packaging material means jute, distalf, cotton, paper and poliethylen sacks, woody, plastic, carton and metal dishes, etc. vreće, drveni, plastični, kartonski i metalni sudovi i dr.

The packaging material which was used for packaging of materials with harmful and toxic effects may not be used for the packaging of products.

The packaging material used for packaging the products shall be closed in a manner which ensures the originality of the package.

Article 98.

The products which may not be transported in the bulk condition are as follows:

1) the alcohol and brew industry products: animal powder, beer powder and barley malt sprouts;

2) the nutrients of animal origin: dessicated fish juice, fish oil, milk without fat in powder, whey in powder, whey in powder without lactose, kazein and lactoalbumin;

3) the mineral nutrients.

The products which are hygroscopic have to be packed.

Article 99.

The product are transported in closed vehicles of railway, road, maritime and river transport, and for shorter distances the usage of opened vehicles is allowed.

The transportation by vehicle has to be ensured in a manner to disable change, abuse and the contamination of the product.

Article 100.

The products are stored in the packaging material or without packaging material on rooms which have to be clean, dry and suitable for the ventilation with the purpose of prevention of heating, firing and corruption of the product. These rooms may not contain harmful organisms nor substances for plant protection, as well and other substances which may contaminate the product.

Article 101.

The sacks used for packaging of products have to be stitched with the yarn or closed in a manner which ensure that they may not be opened without damaging. The sacks have to have the label of callous carton which has the printed declaration. Instead on the label, the declaration may be printed on the sack directly. It has to be ensured that the label present the integral part of the sakc or that it is affixed with it by stitching or in other appropriate manner.

In case that the sack is only tied with the rope, that rope has to be scraped through the opening on the label, and at the end has to be secured with the stopping which has the name of the producer or the company which packed the product. Instead of the stopping may be used the label which has printed on it the name of the producer or the distributor.

IV. THE FINAL PROVISIONS

Article 102.

The date this Rulebook enter into force, the Rulebook on Quality of Animal Food ("The Official Gazette of the Socialist Federal Republic of Yugoslavia, No. 15/89 and 54/90) shall cease to be valid.

Article 103.

This Rulebook shall come into force after 60 days from the day of its publishing in "The Official Gazette of the Federal Republic of Yugoslavia".

The number 7/0-08-026/001
March 17, 2000
Belgrade

The Federal Minister for Agriculture
Nedeljko Šipovac, p.s.