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# **Russian Federation**

Post: Moscow

# **Customs Union Technical Regulation on Milk and Dairy Products**

# **Report Categories:**

Trade Policy Monitoring Sanitary/Phytosanitary/Food Safety FAIRS Subject Report Dairy and Products **Approved By:** Christopher Riker **Prepared By:** Staff

# **Report Highlights:**

The Technical Regulation of the Russia-Kazakhstan-Belarus Customs Union (CU) "On Safety of Milk and Dairy Products" (TR TS 033/2013) is a key CU regulation covering standards and requirements for milk and dairy products. This Technical Regulation was adopted by Decision of the Council of the Eurasian Economic Commission No. 67 of October 9, 2013, and will come into effect as of May 1, 2014.

#### **General Information**

The Technical Regulation of the Russia-Kazakhstan-Belarus Customs Union (CU) "On Safety of Milk and Dairy Products" (TR TS 033/2013) is a key CU regulation covering standards and requirements for milk and dairy products. This Technical Regulation was adopted by Decision of the Council of the Eurasian Economic Commission No. 67 of October 9, 2013, and will come into effect as of May 1, 2014.

Below is an unofficial translation of the following:

- Decision of the Council of the Eurasian Economic Commission No.67 of October 9,2013;
- <u>CU Technical Regulation "On Safety of Milk and Dairy Products" (TR TS 033/2013) with 16</u> annexes;

BEGIN UNOFFICIAL TRANSLATION:

# DECISION

October 9, 2013 No. 67 Kazan

#### On the Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products"

In accordance with Article 3 of the Agreement on the Eurasian Economic Commission of November 18, 2011, the Council of the Eurasian Economic Commission **has decided**:

1. To adopt the attached Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013).

2. To establish that the Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013) shall come into force as of May 1, 2014.

3. Prior to the date of entry into force of the Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013) the Government of the Russian Federation together with the Eurasian Economic Commission shall prepare for adoption in accordance with the established procedure amendments to the stated Technical Regulation in line with the adopted decision to establish regulations classifying reconstituted milk as a milk product in consumer packaging, and establishing its proper marking (labeling).

4. The present Decision shall come into force 30 calendar days after its official publication

#### Members of the Council of the Eurasian Economic Commission:

| For the Republic of Belarus | For the Republic of Kazakhstan | For the Russian<br>Federation |
|-----------------------------|--------------------------------|-------------------------------|
| S. Rumas                    | <b>B.</b> Sagintayev           | I. Shuvalov                   |

END UNOFFICIAL TRANSLATION.

# **Table of Contents**

| Table of Contents   |
|---|
| Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products"                        |
| <u>I. Scope</u>   |
| II. Key Definitions   |
| III. Identification of Milk and Dairy Products  |
| IV. Rules for Circulation of Milk and Dairy Products in the Market of the Customs Union Member-         |
| States and Common Economic Space  |
| V. Safety Requirements for Raw Milk, Raw Nonfat Milk, Raw Cream   |
| VI. Safety Requirements for Production, Storage, Transportation, Marketing and Disposal of Raw Milk,    |
| Raw Skimmed Milk, Raw Cream   |
| VII. Safety Requirements for Dairy Products   |
| VIII. Safety Requirements for Functional Components Necessary for Making Milk Processing Products       |
|   |
| IX. Requirements for Ensuring Safety of Milk and Dairy Products in the Process of their Production,     |
| Storage, Transportation and Disposal  |
| X. Safety Requirements for Milk-Based Products for Baby food, Adapted or Partially Adapted Initial      |
| or Follow-on Milk Baby Formulas (Including Powdered Ones); Powdered Acidified Milk Formulas;            |
| Dairy Drinks (Including Powdered Ones) for Nutrition of Infants and Babies; Ready-to-Use Milk           |
| Cereals and Powdered Milk Cereals (Reconstituted to Readiness with Drinking Water in Home               |
| Conditions) for Nutrition of Infants and Babies   |
| XI. Requirements for Packaging of Dairy Products  |
| XII. Requirements for Marking (Labeling) of Milk and Dairy Products                                     |
| XIII. Ensuring Conformity to Safety Requirements  |
| XIV. Assessment (Confirmation) of Conformity of Milk and Dairy Products                                 |
| XV. Marking with a Unified Mark of Products Circulation on the Market of the Customs Union              |
| Member-States   |
| XVI. Safeguard Clause   |
| Annex No. 1 Physical-and-chemical and microbiological indicators for the identification of milk         |
| processing products   |
| Annex No. 2 Permissible levels of microorganisms in milk-based products for baby foods, adapted or      |
| partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified    |
| milk formulas; dairy drinks (beverages) (including powdered ones) for nutrition of infants and babies;  |
| ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in  |
| home conditions) for nutrition of infants and babies, including products made at the dairy kitchens     |
|   |
| Annex No. 3 Organoleptic indicators for the identification of milk processing products                  |
| Annex No. 4 Permissible levels of potentially dangerous substances in milk and dairy products           |
|   |
| Annex No. 5 Permissible levels of microorganisms and somatic cells in raw milk, raw skimmed milk        |
| and raw cream   |
| Annex No. 6 Indicators for the identification of raw cow's milk and raw milk of other livestock species |
|   |
| Annex No. 7 Indicators for the identification of raw cream from cow's milk                              |
| Annex No. 8 Permissible levels of microorganisms in milk processing products when they are released     |
| into circulation  |
|   |

Annex No. 9 Permissible levels of oxidative deterioration and potentially dangerous substances in milkbased baby foods, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness Annex No. 10 Permissible levels of oxidative deterioration and content of potentially dangerous substances in dairy products, dairy composite products for nutrition of pre-school and school-age Annex No. 11 Permissible levels of microorganisms in dairy products, dairy composite products for nutrition of pre-school and school-age children ......109 Annex No. 12 Physical-and-chemical indicators for the identification of milk-based products for baby foods, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking Annex No. 13 Physical-and-chemical indicators for the identification of milk-based baby foods for Annex No. 14 Permissible levels of micro-nutrients in liquid milk-based formulas for nutrition of infants Annex No. 15 List of food additives and flavorings allowed for making milk-based products for baby foods for nutrition of infants and babies, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies Annex No. 16 Maximum permissible deviation of dairy product nutritional value marked on the 

ADOPTED by Decision of the Council of the Eurasian Economic Commission No. 67 of October 9, 2013

### TECHNICAL REGULATION of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

This Technical Regulation has been developed in accordance with the Agreement on Common Principles and Rules of Technical Regulation in the Republic of Belarus, Republic of Kazakhstan and the Russian Federation dated November 18, 2010.

This Technical Regulation establishes safety requirements mandatory for the application and fulfillment in the customs territory of the Customs Union that apply to milk and dairy products released into circulation in the customs territory of the Customs Union and processes of their production, storage, transportation, marketing (sales) and disposal, as well as requirements for the marking (labeling) and packaging of milk and dairy products to ensure their free movement.

In case when other technical regulations of the Customs Union have been adopted in respect to milk and dairy products that establish safety requirements for milk and dairy products and to the processes of their production, storage, transportation, marketing (sales) and disposal, as well as requirements for their marking (labeling) and packaging, the milk and dairy products, requirements for the processes of their production, storage, transportation, marketing and disposal, as well as requirements for their marking (labeling) and packaging, shall comply with the requirements of all applicable technical regulations of the Customs Union.

#### I. Scope

1. This Technical Regulation has been developed for the purposes of protection of human life and health, environment, animal life and health; prevention of actions misinforming consumers of milk and dairy products as regards their intended use and safety, and covers milk and dairy products released into circulation in the customs territory of the Customs Union, as well as the processes of their production, storage, transportation, marketing (sales) and disposal.

2. This Technical Regulation covers milk and dairy products released into circulation in the customs territory of the Customs Union and used for alimentary purposes, including:

a) raw milk – raw materials; skimmed milk (raw and heat treated) – raw materials; cream (raw and heat treated) – raw materials;

b) dairy products, including:

milk products;

composite dairy products;

milk-containing products;

milk processing by-products;

milk-based products for baby food – for infants and babies (0-3 years), pre-school (3-6 years) and school-age (6 years and older) children; adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (beverages)

(including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies;

c) processes of production, storage, transportation, marketing (sales) and disposal of milk and dairy products;

d) functional components necessary for the manufacture of milk processing products.

3. This Technical Regulation does not cover the following products:

a) products made on the basis of milk and dairy products intended for using in specialized food (except milk and dairy products for baby food);

b) precooked and confectionary items; food and biologically active additives; drugs; animal feeds; non-food products manufactured with the use or on the basis of milk and dairy products;

c) milk and dairy products obtained by citizens in home conditions and/or in private household farms, as well as processes of production, storage, transportation, and disposal of milk and dairy products intended only for personal consumption and not intended for release into circulation in the customs territory of the Customs Union;

4. This Technical Regulation establishes requirements for marking (labeling) and packaging of milk and dairy products that are mandatory for application and execution in the customs territory of the Customs Union and that supplement the requirements of the CU Technical Regulation "On Food Products Labeling" (TR TS 022/2011) approved by Decision of the Customs Union Commission No. 881 of December 9, 2011 (hereinafter – Technical Regulation of the Customs Union "On Food Products Labeling" (TR TS 022/2011)), and Technical Regulation of the Customs Union "On Safety of Packaging" (TR TS 005/2011) approved by Decision of the Customs Union Commission No. 769 of August 16, 2011 (hereinafter – Technical Regulation of the Customs Union "On Safety of Packaging" (TR TS 005/2011) approved by Decision of the Customs Union "On Safety of Packaging" (TR TS 005/2011) approved by Decision of the Customs Union "On Safety of Packaging" (TR TS 005/2011) approved by Decision of the Customs Union "On Safety of August 16, 2011 (hereinafter – Technical Regulation of the Customs Union "On Safety of Packaging" (TR TS 005/2011) approved by Decision of the Customs Union "On Safety of Packaging" (TR TS 005/2011)) and do not contradict them.

#### **II.** Key Definitions

5. For the purposes of application of this Technical Regulation, the definitions established by Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011) approved by Decision of the Customs Union Commission No. 880 of December 09, 2011 (hereinafter - Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011)), Technical Regulation of the Customs Union "On Food Safety" (TR TS 022/2011), as well as the following terms and their definitions shall be used:

"ayran" – a fermented milk product made by mixed (lactic and alcohol) fermentation with the use of starter microorganisms (thermophilic lactic streptococci, *Lactobacillus bulgaricus*) and yeasts whether or not with the addition of water and cooking salt;

"albumin" – a products of milk processing made from milk whey, being essentially a concentrate of milk whey proteins;

"acidophilus milk (acidophilin)" - a fermented milk product made with the use of equal ratios of starter microorganisms (acidophilus lactobacillus, lactococci and starters prepared on kefir fungi);

"varenets" – a fermented milk product made by culturing milk and (or) milk products that are first sterilized or otherwise heat treated at the temperature of  $97^{\circ}C \pm 2 ^{\circ}C$  using starter microorganisms (thermophilic lactic streptococci) until characteristic organoleptic properties are achieved;

"reconstituted milk" – milk product packed in a consumer packaging or raw material for making milk processing products, except fluid (drinking) milk, produced from concentrated or condensed, or dry milk products and water;

"secondary dairy raw material" - a milk processing by-product, milk product, dairy composite product, milk-containing product with partially lost identifying characteristics or consumer attributes (including products recalled before their expiration date but conforming to the safety requirements for food raw materials) which are intended for use after processing;

"starters for the production of milk processing products" – non-pathogenic, non-toxigenic microorganisms and/or associations of microorganisms (primarily lactic acid bacteria) specifically selected and used for making milk processing products;

"granular curd" - a milk product or composite dairy product made from curd grain whether or not with the addition of cream, cooking salt and other non-dairy components added for purposes other than substitution of milk constituents;

"yoghurt" – a fermented milk product with the increased content of nonfat milk solids made with the use of starter microorganisms (thermophilic lactic streptococci and *Lactobacillus bulgaricus*)

"casein" – a products of milk processing made from skimmed milk and being a major fraction of milk protein;

"caseinate" - a products of milk processing made from casein by processing with the solutions of alkaline metal hydroxides or their salts and drying;

"kefir" – a fermented milk product made by mixed (lactic and alcohol) fermentation with the use of starter prepared on kefir fungi without the addition of pure cultures of lactic acid microorganisms or yeasts;

"fermented milk ice-cream" – ice-cream (milk product or dairy composite product) with the mass fraction of milk fat of not more than 7.5 percent made with the use of starter microorganisms or fermented milk products;

"fermented milk product" – a milk product or dairy composite product made by the method which leads to a reduction of the active acidity indicator (pH), increase of the acidity indicator and coagulation of milk protein, milk ripening, and (or) milk products and (or) their mixes with non-dairy components added for purposes other than substitution of milk constituents (before or after ripening), or without the addition of the said constituents with the use of starter microorganisms, and contain live starter microorganisms in the amount specified in Annex No. 1 to this Technical Regulation.

"sour cream butter paste" - butter paste manufactured from pasteurized cream with the use of lactic acid microorganisms;

"sour cream butter" – cream butter manufactured from pasteurized cream with the use of lactic acid microorganisms;

"concentrate of whey proteins" – whey proteins derived from milk whey by concentration or ultra-filtration;

"concentrated or condensed skimmed milk" – a concentrated or condensed milk product where the mass fraction of milk solids is not less than 20 percent, mass fraction of milk protein in fat-free milk solids is not less than 34 percent, and the mass fraction of milk fat is not more than 1.5 percent;

"concentrated or condensed whole milk" – a concentrated or condensed milk product where the mass fraction of milk solids is not less than 25 percent, mass fraction of milk protein in fat-free milk solids is not less than 34 percent, and the mass fraction of milk fat is not less than 7.5%;

"concentrated or condensed partially skimmed milk" – a concentrated or condensed milk product where the mass fraction of milk solids is not less than 20 percent, mass fraction of milk protein in fatfree milk solids is not less than 34 percent, and the mass fraction of milk fat is more than 1.5 percent but less than 7.5 percent;

"kumiss" – a fermented milk product made by mixed (lactic and alcohol) fermentation of mare milk using starter microorganisms (*Lactobacillus bulgaricus* and *acidophilous bacterium*) and yeasts;

"kumiss product" – a fermented milk product made from cow milk in accordance with the kumiss production technology;

"lactulosa" – a lactose processing product made from lactose-containing milk raw materials by lactose isomerization;

"butter from cow milk" – a milk product or dairy composite product on emulsion-and-fat basis where milk fat is a prevailing constituent, and which is made from cow milk, milk products and/or byproducts of milk processing by a fat phase separation from them and the uniform distribution of milk plasma in the fat phase;

"butter paste" – a milk product or dairy composite product on emulsion-and-fat basis where the fat mass fraction ranges from 39 to 49 percent inclusive, and which is made from cow milk, milk products and/or milk processing by-products using stabilizers whether or not with the addition of non-dairy components for purposes other than substitution of milk constituents;

"Mechnikov curdled milk" is a fermented milk product made using starter microorganisms (thermophilic lactic streptococci and *Lactobacillus bulgaricus*);

"milk" – a product of the normal physiological secretion of the mammary glands of livestock obtained from one or more animals during lactation in one or more milking operations, with no additions to this product or extractions of any substances from it;

"milk-containing product" – a food product made from milk, and/or from its constituents, and/or from milk products, and/or from milk processing by-products and non-dairy components, using a process providing for substitution of milk fat in an amount of no more than 50 percent of the fat phase exclusively with milk fat substitute and allowing the use of a protein of non-dairy origin for the purpose other than substitution of milk protein, with the mass fraction of milk solids in the dry matter of the final product of not less than 20 percent;

"milk plasma" – a colloidal system of milk proteins, milk sugar (lactose), mineral substances, enzymes and vitamins in the water phase;

"dairy products" – products of milk processing, including a milk product, dairy composite product, milk-containing product, milk processing by-product, milk-based baby food, adapted or partially adapted initial or follow-on milk formulas (including powdered ones), powdered acidified milk formulas, dairy drinks (including powdered ones) for nutrition of infants and babies, ready-to-use milk cereals, and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies;

"cheese, curd or casein milk whey" – a milk processing by-product obtained in the process of making cheese (cheese whey), curd (curd whey) or casein (casein whey);

"milk ice cream" – ice cream (a milk product or dairy composite product) where a fat mass fraction is no more than 7.5 percent;

"ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies" – baby food products manufactured from different types of cereals and/or flour, milk and/or milk products, and/or milk-containing products whether or not with the addition of non-dairy components, where the mass fraction of milk solids in dry matters of the ready-to-use product is not less than 15 percent;

"dairy drinks (beverages) for nutrition of infants and babies" – ready-to-use dairy products for nutrition of infants and babies made from raw milk and/or milk products whether or not with the addition of non-dairy components with further heat treatment, at least pasteurization, and meeting the physiological needs of infants and babies;

"canned milk, "canned composite milk", "canned milk-containing products" - dry or concentrated (condensed), packaged milk, composite milk or milk-containing products;

"milk fat" – a milk product with the mass fraction of milk fat is at least 99.8 percent, which has a neutral taste and odor and is made from milk and/or milk products by removing the milk plasma;

"milk drink (beverage)" – a dairy or dairy composite product made from milk and/or milk constituents, and/or milk products, including concentrated and/or condensed ones, and/or dry milk products and water, whether or not with the addition of other dairy or non-dairy components for purposes other than substitution of milk constituents, which has the mass fraction of milk protein not below 2.6 percent and the mass fraction of nonfat milk solids not below 7.4 percent (for a milk product);

"milk product" – a food product manufactured from milk and/or its constituents, and/or milk products, whether or not with the addition of milk processing by-products (except milk processing by-products derived in the process of production of milk-containing products), where neither non-dairy fat nor non-dairy protein are used, and which may contain functionally necessary components for milk processing;

"milk sugar" – a products of milk processing manufactured from milk whey or milk whey ultrafiltrate by concentration, crystallization and drying of lactose;

"dairy composite product" – a food product made from milk and/or from its constituents, and/or from milk products whether or not with the addition of milk processing by-products (except milk processing by-products derived in the process of production of milk-containing products), and non-dairy components (except fats of non-dairy origin included in the composition as individual ingredients (does not apply to dairy products for nutrition of infants and babies where fats of non-dairy origin are used in the production process), that are added for purposes other than substitution of milk constituents. At that, the final product should contain above 50 percent of milk constituents, ice cream and sweet milk processing products – above 40 percent;

"hardened ice-cream" – ice-cream frozen after processing to a temperature not above minus 18°C in freezer and retaining that temperature during storage, transportation and sales;

"soft ice-cream" – ice-cream with a temperature from minus 5°C to minus 7°C sold to consumers directly after its processing in freezer;

"ice-cream with milk fat substitute" – ice-cream (milk-containing product) with the mass fraction of milk fat not above 12 percent;

"ice-cream" – whipped and frozen sweet milk products, dairy composite products or milk-containing products consumed frozen;

"national milk product" – a milk product with the name that has been historically composed in the territory of a Party to the Customs Union and the Common Economic Space and is defined by the specific technologies of its production, the raw materials, the composition of the starter used to make it, and/or the name of the geographic area (where the milk product is common);

"non-milk (non-dairy) components" – food products which are added to milk processing products or food additives, or vitamins, or trace- and macro-elements, or proteins, or fats, or carbohydrates of non-dairy origin;

"normalized milk" – raw materials for making milk processing products where the mass fractions of milk fat and milk protein and/or fat-free milk solids, or their proportions are brought in line with the parameters set by standard or technical document of the manufacturer that guide the production of milk processing products;

"skimmed milk" – raw materials for making milk processing products with the mass fraction of milk fat less than 0.5 percent produced as a result of separating milk fat from milk;

"enriched milk" – raw or fluid milk where milk protein, vitamins, trace and macro-elements, dietary fibers, polyunsaturated fatty acids, phospholipids, and prebiotics are included additionally,

separately or in combination, in order to increase nutrition value of the product vs. their natural (initial) content;

"pasteurized, sterilized, ultra-pasteurized, ultra-high temperature treated milk" – milk that is heat treated for the purposes of complying with the requirements of this Technical Regulation in respect of the microbiological safety parameters;

"buttermilk" – a milk processing by-product obtained when making cow's milk butter;

"fluid milk" – whole, skimmed, normalized, enriched milk – a milk product with a milk fat mass fraction below 10 percent, heat treated, at least by pasteurization, without the addition of powdered milk products or water and packed in a consumer package;

"fluid cream" - cream heat treated, at least by pasteurization, and packed in a consumer package;

"processed cheese" – a milk product or dairy composite product made from cheese and (or) curd using milk products and (or) milk processing by-products, emulsifying salts or structure-forming agents by breaking up, blending, liquefying and emulsifying the mixture for processing whether or not with the addition of non-dairy components for purposes other than substitution of milk constituents;

"processed cheese product" – a milk-containing product made according to the technology of production of processed cheese;

"plombir" – ice-cream (milk product or dairy composite product) where the mass fraction of fat milk is not less than 12 percent;

"milk processing by-product" – a by-product obtained in the process of production of milk processing products;

"cheese butter paste" – a butter paste made from cream produced by separation of cheese whey;

"lactose-free milk processing product" – a products of milk processing, where the content of lactose is no more than 0.1 g per a liter of ready-to-use product in which lactose is hydrolyzed or from which lactose is removed;

"whipped milk processing product" – a products of milk processing made by whipping;

"reconstituted milk processing product" – a products of milk processing (except fluid milk) made from concentrated (condensed) or powdered products of milk processing and water whether or not with the addition of other milk products;

"concentrated milk processing product with sugar" – a product of concentrated milk processing made with the addition of sucrose and/or other types of sugars;

"concentrated, condensed, evaporated or frozen milk processing product" – a products of milk processing made by partial water removal until the mass fraction of solids not below 20 percent is achieved;

"low-lactose milk processing product" – a products of milk processing where lactose is partially hydrolyzed or removed;

"normalized milk processing product" – a products of milk processing where the mass fractions of milk fat and milk protein and/or fat-free milk solids, or their ratios are brought in line with the parameters set by documents on the respective product;

"fat-free milk processing product" – a products of milk processing made from skimmed milk, and (or) buttermilk, and (or) whey, and (or) products made on their basis;

"enriched milk processing product" – a products of milk processing where such substances as milk protein, vitamins, trace and macro-elements, dietary fibers, polyunsaturated fatty acids, phospholipids, probiotic microorganisms, and prebiotics are added separately or in combination;

"recombined milk processing product" – a products of milk processing made from milk processing products and/or their individual constituents and water;

"sublimated milk processing product" – a products of milk processing made by removing water from a frozen products of milk processing to bring its solids mass fraction to at least 95 percent;

"dry (powdered) milk processing product" – a products of milk processing made by partially removing water from the product to bring its solids mass fraction to at least 90 percent;

"heat-treated, pasteurized, sterilized, ultra-pasteurized or ultra-high-temperature treated milk processing product" - a products of milk processing that is heat treated and conforms to the requirements of this Technical Regulation established to the permissible level of microorganisms in such product;

"products based on partial protein hydrolysates" – dairy products for baby food made from partially hydrolyzed proteins of livestock milk;

"milk processing products based on full or partial protein hydrolysates" – dairy products made from partially or fully hydrolyzed cow's milk;

"milk-based products for baby food" – food products for children's nutrition (except powdered and liquid baby formula, milk drinks and milk cereals) made from livestock milk whether or not with the addition of milk processing products and/or milk constituents, as well as whether or not with the addition of non-dairy components in the amount not above 50 percent of the total mass of the final product;

"curdled milk" – a fermented milk product made using starter microorganisms (lactococci and/or thermophilic lactic streptococci);

"ryazhenka" – a fermented milk product made by culturing baked milk whether or not with the addition of milk products using starter microorganisms (thermophilic lactic streptococci) whether or not with the addition of Bulgarian bacillus;

"condensed skimmed milk with sugar" – a concentrated or condensed milk product with sugar where the mass fraction of milk solids is at least 26 percent, mass fraction of milk protein in fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is no more than 1 percent;

"condensed whole milk with sugar" – a concentrated or condensed milk product with sugar where the mass fraction of milk solids is at least 28.5 percent, mass fraction of milk protein in fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is at least 8.5 percent;

"condensed partially skimmed milk with sugar" – a concentrated or condensed milk product with sugar where the mass fraction of milk solids is at least 26 percent, mass fraction of milk protein in fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is more than 1 percent but less than 8.5 percent;

"condensed cream with sugar" – a concentrated or condensed milk product with sugar where the mass fraction of milk solids is at least 37 percent, mass fraction of milk protein in fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is at least 19 percent;

"cultured product" is a milk product or dairy composite product which is heat treated after culturing, or a milk-containing product which is made according to the fermented milk production process, retaining the species and structure of the culture microorganisms that determine the type of a respective fermented milk product and have similar organoleptic and physicochemical properties;

"sweet-cream butter paste" – a butter paste made from pasteurized cream;

"sweet-cream butter" – a butter made from pasteurized cream;

"dry (powdered) cream" – a dry milk product where the mass fraction of milk solids is at least 95 percent, mass fraction of milk protein in fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is at least 42 percent;

"cream" – a milk product (raw material) which is made from milk and/or milk products and is an emulsion of fat and milk plasma in which a fat mass fraction is at least 10 percent;

"cream butter" – a butter from cow's milk where a fat mass fraction is at least 50 percent;

"cream ice" – ice cream (milk product or dairy composite product) where a milk fat mass fraction is from 8 percent to 11.5 percent;

"cream cheese butter" – a butter made from cream produced by the separation of cheese whey;

"cream-vegetable rendered mixture" – a milk-containing product where the mass fraction of total fat is at least 99 percent and which is made from cream-vegetable spread by rendering the fat phase or using other processing methods;

"cream-vegetable spread" – an emulsion-fat-based milk-containing product where the mass fraction of total fat is from 39 to 95 percent and the milk fat mass fraction in the fat phase – from 50 to 95 percent;

"cream product" – a milk product or a dairy composite product with the mass fraction of fat above 10 percent made primarily from cream;

"fluid ice-cream mix" – a fluid milk product, dairy composite product or milk-containing product that includes all components necessary for ice-cream production;

"dry ice cream mix" – a dry milk product, dry dairy composite product or dry milk-containing product made by drying a fluid ice cream mix or mixing the necessary dry components and intended for making ice cream after the reconstitution with water, milk, cream and/or juice;

"sour cream" – a fermented milk product which is made by culturing cream whether or not with the addition of milk products using starter microorganisms (lactococci or a mixture of lactococci and thermophilic lactic streptococci) and in which the milk fat mass fraction is at least 10 percent;

"milk constituents" – dry solids (milk fat, milk protein, milk sugar (lactose), enzymes, vitamins, minerals), water;

"dry (powdered) acidified baby formula" – dairy products for nutrition of infants and babies made in accordance with the technology of production of fermented milk products reducing the active acidity indicator (pH) and causing the coagulation of milk proteins, with the use of starter microorganisms (without using organic acids), and whether or not with the addition of live starter microorganisms to the dry mix in the amount specified in Annex No. 2 to this Technical Regulation.

"dry dairy drinks for baby food" – dairy products for nutrition of infants and babies that are made from cow's milk and/or milk products whether or not with the addition of non-dairy components where the mass fraction of milk solids in dry matters of the final product is at least 15 percent and that meet the physiological requirements of infants and babies;

"dry skimmed milk" – a dry milk product where the mass fraction of milk solids is at least 95 percent, mass fraction of milk protein in the fat-free milk solids is at least 34 percent, and the mass fraction of milk fat is no more than 1.5 percent;

"dry whole milk" – a dry milk product where the mass fraction of milk solids is at least 95 percent, mass fraction of milk protein in nonfat milk solids is at least 34 percent, and the mass fraction of milk fat is no less than 26 and no more than 42 percent;

"milk solids" – milk constituents except water;

"nonfat milk solids" – milk constituents except milk fat and water;

"dry milk whey" – a dry milk product made by the partial removal of water from milk whey received in the process of cheese manufacture by a method of protein coagulation induced by milkclotting enzymes, as well as in the process of production of cheese, casein and curd by a method of protein coagulation resulting from lactic acid production, or by thermal acidizing until the mass fraction of solids of at least 95 percent is achieved;

"whey protein" – a milk protein remaining in milk whey after casein precipitation;

"smoked cheese, processed cheese, cheese product, processed cheese product" – cheese, processed cheese, cheese product, processed cheese product that has been smoked and has specific organoleptic properties characteristic for smoked food. The use of smoking flavorings is not allowed.

"soft, medium-hard, hard, extra-hard cheese, cheese product" – cheese, cheese product with respective specific organoleptic and physiochemical properties regulated by the annexes to this Technical Regulation;

"pickled cheese, cheese product" – cheese, cheese product ripened and/or stored in salt brines;

"mold cheese, cheese product" – cheese, cheese product made with the use of mold fungi located inside and/or on the surface of the ready cheese, cheese product;

"slime cheese, slime cheese product" – cheese, cheese product made using slime microorganisms that develop on the surface of ready cheese, cheese product;

"cheese" – a milk product or dairy composite product made from milk, milk products and/or milk processing by-products whether or not with the use of special starters and processes to coagulate milk protein with milk-clotting enzymes, either by acid or thermoacid way with the subsequent separation of cheese mass from whey, its formation, pressing, whether or not with salting, whether or not with ripening, whether or not with the addition of non-dairy components introduced for purposes other than substitution of milk constituents;

"cheese product" – a milk-containing product made in accordance with cheese making technology;

"raw milk" – milk that has not undergone heat treatment at a temperature above 40°C or processing that has changed its constituents;

"raw skimmed milk" – milk that has not undergone heat treatment at a temperature above 45°C received as a result of milk fat separation from milk;

"curd bar" – a curd product which is formed, whether or not covered with food glaze, and weighs no more than 150 grams;

"raw cream" – cream that has not undergone heat treatment at a temperature above  $45^{\circ}$ C;

"curd" – a fermented milk product made using starter microorganisms (lactococci or a mixture of lactococci and thermophilic lactic streptococci) and acidic or acidic-abomasal milk protein coagulation methods with subsequent whey removal by self-pressing and/or pressing, and/or separation (centrifugation), and/or ultrafiltration, whether or not with the addition of milk constituents (before or after culturing) for the purpose of normalizing milk products;

"curd mass" – a milk product or dairy composite product made from curds whether or not with the addition of butter, cream, condensed milk with sugar, sugars and/or salts, whether or not with the addition of non-dairy components for purposes other than substitution of milk constituents;

"curd product" – a milk product or dairy component product, or a milk-containing product made from curds and/or milk processing products in accordance with curd making technology whether or not with the addition of milk products, whether or not with the addition of nondairy components, including nondairy fats and/or nondairy proteins (for a milk-containing product), followed or not by heat treatment;

"curd mass bar" – a milk or dairy composite product made from a curd mass which is formed, whether or not covered with a food glaze, and weighs no more than 150 grams;

"rendered butter" – cow's milk butter where the fat mass fraction is at least 99 percent, which is made from cream butter by rendering the fat phase and has specific organoleptic properties;

"baked milk" – raw or fluid milk heat treated at the temperature from 85°C to 99°C for at least three hours until specific organoleptic properties are achieved; "enzymatic preparations for making milk processing products" – protein substances required for biochemical processes during the manufacture of milk processing products;

"functionally necessary components for making milk processing products" – starters for making milk processing products, kefir fungi, probiotic microorganisms (probiotics), prebiotics, enzymatic preparations which are introduced during the manufacture of milk processing products and without which it is impossible to make a particular products of milk processing;

"whole milk" – raw materials for making milk processing products where the constituents have not been treated through their regulation;

"dry partially skimmed milk" – a dry milk product in which the mass fraction of milk solids is at least 95 percent, the mass fraction of milk protein in the skimmed milk solids is at least 34 percent, and the mass fraction of milk fat is more than 1.5 percent but less than 26 percent.

#### III. Identification of Milk and Dairy Products

6. Milk and Dairy Products are identified according to the following rules:

a) for the purposes of attributing milk and dairy products to the objects of technical regulation which this Technical Regulation applies to, the identification of milk and dairy products is carried out by the applicant; the bodies responsible for state control (surveillance); the customs control bodies; the bodies responsible for assessment (confirmation) of conformity, and other stakeholders, without conducting examinations (tests), based on the name – through the establishing of conformity of milk and dairy product names specified in the marking or shipping documentation, with the names of milk and dairy products defined in Section II of this Technical Regulation and the other technical regulations of the Customs Union applying to milk and dairy products;

b) in case when milk and dairy products cannot be identified by name, the identification of milk and dairy products is performed by visual method - by comparing the appearance of milk and dairy products with the indicators set forth in the definition of such products in this Technical Regulation and the other technical regulations of the Customs Union applying to milk and dairy products;

c) for the purposes of establishing conformity of milk and dairy products to their names, the identification of milk and dairy products is carried out by comparing the appearance and organoleptic parameters with the indicators defined in Annex No. 3 to this Technical Regulation or with the specific standards that, when used on a voluntary basis, ensure the fulfillment of the Technical Regulation requirements, established by the lists of standards employed for the purposes of assessment (confirmation) of conformity to this Technical Regulation, or with the indicators defined in the technical documentation that guided the manufacture of milk and dairy products.

d) in case when milk and dairy products can be identified neither by name, nor by visual or organoleptic methods, the identification is performed by analytical method – through the verification of whether physical-and-chemical and (or) microbiological parameters of milk and dairy products conform to the indicators established in this Technical Regulation, specific technical documentation that the milk and dairy products were produced in line with, as well as other technical regulations of the Customs Union applicable to milk and dairy products.

IV. Rules for Circulation of Milk and Dairy Products in the Market of the Customs Union Member-States and Common Economic Space

7. Milk and dairy products are released into circulation in the market of the Customs Union member-states and the Common Economic Space (hereinafter – member-states or Parties), provided that

they comply with the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto.

8. Milk and dairy products that comply with the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto and that have passed the procedure of assessment (confirmation) of conformity shall be marked with the unified mark of products circulation on the market of the Customs Union member-states.

9. The Parties ensure that milk and dairy products which comply with the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto, circulate in the market of a Party to the Customs Union without imposing additional requirements supplementing the requirements contained in this Technical Regulation and without conducting additional procedures of conformity assessment (confirmation).

10. Where physical persons sell non-commercially produced milk and dairy products at the markets, including farmer markets, it is obligatory to inform the consumers, in any convenient way, about veterinary and sanitary safety of the products, their names, production site (address) and production date.

At the farmers markets where raw milk from the vessels of specialized transport means or other containers made of materials designed for contact with food products is sold to the consumers' containers (legal entities, physical persons registered as individual entrepreneurs, and physical persons), the sellers must present to the consumers the appropriate documents on the veterinary and sanitary examination carried out in accordance with the legislation of a member-state and also to inform the consumers about the need of compulsory boiling of the raw milk.

11. Where raw milk, raw nonfat milk, and raw cream are shipped to milk receiving stations or milk processing facilities, the sellers (legal entities, physical persons registered as individual entrepreneurs, and physical persons) must show the accompanying veterinary documents issued by the authorized body of a Party that prove safety of the raw milk, raw nonfat milk, and raw cream.

12. The transportation of raw milk, raw nonfat milk, and raw cream within the customs territory of the Customs Union is accompanied by a veterinary supporting document issued by the authorized agency of a Party that contains data on the performed veterinary and sanitary examination proving their safety.

The period of validity of the accompanying veterinary document is established depending on the results of the preventive veterinary actions undertaken in relation to farm animals at the site of production of raw milk, raw nonfat milk, and raw cream, but no more than one month from the date of issue of such document.

13. When transferred between the member-states, dairy products that are subject to veterinary control (surveillance), whether imported from third countries or produced in the customs territory of the Customs Union shall be accompanied by a veterinary certificate, to be issued by the authorized bodies of the member-states without conducting veterinary-and-sanitary examination, which confirms epizootic freedom.

Every lot of milk and dairy products that is subject to veterinary control (surveillance) is imported into the customs territory of the Customs Union upon availability of the veterinary certificate issued by the competent authority of a shipping country.

V. Safety Requirements for Raw Milk, Raw Nonfat Milk, Raw Cream

14. For the manufacture of milk processing products, it is not allowed using raw milk received within the first 7 days after the date of caving; within 5 days prior to the date of dry-off (before calving); and, from sick or quarantined animals.

15. The mass fraction of fat-free solids in raw cow milk shall be at least 8.2 percent.

16. Levels of potentially dangerous substances in raw milk, raw skimmed milk, and raw cream should not exceed the permissible levels established in Annexes No. 1 - 4 to the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011) and in Annex No. 4 hereto.

17. Levels of microorganisms and somatic cells in raw milk, raw skimmed milk, and raw cream should not exceed the permissible levels established in Annex 5 to this Technical Regulation.

18. Identification indicators of cow's raw milk and raw milk of other livestock species, and raw cream from cow's milk are established in Annexes No. 6 and 7 to this Technical Regulation.

#### VI. Safety Requirements for Production, Storage, Transportation, Marketing and Disposal of Raw Milk, Raw Skimmed Milk, Raw Cream

19. Processes used for the production of raw milk, raw skimmed milk, and raw cream, including the conditions of holding, feeding and milking of livestock; the conditions of collection, cooling and storage of raw milk, raw skimmed milk, and raw cream shall ensure their compliance with the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto.

20. Raw milk after livestock milking shall be purified and cooled to the temperature of  $4^{\circ}C \pm 2^{\circ}C$  within no more than 2 hours.

21. Prior to the beginning of industrial processing, the storage of raw milk, raw skimmed milk (including the period of storage of raw milk used for separation) is allowed at the temperature of  $4^{\circ}C \pm 2^{\circ}C$ , and raw cream – at the temperature of not above  $8^{\circ}C$  for no more than 36 hours (including the period of transportation).

Prior to the beginning of industrial processing, the storage of raw milk, raw skimmed milk, (including the period of storage of raw milk used for separation) and raw cream, intended for making baby food for nutrition of infants and babies, is allowed at the temperature of  $4^{\circ}C \pm 2^{\circ}C$  for no more than 24 hours (including the period of transportation).

22. Thermal pre-treatment, including pasteurization, of raw milk, raw skimmed milk, and raw cream by the manufacturer is allowed in the following cases:

a) acidity of raw milk, raw skimmed milk is from  $19^{\circ}T$  to  $21^{\circ}T$ ; acidity of raw cream is from  $17^{\circ}T$  to  $19^{\circ}T$ ;

b) storage of raw milk, raw skimmed milk, raw cream is over 6 hours without cooling;

c) duration of transportation of raw milk, raw skimmed milk, raw cream is longer than the acceptable period of storage, but no more than by 25%;

d) availability of appropriate instructions of the authorized agencies of the Parties in the area of veterinary control (surveillance).

23. When thermal pre-treatment, including pasteurization, of raw milk, raw skimmed milk, raw cream is used, the conditions of heat treatment (temperature, period of treatment) are specified in the shipping documentation on the raw milk, raw skimmed milk, and raw cream.

24. In the production of raw milk, raw skimmed milk, and raw cream, the agricultural commodity producers shall use equipment and materials meeting the requirements applied to the safety of materials contacting food products.

25. When cooled raw milk, raw skimmed milk, and raw cream are transported to a processing site, at the time when the processing begins their temperature should not exceed  $10^{\circ}$ C.

Acceptance of raw milk, raw skimmed milk, and raw cream not complying with the temperature requirements, established by this paragraph is allowed only on the condition that they are processed immediately by the manufacturer of milk processing products.

26. Raw milk, raw skimmed milk, and raw cream are transported in sealed tanks with tightfitting lids made of materials complying with the requirements applied to the safety of materials contacting food products. Transportation means shall ensure that the temperature is maintained at the levels established by p.p. 20 and 21 of this Technical Regulation.

27. Raw milk, raw skimmed milk, and raw cream, as well as milk processing products subjected to thermal pre-treatment, including pasteurization, by the manufacturer of milk processing products, are stored prior to the beginning of processing in individual marked tanks at the temperature of  $4^{\circ}C \pm 2^{\circ}C$ .

28. The processes of marketing (sales) of raw milk, raw skimmed milk, and raw cream as well as those subjected to thermal pre-treatment, including pasteurization, shall comply with the requirements established in p.10 hereof and the requirements of the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011).

29. The processes of disposal of raw milk, raw skimmed milk, and raw cream, as well as those subjected to thermal pre-treatment, including pasteurization, shall comply with the requirements of the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011).

#### VII. Safety Requirements for Dairy Products

30. Dairy products being in circulation in the customs territory of the Customs Union within the established shelf life shall be safe when used for intended purposes.

Dairy products shall comply with the requirements of this Technical Regulation and other applicable technical regulations of the Customs Union.

31. Dairy products shall be made from raw milk, and/or raw skimmed milk, and/or raw cream meeting the safety requirements established by this Technical Regulation and subjected to heat treatment that ensures receiving of dairy products which comply with the requirements of this Technical Regulation.

Other alimentary raw materials used for the manufacture of dairy products shall comply with the requirements of the applicable technical regulations of the Customs Union.

32. In dairy products intended for release into circulation in the customs territory of the Customs Union, the levels of toxic elements, potentially dangerous substances, mycotoxins, antibiotics, pesticides, radionuclides, microorganisms and the values of oxidative deterioration parameters should not exceed the levels established in Annexes No. 1-4 to the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011) and Annex No. 4 to this Technical Regulation.

33. Levels of microorganisms in dairy products should not exceed the permissible levels established in Annex No. 8 to this Technical Regulation.

34. Production of dietary food products and cultured milk products (except composite dairy products) shall be carried out without using food supplements or flavorings except functionally necessary components.

Curd mass and grained curd shall be made without heat treatment of the final product and without adding texture stabilizers or preservatives.

35. Organoleptic indicators for the identification of milk processing products are established in Annex No. 3 to this Technical Regulation.

36. Physical-and-chemical and microbiological indicators for the identification of dairy products are established in Annex No. 1 to this Technical Regulation.

VIII. Safety Requirements for Functional Components Necessary for Making Milk Processing Products

37. Microorganisms, including probiotic ones, used in mono-cultures or within the composition of starters for the production of milk processing products, shall be identified and be non-pathogenic, non-toxigenic, and shall possess properties necessary for the manufacture of the above products that comply with the requirements of this Technical Regulation.

38. Enzymatic preparations for the manufacture of milk processing products shall have activity and specificity necessary for a particular technological process and comply with the requirements of the technical regulations of the Customs Union applying to the enzymatic preparations for the manufacture of milk processing products.

39. The levels of microbiological safety of starters for the manufacture of milk processing products, enzymatic preparations for the manufacture of milk processing products, and those of nutrient media for the cultivation of starter and probiotic microorganisms should not exceed the permissible levels established in Annex No. 8 to this Technical Regulation.

40. Other safety indicators of starters for the manufacture of milk processing products: probiotic microorganisms; prebiotics; enzymatic preparations for the manufacture of milk processing products; and, nutrient media for preparing starters to be used in the manufacture of milk processing products, shall comply with the requirements of this Technical Regulation and the requirements established in Annex No. 3 to the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011).

41. Manufacturers of the starters to be used for making milk processing products, the enzymatic preparations for the manufacture of milk processing products and the other functionally necessary components for making milk processing products shall ensure their conformity to the requirements of this Technical Regulation.

Manufacturers of dairy products shall ensure safety of an industrial starter and processes of its manufacture, as well as its compliance with the requirements of the document (a standard or technical document of the manufacturer that guides the production of milk processing product).

Starters for the manufacture of milk processing products shall be used immediately after the opening of a non-broken package. The storage of opened or the use of damaged starter packages is not allowed for making milk processing products.

42. Where milk-based products are made for baby food, it is not allowed using enzymatic milkclotting preparations for making milk processing products or starters for making milk processing products derived with the involvement of gene-modified organisms.

### IX. Requirements for Ensuring Safety of Milk and Dairy Products in the Process of their Production, Storage, Transportation and Disposal

43. Technological processes used in the manufacture of milk and dairy products shall ensure a release of products meeting the requirements of this Technical Regulation and the requirements of the technical regulations of the Customs Union applying thereto.

44. Materials coming into contact with milk and dairy products in the process of production (manufacture) shall comply with the requirements applied to the safety of materials contacting food products.

At all stages of the process of production (manufacture) of milk and dairy products, their traceability shall be ensured.

45. Production facilities, where the processes of production of raw milk, raw skimmed milk, and raw cream and/or their processing (treatment) take place during the manufacture of dairy products, are subject to state registration pursuant to the provisions of the Technical Regulations of the Customs Union "On Food Safety" (TR TS 021/2011).

46. Organization of the production premises where the process of manufacture of milk and dairy products is conducted; the process equipment and implements used in the process of manufacture of milk and dairy products; the conditions of storage and removal of production waste from making milk and dairy products; and, water used in the process of production of milk and dairy products, shall comply with the requirements of the Technical Regulations of the Customs Union "On Food Safety" (TR TS 021/2011).

47. Milk-based baby food for nutrition of infants and babies, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies are manufactured at the specialized production facilities or specialized workshops, or specialized process lines.

Manufacturers, sellers and entities, performing functions of foreign manufacturers of milk and dairy products, shall implement the processes of their storage, transportation and marketing (sales) in a way that ensure compliance of the milk and dairy products with the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto.

The processes of storage, transportation, marketing (sales) and disposal of milk and dairy products shall comply with the requirements of the Technical Regulations of the Customs Union "On Food Safety" (TR TS 021/2011).

X. Safety Requirements for Milk-Based Products for Baby food, Adapted or Partially Adapted Initial or Follow-on Milk Baby Formulas (Including Powdered Ones); Powdered Acidified Milk Formulas; Dairy Drinks (Including Powdered Ones) for Nutrition of Infants and Babies; Ready-to-Use Milk Cereals and Powdered Milk Cereals (Reconstituted to Readiness with Drinking Water in Home Conditions) for Nutrition of Infants and Babies

48. Milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies shall comply with the requirements established by this Technical Regulation and the requirements established in Article 8 of the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011) and shall be safe for children's health.

49. Permissible levels of oxidative deterioration and content of potentially dangerous substances in milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies are established in Annex No. 9 to this Technical Regulation.

50. Permissible levels of microorganisms in milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies, including products made in dairy kitchens are established in Annex No. 2 to this Technical Regulation.

The count of microorganisms in the components functionally necessary for making milk processing products, added to the powdered mixture, where powdered acidified milk formulas are made for nutrition of infants and babies, is established in Annex No. 2 to this Technical Regulation.

Microbiological safety indicators in milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies shall comply with the requirements established in Annex No. 2 to this Technical Regulation.

51. Permissible levels of oxidative deterioration and content of potentially dangerous substances in dairy products, composite dairy products for nutrition of pre-school and school-age children are established in Annex No. 10 to this Technical Regulation.

52. Permissible levels of microorganisms in dairy products, dairy composite products for nutrition of pre-school and school-age children are established in Annex No. 11 to this Technical Regulation.

53. Physical-and-chemical indicators for the identification of milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies are established in Annex No. 12 to this Technical Regulation.

54. Physical-and-chemical indicators for the identification of milk-based baby foodtuffs for nutrition of pre-school and school-age children are established in Annex No. 13 to this Technical Regulation.

55. Indicators of nutrition value of milk-based products for baby food, adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies shall conform to the permissible levels established in Annexes No. 12 and 14 to this Technical Regulation and shall be appropriate for the functional body state of children from the respective age groups.

56. In the production of adapted or partially adapted initial (breast milk substitutes) or follow-on milk baby formulas, for the purposes of making the formula composition as close as possible to the composition of human milk, it is allowed that only L-amino acids, taurin, nucleotides, probiotic microorganisms and prebiotics, fish oil and other concentrates of polyunsaturated fatty acids are included in their content.

57. Forms of vitamins and minerals used in the production of milk-based baby food for nutrition of infants and babies; adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness

with drinking water in home conditions) for nutrition of infants and babies are established in the Technical Regulation of the Customs Union "On Food Safety" (TR TS 021/2011).

The levels of micro-nutrients in liquid milk formulas and powdered milk formulas for nutrition of infants and babies shall conform to the permissible levels established in Annex No. 14 to this Technical Regulation.

58. It is allowed to use food additives listed in Annex No. 15 to this Technical Regulation for making milk-based baby food for nutrition of infants and babies; adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies.

59. Non-dairy components used for making milk-based baby food for nutrition of infants and babies; adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies shall comply with the requirements of the technical regulations of the Customs Union applying thereto.

#### XI. Requirements for Packaging of Dairy Products

60. Dairy products intended for marketing (sales) shall be pre-packed in packages meeting the requirements of the Technical Regulations of the Customs Union "On Safety of Packaging" (TR TS 005/2011) and ensuring safety and permanency of the consumer attributes of milk and dairy products in compliance with the requirements of this Technical Regulation throughout their shelf life.

61. Milk-based baby food for nutrition of infants and babies; adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies shall be released into circulation in the customs territory of the Customs Union only pre-packed and packaged in hermetically sealed small-piece packages, not above the following volume (or weight):

a) 1 kg – dry (powdered) products (adapted or partially adapted initial or follow-on milk baby formulas; powdered acidified milk formulas; milk-based supplementary baby food; instant products and powdered milk cereals (reconstituted to readiness with drinking water in home conditions);

b) 0.21 – liquid (adapted or partially adapted initial or follow-on milk baby formulas);

c) 0.25 l (kg) – fluid milk, fluid cream, fermented milk products;

d) 0.1 kg – milk-based paste-like baby food.

62. Milk-based baby food for nutrition of pre-school and school-age children shall be released into circulation in the customs territory of the Customs Union only pre-packed and packaged in hermetically sealed packages. Liquid milk-based baby food for nutrition of pre-school and school-age children shall be released in the package with the volume of not above 2 l; paste-like products for baby food – with the volume of not above 0.2 kg (ready-to-eat portion-packed products).

63. Where non-packed or non-packaged perishable milk processing products are sold, the use of consumer (buyer) package is not allowed, except cases outlined in p.10 of this Technical Regulation.

64. Portion-packed (cut) dairy products are packed by the manufacturer or the seller under the conditions ensuring safety compliance of such products with the requirements of this Technical Regulation.

65. Every package of dairy products shall have marking (labeling) containing information for the consumers pursuant to Section XII of this Technical Regulation.

XII. Requirements for Marking (Labeling) of Milk and Dairy Products

66. Milk and dairy products shall be accompanied by consumer information complying with the requirements of the Technical Regulations of the Customs Union "On Food Products Labeling" (TR TS 022/2011) and the additional requirements of this Technical Regulation.

67. Each unit of the multiple, multi-way or transportation package of milk or dairy products shall have marking (labeling), containing the following consumer information:

a) brand mark (trade mark) (if any);

b) net weigh (gross weight – at manufacturer's discretion);

c) number of lot of milk or dairy products;

d) warning labels or handling marks (e.g. "keep away from sunlight," "temperature limitation," "keep dry," "perishable cargo") are applied selectively, in accordance with the conditions of storage and transportation of milk or dairy products;

e) product contents – for milk or dairy products packed directly in the transportation package;

f) marking out of the manufacturer's standard or technical document that guides the manufacture of milk processing product – for milk or dairy products packed directly in the transportation containers (may be omitted for milk or dairy products imported from a third country).

68. Where multiple or transportation packages of milk or dairy products are wrapped into transparent protective polymer materials, the marking may be omitted. In this case, the marking (labeling) on consumer containers provides information for the consumers.

69. Names of milk and dairy products shall conform to the definitions established in Section II of this Technical Regulation. Names of milk and dairy products may be supplemented with product designations or brand names of the manufacturer. The order of words in the names of milk and milk processing products that are based on the definitions established in Section II of this Technical Regulation, in the marking (labeling) text is not regulated, e.g. "whole milk," "milk, whole," "cream butter," "butter, cream."

In the names for reconstituted milk it is required to specify the main raw material that is used for the products manufacturing directly in the name in the same font, e.g.: "reconstituted milk from dry milk," "reconstituted milk from concentrated milk," "reconstituted milk from dry and condensed milk."

Classification indicators in the name of cream butter, characterizing specifics of its technology (sweet cream, unsalted), may be omitted in case where starter microorganisms or cooking salt are not used for its manufacture.

70. Designations of livestock species (except the cows from whom milk is received) shall be indicated on the package labels before the term "milk" or after this term.

71. Definitions related to the method of heat treatment of milk or milk processing products, are indicated on the package labels after the term "milk" or after the names of milk processing products, e.g. "milk pasteurized," "cream sterilized."

72. In addition to the method of heat treatment of milk and milk processing production, other product-related concepts, characterizing method of their manufacture, specific composition of the raw material and the use of starter microorganisms, may follow the names of such products, for example

"curd product, heat treated flavored (with flavor)," "fermented milk drink," "recombined cream." The term "normalized" in the name of milk and milk processing products may be omitted on the package labels.

73. The names of composite dairy products shall comprise the definitions established for dairy products and shall be supplemented with information on the availability of non-dairy components added to such products, e.g. "curd with fruit pieces," "fruit kefir," "processed cheese with ham."

74. The names of fermented milk products enriched with probiotic microorganism and/or prebiotics, may be composed with the use of prefix "bio" which is included in the names of milk processing products, for example "biokefir," "bioryazhenka."

75. The term "product" in the names of dairy products, dairy composite products, and milkcontaining products may be replaced or supplemented with a term characterizing the product texture or shape (jelly, kisell, cocktail, cream, mousse, paste, roll, sauce, tart, etc.), for example: "milk-and-juice cocktail," "sour cream sauce," "milk kissel," "curd souffle with nuts," "cheese roll with spices."

76. The use of definitions related to the fermented milk products (ayran, acidophilin, varenets, yoghurt, kefir, kumiss, kumiss product, curdled milk, Mechnikov curdled milk, ryazhenka, sour cream, curd) is not allowed when marking (labeling) milk-containing or cultured milk products made in accordance with the production technology of a respective fermented milk product. In the marking (labeling) of a milk-containing or a cultured milk product the words "milk-containing" or "cultured" shall be replaced with the terms characterizing production technology of such products, e.g. "kefir product," "heat treated kefir product," "yoghurt product," "heat treated yoghurt product."

In the name of fermented milk product, made according to the kefir production technology with a starter prepared on pure cultures of lactic acid microorganisms and one or more types of yeasts included in the composition of microorganisms (microflora) of kefir fungi, the term "kefir product" is used which is shown by fonts of the same size.

77. The term characterizing cheese varieties and types (hard, medium-hard, soft, fresh (not aged), chunk, paste-like) may be omitted in combination with the cheese name.

78. The term "enriched" is used in combination with the names of respective products and accompanied by information in the marking (labeling) on the presence and amount of substances added to these products.

79. Where products do not conform to the identification indicators established by this Technical Regulation, the definitions set forth in Section II of this Technical Regulation should not be used in the names of product designations or other additional names of milk and milk processing products.

80. Where marking (labeling) is applied on the consumer packages of dairy and dairy composite products, a partial application of their names on the package side convenient for reading is allowed, provided that the full names of such products have been specified on the same package.

Where marking (labeling) is applied on the consumer packages of a milk-containing product, a partial application of the name of the milk-containing product on the package side convenient for reading is not allowed in order to avoid consumer misleading.

81. Information on the use of milk fat substitute in the production of milk-containing products in accordance with the technology that assumes milk fat replacement with its substitute (except cream-and-vegetable spreads) is included in the name of the type of milk-containing product on the front of the consumer package (the name of milk-containing product shall be followed by the words: "with milk fat substitute"), for example: "sour cream product with milk fat substitute," "curd bar with milk fat

82. The use of definitions established by this Technical Regulation for milk, milk products and dairy composite products, including the words or their parts that comprise these definitions, or their

different combinations, is not allowed in the names of brand marks (trade marks) when marking milkcontaining products (except cultured products), on their labels, for advertising or other purposes that could mislead consumers.

For milk processing by-products derived in the process of manufacture of milk-containing products, such names as "whey product" and "butter milk product" are used.

83. The use of term "butter" is not allowed, e.g. in the names of brand marks (trade marks) when marking is applied on the labels of butter paste or cream-and-vegetable spread, for advertising or other purposes that could mislead consumers.

The use of the term "rendered butter" is not allowed, e.g. in the names of brand marks (trade marks) when marking is applied on the labels of rendered cream-and-vegetable mix, for advertising or other purposes that could mislead consumers.

84. The names of milk ice-cream, cream ice, plombir, fermented milk ice-cream, ice-cream with milk fat substitute corresponding to the definitions established in Section II of this Technical Regulation shall be included in the marking (labeling) of these products. Where the marking (labeling) of ice-cream is applied on the front of the consumer package, a full name of the product is given in the same lettering.

It is not allowed to use definitions "milk," "cream ice", "plombir" in the names included in the marking (labeling) of an ice-cream which contains a milk-fat substitute.

85. Raw milk, raw skimmed milk, raw cream sold for processing to physical persons registered as individual entrepreneurs and to legal entities shall be accompanied by shipping documentation containing the following information:

a) name (raw milk, raw skimmed milk, raw cream):

b) identification indicators established in Annexes No. 6 and 7 to this Technical Regulation, if determinable;

c) name and location of the manufacturer of raw milk, raw skimmed milk, raw cream (legal address, including country, address of the production site of raw milk, raw skimmed milk, raw cream (if different from the legal address));

d) volume of raw milk, raw skimmed milk, raw cream (in l) or weight (in kg);

e) date and time (hours, minutes) when raw milk, raw skimmed milk, raw cream was shipped;

f) shipment temperature (°C) of raw milk, raw skimmed milk, raw cream;

g) number of lot of raw milk, raw skimmed milk, raw cream.

86. Consumer package of milk processing products shall have marking (labeling) with the following information:

a) name of milk processing product (in accordance with the definitions established in Section II and provisions of Section X of this Technical Regulation, meeting the requirements for their application set forth in this section);

b) mass fraction of fat (in percent) (except nonfat products, cheese, cheese products; processed cheeses, and processed cheese products);

mass fraction of fat in solids (in percent) for cheese, cheese products; processed cheeses, and processed cheese products.

For products made from whole milk, it is allowed that the mass fraction of fat is given in the range "from... to..." in percent, with an additional legible marking (labeling) showing, by any convenient method, a particular value of the mass fraction of fat for every lot.

For powdered adapted or partially adapted initial or follow-on milk baby formulas; powdered acidified milk formulas; powdered dairy drinks for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions)

for nutrition of infants and babies, it is allowed that the mass fraction of fat is specified in grams in the marking (labeling) text within the section "Nutritional Value."

c) mass fraction of milk fat (as a percentage of fat fraction) (for milk-containing products);

d) name and location of the manufacturer of milk-containing products (legal address, including country, address of the production site of milk-containing products (if different from the legal address)) and the organization authorized by the manufacturer to accept claims from consumers in the territory of the Customs Union, registered within the territory of the Customs Union;

e) brand mark (trade mark) (if any);

f) net weight or volume of milk-processing product (placed on the consumer package where it can be easily read);

g) content of milk-processing product specifying its components. In case when component is a food product consisting of two or more components, such food product is included in the section "Content" of the marking (labeling) text under its own name.

A milk product, forming part of the content of a dairy composite product and/or milk-containing product shall be mentioned, under its own name, in the section "Content." The data on content of such products include the names of food products, food additives (the group name, name or index "E", functional components used in the production process but not included in the contents of final product may be omitted), and flavorings (in compliance with the requirements of Technical Regulation of the Customs Union "Safety Requirements for Food Additives, Flavorings and Technological Aids" (TR TS 029/2012) adopted by Decision of the Council of the Eurasian Economic Commission No. 58 of July 20, 2012 (hereinafter – Technical Regulation of the Customs Union "Safety Requirements for Food Additives, Flavorings and Technological Aids" (TR TS 029/2012). The components of glaze content shall be specified in the section "Content" of the marking (labeling) text taking into account the requirements for the composite component.

The order of presenting data on a component of dairy products which is a multi-component food product, shall comply with the requirements of Technical Regulations of the Customs Union "On Food Products Labeling" (TR TS 022/2011) and "Safety Requirements for Food Additives, Flavorings and Technological Aids" (TR TS 029/2012).

h) nutritional value of milk processing products made from whole milk (it is allowed that the nutrition value is given in the range "from... to...");

i) level of microorganisms (lactic acid, bifidus bacteria and other probiotic microorganisms, as well as yeasts (if yeasts are included in the starter)) contained in the final fermented or cultured product (not heat treated after culturing) – colony-forming units in 1 g of the product ;

j) level of trace and macro-elements, vitamins and other substances used for the product enrichment contained in the final enriched product, showing the ratio between the amount of substances added to the product and their daily intake (if duly prescribed intake indicator is available), and specific data concerning product consumption (if necessary);

k) document that guided the manufacture of the products and can be used for their identification (it may be omitted for the products imported into the customs territory of the Customs Union from a third country).

87. The marking (labeling) of concentrated or condensed dairy products or dry (powdered) dairy products shall include the following additional information:

a) date of production (manufacturing) and the shelf life of the product (shown on the top or bottom of a can or package). When the shelf life is outlined by the words "best before" or "use before", next to these words the place where such information can be found shall be indicated, for example: "see on the top or bottom of the can in the first or second row" or "see on the top or bottom of the package." When the shelf life is outlined by the words "best during the period of" or "use by," next to these words the shelf life (month) and the following signature are put: "the date of production is shown on the top or bottom of the can in the first or second row" or "the date of production is shown on the top or bottom of the package."

b) type of sugars (sucrose, fructose, glucose, lactose) for concentrated (condensed) milk processing products with sugar (specified in the section "Content of Milk Processing Product" of the marking (labeling) text).

88. Where marking (labeling) is applied, it is allowed that information is placed on the coating of cheese and cheese products or their covering with the use of an indelible innoxious color or self-adhesive labels or by another method ensuring safety of the manufactured products.

89. Cheese and cheese products shall be marked with the following additional information:

a) species of the main starter microflora and (the text of marking (labeling) signature is composed by the manufacturer);

b) nature of the origin of the milk-clotting enzyme preparations.

90. Milk-based baby food that comply with the requirements established in Section X of this Technical Regulation and that are intended for nutrition of infants and babies shall be marked with the following additional information:

a) recommendations for the product use;

b) preparation conditions; conditions of storage and use of the product after opening of the consumer package;

c) age of children (shown in numbers without word abbreviations) for whom the products are intended:

from birth – adapted or partially adapted initial or follow-on milk baby formulas (including powdered ones and based on partially hydrolyzed proteins); powdered acidified milk formulas;

over (from, after) 6 months of age – adapted or partially adapted follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas;

over (from, after) 6 months of age – dairy beverages (including powdered ones) for infants and babies; curd and curd-based products;

over (from, after) 8 months of age – fluid milk (may be used for the preparation of supplemental foods for infants and babies over (from, after) 4 months of age; with age limitations shown on the label for products prescribed for intended use);

over (from, after) 8 months of age – fluid cream (may be used for the preparation of supplemental foods for infants and babies over (from, after) 6 months of age; with age limitations shown on the label for products prescribed for intended use);

over (from, after) 8 months of age - kefir, yoghurt and other fermented milk products;

d) product content (including names of the used vegetable oils and carbohydrates);

e) nutritional value of the product, including content of vitamins, minerals and caloric content (for enriched products – the percentage of daily requirements).

91. Packages of adapted or partially adapted initial or follow-on formulas (including powdered ones) shall carry the warning: "Breast feeding is preferable for infants and babies." Labels on breast milk substitutes shall have no pictures of babies.

92. Information on other milk products, dairy composite products, and milk-containing baby food intended for nutrition of pre-school or school-age children shall comply with the requirements established in p. 86 of this Technical Regulation.

93. Allowable deviations in dairy products' nutritional value from the actual nutritional value marked on the package or label should not exceed acceptable levels specified in Annex 16 to this

Technical Regulation. The levels of nutritional value of dairy products should be established using the weighted averages obtained by the computational method based on known values, or the weighted averages obtained from the manufacturer's examinations (tests) of dairy products, or by the computational method based on tabulated values taken from official sources, or by the computational method with an analysis of the nutritional value of the components used.

94. The amount of substances added to enriched dairy products shall be shown based on their content level at the end of the products' shelf life. Due to the natural reduction in the amount of vitamins in dairy products during their shelf life, the vitamin content level may be increased when making such products but by no more than 50 percent for fat-soluble vitamins and no more than 100 percent for water-soluble vitamins in relation to the declared parameters.

95. The name of product shall be specified on the front of the consumer package using the fonts of the same size of at least 9.5 lettering, and on consumer packages with a volume or weight of less than 100 ml (g) using the fonts of the same size of at least 8.5 lettering.

96. If all the necessary information cannot be shown on a label of the product's consumer package, some of the information shall be placed on an insert (except product name; fat mass fraction level; net weight or volume; date of production and shelf life or storage life, and manufacturer name), and the label on the consumer package shall have a signature: "Additional information – see insert."

#### XIII. Ensuring Conformity to Safety Requirements

97. Conformity of milk and dairy products to this Technical Regulation is ensured by meeting its requirements and the requirements of the technical regulations of the Customs Union applying to these products.

98. Methods of examinations (tests) and measurements are established in the standards according to the list of standards containing rules and methods of examinations (tests) and measurements, including rules of sampling required for the application and fulfillment of the requirements of this Technical Regulation and the assessment (confirmation) of conformity of the products.

#### XIV. Assessment (Confirmation) of Conformity of Milk and Dairy Products

99. Assessment (confirmation) of conformity of milk and dairy products to the requirements of this Technical Regulation is conducted in the following ways:

a) declaration of conformity;

b) state registration of baby food products – in accordance with the requirements of the Customs Union Technical Regulation "On Food Safety" (TR TS 021/2011);

c) state registration of milk products of new types – in accordance with the provisions of the Customs Union Technical Regulation "On Food Safety" (TR TS 021/2011);

d) veterinary-and-sanitary examination of raw milk, raw skimmed milk and raw cream supplied to establishments for further processing.

100. For products mentioned in p. 99, subparagraphs b) - d), of this Technical Regulation that passed the assessment (confirmation) of conformity to the requirements of this Technical Regulation, the adoption of a conformity declaration is not required.

101. Assessment (confirmation) of conformity of milk and dairy products from non-commercial production is performed in accordance with the legislation of a member-state.

102. Assessment (confirmation) of conformity of the production process, in particular the acceptance of raw milk, raw cream and raw skimmed milk, and/or their processing during the

production (manufacture) of dairy products, is performed before the launch of these processes (prior to the product's release into circulation) in a way of state registration of the production facilities in compliance with the requirements of the Customs Union Technical Regulation "On Food Safety" (TR TS 021/2011).

103. Assessment (confirmation) of conformity of the processes of production, storage, transportation and marketing (sales) of milk and dairy products to the requirements of this Technical Regulation is performed in the form of state control (surveillance).

104. Assessment (confirmation) of conformity of raw milk, raw skimmed milk and raw cream is conducted in the form of veterinary-and-sanitary examination in compliance with the requirements of this Technical Regulation and the requirements of the Customs Union Technical Regulation "On Food Safety" (TR TS 021/2011).

The following products are exempted from veterinary-and-sanitary examination:

raw milk, raw skimmed milk and raw cream when they are transported (relocated) within the same production facility and between production sites of the same business entity;

joined lots and parts of the lots of raw milk, raw skimmed milk and raw cream shaped up from the lots of raw milk, raw skimmed milk and raw cream subjected earlier to veterinary-and-sanitary examination.

105. Conformity of dairy products to the requirements of this Technical Regulation is declared by way of issuance of a declaration of conformity by the applicant based on self-provided proof and/or the evidences, received with the involvement of a third party, at the applicant's option.

106. Conformity of dairy products is declared according to one of the following declaration schemes:

a) declaration scheme 1e (for mass produced products) includes the following procedures:

compilation and review of technical documentation and evidence-based materials;

conducting of production control;

testing of samples of products;

issuance and registration of a declaration of conformity;

application of the unified mark of product circulation on the market of the Customs Union member-states.

The applicant undertakes all necessary measures to ensure that the process of production (manufacture) of dairy products is stable and provides for their conformity to the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto. The applicant compiles technical documentation and evidence-based materials and performs their review.

The applicant ensures that production control is conducted.

The applicant performs tests of samples of dairy products. Dairy product samples are tested in the applicant's testing laboratory (at the applicant's option, the tests of dairy product samples can be carried out at the accredited testing laboratory included in the Unified Register of Certification Agencies and Testing Laboratories (Centers) of the Customs Union).

The applicant executes a declaration on conformity of dairy products to this Technical Regulation which is issued according to the unified form and rules approved by Resolution of the Eurasian Economic Commission Board No. 293 of December 25, 2012.

The applicant marks the products with a unified mark of products circulation on the market of the Customs Union Member-States.

The period of validity of the declaration of conformity for mass produced dairy products is not more than 3 years.

b) declaration scheme 2e (for a lot of dairy products) includes the following procedures:

compilation and review of technical documentation and evidence-based materials;

testing of samples of products;

issuance and registration of a declaration of conformity;

application of the unified mark of product circulation on the market of the Customs Union member-states.

The applicant compiles technical documentation and evidence-based materials and performs their review.

The applicant performs tests of samples of dairy products to provide for confirmation of their conformity to the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto. Dairy product samples are tested in the applicant's testing laboratory (at the applicant's option, the tests of dairy product samples can be carried out at the accredited testing laboratory included in the Unified Register of Certification Agencies and Testing Laboratories (Centers) of the Customs Union).

The applicant executes a declaration on conformity of dairy products to this Technical Regulation which is issued according to the unified form and rules approved by Resolution of the Eurasian Economic Commission Board No. 293 of December 25, 2012.

The applicant marks the products with a unified mark of products circulation on the market of the Customs Union Member-States.

The period of validity of the declaration of conformity of dairy products corresponds to the shelf life of these dairy products;

c) declaration scheme 3e (for mass produced dairy products) includes the following procedures:

compilation and review of technical documentation and evidence-based materials;

conducting of production control;

testing of samples of products;

issuance and registration of a declaration of conformity;

application of the unified mark of product circulation on the market of the Customs Union member-states.

The applicant undertakes all necessary measures to ensure that the process of production (manufacture) of dairy products is stable and provides for their conformity to the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto. The applicant compiles technical documentation and evidence-based materials and performs their review.

The applicant ensures that production control is conducted.

The applicant performs tests of samples of dairy products to control whether the dairy products conform to the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto. Dairy product samples are tested at the accredited testing laboratory included in the Unified Register of Certification Agencies and Testing Laboratories (Centers) of the Customs Union).

The applicant executes a declaration on conformity of dairy products to this Technical Regulation which is issued according to the unified form and rules approved by Resolution of the Eurasian Economic Commission Board No. 293 of December 25, 2012.

The applicant marks the products with a unified mark of products circulation on the market of the Customs Union Member-States.

The period of validity of the declaration of conformity for mass produced dairy products is no more than 3 years.

d) declaration scheme 4e (for a lot of dairy products) includes the following procedures:

compilation and review of technical documentation and evidence-based materials;

testing of samples of products;

issuance and registration of a declaration of conformity;

application of the unified mark of product circulation on the market of the Customs Union member-states.

The applicant compiles technical documentation and evidence-based materials and performs their review.

The applicant performs tests of samples of dairy products to provide for confirmation of their conformity to the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto. Dairy product samples are tested at the accredited testing laboratory included in the Unified Register of Certification Agencies and Testing Laboratories (Centers) of the Customs Union.

The applicant executes a declaration on conformity of dairy products to this Technical Regulation which is issued according to the unified form and rules approved by Resolution of the Eurasian Economic Commission Board No. 293 of December 25, 2012.

The applicant marks the products with a unified mark of products circulation on the market of the Customs Union Member-States.

The period of validity of the declaration of conformity of dairy products corresponds to the shelf life of these dairy products;

e) declaration scheme 6e (for mass produced dairy products where the manufacturer has a HACCP-based certified safety and quality management system (HACCP – Hazard Analysis and Critical Control Points)) includes the following procedures:

compilation and review of technical documentation and evidence-based materials including a certificate of HACCP-based safety and quality management system;

conducting of production control;

testing of samples of dairy products;

issuance and registration of a declaration of conformity;

application of the unified mark of product circulation on the market of the Customs Union member-states.

The applicant undertakes all necessary measures to ensure that the process of production (manufacture) of dairy products is stable and provides for their conformity to the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto. The applicant compiles technical documentation and evidence-based materials and performs their review.

The applicant ensures that production control is conducted.

The applicant performs tests of samples of dairy products to control whether the dairy products conform to the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto. Dairy product samples are tested at the accredited testing laboratory included in the Unified Register of Certification Agencies and Testing Laboratories (Centers) of the Customs Union).

The applicant executes a declaration on conformity of dairy products to this Technical Regulation which is issued according to the unified form and rules approved by Resolution of the Eurasian Economic Commission Board No. 293 of December 25, 2012.

The applicant marks the products with a unified mark of products circulation on the market of the Customs Union Member-States.

The period of validity of the declaration of conformity for mass produced dairy products is no more than 5 years.

107. Evidence-based materials used as a basis for accepting a declaration of conformity include the following:

a) reports on the examinations (tests) proving fulfillment of the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applicable to dairy products.

b) copies of the documents proving state registration as a legal entity or physical person registered in the capacity of individual entrepreneur;

c) safety and quality management system certificates (if available (except for scheme 6e);

d) other documents, at the manufacturer's option, that have served as a basis to confirm conformity of the dairy products to the requirements of this Technical Regulation and the requirements of the other technical regulations of the Customs Union applying thereto.

e) contract (shipment agreement) or shipping documentation (if any) – for confirmation for a lot of dairy products according to schemes 2e and 4 e.

108. Where conformity is declared according to schemes 1e, 3e and 6e, the applicants may include legal entities or physical persons acting in the capacity of individual entrepreneurs, registered in accordance with the legislation of a member-state in its territory, who are manufacturers or perform functions of foreign manufacturers of dairy products based on the contract with them as to ensure that supplied products conform to the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto.

Where conformity is declared according to schemes 2e and 4e, the applicants may include legal entities or physical persons acting in the capacity of individual entrepreneurs, registered in accordance with the legislation of a member-state in its territory, who are manufacturers or sellers, or perform functions of foreign manufacturers of dairy products based on the contract with them as to ensure that supplied products conform to the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto.

109. Sets of documents that have served as a basis for accepting a declaration of conformity shall be kept:

for confirming the conformity of mass produced products – at least 10 years from the date of termination of the period of validity of the declaration of conformity;

for confirming the conformity of a lot of products - at least 5 years from the date of sales of the last item from the lot.

110. State control (surveillance) over compliance of milk and dairy products, the processes of their production, storage, transportation and marketing (sales) with the requirements of this Technical Regulation is conducted in accordance with the legislation of a member-state.

## XV. Marking with a Unified Mark of Products Circulation on the Market of the Customs Union Member-States

111. Milk and dairy products that comply with the requirements of this Technical Regulation and have passed the assessment (confirmation) of conformity to the requirements established in Section XIV of this Technical Regulation shall be marked with a unified mark of products circulation on the market of the Customs Union Member-States.

112. Marking with a unified mark of products circulation on the market of the Customs Union Member-States is performed prior to release of milk and dairy products into circulation.

113. The unified mark of products circulation on the market of the Customs Union Member-States is applied on the package by any method ensuring its clear and readable appearance throughout the shelf life of milk and dairy products. For milk in transportation packs, e.g. tank vehicles, the application of the unified mark of products circulation on the market of the Customs Union Member-States in shipping documents is allowed.

114. For unpacked raw milk, raw skimmed milk, and raw cream sold for processing by legal entities and physical persons registered in the capacity of individual entrepreneurs, the marking with the unified mark products circulation on the market of the Customs Union Member-States is made on the shipping documentation.

#### XVI. Safeguard Clause

115. The authorized agencies of the Customs Union member-states must take all measures to restrict and prohibit the release into circulation in the customs territory of the Customs Union and withdraw from the market milk and dairy products that do not meet the requirements of this Technical Regulation and the technical regulations of the Customs Union applying thereto.

In this case, the authorized agency of the State, a member of the Customs Union, shall notify the authorized agencies of other member-states on the made decision giving the reason for its adoption and providing evidences explaining the need for this measure.

ANNEX No. 1 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

# Physical-and-chemical and microbiological indicators for the identification of milk processing products

Table 1

Fluid milk, liquid and structured dairy composite products, fermented milk products, condensed milk products, dry (powdered milk products)

|   |                    | Mass fraction range   | , %   |  |  |  |
|---|--------------------|---|---|--|--|--|
| Name of milk processing product                               | Fat                | protein, not below<br>(for dairy<br>composite products<br>– in milk basis)  | MSNF <sup>*</sup> , not<br>below<br>(for dairy<br>composite<br>products – in<br>milk basis) | Lactic acid microorganisms, probiotic microorganisms, yeasts |  |  |
| 1   | 2                  | 3   | 4   | 5  |  |  |
| Fluid milk  | 0.1 –<br>9.9       | 2.8 (for milk with<br>the mass fraction of<br>fat above<br>4 percent – 2,6) | 8   | _  |  |  |
| Dairy drink (beverage)  | 0.1 – 6            | 2.6   | 7.4   | _  |  |  |
| Dairy cocktail, drink, jelly, pudding, mousse, paste, souffle | 0.1 –<br>9.5       | _   | _   | _  |  |  |
| Fluid cream, including sterilized<br>Fluid cream, high-fat    | 10 - 34<br>35 - 58 | 1.8 - 2.6<br>1.2  | 5.2 - 8<br>3.6  |  |  |  |

|                                 | Mass fraction range, % |  |   |  |
|---------------------------------|------------------------|--|---|--|
| Name of milk processing product | Fat                    | protein, not below<br>(for dairy<br>composite products<br>– in milk basis) | MSNF <sup>*</sup> , not<br>below<br>(for dairy<br>composite<br>products – in<br>milk basis) | Lactic acid microorganisms, probiotic microorganisms, yeasts |
| 1                               | 2                      | 3  | 4   | 5  |

| Fermented milk products <sup>**</sup> , except<br>ayran, yoghurt, sour cream, curd,<br>including products with bifidum<br>bacteria and other probiotic<br>microorganisms | 0.1 –<br>9.9 | 2.8<br>(for product with<br>the mass fraction of<br>fat above<br>4 percent – 2.6 | not below 7.8   | Lactic acid microorganisms - not less<br>than 1x10 <sup>7</sup> CFU <sup>***/</sup> cm <sup>3</sup> (g).<br>For products enriched with bifidum<br>bacteria and other probiotic<br>microorganisms, including yoghurt,<br>bifidum bacteria and/or other probiotic<br>microorganisms – |
|--|--------------|--|---|---|
| Yoghurt  | 0.1 –<br>10  | 3.2****  | not below<br>9.5 <sup>****</sup>                              | not below 1x10 <sup>6</sup> CFU/cm <sup>3</sup> (g) <sup>**</sup> .<br>Yeasts by the end of shelf life, not less<br>than:<br>For ayran, kefir –<br>1x10 <sup>4</sup> CFU/cm <sup>3</sup> (g), for kumiss – 1x10 <sup>5</sup><br>CFU/cm <sup>3</sup> (g)                             |
| Sour cream and sour-cream-based products   | 10 - 58      | 1.2  | 3.6   | Lactic acid microorganisms for sour<br>cream – not below<br>$1x10^7$ CFU/cm <sup>3</sup> (g)  |
| Curd (except curd made with the use<br>of ultra-filtration, separation and<br>granular curd)   | 0.1 –<br>35  | 12<br>For curd with the<br>mass fraction of fat<br>above 18 % – 8                | 13.5<br>For curd with<br>the mass<br>fraction of fat<br>above | Lactic acid microorganisms for curd –<br>not below<br>1x10 <sup>6</sup> CFU/cm <sup>3</sup> (g)   |

|  |                     | Mass fraction range  | 2, %  |   |
|--|---------------------|--|---|---|
| Name of milk processing product              | Fat                 | protein, not below<br>(for dairy<br>composite products<br>– in milk basis) | MSNF <sup>*</sup> , not<br>below<br>(for dairy<br>composite<br>products – in<br>milk basis) | Lactic acid microorganisms, probiotic microorganisms, yeasts  |
| 1  | 2                   | 3  | 4   | 5   |
|  |                     |  | 18 % - 10   |   |
| Curd made with the use of ultra-             | 0.1 –               | 7  | 10  | Microflora typical for curd starters; a   |
| filtration, separation                       | 25                  |  |   | lack of cells of foreign microorganisms   |
| Granular curd                                | Not                 | 8  | —   | Microflora typical for curd starters; a   |
|  | above<br>25         |  |   | lack of cells of foreign microorganisms   |
| Curd mass                                    | Not<br>below<br>0.1 | 6  | _   | Microflora typical for curd starters; a lack of cells of foreign microorganisms                             |
| Curd products*****                           | 0.1 –<br>35         | _  | _   | Microflora typical for curd starters; a<br>lack of cells of foreign microorganisms<br>(except heat treated) |
| Sterilized milk, condensed<br>(concentrated) | 0.2 –<br>16         | 6  | 11.5  | _   |
| Condensed milk with sugar                    | 0.2 –<br>16         | 5  | 12  | _   |
| Condensed cream with sugar                   | 19.0 –<br>20.0      | 6  | 18  | _   |

|                                 | Mass fraction range, % |  |   |  |
|---------------------------------|------------------------|--|---|--|
| Name of milk processing product | Fat                    | protein, not below<br>(for dairy<br>composite products<br>– in milk basis) | MSNF <sup>*</sup> , not<br>below<br>(for dairy<br>composite<br>products – in<br>milk basis) | Lactic acid microorganisms, probiotic microorganisms, yeasts |
| 1                               | 2                      | 3  | 4   | 5  |
| Dry (powdered) milk             | 0.1 –<br>41.9          | 18   | 53.1  | _  |
| Dry (powdered) cream            | 42 - 74                | 7 - 18   | 21 - 55   | _  |
| High-fat cream                  | 75 - 80                | 5  | 15  | _  |
| Dry milk whey                   | not<br>above<br>2      | not below 10   | not below 92  | _  |

<sup>\*</sup>MSNF – milk solids non-fat

\*\* For fermented milk products for feeding infants, as well as children of pre-school and school age – in accordance with Annexes No. 2 and 11 to the Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013).

\*\*\* CFU – colony-forming units

\*\*\*\*\*For dairy composite products the mass fraction of protein, % – not below 2.8.

\*\*\*\*\*\* For dairy composite products the mass fraction of MSNF, % – not below 8.5.

\*\*\*\*\*\* Indicators of the identification of curd products are regulated in the regulatory or technical documents, or in the entity's standards.
Butter and butter paste from cow's milk

| Butter name                               | Mass              | fraction, %   |      | Titratable acidity of milk plasma of the product, $^{\circ}T$ |                   |  |
|---|-------------------|---------------|------|---|-------------------|--|
| Butter fiame                              | fat               | moisture      | salt | sweet cream butter  | sour cream butter |  |
| 1   | 2                 | 3             | 4    | 5   | 6                 |  |
| Rendered butter                           | not below 99      | not above 1   | _    | _   | _                 |  |
| Cream butter, including:                  |                   |               |      |   |                   |  |
| Sweet cream and sour cream butter         | _                 | _             | _    | not above 30  | 40 - 65           |  |
| unsalted                                  | 50 and more       | 14 – 46       | _    | _   | _                 |  |
| salted                                    | 50 and more       | 13 – 45       | 1    | _   | _                 |  |
| with components                           | 50 - 69           | 16-45         | _    | _   | _                 |  |
| Butter paste, sweet cream and sour cream: | _                 | _             | _    | not above 33  | 40 - 65           |  |
| unsalted                                  | 39 – 49           | 56 - 47       | _    | _   | -                 |  |
| salted                                    | 39 – 49           | 55 - 46       | 1    | _   | -                 |  |
| with components                           | 39 – 49           | 40 - 55       | _    | _   | _                 |  |
| Milk fat                                  | not below<br>99.8 | not above 0.2 | _    | _   | _                 |  |

| Product name                            | Mass<br>fraction of<br>total fat, % | Mass fraction<br>of milk fat in<br>fat phase, % | Mass fraction of<br>linoleic acid in the fat<br>extracted from the<br>product, % | Mass fraction of trans-isomers of<br>oleic acid in the fat extracted from<br>the product, calculated as<br>methylelaidate,<br>% | Fat melting<br>temperature °C,<br>not above |
|---|-------------------------------------|---|--|---|---|
| 1                                       | 2                                   | 3   | 4  | 5   | 6   |
| Cream-and-<br>vegetable<br>spread       | 39 - 95                             | not below 50                                    | 10 - 35  | 8   | 36  |
| Rendered<br>cream-and-<br>vegetable mix | not below<br>99                     | not below 50                                    | 10 - 35  | 8   | 36<br>Table 4                               |

Cheese, cheese product

|                                   |   | Mass fra             | ction, %            |                   |
|-----------------------------------|---|----------------------|---------------------|-------------------|
| Product name                      | moisture moisture in fat-free substance |                      | fat in solids       | salt              |
| 1                                 | 2                                       | 3                    | 4                   | 5                 |
| Dry cheese, cheese product        | 2-10                                    | below 15             | 1 – 40<br>inclusive | 2-6               |
| Extra-hard cheese, cheese product | 30 - 35                                 | below 51             | 1-60 and more       | 1-3 inclusive     |
| Hard cheese, cheese product       | 40-42                                   | 49 – 56<br>inclusive | 1-60 and more       | 0,5-2,5 inclusive |

| Semi-hard cheese, cheese product | 36 – 55<br>inclusive | 54 – 69<br>Inclusive | 1-60 and more   | 0,2-4 inclusive                              |
|----------------------------------|----------------------|----------------------|-----------------|--|
| Soft cheese, cheese product      | above 55 – 80        | 67 and more          | 1 – 60 and more | 0-5<br>For pickled cheese –<br>2-7 inclusive |

# Processed cheese, processed cheese product

|   |                    |                      | Mass fraction, %                   |                                  |
|---|--------------------|----------------------|------------------------------------|----------------------------------|
| Product name                                      | fat in dry solids  | moisture             | Cooking salt (except sweet cheese) | sucrose<br>(for sweet<br>cheese) |
| 1   | 2                  | 3                    | 4                                  | 5                                |
| Processed cheese (cheese product), chunk          | Up to 65 inclusive | 35 – 70<br>inclusive | 0.2 - 4 inclusive                  | Up to 30 inclusive               |
| Processed cheese (cheese product), paste-<br>like | 20 – 70 inclusive  | 35 – 70<br>inclusive | 0.2 - 4 inclusive                  |                                  |
| Processed cheese (cheese product), dry            | Up to 51 inclusive | 3 – 7<br>inclusive   | 2 – 5 inclusive                    |                                  |

Table 6

Table 5

## Ice-cream

| Mass fracti |           | on,%    | Mass fraction, %, not below |        | Acidity <sup>**</sup> °T not | Overrup       |
|-------------|-----------|---------|-----------------------------|--------|------------------------------|---------------|
| Types       | Milk fat  | MSNF *  | Sucrose or total sugar      | Dry    | above                        | Overrun,<br>% |
|             | WIIIK Itt | 1010111 | (except lactose)            | solids | ubove                        | 70            |

| 1                        | 2                           | 3           | 4    | 5  | 6  | 7           |
|--------------------------|-----------------------------|-------------|------|----|----|-------------|
| Plombir                  | Not below 12                | 7 – 10      | 14   | 36 | 21 | 30 -<br>130 |
| Cream                    | 8 - 11.5                    | 7 – 11      | 14   | 32 | 22 | 30 –<br>110 |
| Milk                     | Not above 7.5               | 7 – 11.5    | 14.5 | 28 | 23 | 30 –<br>90  |
| Sour milk                | Not above<br>7.5            | 7 –<br>11.5 | 17   | 28 | 90 | 30 -<br>90  |
| With milk fat substitute | Not above 12 <sup>***</sup> | 7 - 11      | 14   | 29 | 22 | 30 –<br>110 |

Notes: 1. Indicators for the identification of dairy composite products, milk-containing products are established by the national standards, technical documents, or by the entity's standards.

2. The indicator "Mass fraction of MSNF, %) is not a compulsory regulated or controlled parameter and is established at the manufacturer's discretion.

\* MSNF – milk solids non-fat.

\*\*Acidity of ice-cream with food and flavoring components is established by the national standards, technical documents, or by the entity's standards.

\*\*\*\*Mixes of milk and vegetable fat.

ANNEX No. 2 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

Permissible levels of microorganisms in milk-based products for baby foods, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (beverages) (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies, including products made at the dairy kitchens

|                                  |  | Product vo | olume (amoun                                    | t), $cm^3$ (g) where no  | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|------------|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | 0 1        | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3          | 4   | 5  | 6                                   | 7  | 8   | 9    |

I. Adapted milk baby formulas

| <ol> <li>Dry ready-<br/>made milk<br/>baby</li> </ol> | 2x10 <sup>3</sup><br>(for formulas<br>reconstituted | 1 | 10 | 100 | 10 | 100 | Y –<br>10<br>M – |
|---|---|---|----|-----|----|-----|------------------|
| •   |   |   |    |     |    |     |                  |
| formulas  | at the  |   |    |     |    |     | 50               |
|   | temperature   |   |    |     |    |     |                  |
|   | of 37–50 °C),                                       |   |    |     |    |     |                  |
| Non-  | $3x10^{3}$  |   |    |     |    |     |                  |
| acidified,  | (or formulas  |   |    |     |    |     |                  |

|                                  |  | Product v                                  | olume (amou                                     | nt), cm <sup>3</sup> (g) where n   | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|--|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3  | 4   | 5  | 6                                   | 7  | 8   | 9    |
| acidified                        | reconstituted  |  |   |  |                                     |  | •   |      |

reconstituted at the temperature of 70 − 85 °C). In acidified formulas: Acidophilic microorganis ms – not below  $1 \times 10^7$ (where made with their use), bifidum bacteria – not below  $1 \times 10^{6}$ (where made with their use), Lactic acid microorganis

|                                  |  | Product vo | olume (amoun                                    | (t), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|------------|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | 0 1        | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3          | 4   | 5  | 6                                   | 7  | 8   | 9    |

ms not below  $1x10^7$ (with the addition after drying), Lactic acid microorganis ms not below  $1x10^2$ (without the addition after drying)

2. Liquid milk baby formulas produced with ultrapasteurizatio n, with aseptic filling

Industrial sterility requirements :

a) after thermostatic holding at the

|                                  |  | Product vo                                 | olume (amoun                        | t), $cm^3$ (g) where no  | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|--|-------------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3  | 4                                   | 5  | 6                                   | 7  | 8   | 9    |

temperature of 37°C for 3 – 5 days – a lack of visible defects or deterioration indices (package buckling, appearance changes, etc.), a lack of taste or texture changes; in microscopic slides – a lack of bacterial cells b) after thermostatic

|  |  | Product v                                  | olume (amour                        | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |   |
|--|--|--|-------------------------------------|--|-------------------------------------|--|---|---|
| Product,<br>group of<br>products                 | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note  |
| 1  | 2  | 3  | 4                                   | 5  | 6                                   | 7  | 8   | 9   |
|  |  |  |                                     |  |                                     |  |   | holding the<br>following<br>changes are<br>allowed:<br>titratable<br>acidity –<br>no more<br>than by<br>2°T<br>QMAFAn<br>M –<br>not above<br>10<br>CFU/cm <sup>3</sup><br>(g) |
| 3. Liquid<br>acidified milk<br>baby<br>formulas, | Lactic acid<br>microorganis<br>ms<br>– not below                     | 3  | 10                                  | 50   | 10                                  | -  | Y -<br>10<br>M -<br>10  |   |

|  |  | Product v                                  | olume (amour                                    | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |      |
|--|--|--|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g),   | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1  | 2  | 3  | 4   | 5  | 6                                   | 7  | 8   | 9    |
| with aseptic<br>filling,<br>including<br>those with<br>the use of<br>acidophilic<br>microorganis<br>ms or<br>bifidum<br>bacteria | $1 \times 10^7$ ,<br>acidophilic<br>microorganis<br>ms –<br>not below<br>$1 \times 10^7$ (where<br>made with<br>their use),<br>bifidum<br>bacteria –<br>not below<br>$1 \times 10^6$<br>(where made<br>with their use) |  | II. Partly ad                                   | dapted milk baby fo  | rmulas                              |  |   |      |
| 4. Ready-  | $2x10^{3}$ (for  | 1  | 10  | 100  | 10                                  | 100  | Y –   |      |
| 4. Ready-<br>made<br>formulas  | formulas<br>reconstituted<br>at the<br>temperature<br>of   | 1  | 10  | 100  | 10                                  | 100  | 10<br>M –<br>50   |      |

|   |   | Product v                                  | olume (amour                    | nt), cm <sup>3</sup> (g) where no  | ot allowed                          |  | Yeasts  |      |
|---|---|--|---------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products                            | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g),  | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1   | 2   | 3  | 4                               | 5  | 6                                   | 7  | 8   | 9    |
|   | $37 - 50 \ ^{\circ}\text{C}$ ),<br>$3x 10^{3}$ (for<br>formulas<br>reconstituted<br>at the<br>temperature<br>of<br>$70 - 85 \ ^{\circ}\text{C}$ ) |  |                                 |  |                                     |  |   |      |
| 5. Formulas<br>requiring heat<br>treatment                  | 2,5x10 <sup>4</sup>   | 1  | _                               | 50   | 1                                   | 200  | Y –<br>50,<br>M –<br>100  |      |
| 6. Milk-based<br>baby<br>formulas                           | $1 \times 10^{2}$   | 10   | 10                              | 100  | 10                                  | _  | _   |      |
| Adapted,<br>sterilized,<br>made at the<br>dairy<br>kitchens |   |  |                                 |  |                                     |  |   |      |

|                                  |  | Product vo | olume (amoun                                    | t), $cm^3$ (g) where no  | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|------------|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | 0 1        | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes* | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3          | 4   | 5  | 6                                   | 7  | 8   | 9    |

III. Sterilized milk and cream

| 7. Milk and<br>cream,<br>sterilized,<br>ultra-<br>sterilized, | Industrial<br>sterility<br>requirements<br>: |
|---|--|
| ultra-  | a) after                                     |
| pasteurized   | thermostatic                                 |
| with aseptic  | holding at                                   |
| filling,  | the  |
| including   | temperature                                  |
| enriched milk   | of $37^{\circ}C$ – for                       |
|   | 3 – 5 days,                                  |
|   | a lack of                                    |
|   | visible                                      |
|   | defects or                                   |
|   | deterioration                                |
|   | indices                                      |
|   | (package                                     |
|   | buckling,                                    |
|   | appearance                                   |

|                                  |  | Product vo | olume (amour                        | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|------------|-------------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | 0 1        | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3          | 4                                   | 5  | 6                                   | 7  | 8   | 9    |

changes, etc.), a lack of taste or texture changes; b) after

b) after thermostatic holding the following is allowed:

> changes in titratable acidity – no more than by 2°T; QMAFAn M – not

|   |   | Product v                                  | olume (amour                    | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |  |
|---|---|--|---------------------------------|--|-------------------------------------|--|---|--|
| Product,<br>group of<br>products  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g),    | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note   |
| 1   | 2   | 3  | 4                               | 5  | 6                                   | 7  | 8   | 9  |
| 8. Sterilized<br>milk, cream,<br>made at the<br>dairy<br>kitchens, with<br>non-aseptic<br>filling | 1x10 <sup>2</sup>   | 10   | 10                              | 100  | 10                                  | _  | _   | above 10<br>CFU/cm <sup>3</sup><br>(g)<br>c)<br>microscopic<br>slide – a lack<br>of microbial<br>cells |
| 9. Liquid<br>fermented<br>milk products,<br>including<br>those with the                           | Lactic acid<br>microorganis<br>ms<br>– not below<br>1x10 <sup>7</sup> , | 3  | IV. Fei<br>10                   | mented milk production 50  | ets<br>10                           | -  | Y -<br>10<br>M -<br>10  |  |

|   |   | Product v                                  | olume (amour                        | nt), $cm^3$ (g) where n  | ot allowed                          |  | Yeasts  |      |
|---|---|--|-------------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g),  | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1   | 2   | 3  | 4                                   | 5  | 6                                   | 7  | 8   | 9    |
| use of<br>acidophilic<br>microorganis<br>ms or bifidum<br>bacteria                                      | acidophilic<br>microorganis<br>ms –<br>not below<br>$1 \times 10^7$ (where<br>made with<br>their use),<br>bifidum<br>bacteria<br>– not below<br>$1 \times 10^6$ (where<br>made with<br>their use) |  |                                     |  |                                     |  | For<br>kefir<br>Y–<br>1x10 <sup>4</sup>                                     |      |
| 10. fermented<br>milk products,<br>made at the<br>dairy<br>kitchens,<br>with non-<br>aseptic<br>filling | acidophilic<br>microorganis<br>ms –<br>not below<br>1x10 <sup>7</sup><br>(where made<br>with their<br>use),<br>Bifidum  | 3  | 10                                  | 50   | 10                                  | _  | _   |      |

|                                  |  | Product vo                                 | olume (amour                    | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |      |
|----------------------------------|--|--|---------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3  | 4                               | 5  | 6                                   | 7  | 8   | 9    |

bacteria – not below  $1 \times 10^{6}$ (where made with their use)

# V. Curd, curd products

| 11. Curd, curd<br>products  | Microflora,<br>typical for<br>curd starters,<br>a lack of<br>foreign<br>microbial<br>cells | 0.3 | 1 | 50 | 1 | _ | Y -<br>10<br>M -<br>10 |
|---|--|-----|---|----|---|---|------------------------|
| 12. Curd, curd<br>products<br>Acidophilic<br>paste, low-<br>lactose<br>protein paste<br>made at the | Microflora,<br>typical for<br>curd starters,<br>a lack of<br>foreign<br>microbial<br>cells | 0.3 | _ | 50 | 1 | - | -                      |

|   |  | Product ve                                 | olume (amour                                    | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |      |
|---|--|--|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g),   | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1   | 2  | 3  | 4   | 5  | 6                                   | 7  | 8   | 9    |
| dairy kitchens<br>13. Calcium-<br>supplemented<br>curd made at<br>the dairy<br>kitchens | 100  | 1  | _   | 50   | 1                                   | _  | _   |      |
|   |  |  | VI. Dry (pov                                    | vdered) milk for bab   | y foods                             |  |   |      |
| 14. Dry milk<br>for<br>baby foods   | 2.5x10 <sup>4</sup>  | 1  |   | 25   | 1                                   | _  | Y -<br>50<br>M -<br>100   |      |
| 15. Ready-<br>made dry<br>milk for<br>baby foods  | $2x10^{3}$<br>(for formulas<br>reconstituted<br>at 37 –<br>50 °C),<br>$3x10^{3}$<br>(for formulas<br>reconstituted<br>at | 1  | 10  | 100  | 10                                  | 100  | Y –<br>10<br>M –<br>50  |      |

|   |  | Product v                                  | olume (amour                                    | nt), cm <sup>3</sup> (g) where n   | ot allowed                          |  | Yeasts   |      |
|---|--|--|---|--|-------------------------------------|--|--|------|
| Product,<br>group of<br>products  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes* | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU/<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1   | 2  | 3  | 4   | 5  | 6                                   | 7  | 8  | 9    |
|   | 70 – 85 °C)  |  |   |  |                                     |  |  |      |
| 16. Dry milk<br>for<br>baby foods<br>requiring<br>heat<br>treatment                 | 2.5x10 <sup>4</sup>  | 1  | _   | 50   | 1                                   | 200  | Y –<br>50<br>M –<br>100  |      |
|   |  |  | VII   | . Pasteurized milk   |                                     |  |  |      |
| 17. Pasteurize<br>d milk,<br>including that<br>with the shelf<br>life above 72<br>h | 1.5x10 <sup>4</sup>  | 0.1  | 1   | 50   | 1                                   | 25   | _  |      |
|   | VIII. Di   | ry (powdered) a                            | nd liquid dair                                  | y drinks for children  | n from 6 moths to                   | o 3 years of age   |  |      |
| 18. Liquid<br>dairy drinks<br>for children<br>from 6 moths                          | 1.5x10 <sup>4</sup>  | 0.1  | 1   | 50   | 1                                   | _  | Y -<br>50<br>M -<br>50   |      |

|                                  |  | Product vo                                 | Product volume (amount), $cm^3$ (g) where not allowed |  |                                     |  | Yeasts  |      |
|----------------------------------|--|--|---|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli****                   | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3  | 4   | 5  | 6                                   | 7  | 8   | 9    |

to 3 years of age

# IX. Follow-on milk baby formulas

| 19. Follow-<br>on milk baby<br>formulas,<br>instant<br>(ready-made)                               | $2x10^{3}$<br>(for formulas<br>reconstituted<br>at 37 –<br>50 °C),<br>$3x10^{3}$<br>(for formulas<br>reconstituted<br>at 70 – 85 °C) | 1 | 10 | 100 | 10 | 100 | Y –<br>10<br>M –<br>50  |
|---|--|---|----|-----|----|-----|-------------------------|
| 20. Follow-on<br>milk baby<br>formulas,<br>requiring heat<br>treatment<br>after<br>reconstitution | 2.5x10 <sup>4</sup>  | 1 | _  | 50  | 1  | _   | Y –<br>50<br>M –<br>100 |

|  |  | Product v                                  | olume (amour                        | nt), cm <sup>3</sup> (g) where no  | ot allowed                          |  | Yeasts  |  |
|--|--|--|-------------------------------------|--|-------------------------------------|--|---|--|
| Product,<br>group of<br>products                                 | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note   |
| 1  | 2  | 3  | 4                                   | 5  | 6                                   | 7  | 8   | 9  |
|  |  |  | X. Dry (                            | powdered) milk cere  | eals                                |  |   |  |
| 21. Dry<br>(powdered)<br>milk cereals<br>instant<br>(ready-made) | 1x10 <sup>4</sup>  | 1  | _                                   | 50   | 1                                   | 2x10 <sup>2</sup>  | Y –<br>50<br>M –<br>100   |  |
| 22. Dry<br>(powdered)<br>milk cereals<br>requiring<br>boiling    | 5x10 <sup>4</sup>  | 0,1  | _                                   | 50   | _                                   | _  | Y –<br>100<br>M –<br>200  |  |
|  |  |  | XI. Rea                             | dy-to-use milk cerea   | als                                 |  |   |  |
| 23. Ready-to-<br>use milk<br>cereals,<br>sterilized              |  |  |                                     |  |                                     |  |   | Industrial<br>sterility<br>requirements<br>:<br>a) after |

a) after thermostatic

|                                  | Product volume (amount), cm <sup>3</sup> (g) where not allowe        |  |                                 |  |                                     |  | Yeasts  |      |
|----------------------------------|--|--|---------------------------------|--|-------------------------------------|--|---|------|
| Product,<br>group of<br>products | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1                                | 2  | 3  | 4                               | 5  | 6                                   | 7  | 8   | 9    |

holding at the temperature of 37 °C for 3 – 5 days, a lack of visible defects or deterioration indices (package buckling, change of appearance, etc.), a lack of taste or texture changes;

b) after thermostatic holding the following

|   |  | Product v                                  | olume (amour                        | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts  |   |
|---|--|--|-------------------------------------|--|-------------------------------------|--|---|---|
| Product,<br>group of<br>products                                      | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli**** | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU /<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note  |
| 1   | 2  | 3  | 4                                   | 5  | 6                                   | 7  | 8   | 9   |
|   |  |  |                                     |  |                                     |  |   | changes are<br>allowed:<br>titratable<br>acidity –<br>no more<br>than by<br>2°T;<br>QMAFAn<br>M – not<br>above 10<br>CFU/cm <sup>3</sup><br>(g) |
| 24. Ready-to-<br>use milk<br>cereals made<br>at the dairy<br>kitchens | $1 \times 10^{3}$  | 1  | _                                   | 50   | 1                                   | -  | -   |   |

XIII. Low-lactose and lactose-free products

|  |  | Product v                                  | olume (amour                                    | nt), $cm^3$ (g) where no   | ot allowed                          |  | Yeasts   |      |
|--|--|--|---|--|-------------------------------------|--|--|------|
| Product,<br>group of<br>products                 | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /cm <sup>3</sup><br>(g), | E.coli<br>group<br>bacteria<br>(coliforms) | Escherich<br>ia spp.<br>E. coli <sup>****</sup> | Pathogenic,<br>including<br>salmonella and<br>listeria spp. L.<br>monocytogenes <sup>*</sup> | Staphylococc<br>us spp.<br>S.aureus | Bacteria<br>B. cereus,<br>CFU <sup>**</sup> /cm <sup>3</sup> (<br>g),<br>not above | (Y),<br>mould<br>s (M),<br>CFU/<br>cm <sup>3</sup><br>(g),<br>not<br>above | Note |
| 1  | 2  | 3  | 4   | 5  | 6                                   | 7  | 8  | 9    |
| 25. Low-<br>lactose<br>products <sup>*****</sup> | 2x10 <sup>3</sup>  | 1  | _   | 100  | 10                                  | 100  | Y –<br>50<br>M –<br>100  |      |
| 26. <sup>L</sup> lactose-<br>free products       | 2x10 <sup>3</sup>  | 1  | 10  | 100  | 10                                  | 100  | Y –<br>50<br>M –<br>10   |      |
|  |  |  | XIV. Dry d                                      | airy high-protein pro  | oducts                              |  | 10   |      |
| 27. Dry dairy<br>high-protein<br>products        | 2,5x10 <sup>4</sup>  | 0,3  | _   | 50   | 1                                   | _  | Y –<br>50<br>M –<br>100  |      |
|  |  |  | XV. Dr  | y milk-based produc  | cts                                 |  |  |      |
| 28. Dry milk-<br>based<br>products               | -  | 0,3  | _   | 50   | 1                                   | _  | Y –<br>50<br>M –<br>100  |      |

<sup>\*</sup>QMAFAnM – Quantity of mesophilic aerobic and facultative anaerobic microorganisms.

\*\*CFU – colony-forming units

\*\*\*\*Coliforms – Escherichia coli group bacteria

\*\*\*\*\*For dry adapted milk baby formulas – for the formulas intended for nutrition of children from the first days of life to 6 months of age and from 0 to 12 months of age – where controlled for E.coli and pathogenic microorganisms, including salmonella, and where Enterobacteriaceae bacteria not related to E.coli or salmonella are found in the normative product mass, a lack of the pathogenic microorganism E.sakazakii in 300 g of the product is controlled.

For dry milk ready-made cereals – where cereals intended for nutrition of children under 6 months of age are controlled for pathogenic microorganims, including salmonella, and where Enterobacteriaceae bacteria not related to salmonella are found in the normative product mass, a lack of the pathogenic microorganism E.sakazakii in 300 g of the product is controlled.

For dry dairy high-protein products – where salmonella and Enterobacteriaceae bacteria not related to salmonella are found in the normative mass of the product intended for children under 6 months, a lack of the pathogenic microorganism E.sakazakii in 300 g of the product is controlled.

For milk-based baby formulas – reconstituted, pasteurized, made at the dairy kitchens that are intended for children under 6 months, where controlled for E.coli and pathogenic microorganisms, including salmonella, and where Enterobacteriaceae bacteria not related to E. coli or salmonella are found in the normative product mass, a lack of the pathogenic microorganism E.sakazakii in 300 g of the product is controlled.

Where dry milk-based baby food products are made (formulas, drinks, dry milk) and where staphylococci are found in the normative product mass, a lack of staphylococcus enterotoxins is controlled (not allowed in 5 specimens with the weight of 25 g each).

\*\*\*\*\*\*Elaborated by the indicators of Technical Regulation "On Safety of Certain Types of Specialized Food Products, Including Therapeutic and Preventive Dietary Food" (TR TS 027/2012) adopted by Resolution of the Eurasian Economic Commission Council No.34 of June 15, 2012.

### ANNEX No. 3 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

### Organoleptic indicators for the identification of milk processing products

| Dairy products         |                                       | Organoleptic indicators for the                   | identification of milk processing produc   | ets   |
|------------------------|---------------------------------------|---|--|---|
| Dairy products         | appearance                            | texture   | taste and odor   | color   |
| 1                      | 2                                     | 3   | 4  | 5   |
| Fluid milk             | Nontransparent liquid                 | Liquid homogenous, non-<br>gummy                  | Typical of milk, with a light taste<br>of boiling. Sweetish taste is<br>allowed      | White, for skimmed<br>milk – with bluish<br>shade is allowed, for<br>sterilized milk – with<br>light-cream shade is<br>allowed, for enriched<br>milk – depending on the<br>color of the components<br>used for enrichment |
| Fluid cream            | Homogenous non-<br>transparent liquid | Homogenous<br>moderately viscous                  | Typical of cream, with mild boiling<br>taste. Sweetish and salty taste is<br>allowed | White with cream tint,<br>uniform throughout the<br>mass,<br>light cream color;<br>for sterilized cream –<br>light cream uniform<br>color; for varenets –<br>from white to  |
| Ryazhenka,<br>varenets | • •                                   | with an impaired or non-<br>ithout gas generation | Pure sour milk, with strong taste of pasteurization                                  | light cream color   |

| Daimy products                              |  | Organoleptic indicators for the   | identification of milk processing produc   | ets  |  |  |
|---|--|---|--|--|--|--|
| Dairy products                              | appearance   | texture   | taste and odor   | color  |  |  |
| 1   | 2  | 3   | 4  | 5  |  |  |
| Acidophilin                                 | Homogenor  | ıs gummy liquid   | Pure sour milk, with mild sharp taste  | Milk white, uniform  |  |  |
| Kefir, liquid<br>fermented milk<br>products | imp<br>Gas formation is allowed<br>When food flavor comp | with an impaired or non-<br>aired clot<br>d for the products made using<br>yeast.<br>onents are added – with their<br>esence. | Pure sour milk, with mild sharp<br>taste, or taste and smell, due to the<br>added components. For the<br>products made using yeast - yeast<br>flavor is allowed                              | Milk white uniform or<br>determined by the color<br>of the added<br>components.                  |  |  |
| Yogurt                                      | stabilizer is added – j                                  | ately viscous liquid. When<br>elly or creamy. When food<br>added – with their presence.                                       | Sour milk. When sugar or<br>sweeteners are added -moderately<br>sweet taste. When food flavor<br>components are added –<br>determined by the added<br>components.                            | Milk white uniform or<br>determined by the color<br>of the added<br>components.                  |  |  |
| Curds, curd<br>mass, curd<br>products       | milk protein. When for                                   | without tangible particles of<br>ood flavor components are<br>h their presence.   | Pure sour milk, dry milk flavor is<br>allowed. When sugar or sweeteners<br>are added -moderately sweet.<br>When food flavor components are<br>added – determined by the added<br>components. | White or with cream<br>tint uniform or<br>determined by the color<br>of the added<br>components. |  |  |
| Sour cream                                  | Homogenous ma  | ss with glossy surface  | Pure sour milk. Flavor of rendered butter is allowed.  | White with cream tint,<br>uniform  |  |  |
| Ice cream                                   | Portions of single-<br>layer or multilayer ice           | Compact, homogenous, without tangible pellets of  | Pure taste, characteristic of the ice cream type   | Characteristic of the ice cream type, uniform  |  |  |

| Dairy products                |   | Organoleptic indicators for the   | identification of milk processing produc   | ets   |
|-------------------------------|---|---|--|---|
| Dairy products                | appearance  | texture   | taste and odor   | color   |
| 1                             | 2   | 3   | 4  | 5   |
|                               | cream of various<br>shape, fully or<br>partially glazed (with<br>chocolate) or not<br>glazed (with<br>chocolate)  | fat, stabilizer and<br>emulsifier, protein and<br>lactose particles, ice<br>crystals. When food flavor<br>components are added –<br>with their presence.<br>In glazed ice cream the<br>glaze (chocolate) structure<br>is homogenous, without<br>tangible particles of sugar,<br>cocoa products, dry dairy<br>products, with the presence<br>of the nut particles, wafer<br>crumbs and other<br>components, if they are<br>used. |  | throughout the mass of<br>single-layer ice cream<br>or each layer of<br>multilayer ice cream.<br>For glazed ice cream –<br>color of coating<br>characteristic of the<br>glaze type. |
| Rendered<br>butter            | -   | vhen melted – clear, without<br>ediment   | Taste and odor of melted milk fat without foreign flavor and odor  | From light yellow to yellow, uniform  |
| Milk fat                      | 0 1 1   | when melted – clear, without<br>ediment   | Pure, neutral, characteristic of milk fat  | From white to yellow,<br>homogenous throughout<br>the mass  |
| Dairy butter,<br>butter paste | Compact, homogenous, plastic, cut surface is shiny,<br>dry. Slightly shiny or slightly matt surface with single<br>tiny droplets of water, insufficiently compact and<br>plastic texture, slightly crumbly is allowed.<br>When food flavor components are added – with their<br>presence. |   | For sweet cream butter and sweet<br>cream butter paste – pronounced<br>creamy taste and flavor of<br>pasteurization, without foreign<br>flavor and odor.<br>For sour cream butter and sour | From light yellow to<br>yellow, homogenous,<br>uniform.<br>When food flavor<br>components are added –<br>determined by the color  |

| Dairy products  |                  |  | identification of milk processing produc  |   |
|---|------------------|--|---|---|
|   | appearance       | texture  | taste and odor  | color   |
| 1   | 2                | 3  | 4   | 5   |
|   |                  |  | cream butter paste – pronounced<br>creamy taste with sour cream<br>flavor, without foreign flavor and<br>odor.<br>For cheese butter and butter paste<br>whey flavor is allowed. For all type<br>of butter and butter paste slight<br>weedy flavor is allowed and (or)<br>insufficiently pronounced flavors<br>of: creamy, pasteurization,<br>overpasteurization and melted<br>butter, sour milk. When food flavor<br>components are added –<br>determined by the added<br>components. | of the added components.  |
| Cheese, cheese<br>product dry,<br>ncluding<br>processed | Shape of package | Powdery or hard, brittle or<br>other. When food flavor<br>components are added –<br>with their presence.   | Cheese, with odor and flavor<br>characteristic of a particular cheese<br>name.<br>When food flavor components are<br>added – determined by the added<br>components.   | From white to yellow.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components.           |
| Cheese, cheese<br>product extra<br>hard                 | Various shape    | Brittle, granular or other.<br>Without pattern or with<br>holes of various shape and<br>position. When food flavor<br>components are added –<br>with their presence. | Cheese, sweetish spicy,<br>pronounced at various degree<br>characteristic of a particular cheese<br>name.   | From light yellow<br>to yellow.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components. |

| Dairy products                           |   | Organoleptic indicators for the   | identification of milk processing produc  | ts   |
|--|---|---|---|--|
| Daily products                           | appearance  | texture   | taste and odor  | color  |
| 1  | 2   | 3   | 4   | 5  |
| Cheese, cheese<br>product hard           | Shape of bar, cylinder<br>or other arbitrary<br>shape                         | Homogenous,<br>compact, slightly<br>brittle or other.<br>Large, medium, small<br>holes or no holes.<br>When food flavor<br>components are added –<br>with their presence.       | Cheese, sweetish spicy,<br>pronounced at various degree<br>characteristic of a particular cheese<br>name.<br>When food flavor components are<br>added – determined by the added<br>components.  | From light yellow to<br>yellow,<br>uniform.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components.  |
| Cheese, cheese<br>product<br>medium hard | Shape of bar, high or<br>low cylinder, ellipse<br>or other arbitrary<br>shape | Homogenous, elastic,<br>plastic. Large, medium,<br>small holes of various<br>shape and position no<br>holes. When food flavor<br>components are added –<br>with their presence. | <ul> <li>For cheese with high temperature second heating – cheese, sweetish, Spicy, pronounced at various degree for a particular cheese name, for cheese with intermediate and low temperature of second heating – cheese, slightly sour, slightly spicy, sharp, pronounced at various degree characteristic of a particular cheese name. When mold or slime is used – those determined by the type of mold or slime microflora.</li> <li>When food flavor components are added – determined by the added components.</li> </ul> | From white to light<br>yellow, uniform, marble<br>or other. In cheese with<br>mold – streaks of added<br>mold, in cheese with<br>surface mold – presence<br>of the mold.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components. |
| Cheese, cheese<br>product soft           | Shape of low cylinder<br>or other arbitrary<br>shape                          | From soft plastic, compact,<br>slightly elastic to delicate,<br>spreading, oily. Slightly   | Sour milk or cheese characteristic<br>of a particular cheese name.<br>When mold or slime is used – those  | From white to yellow.<br>In cheese with mold –<br>streaks of added mold,   |

| Dairy products                                  | Organoleptic indicators for the identification of milk processing products |   |  |   |  |
|---|--|---|--|---|--|
| Dany products                                   | appearance   | texture   | taste and odor   | color   |  |
| 1   | 2  | 3   | 4  | 5   |  |
|   |  | brittle, crumbly is allowed.<br>No pattern. A small<br>number of holes and voids<br>of irregular shape is<br>allowed. When food flavor<br>components are added –<br>with their presence.    | determined by the type of mold or<br>slime microflora.<br>When food flavor components are<br>added – determined by the added<br>components.  | in cheese with surface<br>mold – presence of the<br>mold. When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components.  |  |
| Cheese, cheese<br>product<br>processed<br>slice | Shape of package   | From compact, slightly<br>elastic to plastic,<br>homogenous throughout<br>the mass, retaining shape<br>after cutting. When food<br>flavor components are<br>added – with their<br>presence. | <ul> <li>Pure, characteristic of a particular cheese name.</li> <li>For smoked cheese – with smoking flavor.</li> <li>When food flavor components are added – determined by the added components.</li> </ul> | From white to intense<br>yellow, uniform.<br>In smoked cheese –<br>from light yellow to<br>yellow;<br>in sweet cheese – from<br>white to brown.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added<br>components. |  |
| Cheese, cheese<br>product<br>processed<br>paste | Shape of package   | From soft plastic to<br>delicate, spreading, cream-<br>like, homogenous<br>throughout the mass. When<br>food flavor components<br>are added – with their<br>presence.                       | Pure, characteristic of a particular<br>cheese name. When food flavor<br>components are added –<br>determined by the added<br>components.  | From white to intense<br>yellow, uniform.<br>In sweet cheese – from<br>white to brown.<br>When food flavor<br>components are added –<br>determined by the color<br>of the added   |  |

components.

| Dairy products                         | Organoleptic indicators for the identification of milk processing products                    |   |   |  |  |
|--|---|---|---|--|--|
| Dairy products                         | appearance  | texture   | taste and odor  | color  |  |
| 1                                      | 2   | 3   | 4   | 5  |  |
| Dry milk                               | Homogenous powder   | Fine dry powder   | Pure, characteristic of fresh pasteurized milk  | White with light cream tint  |  |
| Dry cream                              | Homogenous powder   | Fine dry powder   | Pure, characteristic of pasteurized cream   | White with light cream tint  |  |
| Concentrated milk, cream               | Homogenous liquid   | Homogenous, moderately viscous liquid   | Sweetish-salty taste characteristic of baked milk   | Light cream  |  |
| Condensed<br>milk, cream<br>with sugar | Viscous homogenous<br>mass  | Homogenous, viscous<br>throughout the mass,<br>without tangible crystals of<br>milk sugar. Mealy texture<br>and slight lactose sediment<br>at the container bottom<br>during storage is allowed | Pure, sweet,<br>with pronounced taste of<br>pasteurized milk.<br>For condensed milk with sugar<br>subjected to additional heat<br>treatment – caramel flavor.<br>Slightly weedy flavor is allowed | White with cream tint,<br>uniform.<br>At heat treatment and<br>production with coffee<br>and cocoa - brown |  |
| Whey                                   | Transparent or semi-<br>transparent liquid  | Liquid, homogenous  | Characteristic of whey, for curd<br>whey – slightly sour taste, for<br>cheese whey – sweetish or salty<br>taste   | From pale green to<br>light yellow   |  |
| Dry milk whey                          | Fine powder or<br>powder consisting of<br>single and<br>agglomerated<br>particles of dry whey | A very small number of<br>pellets broken at slight<br>mechanical action is<br>allowed   | Characteristic of milk whey,<br>sweetish, salty, slightly sour taste  | From white to yellow,<br>homogenous throughout<br>the mass   |  |
| Buttermilk                             | Non-transparent<br>liquid without<br>sediment and flakes                                      | Liquid, homogenous  | Characteristic of buttermilk, for<br>buttermilk of sweet cream butter –<br>milk taste, for buttermilk of sour   | From white to light yellow   |  |

| Dairy products  |  | Organoleptic indicators for the                    | identification of milk processing produc   | ts   |
|---|--|--|--|--|
|   | appearance   | texture  | taste and odor   | color  |
| 1   | 2  | 3  | 4  | 5  |
| Casein  | Homogenous powder<br>or crystalline<br>substance   | Powder or dry compact or porous grain of any shape | cream butter – sour cream taste.<br>Flavor of pasteurization or slightly<br>weedy flavor is allowed<br>Odorless, neutral taste | From white to light cream                    |
| Lactulose   | Crystalline substance  | Fine crystals of heterogeneous shape               | Odorless, sweet taste  | White  |
| Lactulose concentrate   | Homogenous viscous<br>liquid   | Homogenous, viscous                                | Sweetish to sour sweet taste.<br>Flavor and odor of caramelization<br>is allowed   | From light yellow to dark yellow             |
| Cream-<br>vegetable<br>spread                                   | Matt or slightly shiny<br>surface, with dry<br>appearance  | Plastic homogenous,<br>compact or soft             | Creamy, sweet creamy<br>or sour creamy taste   | From white to light<br>yellow,<br>homogenous |
| Cream-<br>vegetable<br>rendered<br>mixture                      | Granular or homogenous (compact or soft)   |  | Taste and odor of melted milk fat  | From light yellow to yellow, homogenous      |
| Dairy<br>composite<br>products, milk-<br>containing<br>products | According to the description provided by the producer, with the taste, color and (or) odor determined by the added food flavor components, use of glaze or other food products |  |  |  |

ANNEX No. 4 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

## Permissible levels of potentially dangerous substances in milk and dairy products

| Product, group of products                                   | Potentially dangerous substances   | Permissible levels, mg/kg (l), not<br>above |
|--|------------------------------------|---|
| 1  | 2                                  | 3   |
| Raw milk, raw skimmed milk, raw cream and all dairy products | antibiotics:                       |   |
|  | levomycetine                       | Not allowed (below 0.01)                    |
|  | (chloramphenicol)                  | Not allowed (below 0.0003)*                 |
|  |                                    | Not allowed (below 0.01)                    |
|  | Tetracycline group<br>Streptomycin | Not allowed (below 0.2)                     |
|  | Penicillin                         | Not allowed (below 0.004)                   |

<u>"The indicator of levomycetine (chloramphenicol) level shall come into effect from 01.07.2015.</u>

ANNEX No. 5 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

#### Permissible levels of microorganisms and somatic cells in raw milk, raw skimmed milk and raw cream

|                               | $QMAFAnM^*, CFU^{**}/ cm^3$      | Product volum                               | Count of somatic                                |  |
|-------------------------------|----------------------------------|---|---|--|
| Product                       | (g),<br>not above <sup>***</sup> | E.coli group<br>bacteria<br>(coliforms)**** | Pathogenic microorganisms, including salmonella | $\begin{array}{c} - & \text{cells} \\ \text{in 1 } \text{cm}^3(\text{g}), \\ \text{not above}^{***} \end{array}$ |
| 1                             | 2                                | 3   | 4   | 5  |
| Raw milk                      | $5 \times 10^5$                  | _   | 25  | $7.5 \times 10^5$  |
| Raw skimmed milk              | $5 \times 10^5$                  | _   | 25  | _  |
| Raw cream                     | $5 \times 10^5$                  | -   | 25  | _  |
| Raw milk for making:          |                                  |   |   |  |
| a) baby foods;                | $3x10^{5}$                       | _   | 25  | 5x10 <sup>5</sup>  |
| б) cheese and sterilized milk | 5x10 <sup>5</sup>                | _   | 25  | 5x10 <sup>5</sup>  |

<sup>\*</sup>QMAFAnM – Quantity of mesophilic aerobic and facultative anaerobic microorganisms.

\*\*CFU – colony-forming units

<sup>\*\*\*</sup>The established levels of QMAFAnM and somatic cells count shall come into force as of 01.07.2017 (prior to 01.07.2017, the norms established by the Unified Sanitary and Epidemiological and Hygienic Requirements for Products Subject to Sanitary and Epidemiological Control (Surveillance) shall apply).

\*\*\*\*\*Coliforms – Escherichia coli group bacteria

ANNEX No. 6 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

### Indicators for the identification of raw cow's milk and raw milk of other livestock species

Table 1

### Indicators for the identification of raw cow's milk

| Indicator name                               | Parameters   |  |
|--|--|--|
| 1  | 2  |  |
| Mass fraction of fat, %                      | not below 2.8  |  |
| Mass fraction of protein, %                  | not below 2.8  |  |
| Mass fraction of nonfat milk solids, %       | not below 8.2  |  |
| Texture                                      | Homogenous liquid without precipitation or flakes. Freezing is not allowed                     |  |
| Taste and odor                               | Taste and odor are pure, without foreign flavors or smells that are not typical for fresh milk |  |
| Color  | From white to light cream color  |  |
| Acidity, °T                                  | 16 - 21  |  |
| Density (kg/ $m^3$ ), not below <sup>*</sup> | 1027 (at the temperature of 20 °C)   |  |
| Indicator name | Parameters |
|----------------|------------|
| 1              | 2          |

-0.505

Freezing temperature,  $^{\circ}C$  (used where falsification is suspected), not above

Nonfat milk solids (NFMS) = 0.25xA + 0.225xF + 0.5,

where:

A – density, lactodensimeter;

F – mass fraction of fat in raw milk, %.

Table 2

|                | Со   | ntent of milk constituer | nts, % *           | Density at the temperature of | Acidity, °T, |
|----------------|--|--------------------------|--------------------|-------------------------------|--------------|
| Animal species | Animal species Fat, not below Protein, not below Dry solids, average |                          | 20°C,<br>not below | not above                     |              |
| 1              | 2  | 3                        | 4                  | 5                             | 6            |
| Female goat    | 2.8  | 2.8                      | 13.4               | 1027 – 1030                   | 14 - 20      |
| Female sheep   | 6.2  | 5.1                      | 18.5               | 1034                          | 25           |
| Mare           | 1.8  | 2.1                      | 10.7               | 1032                          | 6.5          |
| Female camel   | 3  | 3.8                      | 15                 | 1032                          | 17.5         |

# Indicators for the identification of raw milk of other livestock species

<sup>&</sup>lt;sup>\*</sup>The main physical parameters of milk are calculated using the following formula:

|                | Co             | ntent of milk constitue | Density at the temperature of | Acidity, °T,       |           |
|----------------|----------------|-------------------------|-------------------------------|--------------------|-----------|
| Animal species | Fat, not below | Protein, not below      | Dry solids, average           | 20°C,<br>not below | not above |
| 1              | 2              | 3                       | 4                             | 5                  | 6         |
| Buffalo cow    | 7.5            | 4.2                     | 17.5                          | 1029               | 17        |
| Female ass     | 1.2            | 1.7                     | 9.9                           | 1011               | 6         |

\*The values of identification indicators of milk received from individual milking operations may vary in broader ranges.

ANNEX No. 7 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

# Indicators for the identification of raw cream from cow's milk

| Indicator name                     | Parameters   |
|------------------------------------|--|
| 1                                  | 2  |
| Mass fraction of fat, %, not below | 10   |
| Acidity, °T                        | 14 – 19  |
| Texture                            | Uniform homogenous. Individual fat balls are allowed |
| Taste and odor                     | Strong taste and odor – creamy, pure, sweetish       |
| Color                              | White, with cream tint, uniform                      |

ANNEX No. 8 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

#### Permissible levels of microorganisms in milk processing products when they are released into circulation

|         |   | Product vol                               | ume (amount,) cm  | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms)** | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

I. Fluid milk, fluid cream, dairy drink, milk whey, buttermilk, heat treated products on their basis

| 1. Fluid milk, dairy<br>drink, in consumer<br>package, including<br>those enriched with<br>vitamins, macro-<br>and trace elements,<br>lactulose,<br>prebiotics: |                   |      |    |   |    |   |                      |
|---|-------------------|------|----|---|----|---|----------------------|
| a) pasteurized  | $1 \times 10^{5}$ | 0,01 | 25 | 1 | 25 | _ |                      |
| b) sterilized   | _                 | _    | _  | _ | _  | _ | Industrial sterility |

|         |   | Product vol   | lume (amount,) cm   | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

\_

\_

c) ultrapasteurized (with aseptic filling) \_

a) after thermostatic holding at the temperature of  $37 \,^{\circ}$ C for 3-5 days, a lack of visible defects or deterioration indices (package buckling, appearance changes, etc.), a lack of taste or texture changes;

requirements:

\_

\_

b) after thermostatic holding the following changes are allowed:

|   |   | Product vo  | lume (amount,) cm   | $^{3}(g,)$ where not al        | lowed                                | Yeasts  |  |
|---|---|---|---|--------------------------------|--------------------------------------|---|--|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note   |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8  |
|   |   |   |   |                                |                                      |   | titratable<br>acidity – no<br>more than by<br>2°T;<br>QMAFAnM –<br>not above 10<br>CFU/cm <sup>3</sup> (g) |
| d) ultra-<br>pasteurized<br>(without<br>aseptic filling)<br>e) baked  | 100<br>2.5x10 <sup>3</sup>  | 10<br>0.1   | 100<br>25   | 10                             | 25<br>25                             | -   |  |
| e) bakeu  | 2.3X10  | 0.1   | 25  | —                              | 23                                   | —   |  |
| 2. Fluid milk,<br>dairy drink in<br>churns and tanks                  | 2x10 <sup>5</sup>   | 0.01  | 25  | 0.1                            | 25                                   | _   |  |
| 3. Milk whey and<br>buttermilk in<br>consumer package,<br>pasteurized | 1x10 <sup>5</sup>   | 0.01  | 25  | 1                              | 25                                   | _   |  |

|   |   | Product vo  | lume (amount,) cm   | <sup>3</sup> (g,) where not a  | llowed                               | Yeasts  |  |
|---|---|---|---|--------------------------------|--------------------------------------|---|--|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note   |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8  |
| <ul> <li>4. Cream and cream-based products including those in consumer packages, in particular:</li> <li>a) pasteurized</li> <li>b) sterilized</li> </ul> | 1x10 <sup>5</sup>   | 0.01  | 25  | 1                              | 25                                   |   | Industrial sterility<br>requirements:<br>a) after<br>thermostatic<br>holding at the<br>temperature of<br>$37 ^{\circ}$ C for<br>3-5 days, a lack<br>of visible defects<br>or deterioration<br>indices (package<br>buckling,<br>appearance<br>changes, etc.), a |

changes, etc.), a lack of taste or

|         |   | Product vo  | lume (amount,) cm   | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

texture changes;

|  |                   |      |    |     |    |   | b) after<br>thermostatic<br>holding the<br>following<br>changes are<br>allowed:<br>titratable<br>acidity – no<br>more than<br>by 2°T;<br>QMAFAnM –<br>not above 10<br>CFU/cm <sup>3</sup> (g) |
|--|-------------------|------|----|-----|----|---|---|
| c) enriched  | $1 \times 10^5$   | 0.01 | 25 | 1   | 25 | _ |   |
| d) whipped   | 1x10 <sup>5</sup> | 0.1  | 25 | 0.1 | 25 | _ |   |
| 5. Cream and<br>cream-based<br>products,<br>including those in<br>churns and tanks | 2x10 <sup>5</sup> | 0.01 | 25 | 0.1 | 25 | _ |   |

|   |  | Product vo  | lume (amount,) cm   | $^{3}(g,)$ where not a         | llowed                               | Yeasts  |      |
|---|--|---|---|--------------------------------|--------------------------------------|---|------|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above            | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1   | 2  | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 6. Drinks,<br>cocktails, kissels,<br>jelly, sauces,<br>creams, puddings,<br>mousses, pastes,<br>soufflé made on<br>the basis of milk,<br>cream buttermilk,<br>whey – pasteurized<br>7. Fermented milk<br>products and<br>products on their<br>basis with the shelf<br>life of no more<br>than 72 hours:<br>a) without<br>components | $1 \times 10^{5}$<br>Lactic acid<br>microorganism<br>s -<br>not below<br>$1 \times 10^{7}$ | 0.1   | 25  | 1                              | -                                    |   |      |

|   |   | Product vo  | lume (amount,) cm   | $^{3}(g,)$ where not a         | llowed                               | Yeasts  |  |
|---|---|---|---|--------------------------------|--------------------------------------|---|--|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | ioulds<br>(M), Note<br>U/cm <sup>3</sup> (g),<br>Not |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8  |
| b) with components  | Lactic acid<br>microorganism<br>s –<br>not below<br>1x10 <sup>7</sup>           | 0.01  | 25  | 1                              | _                                    | _   |  |
| 8. Fermented milk<br>products and<br>products on their<br>basis with the<br>shelf life above<br>72 hours: |   |   |   |                                |                                      |   |  |
| a) without<br>components  | Lactic acid<br>microorganism<br>s –<br>not below<br>1x10 <sup>7</sup>           | 0.1   | 25  | 1                              | _                                    | Y -<br>50 <sup>****</sup><br>M - 50                                   |  |

|  |   | Product vo  | lume (amount,) cm   | $^{3}(g,)$ where not all       | llowed                               | Yeasts  |      |
|--|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above                                       | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1  | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| b) with components   | Lactic acid<br>microorganism<br>s –<br>not below<br>$1 \times 10^7$   | 0.01  | 25  | 1                              | _                                    | Y -<br>50 <sup>****</sup><br>M - 50                                   |      |
| c) enriched<br>with bifidum<br>bacteria and<br>other probiotic<br>microorganism<br>s | bifidum bacteria<br>and other<br>probiotic<br>microorganisms<br>–<br>not below<br>$1 \times 10^6$<br>in the aggregate | 0,1   | 25  | 1                              | _                                    | Y -<br>50 <sup>****</sup><br>M - 50                                   |      |

|  |   | Product vo  | lume (amount,) cm   | $\frac{3}{3}$ (g,) where not all | llowed                               | Yeasts   |      |
|--|---|---|---|----------------------------------|--------------------------------------|--|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup>   | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus   | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above                    | Note |
| 1  | 2   | 3   | 4   | 5                                | 6                                    | 7  | 8    |
| 9. Sour cream and<br>products on its<br>basis, including<br>those with<br>components | lactic acid<br>microorganism<br>s –<br>not below<br>1x10 <sup>7</sup>           | 0.001<br>(for heat<br>treated after<br>ripening sour<br>cream<br>products –<br>0.1 g/ cm <sup>3</sup> ) | 25  | 1                                | _                                    | For<br>products<br>with the<br>shelf life<br>above<br>72 hours.<br>-<br>Y - 50<br>M - 50 |      |
| 10. Heat treated<br>cultured and dairy<br>composite<br>products:                     |   |   |   |                                  |                                      |  |      |
| a) without components  | _   | 1   | 25  | 1                                | 25                                   | $\begin{array}{c} Y-50\\ M-50 \end{array}$   |      |
| б) with<br>components  | _   | 1   | 25  | 1                                | 25                                   | $\begin{array}{c} Y-50\\ M-50 \end{array}$   |      |

II. Curd, curd mass, curd products and products on their basis

|         |   | Product vol   | ume (amount,) cm  | llowed                         | Yeasts                               |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

| 11. Curd without<br>components<br>(except curd made<br>with the use of<br>ultra-filtration,<br>separation, and<br>granular curd): |  |       |    |     |   |                   |
|---|--|-------|----|-----|---|-------------------|
| <ul><li>a) with the shelf life of no more than</li><li>72 hours</li></ul>   | lactic acid<br>microorganism<br>s –<br>not below<br>1x10 <sup>6</sup>              | 0.001 | 25 | 0.1 | _ | _                 |
| b) with the<br>shelf life above<br>72 hours   | 1x10 <sup>6</sup>  | 0.01  | 25 | 0.1 | - | Y - 100<br>M - 50 |
| c) frozen   | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25 | 0.1 | _ | Y - 100<br>M - 50 |

|  |  | Product vo  | lume (amount,) cm   | $^{3}(g,)$ where not a         | llowed                               | Yeasts  |      |
|--|--|---|---|--------------------------------|--------------------------------------|---|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above    | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1  | 2  | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 12. Curd made<br>with the use of<br>ultra-filtration,<br>separation: |  |   |   |                                |                                      |   |      |
| a) with the<br>shelf life of no<br>more than<br>72 hours             | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25  | 0.1                            | _                                    | _   |      |
| b) with the<br>shelf life above<br>72 hours                          | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25  | 0.1                            | _                                    | Y -<br>50<br>M -<br>50  |      |
| 13. Granular curd  | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25  | 0.1                            | _                                    | Y -<br>100<br>M -<br>50   |      |

|   |  | Product vo  | lume (amount,) cm   | (g,) where not all             | lowed                                | Yeasts  |      |
|---|--|---|---|--------------------------------|--------------------------------------|---|------|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above    | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1   | 2  | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 14. Curd with components, curd mass, curd cheese bars:                    |  |   |   |                                |                                      |   |      |
| <ul><li>a) with the shelf life of no more than</li><li>72 hours</li></ul> | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.001   | 25  | 0.1                            | _                                    | _   |      |
| b) with the<br>shelf life above<br>72 hours                               | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25  | 0.1                            | _                                    | Y -<br>100<br>M -<br>50   |      |
| c) frozen   | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25  | 0.1                            | -                                    | Y -<br>100<br>M -<br>50   |      |

|   |  | Product vo  | lume (amount,) cm              | <sup>3</sup> (g,) where not a        | llowed  | Yeasts               |   |
|---|--|---|--------------------------------|--------------------------------------|---|----------------------|---|
| Product QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup>                              | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note                 |   |
| 1   | 2  | 3   | 4                              | 5                                    | 6   | 7                    | 8 |
| 15. Curd<br>products:   | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells |   |                                | <u>.</u>                             | ·   |                      |   |
| a) with the<br>shelf life of no<br>more than<br>72 hours                                | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25                             | 0.1                                  | _   | _                    |   |
| with the shelf<br>life above<br>72 hours b) со<br>сроком<br>годности<br>более<br>72 ч.  | Microflora<br>typical for curd<br>starter, a lack<br>of foreign<br>microbial cells | 0.01  | 25                             | 0.1                                  | _   | Y -<br>100<br>M - 50 |   |
| c) frozen   | _  | 0.01  | 25                             | 0.1                                  | _   | Y -<br>100<br>M - 50 |   |

|   |   | Product vo  | lume (amount,) cm   | (g,) where not all             | llowed                               | Yeasts  |      |
|---|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 16. Heat treated<br>curd products,<br>including those<br>with components            | _   | 0.1   | 25  | 1                              | _                                    | 50 in the<br>aggregat<br>e  |      |
| 17. Milk albumin,<br>products on its<br>basis, except<br>those made by<br>culturing | 2x10 <sup>5</sup>   | 0.1   | 25  | 0.1                            | _                                    | Y -<br>100<br>M - 50  |      |

III. Milk, cream, buttermilk, dairy products, dairy composite products on their basis, sterilized concentrated and condensed, canned dairy products, canned composite dairy products

| 18. Sterilized<br>condensed,<br>concentrated milk; | Industrial sterility requirements: |
|--|------------------------------------|
| sterilized   | a) after                           |
| condensed cream;                                   | thermostatic                       |
| sterilized   | holding at the                     |
| condensed dairy                                    | temperature of                     |
| and dairy  | 37 °C for                          |
| composite  | 6 days, a lack of                  |

|         |   | Product vol   | lume (amount,) cm   | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

products.

visible defects or deterioration indices (package buckling, appearance changes, etc.), a lack of taste or texture changes;

> b) after thermostatic holding:

> > changes of titratable acidity are not allowed

microbial cells should not be found on a

|         |   | Product vol   | ume (amount,) cm  | llowed                         | Yeasts                               |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

microscopic slide

c) additional requirement to baby foods – where inoculation is made, no fungi, yeasts or lactic acid microorganism s are found.

| 19. Condensed<br>and concentrated<br>milk in<br>transportation<br>containers,<br>including churns<br>and tanks | 2x10 <sup>5</sup> | 0.01 | 25 | 0.1 | 25 | _ |
|--|-------------------|------|----|-----|----|---|
|  |                   |      |    |     |    |   |

|  |   | Product vo  | olume (amount,) cm  | $1^{\circ}(g,)$ where not a    | allowed                              | Yeasts  |      |
|--|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1  | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 20. Milk, cream<br>condensed with<br>sugar, in consumer<br>package:            |   |   |   |                                |                                      |   |      |
| a) without components  | $2 \mathrm{x} 10^4$   | 1   | 25  | _                              | _                                    | _   |      |
| b) with components   | $2x10^{4}$  | 1   | 25  | _                              | _                                    | -   |      |
| 21. Milk, cream<br>condensed with<br>sugar, in<br>transportation<br>containers | $4 \mathrm{x} 10^4$   | 1   | 25  | _                              | _                                    | _   |      |
| 22. Buttermilk,<br>whey condensed<br>with and without<br>sugar                 | 5x10 <sup>4</sup>   | 1   | 25  | -                              | _                                    | _   |      |
| 23. Condensed<br>dairy products<br>with sugar                                  | $3.5 \times 10^4$   | 1   | 25  | _                              | -                                    | _   |      |

|         |   | Product vo  | lume (amount,) cm   | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

IV. Dairy products, dairy composite products, dry, sublimated (milk, cream, fermented milk products, drinks, ice-cream mixes, whey, buttermilk, skimmed milk)

| 24. Dry<br>(powdered) cow's<br>milk                                      |                   |      |    |   |    |        |
|--|-------------------|------|----|---|----|--------|
| a) ready-to-use  | $5x10^{4}$        | 0.1  | 25 | 1 | _  | _      |
| b) for<br>commercial   | $1 \times 10^{5}$ | 0.1  | 25 | 1 | _  | -      |
| processing<br>25. Dry<br>(powdered) dairy<br>drinks                      | 1x10 <sup>5</sup> | 0.01 | 25 | 1 | _  | M - 50 |
| 26. Dry<br>(powdered) cream<br>and dry<br>(powdered) cream<br>with sugar | 7x10 <sup>4</sup> | 0.1  | 25 | 1 | _  | _      |
| 27. Dry  | $1 \times 10^{5}$ | 0.1  | 25 | 1 | 25 | Y –    |

|   |   | Product vo  | olume (amount,) cm  | $a^{3}(g,)$ where not a        | allowed                              | Yeasts  |      |
|---|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product   | Product QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| (powdered) milk<br>whey                                   |   |   |   |                                |                                      | 50<br>M –<br>100  |      |
| 28. Dry<br>(powdered) ice-<br>cream mixes                 | $5x10^{4}$  | 0.1   | 25  | 1                              | 25<br>(for soft<br>ice-cream)        | _   |      |
| 29. Dry<br>(powdered)<br>fermented milk<br>products       | 1x10 <sup>5</sup>   | 0.1   | 25  | 1                              | -                                    | Y –<br>50<br>M –<br>100   |      |
| 30. Buttermilk,<br>whole milk<br>substitute<br>(powdered) | 5x10 <sup>4</sup>   | 0.1   | 25  | 1                              | _                                    | Y -<br>50<br>M -<br>100   |      |
|   | V. Concentrates of a  | milk proteins, ca                                     | sein, milk sugar, ca                                      | seinates, milk pro             | otein hydrolys                       | ates, powdered  | 1    |
| 31. Alimentary caseinates                                 | 5x10 <sup>4</sup><br>(sulfite-  | 0.1   | 25  | _                              | _                                    | _   |      |

reducing clostridia in

|   |   | Product vol   | lume (amount,) cm   | $n^{3}(g,)$ where not a        | llowed                               | Yeasts  |      |
|---|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product                                     | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above           | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
|   | 0.01 г are not<br>allowed)  |   |   |                                |                                      |   |      |
| 32. Whey protein concentrate                | 5x10 <sup>4</sup>   | 1   | 25  | 1                              | _                                    | _   |      |
| 33. Alimentary casein concentrate           | $2,5x10^3$  | 1   | 25  | 1                              | _                                    | _   |      |
| 34. Milk protein,<br>alimentary<br>caseins  | 1x10 <sup>4</sup><br>(sulfite-<br>reducing<br>clostridia in<br>0.01 Γ are not<br>allowed) | 1   | 50  | 1                              | _                                    | Y -<br>10<br>M -<br>50  |      |
| 35. Milk sugar, refined                     | 1x10 <sup>3</sup>   | 1   | 25  | 1                              | _                                    | Y -<br>50<br>M -  |      |
| 36. Alimentary<br>milk sugar<br>(alimentary | $1 \times 10^{4}$   | 1   | 25  | 1                              | _                                    | 100<br>Y -<br>50<br>M -   |      |

|                           |   | Product vo  | lume (amount,) cm   | $a^{3}(g,)$ where not a        | llowed                               | Yeasts  |      |
|---------------------------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product                   | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1                         | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| lactose)                  |   |   |   |                                |                                      | 100   |      |
| 37. Lactulose concentrate | 5x10 <sup>3</sup>   | 1   | 50  | 1                              | _                                    | Y -<br>50<br>M -<br>100   |      |

VI. Cheeses, cheese products: extra-hard, hard, semi-hard, soft, processed, whey-and-albumin, dry; cheese pastes, sauces

| 38. Cheeses,<br>cheese products:<br>extra-hard, hard,<br>semi-hard, soft,<br>processed, whey-<br>and-albumin) |   |       |    |       |         |   |
|---|---|-------|----|-------|---------|---|
| a) without components   | _ | 0.001 | 25 | 0.001 | 25***** | _ |
| b) with components  | - | 0.001 | 25 | 0.001 | 25****  | - |
| c) smoked   | _ | 0.001 | 25 | 0.001 | 25****  | _ |

|         |   | Product vol                               | ume (amount,) cm  | (g,) where not a               | llowed                               | Yeasts  |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms)** | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

### 39. Processed cheeses and cheese products:

| a) without<br>components  | 5x10 <sup>3</sup> | 0.1 | 25 | _ | _ | Y -<br>50<br>M -<br>50   |
|---------------------------|-------------------|-----|----|---|---|--------------------------|
| b) with components        | $1 \times 10^{4}$ | 0.1 | 25 | _ | - | Y -<br>100<br>M -<br>100 |
| c) smoked                 | $1 \times 10^{4}$ | 0.1 | 25 | - | - | Y –<br>100<br>M –<br>100 |
| 40. Cheese sauces, pastes | 1x10 <sup>4</sup> | 0.1 | 25 | _ | _ | _                        |

|   |   | Product vo                                | lume (amount,) cm   | $a^{3}(g,)$ where not a        | llowed                               | Yeasts  |                      |
|---|---|---|---|--------------------------------|--------------------------------------|---|----------------------|
| Product   | Product QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms)** | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note                 |
| 1   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8                    |
| 41. Dry<br>(powdered)<br>cheeses, cheese<br>products                              | 5x10 <sup>4</sup>   | 1   | 25  | _                              | _                                    | _   |                      |
|   |   | VII. Butter                               | , butter paste from                                       | cow's milk, milk               | fat                                  |   |                      |
| 42. Butter form<br>cow's milk (sweet-<br>cream, sour-cream,<br>salted, unsalted): | No regulated in<br>sour-cream<br>butter   |   |   |                                |                                      |   |                      |
| a) without<br>components  | 1x10 <sup>5</sup>   | 0.01                                      | 25  | 0.1                            | 25                                   | 100<br>in the<br>aggregate  |                      |
| b) with components  | 1x10 <sup>5</sup>   | 0.01                                      | 25  | 0.1                            | 25                                   | Y -<br>100<br>M -<br>100  |                      |
| c) sterilized   |   |   |   |                                |                                      |   | Industrial sterility |

requirements:

|         |   | Product vol   | lume (amount,) cm   | $a^{3}(g,)$ where not a        | llowed                               | Yeasts  |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
|         |   |   |   | -                              | -                                    | -   | 2    |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 1   | 8    |

b) after thermostatic holding at the temperature of  $37 \,^{\circ}$ C for 3-5 days, a lack of visible defects or deterioration indices (package buckling, appearance changes, etc.), a lack of taste or texture changes;

> b) after thermostatic holding the following changes are allowed:

> > acidity of

|                     |   | Product volume (amount,) cm <sup>3</sup> (g,) where not allowed |   |                                |                                      |   |  |
|---------------------|---|---|---|--------------------------------|--------------------------------------|---|--|
| Product             | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup>           | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note   |
| 1                   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8  |
|                     |   | ·   | ·   | ·                              | ·                                    |   | fat phase –<br>no more<br>than by<br>0.5°K<br>titratable<br>acidity of<br>milk plasma<br>– no more<br>than by 2°T<br>QMAFAnM<br>– no more<br>than 100<br>CFU/g |
| 43. Rendered butter | 1x10 <sup>3</sup>   | 1.0   | 25  | _                              | _                                    | M - 200   |  |
| 44. Powdered butter | 1x10 <sup>5</sup>   | 0.01  | 25  | 0.1                            | 25                                   | 100 in<br>the<br>aggregat<br>e  |  |
| 45. Milk fat        | $1 \times 10^{3}$   | 1.0   | 25  | _                              | _                                    | M – 200   |  |

|         |   | Product vol                               | ume (amount,) cm  | Yeasts                         |                                      |   |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms)** | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

# 46. Butter paste:

| a) without components                       | 2x10 <sup>5</sup> | 0.01            | 25                 | 0.1               | 25           | Y - 100<br>M - 100 |
|---|-------------------|-----------------|--------------------|-------------------|--------------|--------------------|
| b) with components                          | 2x10 <sup>5</sup> | 0.001           | 25                 | 0.1               | 25           | Y - 100<br>M - 100 |
|   | VIII.             | Cream-and-veget | table spread, rend | lered cream-and-v | egetable mix |                    |
| 47. Cream-and-<br>vegetable spread          | 1x10 <sup>5</sup> | 0.01            | 25                 | 0.1               | 25           | Y - 100<br>M - 100 |
| 48. Rendered<br>cream-and-<br>vegetable mix | 1x10 <sup>3</sup> | 1               | 25                 | _                 | _            | M - 200            |

IX. Ice-cream: milk, sour-milk, cream, plombir, with milk fat substitute, tarts, cakes, deserts from ice-cream, mixes, ice-cream glaze

| 49. Ice-cream:     | $1 \times 10^{5}$ | 0.01 | 25 | 1 | 25 | _ |
|--------------------|-------------------|------|----|---|----|---|
| milk, cream,       |                   |      |    |   |    |   |
| plombir, with milk |                   |      |    |   |    |   |

|  |   | Product vo  | lume (amount,) cm   | <sup>3</sup> (g,) where not a  | llowed                               | Yeasts  |      |
|--|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1  | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| fat substitute,<br>hardened,<br>including that with<br>components, tarts,<br>cakes, deserts from<br>ice-cream  |   |   |   |                                |                                      |   |      |
| 50. Мороженое<br>молочное,<br>сливочное,<br>пломбир, с<br>заменителем<br>молочного жира,<br>мягкое, в том<br>числе<br>с компонентами<br>Ice-cream: milk,<br>cream, plombir,<br>with milk fat<br>substitute, soft,<br>including that with<br>components | 1x10 <sup>5</sup>   | 0.1   | 25  | 1                              | 25                                   | _   |      |

|                                     | Product volume (amount,) $cm^3$ (g,) where not allowed                          |   |   |                                | llowed                               | Yeasts  |      |
|-------------------------------------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product                             | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1                                   | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |
| 51. Liquid mixes for soft ice-cream | 3x10 <sup>4</sup>   | 0,.1  | 25  | 1                              | 25                                   | _   |      |
| 52. Sour-cream ice-cream            | Lactic acid<br>microorganism<br>s – not below<br>1x10 <sup>6</sup>              | 0.1   | 25  | 1                              | 25                                   | -   |      |

X. Starters (starter and probiotic microorganisms for making fermented milk products, sour cream butter and cheeses)

| 53. Starters for<br>kefir on kefir fungi                       | 1x10 <sup>8</sup> | 3  | 100 | 10 | _ | Y - not<br>below<br>$1x10^4$<br>M - 5 |
|--|-------------------|----|-----|----|---|---------------------------------------|
| 54. Symbiotic<br>(liquid) starters<br>for kefir product        | 1x10 <sup>8</sup> | 3  | 100 | 10 | - | Y - not<br>below<br>$1x10^4$<br>M - 5 |
| 55. Starters from<br>pure cultures:<br>a) liquid,<br>including | 1x10 <sup>8</sup> | 10 | 100 | 10 | _ | 5 in the aggregate                    |

|  |   | Product volume (amount,) $cm^3$ (g,) where not allowed |   |                                |                                      | Yeasts  |      |
|--|---|--|---|--------------------------------|--------------------------------------|---|------|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above         | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup>  | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1  | 2   | 3  | 4   | 5                              | 6                                    | 7   | 8    |
| frozen   | for<br>concentrated<br>starters – not<br>below<br>$1x10^{10}$                           |  |   |                                |                                      |   |      |
| b) dry<br>(powdered)                             | $1 \times 10^9$<br>for<br>concentrated<br>starters – not<br>below<br>$1 \times 10^{10}$ | 1  | 10  | 1                              | _                                    | 5 in the aggregate  |      |
|  |   | XI. Enz  | ymatic milk-clottin                                       | g preparations                 |                                      |   |      |
| 56. Enzymatic milk-<br>clotting<br>preparations: |   |  |   |                                |                                      |   |      |
| a) of animal<br>origin                           | 1x10 <sup>4</sup>   | 1<br>E.coli in 25<br>g/cm <sup>3</sup>                 | 25<br>Sulfite-<br>reducing<br>clostridia in<br>0.01 g     | _                              | _                                    | _   |      |

|  |  | Product vo  | lume (amount,) cm   | <sup>3</sup> (g,) where not a  | llowed                               | Yeasts  |   |
|--|--|---|---|--------------------------------|--------------------------------------|---|---|
| Product  | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above      | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note  |
| 1  | 2  | 3   | 4   | 5                              | 6                                    | 7   | 8   |
| b) of plant<br>origin  | 5x10 <sup>4</sup>  | 1   | 25  | _                              | _                                    | _   |   |
| в) of<br>microbial and<br>fungal origin  | 5x10 <sup>4</sup><br>should not<br>contain viable<br>forms of<br>enzyme<br>producers | 1   | 25  | _                              | _                                    | _   | should not have<br>antibiotic<br>activity.<br>Enzymatic<br>preparations of<br>fungal origin<br>should not<br>contain<br>mycotoxins. |
|  | XII. Milk-base   | d dry nutrient m                                      | edia for the cultiva                                      | tion of starter and            | l probiotic mi                       | croflora  |   |
| 57. Milk-based<br>dry nutrient media<br>for the cultivation<br>of starter and<br>probiotic<br>microflora | 5x10 <sup>4</sup>  | 0,01  | 25<br>Sulfite-<br>reducing<br>clostridia in<br>0.01 g     | _                              | _                                    | _   |   |

XIII. Milk-containing products

|         | Product volume (amount,) cm <sup>3</sup> (g,) where not allowed                 |   |   |                                |                                      | Yeasts  |      |
|---------|---|---|---|--------------------------------|--------------------------------------|---|------|
| Product | QMAFAnM <sup>*</sup> ,<br>CFU <sup>**</sup> /g (cm <sup>3</sup> ),<br>not above | E.coli group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococc<br>i,<br>S.aureus | listeria<br>L.mono-<br>cytogene<br>s | (Y),<br>moulds<br>(M),<br>CFU/cm <sup>3</sup><br>(g),<br>Not<br>above | Note |
| 1       | 2   | 3   | 4   | 5                              | 6                                    | 7   | 8    |

58. Milkcontaining products requirements are established with consideration given to the regulatory and technical documents concerning the content and ratios of dairy and nondairy components in a product

Notes: 1. The hygienic norms for microbiological indicators of safety and nutritional value of food products include the following groups of microorganisms:

sanitary indicator microorganisms that include the quantity of mesophilic aerobic and facultative anaerobic microorganisms (QMAFAnM), E.coli group bacteria (coliforms), bacteria of Enterobacteriaceae spp., enterococci;

opportunistic pathogens that include E. coli, Staphylococcus aureus, bacteria of Proteus spp., B. cereus and sulfite-reducing clostridia, Vibrio parahaemolyticus;

pathogenic microorganisms, including salmonella and Listeria monocytogenes, Yersinia spp.;

spoilage microorganisms, including yeasts, mould fungi, lactic acid microorganisms;

starter microflora microorganisms and probiotic microorganisms (lactic acid microorganisms, propionoc acid microorganisms, yeasts, bifidum bacteria, acidophilic bacteria, etc.) – in products with a regulated level of biotech microflora and in

probiotic products.

2. The regulation of microbiological indicators of safety of food products is carried out for most of the groups of microorganisms based on the alternative concept – a product amount is rated where coliforms, most of opportunistic pathogens, and pathogenic microorganisms including salmonella and Listeria monocytogenes are not allowed. In other cases, a norm shows the quantity of colony-forming units in 1 cm<sup>3</sup> (g) of a product (CFU/ cm<sup>3</sup> (g)).

<sup>\*</sup> QMAFAnM – quantity of mesophilic aerobic and facultative anaerobic microorganisms.

\*\* CFU – colony-forming units.

\*\*\*\*Coliforms – E.coli group bacteria.

\*\*\*\* The content of yeasts at the end of shelf life not below  $1 \times 10^4$  for ayran and kefir, not below  $1 \times 10^4$  for kumiss; the presence of yeasts is allowed in the products made with their use in the starter.

\*\*\*\*\*\* The amount of product (g) where not allowed is 125 g (for soft and pickled cheeses – in 5 samples of 25 g each.)

ANNEX No. 9 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

Permissible levels of oxidative deterioration and potentially dangerous substances in milk-based baby foods, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product) |
|----------------------------|---|--|
| 1                          | 2   | 3  |

All dairy products

antibiotics:

| Levomycetine<br>(chloramphenicol) | not allowed (below 0.0003)  |
|-----------------------------------|-----------------------------|
| Tetracyclines                     | not allowed (below 0.01)    |
| Penicillin                        | not allowed (below 0.004)   |
| Streptomycin                      | not allowed (below 0.2)     |
| Mycotoxins:                       |                             |
| afla-toxin M <sub>1</sub>         | not allowed (below 0.00002) |
| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product) |
|----------------------------|---|--|
| 1                          | 2   | 3  |

radionuclides (calculated for ready-to-use product): Cesium-137 40 Bq/l Strontium-90 25 Bq/l Dioxins<sup>\*</sup> not allowed (within the measurement accuracy) melamine\*\* not allowed (below 1mg/kg) Adapted initial or follow-on milk-based formulas (dry, liquid, peroxide value 4 mmol of active oxygen/kg of non-acidified and acidified); products based on partly hydrolyzed fat (for dry products) proteins; milk - pasteurized, ultra-pasteurized, sterilized, including enriched; sterilized cream; liquid fermented milk Toxic elements: products, including those with fruit and/or vegetable components; 0.02 powdered milk for baby foods; powdered and liquid dairy drinks; Lead low-lactose and lactose-free products Arsenic 0.05 Cadmium 0.02 Mercury 0.005

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product) |
|----------------------------|---|--|
| 1                          | 2   | 3  |

|   | pesticides (calculated as fat):  |                                       |
|---|--|---------------------------------------|
|   | hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers)<br>DDT <sup>*</sup> and its metabolites | 0.02<br>0.01                          |
| Adapted milk-based mixes                                    | Osmolality   | 320 mOsm/kg                           |
|   | Acidity  | 60 °T (for liquid sour milk products) |
| Follow-on adapted milk-based                                | Osmolality   | 320 mOsm/kg                           |
| mixes (formulas)  | Acidity  | 60 °T (for liquid sour milk products) |
| Follow-on partly adapted milk-based mixes (formulas)        | Osmolality   | 330 mOsm/kg                           |
|   | Acidity  | 60 °T (for liquid sour milk products) |
| Powdered milk cereals requiring cooking and instant (ready- | Toxic elements (in dry product):   |                                       |
| made) powdered milk cereals                                 | lead   | 0.3                                   |
|   | arsenic  | 0.2                                   |

|                            |                                  | Permissible levels, mg/kg (l),  |
|----------------------------|----------------------------------|---------------------------------|
|                            | Potentially dangerous substances | not above                       |
| Product, group of products | and oxidative deterioration      | (for powdered products –        |
|                            | indicators                       | calculated as for reconstituted |
|                            |                                  | product)                        |
| 1                          | 2                                | 3                               |

| cadmium   | 0.06  |
|---|---|
| mercury   | 0.03  |
| Mycotoxins (in dry product):                    |   |
| ochratoxin A<br>aflatoxin B <sub>1</sub>        | not allowed (below 0.0005)<br>not allowed (below 0.00015)                                   |
| desoxynivalenol                                 | not allowed (below 0.05) (for<br>cereals containing wheat, corn,<br>barley flour or grits)  |
| zearalenone                                     | not allowed (below 0.005) (for<br>cereals containing wheat, corn,<br>barley flour or grits) |
| fumonisins B1 and B2                            | 0.2 mg/kg (for cereals<br>containing corn<br>flour or grits)                                |
| T-2 toxin                                       | not allowed (below 0.05)  |
| pesticides (calculated for fat in dry product): | I   |

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product) |
|----------------------------|---|--|
| 1                          | 2   | 3  |

|  | hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers) | 0.001  |
|--|--|--|
|  | DDT <sup>***</sup> and its metabolites                 | 0.01   |
|  | Benzapyrene  | below 0.2 µg/kg  |
|  | Infestation and contamination with bread cereals pests | not allowed  |
|  | metal impurities<br>(in dry product)                   | 3x10 <sup>-4</sup> , %, size of individual<br>particles should exceed 0.3 mm<br>in the largest linear<br>measurement |
| Sterilized ready-to-use milk cereals; ready-to-use milk cereals made at the dairy kitchens | Toxic elements (in final product):                     | measurement  |
|  | lead   | 0.02   |
|  | arsenic  | 0.05   |
|  | cadmium  | 0.02   |
|  | mercury  | 0.005  |
|  | Mycotoxins:  |  |

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted |
|----------------------------|---|--|
|                            |   | product)   |
| 1                          | 2   | 3  |

| ochratoxin A   | not allowed (below 0.0005)  |
|--|---|
| aflatoxin B1   | not allowed (below 0.00015)   |
| desoxynivalenol  | not allowed (below 0.05)<br>(for cereals containing wheat,<br>corn, barley flour or grits)  |
| zearalenone  | not allowed (below 0.005)<br>(for cereals containing wheat,<br>corn, barley flour or grits) |
| fumonisins B1 and B2                                   | 0.2 mg/kg (for cereals<br>containing corn<br>flour or grits)                                |
| T-2 toxin  | not allowed (below 0.05)  |
| pesticides (calculated for fat):                       |   |
| hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers) | 0.01  |
| DDT <sup>*</sup> and its metabolites                   | 0.01  |
| Benzapyrene  | below 0.2 µg/kg   |
|  |   |

| Product, group of products   | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product)                   |
|--|---|--|
| 1  | 2   | 3  |
|  | Infestation and contamination with bread cereals pests                        | not allowed  |
| Curd and curd-based products, including those with fruit and/or vegetable components | metal impurities  | 3x10 <sup>-4</sup> , %, size of individual<br>particles should exceed 0.3 mm<br>in the largest linear<br>measurement                     |
|  | peroxide value  | 4.0 mmol of active oxygen/ kg<br>of fat (for products with fat<br>content above 5g/100g and<br>products enriched with<br>vegetable oils) |
|  | acidity   | 150 °T   |
|  | Toxic elements:   |  |
|  | lead  | 0.06   |
|  | arsenic   | 0.15   |
|  | cadmium   | 0.06   |
|  | mercury   | 0.015  |

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above<br>(for powdered products –<br>calculated as for reconstituted<br>product) |
|----------------------------|---|--|
| 1                          | 2   | 3  |

pesticides (calculated for fat):

| hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers) | 0.55 |
|--|------|
| DDT <sup>*</sup> and its metabolites                   | 0.33 |

<sup>&</sup>lt;sup>\*</sup>The level of indicator is controlled when government authorities or executive power bodies have formally determined that the environmental situation has deteriorated due to emergency situations of natural or man-made origin with dioxins entry into the environment.

\*\*\*\*DDT – dichloro-diphenyl-trichloroethane, insecticide.

<sup>&</sup>lt;sup>\*\*</sup> The level of indicator comes into force from 01.01.2015. Control over melamine level in milk, dairy and other products is conducted in case when there is a justified assumption on its potential presence in food raw materials.

ANNEX No. 10 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

## Permissible levels of oxidative deterioration and content of potentially dangerous substances in dairy products, dairy composite products for nutrition of pre-school and school-age children

| Product, group of products | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above (for powdered<br>products – calculated as for<br>reconstituted product) |
|----------------------------|---|---|
| 1                          | 2   | 3   |
| 1. Dairy products          | Antibiotics:  |   |
|                            | Levomycetine<br>(chloramphenicol)   | not allowed (below 0.0003)  |
|                            | Tetracycline group  | not allowed (below 0.01)  |
|                            | Penicillin  | not allowed (below 0.004)   |
|                            | Streptomycin  | not allowed (below 0.2)   |
|                            | Mycotoxins:   | not allowed (below 0.00002),  |
|                            | aflatoxin M1  | For cheese – not allowed  |
|                            |   | (below 0.00005)   |
|                            | radionuclides:  |   |

| Product, group of products   | Potentially dangerous substances<br>and oxidative deterioration<br>indicators<br>2 | Permissible levels, mg/kg (l),<br>not above (for powdered<br>products – calculated as for<br>reconstituted product)<br>3                 |
|--|--|--|
| 1  | Δ  | 3  |
|  | Cesium137<br>Strontium-90  | 40 Bq/l (kg)<br>25 Bq/l (kg)   |
|  | Strontum-90  | not allowed  |
|  | dioxins <sup>*</sup>   | (within the measurement<br>accuracy)   |
|  | melamine <sup>**</sup>   | not allowed<br>(below 1 mg/kg)   |
| 2. Milk – sterilized, ultra-pasteurized, including vitaminized milk;<br>pasteurized milk; sterilized cream; liquid sour milk products,<br>including enriched ones; sour cream; powdered milk for baby<br>foods; dry and liquid dairy drinks; low-lactose and lactose-free<br>products; milk and cream condensed with sugar; concentrated<br>milk and cream | Peroxide value   | 4.0 mmol of active oxygen/ kg<br>of fat (for products with fat<br>content above 5g/100g and<br>products enriched with<br>vegetable oils) |
|  | Toxic elements:  |  |
|  | lead .   | 0.02   |
|  | arsenic  | 0.05   |
|  | cadmium  | 0.02   |
|  | mercury pesticides (calculated for fat):   | 0.005  |

| Product, group of products  | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above (for powdered<br>products – calculated as for<br>reconstituted product)                      |
|---|---|--|
| 1   | 2   | 3  |
|   | hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers)                        | 0.02   |
|   | DDT <sup>*</sup> and its metabolites  | 0.01   |
| 3. Curd and curd-based products, including those with fruit and/or vegetable components and/or heat treated after culturing | Peroxide value  | 4.0 mmol of active oxygen/ kg<br>of fat (for products with fat<br>content above 5g/100g and<br>products enriched with<br>vegetable oils) |
|   | acidity   | 150 °T   |
|   | Toxic elements:   |  |
|   | lead  | 0.06   |
|   | arsenic   | 0.15   |
|   | cadmium   | 0.06   |
|   | mercury   | 0.015  |
|   | pesticides (calculated for fat):  |  |
|   | hexachlorocyclohexane (alfa-,   | 0.55   |

| Product, group of products                       | indicators  |  |  |
|--|---|--|--|
|  | beta-, gamma-isomers)<br>DDT <sup>***</sup> and its metabolites | 0.33   |  |
| 4. Cream butter, butter paste of premium quality | Acidity of fat phase  | 2.5 °K<br>(for butter and paste<br>with components – 3,5 °K) |  |
|  | Toxic elements:   |  |  |
|  | lead  | 0.1  |  |
|  | arsenic   | 0.1  |  |
|  | cadmium   | 0.03   |  |
|  | mercury   | 0.03   |  |
|  | pesticides (calculated for fat):                                |  |  |
|  | hexachlorocyclohexane (alfa-,<br>beta-, gamma-isomers)          | 0.2  |  |
|  | DDT and its metabolites   | 0.2  |  |

| Product, group of products  | Potentially dangerous substances<br>and oxidative deterioration<br>indicators | Permissible levels, mg/kg (l),<br>not above (for powdered<br>products – calculated as for<br>reconstituted product) |
|---|---|---|
|   | 2   | 3   |
| 5. Cheese, cheese products (hard, semi-hard, soft, pickled), processed, cheese pastes | Toxic elements:   |   |
|   | lead  | 0.2   |
|   | arsenic   | 0.15  |
|   | cadmium   | 0.1   |
|   | mercury   | 0.03  |
|   | pesticides (calculated for fat):  |   |
|   | hexachlorocyclohexane (alfa-, beta-, gamma-isomers)                           | 0.6   |
|   | DDT and its metabolites   | 0.2   |

<sup>\*</sup>The level of dioxins is controlled when government authorities or executive power bodies have formally determined that the environmental situation has deteriorated due to emergency situations of natural or man-made origin with dioxins entry into the environment.

<sup>&</sup>lt;sup>\*\*</sup> The level of melamine comes into force from 01.01.2015. Control over melamine level in milk, dairy and other products is conducted in case when there is a justified assumption on its potential presence in food raw materials.

<sup>\*\*\*\*</sup>DDT – dichloro-diphenyl-trichloroethane, insecticide.

ANNEX No. 11 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

#### Permissible levels of microorganisms in dairy products, dairy composite products for nutrition of pre-school and school-age children

|  | QMAFAnM <sup>*</sup>  | Produ  | ct volume (amount)  | , cm <sup>3</sup> (g) where no       | t allowed                            | Yeasts (Y),                                    |      |
|--|---|--|---|--------------------------------------|--------------------------------------|--|------|
| Product, group of products   | ,<br>CFU <sup>**</sup> /<br>cm <sup>3</sup> (g),<br>not above | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | (M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |
| 1  | 2   | 3  | 4   | 5                                    | 6                                    | 7  | 8    |
| 1. Pasteurized<br>milk in consumer<br>package                                      | 1x10 <sup>5</sup>   | 0.01   | 25  | 1                                    | 25                                   | -  |      |
| 2. Ultra-<br>pasteurized milk<br>without aseptic<br>filling in<br>consumer package | 100   | 10   | 100   | 10                                   | 25                                   | _  |      |
| 3. Pasteurized<br>cream in<br>consumer package                                     | 1x10 <sup>5</sup>   | 0.01   | 25  | 1                                    | 25                                   | _  |      |
| 4. Ultra-<br>pasteurized cream   | 100   | 10   | 100   | 10                                   | 25                                   | _  |      |

|   | QMAFAnM <sup>*</sup> Product volume (amount), cm <sup>3</sup> (g) where not allowed |  |   |                                      |                                      | Yeasts (Y),                                    |  |
|---|---|--|---|--------------------------------------|--------------------------------------|--|--|
| Product, group of products  | ,<br>CFU <sup>**</sup> /<br>cm <sup>3</sup> (g),<br>not above                       | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | (M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note   |
| 1   | 2   | 3  | 4   | 5                                    | 6                                    | 7  | 8  |
| <ul> <li>without aseptic<br/>filling in<br/>consumer package</li> <li>5. Baked milk</li> <li>6. Milk and cream<br/>sterilized, ultra-<br/>pasteurized with<br/>aseptic filling,<br/>including those<br/>enriched</li> </ul> | 2.5x10 <sup>3</sup>   | 1  | 25  |                                      |                                      |  | should<br>comply with<br>the<br>industrial<br>sterility<br>requirement<br>s for<br>sterilized,<br>ultra-<br>pasteurized<br>milk and<br>cream in<br>consumer<br>package |
| 7. Fermented milk<br>products,<br>including yoghurt   |   |  |   |                                      |                                      |  |  |
| a) with the   | _   | 0.01   | 25  | 1                                    | _                                    | -  |  |

|  | QMAFAnM <sup>*</sup> Product volume (amount), cm <sup>3</sup> (g) where not allowed  |  |   |                                      |                                      |  |      |
|--|--|--|---|--------------------------------------|--------------------------------------|--|------|
| Product, group of products   | ,<br>CFU <sup>**/</sup><br>cm <sup>3</sup> (g),<br>not above   | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | Yeasts (Y),<br>moulds<br>(M), CFU/<br>cm <sup>3</sup> (g),<br>not above                                | Note |
| 1  | 2  | 3  | 4   | 5                                    | 6                                    | 7  | 8    |
| shelf life of no<br>more than 72<br>hours  |  |  |   |                                      |                                      |  |      |
| b) with the<br>shelf life<br>above72 hours                                       | Lactic acid<br>micro<br>organisms –<br>not below<br>1x10 <sup>7</sup> , for<br>heat treated<br>products –<br>not regulated         | 0.1  | 25  | 1                                    | _                                    | Y – 50<br>M – 50,<br>Except<br>products<br>made with<br>the use of<br>starters<br>containing<br>yeasts |      |
| c) enriched<br>with bifidum<br>bacteria, with<br>the shelf life<br>above72 hours | Lactic acid<br>micro<br>organisms –<br>not below<br>1x10 <sup>7</sup> ,<br>bifidum<br>bacteria –<br>not below<br>1x10 <sup>6</sup> | 0.1  | 25  | 1                                    | _                                    | Y – 50<br>M – 50,<br>Except<br>products<br>made with<br>the use of<br>starters<br>containing<br>yeasts |      |

|  | QMAFAnM <sup>*</sup> Product volume (amount), cm <sup>3</sup> (g) where not allowed          |   |   |                                      |                                      |  |      |  |
|--|--|---|---|--------------------------------------|--------------------------------------|--|------|--|
| Product, group of products                         | ,<br>CFU <sup>**/</sup><br>cm <sup>3</sup> (g),<br>not above                                 | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup>                                | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s |  | Note |  |
| 1  | 2  | 3   | 4   | 5                                    | 6                                    | 7  | 8    |  |
| 8. Ryazhenka                                       | lactic acid<br>micro<br>organisms –<br>not below<br>1x10 <sup>7</sup>                        | 1   | 25  | 1                                    | _                                    | Y – 50<br>M – 50<br>(for<br>products<br>with the<br>shelf<br>life<br>above72<br>hours) |      |  |
| 9. Sour cream and<br>products made on<br>its basis | For sour<br>cream –<br>lactic acid<br>micro<br>organisms –<br>not below<br>1x10 <sup>7</sup> | 0.001<br>(for sour<br>cream<br>products<br>heat treated<br>after<br>culturing –<br>0,1) | 25  | 1                                    | _                                    | Y – 50<br>M – 50<br>(for<br>products<br>with the<br>shelf<br>life<br>above72<br>hours) |      |  |
| 10. Cream butter,                                  |  |   |   |                                      |                                      |  | In   |  |

10. Cream butter, butter paste, curd and curd-based In compliance with the

| OMAEAnM |                            | OMAFAnM <sup>*</sup> | Produc   | ct volume (amount)  | Yeasts (Y),                          |                                      |  |      |  |
|---------|----------------------------|----------------------|--|---|--------------------------------------|--------------------------------------|--|------|--|
|         | Product, group of products |                      | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | (M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |  |
|         | 1                          | 2                    | 3  | 4   | 5                                    | 6                                    | 7  | 8    |  |

| products, cheese,<br>canned milk         |                     |   |    |   |   |                   | levels<br>established<br>in Annex<br>No. 8 to<br>Technical<br>Regulation<br>of the<br>Customs<br>Union "On<br>Safety of<br>Milk and<br>Dairy<br>Products"<br>(TR TS<br>033/2013) |
|--|---------------------|---|----|---|---|-------------------|--|
| 11. Products used for making baby foods: |                     |   |    |   |   |                   |  |
| a) powdered<br>milk                      | 2.5x10 <sup>4</sup> | 1 | 25 | 1 | _ | Y - 50<br>M - 100 |  |
| b) concentrate of milk whey              | 1x10 <sup>4</sup>   | 1 | 25 | 1 | _ | Y - 10<br>M - 50  |  |

|  | QMAFAnM*   | Produ  | uct volume (amount)                                       | ), $cm^3$ (g) where no               | ot allowed                           | Vacata (V)  |      |
|--|--|--|---|--------------------------------------|--------------------------------------|---|------|
| Product, group of products   | ,<br>CFU <sup>**/</sup><br>cm <sup>3</sup> (g),<br>not above | E.coli<br>group<br>bacteria<br>(coliforms)** | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | - Yeasts (Y),<br>moulds<br>(M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |
| 1  | 2  | 3  | 4   | 5                                    | 6                                    | 7   | 8    |
| proteins<br>produced by<br>electrodialysis<br>(ultra-filtration<br>and<br>electrodialysis)<br>c) carbohydrate<br>-and-protein<br>concentrate | 1x10 <sup>4</sup>  | 1  | 50  | 1                                    | _                                    | Y – 10<br>M – 50  |      |
| d) milk protein concentrate  | 1x10 <sup>4</sup>  | 1  | 50  | 1                                    | -                                    | Y - 10<br>M - 50  |      |
| e) dry<br>carbohydrate-<br>and-protein<br>module from<br>cheese whey   | 2.5x10 <sup>4</sup>  | 1  | 25  | 1                                    | _                                    | Y - 10<br>M - 50  |      |
| f) dry<br>carbohydrate-<br>and-protein<br>modules from<br>curd whey  | 2.5x10 <sup>4</sup>  | 1  | 25  | 1                                    | _                                    | Y - 10<br>M - 50  |      |
| g) liquid para-  | _  | 3  | 25  | 1                                    | _                                    | Y - 50  |      |

|  | QMAFAnM <sup>*</sup>   |  | ict volume (amount)                                       | ), $cm^3$ (g) where no               | ot allowed                           | Yeasts (Y),                                    |      |
|--|--|--|---|--------------------------------------|--------------------------------------|--|------|
| Product, group of products   | ,<br>CFU <sup>**/</sup><br>cm <sup>3</sup> (g),<br>not above | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | (M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |
| 1  | 2  | 3  | 4   | 5                                    | 6                                    | 7  | 8    |
| casein<br>concentrate  |  |  |   |                                      |                                      | M – 50   |      |
| h) dry para-<br>casein<br>concentrate  | _  | 1  | 25  | 1                                    | _                                    | Y - 50<br>M - 50                               |      |
| i) dry casecyte  | $1 \times 10^{4}$  | 1  | 25  | 1                                    | _                                    | Y - 10<br>M - 50                               |      |
| j) dry nonfat<br>milk<br>component (for<br>dry baby<br>foods)                          | 1.5x10 <sup>4</sup>  | 0.3  | 25  | 1                                    | _                                    | Y - 10<br>M - 50                               |      |
| k) dry milk<br>component<br>with malt<br>extract (for<br>liquid baby<br>food products) | 1.5x10 <sup>4</sup>  | 1  | 25  | 1                                    | _                                    | Y - 10<br>M - 50                               |      |
| l) dry milk<br>component<br>with<br>carbohydrate-                                      | 2.5x10 <sup>4</sup>  | 1  | 25  | 1                                    | _                                    | Y - 50<br>M - 50                               |      |

|   | QMAFAnM*   | Produ  | ict volume (amount)                                       | ), $cm^3$ (g) where no               | ot allowed                           | Yeasts (Y),                                    |      |
|---|--|--|---|--------------------------------------|--------------------------------------|--|------|
| Product, group of products  | ,<br>CFU <sup>**/</sup><br>cm <sup>3</sup> (g),<br>not above | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup> | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | (M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |
| 1   | 2  | 3  | 4   | 5                                    | 6                                    | 7  | 8    |
| and-protein<br>concentrate<br>(for liquid baby<br>food products)<br>m) nonfat dry<br>milk<br>component<br>without<br>chemical<br>treatment (for<br>dry baby food<br>products) | 2.5x10 <sup>4</sup>  | 1  | 25  | 1                                    | _                                    | Y - 50<br>M - 50                               |      |
| n) refined milk<br>sugar  | $1 \times 10^{3}$  | 1  | 25  | _                                    | _                                    | M – 10   |      |
| o) alimentary<br>lactose  | $1 \times 10^{4}$  | 1  | 25  | 1                                    | -                                    | M – 100  |      |
| p) lactose<br>concentrate   | $1 \times 10^{3}$  | 1  | 50  | -                                    | -                                    | M - 100  |      |
| q) lactulose<br>concentrate   | $1 \times 10^{3}$  | 1  | 50  | 1                                    | _                                    | Y - 50<br>M - 100                              |      |

|                            | QMAFAnM*                 | EAnM <sup>*</sup> Product volume (amount), cm <sup>3</sup> (g) where not allowed |   |                                      |                                      |   |      |
|----------------------------|--------------------------|--|---|--------------------------------------|--------------------------------------|---|------|
| Product, group of products | ,<br>CFU <sup>**</sup> / | E.coli<br>group<br>bacteria<br>(coliforms) <sup>**</sup>                         | Pathogenic<br>microorganisms<br>, including<br>salmonella | Staphylococcu<br>s spp.<br>S. aureus | Listeria spp.<br>L.monocytogene<br>s | - Yeasts (Y),<br>moulds<br>(M), CFU/<br>cm <sup>3</sup> (g),<br>not above | Note |
| 1                          | 2                        | 3  | 4   | 5                                    | 6                                    | 7   | 8    |
| r) dry milk                | 1x10 <sup>4</sup>        | 1  | 25  | 1                                    | _                                    | Y - 10  |      |

r) dry milk  $1 \times 10^4$  1 25 1 - Y - 10 whey  $\Pi - 50$ 

\* QMAFAnM – quantity of mesophylic aerobic and facultative anaerobic microorganisms.

\*\* CFU – colony-forming units.

\*\*\*\*Coliforms – E.coli group bacteria.

ANNEX No. 12 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

Physical-and-chemical indicators for the identification of milk-based products for baby foods, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies

| Criteria and indicators |   |   | Necessity of marking |
|-------------------------|---|---|----------------------|
| 1                       | 2 | 3 | 4                    |

1. Adapted milk baby formulas (dry, liquid, acidified) and products based on partly hydrolyzed proteins for nutrition of children from 0 to 6 months of age

#### Nutritional value indicators (per 100 ml of ready-to-use products)

| Protein   | g   | 1.2 - 1.7          | + |
|---|---|--------------------|---|
| Milk whey proteins  | % of the total amount of protein<br>not below | $50^{*}$           | + |
| Fat   | g   | 3 - 4              | + |
| Linoleic acid   | % of the aggregate of fatty acids             | 14 - 20            | + |
| The ratio of alfa tocoferol and polyunsaturated fatty acids | mg<br>—                                       | 400 - 800<br>1 - 2 | - |

| Criteria and indicators  | Measurement units   | Acceptable levels       | Necessity of marking |  |  |
|--|---|-------------------------|----------------------|--|--|
| 1  | 2   | 3                       | 4                    |  |  |
| Carbohydrates  | Г   | 6.5 - 8                 | +                    |  |  |
| Lactose  | % of the total amount of carbohydrates <sup>**</sup> , not below  | 65                      | +                    |  |  |
| Taurine  | mg, not above   | 8                       | +                    |  |  |
| 2. Follow-on adapted milk l  | baby formulas (dry, liquid, non-acidified and acidified) and products l<br>nutrition of children over 6 months of age | based on partly hydroly | zed proteins for     |  |  |
|  | Nutritional value indicators (per 100 ml of ready-to-use products   | )                       |                      |  |  |
| Protein  | g   | 1.2 - 2.1               | +                    |  |  |
| Milk whey proteins   | % of the total amount of protein<br>not below   | 35***                   | -                    |  |  |
| Fat  | g   | 2.5 - 4.0               | +                    |  |  |
| Linoleic acid  | % of the aggregate of fatty acids   | 14 - 20                 | +                    |  |  |
|  | mg  | 400 - 800               | +                    |  |  |
| Carbohydrates  | g   | 7 – 9                   | +                    |  |  |
| Lactose % of the total amount of carbohydrates <sup>**</sup> , not below 50 +  |   |                         |                      |  |  |
| 3. Adapted milk baby formulas (dry, liquid, non-acidified and acidified) and products based on partly hydrolyzed proteins for nutrition of children from 0 to 12 months of age |   |                         |                      |  |  |

Nutritional value indicators (per 100 ml of ready-to-use products)

| Criteria and indicators  | Measurement units   | Acceptable levels | Necessity of marking |  |  |
|--|---|-------------------|----------------------|--|--|
| 1  | 2   | 3                 | 4                    |  |  |
| Protein  | ein g   |                   | +                    |  |  |
| Milk whey proteins   | % of the total amount of protein<br>not below                     | $50^{*}$          | -                    |  |  |
| Taurine  | mg, not above   | 8                 | _                    |  |  |
| Fat  | g   | 3 – 4             | +                    |  |  |
| Linoleic acid  | % of the aggregate of fatty acids                                 | 14 - 20           | -                    |  |  |
|  | mg  | 400 - 800         | +                    |  |  |
| The ratio of alfa tocoferol and polyunsaturated fatty acids  | _   | 1 – 2             | -                    |  |  |
| Carbohydrates  | g   | 6.5 - 8           | +                    |  |  |
| Lactose  | % of the total amount of carbohydrates <sup>**</sup> , not below  | 65                | +                    |  |  |
| 4. Follow-on partly adapted milk baby formulas (dry, liquid, non-acidified and acidified) for nutrition of children over 6 months of age |   |                   |                      |  |  |
|  | Nutritional value indicators (per 100 ml of ready-to-use products | 3)                |                      |  |  |
| Protein  | g   | 1.5 – 2.4         | +                    |  |  |
| Milk whey proteins   | % of the total amount of protein                                  | 20                | -                    |  |  |

| Criteria and indicators   | Measurement units  | Acceptable levels        | Necessity of marking |
|---------------------------|--|--------------------------|----------------------|
| 1                         | 2  | 3                        | 4                    |
|                           | not below  |                          |                      |
| Fat                       | G  | 2.5 - 4                  | +                    |
| Linoleic acid             | % of the aggregate of fatty acids,<br>not below                      | 14                       | +                    |
|                           | mg, not below  | 400                      | +                    |
| Carbohydrates             | G  | 6 - 9                    | +                    |
| Lactose                   | % of the total amount of carbohydrates, not below                    | 50                       | +                    |
| 5. Supplemental feeding p | products and products for nutrition of infants and babies (per 100 m | or 100 g of ready-to-use | product)             |
| Fluid milk –              | pasteurized, sterilized, ultra-pasteurized, including enriched milk; | sterilized fluid cream   |                      |
| Protein:                  |  |                          |                      |
| milk                      | g  | 2.8 - 3.2                | +                    |
| cream                     | g, not below   | 2.6                      | +                    |
| Fat:                      |  |                          |                      |
| milk                      | g  | 2 - 4                    | +                    |
| cream                     | g  | 10                       | +                    |

| Criteria and indicators  | Measurement units | Acceptable levels                                 | Necessity of<br>marking<br>4 |  |  |
|--|-------------------|---|------------------------------|--|--|
| Ash  | g                 | 0.6 - 0.8   | <del>_</del>                 |  |  |
| Calcium  | mg, not below     | 100   | _                            |  |  |
| 6. Sour milk products, including those with fruit and/or vegetable components                                      |                   |   |                              |  |  |
| Protein  | g                 | 2 – 3.2<br>For prophylactic<br>diet – not above 4 | +                            |  |  |
| Fat  | g                 | 2 - 4   | +                            |  |  |
| Carbohydrates,   | g, not above      | 12  | +                            |  |  |
| including sucrose ****   | g, not above      | 10  | +                            |  |  |
| Ash  | g                 | 0.5 - 0.8   | _                            |  |  |
| Calcium  | mg, not below     | 60  | +                            |  |  |
| Acidity  | °T, not above     | 110   | _                            |  |  |
| 7. Curd and curd-based products, paste-like dairy products, including those with fruit and/or vegetable components |                   |   |                              |  |  |
| Protein  | g                 | 7 – 17  | +                            |  |  |
| Fat  | g                 | 3 – 10  | +                            |  |  |
| Carbohydrates,   | g, not above      | 12  | +                            |  |  |

| Criteria and indicators                   | Measurement units  | Acceptable levels | Necessity of marking |
|---|--|-------------------|----------------------|
| 1   | 2  | 3                 | 4                    |
| including sucrose****                     | g, not above   |                   |                      |
|   |  | 10                | +                    |
| Calcium                                   | mg, not below  | 85                | +                    |
| Acidity                                   | °T, not above  | 150               | _                    |
|   | 8. Dry milk (per 100 ml of reconstituted product)  |                   |                      |
| Milk protein                              | g  | 2.8 - 3.2         | +                    |
| Fat                                       | g  | 2 - 4             | +                    |
| Calcium                                   | mg, not below  | 100               | _                    |
|   | 9. Dry (per 100 ml of reconstituted product) and liquid dairy, dairy con<br>and milk-containing drinks (for children over 6 months of age) |                   |                      |
| Protein                                   | g, not below   | 1.8               | +                    |
| Fat                                       | g  | 1 - 4             | +                    |
| Carbohydrates,<br>including sucrose ***** | g, not above   | 12                | _                    |
| menuting sucrose                          | g, not above   | 6                 |                      |
| Calcium                                   | mg   | 90 - 240          | +                    |
|   | 10. Dry milk-based cereals requiring cooking and instant (ready-mathematical sector)   | ade)              |                      |

(per 100 g of dry product)

| Criteria and indicators             | Measurement units   | Acceptable levels | Necessity of<br>marking |
|-------------------------------------|---|-------------------|-------------------------|
| 1                                   | 2   | 3                 | 4                       |
| Moisture                            | g, not above  | 8                 | +                       |
| Protein                             | g   | 12 – 20           | +                       |
|                                     | g<br>not below – in cereals requiring reconstitution by whole or partly<br>diluted cow's milk   | 7                 |                         |
| Fat                                 | g   | 10 - 18           | +                       |
|                                     | g,<br>not below – in cereals on whole milk with the mass faction of at<br>least 25% provided that butter or vegetable oil is added to the<br>reconstituted cereals            | 5                 | +                       |
|                                     | g,<br>not below – in cereals on skimmed milk provided that they are<br>reconstituted with whole milk or that butter or vegetable oil is<br>added to the reconstituted cereals | 0.5               | +                       |
| Carbohydrates,<br>including sucrose | g   | 60 - 70           | +                       |
| menualing sucrose                   | g, not above  | 20                | +                       |

Notes: 1. The composition of proteins in adapted milk formula should be as close as possible to the composition of human breast milk.

2. Sesame oil or cotton oil are not used in the composition of fat in adapted milk formula.

3. The content of isomers should be more than 3% of the total fat content.

4. The content of myristic and lauric acids should not be more than 20% of the total fat content.

5. The ratio of linoleic acid and alfa-linoleic acid should be less than 5 and more than 15.

6. Where formulas are enriched with long-chain fatty acids, their content should not be above 1% of the total fat for "w-3" long-chain polyunsaturated fatty acid and 2% for "w-6" long-chain polyunsaturated fatty acid.

7. The content of eicosapentanoic acid should not the higher than the content of docosahexaenoic acid.

8. Along with lactose, maltodextrin and partly hydrolyzed gluten-free starch, sucrose and fructose are used – only in initial and follow-on adapted baby formulas based on partly hydrolyzed proteins and in follow-on partly adapted baby formulas; the amount of sucrose and/or fructose or their aggregate should not exceed 20% of the total carbohydrate content; glucose and glucose syrup – only in initial and follow-on adapted baby formulas based on partly hydrolyzed proteins in the amount not above 14 g/l; carbohydrate component may include prebiotics – galacto-oligosaccharides, fructo- oligosaccharides (not above 8 g/l in the aggregate) and lactulose.

\* Except adapted casein-dominating formulas (milk baby formulas with casein content above 50% of the total amount of protein).

\*\* Except products based on partly hydrolyzed proteins.

\*\*\* Except adapted casein-dominating formulas (milk baby formulas with casein content above 65% of the total amount of protein).

\*\*\*\*\*Sucrose replacement with fructose in the amount not above 5 g is allowed.

\*\*\*\*\*\* Sucrose replacement with fructose in the amount not above 3 g is allowed.

<sup>\*\*\*</sup> Sucrose replacement with fructose in the amount not above 10 g is allowed.

ANNEX No. 13 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

### Physical-and-chemical indicators for the identification of milk-based baby foods for nutrition of pre-school and school-aged children

Table 1

Fluid milk, fluid cream, fermented milk products milk-based drinks (dry and liquid), including enriched ones (per 100 ml of ready-to-use product)

| Criteria and indicators                                | Measurement unit | Acceptable levels | Necessity of marking |
|--|------------------|-------------------|----------------------|
| 1  | 2                | 3                 | 4                    |
| Protein:   |                  |                   |                      |
| milk, fermented milk<br>products, milk-based<br>drinks | g                | 2 – 5             | +                    |
| sour cream   | g, not below     | 2.5               | +                    |
| cream  | g, not below     | 2.5               | +                    |
| Eate   |                  |                   |                      |

Fat:

| Criteria and indicators                                | Measurement unit   | Acceptable levels | Necessity of marking         |  |
|--|--|-------------------|------------------------------|--|
| 1  | 2  | 3                 | 4                            |  |
| milk, fermented milk<br>products, milk-based<br>drinks | g  | 1.5 – 4           | +                            |  |
| cream  | g  | 10 - 20           | +                            |  |
| sour cream   | g  | 10 - 20           | +                            |  |
| Carbohydrates:   |  |                   |                              |  |
| fermented milk products,<br>milk-based drinks          | g, not above   | 16                | +                            |  |
| including added sucrose <sup>*</sup>                   | g, not above   | 10                | +                            |  |
| milk   | g, not below   | 4.7               | +                            |  |
| sour cream   | g, not below   | 3.4               | +                            |  |
| cream  | g, not below   | 3.7               | +                            |  |
| Calcium  | mg   | 105 - 240         | +<br>(for enriched products) |  |
| Note.  | Note.For fermented milk composite products it is allowed that the identification physical-and-chemical<br>indicators are regulated in the regulatory or technical documents guiding manufacture of these products. |                   |                              |  |

\* Sucrose replacement with fructose in the amount not above 5 g is allowed.

| Criteria and indicators            | Measurement unit | Acceptable levels | Necessity of marking |
|------------------------------------|------------------|-------------------|----------------------|
| 1                                  | 2                | 3                 | 4                    |
| Mass fraction of moisture          | %, not above     | 70                | _                    |
| Mass fraction of fat in dry solids | %, not above     | 55                | +                    |
| Cooking salt                       | g, not above     | 2                 | _                    |

Hard, semi-hard, soft and processed cheeses for nutrition of pre-school and school-aged children (per 100 ml of ready-to-use product)

Table 3

# Curd and curd-based products including those with fruit and vegetable components (per 100 g of ready-to-use product)

| Criteria and<br>indicators | Measurement unit | Acceptable levels | Necessity of marking |
|----------------------------|------------------|-------------------|----------------------|
| 1                          | 2                | 3                 | 4                    |
| Protein                    | g, not below     | 6 – 17            | +                    |
| Fat                        | g                | 3.5 – 10          | +                    |
| Carbohydrates,             | g, not above     | 16                | +                    |
| including added sucrose *  | g, not above     | 10                | +                    |
| Acidity                    | °T, not above    | 150               | _                    |

| Criteria and indicators | Measurement unit | Acceptable levels | Necessity of marking |
|-------------------------|------------------|-------------------|----------------------|
| 1                       | 2                | 3                 | 4                    |

Note.

For fermented milk composite products it is allowed that the identification physical-and-chemical indicators are regulated in the regulatory or technical documents guiding manufacture of these products.

\* Sucrose replacement with fructose in the amount not above 5 g is allowed.

ANNEX No. 14 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

## Permissible levels of micro-nutrients in liquid milk-based formulas for nutrition of infants and babies

| Name | Measurement<br>unit | Indicator | Necessity of<br>marking |
|------|---------------------|-----------|-------------------------|
| 1    | 2                   | 3         | 4                       |

I. Adapted milk baby formulas (dry, liquid, non- acidified and acidified) and products based on partly hydrolyzed proteins for nutrition of children from birth to 6 months of age (initial baby formulas)

#### 1. Minerals:

| calcium             | mg/l         | 330 - 700             | +      |
|---------------------|--------------|-----------------------|--------|
| phosphorus          | mg/l         | 150 - 400             | +      |
| calcium/phosphorus  | ratio        | 1.2 - 2               | _      |
| potassium           | mg/l         | 400 - 850             | +      |
| sodium              | mg/l         | 150 - 300             | +      |
| magnesium           | mg/l         | 30 - 90               | +      |
| copper<br>manganese | μg/l<br>μg/l | 300 - 600<br>10 - 300 | +<br>+ |

| Name             | Measurement<br>unit | Indicator       | Necessity of marking |
|------------------|---------------------|-----------------|----------------------|
| 1                | 2                   | 3               | 4                    |
| iron             | mg/l                | 3 - 9           | +                    |
| zinc             | mg/l                | 3 - 10          | +                    |
| chlorides        | mg/l                | 300 - 800       | +                    |
| iodine           | µg/l                | 50 - 150        | +                    |
| selenium         | µg/l                | 10 - 40         | +                    |
| ash              | g/l                 | 2.5 - 4         | _                    |
| 2. Vitamins:     |                     |                 |                      |
| retinol (A)      | µg-equiv./l         | 400 - 1000      | +                    |
| tocoferol (E)    | mg/l                | 4 - 12          | +                    |
| calciferol (D)   | µg/l                | 7.5 – 12.5      | +                    |
| Vitamin K        | µg/l                | 25 - 100        | +                    |
| thiamine (B1)    | µg/l                | 400 - 2100      | +                    |
| riboflavin (B2)  | µg/l                | 500 - 2800      | +                    |
| pantothenic acid | µg/l                | 2700 –<br>14000 | +                    |
| pyridoxin (B6)   | µg/l                | 300 - 1000      | +                    |
| Name   | Measurement<br>unit | Indicator         | Necessity of marking |
|--|---------------------|-------------------|----------------------|
| 1  | 2                   | 3                 | 4                    |
| niacin (PP)  | µg/l                | 2000 -<br>10000   | +                    |
| folic acid (Bc)  | µg/l                | 60 - 350          | +                    |
| cyanocobalamin (B12)   | μg/l                | 1 – 3             | +                    |
| ascorbic acid (C)  | mg/l                | 55 - 150          | +                    |
| inosine  | mg/l                | 20 - 280          | +                    |
| choline  | mg/l                | 50 - 350          | +                    |
| biotine  | μg/l                | 10 - 40           | +                    |
| L-carnitine  | mg/l, not above     | 20<br>(if added)  | +                    |
| lutein   | μg/l, not above     | 250<br>(if added) | +                    |
| nucleotides (the aggregate of cytidine-, uridine, adenosine,- guanosine- and inosine-5 monophosphates) | mg/l, not above     | 35<br>(if added)  | +                    |

II. Follow-on adapted milk baby formulas (dry, liquid, non- acidified and acidified) and products based on partly hydrolyzed proteins for nutrition of children over 6 months of age

## 3. Minerals:

| calcium    | mg/l | 400 - 900 | + |
|------------|------|-----------|---|
| phosphorus | mg/l | 200 - 600 | + |

| Name               | Measurement<br>unit | Indicator  | Necessity of marking |
|--------------------|---------------------|------------|----------------------|
| 1                  | 2                   | 3          | 4                    |
| calcium/phosphorus | ratio               | 1.2 - 2    | _                    |
| potassium          | mg/l                | 500 - 1000 | +                    |
| sodium             | mg/l                | 150 - 300  | +                    |
| magnesium          | mg/l                | 50 - 100   | +                    |
| copper             | µg/l                | 400 - 1000 | +                    |
| manganese          | µg/l                | 10 - 300   | +                    |
| iron               | mg/l                | 7 – 14     | +                    |
| zinc               | mg/l                | 4 - 10     | +                    |
| chlorides          | mg/l                | 300 - 800  | +                    |
| iodine             | μg/l                | 50 - 350   | +                    |
| selenium           | μg/l                | 10 - 40    | +                    |
| ash                | g/l                 | 2.5 - 6    | -                    |
| 4. Vitamins:       |                     |            |                      |
| retinol (A)        | µg-equiv./l         | 400 - 1000 | +                    |
| tocoferol (E)      | mg/l                | 4 - 20     | +                    |

| Name                 | Measurement<br>unit | Indicator        | Necessity of marking |
|----------------------|---------------------|------------------|----------------------|
| 1                    | 2                   | 3                | 4                    |
| calciferol (D)       | μg/l                | 8 - 21           | +                    |
| Vitamin K            | μg/l                | 25 – 170         | +                    |
| thiamine (B1)        | μg/l                | 400 - 2100       | +                    |
| riboflavin (B2)      | µg/l                | 600 - 2800       | +                    |
| pantothenic acid     | µg/l                | 3000 –<br>14000  | +                    |
| pyridoxin (B6)       | µg/l                | 400 - 1200       | +                    |
| niacin (PP)          | µg/l                | 3000 –<br>10000  | +                    |
| folic acid (Bc)      | µg/l                | 60 - 350         | +                    |
| cyanocobalamin (B12) | μg/l                | 1.5 – 3          | +                    |
| ascorbic acid (C)    | mg/l                | 55 - 150         | +                    |
| choline              | mg/l                | 50 - 350         | +                    |
| biotine              | µg/l                | 10 - 40          | +                    |
| inosine              | mg/l                | 20 - 280         | +                    |
| L-carnitine          | mg/l, not above     | 20<br>(if added) | +                    |

| Name  | Measurement<br>unit | Indicator                     | Necessity of marking |
|---|---------------------|-------------------------------|----------------------|
| 1   | 2                   | 3                             | 4                    |
| lutein  | µg/l, not above     | 250<br>(if added)             | +                    |
| nucleotides (the aggregate of cytidine-, uridine, adenosine,- guanosine- and inosine-5 monophosphates)              | mg/l                | not above<br>35<br>(if added) | +                    |
| III. Adapted milk baby formulas (dry, liquid, non- acidified and acidified) and produchildren over 12 months of age |                     |                               | ns for nutrition of  |
| 5. Minerals:  |                     |                               |                      |
| calcium   | mg/l                | 400 - 900                     | +                    |
| phosphorus  | mg/l                | 200 - 600                     | +                    |
| calcium/phosphorus  | ratio               | 1.2 - 2                       | _                    |
| potassium   | mg/l                | 400 - 800                     | +                    |
| sodium  | mg/l                | 150 - 300                     | +                    |
| magnesium   | mg/l                | 40 - 100                      | +                    |
| copper  | µg/l                | 300 - 1000                    | +                    |
| manganese   | µg/l                | 10 - 300                      | +                    |
| iron  | mg/l                | 6 – 10                        | +                    |
| zinc  | mg/l                | 3 - 10                        | +                    |
| chlorides   | mg/l                | 300 - 800                     | +                    |

| Name                 | Measurement<br>unit | Indicator  | Necessity of marking |
|----------------------|---------------------|------------|----------------------|
| 1                    | 2                   | 3          | 4                    |
| iodine               | µg/l                | 50 - 350   | +                    |
| selenium             | µg/l                | 10 - 40    | +                    |
| ash                  | g/l                 | 2.5 - 6    | +                    |
| 6. Vitamins:         |                     |            |                      |
| retinol (A)          | µg-equiv./l         | 400 - 1000 | +                    |
| tocoferol (E)        | mg/l                | 4 - 12     | +                    |
| calciferol (D)       | µg/l                | 8 – 21     | +                    |
| vitamin K            | µg/l                | 25 - 170   | +                    |
| thiamine (B1)        | mg/l                | 0.4 - 2.1  | +                    |
| riboflavin (B2)      | mg/l                | 0.5 - 2.8  | +                    |
| pantothenic acid     | mg/l                | 2.7 - 14   | +                    |
| pyridoxin (B6)       | mg/l                | 0.3 – 1.2  | +                    |
| niacin (PP)          | mg/l                | 3 – 10     | +                    |
| folic acid (Bc)      | µg/l                | 60 - 350   | +                    |
| cyanocobalamin (B12) | µg/l                | 1.5 – 3    | +                    |

| Name   | Measurement<br>unit | Indicator         | Necessity of marking |
|--|---------------------|-------------------|----------------------|
| 1  | 2                   | 3                 | 4                    |
| ascorbic acid (C)  | mg/l                | 55 - 150          | +                    |
| inosine  | mg/l                | 20 - 280          | +                    |
| choline  | mg/l                | 50 - 350          | +                    |
| biotine  | μg/l                | 10 - 40           | +                    |
| L-carnitine  | mg/l, not above     | 20<br>(if added)  | +                    |
| lutein   | µg/l, not above     | 250<br>(if added) | +                    |
| nucleotides (the aggregate of cytidine-, uridine, adenosine,- guanosine- and inosine-5 monophosphates) | mg/l, not above     | 35<br>(if added)  | +                    |

IV. Follow-on partly adapted milk baby formulas (dry, liquid, non- acidified and acidified) and products based on partly hydrolyzed proteins for nutrition of children over 6 months of age

## 7. Minerals:

| calcium            | mg/l  | 600 - 900  | + |
|--------------------|-------|------------|---|
| phosphorus         | mg/l  | 200 - 600  | + |
| calcium/phosphorus | ratio | 1.2 - 2    | - |
| potassium          | mg/l  | 400 - 1000 | + |

| Name            | Measurement<br>unit | Indicator  | Necessity of<br>marking |
|-----------------|---------------------|------------|-------------------------|
| 1               | 2                   | 3          | 4                       |
| sodium          | mg/l                | 150 - 350  | +                       |
| magnesium       | mg/l                | 50 - 100   | +                       |
| copper          | µg/l                | 400 - 1000 | +                       |
| manganese       | µg/l                | 10 - 650   | +                       |
| iron            | mg/l                | 5 - 14     | +                       |
| Zinc            | mg/l                | 4 - 10     | +                       |
| chlorides       | mg/l                | 300 - 800  | +                       |
| Iodine          | µg/l                | 50 - 350   | +                       |
| Ash             | g/l                 | 2.5 - 6    | +                       |
| 8. Vitamins:    |                     |            |                         |
| retinol (A)     | µg-equiv./l         | 400 - 1000 | +                       |
| tocoferol (E)   | mg/l                | 4 - 12     | +                       |
| calciferol (D)  | µg/l                | 7 – 21     | +                       |
| thiamine (B1)   | mg/l                | 0.4 - 2,1  | +                       |
| riboflavin (B2) | mg/l                | 0.5 – 2,8  | +                       |

| Name                 | Measurement<br>unit | Indicator | Necessity of<br>marking |
|----------------------|---------------------|-----------|-------------------------|
| 1                    | 2                   | 3         | 4                       |
| pantothenic acid     | mg/l                | 2.5 – 14  | +                       |
| pyridoxin (B6)       | mg/l                | 0.4 - 1.2 | +                       |
| niacin (PP)          | mg/l                | 3 – 10    | +                       |
| folic acid (Bc)      | µg/l                | 60 - 350  | +                       |
| cyanocobalamin (B12) | µg/l                | 1.5 – 3   | +                       |
| ascorbic acid (C)    | mg/l                | 55 - 150  | +                       |

ANNEX No. 15 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

List of food additives and flavorings allowed for making milk-based products for baby foods for nutrition of infants and babies, adapted or partly adapted initial or follow-on milk baby formulas (including powdered ones); powdered acidified milk formulas; dairy drinks (including powdered ones) for nutrition of infants and babies; ready-to-use milk cereals and powdered milk cereals (reconstituted to readiness with drinking water in home conditions) for nutrition of infants and babies

| Food additive<br>(Index E)<br>1   | Food Products                       | Maximum level in final products for baby foods 3           |
|---|-------------------------------------|--|
| Nitrogen (E 941)  | for nutrition of infants and babies | In compliance with the technical documents of the producer |
| Argon (E 938)   |                                     | the producer   |
| Helium (E 939)  |                                     |  |
| Carbon dioxide (E 290)  |                                     |  |
| Alginic acid (E 400)  | Dessert, pudding                    | 500 mg/kg  |
| Potassium alginate (E 402)  |                                     |  |
| Calcium alginate (E 404)<br>Sodium alginate (E 401)<br>(separately or in combination) |                                     |  |
| L-ascorbyl palmitate (E 304)  | Fat-containing products             | 100 mg/kg  |

| Food additive<br>(Index E)   | Food Products  | Maximum level in final products for baby foods |
|--|--|--|
| Tocopherol concentrate (E 306)   | _  |  |
| Alpha tocopherol (E 307)   |  |  |
| Gamma tocopherol (E 308)   |  |  |
| Delta tocopherol (E 309)<br>(separately or in combination)                                     |  |  |
| L-ascorbic acid (E 300)  | Cereal based fat-containing  | 200 mg/kg                                      |
| L-calcium ascorbate (E 302)  | products, including biscuits and breadsticks   |  |
| L-sodium ascorbate (E 301)<br>(separately or in combination<br>equivalent to<br>Ascorbic acid) |  |  |
| Potassium hydroxide (E 525)  | supplementing feeding products   | In compliance with the technical documents of  |
| Calcium hydroxide (E 526)  |  | the producer                                   |
| Sodium hydroxide (E 524)<br>(only for regulation of active<br>acidity)                         |  |  |
| Guar gum (E 412)   | supplementing feeding products,<br>anti-reflux formulas for baby foods,<br>hypoallergic products | 10 g/kg  |

| Food additive<br>(Index E)   | Food Products                  | Maximum level in final products for baby foods             |
|--|--------------------------------|--|
| <u> </u>   | 2                              | 3  |
| Arabic gum (E 414)   |                                |  |
| Locust bean gum (E 410)  |                                |  |
| Xantham gum (E 415)  |                                |  |
| Pectins (E 440)<br>(Separately or in combination)  |                                |  |
| Ammonium carbonates (E 503)  | supplementing feeding products | In compliance with the technical documents of the producer |
| Potassium carbonates (E 501)   |                                | the producer   |
| Sodium carbonates (E 500)<br>(only as baking powder)                                       |                                |  |
| Calcium carbonates (E 170)<br>(only for regulation of active<br>acidity)                   | supplementing feeding products | In compliance with the technical documents of the producer |
| Citric acid (E 330)  | supplementing feeding products | In compliance with the technical documents of              |
| Potassium citrates (E 332)   |                                | the producer   |
| Calcium citrates (E 333)   |                                |  |
| Sodium citrates (E 331)<br>(separately or in combination,<br>only for regulation of active |                                |  |

| Food additive<br>(Index E)   | Food Products                  | Maximum level in final products for baby foods |
|--|--------------------------------|--|
| 1  | 2                              | 3  |
| acidity)<br>Converted starches:  | supplementing feeding products | 50 g/kg  |
| Acetylated distarch adipate<br>(E 1422)<br>Acetylated distarch<br>phosphate (E 1414) |                                |  |
| Acetylated starch (E 1420)   |                                |  |
| Acetylated oxidized starch (E 1451)  |                                |  |
| Distarch phosphate (E 1412)  |                                |  |
| Monostarch phosphate (E 1410)  |                                |  |
| Oxidized starch (E 1404)   |                                |  |
| Phosphatized distarch phosphate (E 1413)   |                                |  |
| Starch sodium octenyl<br>succinate (E<br>1450)(separately or in<br>combination)      |                                |  |

Lactic acid (E 270)

supplementing feeding products

In compliance with the technical documents of

| Food additive<br>(Index E)<br>1  | Food Products                  | Maximum level in final products for baby foods             |
|--|--------------------------------|--|
|  |                                | the producer   |
| Potassium lactate (E 326)  |                                | the producer   |
| Calcium lactate (E 387)  |                                |  |
| Sodium lactate (E 325)<br>(separately or in combination,<br>only for regulation of active<br>acidity) <sup>*</sup> |                                |  |
| Hydrochloric acid (E 507)  | supplementing feeding products | In compliance with the technical documents of the producer |
| Acetic acid (E 260)  | supplementing feeding products | In compliance with the technical documents of the producer |
| Potassium acetate (E 261)  |                                |  |
| Calcium acetate (E 387)  |                                |  |
| Sodium acetate (E 262)<br>(separately or in combination,<br>only for regulation of active<br>acidity)              |                                |  |
| Ortho-phosphoric acid (E 339)<br>(added phosphate equivalent to $P_2O_5$ for regulation of active<br>acidity only) | supplementing feeding products | 1 g/kg   |
| Malic acid (E 296)<br>(only for regulation of active   | supplementing feeding products | In compliance with the technical documents of the producer |

| Food additive<br>(Index E)                  | Food Products  | Maximum level in final products for baby foods             |
|---|--|--|
| 1   | 2  | 3  |
| acidity) <sup>**</sup><br>Natural flavoring | supplementing feeding products   | In compliance with the technical documents of the producer |
| Note:                                       | The use of food additives in products for baby foods is allowed as part of another product. The content of Arabic gum (E 414) in products like this should not exceed 150 g/kg; that of amorphous silicon dioxide (E 551) – 10 g/kg. Admission of mannitol (E 421) to baby food products as solvent carrier is allowed with vitamin B-12; the content of vitamin B-12 in such products should not exceed 1 mg/kg of mannitol. Admission of sodium ascorbate (E 301) is allowed as part of polyunsaturated fatty acid preparation coating. Admission of Arabic gum from other products should not exceed 10 mg/kg of final product, that of sodium ascorbate - 75 mg/kg of final product) |  |

<sup>\*</sup> Only L(+)-forms of lactic, tartaric, malic acids and their salts are used for producing supplementing feeding products.

<sup>\*\*</sup> L(+)-lactic acid produced by non-pathogenic and non-toxigenic strains of microorganisms is used in the production of fermented milk products.

ANNEX No. 16 to Technical Regulation of the Customs Union "On Safety of Milk and Dairy Products" (TR TS 033/2013)

## Maximum permissible deviation of dairy product nutritional value marked on the packages or labels from the actual nutritional value of such products

| Final product nutritional value  | Maximum permissible deviation , $\pm$  |
|--|--|
| 1  | 2  |
| 1. Proteins, carbohydrates, organic acids, alcohol, cellulose, fatty acids   |  |
| below 10 g per 100 g of product  | 10 %   |
| 10 - 40 g per 100 g of product   | 15 %   |
| above 40 g per 100 g of product  | 6 г  |
| <ol> <li>Sodium, magnesium, calcium, phosphorus, iron, zinc, vitamins C, B1, B2,<br/>B6, panthothenic acid, niacin, cholesterol</li> </ol> | 20 %   |
| 3. Vitamins A, B12, Д, E, folic acid, biotin, iodine   | 30 %<br>(not including an increased content of vitamins in the<br>production of the final product) |

Note: The actual values in terms of mass fractions of proteins, carbohydrates, organic acids, alcohol, cellulose, fatty acids, vitamins and minerals should comply with the requirements specified in the companies' regulations and technical documents or standards used for production and identification of dairy products.

END UNOFFICIAL TRANSLATION.