

CODEX STANDARD FOR CREAM AND PREPARED CREAMS*CODEX STAN A-9-1976, Rev. 1-2003***1. SCOPE**

This Standard applies to cream and prepared creams for direct consumption or further processing as defined in Section 2 of this Standard.

2. DESCRIPTION

2.1 CREAM is the fluid¹ milk product comparatively rich in fat, in the form of an emulsion of fat-in-skimmed milk, obtained by physical separation from milk.

2.2 RECONSTITUTED CREAM is cream obtained by reconstituting milk products with or without the addition of potable water and with the same end product characteristics as the product described in Section 2.1.

2.3 RECOMBINED CREAM is cream obtained by recombining milk products with or without the addition of potable water and with the same end product characteristics as the product described in Section 2.1.

2.4 PREPARED CREAMS are the milk products obtained by subjecting cream, reconstituted cream and/or recombined cream to suitable treatments and processes to obtain the characteristic properties as specified below.

2.4.1 Prepackaged liquid cream is the fluid¹ milk product obtained by preparing and packaging cream, reconstituted cream and/or recombined cream for direct consumption and/or for direct use as such.

2.4.2 Whipping cream is the fluid¹ cream, reconstituted cream and/or recombined cream that is intended for whipping. When cream is intended for use by the final consumer the cream should have been prepared in a way that facilitates the whipping process.

2.4.3 Cream packed under pressure is the fluid¹ cream, reconstituted cream and/or recombined cream that is packed with a propellant gas in a pressure-propulsion container and which becomes Whipped Cream when removed from that container.

2.4.4 Whipped cream is the fluid¹ cream, reconstituted cream and/or recombined cream into which air or inert gas has been incorporated without reversing the fat-in-skimmed milk emulsion.

2.4.5 Fermented cream is the milk product obtained by fermentation of cream, reconstituted cream or recombined cream, by the action of suitable microorganisms, that results in reduction of pH with or without coagulation. Where the content of (a) specific microorganism(s) is(are) indicated, directly or indirectly, in the labelling or otherwise indicated by content claims in connection with sale, these shall be present, viable, active and abundant in the product to the date of minimum durability. If the product is heat-treated after fermentation the requirement for viable microorganisms does not apply.

2.4.6 Acidified Cream is the milk product obtained by acidifying cream, reconstituted cream and/or recombined cream by the action of acids and/or acidity regulators to achieve a reduction of pH with or without coagulation.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS**3.1 RAW MATERIALS**

All creams and prepared creams:

Milk, which may have been subjected to mechanical and physical treatments prior to cream processing.

¹ Fluid means capable of pouring at temperatures above freezing

Additionally, for creams made by reconstitution or recombination:

Butter², milk fat products², milk powders², cream powders², and potable water.

Additionally, for prepared creams described in Section 2.4.2 through to Section 2.4.6:

The product that remains after the removal of milk fat by churning milk and cream to manufacture butter and milk fat products (often referred to as buttermilk) and that may have been concentrated and/or dried.

* For specifications, see the relevant Codex standards

3.2 PERMITTED INGREDIENTS

Only those ingredients listed below may be used for the purposes and product categories specified, and only within the limitations specified.

For use in products only for which stabilizers and/or thickeners are justified (see table in Section 4):

- Products derived exclusively from milk or whey and containing 35% (m/m) or more of milk protein of any type (including casein and whey protein products and concentrates and any combinations thereof) and milk powders: These products can be used in the same function as thickeners and stabilizers, provided they are added only in amounts functionally necessary not exceeding 20 g/kg, taking into account any use of the stabilizers and thickeners listed in Section 4.
- Gelatine and starch: These substances can be used in the same function as stabilizers, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice taking into account any use of the stabilizers/thickeners listed in section 4.

Additionally, for use in fermented cream, only:

- Starter cultures of harmless microorganisms including those specified in Section 2 of the Codex Standard for Fermented Milks.

Additionally, for use in fermented cream and acidified cream, only:

- Rennet and other safe and suitable coagulating enzymes to improve texture without achieving enzymatic coagulation.
- Sodium chloride.

3.3 COMPOSITION

Milk fat: Minimum 10% (w/w)

Compositional modification below the minimum specified above for milk fat is not considered to be in compliance with the Section 4.3.3 of the Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

Only those additives classes indicated in the table below may be used for the product categories specified. Within each additive class, and where permitted according to the table, only those additives listed below may be used and only within the limits specified.

Stabilizers and thickeners, including modified starches may be used singly or in combination, in compliance with the definitions for milk products and only to the extent that they are functionally necessary, taking into account any use of gelatine and starch as provided for in Section 3.2.

² For specification, see relevant Codex Standard.

| <i>Additive functional class:</i> | Stabilizers* | Acidity Regulators* | Thickeners* and Emulsifiers* | Packing Gases and Propellants |
|---|---------------------|--------------------------------|---|--|
| <i>Product category:</i> | | | | |
| <i>Prepackaged liquid cream (2.4.1):</i> | X | X | X | - |
| <i>Whipping cream (2.4.2):</i> | X | X | X | - |
| <i>Cream packed under pressure (2.4.3):</i> | X | X | X | X |
| <i>Whipped cream (2.4.4):</i> | X | X | X | X |
| <i>Fermented cream (2.4.5):</i> | X | X | X | - |
| <i>Acidified cream (2.4.6):</i> | X | X | X | - |

* These additives may be used when needed to ensure product stability and integrity of the emulsion, taking into consideration the fat content and durability of the product. With regard to the durability, special consideration should be given to the level of heat treatment applied since some minimally pasteurized products do not require the use of certain additives.

X = The use of additives belonging to the class is technologically justified

- = The use of additives belonging to the class is not technologically justified

| INS No | Name of Food Additive | Maximum Level |
|-----------------------------------|------------------------------|--|
| Stabilizers | | |
| 170 | Calcium carbonates | Limited by GMP |
| 325 | Sodium lactate | |
| 326 | Potassium lactate | |
| 327 | Calcium lactate | |
| 331 | Sodium citrates | |
| 332 | Potassium citrates | |
| 333 | Calcium citrates | |
| 516 | Calcium sulphate | |
| 339 | Sodium phosphates | 2 g/kg, singly or in combination, expressed as P ₂ O ₅ |
| 340 | Potassium phosphates | |
| 341 | Calcium phosphates | |
| 450 | Diphosphates | |
| 451 | Triphosphates | |
| 452 | Polyphosphates | |
| Acidity Regulators | | |
| 500 | Sodium carbonates | Limited by GMP |
| 501 | Potassium carbonates | |
| 270 | Lactic acid (L, D, and DL-) | |
| 330 | Citric acid | |
| Thickeners and Emulsifiers | | |
| 322 | Lecithins | Limited by GMP |
| 400 | Alginic acid | |
| 401 | Sodium alginate | |
| 402 | Potassium alginate | |
| 403 | Ammonium alginate | |

| | | |
|------|--|----------------|
| 404 | Calcium alginate | |
| 406 | Agar | |
| 407 | Carrageenan and its Na, K, NH ₄ salts | |
| 410 | Carob bean gum | |
| 412 | Guar gum | |
| 414 | Gum Arabic | |
| 415 | Xanthan gum | |
| 418 | Gellan gum | |
| 432 | Polyoxyethylene (20) sorbitan monolaurate | |
| 433 | Polyoxyethylene (20) sorbitan monooleate | |
| 434 | Polyoxyethylene (20) sorbitan monopalmitate | 1 g/kg |
| 435 | Polyoxyethylene (20) sorbitan monostearate | |
| 436 | Polyoxyethylene (20) sorbitan tristearate | |
| 440 | Pectins | |
| 460 | Cellulose | |
| 461 | Methyl cellulose | |
| 463 | Hydroxypropyl cellulose | |
| 464 | Hydroxypropyl methyl cellulose | |
| 465 | Methyl ethyl cellulose | |
| 466 | Sodium carboxymethyl cellulose | Limited by GMP |
| 471 | Mono- and diglycerides of fatty acids | |
| 472a | Acetic and fatty acid esters of glycerol | |
| 472b | Lactic and fatty acid esters of glycerol | |
| 472c | Citric and fatty acid esters of glycerol | |
| 508 | Potassium chloride | |
| 509 | Calcium chloride | |
| 1410 | Monostarch phosphate | |
| 1412 | Distarch phosphate esterified with sodium trimetaphosphate: esterified with phosphorus oxychloride | |
| 1413 | Phosphated distarch phosphate | |
| 1414 | Acetylated distarch phosphate | Limited by GMP |
| 1420 | Starch acetate esterified with acetic anhydride | |
| 1422 | Acetylated distarch adipate | |
| 1440 | Hydroxypropyl starch | |
| 1442 | Hydroxypropyl distarch phosphate | |
| 1450 | Starch sodium octenyl succinate | |

Packing Gases and Propellants

For use only in whipped creams (including creams packed under pressure):

| | | |
|-----|----------------|----------------|
| 290 | Carbon dioxide | |
| 941 | Nitrogen | Limited by GMP |
| 942 | Nitrous oxide | |

5. CONTAMINANTS

The products covered by this Standard shall comply with the maximum limits for contaminants and the maximum residue limits for pesticides and veterinary drugs established by the Codex Alimentarius Commission.

6. HYGIENE

It is recommended that the products covered by the provisions of this standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General

Principles of Food Hygiene (CAC/RCP 1-1969), the Code of Hygienic Practice for Milk and Milk Products (CAC/RCP 57-2004) and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice. The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) and the General Standard for the Use of Dairy Terms (CODEX STAN 209-1999), the following specific provisions apply:

7.1 NAME OF THE FOOD

7.1.1 The name of the food shall be as specified in section 2 of this Standard, as appropriate and taking into account section 7.1.3. However, "prepackaged liquid cream" may be designated as "cream" and "cream packed under pressure" may be designated by another descriptive term that refers to its nature or intended use or as "Whipped Cream". The term "prepared cream" should not apply as a designation.

The products covered by this Standard may alternatively be designated with other names specified in the national legislation of the country in which the product is manufactured and/or sold or with a name existing by common usage, provided that such designations do not create an erroneous impression in the country of retail sale regarding the character and identity of the food.

In addition, labelling statements, such as product designation of fermented creams and content claims, may include reference to the terms "Acidophilus", "Kefir", and "Kumys", as appropriate, provided that the product has been fermented by the corresponding specific starter culture(s) specified in section 2.1 of the Codex Standard for Fermented Milks, and provided that the product complies with those compositional microbiological criteria that are applicable to the corresponding fermented milk as specified in section 3.3 of that Standard.

7.1.2 The designation shall be accompanied by an indication of the fat content that is acceptable in the country of retail sale, either as a numerical value or by a suitable qualifying term, either as part of the name or in a prominent position in the same field of vision.

Nutrition claims, when used, shall be in accordance with the Codex Guidelines for Use of Nutrition Claims (CAC/GL 23-1997). For this purpose only, the level of 30% milk fat constitutes the reference.

7.1.3 Creams which have been manufactured by the recombination or reconstitution of dairy ingredients as specified in Sections 2.2 and 2.3 shall be labelled as "Recombined cream" or "Reconstituted cream" or another truthful qualifying term if the consumer would be misled by the absence of such labelling.

7.1.4 An appropriate description of the heat treatment should be given, either as part of the name or in a prominent position in the same field of vision, if the consumer would be misled by the absence of such labelling.

When reference is made in the labelling to the type of heat treatment(s) applied, the definitions established by the Codex Alimentarius Commission shall apply.

7.2 DECLARATION OF MILK FAT CONTENT

The milk fat content shall be declared in a manner acceptable in the country of sale to the final consumer, either as (i) a percentage of mass or volume, (ii) in grams per serving as qualified in the label, provided that the number of servings is stated.

Where the fat content of the product is indicated by a numerical value in accordance with Section 7.1.2, such indication may constitute the fat declaration, provided that the indication includes any additional information as required above.

7.3 LABELLING OF NON-RETAIL CONTAINERS

Information required in Section 7 of this Standard and Sections 4.1 to 4.8 of the General Standard for the Labelling of Prepackaged Foods, and, if necessary, storage instructions, shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the manufacturer or packer shall appear on the container. However, lot identification and the name and address of the manufacturer or packer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

8. METHODS OF SAMPLING AND ANALYSIS

See CODEX STAN 234-1999.