

# CODEX STANDARD FOR EVAPORATED MILKS

CODEX STAN 281-1971

## 1. SCOPE

This Standard applies to evaporated milks, intended for direct consumption or further processing, in conformity with the description in Section 2 of this Standard.

## 2. DESCRIPTION

Evaporated milks are milk products which can be obtained by the partial removal of water from milk by heat, or by any other process which leads to a product of the same composition and characteristics. The fat and/or protein content of the milk may have been adjusted, only to comply with the compositional requirements in Section 3 of this Standard, by the addition and/or withdrawal of milk constituents in such a way as not to alter the whey protein to casein ratio of the milk being adjusted.

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Raw materials

Milk and milk powders<sup>1</sup>, cream and cream powders<sup>1</sup>, milkfat products<sup>1</sup>.

The following milk products are allowed for protein adjustment purposes:

- milk retentate Milk retentate is the product obtained by concentrating milk protein by ultrafiltration of milk, partly skimmed milk, or skimmed milk;
- milk permeate Milk permeate is the product obtained by removing milk proteins and milkfat from milk, partly skimmed milk, or skimmed milk by ultrafiltration; and
- lactose<sup>1</sup>.

### 3.2 Permitted ingredients

- Potable water
- Sodium chloride.

### 3.3 Composition

#### Evaporated milk

Minimum milkfat	7.5% m/m
Minimum milk solids <sup>(a)</sup>	25% m/m
Minimum milk protein in milk solids-not-fat <sup>(a)</sup>	34% m/m

#### Evaporated skimmed milk

Maximum milkfat	1% m/m
Minimum milk solids <sup>(a)</sup>	20% m/m

<sup>1</sup> See Standard for Sugars (CODEX STAN 212-1999).

Minimum milk protein in milk solids-not-fat<sup>(a)</sup> 34% m/m

#### Evaporated partly skimmed milk

Milkfat More than 1% and less than 7.5% m/m

Minimum milk solids<sup>(a)</sup> 20% m/m

Minimum milk protein in milk solids-not-fat<sup>(a)</sup> 34% m/m

#### Evaporated high-fat milk

Minimum milkfat 15% m/m

Minimum milk solids-not-fat<sup>(a)</sup> 11.5% m/m

Minimum milk protein in milk solids-not-fat<sup>(a)</sup> 34% m/m

(a) The milk solids and milk solids-not-fat content include water of crystallization of the lactose.

## 4. FOOD ADDITIVES

Only those food additives listed below may be used and only within the limits specified.

INS no.	Name of additive	Maximum level
<b>Firming agents</b>		
508	Potassium chloride	2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances
509	Calcium chloride	
<b>Stabilizers</b>		
331	Sodium citrates	2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances
332	Potassium citrates	
333	Calcium citrates	
<b>Acidity regulators</b>		
170	Calcium carbonates	2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances
339	Sodium phosphates	
340	Potassium phosphates	
341	Calcium phosphates	
450	Diphosphates	
451	Triphosphates	
452	Polyphosphates	
500	Sodium carbonates	
501	Potassium carbonates	
<b>Thickener</b>		
407	Carrageenan	150 mg/kg
<b>Emulsifier</b>		
322	Lecithins	Limited by GMP

## 5. CONTAMINANTS

The products covered by this Standard shall comply with the Maximum Levels for contaminants that are specified for the product in the *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995).

The milk used in the manufacture of the products covered by this Standard shall comply with the Maximum Levels for contaminants and toxins specified for milk by the *General Standard for Contaminants and Toxins in Food and Feed* (CODEX STAN 193-1995) and with the maximum residue limits for veterinary drug residues and pesticides established for milk by the CAC.

## 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 *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 *General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985) and the *General Standard for the Use of Dairy Terms* (CODEX STAN 206-1999), the following specific provisions apply:

### 7.1 Name of the food

The name of the food shall be:

- Evaporated milk
- Evaporated skimmed milk
- Evaporated partly skimmed milk
- Evaporated high-fat milk

} according to the composition  
specified in Section 3

Evaporated partly skimmed milk may be designated "evaporated semi-skimmed milk" if the milkfat content is 4.0–4.5% and the minimum milk solids is 24% m/m.

### 7.2 Declaration of milkfat content

If the consumer would be misled by the omission, the milkfat content shall be declared in a manner found acceptable in the country of sale to the final consumer, either (i) as a percentage by mass or volume, or (ii) in grams per serving as quantified in the label provided that the number of servings is stated.

### **7.3 Declaration of milk protein**

If the consumer would be misled by the omission, the milk protein content shall be declared in a manner acceptable in the country of sale to the final consumer, either as (i) a percentage by mass or volume, or (ii) grams per serving as quantified in the label provided that the number of servings is stated.

### **7.4 List of ingredients**

Notwithstanding the provision of Section 4.2.1 of the *General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985), milk products used only for protein adjustment need not be declared.

### **7.5 Labelling of non-retail containers**

Information required in Section 7 of this Standards and Sections 4.1 to 4.8 of the *General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985), 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.