CODEX STANDARD FOR SWEETENED CONDENSED MILKS

CODEX STAN 282-1971

1. SCOPE

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

2. DESCRIPTION

Sweetened condensed milks are milk products which can be obtained by the partial removal of water from milk with the addition of sugar, 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 powder¹, cream and cream powders¹, milkfat products¹.

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
- Lactose¹ (Also for seeding purposes)

3.2 Permitted ingredients

- Potable water
- Sugar
- Sodium chloride.

In this product, sugar is generally considered to be sucrose, but a combination of sucrose with other sugars, consistent with Good Manufacturing Practice, may be used.

3.3 Composition

Sweetened condensed milk
Minimum milkfat 8% m/m
Minimum milk solids** 28% m/m
Minimum milk protein in milk solids-not-fat** 34% m/m

Sweetened condensed skimmed milk
Maximum milkfat 1% m/m
Minimum milk solids** 24% m/m
Minimum milk protein in milk solids-not-fat** 34% m/m

Sweetened condensed partly skimmed milk
Milkfat More than 1% and less than 8% m/m
Minimum milk solids-not-fat** 20% m/m
Minimum milk solids** 24% m/m
Minimum milk protein in milk solids-not-fat** 34% m/m

Sweetened condensed high-fat milk
Minimum milkfat 16% m/m
Minimum milk solids-not-fat** 14% m/m
Minimum milk protein in milk solids-not-fat** 34% m/m

** The milk solids and milk solids-not-fat content include water of crystallization of the lactose.

For all sweetened condensed milks the amount of sugar is restricted by Good Manufacturing Practice to a minimum value which safeguards the keeping quality of the product and a maximum value above which crystallization of sugar, may occur.

4. FOOD ADDITIVES

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

<table>
<thead>
<tr>
<th>INS no.</th>
<th>Name of additive</th>
<th>Maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firming agents</td>
<td></td>
<td></td>
</tr>
<tr>
<td>508</td>
<td>Potassium chloride</td>
<td>2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances</td>
</tr>
<tr>
<td>509</td>
<td>Calcium chloride</td>
<td></td>
</tr>
<tr>
<td>Stabilizers</td>
<td></td>
<td></td>
</tr>
<tr>
<td>331</td>
<td>Sodium citrates</td>
<td>2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances</td>
</tr>
<tr>
<td>332</td>
<td>Potassium citrates</td>
<td></td>
</tr>
<tr>
<td>333</td>
<td>Calcium citrates</td>
<td></td>
</tr>
</tbody>
</table>
### Acidity regulators

<table>
<thead>
<tr>
<th>INS no.</th>
<th>Name of additive</th>
<th>Maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>170</td>
<td>Calcium carbonates</td>
<td>2 000 mg/kg singly or 3 000 mg/kg in combination, expressed as anhydrous substances</td>
</tr>
<tr>
<td>339</td>
<td>Sodium phosphates</td>
<td></td>
</tr>
<tr>
<td>340</td>
<td>Potassium phosphates</td>
<td></td>
</tr>
<tr>
<td>341</td>
<td>Calcium phosphates</td>
<td></td>
</tr>
<tr>
<td>450</td>
<td>Diphosphates</td>
<td></td>
</tr>
<tr>
<td>451</td>
<td>Triphosphates</td>
<td></td>
</tr>
<tr>
<td>452</td>
<td>Polyphosphates</td>
<td></td>
</tr>
<tr>
<td>500</td>
<td>Sodium carbonates</td>
<td></td>
</tr>
<tr>
<td>501</td>
<td>Potassium carbonates</td>
<td></td>
</tr>
</tbody>
</table>

### Thickener

<table>
<thead>
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<th>INS no.</th>
<th>Name of additive</th>
<th>Maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>407</td>
<td>Carrageenan</td>
<td>150 mg/kg</td>
</tr>
</tbody>
</table>

### Emulsifier

<table>
<thead>
<tr>
<th>INS no.</th>
<th>Name of additive</th>
<th>Maximum level</th>
</tr>
</thead>
<tbody>
<tr>
<td>322</td>
<td>Lecithins</td>
<td>Limited by GMP</td>
</tr>
</tbody>
</table>

### 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:
- Sweetened condensed milk
- Sweetened condensed skimmed milk
- Sweetened condensed partly skimmed milk
- Sweetened condensed high-fat milk

according to the composition specified in Section 3

Sweetened condensed partly skimmed milk may be designated “sweetened condensed semi-skimmed milk” if the milkfat content is 4.0–4.5% and the minimum milk solids is 28% 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 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 Standard 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.