CODEX STANDARD FOR CAMEMBERT

CODEX STAN 276-1973

1. SCOPE

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

2. DESCRIPTION

Camembert is a soft surface ripened, primarily mould ripened cheese in conformity with the *General Standard for Cheese* (CODEX STAN 283-1978), which has a shape of a flat cylinder or sectors thereof. The body has a near white through to light yellow colour and a soft-textured (when pressed by thumb), but not crumbly texture, ripened from the surface to the center of the cheese. Gas holes are generally absent, but few openings and splits are acceptable. A rind is to be developed that is soft and entirely covered with white mould but may have red, brownish or orange coloured spots. Whole cheese may be cut or formed into sectors prior to or after the mould development.

For Camembert ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 10 days at 10–16 °C depending on the extent of maturity required. Alternative ripening conditions (including the addition of ripening enhancing enzymes) may be used, provided the cheese exhibits similar physical, biochemical and sensory properties as those achieved by the previously stated ripening procedure. Camembert intended for further processing need not exhibit the same extent of ripening when justified through technical and/or trade needs.

Carré de Camembert is a soft surface ripened cheese with a square shape and which comply with all other criteria and requirements specified for Camembert.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Raw materials

Cows' milk or buffaloes' milk, or their mixtures, and products obtained from these milks.

3.2 Permitted ingredients

- Starter cultures of harmless lactic acid and/ or flavour producing bacteria and cultures of other harmless micro-organisms, including *Geotrichum candidum*, *Brevibacterium linens*, and yeast
- Rennet or other safe and suitable coagulating enzymes
- Sodium chloride and potassium chloride as a salt substitute
- Potable water
- Safe and suitable enzymes to enhance the ripening process
- Safe and suitable processing aids

Formerly CODEX STAN C-33-1973. Adopted in 1973. Revision 2007. Amendment 2008, 2010.

– Rice, corn and potato flours and starches: Notwithstanding the provisions in the *General Standard for Cheese* (CODEX STAN 283-1978), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 Composition

Milk constituent:	Minimum content *(m/m)*	Maximum content *(m/m)*	Reference level *(m/m)*
Milkfat in dry matter:	30%	Not restricted	45% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content *(m/m):*	**Corresponding minimum dry matter content** *(m/m):*
Equal to or above 30% but less than 40%:	38%
Equal to or above 40% but less than 45%:	41%
Equal to or above 45% but less than 55%:	43%
Equal to or above 55%	48%

Compositional modifications beyond the minima and maxima specified above for milkfat and dry matter are not considered to be in compliance with section 4.3.3 of the *General Standard for the Use of Dairy Terms* (CODEX STAN 206-1999).

3.4 Essential sizes and shapes

Maximum height: approx. 5 cm;
Weight: Whole cheese of flat cylinder (Camembert)
or square (Carré de Camembert): approx. 80 g to 500 g.

3.5 Essential ripening procedure

Rind formation and maturation (proteolysis) from the surface to the centre is predominantly caused by *Penicillium candidium* and /or *Penicillium camembertii* and *Penicillium caseicolum*.

4. FOOD ADDITIVES

Only those additives classes indicated as justified 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 food additives listed below may be used and only within the functions and limits specified.

Additive functional class	Justified use	
	Cheese mass	Surface/rind treatment
Colours:	X[(a)]	–
Bleaching agents:	–	–
Acidity regulators:	X	–
Stabilizers:	–	–
Thickeners:	–	–
Emulsifiers:	–	–
Antioxidants:	–	–
Preservatives:	–	–
Foaming agents:	–	–
Anticaking agents:	–	–

(a) Only to obtain the colour characteristics, as described in Section 2.
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 additive	Maximum level
Colours		
160a(i)	Carotene, *beta*-, synthetic	35 mg/kg singly or in combination
160a(iii)	Carotene, *beta*-, *Blakeslea trispora*	
160e	Carotenal, *beta*-apo-8'-	
160f	Carotenoic acid, ethyl esters, *beta*-apo-8'-	
160a(ii)	Carotenes, *beta*-, vegetable	600 mg/kg
160b(ii)	Annatto extracts – norbixin-based	25 mg/kg
Acidity regulators		
575	Glucono delta-lactone	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 product 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/RC 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 names Camembert and Carré de Camembert may be applied in accordance with section 4.1 of the *General Standard for the Labelling of Prepackaged Foods* (CODEX STAN 1-1985), provided that the product is in conformity with this Standard. Where customary in the country of retail sale, alternative spelling may be used.

The term "Carré de" may be replaced by other appropriate term(s) related to shape that are suitable in the country of retail sale.

The use of the names is an option that may be chosen only if the cheese complies with this standard. Where the name is not used for a cheese that complies with this standard, the naming provisions of the *General Standard for Cheese* (CODEX STAN 283-1978) apply.

The designation of products in which the fat content is below or above the reference range but above the absolute minimum specified in section 3.3 of this Standard shall be accompanied by an appropriate qualification describing the modification made or the fat content (expressed as fat in dry matter or as percentage by mass whichever is acceptable in the country of retail sale), either as part of the name or in a prominent position in the same field of vision. Suitable qualifiers are the appropriate characterizing terms specified in Section 7.3 of the *General Standard for Cheese* (CODEX STAN 283-1978) or a nutritional claim in accordance with the *Guidelines for the Use of Nutritional Claims* (CAC/GL 23-1997)[1].

The designation may also be used for cut, sliced, shredded or grated products made from cheese which cheese is in conformity with this Standard.

7.2 Country of origin

The country of origin (which means the country of manufacture, not the country in which the name originated) shall be declared. When the product undergoes substantial transformation[2] in a second country, the country in which the transformation is performed shall be considered to be the country of origin for the purpose of labelling.

[1] For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

[2] For instance, repackaging, cutting, slicing, shredding and grating is not regarded as substantial transformation.

7.3 Declaration of milkfat content

The milk fat content shall be declared in a manner found acceptable in the country of retail sale. either (i) as a percentage by mass, (ii) as a percentage of fat in dry matter, or (iii) in grams per serving as quantified in the label, provided that the number of servings is stated.

7.4 Labelling of non retail containers

Information specified 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 of the manufacturer or packer shall appear on the container, and in the absence of such a container, on the product itself. However, lot identification and the name and address may be replaced by an identification mark, provided that such mark is clearly identifiable with the accompanying documents.

8. METHODS OF SAMPLING AND ANALYSIS

See CODEX STAN 234-1999.

APPENDIX – ADDITIONAL INFORMATION

The additional information below does not affect the provisions in the preceding sections which are those that are essential to the product identity, the use of the name of the food and the safety of the food.

1. Method of manufacture

1.1 Fermentation procedure: Microbiologically derived acid development.

1.2 Type of coagulation: Coagulation of the milk protein is typically obtained through the combined action of microbial acidification and proteases (e.g. rennet) at an appropriate coagulation temperature.