CODEX ALIMENTARIUS
INTERNATIONAL FOOD STANDARDS

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World Health Organization

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STANDARD FOR COTTAGE CHEESE

CXS 273-1968

Formerly CODEX STAN C-16-1968. Adopted in 1968. Revised in 2007, 2010, 2018. Amended in 2014, 2016.

1. SCOPE

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

2. DESCRIPTION

Cottage Cheese is a soft, rindless[1], unripened cheese in conformity with the *General Standard for Cheese* (CXS 283-1978) and the *Group Standard for Unripened Cheese Including Fresh Cheese* (CXS 221-2001). The body has a near white colour and a granular texture consisting of discrete individual soft curd granules of relatively uniform size, from approximately 3–12 mm depending on whether small or large type of curd is desired, and possibly covered with a creamy mixture.

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;
- Rennet or other safe and suitable coagulating enzymes;
- Gelatin and starches: 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;
- Sodium chloride and potassium chloride as a salt substitute;
- Potable water;
- Safe and suitable processing aids.

3.3 Composition

Milk constituent	**Minimum content** *(m/m)*	**Maximum content** *(m/m)*	**Reference level** *(m/m)*
Milkfat:	0%	Not restricted	4–5%
Fat free dry matter:	18%	Restricted by the MFFB	

Compositional modifications beyond the minimum and maximum specified above for fat free dry matter are not considered to be in compliance with section 4.3.3 of the *General Standard for the Use of Dairy Terms* (CXS 206-1999).

[1] The cheese has been kept in such a way that no rind is developed (a "rindless" cheese).

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[(b)]	Surface/rind treatment
Colours:	–	–
Bleaching agents:	–	–
Acidity regulators:	X	–
Stabilizers:	X[(a)]	–
Thickeners:	–	–
Emulsifiers:	–	–
Antioxidants:	–	–
Preservatives:	X	–
Foaming agents:	–	–
Anti–caking agents:	–	–

(a) Stabilizers including modified starches may be used in compliance with the definition of milk products and only to the extent they are functionally necessary, taking into account any use of gelatine and starches as provided for in Section 3.2.

(b) Cheese mass includes creaming mixture.

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
Preservatives		
200	Sorbic acid	1 000 mg/kg singly or in combinations sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
234	Nisin	12.5 mg/kg
280	Propionic acid	Limited by GMP
281	Sodium propionate	
282	Calcium propionate	
283	Potassium propionate	
Acidity regulators		
170(i)	Calcium carbonate	Limited by GMP
260	Acetic acid, glacial	Limited by GMP
261(i)	Potassium acetate	Limited by GMP
261(ii)	Potassium diacetate	Limited by GMP
262(i)	Sodium acetate	Limited by GMP
263	Calcium acetate	Limited by GMP
270	Lactic acid, L-,D-, and DL-	Limited by GMP

INS no.	Name of additive	Maximum level
296	Malic acid, DL-	Limited by GMP
325	Sodium lactate	Limited by GMP
326	Potassium lactate	Limited by GMP
327	Calcium lactate	Limited by GMP
330	Citric acid	Limited by GMP
338	Phosphoric acid	880 mg/kg as phosphorous
350(i)	Sodium hydrogen DL-malate	Limited by GMP
350(ii)	Sodium DL-malate	Limited by GMP
352(ii)	Calcium malate, D,L-	Limited by GMP
500(i)	Sodium carbonate	Limited by GMP
500(ii)	Sodium hydrogen carbonate	Limited by GMP
500(iii)	Sodium sesquicarbonate	Limited by GMP
501(i)	Potassium carbonate	Limited by GMP
501(ii)	Potassium hydrogen carbonate	Limited by GMP
504(i)	Magnesium carbonate	Limited by GMP
504(ii)	Magnesium hydrogen carbonate	Limited by GMP
507	Hydrochloric acid	Limited by GMP
575	Glucono-delta-lactone	Limited by GMP
577	Potassium gluconate	Limited by GMP
578	Calcium gluconate	Limited by GMP
Stabilizers		
331(i)	Sodium dihydrogen citrate	Limited by GMP
332(i)	Potassium dihydrogen citrate	Limited by GMP
333	Calcium citrates	Limited by GMP
339(i)	Sodium dihydrogen phosphate	1 300 mg/kg, singly or in combination, expressed as phosphorus
339(ii)	Disodium hydrogen phosphate	
339(iii)	Trisodium phosphate	
340(i)	Potassium dihydrogen phosphate	
340(ii)	Dipotassium hydrogen phosphate	
340(iii)	Tripotassium phosphate	
341(i)	Calcium dihydrogen phosphate	
341(ii)	Calcium hydrogen phosphate	
341(iii)	Tricalcium phosphate	
342(i)	Ammonium dihydrogen phosphate	
342(ii)	Ammonium hydrogen phosphate	
343(ii)	Magnesium hydrogen phosphate	
343(iii)	Trimagnesium phosphate	
450(i)	Disodium diphosphate	1 300 mg/kg, singly or in combination,

INS no.	Name of additive	Maximum level
450(iii)	Tetrasodium diphosphate	expressed as phosphorus
450(v)	Tetrapotassium diphosphate	
450(vi)	Dicalcium diphosphate	
451(i)	Pentasodium triphosphate	
451(ii)	Pentapotassium triphosphate	
452(i)	Sodium polyphosphate	
452(ii)	Potassium polyphosphate	
452(iv)	Calcium polyphosphate	
452(v)	Ammonium polyphosphate	
400	Alginic acid	Limited by GMP
401	Sodium alginate	Limited by GMP
402	Potassium alginate	Limited by GMP
403	Ammonium alginate	Limited by GMP
404	Calcium alginate	Limited by GMP
405	Propylene glycol alginate	5 000 mg/kg
406	Agar	Limited by GMP
407	Carrageenan	Limited by GMP
407a	Processed euchema seaweed (PES)	Limited by GMP
410	Carob bean gum	Limited by GMP
412	Guar gum	Limited by GMP
413	Tragacanth gum	Limited by GMP
415	Xanthan gum	Limited by GMP
416	Karaya gum	Limited by GMP
417	Tara gum	Limited by GMP
440	Pectins	Limited by GMP
466	Sodium carboxymethyl cellulose (Cellulose gum)	Limited by GMP
1400	Dextrins, roasted starch	Limited by GMP
1401	Acid-treated starch	Limited by GMP
1402	Alkaline-treated starch	Limited by GMP
1403	Bleached starch	Limited by GMP
1404	Oxidized starch	Limited by GMP
1405	Starches, enzyme-treated	Limited by GMP
1410	Monostarch phosphate	Limited by GMP
1412	Distarch phosphate	Limited by GMP
1413	Phosphateddistarch phosphate	Limited by GMP
1414	Acetylated distarch phosphate	Limited by GMP
1420	Starch acetate	Limited by GMP

INS no.	Name of additive	Maximum level
1422	Acetylated distarchadipate	Limited by GMP
1440	Hydroxypropyl starch	Limited by GMP
1442	Hydroxypropyldistarch phosphate	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* (CXS 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* (CXS 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* (CXC 1-1969), the *Code of Hygienic Practice for Milk and Milk Products* (CXC 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 and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997).

7. LABELLING

In addition to the provisions of the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985) and the *General Standard for the Use of Dairy Terms* (CXS 206-1999), the following specific provisions apply:

7.1 Name of the food

The name Cottage Cheese may be applied in accordance with Section 4.1 of the *General Standard for the Labelling of Prepackaged Foods* (CXS 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 name may be translated into other languages so that the consumer in the country of retail sale will not be mislead

The use of the name 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* (CXS 283-1978) apply.

The designation of products in which the fat content is below or above the reference range 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 include nutritional claims in accordance with the *Guidelines for Use of Nutrition and Health Claims*[2] (CXG 23-1997). In addition the appropriate characterizing terms describing the nature or style of the product may accompany the name of the food. Such terms include “dry curd” or “creamed”

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[3] 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.

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[2] For the purpose of comparative nutritional claims, the fat content of 4% constitutes the reference.”

[3] 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* (CXS 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

For checking the compliance with this Standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999) relevant to the provisions in this Standard, shall be used.