

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
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Agenda Item 4 (b)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS

Fifth Session

Wellington, New Zealand, 8-12 April 2002

REVISED PROPOSED DRAFT STANDARDS FOR INDIVIDUAL CHEESES

(Prepared by International Dairy Federation)

Governments and interested international organisations are invited to comment on the attached revised proposed draft standards for individual cheese varieties. Comments should be sent to:

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with a copy to the Secretary, Codex Alimentarius Commission, FAO, Viale delle Terme di Caracalla, 00100 Rome, Italy, **not later than 1 March 2002.**

This paper contains the Proposed Draft Standards as revised in November 2001 by the IDF and incorporates the outcome of the market approach for establishing absolute minimum fat contents (*Report no. 1 - Establishment of absolute minimum contents of fat in dry matter for individual cheese varieties*) and the recommendations as further specified in the following reports to the 5th Session of the CCMMP:

- *Report no. 2: Review of details in the Standards for Individual Cheese Varieties*
- *Report no. 3: Redraft of the Proposed Draft Standards for Individual Cheese Varieties*

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PROPOSED DRAFT REVISED STANDARD FOR CHEDDAR (C-1)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Cheddar is a ripened hard cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a uniform, whitish to yellow or orange colour and a solid, compact, smooth and waxy texture, with none to few mechanical openings and no eyes. The cheese is sold with or without* rind and may be coated.

[For Cheddar ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 5 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Cheddar intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review together with review of formulations of other ripening details*];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	1%	Not restricted	48% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter content (m/m):</u>
	Equal to or above 1% but less than 10%:		42%
	Equal to or above 10% but less than 20%:		46%
	Equal to or above 20% but less than 25%:		49%
	Equal to or above 25% but less than 30%:		51%
	Equal to or above 30% but less than 35%:		53%
	Equal to or above 35% but less than 40%:		55%
	Equal to or above 40% but less than 45%:		57%
	Equal to or above 45% but less than 48%:		60%
	Equal to or above 48% but less than 50%:		61%
	Equal to or above 50% but less than 55%:		62%
	Equal to or above 55%:		64%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	25 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acids (for products with less than 20% FDM)</u>	
260	Acetic acid glacial)	
270	Lactic acid (L-, D- and DL-))	Limited by GMP
330	Citric acid)	
338	Orthophosphoric acid	2 g/kg*, expressed as P ₂ O ₅
507	Hydrochloric acid	Limited by GMP
	<u>Acidity regulators (for products with less than 20% FDM)</u>	
170	Calcium carbonates)	
325	Sodium lactate)	Limited by GMP
326	Potassium lactate)	
327	Calcium lactate)	
339	Sodium phosphates)	
340ii	Dipotassium orthophosphates)	3 g/kg*, singly or in combination,

341	Calcium phosphates	)	expressed as P ₂ O ₅
500	Sodium carbonates)	
501	Potassium carbonates	)	Limited by GMP
504	Magnesium carbonates)	
575	Glucono-delta-lactone (GDL))	
	<u>Preservatives</u>		
200	Sorbic acid)	
202	Potassium sorbate	)	3000 mg/kg of cheese,
203	Calcium sorbate	)	calculated as sorbic acid
234	Nisin	)	12.5 mg/kg
280	Propionic acid)	
281	Sodium propionate	)	3000 mg/kg, calculated
282	Calcium propionate	)	as propionic acid
	<u>For surface/rind treatment only:</u>		
200	Sorbic acid	)	1 g/kg of cheese, singly
202	Potassium sorbate	)	or in combination,
203	Calcium sorbate	)	calculated as sorbic acid
235	Pimaricin (natamycin)	)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.

*) Total amount of P₂O₅ not to exceed 3 g/kg.

Sliced, cut, shredded or grated cheese

Anti-caking agents (for surface treatment only)

460	Cellulose	)	Limited by GMP
551	Silicon dioxide, amorphous)	
552	Calcium silicate)	
553	Magnesium silicates	)	10 g/kg singly or in combination
554	Sodium aluminosilicate	)	Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)	
556	Calcium aluminium silicate)	
559	Aluminium silicate)	
560	Potassium silicate)	

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 – 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Cheddar may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 48% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING CHEDDAR

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. METHOD OF MANUFACTURE

1.1 Starter cultures consist of non-gas forming lactic acid producing bacteria.

1.2 After coagulation, the curd is cut and cooked* at up to 42°C. The curd is separated from the whey and stirred or cheddared. After cheddaring the curd is milled. When the desired acidity is reached the curd is salted. The curd and salt are then mixed and moulded. Other processing techniques, which give end products with the same physical, chemical and organoleptic characteristics may be applied.

*) Heating the curd in its whey above coagulation temperature.

1.3 [Typical maturation times varying from 5 to 52 or more weeks, depending on the temperature of maturation and the degree of maturity required. – *formulation under review together with review of formulations of other ripening details*]

PROPOSED DRAFT REVISED STANDARD FOR DANBO (C-3)

(As revised at Step 3, November 2001)

1. SCOPE

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

2. DESCRIPTION

Danbo is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a solid and compact texture, suitable for cutting, with few to plentiful, evenly distributed, smooth and round eyes of sizes as peas. The shape is flat square or parallelepiped. The cheese is sold with or without* hard or slightly moist smear-ripened rind, which may be coated.

[For Danbo ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 3 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Danbo intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	20%	Not restricted	45% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>	<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>	
	Equal to or above 20% but less than 25%:	41%	
	Equal to or above 25% but less than 30%:	42%	
	Equal to or above 30% but less than 35%:	44%	
	Equal to or above 35% but less than 40%:	46%	
	Equal to or above 40% but less than 55%:	50%	
	Equal to or above 55%:	57%	

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicate calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits

established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Danbo may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A), the date of manufacture may

be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR EDAM (C-4)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Edam is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a solid and compact texture, suitable for cutting, with few more or less round eyes of sizes varying up to 10 mm in diameter, distributed regularly as well as irregularly all over the interior of the cheese. The shape is spherical, of a flat block or of a loaf. The cheese is sold with dry rind, which may be coated. Edam of flat block or loaf shape is also sold without* rind.

[For Edam ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 3 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Edam intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – formulation under review together with review of formulations of other ripening details];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	30%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>
	Equal to or above 30% but less than 35%:		47%
	Equal to or above 35% but less than 40%:		49%
	Equal to or above 40% but less than 45%:		51%
	Equal to or above 45% but less than 55%:		55%
	Equal to or above 55%:		58%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)	
504	Magnesium carbonates)	Limited by GMP
575	Glucono-delta-lactone (GDL))	
	<u>Preservatives</u>	
200	Sorbic acid)	
202	Potassium sorbate)	3000 mg/kg of cheese,
203	Calcium sorbate)	calculated as sorbic acid
234	Nisin)	12.5 mg/kg
251	Sodium nitrate)	50 mg/kg of cheese, expressed
252	Potassium nitrate)	as Na NO ₃
1105	Lysozyme)	Limited by GMP
280	Propionic acid)	
281	Sodium propionate)	3000 mg/kg, calculated
282	Calcium propionate)	as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid)	1 g/kg of cheese, singly
202	Potassium sorbate)	or in combination,
203	Calcium sorbate)	calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose)	Limited by GMP
551	Silicon dioxide, amorphous)	
552	Calcium silicate)	
553	Magnesium silicates)	10 g/kg singly or in combination
554	Sodium aluminosilicate)	Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)	
556	Calcium aluminium silicate)	
559	Aluminium silicate)	
560	Potassium silicate)	

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Edam, Edamer or Edammer may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 40% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; Codex Alimentarius, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING EDAM

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

Edam is normally manufactured with a weights ranging from 1.5 to 2.5 kg. Lower weights are normally qualified by the term “Baby”. Edam intended for [further processing – *formulation under review*], cutting or slicing may have other weights.

PROPOSED DRAFT REVISED STANDARD FOR GOUDA (C-5)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Gouda is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a solid and compact texture, suitable for cutting, with few to plentiful, more or less round eyes of sizes varying up to 10 mm in diameter, distributed regularly as well as irregularly all over the interior of the cheese. The shape is of a flattened cylinder with convex sides, a flat block, or a loaf. The cheese is sold with a dry rind, which may be coated. Gouda of flat block or loaf shape is also sold without* rind.

[For Gouda ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 3 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Gouda intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	30%	Not restricted	48% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter content (m/m):</u>
	Equal to or above 30% but less than 35%:		48%
	Equal to or above 35% but less than 40%:		50%
	Equal to or above 40% but less than 45%:		52%
	Equal to or above 45% but less than 48%:		54%
	Equal to or above 48% but less than 50%:		55%
	Equal to or above 50% but less than 55%:		56%
	Equal to or above 55% but less than 60%:		60%
	Equal to or above 60%:		62%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid

For surface/rind treatment only:

200	Sorbic acid	)	1 g/kg of cheese, singly
202	Potassium sorbate	)	or in combination,
203	Calcium sorbate	)	calculated as sorbic acid
235	Pimaricin (natamycin)		2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.

Sliced, cut, shredded or grated cheeseAnti-caking agents (for surface treatment only)

460	Cellulose		Limited by GMP
551	Silicon dioxide, amorphous)	
552	Calcium silicate)	
553	Magnesium silicates	)	10 g/kg singly or in combination
554	Sodium aluminosilicate	)	Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)	
556	Calcium aluminium silicate)	
559	Aluminium silicate)	
560	Potassium silicate)	

5. CONTAMINANTS**5.1 HEAVY METALS**

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Gouda may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

- *) For the purpose of comparative nutritional claims, the minimum fat content of 48% fat in dry matter constitutes the reference.

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* 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.

- *) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING GOUDA

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

Gouda is normally manufactured with weights ranging from 2.5 to 30 kg. Lower weights are normally qualified by the term “Baby”. Gouda intended for [further processing – *formulation under review*], cutting or slicing may have other weights.

PROPOSED DRAFT REVISED STANDARD FOR HAVARTI (C-6)

(As revised at Step 3, November 2001)

1. SCOPE

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

2. DESCRIPTION

Havarti is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a texture suitable for cutting, with plentiful, irregular and coarse holes of the size of large rice seeds. The shape is flat cylindrical, rectangular or of a loaf shape. The cheese is sold with or without* a slightly greasy smear-ripened rind, which may be coated.

[For Havarti ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 3 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Havarti intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
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.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>
	Equal to or above 30% but less than 35%:		46%
	Equal to or above 35% but less than 40%:		47%
	Equal to or above 40% but less than 45%:		48%
	Equal to or above 45% but less than 55%:		50%
	Equal to or above 55% but less than 60%:		54%
	Equal to or above 60%:		58%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.

Sliced, cut, shredded or grated cheese

<u>Anti-caking agents (for surface treatment only)</u>		
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Havarti may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

Havarti with a fat in dry matter content of minimum 60% may alternatively be designated Cream Havarti.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; Codex Alimentarius, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR SAMSO (C-7)

(As revised at Step 3, November 2001)

1. SCOPE

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

2. DESCRIPTION

Samsø is a ripened hard cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a solid and compact texture suitable for cutting, with few to plentiful, evenly distributed, smooth and round eyes of sizes varying from pea to cherry. The shape is a flat cylindrical, flat square or rectangular. The cheese is sold with or without* a hard, dry rind, which may be coated.

[For Samsø ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 3 weeks at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Samsø intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
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.		
	<u>Fat in dry matter content (m/m):</u>	<u>Corresponding minimum dry matter content (m/m):</u>	
		Samsø:	Mini Samsø:
	Equal to or above 30% but less than 35%:	46%	46%
	Equal to or above 35% but less than 40%:	48%	47%
	Equal to or above 40% but less than 45%:	52%	49%
	Equal to or above 45% but less than 55%:	54%	52%
	Equal to or above 55%:	59%	57%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Samsø and Mini Samsø, respectively, may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; Codex Alimentarius, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR EMMENTAL (C-9)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Emmental is a ripened hard cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has an whitish to yellow colour and a solid, compact and flexible texture, with regular, scarce to plentiful distributed, mat to brilliant eyes from 1 to 3 cm. [Emmental is traditionally manufactured as a wheel of weights of 60 kg or more, but blocks and weights above 20 kg are possible – *formulation under review*]. The cheese is sold with a hard, dry rind, [possibly manufactured by the use of ripening films – *formulation under review together with review of formulations of other ripening details*]. Emmental of block shape is also manufactured and sold without* rind. The typical flavour is mild, nut-like and sweet, more or less pronounced.

[For Emmental ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 2 months at 10-25°C depending of the degree of maturity required. Different ripening conditions may be used provided a minimum period of 6 weeks and provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Emmental intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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. – *retention under review*]

3.3 COMPOSITION

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	45%	Not restricted	45% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>	<u>Corresponding minimum dry matter</u>	<u>content (m/m):</u>
	Equal to or above 45% but less than 55%:		60%
	Equal to or above 55%:		63%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

3.4 ESSENTIAL MANUFACTURING CHARACTERISTICS

Starter cultures of propionic acid producing bacteria [*additional cultures subject to identification*]. The curd is heated after cutting [to a temperature suitable for thermophilic fermentation; where non-pasteurized milk is used, to a minimum of 50°C. – *formulation under review*]

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β-apo-8'-carotenal	35 mg/kg
160f	β-apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
575	Glucono-delta-lactone (GDL)	Limited by GMP
	<u>Preservatives</u>	
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only:</u>	
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.

Sliced, cut, shredded or grated cheese

[Anti-caking agents (for surface treatment only) – retention subject to review]

[460	Cellulose]	Limited by GMP
[551	Silicon dioxide, amorphous])
[552	Calcium silicate])
[553	Magnesium silicates]	) 10 g/kg singly or in combination
[554	Sodium aluminosilicate]	) Silicates calculated as silicon dioxide
[555	Potassium aluminosilicate])
[556	Calcium aluminium silicate])
[559	Aluminium silicate])
[560	Potassium silicate])

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Emmental or Emmentaler may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The designation of products in which the fat content is 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING EMMENTAL

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

[Common dimensions – *formulation under review*:

Shape:	<u>Wheel</u>	<u>Block</u>
Height:	12-30 cm	12-30 cm
Diameter:	70-100 cm	-
Weight:	60 kg	40 kg]

2. METHOD OF MANUFACTURE

- 2.1 Fermentation procedure: Microbiologically derived acid development.
- [2.2 Maturation procedure: Proteolysis due to action of microbial enzymes at successive temperatures up to 25 °C. – *formulation under review together with review of formulations of other ripening details*]

PROPOSED DRAFT REVISED STANDARD FOR TILSITER (C-11)

(As revised at Step 3, November 2001)

1. SCOPE

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

2. DESCRIPTION

Tilsiter is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a firm texture suitable for cutting, with irregularly shaped, shiny and evenly distributed holes. The cheese is sold with or without* a well-dried smear-developed rind, which may be coated.

[For Tilsiter ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 5 weeks at 12-16 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Tilsiter intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
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.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>
	Equal to or above 30% but less than 35%:		49%
	Equal to or above 35% but less than 40%:		51%
	Equal to or above 40% but less than 45%:		53%
	Equal to or above 45% but less than 50%:		55%
	Equal to or above 50% but less than 55%:		57%
	Equal to or above 55% but less than 60%:		59%
	Equal to or above 60%:		61%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Tilsiter may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; Codex Alimentarius, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR SAINT-PAULIN (C-13)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Saint-Paulin is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a uniform whitish to yellow colour and a firm but flexible texture. Holes are generally absent, but a few spherical or stretched (slits), smooth holes of pinhead size may occur. The cheese is sold with or without* a dry or slightly moist rind, which is hard, but elastic under thumb pressure, and which may be coated.

[For Saint-Paulin ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 1-2 weeks at approx. 12 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Saint-Paulin intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review together with review of formulations of other ripening details*];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	40%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>
	Equal to or above 40% but less than 50%:		44%
	Equal to or above 50% but less than 55%:		48%
	Equal to or above 55% but less than 60%:		51%
	Equal to or above 60%:		54%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucono-delta-lactone (GDL))
	<u>Preservatives</u>	
200	Sorbic acid)
202	Potassium sorbate	) 3000 mg/kg of cheese,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
251	Sodium nitrate	) 50 mg/kg of cheese, expressed
252	Potassium nitrate	) as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated
282	Calcium propionate	) as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Saint-Paulin may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The designation of products in which the fat content is 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 40% fat in dry matter constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; Codex Alimentarius, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING SAINT-PAULIN

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

1.1 Shape: Small flat cylinder with slightly convex sides. Other shapes are possible.

1.2 Dimensions and weights:

- a) Usual variant: Diameter approx. 20 cm; min. weight 1.3 kg
- b) "Petit Saint-Paulin": Diameter 8-13 cm; min. weight 150 g.
- c) "Mini Saint-Paulin": Min. weight 20 g.

2. METHOD OF MANUFACTURE

2.1 Fermentation procedure: Microbiologically derived acid development.

2.2 Other characteristics: The cheese is salted in brine. The cheese can be coated (i.e. plastic film, wax)*

**) Note: The last sentence to be removed once the proposed Annex to Standard A-6 on cheese surface terminology has been adopted at Step 8.*

3. QUALIFIERS

The designations "Petit Saint-Paulin" and "Mini Saint-Paulin" should be used when the cheese complies with the provisions for dimensions and weights (1.2).

PROPOSED DRAFT REVISED STANDARD FOR PROVOLONE (C-15)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Provolone is a ripened firm cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The body has a whitish to yellow colour and a fibrous texture with long stranded parallel-orientated protein fibers. It is suitable for cutting and, when aged, for grating as well. A few holes and splits may occur. The shape is mainly cylindrical or pear-shaped, but other shapes are possible. The cheese is sold with or without* a rind, which may be coated.

[For Provolone ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 30 days for mild variants (15 days for weights lower than 2 kg) and 100 days for sharp variants at 10-20 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Provolone intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

Provolone is made by “pasta filata” processing which consists of heating curd of a pH value suitable for further processing by kneading and stretching until the curd is smooth and free from lumps. Still warm, the curd is cut and moulded, then firmed by cooling in chilled water or brine. Other processing techniques, which give end products with the same physical, chemical and organoleptic characteristics are allowed.

*) The cheese has been ripened and/or kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review together with review of formulations of other ripening details*];
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	45%	Not restricted	45% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter content (m/m):</u>
	Equal to or above 45% but less than 50%:		51%
	Equal to or above 50%:		56%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

3.4 ESSENTIAL MANUFACTURING CHARACTERISTICS

The principal starter culture microorganisms shall be *Lactobacillus helveticus*, *Streptococcus salivarius subsp. thermophilus*, *Lactobacillus delbrueckii subsp. bulgaricus* and *Lactobacillus casei*.

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Bleaching agents (to obtain the colour characteristics, as described in Section 2)</u>	
171	Titanium dioxide	Limited by GMP
	<u>Acidity regulators</u>	
170	Calcium carbonates)	
	<u>Preservatives</u>	
200	Sorbic acid)	
202	Potassium sorbate)	3000 mg/kg of cheese,
203	Calcium sorbate)	calculated as sorbic acid
234	Nisin	12.5 mg/kg
239	Hexamethylene tetramine	25 mg/kg of cheese, expressed as formaldehyde
251	Sodium nitrate)	50 mg/kg of cheese, expressed
252	Potassium nitrate)	as Na NO ₃
1105	Lysozyme	Limited by GMP
280	Propionic acid)	
281	Sodium propionate)	3000 mg/kg, calculated
282	Calcium propionate)	as propionic acid
	<u>For surface/rind treatment only:</u>	
200	Sorbic acid)	1 g/kg of cheese, singly
202	Potassium sorbate)	or in combination,
203	Calcium sorbate)	calculated as sorbic acid
235	Pimaricin (natamycin)	2 mg/dm ² surface. Not present at a depth of 5 mm. For rind treatment or added to coatings only.
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)	
552	Calcium silicate)	
553	Magnesium silicates)	10 g/kg singly or in combination
554	Sodium aluminosilicate)	Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)	
556	Calcium aluminium silicate)	
559	Aluminium silicate)	
560	Potassium silicate)	

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Provolone may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The designation of products in which the fat content is 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

- *) For the purpose of comparative nutritional claims, the average minimum fat content of 45% fat in dry matter constitutes the reference.

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* 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.

- *) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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 DATE MARKING

Notwithstanding the provisions of Section 4.7.1 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A), the date of manufacture may be declared instead of the minimum durability information, provided that the product is not intended to be purchased as such by the final consumer.

7.5 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING PROVOLONE

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

- 1.1 Typical shapes: Cylindrical (Salame), pear-shaped (Mandarino), pear-shaped cylinder (Gigantino) and flask (Fiaschetta).
- 1.2 Typical packing: The cheese is typically encased in ropes.
- 1.3 Flavour: The cheese is sold in mild and sharp variants, occasionally smoked.

PROPOSED DRAFT REVISED STANDARD FOR COTTAGE CHEESE (C-16)

(As revised at Step 3, November 2001)

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*, unripened cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001) and the Standard for Unripened Cheese Including Fresh Cheese (CODEX STAN XXX-2001). The body has a whitish 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.

*) The cheese has been kept in such a way that no rind is developed (a “rindless” cheese)

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water.

3.3 COMPOSITION

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat			
- Cottage Cheese	4%	Not restricted	4%
- Dry Curd Cottage Cheese:	None	Below 4%	4%
Dry matter:			
- Cottage Cheese:	20%	Restricted by the MFFB	
- Dry Curd Cottage Cheese:	24%	Restricted by the MFFB	

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Acids</u>	
260	Acetic acid glacial)
270	Lactic acid	) Limited by GMP
330	Citric acid)
338	Orthophosphoric acid	2 g/kg, expressed as P ₂ O ₅ *
507	Hydrochloric acid	Limited by GMP

Acidity regulators

170	Calcium carbonates)	
325	Sodium lactate	)	Limited by GMP
326	Potassium lactate)	
327	Calcium lactate)	
339	Sodium phosphates)	
340ii	Dipotassium orthophosphates	)	3 g/kg, singly or in combination,
341	Calcium phosphates	)	expressed as P ₂ O ₅ *
500	Sodium carbonates)	
501	Potassium carbonates	)	Limited by GMP
504	Magnesium carbonates)	
575	Glucono-delta-lactone (GDL))	

Stabilizers

Stabilizers may be used in compliance with the the definition of milk products and only to the extent they are functionally necessary.

400	Alginate acid)	
401	Sodium alginate)	
402	Potassium alginate	)	Limited by GMP
403	Ammonium alginate)	
404	Calcium alginate)	
405	Propylene glycol alginate	)	5 g/kg, singly or in combination
406	Agar)	
407	Carrageenan or its Na, K, NH ₄ salts (includes furcelleran))	
410	Carob bean gum)	
412	Guar gum)	
413	Tragacanth gum	)	Limited by GMP
415	Xanthan gum)	
416	Karaya gum)	
440	Pectins)	
466	Sodium carboxymethyl cellulose)	

Modified starches as follows:

1400	Dextrins, roasted starch white and yellow)	
1401	Acid-treated starch)	
1402	Alkaline treated starch)	
1403	Bleached starched)	
1404	Oxidized starch)	
1405	Starches, enzyme-treated)	
1410	Monostarch phosphate)	
1412	Distarch phosphate esterified with sodium trimetaphosphate; esterified with phosphorus-oxychloride	)	Limited by GMP
1413	Phosphated distarch phosphate)	
1414	Acetylated distarch phosphate)	
1420	Starch acetate esterified with acetic anhydride)	
1421	Starch acetate esterified with vinyl acetate)	
1422	Acetylated distarch adipate)	
1440	Hydroxypropyl starch)	
1442	Hydroxypropyl distarch phosphate)	

Preservatives:

200	Sorbic acid	)	1 g/kg of cheese, singly
202	Potassium sorbate	)	or in combination,
203	Calcium sorbate	)	calculated as sorbic acid
280	Propionic acid)	

281	Sodium propionate	)	3000 mg/kg, calculated as
282	Calcium propionate	)	propionic acid
283	Potassium propionate)	

*) Total amount of P₂O₅ not to exceed 3 g/kg.

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Cottage Cheese and Dry Curd Cottage Cheese may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The term “dry curd” may be omitted in the name of the product, if the omission would not be confusing to the consumer in the country of retail sale.

The qualifiers “creamed” or “full fat” may be used for products with fat contents of 4% or above.

For the purpose of comparative nutritional claims, the minimum fat content of 0% fat constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR COULOMMIERS (C-18)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Coulommiers is a soft, surface ripened, primarily mould ripened cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001) which has a shape of a flat cylinder or sectors thereof. The body has a whitish to yellow colour and a soft, but not crumbly texture, ripened from the surface to the center of the cheese. Holes are generally absent, but splits and openings may occur. A rind is to be developed that is soft and uniformly covered with white mould but may occasionally have red, brownish or orange coloured spots. Whole cheese may be cut or formed into sectors prior to or after the mould development.

[For Coulommiers ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 10 days at 10-14 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Coulommiers intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review together with review of formulations of other ripening details*];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	40%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter content (m/m):</u>
	Equal to or above 40% but less than 50%:		42%
	Equal to or above 50% but less than 55%:		46%
	Equal to or above 55% but less than 60%:		49%
	Equal to or above 60%:		52%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;
Weight: Whole cheese of flat cylinder: min. 300 g.

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
575	Glucono-delta-lactone (GDL)	Limited by GMP
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Coulommiers may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The designation of products in which the fat content is 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 40% fat in dry matter constitutes the reference.

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

Coulommiers, which is packed in a container in which it has undergone heat treatment, shall be labelled with an indication of the treatment.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING COULOMMIERS

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. METHOD OF MANUFACTURE

1.1 Fermentation procedure: Microbiologically derived acid development.

[1.2 Maturation procedure: Predominantly surface development of moulds followed by proteolysis from the surface caused by *Penicillium camembertii*, *Penicillium caseicolum* and other harmless microorganisms such as *Geoptrichum candidum*, *Brevibacterium linens*, yeast, etc. – *formulation under review together with review of formulations of other ripening details*]

PROPOSED DRAFT REVISED STANDARD FOR CREAM CHEESE (C-31)

(As revised at Step 3, November 2000)

1. SCOPE

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

In some countries, the term “cream cheese” is used to designate cheeses, such as high fat ripened hard cheese, that do not conform to the description I Section 2. This Standard does not apply to such cheeses.

2. DESCRIPTION

Cream Cheese is a soft, spreadable, unripened and rindless* cheese in conformity with the Standard for Unripened Cheeses Including Fresh Cheeses (CODEX STAN XXX-2001) and the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001). The cheese has a whitish to yellow colour. The texture is smooth to slightly flaky and without holes, and the cheese spreads and mixes readily with other foods.

*) The cheese has been kept in such a way that no rind is developed (a “rindless” cheese)

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 RAW MATERIALS

Milk and/or products obtained from milk.

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;
- Sodium chloride;
- Potable water;
- Gelatine 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;
- Vinegar.

3.3 COMPOSITION

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	[25/40] %	Not restricted	Minimum 60%
Moisture on fat free basis:	67%	-	Not specified
Dry matter:	25%	Restricted by the MMFB	Not specified

Compositional modifications of Cream Cheese beyond the minima or maxima specified above for milkfat, moisture on fat free basis 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).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160e	β-apo-8`-carotenal	35 mg/kg
160f	β-apo-8`-carotenic acid, methyl and ethyl ester	35 mg/kg
171	Titanium dioxide	Limited by GMP

Acids

260	Acetic acid glacial)	
270	Lactic acid (L-, D- and DL-))	
296	Malic acid (DL-)	)	Limited by GMP
330	Citric acid)	
507	Hydrochloric acid)	

Acidity regulators

170	Calcium carbonates)	
500	Sodium carbonates)	
501	Potassium carbonates	)	Limited by GMP
575	Glucono-delta-lactone (GDL))	

Stabilizers/thickeners

Stabilizers and thickeners including modified starches may be used in compliance with the definition for milk products and only to heat treated products to the extent they are functionally necessary taking into account any use of gelatine and starch as provided for in section 3.2.

331	Sodium citrates)	
332	Potassium citrates	)	Limited by GMP
333	Calcium citrates)	
339	Sodium phosphates)	
340	Potassium phosphates	)	3.5 g/kg, singly or in combination,
341	Calcium phosphates	)	expressed as P ₂ O ₅ .
450i	Disodium diphosphate)	
400	Alginic acid)	
401	Sodium alginate)	
402	Potassium alginate	)	Limited by GMP
403	Ammonium alginate)	
404	Calcium alginate)	
405	Propylene glycol alginate	)	5 g/kg, singly or in combination
406	Agar)	
407	Carrageenan or its Na, K, NH ₄ salts (includes furcelleran))	
410	Carob bean gum)	
412	Guar gum)	
413	Tragacanth gum	)	Limited by GMP
415	Xanthan gum)	
416	Karaya gum)	
417	Tara gum)	
466	Sodium carboxymethyl cellulose)	
576	Sodium gluconate)	

Modified starches as follows:

1400	Dextrins, roasted starch white and yellow)	
1401	Acid-treated starch)	
1402	Alkaline treated starch)	
1403	Bleached starched)	
1404	Oxidized starch)	
1405	Starches, enzyme-treated)	
1410	Monostarch phosphate)	
1412	Distarch phosphate esterified with sodium trimetaphosphate; esterified with phosphorus-oxychloride	)	Limited by GMP
1413	Phosphated distarch phosphate)	
1414	Acetylated distarch phosphate)	
1420	Starch acetate esterified with acetic anhydride)	

)	
1421	Starch acetate esterified with vinyl acetate)
1422	Acetylated distarch adipate)
1440	Hydroxypropyl starch)
1442	Hydroxypropyl distarch phosphate)
	<u>Preservatives:</u>	
200	Sorbic acid	) 1 g/kg of cheese, singly
202	Potassium sorbate	) or in combination,
203	Calcium sorbate	) calculated as sorbic acid
234	Nisin	12.5 mg/kg
280	Propionic acid)
281	Sodium propionate	) 3000 mg/kg, calculated as
282	Calcium propionate	) propionic acid
283	Potassium propionate)
235	Pimaricin /natamycin)	For surface treatment only: 2 mg/dm ² of surface. Not present in a depth of 5 mm.
	<u>Foaming agents (for whipped products only)</u>	
290	Carbon dioxide	Limited by GMP
941	Nitrogen	Limited by GMP

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Cream Cheese may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 60 % fat constitutes the reference.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – formulation under review] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

PROPOSED DRAFT REVISED STANDARD FOR CAMEMBERT (C-33)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

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 A-6 – 1978, Rev. 2-2001), which has a shape of a flat cylinder or sectors thereof. The body has a whitish to yellow colour and a soft, but not crumbly texture, ripened from the surface to the center of the cheese. Holes are generally absent, but splits and openings may occur. A rind is to be developed that is soft and uniformly covered with white mould but may occasionally 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 10-14 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Camembert intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review together with review of formulations of other ripening details*];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>
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.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter content (m/m):</u>
	Equal to or above 30% but less than 35%:		38%
	Equal to or above 35% but less than 40%:		39%
	Equal to or above 40% but less than 45%:		41%
	Equal to or above 45% but less than 50%:		43%
	Equal to or above 50% but less than 55%:		45%
	Equal to or above 55% but less than 60%:		48%
	Equal to or above 60%:		51%

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;

Weight: Whole cheese of flat cylinder (Camembert) or square (Carré de Camembert): min. 80 g; max. 500 g

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucone-delta-lactone (GDL))
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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

Camembert, which is packed in a container in which it has undergone heat treatment, shall be labelled with an indication of the treatment.

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* 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.

- *) For instance, [repackaging, cutting, slicing, shredding and grating — *formulation under review*] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING CAMEMBERT

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. METHOD OF MANUFACTURE

1.1 Fermentation procedure: Microbiologically derevied acid development.

[1.2 Maturation procedure: Predominantly cultures of *Penicillium camembertii*, *Penicillium caseicolum* and other harmless microorganisms such as *Geotrichum candidum*, *Brevibacterium linens*, yeast, etc. – *formulation under review together with review of formulations of other ripening details*]

PROPOSED DRAFT REVISED STANDARD FOR BRIE (C-34)

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Brie is a soft surface ripened, primarily white mould ripened cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), which has a shape of a flat cylinder or sectors thereof. The body has a whitish to yellow colour and a soft, but not crumbly texture, ripened from the surface to the center of the cheese. Holes are generally absent, but splits and openings may occur. A rind is to be developed that is soft and uniformly covered with white mould but may occasionally have red, brownish or orange coloured spots. Whole cheese may be cut or formed into sectors prior to or after the mould development.

[For Brie ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 10 days at 10-14 °C depending of the degree of maturity required. Different ripening conditions may be used provided the cheese exhibits similar physical, biochemical and organoleptic changes to those achieved by the previously stated ripening procedure. Brie intended for further processing need not exhibit the same degree of ripening. – *formulation under review together with review of formulations of other ripening details*]

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 microorganisms;
- Rennet or other safe and suitable coagulating enzymes;
- Sodium chloride;
- Potable water;
- [Safe and suitable enzymes to enhance the ripening process – *formulation under review*];
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), 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

<u>Milk constituent</u>	<u>Minimum content</u> <u>(m/m):</u>	<u>Maximum</u> <u>content(m/m):</u>	<u>Reference level (m/m):</u>
Milkfat in dry matter:	40%	Not restricted	45% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		
	<u>Fat in dry matter content (m/m):</u>		<u>Corresponding minimum dry matter</u> <u>content (m/m):</u>
	Equal to or above 40% but less than 45%:		42%
	Equal to or above 45% but less than 50%:		43%
	Equal to or above 50% but less than 55%:		45%
	Equal to or above 55% but less than 60%:		48%
	Equal to or above 60%:		51%

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 Codex General Standard for the Use of Dairy

Terms (CODEX STAN 206-1999).

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;

Weight: Whole cheese of flat cylinder: min. 500 g; max. 3500 g

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (for edible cheese rind)</u>	
100	Curcumins	Limited by GMP
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
	<u>Acidity regulators</u>	
170	Calcium carbonates)
504	Magnesium carbonates	) Limited by GMP
575	Glucone-delta-lactone (GDL))
	<u>Preservatives</u>	
1105	Lysozyme	Limited by GMP
	<i>Sliced, cut, shredded or grated cheese</i>	
	<u>Anti-caking agents (for surface treatment only)</u>	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous)
552	Calcium silicate)
553	Magnesium silicates	) 10 g/kg singly or in combination
554	Sodium aluminosilicate	) Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)
556	Calcium aluminium silicate)
559	Aluminium silicate)
560	Potassium silicate)

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Brie may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) 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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

*) For the purpose of comparative nutritional claims, the minimum fat content of 45% fat in dry matter constitutes the reference.

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

Brie, which is packed in a container in which it has undergone heat treatment, shall be labelled with an indication of the treatment.

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* 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.

*) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING BRIE

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

1. APPEARANCE CHARACTERISTICS

Flavour: [Characteristic of the variety – *formulation under review.*]

2. METHOD OF MANUFACTURE

2.1 Fermentation procedure: Microbiologically derived acid development.

[2.2 Maturation procedure: Predominantly cultures of *Penicillium caseicolum*, *Penicillium caseicolum*, *Penicillium camembertii* and other harmless microorganisms such as *Geotrichum candidum*, *Brevibacterium linens*, yeast, etc. – *formulation under review together with review of formulations of other ripening details*]

PROPOSED DRAFT STANDARD FOR MOZZARELLA

(As revised at Step 3, November 2001)

The Appendix to this Standard contains provisions which are not intended to be applied within the meaning of the acceptance provisions of Section 4.A. (i) (b) of the General Principles of the Codex Alimentarius.

1. SCOPE

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

2. DESCRIPTION

Mozzarella is an unripened cheese in conformity with the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001) and the Standard for Unripened Cheese Including Fresh Cheese (CODEX STAN XXX-2001). It is a smooth elastic cheese with a long stranded parallel-orientated fibrous protein structure without evidence of curd granules. The cheese is rindless* and may be formed into various shapes.

Mozzarella with a high moisture content is a soft cheese with overlying layers that may form pockets containing liquid of milky appearance. It may be packed with or without the liquid. The cheese has a whitish colour.

Mozzarella with a low moisture content is a firm homogeneous cheese without holes and is suitable for shredding.

Mozzarella is made by “pasta filata” processing, which consists of heating curd of a pH value suitable for further processing by kneading and stretching until the curd is smooth and free from lumps. Still warm, the curd is cut and moulded, then firmed by cooling. Other processing techniques, which give end products with the same physical, chemical and organoleptic characteristics are allowed.

*) The cheese has been kept in such a way that no rind is developed (a “rindless” cheese)

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;
- Sodium chloride;
- Vinegar;
- Potable water;
- Rice, corn and potato flours and starches: Notwithstanding the provisions in the General Standard for Cheese (CODEX STAN A-6 – 1978, Rev. 2-2001), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded Mozzarella with a low moisture content 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

<u>Milk constituent</u>	<u>Minimum content (m/m):</u>	<u>Maximum content(m/m):</u>	<u>Reference level (m/m):</u>	
Milkfat in dry matter:				
- with high moisture	20%	Not restricted	40% to 50%	
- with low moisture	2%	Not restricted	40% to 50%	
Dry matter:	Depending on the fat in dry matter content, according to the table below.			
	<u>Fat in dry matter content (m/m):</u>	<u>Corresponding minimum dry matter content (m/m):</u>		
		With low moisture:	With high moisture:	
	Equal to or above 2% but less than 10%:	31%	-	
	Equal to or above 10% but less than 10%:	34%	-	
	Equal to or above 20% but less than 30%:	36%	24%	
	Equal to or above 30% but less than 40%:	39%	26%	
	Equal to or above 40% but less than 45%:	42%	29%	
	Equal to or above 45% but less than 50%:	45%	31%	
	Equal to or above 50% but less than 60%:	47%	34%	
	Equal to or above 60%:	53%	38%	

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 Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999).

4. FOOD ADDITIVES

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

<i>No.</i>	<i>Name of food additive</i>	<i>Maximum level</i>
	<u>Colours (to obtain the colour characteristics, as described in Section 2)</u>	
101(ii)	Turmeric	Limited by GMP
101	Riboflavins	Limited by GMP
140	Chlorophyll	Limited by GMP
141	Copper chlorophylls	15 mg/kg
160a(i)	Carotenes (synthetic)	25 mg/kg
160a(ii)	Carotenes (vegetable)	600 mg/kg
160b	Annatto extracts	10 mg/kg of cheese on bixin/norbixin basis
160c	Paprika oleoresins	Limited by GMP
160e	β -apo-8'-carotenal	35 mg/kg
160f	β -apo-8'-carotenic acid, methyl and ethyl ester	35 mg/kg
171	Titanium dioxide	Limited by GMP
	<u>Acidity regulators</u>	
170	Calcium carbonates)	
325	Sodium lactate)	Limited by GMP
326	Potassium lactate)	
327	Calcium lactate)	
339	Sodium phosphates)	
340ii	Dipotassium orthophosphates)	3 g/kg, singly or in combination,
341	Calcium phosphates)	expressed as P ₂ O ₅ *
500	Sodium carbonates)	
501	Potassium carbonates)	Limited by GMP
504	Magnesium carbonates)	
575	Glucono-delta-lactone (GDL))	
	<u>Acids</u>	
260	Acetic acid glacial)	

270	Lactic acid (L-, D- and DL-))	
296	Malic acid (DL-)	)	Limited by GMP
330	Citric acid)	
338	Orthophosphoric acid	)	2 g/kg, expressed as P ₂ O ₅ *
507	Hydrochloric acid	)	Limited by GMP

Sliced, cut, shredded or grated cheese

Anti-caking agents (for surface treatment of Mozzarella with low moisture content, only)

460	Cellulose	)	Limited by GMP
551	Silicon dioxide, amorphous)	
552	Calcium silicate)	
553	Magnesium silicates	)	10 g/kg singly or in combination
554	Sodium aluminosilicate	)	Silicates calculated as silicon dioxide
555	Potassium aluminosilicate)	
556	Calcium aluminium silicate)	
559	Aluminium silicate)	
560	Potassium silicate)	

Preservatives

200	Sorbic acid)	
202	Potassium sorbate	)	1 g/kg of cheese,
203	Calcium sorbate	)	expressed as sorbic acid
280	Propionic acid)	
281	Sodium propionate	)	Limited by GMP
282	Calcium propionate)	
283	Potassium propionate)	

*) Total amount of P₂O₅ not to exceed 3 g/kg.

5. CONTAMINANTS

5.1 HEAVY METALS

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

5.2 PESTICIDE RESIDUES

The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission.

6. HYGIENE

6.1 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997, *Codex Alimentarius*, Volume 1B), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 From raw material production to the point of consumption, the products covered by this standard should be subject to a combination of control measures, which may include, for example, pasteurization, and these should be shown to achieve the appropriate level of public health protection.

6.3 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, *Codex Alimentarius*, Volume 1B).

7. LABELLING

In addition to the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Mozzarella may be applied in accordance with section 4.1 of the Codex General Standard for the

Labelling of Prepackaged Foods, provided that the product is in conformity with this Standard.

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 (CODEX STAN A-6 – 1978, Rev. 2-2001) apply.

The designation of Mozzarella with a high moisture content shall be accompanied by a qualifying term describing the true nature of the product.

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), 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 A-6 – 1978, Rev. 2-2001) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims (CAC/GL 023 – 1997, *Codex Alimentarius* Volume 1A)*.

- *) For the purpose of comparative nutritional claims, the minimum fat content of 40% fat in dry matter constitutes the references.

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* 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.

- *) For instance, [repackaging, cutting, slicing, shredding and grating – *formulation under review*] 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 sale to the final consumer, 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, Rev.1-1991; *Codex Alimentarius*, Volume 1A) 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 Alimentarius*, Volume 13.

Determination of equivalency between “pasta filata” processing and other processing techniques:
Identification of the typical structure by confocal laser scanning microscopy.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING MOZZARELLA

The information below is intended for voluntary application by commercial partners and not for application by governments.

Should a Member Country identify legitimate objective(s) for retaining or introducing national regulation(s) that address(es) matters considered in this Annex, the provisions below should be taken into account.

MOZZARELLA WITH A HIGH MOISTURE CONTENT**1. METHOD OF MANUFACTURE**

- 1.1 The principal starter culture microorganisms are *Streptococcus thermophilus* and/or *Lactococcus* spp.
- 1.2 Products made from buffalo's milk shall be salted in cold brine.