codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 4(e)

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON MILK AND MILK PRODUCTS
Fourth Session
Wellington, New Zealand, 28 February – 3 March 2000

PROPOSED DRAFT STANDARDS FOR INDIVIDUAL CHEESES

REVIEW OF COMMENTS AND PROPOSED DRAFT STANDARDS FOR INDIVIDUAL CHEESE VARIETIES (INCLUDING MOZZARELLA)

(Prepared by International Dairy Federation)

Governments and interested international organizations are invited to comment on the attached proposed draft standards for individual cheese varieties at Step 3. 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 25 January 2000.**

The Proposed Draft Standards will be considered at Step 4 by the Committee at its 4th Session.

INTRODUCTION

At the 3rd session of the Codex Committee on Milk and Milk Products(CCMMP; May 1998) the Proposed Draft Standards for individual cheese varieties were not discussed. The Committee agreed to establish an *Ad Hoc* Working Group chaired by France to consider specified principal issues and other relevant matters relating to the individual cheeses. The Committee further agreed that the IDF should redraft the standards on the basis of conclusions and recommendations of the Ad Hoc Working Group on Cheese for circulation and comment at Step 3 prior to the Committee's next session (ALINORM 99/11, paras 84-88).

The redrafting has been carried out on the basis of the Proposed Draft Standards tabled at the 3rd session of the Committee (Annexes to CL 1997/36-MMP and CL 1997/38-MMP). However, as the 3rd CCMMP decided to recommend to the CAC the revocation of 14 of the Standards under consideration (ALINORM 99/11, paras 80-83), only the remaining 15 Proposed Draft Standards have been considered for the redrafting. It should be noted that the CCMMP has not yet taken a decision whether to revise or revoke the Standard for Extra Hard Grating Cheese (C-35).

The following principles have been applied:

1. The review has been done in light of written comments submitted[1] and with the inclusion of the recommendations of the Ad Hoc Working Group on Cheese.
2. Each written comment submitted has been examined individually to the extent they do not fully fall under the issues considered by the Ad Hoc Working Group on Cheese. However, comments relating to those Proposed Draft Standards that will be revoked have not been considered. It should be noted that the comments reviewed were submitted prior to the 3rd Session of the CCMMP. This review does not consider those comments made to the two Questionnaires issued by the Chair of the Ad Hoc Working Group on Cheese.
3. Recommendations and conclusions of the Ad Hoc Working Group on Cheese have been inserted to the extent they were received by end of August 1999, i.e. those relating to the results of the first Questionnaire. Also additional amendments consequential from the recommendations of the Ad Hoc Working Group on Cheese have been considered. At the time of finalization of this report, the conclusions of the Chair of the Ad Hoc Working Group on Cheese on replies to the 2nd Questionnaire have not been received. Consequently, the review does not review earlier comments relating to absolute minimum fat contents in the individual standards nor does it provide recommendations in this respect.
4. The review also includes recommendations for amendments, where appropriate, that are considered consequential from the decisions taken at the Session under Agenda item 4 (Draft Code of Principles concerning Milk and Milk Products)[2,] item 5 (Common Labelling Provisions of Milk Product Standards)[3] and item 6 (Draft and Draft Revised Standards at Step 7)[4] and item 9 (Methods of Analysis and Sampling for Milk Products)[5].
5. The relevant decisions taken by the 23rd Session of the Codex Alimentarius Commission in accordance with the recommendations of the 27th session of the Codex Committee on Food Labelling (CCFL) and the 31st session of the Codex Committee on Food Additives and Contaminants (CCFAC) have been incorporated. Consequently, government comments related to these issues, which were submitted at an earlier stage, have not been reviewed. The considerations and recommendations of the 14th session of the Codex Committee on General Principles (CCGP) have been taken into account as well.
6. The general approach used has been that a Government comment is accepted unless proper technological, scientific, editorial or similar arguments make it advisable not to follow it or to amend it.
7. Where Governments have expressed different views, possible solutions are provided with the aim of facilitating a decision. They take into account technical justification and/or existing commercial trading practices.

Abbreviations used in this document:

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

GSLPF: General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991).

A. GENERAL MATTERS

1. BASIS FOR FURTHER WORK

The question on the need for separate standards was referred to the Ad Hoc Working Group on Cheese as follows: *To consider the need to have separate individual cheese standards compared to annexing the provisions to the relevant provisions in the relevant standards for Cheeses, including the possible*

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1 CX/MMP 98/7 adds 1 and 2 and CRDs 19 & 20 tabled at the 3rd session of the CCMMP.

2 ALINORM 99/11, paras. 7-20 and Appendix II.

3 ALINORM 99/11, paras. 21-29 and Appendix III.

4 ALINORM 99/11, paras. 30-79 and Appendices IV-XI.

5 ALINORM 99/11, paras. 89-91 and Appendix XII.

incorporation of specific and/or essential requirements into the relevant General Standards for Cheeses.

Conclusions and recommendations of the Ad Hoc Working Group on Cheese

The Chair of the Ad Hoc Working Group on Cheese has concluded that there appears to be considerable support for continuing discussion on the IDF standards based on current format of individual standards.

The Chair recommended that IDF continued and completed its technical work based on individual standards so that the Committee can have a clear survey of the content of these standards, and therefore of the specific characteristics of these cheeses.

There were also opinions supporting a different approach for the construct of individual cheese annexes attached to the relevant general standard. This alternative approach could be explored by IDF in the form of an example, while carrying out its technical work on the content of individual standards mentioned above. This consideration should not restrict discussion on the content of individual cheese standards, but rather provide an example on how cheese standards can be constructed with certain individual cheese information contained in annexes.

However, CCMMP will have to be thoroughly informed of the conclusions of Codex and TBT secretariats on the status of annexes (Cf. CX/GP 99/7).

Recommendation no. 1: The review should be continued as foreseen, based upon individual separate standards. IDF intends to provide an example of annexing individual standards to the general standards for the 4th session of the CCMMP.
With regard to the role of advisory material in the appendices, see also the discussion leading to ***Recommendation no. 21***.

2. NATURE AND PLACING OF ESSENTIAL/NON-ESSENTIAL PROVISIONS

This question was referred to the Ad Hoc Working Group on Cheese as follows: *To consider whether requirements such as colour, rind, holes, shape, and form should be deleted or transferred to appendices of the General Standards.*

Conclusions and recommendations of the Ad Hoc Working Group on Cheese:

The Chair of the Ad Hoc Working Group on Cheese has concluded that, on the whole, the respondents indicated that there is a need to retain the requirements proposed in the first questionnaire to describe individual cheese and therefore, allow their distinction (cheese variety, form, description, dry matter, fat in dry matter, sensory criteria). These criteria have to be studied standard by standard.

The Chair has recommended that IDF analyses each of the individual standards and examine the relevance of the criteria retained in each to allow to make a distinction between essential criteria to describe the identity of a cheese and those that could be transferred to appendices or eventually deleted.

Recommendation no. 2: Surveys of essential/non-essential details have been carried out by the IDF in the previous reviews of the draft standards. Those details considered justified at that stage as essential/necessary are now contained in the current draft standards. Justifications have been submitted to the 2nd and the 3rd sessions of the CCMMP.

However, the details will be discussed in this review to the extent they have been addressed by government comments.

An overview of the degree of detailing in the various Draft Standards, as reviewed in 1999, is provided in **Annex A** to this report together with explanations for their inclusions in the first place.

B. COMMON ISSUES RELATING TO ALL STANDARD FOR INDIVIDUAL CHEESE VARIETIES

2. DESCRIPTION

2.1 Ripening provisions

Comments submitted: The **United Kingdom** stated that the wording relating to ripening periods is acceptable provided that these are, indeed, minimum ripening periods.

The United States supported the approach made on page 7 of CL 1997/36: Alternative methods resulting in the same degree of ripening should be permitted, wherefore the term "normally" should be inserted to indicate that deviations from "normally" are permitted. The US recommended that clarifying language be included where "normally" provides deviations to specific time periods as follows:

"The minimum ripening time for the cheese to develop characteristic flavour and body characteristics is normally _____ (fill in appropriate information) weeks. A shorter ripening period may occur provided the cheese exhibits similar characteristics."

New Zealand stated that age of ripening is not among the reliable descriptors of the products, does not necessarily ensure fair trade practices, and may inhibit technological innovation, which is of benefit to the consumer. Until descriptions can be developed that do reliably describe the age of ripening, such detail should be available as advisory information in attachments not subject to acceptance.

Discussion: Minimum ripening periods have been indicated in the standards for two reasons:

- To distinguish ripened cheeses from unripened cheeses.

  Unripened cheese is ready for sale shortly after manufacture. Ripened cheeses are subject to further maturation and are not ready for sale until some ripening has occurred.

- To quantify the interpretation of the definition of ripened cheeses as included in section 2.1.1 of the General Standard for Cheese (A-6).

Ripened cheese is defined as cheese which is not ready for consumption shortly after manufacture but which must be held for such time, at such temperature, and under such conditions as will result in the necessary biochemical and physical changes characterizing the cheese in question. Consequently, three factors need to be considered: Time, Temperature and conditions (for instance, humidity).

Specification of ripening time is an indirect way of describing flavour intensity of the cheese type in question. Usually, the time needed increases with increased dry matter contents. However, as ripening temperature and other conditions are not specified in the standards, the requirement for minimum time needs to be stated, however, with some flexibility. The flexibility needed is contained in the use of the term "normally", by including the principle of equivalence, and by providing possibility for some deviation for products intended for further processing. The intention is to specify a reference procedure without excluding future technological developments.

The UK request to retain a minimum ripening period may have consequences for the request also to allow ripening enzymes in the ingredient list (see UK comment under section 3.2) and would also be contradictory to the view of New Zealand.

The US proposal for a clarified wording assists in the understanding of the intent with the term "normally".

With regard to the New Zealand comment, it should be noted that alternative descriptors do exist for characterising the degree of the necessary biochemical and physical changes characterizing the cheese in question. These descriptors concerns various expressions for the degree of proteolysis such as amount of peptides, free amino acids, and minor N compounds, identified by a range of analytical specific and non-specific techniques. Non-specific techniques include the quantification of nitrogen compounds soluble in various extracts or precipitants and the liberation of active groups, in the first place described by Bondzynski (Landwirtsch. Jahrbuch der Schweiz (1894), 159). Specific techniques include chromatography and electrophoresis. Similarly, where lipolysis is characteristic for a cheese variety, the

degree of fat decomposition can be quantified as well (amount of free fatty acids). A combination of these techniques can provide a good picture of the degree of maturation characteristic for an individual cheese variety.

Although it is possible to specify appropriate ripening criteria for each cheese variety based upon the above objective and scientifically based techniques, it will be rather complicated. It is therefore preferred to indicate the normal (reference) ripening conditions which normally result in a cheese complying with necessary biochemical, physical and organoleptic changes, as required by standard A-6.

Note: *In this review, the specifications for the ripening temperatures, as inserted in the reviewed draft standards, have been taken from the old unrevised Codex Standards. As a consequence of the recommended new approach, the ripening periods and temperatures need to be reviewed. The figures included in the appended draft standards have not yet been subject to such a review.*

Recommendation no. 3: Adopt a revised text based upon the proposal of the United States, and include the appropriate wordings in the standards for ripened cheese varieties to indicate the flavour development typical of the variety. The following text is suggested:

"For cheese ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from ___ weeks at ____ °C (appropriate information to be filled in for each standard) 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. Cheese intended for further processing need not exhibit the same degree of ripening."

2.2. Colour Descriptors

Comments submitted: United Kingdom suggested in the comments to Cheddar that the term "pale straw" would be better described as "pale cream".

Discussion: The terms used for the description of colours are not universal in all cases. More generic terms are needed, for instance, a generic scale of cheese colours.

Recommendation no. 4: Development of a more generic descriptor system is currently being considered by IDF. IDF expects to report to the CCMMP on this issue at the 5th session. Until then, the current descriptions should be retained.

3.1 Raw materials

Comments submitted: India stated that substantial equivalence now exists for the use of buffalo milk in all the individual standards. Continued discrimination against the use of buffalo milk in these standards cannot be technologically justified. (Justification for removal of this restriction was provided in the comments of India).

The IDF suggested that the standards accommodate for buffalo's milk as well and recommended the following wording: *"Cows milk or buffaloes milk, or their mixtures, and products obtained from these milks."*

Discussion: The species of origin of the milk supply used in cheese making may affect the characteristic identity of individual cheeses on the basis of colour, texture, flavour and aroma.

Due to differences in the biochemical composition of milks from different animals, cheeses produced from the milks of different species may have significant differences in organoleptic properties.

Since the organoleptic properties are critical to the identity of many individual cheese varieties and their continued acceptance by consumers, it should be recognized that for certain individual cheese varieties it may be technologically justified to restrict raw materials to milk of a specific origin.

Milk of other species should be permitted if proven that they give end products with similar physical, chemical and organoleptic characteristics.

Taking into account:

- that adequate documentation for equivalency between cheeses made from milk from various species with regard to the cheese varieties currently under consideration is only available for buffalo's milk, and
- that international trade with cheeses using the variety names regulated by the current standards and which have been manufactured from milk from other species than those prescribed by the standards are non-existing or insignificant,

it is recommended that the origin of milk in the revised individual cheese standards is restricted to cow's and buffalo's milk and their mixtures.

When more documentation is available, which proves equivalency between an individual cheese made from cow's and buffalo's milk and the same variety made from milk of another specified animal origin, the restriction should be reviewed. In this respect, each individual cheese should be evaluated individually and species by species.

At the 3rd CCMMP, the Committee agreed on an editorial amendment in Standards A-6, A-7 and A-17. The same amendment should also be done in the standards for individual cheeses.

Recommendation no. 5: Adopt the following wording for all the individual standards under review by this document:

"Cows´ milk or buffaloes´ milk, or their mixtures, and/or products obtained from these milks."

3.2 Permitted ingredients

3.2.1 Introductory text

Comments submitted: France recommended that, for greater clarity, a similar wording as introduces the additives list (section 4) should be inserted as an introductory statement to the list of permitted ingredients.

Discussion: There is no need for an introductory sentence because the heading says "Permitted Ingredients". If the wording instead was "Ingredients" which is similar to the heading "Food additives", then a sentence precisely as the one for additives would be relevant.

Recommendation no. 6: No adoption.

3.2.2 Flavour enhancing Enzymes

Comments submitted: The United Kingdom requested to amend the indent into "Safe and suitable enzymes", as enzymes also serve to function in the assistance of ripening.

Discussion: It is well known that the residual coagulating enzymes and, especially, the proteolytic enzymes of the starter bacteria are of great importance for the ripening of cheese, which results in flavour formation. To enhance flavour development or to accelerate ripening the use of specific proteolytic enzyme preparations, except coagulating enzymes, is of increasing interest in various countries. In this respect, adjunct starter cultures and lipases are also used.

The proteolytic enzymes can be used for the production of various cheese types but also for the manufacture of enzyme-modified cheese. These can be considered as cheese preparations that has treated enzymatically to enhance the flavour or a significant portion of the flavour profile of that cheese to provide the food manufacturer with a strong tasting cheese.

There are various microbial sources for these proteolytic enzyme preparations but the preparations are to be considered as GRAS (generally recognized as safe). These preparations are often mixtures of various proteolytic enzymes, sometimes including amino acid convertates. They are available on the market under a number of commercial names such as Accelase, Debitrase, Delvolase, Protease B500, Neutrase, Alcalase, Flavourzyme, Protease "Amano", Peptidase "Amano", Stemzyme, Bioprotease, Promod, Flavourpro, Savourase, Emporase and Proteinase D5 (list not exclusive).

Enzymes to assist in flavour development are currently included only in the standards for Cheddar and Provolone as "safe and suitable enzymes to assist in flavour development".

Although it is a secondary function, coagulating enzymes also assists in flavour development of the cheese. For this reason the current wording is broader than necessary.

The intent is to address those enzymes, which are added for the primary purpose of assisting in enhancing the ripening process (e.g. lipases, peptidases, proteases, and lactases), better known as ripening enzymes. The use of ripening enzymes is not justified for the manufacture of unripened cheeses and such practice would be misleading to the consumer with regard to the nature (unripenedness) of the product.

The 3rd CCMMP agreed on a text as requested above for standard A-6.

Recommendation no. 7: Whether to permit ripening enzymes should be considered standard by standard. Requests for allowing ripening enzymes have so far concerned Cheddar, Edam, Provolone, Coulommiers, Camembert and Brie. Where it is decided to permit the use of such enzymes, the wording should be as follows:

"- safe and suitable enzymes to enhance the ripening process."

This wording should be inserted in the standards for the varieties mentioned.

3.2.3 Ingredients with anti-caking functions

Comments submitted: The United States requested the addition of rice, corn, and potato flour to the list of ingredients as these substances are used as anti-caking agents.

Discussion: The function is similar to anti-caking agents. Wheat flour is also currently used and should be added to the list provided by the US.

Recommendation no. 8: Add the following new indent to the list of permitted ingredients in those standards, where section 4 provides for anti-caking agents:

"- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), 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

3.3.1 Presentation/format of the section

Comments submitted: France found the section too complex and has suggested simplifying a number of separate standards.

Discussion: Reduction and enrichment of the fat content from a reference level has to be followed up by corresponding and different dry matter contents in order to maintain equivalent levels of MFFB. Alternatively, the MFFB range needs to be specified.

Extensive reference to MFFB is considered to be more complicated to adapt to in practice, although it is simpler.

Therefore, it is recommended to provide sets of criteria consisting of different fat in dry matter levels, as appropriate for the variety in question, combined with minimum dry matter contents ensuring the retention of the MFFB content as characteristic for the variety in question.

This approach has actually been used in those old unrevised cheese standards, which include reduced fat variants. The present format follows this principle.

The presentation/format recommended ensures that a similar texture of a particular cheese type is maintained at all those fat levels specified in the standard for the cheese variety in question. The reasoning for the current format is provided in details on pages 47-51 of CL 1997/36-MMP. Eight different options were considered in depth, which led to the recommended approach. The current format represents the option (out of eight) which creates the fewest technical and technological difficulties, although it is agreed it seems to be rather complex.

Texture of cheese is normally described by moisture on fat free basis (see section 7.1.1 of A-6), where the texture descriptors soft, firm, hard and extra hard are defined according to moisture on fat free basis.

However, it has been considered too complicated to introduce moisture on fat free basis as a new criterion in the standards as the term is not widespread known.

Recommendation no. 9: Retain the approach (See ***Recommendation no. 10***).

3.3.2 Absolute minimum fat contents

This question was referred to the Ad Hoc Working Group on Cheese as follows: ***To identify the absolute minimum values for fat in dry matter.***

Recommendations of the Ad Hoc Working Group on Cheese: The Chair has concluded that the working group is in the opinion that fat in dry matter is important to identify an individual cheese. This criterion should be considered and determined on a case by case basis (standard by standard).

The working group had not yet concluded on the absolute minima in each standard by the time of completion of this review.

Discussion: *The adoption of the new wording concerning compositional modified milk products (section 4.3.3 of the GSUDT) provides a new framework for provisions in individual milk product standards with respect to modified products.*

For the purpose of this provision, a "modified milk product" is a milk product altered in composition compared to the reference product. The reference fat levels are specified for each cheese variety in section 7.1 of the draft individual cheese standards.
The new provision states that compositional modified products may be named as specified in a milk product standard if the following three conditions are met:

1. It is named with a clear description of the modification made in association with the name of the reference product;
2. The essential product characteristics are maintained; and
3. The limits of such compositional modifications are detailed in the standards concerned, as appropriate.

If the limitations for compositional modifications are not detailed in the standards, such modifications may not be allowed. For this purpose, the following should be noted:

- The standard needs to address modifications, as appropriate.
- A description of the reference product is needed to identify when a modification has taken place. For components, where reference levels are specified, a wording addressing modifications will always be necessary.
- For components, where no compositional criteria have been established, any restriction on modifications does not make sense.

It is obvious; that a certain minimum level of fat should be respected to ensure that the essential product characteristics (identity) are maintained. In the case of individual cheese varieties, recommendations for absolute minimum fat levels for each variety are expected to be the result of the work of the Ad Hoc Working Group on Cheese.

However, it is not only the fat content that could be modified. Also the limitations for modification of the dry matter, protein and lactose content should be considered. Provided the definition of cheese is amended as proposed by the IDF (see a separate document which will be submitted late 1999 by IDF), the compositional framework for protein and lactose contents in cheese in general will be adequately covered by the general Cheese Standard.

Recommendation no. 10: The following format is suggested for section 3.3 in the standards for individual cheeses (See also ***Recommendation no. 17***):

Milk constituent:	*Minimum content (m/m):*	*Maximum content (m/m):*	*Reference level (m/m):*
Milkfat in dry matter:	*(to be inserted)**	*(to be inserted)**	*(range to be inserted)**
Dry matter:	*Depending on the fat in dry matter content according to the table below.*		

Fat in dry matter content (m/m):	*Corresponding minimum dry matter content (m/m)*
[*Equal to or above --% but less than --%:*	*(minimum to be inserted)*
Equal to or above --% but less than --%:	*(minimum to be inserted)*
Equal to or above --% but less than --%:	*(minimum to be inserted)*
Equal to or above --% but less than --%:	*(minimum to be inserted)*
Equal to or above --%	*(minimum to be inserted)****]****

*) To be inserted as deemed appropriate for each individual variety.

Compositional modifications beyond the minima or maxima specified above for milkfat and dry matter are not considered to be in compliance with section 4.3.3 of the General Standard for the Use of Dairy Terms.

Note: The standard format recommended above have been applied in the revised draft standards, using the absolute minimum fat contents included in the previous drafts. The later conclusions may include changes with regard to the minima, wherefore these have been put in square brackets. Whether the above system is fully adequate in the cases of Edam and Gouda is still subject to consideration within IDF. Consequently, section 3.3 of these two standards have been put in square brackets as well.

4 FOOD ADDITIVES

4.1 General approach to additives

According to the Draft General Standard for Food Additives, additives with an ADI not specified should be allowed to foods in general according to GMP. However, stricter lists applying to specific commodities can supersede this general approach. In particular, restrictions are justified where no technological justification for their use is available.

Recommendation no. 11: For the purpose of this review, the following principles apply:

- All requests for additives with no numerical ADI specified should be included, provided it's functional class has already been inserted in the Draft Standard,
- Insertion of additional functional classes shall be technologically justified (class by class).
- Additives with numerical ADI-values shall be justified individually as to whether they should be permitted and, if so, at which maximum level.

4.2 Additives for cheeses with low fat contents

The United States recommended a long list of additives to be included for use only in cheeses that have been modified to meet a nutrition claim. Due to diet concerns among consumers, demands for lower fat cheeses have increased and are expected to increase even further in the future. It is therefore important to provide manufacturers with the technological tools needed to meet the demands of these consumers. These tools include the availability of a variety of safe and suitable additives that provide functional and organoleptic properties consistent with the full fat version of the cheese. The US recommends that the additives needed in the production of lower fat cheeses be included in each of the individual variety cheese standards for products that has been modified to meet a nutrition claim as defined in the Codex Guidelines for Use of Nutrition Claims.

Discussion: The US proposal includes groups of additives, which have not been considered before as follows:

- ripened cheeses: acids, stabilizers/thickeners, emulsifiers, emulsifying salts, foaming agents, anticaking agents (for addition to the cheese itself), flavour enhancers, and antioxidants.

- unripened cheeses: emulsifying salts, anticaking agents (for addition to the cheese itself), flavour enhancers, and antioxidants

The proposal gives rise to a number of questions:

- what is lower fat content?
- which nutrition claims - is, for instance, the nutritional claim for low sodium content included? Nutrition claims also include terms referring to enrichments, such as “extra high fat content”, “creamed” etc.
- is the use of the additional additives dependent on the actual use of a claim in the labelling?
- do some of the additives actually replace milkfat (texture, body, and taste)?

Recommendation no. 12: It is recommended that the CCMMP consider the proposal at a later stage once the issue on absolute minimum fat contents in each individual standard has been established. Therefore, consideration of the additional additives proposed specifically for lower fat cheeses to meet a nutritional claim have not been considered further in this review, but should be taken up again in a later review.

4.3 Colours

Comments submitted: Canada requested the addition of INS 100 (ii) (Turmeric), INS 160a (beta-carotene - source non-specified) and INS 140 (Chlorophyll) at GMP levels and INS 160e (Beta-Apo-Carotenal) and 160f (Beta-apo-8´-Carotenoic Acid, ethyl ester) at a maximum of 35 ppm.

The United Kingdom informed that EU legislation permits the use of INS 160a in ripened cheeses at quantum satis, not at 600 mg/kg whilst 160b (annatto extracts) is permitted for use up to a maximum level of 15 mg/kg. Except for Cheddar, the ripened cheese standards only permit 10 mg/kg.

The IDF recommended that INS no. 160a - Carotenes be amended to follow the advice from the CCFAC as follows: “160a Carotenes (synthetic) 25 mg/kg”.

Discussion: As the draft standards do not regulate composite products, only those colours justified for plain products can be included. This restricts the list of colours to those aiming at achieving a uniform natural colour throughout the year independent from varying feeding practices. Numerical ADI´s have been specified for INS 101 and 160a.

According to the scope of the C-Standards for individual named varieties of cheese, these standards as applying to the products “*for direct consumption or for further processing*”.

The consequence of this is that cheeses used for Processed Cheese manufacture and as ingredients in other foods must comply with the requirements of the appropriate standards. However, in the further processing of these cheeses, severe physical and chemical conditions may be encountered (e.g. UHT, sterilisation, desiccation, extrusion, shearing and oven and microwave cooking). These may and indeed do affect the colour and colour stability of cheeses.

Use of cheese and processed cheese as ingredients in processed products is increasing. Some cheese manufacturers wish to produce coloured cheese, which can be sold both for direct consumption and for further processing. Manufacturers of products, using cheese as an ingredient, frequently have specific and strict colour requirements, which must be achieved by suppliers. Therefore cheese manufacturers require flexibility in the colour(s) permitted.

While traditionally Annatto (160 b) has been used to produce “orange” coloured cheeses, such as Cheddar, it is well recognised that it has poor heat stability, leading to the defect known as “pinking”. Alternative colours, which are more heat stable, are therefore required where the cheeses are likely to encounter heat processing. The Carotenes (160a) do not all have the required heat stability and are subject to oxidation especially by light.

To match the colour of Annatto, single colour alternatives are not suitable and (heat stable) blends of colours such as the Carotenes (160a), paprika oleoresin (160 c), ß-apo-8’-carotenal (160e) and of ß-apo-8’-carotenic acid, ethyl ester (160 f), and turmeric (100 ii) are used for this purpose.

At present 160 e, 160 f, and 100 ii are not permitted in individual C-Standards. It is requested and justified to use these standards in all C-Standards where other yellow/orange colours are allowed (i.e. C1, C3, C4, C5, C6, C7, C9, C11, C13, C18*, C33*, C34* and Mozzarella)

*) *At present, C18, C33 and C34 do not list paprika oleoresins 160 c – this should be included there as otherwise 160a is not a replacement for 160 b.*

Further, where Carotenes are listed, both types (natural extracted and synthetic) should be listed.

The above additions are in line with Standard A-6 with regard to the cheeses in question.

With regards to whiteners, the addition the use of chlorophyll (140) is requested as a whitening agent in cheese to be used as an ingredient and in helping overcome browning effects in cheese where subjected to heating/cooking. The CCMMP should discuss the principle of permitting whitening colours.

Recommendation no. 13: *Add the following colours to standards C1, C3, C4, C5, C6, C7, C9, C11, C13, C18, C33, C34 and Mozzarella:*

Turmeric (100 ii)	*GMP*
Chlorophyll (140)	*GMP*
ß-apo-8'-carotenic acid, methyl and ethyl ester (160 f)	*35 mg/kg*
ß-apo-8'-carotenal (160e)	*35 mg/kg*
Additionally for C18, C33 and C34 add:	
Paprika oleoresins (160c)	*GMP*

In addition, align the provisions for Carotenes with Standard A-6 and include a statement addressing the objective of adding colours, i.e. by changing the sub-heading into: "*Colours (to meet the colour characteristics of the product, as described in section 2)*"

It is further recommended that the CCMMP discuss how to approach the principle of using whitening colours to meet the same objective.

4.4 Preservatives

Comments submitted:

a. Sorbates:

United Kingdom informed that INS 200 and 202-203 are permitted in the EU up to a level of 1 g/kg but only if the ripened cheese is prepackaged and sliced. **The Czech Republic** informed that INS 200-203 were not allowed for cheese in their national legislation. **Canada** requested the extension of the use of sorbates with its sodium salt (INS 201), a non-specified treatment area and a maximum level of 3 g/kg, calculated as sorbic acid.

The United States requested the extension of the use of sorbates for cheeses which have been modified to meet a nutrition claim (lower fat cheeses) with its sodium salt (INS 201) and a maximum level of 2 g/kg, calculated as sorbic acid.

b. Nitrates:

India informed that nitrates are not permitted in India because of their toxicity.

The United States recommended the deletion of nitrates as they believes that the public health safety concerns associated with nitrates, such as formation of nitrosamines, out weight any technological purpose for the use in cheese making.

c. Propionates:

Canada requested the insertion of propionic acid and its sodium and calcium salts (INS 280-281) at a maximum of 2 g/kg, calculated as propionic acid.

d. Nisin:

India requested the addition of Nisin in the standards for a number of cheeses (Cheddar, Gouda, and Emmental), as it is complementary to sorbates and has been cleared by JECFA and included in standards for similar cheeses.

e. Pimaricin:

Canada requested the insertion of INS 235 (Pimaricin) for surface treatment of cheese with the maximum limit of 20 ppm, calculated on weight of cheese.

The United States requested the addition of pimaricin for cheeses, which have been modified to meet a nutrition claim (lower fat cheeses) with max. limits of 1 mg/dm^2 of surface and not present in a depth of 5 mm when applied to rind or added to coatings and max. 0.3 g/kg when applied to the surface of cheese or added during the kneading and stretching process.

Discussion:

Sorbates: Different approaches have been taken in the standards for cheeseA-6 (with regard to ripened cheeses) and for unripened cheese. For individual cheese standards, the approach taken in the parent standards should apply.

Nitrates: Potassium and sodium nitrates are used to prevent late blowing in cheese. In most cheese varieties which undergo a long ripening period there is the risk that anaerobic spore-forming clostridia, particularly *Clostridium tyrobutyricum*, which are not destroyed by pasteurisation, may produce considerable butyric acid resulting in late blowing of the cheese, thus making it unsuitable for consumption. During the ripening period the nitrates are reduced to nitrites which inhibit the growth of clostridia and thus prevent late blowing of the cheese. Nitrites have no effect on the growth of lactic acid bacteria. Nitrates have been evaluated by JECFA and the findings are found in the 44th report from 1995. The main sources of nitrates in the human diet are vegetables, meat and drinking water. Although nitrates are used in fish products and cheese as well, these sources contribute insignificantly to the human intake of nitrates. JECFA has established an ADI of 3.7 mg/kg body weight per day. CCFAC has endorsed the proposed residue levels. Normally, CCFAC takes into account any toxicological concerns. It should be noted that a maximum level of 50 mg/kg corresponds to the max. level accepted in drinking water (WHO).

Nitrates acts in cheese by being decomposed into nitrite. It is well known that the presence of nitrite in the human intestines, under certain circumstances, may form nitrosamines. However, the nitrite formed during cheese ripening is decomposed rapidly. The decomposition is catalysed by xanthinoxidase, a naturally occurring enzyme in milk. Consequently, the end product contains only traces of nitrites. Accordingly, the risk of formation of nitrosamines is insignificant, and surveys have also shown that nitrosamines can only be found in cheese in very small amounts, if any, which level is far beyond the level affecting human health. Nitrates are not technologically justified for unripened cheeses.

Propionates: No numerical ADI has been specified for INS 282. Propionates are attractive alternatives to sorbates. It should be noted that propionates do not have any numerical ADI specified. This is not the case for sorbates. It is therefore in the interest of public health protecting to promote these alternatives to sorbates. The use of propionates was endorsed by the 31st CCFAC at GMP level.

Nisin: Sorbates and nisin are not complementary. Sorbates are added to avoid mould growth. Nisin is added to prevent sporeforming strains to multiply. Nisin does not have any impact on moulds. Nisin is an alternative to nitrates and, as it is the case with nitrates a numerical ADI value of 33000 units/kg body weight has been established due to its toxicity.

Pimaricin: It is advisable to use the same specifications as in A-6. Not justified in mould ripened cheese types.

Recommendation no. 14: Sorbate provisions should be aligned with the corresponding parent standard (A-6 or one for unripened cheese).

Nitrate provisions should be retained for ripened cheese varieties as endorsed by the CCFAC.

INS 280-282 (propionates) should be included as GMP in those standard where sorbates are listed.

Nisin should be inserted at a maximum of 12,5 mg/kg in the lists of those standards where nitrates are already listed. Further, nisin should be added to the standard for Cheddar at the same max. level.

The provisions for pimaricin as adopted for ripened cheeses in general should be copied in the individual standards for ripened, not-mould-ripened cheese varieties.

4.5 Anticaking agents for cut, sliced, Grated and shredded products, only

Comments submitted: The United States recommended the following anticaking agents be included in each individual standard except C16 (Cottage Cheese):

551	Silicon dioxide amorphous	10 g/kg singly or in combination
552	Calcium silicate	
554	Sodium aluminosilicate	
556	Calcium aluminium silicate	
1450	Starch sodium octenyl succinate	

Discussion: The 3rd CCMMP adopted a list of anticaking agents permitted for surface treatment of cut, sliced, grated and shredded cheese in general. Unripened cheeses do not differ substantially from ripened cheese in this respect, wherefore the maximum limit of 10 g/kg as specified for cheese in general is sufficient for this standard as well. Some unripened cheeses such as Cottage Cheese, Cream Cheese, and Mozzarella with high moisture content are not cut, sliced, grated or shredded for practical reasons. Therefore, there is no need neither to insert the agents in the additive lists of these standards nor to make exceptions where these products are grouped together with other varieties in the same standard.

Recommendation no. 15: Insert the list of anticaking agents as provided for in the standard for cheese in general (A-6), except in the case of Cottage Cheese and Mozzarella with a high moisture content.

4.6 Preservatives for cut, sliced, Grated and shredded products, only

Comments submitted: United States and Canada requested the insertion of INS 235 (Pimaricin). **Canada** requested it restricted the maximum limit of 10 ppm, calculated on weight of cheese, while **the US** requested a higher limit of 300 ppm.

Discussion: The 3rd CCMMP debated in detail a similar request to allow pimaricin to sliced, cut, grated and shredded products.

The matter was referred to the CCFAC, although the Committee felt that the substance should not be in the food as consumed. The 31st CCFAC did not endorse the use of pimaricin in these products. The delegation of Canada to the session was requested to provide a technological justification. Many delegates at the session declared themselves against an increased use of pimaricin that they regard as an antibiotic agent.

Recommendation no. 16: No adoption.

7. LABELLING

7.1 Name of the food

a. First praragraph (reservation of the name)

Comments submitted: Denmark and the IDF expressed concern with the use of the so-called "standard wording" in all cases as it would make it mandatory to use the designations regulated by Codex. The IDF recommended retaining the text in the first paragraph.

b. Second praragraph (modified products)

Canada applauded the Secretariat for recognizing the specific provisions for products modified in composition.

The IDF recommended the retention of this text; however, comments to the figures (reference fat levels) were given in relation to some of the standards.

Discussion:

Reservation of the names:
The obligation to use an individual variety name is not feasible as this would mean that all foods complying with the standard for e.g. Cheddar shall be designated "Cheddar" thus prohibiting the use of other names for such a product. Globally, several thousands individual cheese names exist and more

than 100 of these would probably comply with the description of Cheddar in the current Proposed Draft Standard. If, in this case, Codex should adopt the obligation to use the name specified in the standard all these other names would have to disappear and this is not considered a good solution.

Therefore, there is a need for a wording that provides for the conditionally use of the name (in accordance with section 4.1.1.1 of the GSLPF) to foods that are in conformity with the product described by the standard.

Otherwise, the individual standard for e.g. Cheddar will have to include a vast number of additional details to ensure that another of the 3000 cheese varieties cannot be considered as Cheddar and be forced to be named as such.

Modified products:
Only positive response to the proposed text has been submitted. The figures in the text are to be decided standard by standard, however, the optional application of the provision according to national legislation is not in compliance with the provision in section 4.3.3 of the GSUDT and should be deleted.

If ***Recommendation no. 10*** is endorsed, the text needs to refer to the maxima/minima specified in section 3.3.

Recommendation no. 17: See ***Recommendation no. 10***.

The following text should replace the present text section 7.1:

"The name ____ (fill in the name(s)) may be applied in accordance with section 4.1 of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985-Rev. 1-1991), provided that the product is in conformity with this Standard.

*The designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 minimum fat content the appropriate characterizing terms specified in Section 7.3 of the Standard for Cheese (A-6), or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims**.

**) For the purpose of comparative nutritional claims, the minimum fat content of __ % 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

Comments submitted: France requested that a clear and visible reference to the country of manufacture to prevent any risk of confusion in the mind of the consumer.

The Netherlands proposed to add the following provision to all individual cheese standards: "The name of the country of origin shall always be declared close to the name of the food."

The IDF recommended that the conclusion reached in relation to A-6 should apply for the C-standards as well.

Discussion: The 3rd CCMMP decided to remove the provision from the Draft Standard A-6. Consequently, the provisions of the GSLPF apply. However, the Committee decided to examine the individual cheese standards on a case-by-case basis regarding the application of the "country of origin" to ensure that the consumer would not be misled (ALINORM 99/11, para. 27).

The provisions of the GSLPF say that the country of origin shall be declared if the omission would mislead or deceive the consumer (section 4.5.1 of the GSLPF).

The individual cheese varieties covered by the current draft standards are considered sufficiently specific to enable decisions with respect to whether the omission of information on the country of origin could be misleading or deceiving.

Such information should be required, because:

1. To ensure transparency for the consumer: Most consumers believe that the foods they buy in the retail-sector are domestically produced;
2. To facilitate traceability: Information on the country of origin speeds up the tracing back process in the case that safety problem or other defaults occur. Most individual cheese varieties are manufactured in relatively few countries, but traded globally; and
3. To avoid misleading the consumers: Many of the individual variety names are derived from geographic places (e.g. the valley of Emmental, the gorge of Cheddar, the town of Camembert). Therefore, the consumer may well think that the product is manufactured there.

The above justifies a requirement for giving the necessary information in the labelling. However, such information need not necessarily be given in close proximity to or as part of the name. The intent of the GSLPF will be met by appropriate labelling anywhere on the package.

Recommendation no. 18: Include the statement in all standards for individual cheeses (note that the text in square brackets is still subject to consideration by the IDF):

"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] is not regarded as substantial transformation"*

7.4 Ingredients listing

Comments submitted: United States suggested inserting the following text: "Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as enzymes in the list of ingredients".

Discussion: The US proposal is not in compliance with the GSLPF (section 4.2). If insertion is agreed, it needs to be endorsed by the CCFL. However, it is recommended that the text refers to "coagulating enzymes" rather than just "enzymes". The proposal may have horizontal consequences for other foods as well and the CCMMP should therefore consider recommending a class name for coagulating enzymes to be added to section 4.2.2.1 of the GSLPF.

Recommendation no. 19: Consider the insertion of the text suggested by the US, however modified as follows:

"Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients"

Alternatively, consider recommending to the CCFL that a class name be added to section 4.2.2.1 of the GSLPF as follows:

"The following class names may be used for the ingredients falling within these classes:

Coagulating enzymes: Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin."

7.5 Date Marking (ripened cheese only)

Comments submitted: Canada noted that the provision exempting date marking did not appear in all standards, for instance, in C-33 and C-34. This information should be required within every standard. The exemption should be exercised judiciously, only with cheeses that have an extended ripening period (greater than 90 days). Some of the C-standard cheeses should be consumed less than 90 days after manufacture thereby obliged to specify a durability date on the package.

The IDF provided an amended text to provide full clarity concerning the exemption and to ensure alignment with the wording suggested for A-6. The IDF also provided justifications for the exemption.

Discussion: None of the cheese varieties covered by the C-series has a specified ripening period of at least 90 days. It is considered more consistent to differentiate according to dry matter contents, as this factor is more decisive for whether the product can extensively mature.

When adopting the draft standard A-6 for cheese, the 3rd CCMMP agreed on the following general text:

Recommendation no. 20: Apply the principle contained in Section 7.3 of Standard A-6 by inserting the following provision in the draft standards for Cheddar, Danbo, Edam, Gouda, Havarti, Samsø, Emmental, Tilsiter, Saint Paulin and Provolone:

"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."

APPENDICES

Comment submitted: United Kingdom would welcome clarification on the meaning of the introductory sentence to the Appendices.

The IDF recommended that the introductory text, as agreed by the 22nd CAC (para. 171 of ALINORM 97/37), superseded the existing text.

Discussion: The Codex Committee on General Principles currently debates the nature of the extent to which Codex should retain advisory information not intended for governmental regulation. The general view of the Committee is that Codex should continue developing advisory material for application by the trade although not intended for government use. The role of such advisory material has been considered by the 14th CCGP on the basis of a paper prepared by the Codex Secretariat in conjunction with the WTO Secretariat. From the paper and the CCGP considerations thereof the following can be concluded:

- All Codex texts, including advisory texts such as the annexes to the dairy standards are covered by the TBT definition of "standard";
- distinctions based on acceptance (i.e. not intended to be applied within the meaning of the Codex acceptance procedures) are not relevant in the framework of WTO;
- Any country has the basic right to introduce any technical regulation, which it finds appropriate under the local circumstances. However, if a technical regulation is maintained/introduced, the relevant international standard (in the TBT understanding of a standard) should be used, if it exist; and
- The intended use of the annexes is not for application by governments. Consequently, national regulation of the elements contained in the annexes is discouraged, and it is therefore unlikely that a dispute will occur within the framework of the WTO. However, a country can choose to regulate the elements anyway by utilizing it's basic right provided by the TBT Agreement, if the regulation is justified. In such a case, the content of the annex becomes the reference, and the national regulation should be based on the content of the annex.

In summary, the content of the annexes plays a role only in the case a country finds it necessary to regulate an element addressed therein. It is expected, that a country that finds it necessary to maintain/introduce additional regulation compared to the contents addressed in the main body of the Codex standards (which are subject to the Codex acceptance procedures) will do that independent from Codex recommendation. In these cases, the content of an advisory annex will have a role to play.

It is therefore appropriate to proceed with the current approach with respect to Annexes. The CCMMP may wish to review the content of the annexes in light of the recent debate of the CCGP.

Recommendation no. 21: The introductory wording (disclaimer) as recommended by the 22nd CAC should replace the current introduction, as follows:

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

In order to provide further transparency with respect to the legal implications of the content of the annexes, the CCMMP may wish to consider the addition of a supplementary introductory wording, e.g. as follows:

"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."

C. SPECIFIC ISSUES REALTING TO THE INDIVIDUAL STANDARDS FOR INDIVIDUAL CHEESE VAIRETIES

NOTE: Comments that relate to absolute minimum fat contents have not been considered in this review.

1. PROPOSED DRAFT REVISED STANDARD FOR CHEDDAR (C-1)

APPENDIX

Comments submitted: United Kingdom considered appearance characteristics as being superfluous and recommended the deletion of part one of the Appendix.

IDF recommended that the text in part 2.2 is corrected with regard to milling (not part of the cheddaring process) and that the wording accommodated for "stirred" Cheddar. As a consequence, the word "cheddaring" between brackets in the heading of part 2 should be deleted.

Discussion: The appearance characteristics described in part 1 add very little to the identity of the Cheddar and could be deleted.

Recommendation no. 22: Delete part 1 - Appearance characteristics.

Remove the word "cheddaring" between brackets in the heading of part 2.

Amend 2.2 into: *After coagulation, the curd is cut and scalded 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 ~~milled and~~ salted. The curd and salt ..., etc.* (the rest remains unchanged)."

2. PROPOSED DRAFT REVISED STANDARD FOR DANBO (C-3)

2. DESCRIPTION

Comments submitted: Uruguay proposed to replace "has between few and many holes" by "can have holes" as Danbo known in Uruguay has these characteristics.

Discussion: Holes are the result of fermentation of certain starter cultures used in the manufacture of this cheese variety and represent characteristic features important for the consumer for the visual identity of the cheese variety, e.g. when presented as a whole, cut or sliced cheese. A Danbo without holes would fulfil the appearance specifications for other cheese varieties such as Saint Paulin and Butterkäse.

Recommendation no. 23: The scientific and technological basis for retaining holes descriptions in the standards need an in-depth analysis. The IDF has initiated such an analysis. Until the results are available, the descriptions should be retained.

4 ADDITIVES

Comments submitted: Uruguay suggested the following amendment of the maximum levels for the use of natamycin: Max. 1 mg/dm^2, not detectable in 2 mm, not to exceed 5 mg/kg, absent in the mass.

Discussion: The amount specified in the draft is needed if the treatment is to be effective. The level has been endorsed by the CCFAC.

Recommendation no. 24: No change, however, see ***Recommendation no. 14***.

APPENDIX

Comments submitted: Uruguay proposed the following wordings:

1.1 Form: parallelepiped
1.2 Size and weight: Danbo cheese may weigh 2-14 kg

Discussion: The information provided in the Appendix is not for governmental use. It represents common practices.

If it is common practice in Uruguay to manufacture Danbo in parallelepiped forms, this practice should be added. As a consequence, the information provided under 1.2 should be amended accordingly. The name Danbo should, in the case of weights below 6 kg be qualified by an adequate descriptor such as "mini".

Recommendation no. 25: Amend the information in the Appendix as follows:

1.1 Shape:	*Flat square or parallelepiped.*
1.2 Dimensions and weight:	*Danbo cheese is normally manufactured in weights of approx. 8.5 kg with a side of 30 cm approx. Weights range normally from 6 to 14 kg, however, weights below 6 kg are sold with adequate descriptors addressing the size in association with the name.*

3. PROPOSED DRAFT REVISED STANDARD FOR EDAM (C-4)

2. DESCRIPTION

Comments submitted: New Zealand stated that holes are a matter for consumer preference and are not an essential attribute for Edam, wherefore it should be deleted.

Discussion: Holes are the result of fermentation of the specific cultures used in particular those strains that produce the cheese flavours typical for this type of cheese. The presence/absence, appearance and size of holes depend on the fermentation process and bacteria species used. Holes present and their appearance in Edam as well as in many other cheese varieties may be adequate indicators of correct fermentation and maturation, in other words, indicators of specific flavour characteristic for the product identity. This may also be the case for Edam. An Edam without holes would fulfil the appearance specifications for other cheese varieties such as Saint Paulin and Butterkäse. Further, holes represent characteristic features important for the visual identity of Edam.

Recommendation no. 26: Holes are the result of fermentation of certain starter cultures used in the manufacture of this cheese variety and represent characteristic features important for the consumer for the visual identity of the cheese variety, e.g. when presented as a whole, cut or sliced cheese. An Edam without holes would fulfil the appearance specifications for other cheese varieties such as Saint Paulin and Butterkäse.

3.3 Composition

Recommendation no. 27: The two columns should merged applying the lowest minimum figures, i.e. the figures applicable for weight from 2 kg.

7.1 Name of the Food

Comments submitted: The Netherlands stated that Edam should be excluded from lower fat versions and the name should not be used, even with qualifiers like "reduced fat" or "light". This would be in compliance with section 4.1.2.3. of the Draft GSUDT (CL 1997/25). As a consequence, the para. "Where required by.... constitutes the reference" should be deleted.

Germany requested that the reference fat level for nutrition claims be changed from 40% to 45% FDM.

Discussion: The par. referred to by the Netherlands is needed to provide adequate provisions for the naming of Edam with fat contents different from the reference level (40% FDM), for instance Edam with 55% FDM or Edam with 30% FDM. In both these examples, the name should be qualified, for

instance, in the case of 30% Edam: “light Edam”; in the case of 55% Edam: “Edam with higher fat content”. At present, Edam with both 30% FDM and with 55% FDM are permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Edam than the reference product (i.e. min. 40%; max. 50% FDM), the wording would not be needed.

Recommendation no. 28: No change, pending a later conclusion with respect to absolute minimum fat in dry matter content.

4. PROPOSED DRAFT REVISED STANDARD FOR GOUDA (C-5)

2. DESCRIPTION

a. Holes:

Comments submitted: New Zealand stated that holes are a matter for consumer preference and are not an essential attribute for Gouda, wherefore it should be deleted.

Uruguay suggested the replacement of “has from a few to plentiful, more or less round holes” with “can have round holes”. Gouda produces in Uruguay is known to have these characteristics.

Discussion: Holes are the result of fermentation of the specific cultures used in particular those strains that produce the cheese flavours typical for this type of cheese. The presence/absence, appearance and size of holes depend on the fermentation process and bacteria species used. Holes present and their appearance in Gouda as well as in many other cheese varieties may be adequate indicators of correct fermentation and maturation, in other words, indicators of specific flavour characteristic for the product identity. This may also be the case for Gouda. Gouda without holes would fulfil the appearance specifications for other cheese varieties such as Saint Paulin and Butterkäse. Further, holes represent characteristic features important for the visual identity of Gouda.

Recommendation no. 29: Holes are the result of fermentation of certain starter cultures used in the manufacture of this cheese variety and represent characteristic features important for the consumer for the visual identity of the cheese variety, e.g. when presented as a whole, cut or sliced cheese. A Gouda without holes would fulfil the appearance specifications for other cheese varieties such as Saint Paulin and Butterkäse.

b. Ripening provisions:

Comments submitted: Uruguay suggested replacing 3-4 weeks of normal ripening time with 3 weeks of normal ripening time.

Discussion: The proposal makes the description more clear and transparent.

Recommendation no. 30: Replace 3-4 weeks with 3 weeks.

3.3 Composition

Comments submitted: Germany and the IDF recommended retaining only one set of DM contents. The differentiation according to weight should disappear.

France suggested to amend min. 48% FDM, 55% DM into min. 45% FDM/51% DM to take into account current available products.

Uruguay proposed the following criteria without referring to the weight: Min. FDM 35%, min. DM 57%.

Discussion: The French proposal includes two changes: (i) amendment of the absolute minimum fat content into 45% and (ii) reduction of the corresponding minimum dry matter content to 51% (equivalence in terms of MFFB is obtained if the min. DM content is set to 56% (from 2 kg) and 53% (below 2 kg), respectively). If adopted the DM content should therefore be amended as well.

The proposal of Uruguay also include two changes: (i) amendment of the absolute minimum fat content into 35% and (ii) increasing the corresponding minimum dry matter content to 57% which is would

make the cheese into a hard cheese (equivalence in terms of MFFB is obtained if the min. DM content is set to 51% (from 2 kg) and 48% (below 2 kg), respectively). If adopted the DM content should therefore be amended to correspond to the reference product and to retain the variety as a firm cheese.

Differentiation according to size should disappear. As a consequence, the DM figures applicable to weights below 2 kg should apply.

Recommendation no. 31: Remove differentiation according to size, and apply the DM figures for weights below 2 kg.

7.1 Name of the Food

Comments submitted: The Netherlands stated that Gouda should be excluded from lower fat versions and the name should not be used, even with qualifiers like "reduced fat" or "light". This would be in compliance with section 4.1.2.3. of the Draft GSUDT (CL 1997/25). As a consequence, the para. "Where required by.... constitutes the reference" should be deleted.

Germany requested that the normal fat range be amended into 40-50% FDM and that the reference fat level for nutrition claims be changed from 48% to 45% FDM.

Discussion: The reference product of 48% should be retained, as this version is the most commonly produced. 48% FDM has been the reference for a long period. Changing this could be misleading to consumers.

The para. referred to by the Netherlands is needed to provide adequate provisions for the naming of Gouda with fat contents different from the reference level (48% FDM), for instance Gouda with 60 % FDM or Gouda with FDM contents below 48%, if included in the Standard. At present, Gouda with 60% FDM is permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Gouda than the reference product (i.e. min. 48%; max. 55% FDM), the wording would not be needed.

Recommendation no. 32: No change, pending a later conclusion with respect to absolute minimum fat in dry matter content.

APPENDIX

Comments submitted: The Netherlands observed a small error in the weight range in part 1. 3.0 kg should be replaced by 30 kg.

Recommendation no. 33: Endorse the proposal of the Netherlands. As a consequence of ***Recommendation no. 30***, delete part 2 (maturation temperatures).

5. PROPOSED DRAFT REVISED STANDARD FOR EMMENTAL (C-9)

2. DESCRIPTION

a. Holes:

Comments submitted: New Zealand commented that, although size of holes may be important as visual characteristic for some consumers buying a segment of Emmental for table purposes, it is really a quality issue and should be relegated to the Appendix. Holes of a specific size should not be required for Emmental destined for non-table uses.

Morocco stated that the organoleptic and presentation characteristics of Emmental should be preserved.

Discussion: Holes are the result of fermentation of certain starter cultures used in the manufacture of this cheese variety and represent characteristic features important for the consumer for the visual identity of the cheese variety, e.g. when presented as a whole, cut or sliced cheese. For instance, Emmental, Tilsiter and Cheddar are differentiated significantly in this respect (large round holes, plentiful irregular holes and absence of holes).

Recommendation no. 34: The scientific and technological basis for retaining holes descriptions in the standards need an in-depth analysis. The IDF has initiated such an analysis. Until the results are available, the descriptions should be retained.

b. Size/weight:

Comments submitted: The United States recommended that the specific size information be relocated in the Appendix.

France requested that the minimum weight of blocks be amended from 20 kg to 40 kg. For technical reasons, a high mass to allow slow cooling of the curd (surface/volume ratio) and to promote the development of the specific thermophilic flora, which plays a vital role in the cheese's special characteristics.

New Zealand commented that, with regard to block size, the words "Above 20 kg" are unnecessary and should be deleted. As specifications for holes are already included in the description, the minimum weight is redundant.

Morocco stated that the organoleptic and presentation characteristics of Emmental should be preserved.

Recommendation no. 35: Some minimum weight may be required. The exact figure may be difficult to define. Therefore 20 kg has been chosen to ensure that all existing products are covered.

c. Coatings:

Comments submitted: Germany requested a clarification statement concerning the use of plastic films for the ripening of cheese.

Discussion: As the phrase "may be coated" is not part of the description, and as use of ripening films is practised, there is a need specifically to address ripening films. A similar approach is not needed in other cases, where coatings are permitted by the description.

Recommendation no. 36: Reword the 3rd sentence of the description as follows:

"The cheese is sold with a hard rind, eventually manufactured by the use of ripening films"

3.2 Permitted Ingredients

Comments submitted: Finland disagreed with the deletion of cupric sulphate from the list in the existing standard. Copper is essential with certain propionic acid cultures. Copper can be added by three means: (i) by using copper kettles, (ii) by using kettles coated with copper, and (iii) by the addition of copper in the cheese milk, for instance, as cupric sulphate.

Discussion: The maximum limit that is established in the old standard for Emmental is 15 mg/kg. In the INS system, cupric sulphate is categorized as a colour fixative and a preservative. In the case of Emmental, it is assumed that it is used as a preservative. Therefore, the substance does not belong under section 3.2, but section 4 - food additives.

Finland justifies the proposal due to the use of steel kettles instead of copper kettles.

The addition of cupric sulphate is not technologically justified. The justification is based on a wish to retain the level of chemical contamination of copper at the same level as in products traditionally manufactured in copper kettles. Such practice is not compatible with GMP procedures.

If the request is pursued, scientific justification for the certain propionic acid cultures need for copper is necessary.

Recommendation no. 37: Cupric sulphate should not be included in the list of additives.

3.3 Composition

Comments submitted: The IDF recommended that, for the version of minimum 55% FDM, the minimum dry matter content be changed from 64% to 63%.

Recommendation no. 38: The minimum dry matter content for the 55% FDM version should be changed from 64% to 63%.

3.4 Manufacturing characterisitcs

Comments submitted:

First sentence:
The United States and New Zealand recommended that the information is transferred to the Appendix, while **Denmark, France, United Kingdom, Germany and Norway** accepted the wording.

Second sentence:
Denmark, Norway, United Kingdom and the United States requested the deletion, while **New Zealand, Norway and the United States** suggested the sentence relocated in the Appendix.

France requested the retention and extension to all products, independent on the initial heat treatment of the milk. The standard concerns pressed and cooked cheese, wherefore 50 °C is necessary for the proper development of thermophilic enzymes, for acidification of the curd (kinetics of acidification), the formation of holes and sensory properties (texture and flavour).

Germany referred to difficulties in detecting application of the temperature. If a method exist, it should be mentioned in section 8 of the standard.

Brining:
Norway commented that it was new to them that Emmental is not brine-salted. The practice of brine salting was used as the justification for allowing lysozyme (MDS 86/7 Add. 1, prepared by IDF).

Discussion:

Brine-salting:
Dry salting was specified as an option in the "old" standard.

Starter cultures:
The development of propionic acid is an essential characteristic of Emmental. Propionic acid will only be produced by the culture if the conditions for their growth are established, such as the heating of the curd after cutting.

Consideration of additional essential characteristics, including their location, requires further in-depth analyses and consideration. The IDF has initiated further work accordingly.

Recommendation no. 39: Retain the first sentence and the first part of the second. Place square brackets around the rest of the para. (referring to heating temperatures), to highlight that additional essential characteristics, including their location, are subject to further in-depth analyses and consideration. The IDF has initiated such analysis.

(3.5 Sizes and weights)

Comments submitted: Morocco stated that the presentation characteristics of Emmental should be preserved.

France requested that the provisions relating to size of the cheese, as mentioned in the Annex, should be added to section 3 of the standard since they are vital criteria for the definition of Emmental.

Discussion: The recommended description includes a minimum weight of 20 kg. This is considered sufficient to preserve the essential characteristics of Emmental. No need to insert additional wording in a section 3.5.

Recommendation no. 40: No adoption provided that the weight specification in section 2 is retained (see ***Recommendation no. 35***).

4. FOOD ADDITIVES

Comments submitted: Finland requested the deletion of nitrates, as their use is not technologically justified.

Discussion: Potassium and sodium nitrates are used to prevent late blowing in cheese, including Emmental. It is presumed that nitrates have similar function as cupric sulphate allowed in Finland. See discussion leading to ***Recommendation no. 14***.

Recommendation no. 41: Retain permission to use nitrates.

7.1 Name of the Food

Comments submitted: France requested the removal of the para. referring to nutritional claims, as the compositional criteria do not provide for the reduction of the fat content.

New Zealand requested that cut, sliced, etc. be exempted from the description specifications for size and shape, and that shredded or grated products be exempted from the specifications for holes.

Discussion: The NZ proposal would mean that consumers would be misled as long as the specifications for holes are part of the definition for Emmental. Also, holes means flavour. Emmental without holes will taste differently.

The para. referred to by France is needed to provide adequate provisions for the naming of Emmental with fat contents different from the reference level (45% FDM), for instance Emmental with 60 % FDM or Emmental with FDM contents below 45%. At present, Emmental with 60% FDM is permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Emmental than the reference product (i.e. min. 45%; max. 55% FDM), the wording would not be needed.

Recommendation no. 42: No change, pending a later conclusion with respect to absolute minimum fat in dry matter content.

APPENDIX

Comments submitted: France commented that there was no need to mention the salting procedure.

Norway suggested that the weights be aligned with the weight specification (20 kg) in the description.

Discussion: The information concerning weights should not be confusing. Pending the retention of the minimum 20 kg specification in section 2 of the standard, the heading and specifications in section 1.2 of the Appendix should be slightly amended. Changing the figure into 20 kg would not correspond with the height and diameter specifications.

There is no specific need for the information on salting as contained in section 2.3.

Recommendation no. 43: Change title of section 1.2 into “Common dimensions”.

Delete the word “min.” qualifying the weight specifications.

Delete section 2.3 (salting procedure).

6. PROPOSED DRAFT REVISED STANDARD FOR TILSITER (C-11)

3.3 Composition

Comments submitted: Germany suggested a number of changes as follows:

Contents of fat in dry matter (w/w):	*Corresponding dry matter content (w/w):*
Minimum 30% and less than 35%:	*Minimum 49%*
Minimum 35% and less than 40%:	*Minimum 51%*
Minimum 40% and less than 45%:	*Minimum 53%*
Minimum 45% and less than 50%:	*Minimum 55%*
Minimum 50% and less than 55%:	*Minimum 57%*
Minimum 55% and less than 60%:	*Minimum 59%*
Minimum 60%:	*Minimum 61%*

The IDF suggested the following criteria:

Contents of fat in dry matter (w/w):	*Corresponding dry matter content (w/w):*
Minimum 30% and less than 40%:	*Minimum 49%*
Minimum 40% and less than 45%:	*Minimum 53%*
Minimum 45% and less than 50%:	*Minimum 55%*
Minimum 50% and less than 60%:	*Minimum 57%*
Minimum 60%:	*Minimum 61%*

Recommendation no. 44: If the CCMMP agrees to retain an absolute minimum of 30%, adopt the German proposal.

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

2. DESCRIPTION

Recommendation no. 45: Apply a period of 1-2 weeks in the standard text addressing ripening conditions (***Recommendation no. 3)***.

3.3 Composition

Comments submitted: France recommends simplifying the criteria to min. 40% FDM and min. 44% DM so as to take account of actually available products.

Discussion: The French proposal implies that the DM content for versions with higher fat content would still be min. 44%. Such a change has an impact on product with enriched fat contents. The MFFB should be maintained, even at higher fat contents.

Recommendation no. 46: The French proposal should not be adopted, depending upon the later conclusions with respect to absolute minimum fat content.

7.1 Name of the Food

Comments submitted: France found it necessary to ensure that the denominations “Petit Saint Paulin” and “Mini Saint Paulin” be retained as an option. Further, the para. referring to nutritional claims should be removed so as to take into account the recommended criteria in section 3.3.

Discussion: The cheese name can be associated with any qualifier that is not misleading to the consumer. Guidance for the use of the qualifiers “petit” and “mini” are provided for in the Appendix.

The para. on nutritional claims is needed to provide adequate provisions for the naming of Saint Paulin with fat contents different from the reference level (40% FDM), for instance Saint Paulin with 55 % FDM or Saint Paulin with FDM contents below 40%. At present, Saint Paulin with 60% FDM is permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Saint Paulin than the reference product (i.e. min. 40%; max. 50% FDM), the wording would not be needed.

Recommendation no. 47: No change, pending a later conclusion with respect to absolute minimum fat in dry matter content.

APPENDIX

Comments submitted: The IDF observed the following editorial corrections:

- Section 1.3 (Rind): .... with a dry or, in the case of washed rind, humid appearance....”
- Section 2.2 (Fermentation procedure): Delete “at a temperature”.

Recommendation no. 48: Endorse the editorial corrections identified by the IDF.

8. PROPOSED DRAFT REVISED STANDARD FOR PROVOLONE (C-15)

2. DESCRIPTION

Comments submitted: Uruguay suggested the deletion of "with a few holes" as Provolone produced in Uruguay has these characteristics. Further, Uruguay requested the deletion of the sentence "It is sold in mild and sharp variants, occasionally smoked, typically encased in ropes" as it is a marketing variant.

Discussion: Replacing the phrase "with a few holes and splits "with" A few holes and splits may occur would solve the Uruguayan situation with respect to holes.

The comment on the mild/sharp variants, the fact of smoking and encasement is relevant. The information is not essential to the variety.

Recommendation no. 49: Replace the phrase "with a few holes and splits" with a new sentence which reads "A few holes and splits may occur".

Relocate the sentence "It is sold in mild and sharp variants, occasionally smoked, typically encased in ropes" in the Appendix as follows: The phrase "It is sold in mild and sharp variants, occasionally smoked" to be added to section 1.3 (flavour), and the rest of the information to be added under 1.2 (rind)."

3.3 Composition

Comments submitted: Uruguay supported the proposal of IDF as stated in CX/MMP 98/7 Add. 1, page 34 (Spanish version) and page 33 (English version). **The IDF** recommended that the absolute minimum fat level be changed to minimum 40% FDM. Further, the fat categories should be rearranged. As a consequence, the criteria would then read as follows:

Contents of fat in dry matter (w/w):	*Corresponding dry matter content (w/w):*	
	Mild:	*Aged:*
Minimum 40% and less than 50%:	*Minimum 51%*	*Minimum 53%*
Minimum 50%:	*Minimum 56%*	*Minimum 58%)*

Recommendation no. 50: To the extent it is in conformity with the later conclusion with respect to absolute minimum fat content, adopt the proposal of Uruguay (and IDF).

4. FOOD ADDITIVES

Comments submitted: The United States recommended the addition of 171 titanium dioxide at a maximum of 10 g/kg as well as the rewriting of the information concerning 235 Pimaricin (natamycin) as follows: max. 300 ppm applied to the surface of the cheese or added during the kneading and stretching process.

Discussion:

Bleaching agents:
The 3rd CCMMP agreed to include INS 171 in the list for ripened cheese in general (A-6), limited by GMP[6].

Pimaricin:
The 3rd CCMMP confirmed the maximum level for the use of pimaricin as endorsed by the CCFAC. In connection with a detailed discussion on the addition of pimaricin to cut, sliced, shredded and grated products, the Committee felt that the substance should not be in the food as consumed.

The 31st CCFAC did not endorse further use of pimaricin.

Recommendation no. 51: Include INS 171 limited by GMP.

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[6] Secretariat's Note: Titanium dioxide is classified as "colour" in Codex and its use as colour was endorsed for cheese by the 31st Session of the Codex Committee on Food Additives and Contaminants.

7.1 Name of the Food

Comments submitted: The IDF recommended that the reference fat level specified between brackets in the second line of the second par. of section 7.1 be changed *from "i.e. contents below 44% and equal to or above 54% fat in dry matter content"* into *from "i.e. contents below 45% and equal to or above 50% fat in dry matter content"*. As a consequence, the word "average" in the footnote should be deleted and the figure changed from 48% into 45%.

Recommendation no. 52: Adopt the consequential proposal of IDF. The first proposal is no longer relevant due to ***Recommendation no. 10***.

APPENDIX

Comments submitted: Uruguay requested the weight range corrected into "weight 0.3 to 30 kg".

Recommendation no. 53: Follow the suggestion.

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

2. DESCRIPTION

Comments submitted: The IDF recommended that a cross-reference to the standard for unripened cheese be inserted, as this standard is a parent standard for Cottage Cheese.

Recommendation no. 54: Insert a cross-reference to the standard for unripened cheese in the same manner as has been done to standard A-6.

3.3 Composition

Comments submitted: Norway suggested retaining a criterion of minimum 20% DM to avoid the replacing of dry matter with stabilizers.

Discussion: Although the Ad Hoc Working Group on Cheese has not made any conclusions yet with respect to absolute minimum fat content it is not anticipated that the Ad Hoc Working Group on Cheese will recommend another value than "none". Reference is made to the discussion leading to ***Recommendation no. 10***.

The Norwegian suggestion should be followed. It is recommended that this standard includes two variants, Cottage Cheese and Creamed Cottage Cheese.

This approach is different from the present draft standard and impacts section 7.1 (name of the food). *(See also government comments to section 7.1.)*. Recommended consequential amendments are provided in ***Recommendation no. 57***.

Recommendation no. 55: Section 3.3 should be reformatted as follows (includes ***Recommendation no. 10***):

Milk constituent:	*Minimum content (m/m):*	*Maximum content (m/m):*	*Reference level (m/m):*
Milkfat:			
- Cottage Cheese:	*none*	*Not restricted*	*Not specified*
- Creamed Cottage Cheese:	*4%*	*Not restricted*	*Not specified*

Dry matter: *Depending on the fat in dry matter content according to the table below.*

	Fat content (m/m):	*Corresponding minimum dry matter content (m/m):*
Cottage Cheese:	*none or above*	*20%*
Creamed Cottage Cheese:	*4%*	*24%*

Compositional modifications beyond the minima or maxima contents specified above for milkfat and dry matter are not considered to be in compliance with section 4.3.3 of the General Standard for the Use of Dairy Terms.

4. FOOD ADDITIVES

Comments submitted: Poland found the list too long. In Poland, only INS 509 and 290 are allowed for Cottage Cheese not heat treated after fermentation, and only INS 407, 410, 412 and 415 are allowed for products subject to heat treatment after fermentation.

United Kingdom informed that in EU, INS 405 and 416 are not permitted for use in cheese.

Discussion: The additives listed have been justified.

Recommendation no. 56: No change.

7.1 Name of the Food

Comments submitted: The United States stated that a reference level of 0% makes nutrition claims impossible. Should be 4%.

Uruguay supported the proposal of IDF in CX/MMP 98/7 Add. 1, page 35 (Spanish version) regarding the use of the qualifier "creamed". *(**The IDF** recommended the retention of the text referring to the use of the qualifier "creamed". Justification was provided*.)

Discussion: US proposal would correspond to Creamed Cottage Cheese being the reference, which is not in compliance with the guidelines for nutritional claims. The qualifier Creamed indicates extra fat. A consequence would be to require higher fat content than the reference content for the use of this qualifier.

Amendments that are consequential from the proposal as provided in ***Recommendation no. 55*** are necessary.

Recommendation no. 57: Retain the reference fat level of 0% in order to retain the "creamed" version as a modification in accordance with section 4.3.3 of the GSUDT.

10. PROPOSED DRAFT REVISED STANDARD FOR COULOMMIERS (C-18)

3.2 Permitted Ingredients

Comments submitted: France requested the addition of flavour enhancing enzymes.

Recommendation no. 58: Insert the wording as provided in ***Recommendation no. 7***.

3.3 Composition

Comments submitted: France suggested that the criteria be simplified into min. 40% FDM and min. 42% DM.

IDF recommended changing the min. dry matter content of 60% FDM version from 52% into 50%.

Discussion: The French proposal implies that the DM content for versions with higher fat content would still be min. 42%. Such a change has an impact on products with enriched fat contents. For instance, the MFFB of a products with a FDM content of 60 % would be 78% which is substantially different from the MFFB content of the reference product of 71%. The MFFB should be retained, even at high fat contents.

Recommendation no. 59: No adoption of the proposal of France.

3.4 Essential Sizes and Weights

Comments submitted: France observed that the minimum weight should be 300 g instead of 320 g.

Recommendation no. 60: Adopt the French proposal.

4. FOOD ADDITIVES

Comments submitted: Norway questioned the need for lysozyme.

Discussion: The enzyme lysozyme is not listed in the present draft standard.

Recommendation no. 61: No change.

7.1 Name of the Food

Comments submitted: France requested that the para. referring to nutritional claims be removed so as to take into account the recommended criteria in section 3.3.

The IDF recommended the retention of the provision concerning the declaration of heat treatment after fermentation. Justification was provided.

Discussion: The par. on nutritional claims is needed to provide adequate provisions for the naming of Coulommiers with fat contents different from the reference level (40% FDM), for instance Coulommiers with 60 % FDM or Coulommiers with FDM contents below 40%, if included in the Standard. At present, Coulommiers with 60% FDM is permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Coulommiers than the reference product (i.e. min. 40%; max. 50% FDM), the wording would not be needed.

Recommendation no. 62: No change, pending a later conclusion with respect to absolute minimum fat in dry matter content.

Retain the provision concerning the declaration of heat treatment.

APPENDIX

Comments submitted: The IDF pointed out a spelling error (spelling of P. camembertii).

Recommendation no. 63: Correct the spelling.

11. PROPOSED DRAFT REVISED STANDARD FOR CAMEMBERT (C-33)

2. DESCRIPTION

a. General:

Morocco stated that the organoleptic and presentation characteristics of Camembert should be preserved.

b. Holes:

Comments submitted: France suggested that “the holes are more or less abundant” replaces “the longitudinal holes”, as it is a better description.

Recommendation no. 64: The wording proposed by France is not very clear and the comment is possibly derived from unclear translation of the English. It is suggested that the proposal be modified as follows: “Holes are generally absent, but splits and openings may occur”.

c. Carré de Camembert:

Comments submitted: Norway questioned the justification for Carré de Camembert (mandatory). The following wording was suggested: “A square Camembert may be designated “Carré de Camembert”.”

The United States recommended transferring the Carré de Camembert nomenclature requirements to the Appendix.

Recommendation no. 65: In order to obtain consensus, the following changes are recommended:

In the description, the form of a square is added at the end of the first sentence. The last par. referring to the square variant is removed. The following wording is added under section 7.1: “Where the square shape is not prohibited by national legislation, a square Camembert shall be designated “Carré de Camembert”.

d. Editorial:

Uruguay pointed out a translation error in the Spanish version. The phrase “madurado con modo” should read “madurado principalmente con moho”.

Recommendation no. 66: The translation should be checked.

3.2 Permitted Ingredients

Ripening enzymes:

Comments submitted: France and **Uruguay** requested the addition of flavour enhancing enzymes.

Recommendation no. 67: Insert the wording as provided in ***Recommendation no. 7***.

3.3 Composition

Comments submitted: France and Uruguay suggested that the criteria be simplified into min. 30% FDM/min. 38% DM and min. 40% FDM/min. 42% DM.

Discussion: The principle highlighted by Morocco is now included in the GSUDT (section 4.3.3).

The French proposal implies that the DM content for versions with higher fat content would still be min. 42%. Such a change has an impact on products with enriched fat contents. For instance, the MFFB of a products with a FDM content of 60 % would be 78% which is substantially different from the MFFB content of the reference product of 71%. The MFFB should be retained.

Recommendation no. 68: No adoption of the proposal of France.

3.4 Essential Sizes and Weights

Comments submitted: Denmark supported the proposed compromise on sizes and shapes while **the United States** recommended it transferred to the Appendix.

Morocco stated that the presentation characteristics of Camembert should be preserved.

Recommendation no. 69: No change.

4. FOOD ADDITIVES

Comments submitted: Norway questioned the need for lysozyme.

Discussion: The enzyme lysozyme is not listed in the present draft standard.

Recommendation no. 70: No change

7.1 Name of the Food

Comments submitted: France requested that the para. referring to nutritional claims be removed so as to take into account the recommended criteria in section 3.3.

The United States recommended that the provision concerning heat treatment be relocated in the Appendix. Further, the provisions concerning "Carré de Camembert" should also be relocated there.

The IDF recommended the retention of the provision concerning the declaration of heat treatment after fermentation. Justification was provided.

Discussion:

Heat treatment:
Heat treatment results in a product the organoleptic characteristics of which (appearance, taste, and colour) have changed. Accordingly, and in order to comply with the GSLPF (section 4.1.2) the treatment shall be indicated in label.

Carré de Camembert:
See ***Recommendation no. 65.***

Fat modified products:
The para. on nutritional claims is needed to provide adequate provisions for the naming of Camembert with fat contents different from the reference level (40% FDM), for instance Camembert with 60 % FDM or Camembert with FDM contents below 40%. At present, Camembert with both 30% and 60% FDM are permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Camembert than the reference product (i.e. min. 45%; max. 55% FDM), the wording would not be needed.

Recommendation no. 71: No change, except the amendment covered by ***Recommendation no. 65***, pending a later conclusion with respect to absolute minimum fat in dry matter content.

APPENDIX

Comments submitted: Germany and Uruguay rejected the recommendation to use the term "should" with respect to the term "petit Camembert". Suggested to use the word "may" instead.

The IDF recommended the following: In section 1.4, the spellings should be corrected into *Penicillium camembertii* and *Brevibacterium linens* to be consistent with the World Data Centre for Microorganisms. In section 2 (Designation), and in order to align the approach with the similar recommendation in the Appendix to the Standard for Brie, the word "should" should be replaced by "may". Section 2 ("petit Camembert") should be deleted.

Discussion: Due to the optional nature of the information contained in the Appendix, the use of the designation "petit Camembert" should be optional. The word "petit" would, however be allowed in any case, wherefore reference to this option is not necessary.

Recommendation no. 72: Correct the spelling of the bacteria strains and delete part 2. See also ***Recommendation no. 65***.

12. PROPOSED DRAFT REVISED STANDARD FOR BRIE (C-34)

2. DESCRIPTION

Comments submitted: France suggested that "the holes are more or less abundant" replaces "the longitudinal holes", as it is a better description.

The United States recommended the relocation in the Appendix of the specific shape requirements.

Morocco stated that the organoleptic and presentation characteristics of Brie should be preserved.

Recommendation no. 73:

Holes and splits:
The wording proposed by France is not very clear, possibly derived from the translation from English. It is suggested that the proposal be modified as follows: "Holes are generally absent, but splits and openings may occur".

Shape:
Retain the provision.

3.2 Permitted Ingredients

Comments submitted: France requested the addition of flavour enhancing enzymes.

Recommendation no. 74: Insert the wording provided in ***Recommendation no. 7*.**

3.3 Composition

Comments submitted: France suggested that the criteria be simplified into min. 40% FDM/min. 42% DM and min. 60% FDM/min. 50% DM.

Discussion: The principle highlighted by Morocco is now included in the GSUDT (section 4.3.3).

The French proposal implies that the DM content for versions with higher fat content would still be min. 42%. Such a change has an impact on products with enriched fat contents. For instance, the MFFB of a products with a FDM content of 60 % would be 78% which is substantially different from the MFFB content of the reference product of 71%. The MFFB should be retained, even at higher fat contents.

Recommendation no. 75: No adoption of the proposal of France

3.4 Essential Sizes and Weights

Comments submitted: Denmark supported the proposed compromise on sizes and shapes while **the United States** recommended it transferred to the Appendix.

France recommended that the max. weight should be raised to 4000g so as to account for products designed for cutting into individual consumer portions.

Morocco stated that the presentation characteristics of Brie should be preserved.

Recommendation no. 76: No change.

4. FOOD ADDITIVES

Comments submitted: Norway questioned the need for lysozyme.

Discussion: The enzyme lysozyme is used in practice.

Recommendation no. 77: No change.

7.1 Name of the Food

Comments submitted: France requested that the para. referring to nutritional claims be removed so as to take into account the recommended criteria in section 3.3.

Germany and the United States suggested moving references to "Pointe de Brie" to the Appendix.

The United States further recommended that the provision concerning heat treatment be relocated in the Appendix.

The IDF recommended the deletion of the references to "Pointe de Brie".

Discussion:

Heat treatment:
Heat treatment results in a product the organoleptic characteristics of which (appearance, taste, and colour) have changed. Accordingly, and in order to comply with the GSLPF (section 4.1.2) the treatment shall be indicated in label.

Pointe de Brie:
The provision can be deleted.

Fat modified products:
The par. on nutritional claims is needed to provide adequate provisions for the naming of Brie with fat contents different from the reference level (45% FDM), for instance Brie with 60 % FDM or Brie with FDM contents below 45%. At present, Brie with both 40% and 60% FDM are permitted by the draft standard.

However, in the case that it is decided not to permit other versions of Camembert than the reference product (i.e. min. 45%; max. 55% FDM), the wording would not be needed.

Recommendation no. 78: Delete the provision referring to Pointe de Brie.

The rest should remain unchanged, pending a later conclusion with respect to absolute minimum fat in dry matter content.

APPENDIX

Comments submitted: The IDF noted that in part 2.3, P. camembertii is mentioned twice. One suffices and the one spelled correctly should apply. IDF also recommended the delete section 3 concerning "Petit Brie".

Discussion: Due to the optional nature of the information contained in the Appendix, the use of the designation "petit Camembert" should be optional. The word "petit" would, however be allowed in any case, wherefore, reference to this option is not necessary.

Recommendation no. 79: Correct the reference to bacteria and delete part 3.

13. PROPOSED DRAFT STANDARD FOR MOZZARELLA

2. DESCRIPTION

Comments submitted: Canada expressed concerns with the regulation of appearance characteristics and methods of manufacture. Both elements should always appear in Appendices without exemption. Very detailed description, which made it difficult if not impossible to enforce internationally, however, Canada, presumed that the wording "other processing techniques, etc." gives the needed flexibility to manufacturers with alternatives to traditional make procedures provided the end-product looks and tastes the same.

Uruguay requested a specification of the type of liquid referred to in the description of Mozzarella with high moisture content. Uruguay further proposed that the phrase "and a short shelf life even at refrigerated temperature" be deleted.

Discussion: The reference to short shelf life is not essential and it is not quantified. The type of liquid is milk serum/whey.

Recommendation no. 80: Delete the phrase "and a short shelf life even at refrigerated temperature".

3.2 Permitted Ingredients

Comments submitted: United States recommended the addition of rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as enzymes in the list of ingredients.

India suggested the addition of "and cultures of other harmless micro-organisms" to be consistent with other C-standards.

France observed an incorrect translation in the French version: "cultures d´amorçage de bactéries lactique" should be replaced by "cultures de bactéries lactique inoffensives".

Discussion: The Indian proposal should be followed in order to ensure consistency.

The French version should be checked.

With regard to the US proposal, see ***Recommendation no. 19***.

Recommendation no. 81: Add the phrase "and cultures of other harmless micro-organisms" to the text in the first indent.

Check the translation of the French version.

3.3 Composition

a. Buffaloes Mozzarella:

Comments submitted: Denmark, India and the IDF recommended the deletion of special criteria for Buffaloes Mozzarella.

Uruguay recommended that the column referring to buffalo milk should read "exclusively from buffaloes milk", since raw materials can contain mixtures of buffaloes and cow's milk.

Recommendation no. 82: The proposal of Denmark, India and the IDF should be followed. There are no technical justifiable reasons for a differentiation of this kind. Further, such differentiation makes the standard unnecessary complicated, and creates an unclear situation with respect to which criteria are applicable to products made from mixtures of cow's and buffalo's milk.

Deletion has consequences both for section 3.3 and for section 7.1 of the standard and solves also the comment raised by Uruguay.

b. Dry matter:

Comments submitted: United States recommended the deletion of "45%" and substitute "43%" DM for low moisture Mozzarella with a fat range between 45-50%.

France suggested to simplify the criteria as follows: Low moisture: 20%-40% FDM/ 36% DM and above 40% FDM/42% DM. High moisture: 20%-40% FDM/24% DM and above 40% FDM/29% DM.

Germany proposed a number of changes to the criteria and suggested the following:

FDM	Corresponding DM content	
	Low moisture	High moisture
min. 20% and less than 30%	36%	24%
min. 30% and less than 40%	38%	26%
min. 40% and less than 45%	40%	29%
min. 45% and less than 50%	42%	31%
min. 50% and less than 60%	44%	34%
min. 60%	46%	38%

Recommendation no. 83: No adoption. The figures for low moisture mozzarella is the lowest figures possible if the product is to be a firm/semi-hard cheese as specified in section 2. The figures correspond to a moisture on fat free basis of max. 69%. The German proposal would change the product into a soft cheese. The French proposal would change products with FDM contents 30 - 40 and above 45 into a soft cheese. The US proposal will change products with 45-50% into a soft cheese.

c. Fat ranges:

Comments submitted: Canada stated that it was only necessary to define one set of products (low moisture and high moisture) conforming to the name Mozzarella. The scale provided would limit the marketing of reduced fat Mozzarella because a single reference product does not exist. Fat-reduced and "part-skim" products have been available in Canada for many years. The criteria as drafted would prohibit such products.

Germany: (see above).

Discussion: The Canadian comment indicates that "reduced fat" Mozzarella is not covered by the standard. Whether this is correct depends on the reference fat level established.

In the present draft, certain reference fat levels are specified and the corresponding maximum fat contents for "fat reduced" versions are as follows:

	Reference fat level	*Maximum fat for using the claim: "reduced fat"*
Mozzarella with low moisture content:	40% FDM	30% FDM
Mozzarella with high moisture content:	44% FDM	33% FDM
Mozzarella made from buffalo's milk:	50% FDM	37.5% FDM

The use of the qualifier "partially skimmed" are regulated by Standard A-6 (10-25% FDM), however, if the absolute minimum fat content is set to 20% FDM (as in the present draft), the use of this term is limited to products between 20-25% FDM. The absolute minimum fat level of Mozzarella was by the 3rd CCMMP referred to the Ad Hoc Working Group on Cheese.

The German comment includes a proposal to simplify the categorisation of fat levels. This is an improvement and should be followed.

Recommendation no. 84: Pending a later conclusion with respect to absolute minimum fat content, it is recommended that the fat range and corresponding minimum dry matters be amended into the following:

FDM	*Corresponding DM content*	
	With low moisture	*With high moisture*
min. 20% and less than 30%	*36%*	*24%*
min. 30% and less than 40%	*39%*	*26%*
min. 40% and less than 45%	*42%*	*29%*
min. 45% and less than 50%	*45%*	*31%*
min. 50% and less than 60%	*47%*	*34%*
min. 60%	*53%*	*38%*

As a consequence and taking into account ***Recommendation no. 17***, the second par. of and footnotes to section 7.1 should be changed into:

*"The designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 minimum fat content the appropriate characterizing terms specified in Section 7.3 of the Standard for Cheese (A-6), or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims *.*

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

4. FOOD ADDITIVES

4.1 General:

Comments submitted: Spain commented that it would seem appropriate to differentiate between "Mozzarella" with few additives and "Mozzarella-type" with more additives. This would preserve Mozzarella with a minimum of additives. Spain further suggested that the country of provenience (that is Italy) should consider the list.

Discussion: From a technical point of view, it would not be justified to differentiate additive provisions between "mozzarella" and "mozzarella-type" cheeses.

Recommendation no. 85: No adoption.

4.2 Acids:

Comments submitted: Spain stated that the addition of INS 338 was not justified.

United Kingdom informed that INS 338 was not permitted for Mozzarella in the EU although it was permitted for other unripened cheeses. INS 507 and 260 were not permitted for Mozzarella as well, however, 260 was currently subject to a review.

India recommended adding Malic acid at GMP level to accommodate for directly acidified Mozzarella.

Uruguay requested the addition of tartaric acid, as permitted in MERCOSUR.

Discussion: The use of INS 338 is justified. Orthophosphoric acid is often used instead of other acids, as it does not provide the product with an after-taste. Orthophosphoric acid is used in combination with glucono delta-lactone.

JECFA has allocated the ADI "not specified" for Malic acid (INS 296), Acetic Acid glacial (INS 260) and Hydrochloric acid (INS 507). Following the recommended principles contained in ***Recommendation no. 11***, INS 260 and 507 should be retained and INS 296 should be added to the list.

Tartaric acid has a different function in Mozzarella (sequestrant) and JECFA has allocated a numerical ADI to it. Following the above principles, tartaric acid should not be added to the list.

Recommendation no. 86: Retain INS 338 (orthophosphoric acid) and INS 260 (Acetic acid glacial) and add INS 296 (Malic acid (DL-)).

4.3 Colours:

Comments submitted: Spain and United Kingdom requested the deletion of colours, as they seem not to be justified. The UK informed that INS 100, 160a,b,c were not permitted in the EU for Mozzarella.

United States and New Zealand requested the addition of titanium dioxide. US suggested a max. of 10 g/kg, while NZ suggested use according to GMP.

New Zealand further suggested the addition of 928 Benzoyl peroxide at a maximum of 1 g/kg on the weight of bleached milk.

France recommended that the same approach to carotenes in A-6 should apply for Mozzarella as well.

India recommended that INS 100 be replaced by 100(i) curcumins and 100(ii) turmeric.

IDF recommended to add 160a Carotenes (synthetic) max. 25 mg/kg as a consequence of the 29th CCFAC

Discussion: Only the comments relating to INS 100 and INS 160a are contradicting. The other proposals could be adopted.

With regard to INS 100, the standard A6 and the draft standard for unripened cheese restrict the use to edible cheese rind. As Mozzarella is manufactured and sold without a rind, the colour should be deleted. This would also cover the Indian proposal.

With regard to INS 160a, it is recommended to copy the provisions of standard A-6.

The 31st session of the CCFAC did not endorse the use of INS 928.

Recommendation no. 87: Add the following colours to the list with the restrictions as included in the standards for cheese and for unripened cheese:

- INS 171 Titanium dioxide (GMP)
- INS 160a Carotenes (synthetic) (25 mg/kg)

Delete INS 100 from the list but retain the provisions for 160b and 160c for the sake of consistency.

4.4 Anticaking agents for surface treatment (cut, sliced and shredded products, only):

Comments submitted: United Kingdom stated that the EU does not have a specific category of cut, sliced and shredded Mozzarella and that INS 551-556, 559, 560 and 1450 are not permitted for use in this product.

Uruguay recommended that the term “anticaking” be translated into Spanish as “antiaglomerante/antihumectante”.

Recommendation no. 88: See ***Recommendation no. 15*** (not to be permitted to Mozzarella with a high moisture content).

Check the Spanish translation of “anticaking”.

4.5 Preservatives for surface treatment (cut, sliced and shredded products, only):

Comments submitted: Spain suggested the deletion of sodium sorbate, as it is not contained in standard A-6.

United States recommended the addition of INS 235 Pimaricin 300 ppm for surface treatment or added during the kneading and stretching process.

United Kingdom informed that the EU does not permit INS 201 and 280-283 for Mozzarella. However, INS 200 and 202-203 are permitted at max. 1 g/kg for <u>all</u> Mozzarella, not just for cut, sliced and shredded Mozzarella).

Germany requested the deletion of INS 280-283, as they are not required.

Uruguay suggested that the use of preservatives was not restricted to cut, sliced or shredded products, but permitted to Mozzarella in general. However, natamycin should be restricted to surface treatment at a max. level of 1 mg/dm^2, not detectable in 2 mm, not to exceed 5 mg/kg, absent in the mass.

Discussion:

Addition of preservatives to the cheese curd:
The request of the United Kingdom and Uruguay to allow preservatives to be added to the cheese curd should be followed. This would also be consistent with the approach taken in standards A-6 and A19.

Sodium sorbate:
INS 201 is not included in the list of standard for unripened cheese and should be deleted. It is not used in practice.

Propionates:
Propionates are attractive alternatives to sorbates. An ADI "not specified" has been allocated to them. Following the recommended general principles for drafting the additive provisions, they should be retained in the standard.

Pimaricin:
The comments of the USA and Uruguay are contradicting. The approach taken in standard A-6 should apply. The 31st CCFAC did not endorse the further use of pimaricin (i.e. addition to the curd).

Recommendation no. 89: Include the list of preservatives applicable to all Mozzarella, however

- Delete INS 201 (sodium sorbate).
- Do not include pimaricin for addition to the curd.

7. LABELLING

Note: Only comments, which have not already been dealt with in part B of this review (common provisions), are considered below.

7.1 Name of the Food

Comments submitted: Canada strongly endorsed the text.

New Zealand recommended to change the reference area for low moisture products to 30-50% as products with fat contents lower than 40% FDM are sold in some markets as normal Mozzarella.

IDF noted that the provision on cut, sliced, grated and shredded products, as contained in the other C-standards, is missing. IDF further recommended the retention of the para. requiring an appropriate qualifier for Mozzarella with high moisture content. Finally, an amendment to the footnotes was needed as a consequence of remove the differentiation between cow's and buffaloes products in section 3.3.

Discussion: The proposal of New Zealand would imply a relatively large range of fat content as the reference. This could be misleading to the consumer. Reference is made to the provision contained in the 2nd para. where it is stated that qualifiers need only be associated with the name of the food where required by the legislation of the country of sale. This would allow New Zealand to continue the current practice on the domestic market.

The proposals of IDF should be adopted.

Recommendation no. 90: Insert the general provision referring to the use of the designations for cut, sliced, grated and shredded products.

Amend the second para. as recommended in ***Recommendation no 84***.

7.5 Date Marking

Comments submitted: Canada noted that the provision on date marking does not appear in this standard and observed that the wording in the description "short shelf-life" alone requires declaration of the product's durability date.

Discussion: The provision for date marking is not justified for unripened cheeses.

8 METHODS OF SAMPLNG AND ANALYSIS

Comments submitted: IDF noted that work initiated to provide a method for the determination of equivalency may result in a conclusion that electron microscopy might not be the best method.

Discussion: IDF has initiated work aiming at identifying and describing an adequate method. When available, the method will be submitted to the Codex Committee Methods of Analysis and Sampling for endorsement [7]

APPENDIX

Comments submitted: IDF observed that in section 2.2, a "t" is missing. It should read "The curd is not scalded in its whey at temperatures exceeding 40 °C". IDF further recommended the insertion of the standard introductory wording as recommended by the CAC.

Recommendation no. 91: Endorse the IDF proposal.

[7] Secretariat's Note: Before submitting the method to the Codex Committee on Methods of Analysis and Sampling, it needs to be considered and agreed by this Committee.

Annex A

APPROACH TO DETAILS IN THE REVISION OF THE PROPOSED DRAFT STANDARDS FOR INDIVIDUAL CHEESES

Details on ingredients, composition and additives are considered as essential parts of any of the standards and should therefore be stated in the body of the standard. With regard to the other details, the details in the old unrevised standards have been be treated as follows:

Notes: Where details are indicated as "Retained in the Standard", the detail may have been subject to amendment and/or may have been split, i.e. a part retained in the body of the standard, a part deleted, and/or a part relocated in the Appendix to the Standard. Details in the body of the Proposed Draft Standard for Mozzarella are indicated under the column "Added to the Standard".

General characteristics	**Retained in the Standard**	**Added to the Standard**	**Relocated in Appendix**	**Deleted**
Type of cheese	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Cottage Cheese, Coulommiers, Camembert, Brie	Provolone, Mozzarella		
Storing ability				Emmental
Origin of the milk	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Provolone, Cottage Cheese, Coulommiers, Camembert, Brie	Mozzarella		

Format of cheese:	**Retained in the Standard**	**Added to the Standard**	**Relocated in Appendix**	**Deleted**
Shape	Emmental, Provolone, Cottage Cheese (size of curd), Coulommiers, Camembert, Brie	Mozzarella	Danbo, Edam, Gouda, Havarti, Samsoe, Saint-Paulin	Cheddar, Tilsiter
Dimensions	Coulommiers, Camembert, Brie		Danbo, Havarti, Samsoe, Emmental, Saint-Paulin, Provolone, Mozzarella	Cheddar, Tilsiter, Cottage Cheese
Weight	Emmental, Coulommiers, Camembert, Brie		Danbo, Edam, Gouda, Havarti, Samsoe, Saint-Paulin, Provolone	Tilsiter, Cottage Cheese

Method of production:	**Retained in the Standard**	**Added to the Standard**	**Relocated in Appendix**	**Deleted**
Heat treatment of milk				Cheddar, Saint-Paulin, Cottage Cheese, Coulommiers, Camembert, Brie
Coagulation techniques			Saint-Paulin, Coulommiers, Camembert, Brie	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Provolone, Cottage Cheese
Fermentation techniques	Emmental, Provolone		Cheddar, Saint-Paulin, Coulommiers, Camembert, Brie, Mozzarella	Danbo, Edam, Gouda, Havarti, Samsoe, Tilsiter, Cottage Cheese
Curd treatment techniques	[Emmental], Provolone	Mozzarella	Cheddar, Saint-Paulin, Coulommiers, Camembert, Brie	Danbo, Edam, Gouda, Havarti, Samsoe, Tilsiter, Cottage Cheese
Fat content adjustment techniques				Cottage Cheese
Salting procedure			Cheddar, Saint-Paulin, Coulommiers, Camembert, Brie, Mozzarella	Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Provolone, Cottage Cheese
Ripening procedure	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Provolone, Coulommiers, Camembert, Brie			
Cutting procedure			Brie	Camembert

Description of rind:	**Retained in the Standard**	**Added to the Standard**	**Relocated in Appendix**	**Deleted**
Rind/rindless	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Provolone	Mozzarella		Cottage Cheese
Colour	Provolone, Coulommiers, Camembert, Brie		Emmental, Saint-Paulin	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Tilsiter
Appearance	Edam, Gouda, Havarti, Tilsiter, Saint-Paulin, Coulommiers, Camembert, Brie		Emmental, Provolone, Mozzarella	Cheddar, Danbo
Coatings	Danbo, Edam, Gouda, Havarti, Samsoe, Saint-Paulin, Provolone	Cheddar, Emmental, Tilsiter		

Organoleptic characteristics	**Retained in the Standard**	**Added to the Standard**	**Relocated in Appendix**	**Deleted**
Colour	Cheddar, Danbo, Edam, Gouda, Havarti, Emmental, Tilsiter, Saint-Paulin, Cottage Cheese, Coulommiers, Camembert, Brie	Mozzarella		
Taste/aroma			Emmental, Provolone, Brie, Mozzarella	Cheddar, Tilsiter, Cottage Cheese, Camembert
Texture	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Provolone, Cottage Cheese, Coulommiers, Camembert, Brie	Mozzarella		
Holes, splits, etc.	Cheddar, Danbo, Edam, Gouda, Havarti, Samsoe, Emmental, Tilsiter, Saint-Paulin, Provolone, Coulommiers, Camembert, Brie	Mozzarella		Cottage Cheese

Attachment

PROPOSED DRAFT REVISED STANDARD FOR CHEDDAR (C-1)[8]

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 pressed cheese in conformity with Standard A-6. The body has a uniform, pale straw through dark straw to orange colour and a firm, smooth and waxy texture, with none to few mechanical openings, no gas holes or free moisture. 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.

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;
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[48]%	Not restricted	48% to 55%

[8] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

Dry matter: Depending on the fat in dry matter content, according to the table below.

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [48]% but less than 55%:	61%
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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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		
	Anti-caking agents	
460	Cellulose	Limited by GMP

551	Silicon dioxide, amorphous	
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	10 g/kg singly or in combination.
555	Potassium aluminosilicate	Silicates calculated as silicon dioxide.
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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. [9]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[10]

7.5 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

7.6 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, Vol. 13.

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9 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

10 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

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 Lactic acid starter is added to the milk, which may be ripened for up to 2 hours before coagulation using rennet or other suitable coagulating enzymes.

1.2 After coagulation, the curd is cut and scalded at up to 42ºC. 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. Following pressing the cheese is wrapped and matured, with typical maturation times varying from 5 to 52 or more weeks, depending on the temperature of maturation and the degree of maturity required.

PROPOSED DRAFT REVISED STANDARD FOR DANBO (C-3) [11]

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 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 Standard A-6. The body has a yellowish colour and a firm texture, suitable for cutting, with few to plentiful, evenly distributed, smooth and round holes of sizes as peas. The cheese is sold with or without hard 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[20]%	Not restricted	45% to 55%

Dry matter: Depending on the fat in dry matter content, according to the table below.

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [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 45%:	50%

[11] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

Equal to or above 45% but less than 55%:	52%
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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170 504 575	Calcium carbonates Magnesium carbonates Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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

	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for

Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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. [12]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[13]

7.5 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.

7.6 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, Vol. 13.

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12 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

13 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING DANBO

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:	Flat square or parallelepiped.
1.2	Dimensions and weights:	Danbo cheese is normally manufactured in weights of approx. 8.5 kg with a side of 30 cm approx. Weights range normally from 6 to 14 kg, however, weights below 6 kg are sold with adequate descriptors addressing the size in association with the name.

PROPOSED DRAFT REVISED STANDARD FOR EDAM (C-4)[14]

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 Standard A-6. The body has a yellowish colour and a firm texture, suitable for cutting, with few more or less round holes of sizes varying from rice to pea, distributed regularly as well as irregularly all over the interior of the cheese. The cheese is sold with dry rind, which may be coated.

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.

Edam of flat block or loaf shape is also sold without rind.

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;
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

[3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[30]%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [30]% but less than 35%:	47%

[14] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.]

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170 504 575	Calcium carbonates Magnesium carbonates Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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

	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for

Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[15]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[16]

7.5 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.

7.6 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, Vol. 13.

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15 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

16 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX

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 spherical shape of weight ranging from 1.5 to 2.5 kg. Lower weights are normally qualified by the term “Baby”. Edam intended for further processing, cutting or slicing may have other weights and shapes.

PROPOSED DRAFT REVISED STANDARD FOR GOUDA (C-5)[17]

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 Standard A-6. The body is straw coloured and has a firm texture, suitable for cutting, with few to plentiful, more or less round holes of sizes varying from a pin's head to a pea, distributed regularly as well as irregularly all over the interior of the cheese. The cheese is sold with a hard, dry rind, which may be coated.

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.

Gouda of flat block or loaf shape is also sold without rind.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

[3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[48]%	Not restricted	48% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [48]% but less than 55%:	55%
Equal to or above 55%:	59%

[17] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.]

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170 504 575	Calcium carbonates Magnesium carbonates Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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

	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[18]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet, or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[19]

7.5 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.

7.6 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, Vol. 13.

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18 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

19 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

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 a flat cylindrical shape with convex sides and of weights ranging from 2.5 to 30 kg. Lower weights are normally qualified by the term “Baby”. Gouda intended for further processing, cutting or slicing may have other weights and shapes.

PROPOSED DRAFT REVISED STANDARD FOR HAVARTI (C-6)[20]

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 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 Standard A-6. The body has a light yellow colour and a texture suitable for cutting, with plentiful, irregular and coarse holes of the size of large rice seeds. The cheese is sold with or without a semi-soft, 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

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

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [30]% but less than 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%

[20] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170	Calcium carbonates	Limited by GMP
504	Magnesium carbonates	
575	Glucono delta-lactone (GDL)	
	Preservatives	
200	Sorbic acid	3000 mg/kg of cheese, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
234	Nisin	12.5 mg/kg
251	Sodium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
252	Potassium nitrate	
280	Propionic acid	Limited by GMP
281	Sodium propionate	
282	Calcium propionate	
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200	Sorbic acid	1 g/kg singly or in combination, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
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	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[21]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[22]

7.5 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.

7.6 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, Vol. 13.

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21 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

22 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING HAVARTI

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 characteristic

1.1 Dimensions and weights:

a) Flat cylindrical: Height at least half the diameter, weight 0.2 kg to 1.5 kg.

b) Rectangular (loaf): Square cross section; length more than double height; weight min. 0.2 kg.

c) Rectangular: Weight min. 2 kg.

PROPOSED DRAFT REVISED STANDARD FOR SAMSØ (C-7)[23]

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 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 Standard A-6. The body has a yellowish colour and a firm texture suitable for cutting, with few to plentiful, evenly distributed, smooth and round holes of sizes varying from pea to cherry. The cheese is sold with or without a hard 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[20]%	Not restricted	45% to 55%

Dry matter: Depending on the fat in dry matter content, according to the table below.

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):	
	Samsø:	Mini Samsø:
Equal to or above [20]% but less than 25%:	42%	42%
Equal to or above 25% but less than 30%:	44%	44%
Equal to or above 30% but less than 35%:	46%	46%
Equal to or above 35% but less than 40%:	48%	47%

[23] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170	Calcium carbonates	Limited by GMP
504	Magnesium carbonates	
575	Glucono delta-lactone (GDL)	
	Preservatives	
200	Sorbic acid	3000 mg/kg of cheese, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
234	Nisin	12.5 mg/kg
251	Sodium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
252	Potassium nitrate	
280	Propionic acid	Limited by GMP
281	Sodium propionate	
282	Calcium propionate	
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200	Sorbic acid	1 g/kg singly or in combination, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
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	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for

Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[24]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[25]

7.5 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.

7.6 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, Vol. 13.

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24 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

25 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

INFORMATION ON USUAL PATTERNS OF MANUFACTURING SAMSØ

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 Dimensions and weights:

a) Flat cylindrical: Weight min. 12 kg or less than 1 kg; diameter of the former: min. 44 cm approx.

b) Flat square and rectangular: Side min. 30 cm; weight min. 8.0 kg.

PROPOSED DRAFT REVISED STANDARD FOR EMMENTAL (C-9)[26]

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 Standard A-6. The body has an ivory to light yellow colour and a sliceable texture, with regular, scarce to plentiful distributed, mat to brilliant holes from 1 to 3 cm. The cheese is sold with a hard rind, eventually manufactured by the use of ripening films. Emmental is traditionally manufactured as a wheel of weights of 60 kg or more, but other shapes and weights above 20 kg are possible.

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.

Emmental of block shape is also manufactured and sold without rind.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

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

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [45]% but less than 55%:	60%

[26] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

3.4 ESSENTIAL MANUFACTURING CHARACTERISTICS

Starter cultures of propionic acid producing bacteria. The curd is heated after cutting [to a temperature suitable for thermophilic fermentation; where non-pasteurized milk is used, to a minimum of 50ºC.]

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
575	Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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

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

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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for

Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[27]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[28]

7.5 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.

7.6 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, Vol. 13.

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27 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

28 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

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

1.1 ***Rind:*** Hard, dry and yellow to golden brown. Washing of surface is permitted.

1.2 ***Common dimensions***

Shape:	Wheel	Block
Height:	12-30 cm	12-30 cm
Diameter:	70-100 cm	-
Weight:	60 kg	40 kg

1.3 ***Flavour:*** Mild, nutlike, more or less pronounced.

2. Method of manufacture

2.1 ***Fermentation procedure:*** Lactic acid and propionic acid fermentation.

2.2 ***Maturation procedure:*** Proteolysis due to action of microbial enzymes at successive temperatures up to 25 °C.

PROPOSED DRAFT REVISED STANDARD FOR TILSITER (C-11)[29]

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 Standard A-6. The body has an ivory to yellow colour and a semi-hard texture suitable for cutting, with irregularly shaped, shiny and evenly distributed holes. The cheese has a well-dried smear-developed rind. The cheese may be sold without rind and 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

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

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [30]% but less than 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%

[29] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170 504 575	Calcium carbonates Magnesium carbonates Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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		
	Anti-caking agents	
460	Cellulose	Limited by GMP

551	Silicon dioxide, amorphous	
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	10 g/kg singly or in combination.
555	Potassium aluminosilicate	Silicates calculated as silicon dioxide.
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[30]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[31]

7.5 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.

7.6 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, Vol. 13.

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30 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

31 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

PROPOSED DRAFT REVISED STANDARD FOR SAINT-PAULIN (C-13)[32]

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 Standard A-6. The body has a uniform yellow to white 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 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[40]%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [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%

[32] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170 504 575	Calcium carbonates Magnesium carbonates Glucono delta-lactone (GDL)	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	<u>For surface/rind treatment only</u>	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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		
	Anti-caking agents	
460	Cellulose	Limited by GMP

551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[33]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[34]

7.5 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.

7.6 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, Vol. 13.

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33 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

34 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

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 protruding sides.

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.

1.3 ***Rind:*** Hard, but elastic under thumb pressure, with a dry or, in the case of washed rind, humid appearance and a beige, yellow or ochre colour. The cheese can be coated (i.e. plastic film, wax).

2. Method of manufacture

2.1 ***Method of coagulation:*** Chiefly with rennet or other suitable coagulating enzymes.

2.2 ***Fermentation procedure:*** Lactic acid fermentation

2.3 ***Other characteristics:*** The temperature of the coagulum is sometimes raised by 1° or 2 °C. After clotting the coagulum is cut; particles are washed; curd is moulded under pressure; cheese is salted in brine.

3. Designation

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)[35]

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 Standard A-6. The body has a pale to fair yellow straw colour and a fibrous texture with long stranded parallel-orientated protein fibers. A few holes and splits may occur. It is suitable for cutting and, when aged, for grating as well. The cheese is mainly cylindrical or pear-shaped, but other shapes are possible. The yellow rind, brown when smoked, is commonly covered with wax and/or paraffin. Rindless variants are possible, provided they are ripened under vacuum in plastic film bags.

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.

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.

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;
- Sodium chloride;
- Safe and suitable enzymes to enhance the ripening process;
- Potable water,
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), 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.

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[35] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[40]%	Not restricted	45% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):	
	Mild:	Aged:
Equal to or above [40]% but less than 50%:	51%	53%
Equal to or above 50%:	56%	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.

3.4 ESSENTIAL MANUFACTURING CHARACTERISTICS

The main 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.

INS No	Name of food additive	Maximum level
	Bleaching agents	
171	Titanium dioxide[36]	Limited by GMP
	Acidity regulators	
170	Calcium carbonates	Limited by GMP
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
234	Nisin	12.5 mg/kg of cheese
239	Hexamethylene tetramine	25 mg/kg of cheese, expressed as formaldehyde
251 252	Sodium nitrate Potassium nitrate	50 mg/kg of cheese, expressed as $NaNO_3$
280 281 282	Propionic acid Sodium propionate Calcium propionate	Limited by GMP
1105	Lysozyme	Limited by GMP
	For surface/rind treatment only	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	1 g/kg singly or in combination, 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.

[36] Secretariat's Note: Titanium dioxide is classified as "colour" in Codex and its use as colour was endorsed for cheese by the 31st Session of the Codex Committee on Food Additives and Contaminants.

Sliced, cut, shredded or grated cheese

	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[37]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[38]

7.5 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.

7.6 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, Vol. 13.

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37 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

38 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

APPENDIX.

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 ***Dimensions and weights:*** Various dimensions. Typical shapes are cylindrical (Salame), pear-shaped (Mandarino), pear-shaped cylinder (Gigantino) and flask (Fiaschetta). Weights vary from 0.3 to 30 kg

1.2 ***Rind:*** Cheese coatings are often used and may be coloured and/or added antimycotic agents. The cheese is typically encased in ropes.

1.3 ***Flavour:*** The cheese is sold in mild and sharp variants, occasionally smoked. Mild products have a sweetish and buttery flavour whereas sharp products are piquant due to ageing.

PROPOSED DRAFT REVISED STANDARD FOR COTTAGE CHEESE (C-16)[39]

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 unripened cheese in conformity with the Standard for Cheese (A-6) and the Standard for Unripened Cheese Including Fresh Cheese. The cheese consists 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 colour is natural white to light cream.

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

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat:			
- Cottage Cheese:	none	Not restricted	Not specified
- Creamed Cottage Cheese:	4%	Not restricted	Not specified
Dry matter:	Depending on the fat in dry matter content according to the table below.		

	Fat content (m/m):	Corresponding minimum dry matter content (m/m):
Cottage Cheese:	none or above	20%
Creamed Cottage Cheese:	4%	24%

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.

4. FOOD ADDITIVES

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

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[39] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

INS No	Name of food additive	Maximum level
	Acids	
260	Acetic acid glacial	Limited by GMP
270	Lactic acid	
330	Citric acid	
507	Hydrochloric acid	
	Acidity regulators	
575	Glucono delta-lactone (GDL)	Limited by GMP
	Stabilizers	
400	Alginic acid	Limited by GMP
401	Sodium alginate	
402	Potassium alginate	
403	Ammonium alginate	
404	Calcium alginate	
405	Propylene glycol alginate	5 g/kg singly or in combination
407	Carrageenan or its Na, K, NH4 salts (includes furcelleran)	Limited by GMP
410	Carob bean gum	
412	Guar gum	
413	Tragacanth gum	
415	Xanthan gum	
416	Karaya gum	
466	Sodium carboxymethyl cellulose	
	Emulsifier	
322	Lecithins	
	Preservatives	
200	Sorbic acid	3000 mg/kg of cheese, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
280	Propionic acid	Limited by GMP
281	Sodium propionate	
282	Calcium propionate	
283	Potassium propionate	

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), 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).

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 Creamed 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.*

*) 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.[40]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[41]

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.

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40 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

41 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

8. METHODS OF SAMPLING AND ANALYSIS

See Codex Alimentarius, Vol. 13.

PROPOSED DRAFT REVISED STANDARD FOR COULOMMIERS (C-18)[42]

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 Standard A-6 which has a shape of a flat cylinder. The body has a cream yellow to white colour and a soft texture, matured from the periphery to the centre. Holes are generally absent, but possible small longitudinal splits and openings may occur. The rind is flexible, covered with white mould and occasionally with red or orange spots.

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.

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;
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[40]%	Not restricted	40% to 50%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [40]% but less than 50%:	42%
Equal to or above 50% but less than 55%:	46%

[42] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;
Weight: min. 300 g.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
575	Glucono delta-lactone (GDL)	Limited by GMP
Sliced, cut, shredded or grated cheese		
	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[43]

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

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[43] Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[44]

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, Vol. 13.

APPENDIX.

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. Appearance characteristics

1.1 The cheese may be cut into sectors or half-cylinders; half-cylinders may be cut into sectors; cuts should follow the axis of the cylinder.

2. Method of manufacture

2.1 Method of coagulation: Rennet and lactic acid originating from lactic acid bacteria.

2.2 Treatment of the curd: No heat treatment and no washing/lactose removal.

2.3 Fermentation procedure: Predominantly lactic fermentation

2.4 Maturation procedure: Predominantly surface development of moulds followed by proteolysis from the surface caused by Penicillium camembertii and other harmless microorganisms such as Geoptrichum candidum, Brevibacterium linens, yeast, etc.

2.5 Other characteristics: Dry salting or salting in brine.

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[44] The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

PROPOSED DRAFT REVISED STANDARD FOR CAMEMBERT (C-33)[45]

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 Standard A-6, which has a shape of a flat cylinder or a square. The body has a white to creamy yellow colour and a soft, but not crumbly, texture, ripened from the surface. Holes are generally absent, but splits and openings may occur. The rind is soft, uniformly covered with white mould but may have occasional red or orange-coloured spots.

For Camembert ready for consumption, the ripening procedure to develop flavour and body characteristics is normally from 10 days at 10-24 °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.

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;
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

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

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [30]% but less than 35%:	38%
Equal to or above 35% but less than 40%:	39%

[45] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

Equal to or above 40% but less than 45%:	41%
Equal to or above 45% but less than 55%:	43%
Equal to or above 55% 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.

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;
Weight: min. 80 g; max. 500 g

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170	Calcium carbonates	Limited by GMP
504	Magnesium carbonates	
575	Glucono delta-lactone (GDL)	
Sliced, cut, shredded or grated cheese		
	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 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.

Where the square shape is not prohibited by national legislation, a square Camembert shall be designated “Carré de Camembert”.

The designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[46]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[47]

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, Vol. 13.

APPENDIX.

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	Method of coagulation:	Rennet and lactic acid producing bacteria at coagulation temperature.
1.2	Treatment of the coagulum:	No heat treatment.
1.3	Fermentation procedure:	Predominantly lactic acid fermentation.
1.4	Maturation procedure:	Predominantly cultures of Penicillium camembertii and other harmless microorganisms such as Geotrichum candidum, Brevibacterium linens, yeast, etc. The cheese may be cut into sectors before maturation.
1.5	Other characteristics:	Dry salting or salting in brine.

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46 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

47 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

PROPOSED DRAFT REVISED STANDARD FOR BRIE (C-34)[48]

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 Standard A-6, which has a shape of a flat cylinder. The body has a white to creamy yellow colour and a smooth, but not crumbly, texture, ripened from the surface. Holes are generally absent, but splits and openings may occur. The rind is soft and uniformly covered with white mould but may have occasional orange coloured spots.

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.

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;
- Rice, corn, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), these substances can be used in the same function as anti-caking agents for treatment of the surface of cut, sliced, and shredded products only, provided they are added only in amounts functionally necessary as governed by Good Manufacturing Practice, taking into account any use of the anti-caking agents listed in section 4.

3.3 COMPOSITION

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[40]%	Not restricted	45% to 55%
Dry matter:	Depending on the fat in dry matter content, according to the table below.		

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):
Equal to or above [40]% but less than 45%:	42%
Equal to or above 45% but less than 55%:	43%

[48] Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

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.

3.4 ESSENTIAL SIZES AND SHAPES

Height: max. 5 cm;
Weight: min. 500 g; max. 3500 g

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Colours (for edible cheese rind)	
100	Curcumins	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Acidity regulators	
170	Calcium carbonates	Limited by GMP
504	Magnesium carbonates	
575	Glucono delta-lactone (GDL)	
	Preservatives	
1105	Lysozyme	Limited by GMP

Sliced, cut, shredded or grated cheese

	Anti-caking agents	
460	Cellulose	Limited by GMP
551	Silicon dioxide, amorphous	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
552	Calcium silicate	
553	Magnesium silicates	
554	Sodium aluminosilicate	
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), 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).

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 designation of products in which the fat content is beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[49]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[50]

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, Vol. 13.

APPENDIX.

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

1.1 Existing variants: Whole cheese cut into sectors; half cylinder; half cylinder in sectors

1.2 Flavour: Characteristic of the variety.

2. Method of manufacture

2.1 Method of coagulation: Rennet and lactic acid producing bacteria at coagulation temperature.

2.2 Fermentation procedure: Predominantly lactic acid fermentation.

2.3 Maturation procedure: Predominantly cultures of Penicillium caseicolum, Penicillium camembertii and other harmless microorganisms such as Geotrichum candidum, Brevibacterium linens, yeast, etc. The cheese may be cut into sectors before maturation.

2.4 Treatment of the coagulum: No heat treatment.

2.5 Other characteristics: Dry salting or salting in brine.

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[49] Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

PROPOSED DRAFT STANDARD FOR MOZZARELLA[51]

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 Standard for Cheese (A-6) and the Standard for Unripened Cheese Including Fresh Cheese. It is a smooth elastic cheese with a long stranded parallel-orientated fibrous protein structure without evidence of curd granules. The cheese is typically rindless, with a satin-like appearance 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 white to light cream colour.

Mozzarella with a low moisture content is a firm/semi-hard 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.

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, wheat and potato flours and starches: Notwithstanding the provisions in the Standard for Cheese (A-6), 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

Milk constituent:	Minimum content (m/m):	Maximum content (m/m):	Reference level (m/m):
Milkfat in dry matter:	[20]%	Not restricted	40% to 50%

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50 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name “coagulating enzymes” in section 4.2.2.1 of the GSLPF.

51 Comments are being sought at Step 3. The Proposed Draft Standard will be considered at Step 4 by the Committee at its 4th Session.

Dry matter: Depending on the fat in dry matter content, according to the table below.

Fat in dry matter content (m/m):	Corresponding minimum dry matter content (m/m):	
	With low moisture:	With high moisture:
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.

4. FOOD ADDITIVES

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

INS No	Name of food additive	Maximum level
	Acids	
260	Acetic acid glacial	Limited by GMP
270	Lactic acid (L-, D- and DL-)	
296	Malic acid (DL-)	
330	Citric acid	
338	Orthophosphoric acid	1 g/kg, expressed as P_2O_5
507	Hydrochloric acid	Limited by GMP
	Acidity regulators	
575	Glucono delta-lactone (GDL)	Limited by GMP
	Colours (to obtain the colour characteristics, as described in Section 2)	
100(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
	Preservatives	
200	Sorbic acid	3000 mg/kg of cheese, calculated as sorbic acid
202	Potassium sorbate	
203	Calcium sorbate	
280	Propionic acid	Limited by GMP
281	Sodium propionate	
282	Calcium propionate	
171	Titanium dioxide	

Sliced, cut, shredded or grated cheese (Surface treatment)

	Anti-caking agents (Mozzarella with low moisture content, only)	
460	Cellulose	Limited by GMP
551 552 553 554 555 556 559 560	Silicon dioxide, amorphous Calcium silicate Magnesium silicates Sodium aluminosilicate Potassium aluminosilicate Calcium aluminium silicate Aluminium silicate Potassium silicate	10 g/kg singly or in combination. Silicates calculated as silicon dioxide.
	Preservatives	
200 202 203	Sorbic acid Potassium sorbate Calcium sorbate	3000 mg/kg of cheese, calculated as sorbic acid
280 281 282 283	Propionic acid Sodium propionate Calcium propionate Potassium propionate	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), 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).

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 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 beyond the reference level but within the maxima/minima 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 Standard for Cheese (A-6) or a nutritional claim in accordance with the Guidelines for the Use of Nutritional Claims.*

*) 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.[52]

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

7.3 DECLARATION OF MILKFAT CONTENT

The milk fat content shall be declared in a manner found acceptable in the country of 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 LIST OF INGREDIENTS

Rennet or other safe and suitable coagulating enzymes of animal, plant, or microbial origin may be declared as coagulating enzymes in the list of ingredients.[53]

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, Vol. 13.

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52 Secretariat's Note: Section 4.5.2 of the GSLPF states "When a food undergoes processing in a second country which changes its nature, the country in which the processing is performed shall be considered to be the country of origin for the purposed of labelling."

53 The CCMMP may consider it more appropriate to recommend to the CCFL to include a class name "coagulating enzymes" in section 4.2.2.1 of the GSLPF.

[Determination of equivalency between “pasta filata” processing and other processing techniques: Identification of the typical structure by [method to be established].]

APPENDIX

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. Appearance characteristics

1.1 Dimensions and weights: Various

1.2 Rind: A silky skin may be present in products made from buffalo’s milk

1.3 Flavour: A mild fresh flavour. Mozzarella made from buffalo’s milk is usually more salty and presents a characteristic flavour and taste.

2. Method of manufacture

2.1 Lactic acid bacteria, where used, are predominantly constituted by Streptococcus thermophilus and/or Lactococcus spp.

2.2 The curd is not scalded in its whey at temperatures exceeding 40 °C.

2.3 Products made from buffalo’s milk shall be salted in cold brine.

Mozzarella with a low moisture content

1. Appearance characteristics

1.1 Flavour: Mild and creamy.