

codex alimentarius commission

FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD HEALTH
ORGANIZATION

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Agenda Item 4(c)

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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 STANDARD FOR DAIRY SPREADS

REVIEW OF COMMENTS AND PROPOSED DRAFT STANDARD FOR DAIRY SPREADS

(Prepared by the International Dairy Federation)

Governments and interested international organizations are invited to comment on the attached proposed draft standard for Dairy Spreads 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 Standard 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 Standard for Dairy Spreads was not discussed. The Committee agreed to establish an *Ad Hoc* working group on Creams, Dairy Spreads, and Fermented Milks chaired by Argentina (in this document referred to as the CCMMP *Ad Hoc* Working Group on Dairy Products) to consider specified principal issues relating to dairy spreads. The Committee further agreed that the International Dairy Federation (IDF) should redraft the standard on the basis of comments from the CCMMP *Ad Hoc* Working Group on Dairy Products for circulation and comment at Step 3 prior to the Committee's next session. (ALINORM 99/11, paras 84-88)

The review has been carried out on the basis of the Proposed Draft Standard tabled at the 3rd session of the Committee.

The following principles have been applied:

1. The review has been done in light of written comments submitted¹ and with the inclusion of the recommendations of the CCMMP *Ad Hoc* Working Group on Dairy Products.

¹ Government Comments to CL 1997/33

2. Each written comment submitted has been examined individually to the extent they do not fully fall under the issues considered by the CCMMMP *Ad Hoc* Working Group on Dairy Products.
3. Inputs from the CCMMMP *Ad Hoc* Working Group on Dairy Products have been inserted without any changes, however, they may have been subject to editorial amendment. Also, additional amendments resulting from the recommendations of the CCMMMP *Ad Hoc* Working Group on Dairy Products have been considered.
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 (General Standard for the Use of Dairy Terms)², item 5 (Common Labelling Provisions of Milk Product Standards)³, 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) have been incorporated.
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 different views have been expressed by governments, 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 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)

TASKS AND CONCLUSIONS OF THE CCMMMP *AD HOC* WORKING GROUP ON DAIRY PRODUCTS WITH REGARD TO DAIRY SPREADS

At the 3rd session of the CCMMMP referred the following issues for consideration to the CCMMMP *Ad Hoc* Working Group on Dairy Products Working Group:

1. whether there is a need for a Standard for Dairy Spreads, and
2. harmonization and alignment with the standard for butter and the standard for fat spreads and blended spreads.

The Chair of the CCMMMP *Ad Hoc* Working Group on Dairy Products Working Group concluded as follows:

- 1 A large majority of countries considers that the development of a Standard for Dairy Spreads is necessary.
- 2 Such a Standard should be in line with both the Standard on Fat Spreads and that on Butter.

IDF has proceeded with the review on the basis of the first conclusion. The following-up on the second conclusion is with regard to some items problematic as the standards for Butter and Fat Spreads differ with respect to their nature and approaches. Consequently, where differences occur between the two standards, choices have to be taken whether to align with one or the other.

To illustrate the consequences, this review has considered alignment with the Fat Spreads Standard to the extent possible, only aligning with the Butter Standard where this is not in conflict with the Fat Spreads Standard or where it is necessary due to dairy spreads being milk products.

It is recommended that the CCMMMP considers to which extent the Dairy Spreads Standard should be aligned with the Fat Spreads Standard and with the Butter Standard, respectively.

2 CODEX STAN 206-1999

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.

To facilitate such consideration, an overview of the choices made in this review is provided below.

Section	Title	Chosen Alignment with the Standard for		Remarks
		Butter	Fat Spreads	
2.	Description		X	Consequences for the Scope
3.1	Raw Materials	X		
3.2	Permitted Ingredients	X	X	Several ingredients added to align with the Fat Spreads Standard Vitamin additions not considered in other milk product standards
3.3	Composition		X	Further consideration is necessary in relation to the GSUDT
4.	Food Additives		X - with amendments	Whether technological justification exist should be investigated Further consideration is needed whether to restrict the list for products using the term "butter"
5.	Contaminants	X		Differs from the Fat Spreads standard
6.	Hygiene	X		Differs from the Fat Spreads standard
7.	Preamble	X		CCMMP standard text
7.1	Name of the food			
	para. 1 (name)		X	Further consideration is needed with regard to the use of the term "butter"
	para. 2 (translations)	X		
	para. 3 (nutrition claims)		X	Except for "low fat"
	para. 4 (salting)	X		
7.2	Fat Declaration	X		CCMMP standard text
7.3	Labelling of non-retail containers	X		CCMMP standard text
8	Methods of Sampling and Analysis	X		

REVIEW OF THE STANDARD

1. SCOPE

The UK and the International Dairy Federation recommended that the Scope should be modified specifically to exclude cream and cheese spreads, if the wording of the standard for dairy spreads concerning the emulsion type is changed in line with the Draft Standard for Fat Spreads and Blended Spreads.

Discussion: This review does recommend to consider changing the emulsion type (see Description below). To avoid possible overlap between standards, it is therefore necessary to exclude other emulsion milk products. This includes creams, fermented creams and processed cheese products and similar products. Since the standard for processed cheeses and processed cheese preparations is currently under review, the term should be placed in square brackets.

Recommendation no. 1: Add a second sentence to the Scope that reads: "It excludes creams, fermented creams and [processed cheese products]."

2. DESCRIPTION

The UK requested a change from "and principally in the form of an emulsion of the type water in oil" to "in the form of an emulsion, principally of water and milkfat", in line with the CCFO standard.

Discussion: To follow the conclusion of the Dairy Products Working Group, the definition of the emulsion type should align with the Draft Standard for Fat Spreads and Blended Spreads⁶, which defines the emulsion type as “principally water and edible fats and oils”.

The definition "water-in-oil" may not be appropriate since dairy spreads are mostly a mix of emulsion types. Cream, on the other hand, is a single homogenous oil-in-water emulsion.

The term "milkfat" should be used, to describe the fat.

Recommendation no. 2: Consider the adoption of the Definition: "Dairy spreads are fatty products derived exclusively from milk and products obtained from milk, with less than 80% milkfat, and in the form of an emulsion principally of water and milkfat".

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1.1 Raw Materials

No comments

3.1.2 Permitted Ingredients

- (a) **India** asked for the term "natural starch" to be replaced by "starch".

Discussion: It is agreed that this terminology should be accepted.

Recommendation no. 3: Amend "natural starch" to read "starch".

- (b) **Spain** asked for the inclusion of “lactic proteins” [milk proteins] which, in this case, would be considered as raw materials for labelling purposes.

The **UK** noted that since the technology of manufacture of dairy spreads and fat spreads is the same, the same ingredients should be permitted. In order to align with the CCFO standard, the UK requested the addition of :

Egg yolk

Sugars (i.e. any carbohydrate sweetening matter)

Mono-, di, oligo and polysaccharides (including inulin) and maltodextrins.

Discussion: This review agrees that in principle, the list of ingredients should align with that for the Draft Standard for Fat Spreads and Blended Spreads. However there is concern that some of the ingredients in the latter standard could replace milk ingredients, in which case the product would fall outside the scope of a milk product as defined in the GSUDT.

Recommendation no. 4: Consider adding the following ingredients to the list:

Edible milk proteins

Egg yolk

Mono-, di-, oligo- and polysaccharides (including inulin) and malto-dextrins.

3.3 Composition

- (a) **India** recommended that section 3.3.3 should use the plural "Dairy Spreads" instead of "Dairy Spread".

Discussion: It is agreed that this terminology should be accepted.

Recommendation no. 5: In 3.3.3, use the term "Dairy spreads".

- (b) The **Czech Republic** suggested a minimum fat content 31,0%.

France requested that, in order to take the product's special character into consideration, a fat content of between 60-62% should be adopted for products referred to as “3/4 butter”, instead of 59-61 %.

India recommended that the composition of minimum and maximum fat should be specified under Dairy Spreads.

Discussion: The CCMMMP *Ad Hoc* Working Group on Dairy Products has concluded that the Standard for Dairy Spreads should align with the Standard for Fat Spreads and Blended Spreads. If this is followed, the fat composition ranges should be those given in the 1997 draft, with the addition of a minimum milkfat content of 10%.

However the use of the term "butter" in the names of the three-quarter fat and half fat products is not consistent with the Standard for Butter, since butter is a different product from dairy spreads in respect to its definition, ingredients and food additives. Nor is the term consistent with section 4.3.3 of the GSUDT, which states that the name of a milk product may be used for a product that is modified through the withdrawal of milk constituents, provided that the limits of such compositional modifications are detailed in the standards concerned. The minimum milkfat content of butter is 80%. The names of the three-quarter and half fat products need to be considered further in relation to the Standard for Butter and the GSUDT.

Recommendation no. 6: The fat ranges for the three-quarter and half fat products should be 59-61% and 39-41% respectively. Furthermore a minimum milkfat content of 10% should be introduced.

Recommendation no. 7: The names of the three-quarter and half fat products should be placed in square brackets throughout the document, for further consideration in relation to the Standard for Butter and the GSUDT.

4. FOOD ADDITIVES

(a) **France** noted the need to align the compositional limits mentioned in section 4 (e.g. for sorbates) with the composition limits in 3.3.

Japan asked the reason for the restriction by fat % specified for No. 476, 200, 202 and 203.

Discussion: It is agreed that the sorbate cut off should be in line with the definition of the three-quarter fat product.

Recommendation no. 8: Amend the limits to <59% in each case.

(b) **Spain** The following modified starches are not considered food additives. Therefore, they should not be included in the list of these substances:

- 1400 - Dextrins, white and yellow roasted starch.
- 1401 - Starch treated with acids.
- 1402 - Starch treated with alkalis.
- 1403 - Bleached starch.
- 1405 - Starch treated with enzymes.

Spain also noted that the substance "pregelatinized starches" is not assigned a number in the International Numbering System. Its evaluation by JECFA is not known, so it should not be included in the list of this Standard.

Discussion: It is agreed that chemically modified starches are regarded as additives and should therefore be listed in section 4.

Recommendation no. 9: List the modified starches in a separate list under stabilizers.

(c) **France** asked for polyglycerol polyricinolate (476) to be authorized for products with a 41 % fat content.

India asked that the list of additives should be reduced to the extent possible. They also asked that the level of propyl gallate should be reduced to 100 ppm. They considered that the rate of 200 ppm BHT cannot be justified in products having a fat content < 80%.

Japan asked that the following substances should be listed additionally:

Sodium dehydroacetate
Potassium polyphosphate
Sodium polyphosphate

Norway proposed that each of the additives listed should be considered independently with regard to their need and technological justification for the dairy spreads in question, based on the Codex Guidelines specified in CAC/MISC 1-1989.

Poland provided a list of food additives permitted in Polish legislation.

Spain recommended that the additives should be listed by their most important technological function. Care should be taken to avoid including the same additive under different functions (even if it carries them out), since this would lead to an error, whereby it could be supposed that the doses can be combined, which is not correct. This is the case of Phosphates.

Additives with IDA numbering [ADI level] which are included in the list, should not be used at GMP dose, and the level of use should be quantified.

The use of the strong oxidation inhibitors 310, 319, 320, 321 and 389 would be justified only in dairy products to be pasteurised subsequently (those used in products that are baked or cooked).

Finally Spain noted that the additive 920 L-cysteine is a flour treating agent. Therefore, it should be removed from the list.

The **UK** provided a list of inconsistencies between the food additives proposed in the individual Codex milk standards and those permitted in UK and EC legislation (e.g. EC Directives 95/2/EC on "miscellaneous" additives, EC Directive 94/36/EC on colours).

Discussion: The CCMMMP *Ad Hoc* Working Group on Dairy Products has recommended that the Standard for Dairy Spreads should be aligned with the Standard for Butter and the Standard for Fat Spreads and Blended Spreads. This review recommends that, as far as possible, the list should be the same as for Fat Spreads and Blended Spreads as the technological need is the same. Some differences have been noted in Recommendation no. 8. It is presumed that the additives listed in the Fat Spreads Standard have been technologically justified in accordance with CAC/MISCJ-1989. However, this presumption should be subject to verification.

It is agreed that 476 polyglycerol ricinoleate, 266 sodium dehydroacetate, 452(i) potassium polyphosphate, and 452(ii) sodium polyphosphate should be permitted in any dairy spread, and that 920, L-cysteine, should be removed from the list.

It is also agreed that the antioxidants 310, 319, 320, 321 and 389 should be restricted to products intended for cooking purposes, and that a limit of 100 mg/kg should be placed on 310. A limit of 75 mg/kg can be placed on 321, consistent with the Standard for Fat Spreads and Blended Spreads.

Further development of the list may result from consideration of the Proposed Draft Standard for Fat Spreads and Blended Spreads, currently at step 3, by CCFO in 2001.

It is also important to maintain alignment with the Standard for Butter, which has a very limited list of permitted additives. Therefore consideration should be given to restricting the use of additives for products using the term "butter". However there is a technological need for other additives in these products in addition to those needed for Butter (80%) due to the lower fat content.

Recommendation no. 10: Consideration should be given to aligning of the list of permitted additives as far as possible with the Standard for Fat Spreads and Blended Spreads. Some exceptions have been noted in Recommendation no. 8 . The following further changes should also be made:

- Allow 476 with a maximum level of 5g/kg, and 452 in any dairy spread
- Remove l-cysteine from the list.

- Restrict 310, 319, 320, 321 and 389 to products intended for cooking purposes, and place limit of 75 mg/kg on 310 and 100 mg/kg on 321.

Recommendation no. 11: Consider restricting the use of additives in dairy spreads named using the term "butter". This is highlighted in the standard by adding a new section 4.1 in square brackets. The CCMMMP should discuss the principle of addressing separately additives for products using the term butter.

5. CONTAMINANTS

Poland suggested that not only lead, but that limits for cadmium, arsenic, mercury, copper and zinc should also be given.

Discussion: The CCMMMP *Ad Hoc* Working Group on Dairy Products has concluded that the standard should align with the Standard for Butter and the Standard for Fat Spreads and Blended Spreads. The latter two standards differ in respect to their provisions regarding heavy metals, but this review recommends that it would be appropriate to align with the Standard for Butter.

Recommendation no. 12: Retain the current text.

7. LABELLING

7.1 NAME OF THE FOOD

(a) The names

France suggested the following denominations:

- Three-quarters (3/4) butter
- Half-butter
- Dairy fat for spreading (dairy spreads)

New Zealand noted that is illogical and confusing to specify three different names for dairy spreads, particularly when two of the names, three-quarters fat butter and half fat butter, apply only to very narrow bands within the total range of composition. They also observed that the name "butter" applies to a product with a strictly limited list of ingredients and additives. The same term should not be used for products having a much greater range of ingredients and additives.

Norway suggested the following amended text: "The name of the food shall be as specified in Section 3.3."

IDF recommended that the first paragraph should be simplified to align with the Standard for Fat Spreads and Dairy Spreads.

Discussion: The CCMMMP should consider alignment of the wording of this paragraph with the Standard for Fat Spreads and Blended Spreads, which is consistent with the conclusion of the Dairy Products Working Group.

The word "fat" is necessary in the name of the three-quarter and half products, to indicate the attribute of the product to which the qualifiers refer.

The use of the term "butter" in the name of the three-quarter fat and half fat products, and the appropriate use of additives in these products, has been discussed above in sections 3.3 and 4. The whole terms related to "butter" should therefore be placed in square brackets, and the paragraph should also refer to section 4.

Recommendation no. 13: The paragraph should read: " The name of the food shall be Three-quarter Fat [Butter], Half Fat [Butter] or Dairy Spread in accordance with sections 3.3 and 4".

(b) Translation

Norway suggested the wording: "However, the designations should be translated into other languages in a meaningful way, and not necessarily word by word."

IDF recommended the paragraph should be modified as follows:

"The designations and any qualifying term should be translated into other languages in a meaningful and non-misleading way and not necessarily word for word".

Discussion: The wording proposed by IDF covers Norway's suggestion as well. However the words "in a meaningful way" have been deleted from other standards for milk products and should not be included.

Recommendation no. 14: Add a paragraph, "The designations and any qualifying terms should be translated into other languages in a non-misleading way and not necessarily word for word."

(c) Nutrition claims

Canada reported that it permits the term 'light/lite butter' to be used for dairy spreads with a minimum 39% milkfat content by weight and a maximum 60% milkfat content by weight. The words "reduced fat" and "low fat" are considered to be nutrient content claims by Canada and CCNFSDU and their definitions would apply accordingly with no exceptions.

France requested that the term "reduced fat" (*allégé*) can be used as a synonym for "low fat" ("à teneur réduite en matière grasse) for products whose fat content ranges between 41 and 62 %. The French wording should be as follows : the expression "low fat" or "reduced fat" may be used...." (*L'expression "à teneur réduite en matière grasse" ou "allégé" peut être utilisée...*).

Norway considered that claims concerning the fat content of the products covered by this standard may be used where appropriate, including alternatives to the terms "three quarter" and "half", in accordance with the Codex Guidelines for the Use of Nutrition Claims.

The **UK** noted that use of the term "low fat" to describe dairy spreads would contradict Codex Guidelines on nutrition claims, and recommended that the use of such nutrition claims and the terms "three quarter" and "half" should be mutually exclusive.

The **US** recommended the paragraph should be rewritten as follows:

"The term "reduced fat butter" may be used to describe dairy spreads with a fat content of >40% and ≤60% and the term "low fat butter" may be used to describe dairy spreads with a fat content of ≤ 40% provided these products meet the conditions of the Codex Guidelines for Use of Nutrition Claims. The terms reduced fat butter and low fat butter can not be used in combination with the terms "three-quarter" and "half"."

The **IDF** recommended the paragraph should be replaced by the following:

"Where Codex Guidelines for the Use of Nutrition Claims permit claims concerning the fat content of products covered by this standard, these may be used, where appropriate, and as alternatives to the terms "three quarter" and "half".

Discussion: This paragraph should align with the Standard for Fat Spreads and Blended Spreads, in accordance with the conclusion of the CCMMMP Ad Hoc Working Group on Dairy Products. However the provision for the use of the term "low fat" should not be included as it is not consistent with the Codex guidelines on nutrition claims.

Recommendation no.15: The paragraph should read: "The term "reduced fat" (or "light") may be used to describe dairy spreads with a fat content below 61%, but not together with the terms "three-quarter" and "half"."

(d) Salted and unsalted products

Norway suggested the wording, "The products may be labelled to indicate whether they are salted or unsalted according to national legislation."

The IDF recommended the wording should be similar to the Standard for Butter.

Discussion: The wording should align with the Standard for Butter, in accordance with the conclusion of the Dairy Products Working Group.

Recommendation no. 16: The paragraph should read: "The products may be labelled to indicate whether they are salted or unsalted according to national legislation."

8. METHODS OF SAMPLING AND ANALYSIS⁷

The method for fat determination is not appropriate for the whole range of fat contents of dairy spreads. A new method will therefore need to be established. IDF is beginning work on this topic.

Recommendation no. 17: Request information on a suitable method for determination of milkfat content.

PROPOSED DRAFT STANDARD FOR DAIRY SPREADS⁸

1. SCOPE

This Standard applies to dairy spreads intended for direct consumption or for further processing in conformity with section 2 of this Standard. It excludes creams, fermented creams and [processed cheese products].

2. DESCRIPTION

Dairy Spreads are fatty products derived exclusively from milk and/or products obtained from milk, with less than 80% milkfat, and in the form of an emulsion principally of water and milkfat.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 RAW MATERIALS

Milk and/or products obtained from milk.

3.2 PERMITTED INGREDIENTS

- Sodium chloride and food grade salt
- Starter cultures of harmless lactic acid and/or flavour producing bacteria
- Potable water
- Vitamins *
- Gelatine
- Starches
- Edible milk proteins
- Egg yolk
- Mono-, di-, oligo- and polysaccharides (including inulin) and malto-dextrins.

* Maximum and minimum levels for vitamins A, D and other vitamins, where appropriate, should be laid down by national legislation in accordance with the needs of each individual country including, where appropriate, the prohibition of the use of particular vitamins.

3.3 COMPOSITION

3.3.1 [Three-quarter fat butter]

Milkfat content 59% - 61%

3.3.2 [Half fat butter]

Milkfat content 39% - 41%

3.3.3 Dairy spreads

Any other product which meets the description in section 2, subject to a minimum milkfat content of 10%.

Compositional modifications of Dairy Spreads below the minimum specified above for milkfat are not considered to be in compliance with section 4.3.3 of the General Standard for the Use of Dairy Terms.

8 Comments are being requested at Step 3. This Proposed Draft will be considered by the CCMMMP at its 4th Session at Step 4.

4. FOOD ADDITIVES *

[4.1 Only those food additives listed below may be used in [three-quarter fat butter] and [half fat butter], and only within the limits specified.

To be developed.]

4.2 Only those food additives listed below may be used in dairy spreads other than [three-quarter fat butter] and [half fat butter], and only within the limits specified.

INS No.	Name of food additive	Maximum Level
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Colours

100(i)	Curcumin, or	Limited by GMP
100(ii)	Turmeric	
160a	(i) Beta-carotene	Limited by GMP
160b	Annatto extracts	10 mg/kg (calculated as total bixin or norbixin)
160e	Beta-apo-carotenal	25 mg/kg
160f	Beta-apo-8'-carotenoic acid, methyl or ethyl ester	25 mg/kg

Flavours and Flavourings

Natural flavours and their identical synthetic equivalents and other synthetic flavours, except those which are known to present a toxic hazard

Emulsifiers

322	Lecithins	Limited by GMP
432	Polyoxyethylene (20) sorbitan monolaurate	10 g/kg singly or in combination
433	Polyoxyethylene (20) sorbitan monooleate	
434	Polyoxyethylene (20) sorbitan monopalmitate	
435	Polyoxyethylene (20) sorbitan monostearate	
436	Polyoxyethylene (20) sorbitan tristearate	
471	Mono- and di-glycerides of fatty acids	Limited by GMP
472(a)	Acetic and fatty acid esters of glycerol	
472(b)	Lactic and fatty acid esters of glycerol	
472(c)	Citric and fatty acid esters of glycerol	
472(d)	Tartaric acid esters of mono- and di-glycerides of fatty acids	
472(e)	Diacetyltauric and fatty acid esters of glycerol	
472(f)	Mixed tartaric, acetic and fatty acid esters of glycerol	10 g/kg
473	Sucrose esters of fatty acids	
474	Sucroglycerides	
475	Polyglycerol esters of fatty acids	
476	Polyglycerol polyricinoleate	
477	Propylene glycol esters of fatty acids	5 g/kg
479	Thermally oxidised soya bean oil with mono- and di-glycerides of fatty acids	20 g/kg
481(i)	Sodium stearoyl lactylate	5 g/kg
481(ii)	Sodium oleyl lactylate	
482	Calcium lactylates	

491	Sorbitan monostearate		
492	Sorbitan tristearate		
493	Sorbitan monolaurate		
494	Sorbitan monooleate		
495	Sorbitan monopalmitate		
Preservatives			
200	Sorbic acid		
202	Potassium sorbate		
203	Calcium sorbate		2000 mg/kg singly or in combination (as sorbic acid) for fat contents < 59% and 1000 mg/kg singly or in combination (as sorbic acid) for fat contents > 59%
210	Benzoic acid		
211	Sodium benzoate		
212	Potassium benzoate		1000 mg/kg singly or in combination (as benzoic acid)
213	Calcium benzoate		
Stabilizers/thickeners			
338	Orthophosphoric acid		
339	Orthophosphate		
450a	Disodium diphosphate		2g/kg singly or in combination with other phosphates, expressed as anhydrous substances
452(i)	Sodium polyphosphate		
452(ii)	Potassium polyphosphate		
400	Alginic acid		
401	Sodium alginate		
402	Potassium alginate		Limited by GMP
403	Ammonium alginate		
404	Calcium alginate		
405	Propylene glycol alginate		3 g/kg
406	Agar		
407	Carrageenan and its Na, K and NH ₄ salts (including furcellaran)		
410	Carob bean gum		
412	Guar Gum		
413	Tragacanth gum		
414	Gum arabic		
415	Xanthan gum		
418	Gellan gum		
422	Glycerol		Limited by GMP
440	Pectins		
461	Methyl cellulose		
463	Hydroxypropyl cellulose		
464	Hydroxypropyl methyl cellulose		
465	Methyl ethyl cellulose		
466	Sodium carboxymethyl cellulose		
500(iii)	Sodium sesquicarbonate		
460	Cellulose		
460 (i)	Microcrystalline cellulose		

Modified starches as follows:

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

Acidity regulators

260	Acetic acid	
261	Potassium acetate	
262	Sodium acetate	
263	Calcium acetate	
270	Lactic acid (L-, D- and DL-)	
325	Sodium lactate	
326	Potassium lactate	
327	Calcium lactate	Limited by GMP
330	Citric acid	
331(i)	Sodium dihydrogen citrate	
331(ii)	Disodium monohydrogen citrate	
331(iii)	Trisodium citrate	
332	Potassium citrate	
333	Calcium citrate	
334	Tartaric acid	
335(i)	(i) Monosodium tartrate	
335(ii)	(ii) Disodium tartrate	5 g/kg singly or in combination
336	Potassium tartrate	
337	Sodium tartrate	
339	Sodium phosphates	
340	Potassium phosphates	2 g/kg singly or in combination with other phosphates, expressed as anhydrous substances
341	Calcium orthophosphate	
338	Orthophosphoric acid	
500(i)	Sodium carbonate	
500(ii)	Sodium hydrogen carbonate	
524	Sodium hydroxide	Limited by GMP
526	Calcium hydroxide	
575	Glucono delta lactone	

Antioxidants

300	Ascorbic acid (L-)	
301	Sodium ascorbate	
302	Calcium ascorbate	
304	Ascorbyl palmitate	
305	Ascorbyl stearate	Limited by GMP
306	Mixed tocopherols concentrate	
307	Alpha-tocopherol	
308	Synthetic gamma-tocopherol	
309	Synthetic delta-tocopherol	
310	Propyl gallate	100 mg/kg
319	Tertiary butyl hydroquinone (TBHQ)	
320	Butylated hydroxyanisole (BHA)	200 mg/kg singly or in combination
389	Dilauryl thiodipropionate	
321	Butylated hydroxytoluene (BHT)	75 mg/kg

Any combination of 310, 320 and 321 may be used providing limits for individual compounds are not exceeded. 310, 319, 320, 321 and 389 may be used only in dairy spreads intended for cooking purposes.

Antioxidant synergists

384	Isopropyl citrates	
	Monoglyceride citrate	200 mg/kg singly or in combination
385	Calcium disodium EDTA	75 mg/kg

Anti-foaming agents

900a	Polydimethylsiloxane	10 mg/kg
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Flavour enhancers

508	Potassium chloride	
509	Calcium chloride	
510	Ammonium chloride	Limited by GMP
511	Magnesium chloride	
620	Glutamic acid	
621	Monosodium glutamate	
622	Monopotassium glutamate	10 g/kg singly or in combination
623	Calcium diglutamate	(as glutamic acid)
624	Monoammonium glutamate	
625	Magnesium diglutamate	
626	Guanylic acid	
627	Sodium guanylate	500 mg/kg singly or in combination
628	Potassium guanylate	(expressed as guanylic acid)
629	Calcium guanylate	
630	Inosinic acid	
631	Disodium inosinate	
632	Dipotassium inosinate	Limited by GMP
633	Calcium inosinate	
634	Calcium 5'-ribonucleotides	
635	Disodium 5' -ribonucleotides	
959	Neohesperidine dihydrochalcone	5 mg/kg

Miscellaneous

290	Carbon dioxide	Limited by GMP
420	Sorbitol and sorbitol syrup	Limited by GMP
421	Mannitol	Limited by GMP
551	Silicon dioxide amorphous	500 mg/kg
938	Argon	Limited by GMP
941	Nitrogen	Limited by GMP
942	Nitrous oxide	Limited by GMP
953	Isomalt	Limited by GMP
965	Maltitol	Limited by GMP
966	Lactitol	Limited by GMP
967	Xylitol	Limited by GMP

5. CONTAMINANTS

5.1 HEAVY METALS

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

In particular, the following limit applies:

Heavy metal	Maximum level
Lead	0.05 mg/kg

5.2 PESTICIDE RESIDUES

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

6. HYGIENE

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3 - 1997), and other relevant Codes 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 of the food shall be [three-quarter fat butter], [half fat butter] or Dairy Spread in accordance with sections 3.3 and 4.

The designations and any qualifying terms should be translated into other languages in a non-misleading way and not necessarily word for word.

The term "reduced fat" (or "light") may be used to describe dairy spreads with a fat content below 61%, but not together with the terms "three-quarter" and "half".

The products may be labelled to indicate whether they are salted or unsalted according to national legislation.

7.2 DECLARATION OF MILKFAT CONTENT

If the consumer would be misled by the omission, the milkfat content shall be declared in a manner found acceptable in the country of sale to the final consumer, either (i) as a percentage by mass, or (ii) in grams per serving as quantified on the label, provided that the number of servings is stated.

7.3 LABELLING OF NON-RETAIL CONTAINERS

Information required in Section 7 of this Standard and Sections 4.1 to 4.8 of the General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, 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 and address of the manufacturer or packer shall appear on the container. However, lot identification and the name and address of the manufacturer or packer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

8. METHODS OF SAMPLING AND ANALYSIS

See *Codex Alimentarius*, Volume 13.