



JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-Sixth Session

Hong Kong, China, 17-21 March 2014

DESCRIPTORS AND FOOD ADDITIVE PROVISIONS OF FOOD CATEGORY 01.1.1 “MILK AND BUTTER MILK (PLAIN)” AND ITS SUB-CATEGORIES AND FOOD CATEGORY 01.1.2 “DAIRY-BASED DRINKS, FLAVOURED AND/OR FERMENTED (E.G. CHOCOLATE MILK, COCOA, EGGNOG, DRINKING YOGHURT, WHEY-BASED DRINK)”

Prepared by an electronic Working Group led by New Zealand with comments received from Austria, India, Indonesia, Japan, Malaysia, Russia, Spain, USA, International Dairy Federation (IDF) and World Association of Seaweed Processors (Marinalg International)

1. The 45th Session of the Codex Committee on Food Additives (CCFA) identified inconsistencies between the descriptions of some milk categories and provisions for the use of food additives in these food categories under the Codex General Standard for Food Additives (GSFA). The Committee agreed¹ to establish an electronic Working Group chaired by New Zealand to:

- (i) Consider the effect of the descriptors of food categories 01.1.1 (“Milk and buttermilk (plain)”), 01.1.1.1 (“Milk (plain)”), 01.1.1.2 (“Buttermilk (plain)”) and 01.1.2 (“Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drink)”) on the technologically justified use of food additives in such foods, where applicable;
- (ii) Prepare recommendations to address descriptors which do not allow the use of additives in foods where the use of additives in such foods are technologically justified; and
- (iii) Prepare recommendations on the horizontal approach to the use of emulsifiers, stabilizers and thickeners in these food categories.

Background

2. During the discussion of the physical Working Group (pWG) to the 45th CCFA regarding the provisions for food additives with the technological function of “emulsifier, stabilizer, thickener” (EST) listed in Appendix 3 of CX/FA 13/45/7, an Observer noted that there are inconsistencies between the descriptions of foods covered by food category 01.1.1 (Milk and buttermilk (plain)) and its subcategories 01.1.1.1 (Milk (plain)) and 01.1.1.2 (Buttermilk (plain)) and the technologically justified use of food additives in these foods. These inconsistencies may cause problems when considering provisions for food additives that are needed for the production of reconstituted, recombined, and ultra-high temperature (UHT) products. The pWG made no decisions regarding the use of Table 3 food additives with the function of EST in food categories 01.1.1, 01.1.1.1 and 01.1.1.2.

3. The food category system is based on product descriptors of food stuffs as marketed, unless otherwise stated (Preamble to the General Standard for Food Additives (CODEX STAN 192-1995. Section 5).

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

Milk is the normal mammary secretion of milking animals obtained from one or more milkings without either addition to it or extraction from it, intended for consumption as liquid milk or for further processing.

Milk product is a product obtained by processing of milk, which may contain food additives, and other ingredients functionally necessary for the processing.

A **reconstituted milk product** is a product resulting from the addition of water to the dried or concentrated form of the product in the amount necessary to re-establish the appropriate water to solids ratio.

A **recombined milk product** is a product resulting from the combining of milkfat and milk-solids-non-fat in their preserved forms with or without the addition of water to achieve the appropriate milk product composition.

Issues to be addressed

- i) Conflicts between the definition of “milk” in the Codex General Standard for the Use of Dairy Terms (CODEX STAN 206-1999) and the descriptor of food category 01.1.1.1 (Milk (plain))¹.
 - a. The definition of “milk” in CODEX STAN 206-1999 does not allow for extraction of ingredients from milk. However, many of the foods listed in the descriptor of food category 01.1.1.1 (Milk (plain)) are the result of the extraction of ingredients, mainly fat, from milk (i.e. skim, part-skim, and low-fat milk). If the prohibition of extraction of ingredients from milk in CODEX STAN 206-1999 is applied to food category 01.1.1.1 (Milk (plain)), most of the foods listed in the descriptor would not be covered by this food category.
 - b. The definition of “milk” in CODEX STAN 206-1999 does not allow for the use of food additives in milk.
 - i. Many of the processes listed in the descriptor of food category 01.1.1.1 (Milk (plain)) require the addition of stabilizers into the final food (i.e. heat-treatment by pasteurization, ultra-high temperature (UHT) treatment or sterilization). For example, the broader food category 01.1.1.1 (Milk and buttermilk (plain)) contains an adopted provision for Phosphates with Note 227 (“For use in sterilized and UHT treated milks only.”) Additionally, many Codex Members add vitamins and/or minerals to, or may use packaging gases in, these foods. If the prohibition of addition of additives to milk in CODEX STAN 206-1999 is applied to food category 01.1.1.1 (Milk (plain)), most of the processes listed in the descriptor would not be covered by this food category, nor would any of these additives be allowed.
 - ii. In accordance with the hierarchical structure of the food category system as described in Principle 5a of the Preamble to the GSFA (see Attachment 1), additives recognized for use in the broader parent categories 01.1 (Milk and dairy-based drinks) or 01.1.1 (Milk and buttermilk (plain)) would automatically be accepted for use in subcategory 01.1.1.1 (Milk (plain)). There currently are food additive provisions in the step process for all three of these food categories. If the prohibition of addition of additives to milk in CODEX STAN 206-1999 is applied to food category 01.1.1.1 (Milk (plain)), all of these provisions should be discontinued or revoked.
- ii) The current food category system and descriptors do not address:
 - a. Reconstituted plain milk: Reconstituted plain milk is listed in the descriptor for the parent food category 01.1.1 (Milk and buttermilk (plain))², but is not covered by either of the relevant subcategories. The production of reconstituted milk first involves the extraction of water from milk, followed by reconstitution with water at a later stage. According to CODEX STAN 206-1999 “milk” cannot have anything extracted from or added to it. Therefore, reconstituted milk does not fit into subcategory 01.1.1.1 (Milk (plain)). Additionally, reconstituted plain milk is not buttermilk, so it would not fit into subcategory 01.1.1.2 (Buttermilk (plain))³.
 - b. Recombined plain milk and other plain (non-flavoured) milk products: Under the current food category system of the GSFA, recombined plain milk and other plain (non-flavoured) milk products would fit into food category 01.1 (Milk and dairy-based drinks). However, these foods would not fit into any of the subcategories of this parent food category.
 - i. The production of recombined plain milk involves the addition of dairy ingredients and as such this food would not meet the definition of “milk” in CODEX STAN 206-1999 and therefore does not fit into subcategory 01.1.1.1 (Milk (plain)). Additionally, recombined plain milk is not buttermilk, so it would not fit into subcategory 01.1.1.2 (Buttermilk (plain)). However, since recombined plain milk does not contain flavours, it also would not fit into subcategory 01.1.2

¹ The descriptor of food category 01.1.1.1 (Milk (plain)) reads as follows: “Fluid milk obtained from milking animals (e.g. cows, sheep, goats, buffalo). Milk is usually heat-treated by pasteurization, ultra-high temperature (UHT) treatment or sterilization.13 Includes skim, part-skim, low-fat and whole milk.”

² The descriptor of food category 01.1.1 (Milk and buttermilk (plain)) reads as follows: “Includes plain fluid products only. Includes reconstituted plain milk that contains only dairy ingredients.”

³ CODEX STAN 206-1999 does not define “buttermilk”. The descriptor for food category 01.1.1.2 (Buttermilk (plain)) defines buttermilk as “the nearly milkfat-free fluid remaining from the butter-making process (i.e. the churning fermented or non-fermented milk and cream). Buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk).”

(Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)).

- ii. Other plain (non-flavoured) milk products such as lactose reduced milk and milk product with modified organoleptic properties would not fit into subcategory 01.1.1.1 (Milk (plain)) as they have ingredients added to or extracted from them, These products would not fit into subcategory 01.1.1.2 (Buttermilk (plain)) as they are not buttermilk, and would not fit into subcategory 01.1.2 (Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)) as they are not flavoured.

5. It should be noted that none of the products mentioned in Point 2 are covered by Codex commodity standards.

6. To assist with the discussion to address the issues, Attachments 1 - 3 are excerpts from previous work carried out by CCFA:

- Attachment 1 Excerpts from CODEX STAN 192-1995, Codex General Standard for Food Additives – Food Category System.
- Attachment 2 Excerpts from CCFA45 CRD2
- Attachment 3 Excerpts from FA/46 INF/01 – Table 2 Food Categories or Individual Food Items in Which Food Additives are Permitted (In the Step Process)

Principles used when considering the issues

- i. Food categories should be aligned with dairy products currently found in international trade as much as possible.
- ii. “Reconstituted milk” in the GSFA should be amended to “reconstituted milk, recombined milk”.
- iii. Food additives, where permitted, can be added to a “plain” product in the categories under consideration.
- iv. Vitamins and minerals that are mandatory additions in national legislation can be added to a “plain” milk product.
- v. Vitamins and minerals (that are voluntary additions) can be added to a “plain” milk product.

Options for addressing the issues:

Option 1

7. Retain the current food category structure of the GSFA and provide specific notes to identify the use of EST that do not align with the prohibition of the use of the food additives in ‘milk’, as defined by the Codex *General Standard for the Use of Dairy Terms* (CODEX STAN 206-1999).

8. This option tends to undermine the relationship between the GSFA and corresponding commodity standards. Further, the use of specific notes would need to be extended in the future to include functional classes other than EST, as appropriate. This approach also does not resolve the issues identified regarding the correct placement of certain dairy products in the food category system

Option 2

9. Revise the descriptors of the current food categories to define where the unflavoured milk products would be placed.

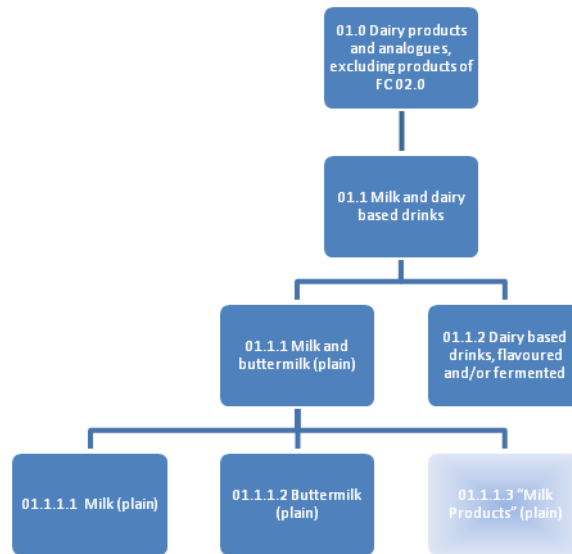
10. The revision of the descriptors could have consequential effects on the current provisions in the GSFA – either adopted or in the step process – in the affected food categories.

Option 3

11. Revise food category 01.1 (Milk and dairy-based drinks) and its subcategories to define where unflavoured milk products would be placed, taking into account technological justifications of EST where possible. Revise the descriptors of the current subcategories and create a new subcategory where alignment is not possible. See Figures 1 and 2 for potential revisions. The lighter shaded boxes indicate the changes to the current food category system.

12. The revision of the descriptors and creation of a new subcategory could have consequential effects on the current provisions in the GSFA – either adopted or in the step process – in the affected food categories.

Figure 1 Suggested new subcategory

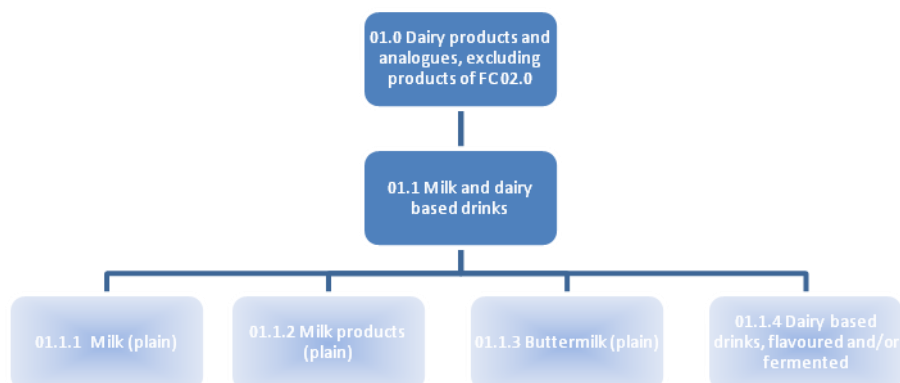


01.1.1.3 “Milk Products” (plain)

Includes all plain fluid milk, excluding products of food category 01.1.1.1. Includes recombined milk product, reconstituted milk product, unflavoured vitamin and mineral fortified milk product, lactose reduced milk, milk product with modified organoleptic properties

Figure 2 Suggested restructured subcategories

(deleting current 01.1.1 Milk and buttermilk plain as no products sit in this category – reallocated as shown below)



01.1.1 Milk (plain)

Fluid milk obtained from milking animals (e.g., cows, sheep, goats, buffalo). Milk is usually heat-treated by pasteurization, ~~ultra-high temperature (UHT) treatment or sterilization~~. Includes skim, part-skim, low-fat and whole milk.

01.1.2 Milk products (plain)

Includes all plain fluid milk, excluding products of food category 01.1.1. Includes plain recombined milk product, plain reconstituted milk product, unflavoured vitamin and mineral fortified milk product, lactose reduced milk, plain milk product with modified organoleptic properties

01.1.3 Buttermilk (plain)

Buttermilk is the nearly milkfat-free fluid remaining from the butter-making process (i.e., the churning fermented or non-fermented milk and cream). Buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk). Buttermilk may be pasteurized or sterilized.

~~01.1.2~~ 01.1.4 Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks):

Includes all ready-to-drink flavoured and aromatized milk-based fluid beverages and their mixes, excluding mixes for cocoa (cocoa-sugar mixtures, category 05.1.1). Examples include: hot chocolate, chocolate malt drinks, strawberry-flavoured yoghurt drink, lactic acid bacteria drinks, and *lassi* (liquid obtained by whipping curd from the lactic acid fermentation of milk, and mixing with sugar or synthetic sweetener).

Preferred Option

13. From the options discussed by the eWG all participants preferred Option 3 as the most appropriate way to address the concerns. However there was no clear preference for Figure 1 or Figure 2.

14. The USA, who are the chair of the physical Working Group (pWG) on the GSFA, in their comments outlined the process that would need to be followed in order to progress either Option 2 or Option 3.

Option 2

15. The revision of the descriptors to accommodate certain milk products is more likely to be substantive than editorial. Substantive revision of the food category system requires a project document proposing new work (Codex Procedural Manual, 21st Ed. (2013), Section II: Elaboration of Codex Standards, Procedures for the Elaboration of Codex Standards and Related Texts, pp.28-30). Although the eWG is currently considering the use of EST in these products, the descriptors would need to be revised with the view that the use of additives with other functional classes would need to be taken into account in the future, as appropriate. The revision of the descriptors could have consequential effects on the current provisions in the GSFA – either adopted or in the step process – in the affected food categories.

Option 3

16. Although the eWG is currently considering the use of EST, food category 01.1 would need to be revised with the view that the use of additives with other functional classes would need to be taken into account in the future, as appropriate. Similar to Option 2, Option 3 would require a project document proposing new work. Additionally, the creation of a new subcategory or restructuring the current subcategories would require that CCFA follow its previous practice to discontinue or revoke all of the provisions in the affected food categories and subcategories, and to repopulate them according to the revised categorization (see e.g. REP 12/FA, para. 112).

17. This was not taken into consideration by eWG participants when giving their preferred option

Recommendation

18. The eWG recommends that the 46th CCFA continues work on Option 3.

19. As the food categories discussed above have not been finalised the eWG has not prepared recommendations on the horizontal approach to the use of emulsifiers, stabilizers and thickeners.

20. Note that this agenda item will form part of the discussion of the pWG on the GSFA.

Attachment 1**EXCERPT FROM CODEX STAN 192-1995 Codex General Standard for Food Additives****5. FOOD CATEGORY SYSTEM**

The food category system is a tool for assigning food additive uses in this Standard. The food category system applies to all foodstuffs.

The food category descriptors are not to be legal product designations nor are they intended for labelling purposes.

The food category system is based on the following principles:

- a) The food category system is hierarchical, meaning that when an additive is recognized for use in a general category, it is recognized for use in all its sub-categories, unless otherwise stated. Similarly, when an additive is recognized for use in a sub-category, its use is recognized in any further sub-categories or individual foodstuffs mentioned in a sub-category.
- b) The food category system is based on product descriptors of foodstuffs as marketed, unless otherwise stated.
- c) The food category system takes into consideration the carry-over principle. By doing so, the food category system does not need to specifically mention compound foodstuffs (e.g., prepare meals, such as pizza, because they may contain, *pro rata*, all the additives endorsed for use in their components), unless the compound foodstuff needs an additive that is not endorsed for use in any of its components.
- d) The food category system is used to simplify the reporting of food additive uses for assembling and constructing this Standard

ANNEX B**FOOD CATEGORY SYSTEM****PART I: Food Category System**

01.0 Dairy products and analogues, excluding products of food category 02.0

01.1 Milk and dairy-based drinks

01.1.1 Milk and buttermilk (plain)

01.1.1.1 Milk (plain)

01.1.1.2 Buttermilk (plain)

01.1.2 Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)

PART II: Food Category Descriptors

01.0 Dairy products and analogues, excluding products of food category 02.0

Includes all types of dairy products that are derived from the milk of any milking animal (e.g., cow, sheep, goat, buffalo). In this category, a "plain" product is one that is not flavoured, nor contains fruit, vegetables or other non-dairy ingredients, nor is mixed with other non-dairy ingredients, unless permitted by relevant standards. Analogues are products in which milk fat has been partially or wholly replaced by vegetable fats or oils.

01.1 Milk and dairy-based drinks:

Includes all plain and flavoured fluid milk products based on skim, part-skim, low-fat and whole milk.

01.1.1 Milk and buttermilk (plain):

Includes plain fluid products only. Includes reconstituted plain milk that contains only dairy ingredients.

01.1.1.1 Milk (plain):

Fluid milk obtained from milking animals (e.g., cows, sheep, goats, buffalo). Milk is usually heat-treated by pasteurization, ultra-high temperature (UHT) treatment or sterilization. Includes skim, part-skim, low-fat and whole milk.

01.1.1.2 Buttermilk (plain):

Buttermilk is the nearly milkfat-free fluid remaining from the butter-making process (i.e., the churning fermented or non-fermented milk and cream). Buttermilk is also produced by fermentation of fluid skim milk, either by spontaneous souring by the action of lactic acid-forming or aroma-forming bacteria, or by inoculation of heated milk with pure bacterial cultures (cultured buttermilk). Buttermilk may be pasteurized or sterilized.

01.1.2 Dairy-based drinks, flavoured and/or fermented (e.g. chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks):

Includes all ready-to-drink flavoured and aromatized milk-based fluid beverages and their mixes, excluding mixes for cocoa (cocoa-sugar mixtures, category 05.1.1). Examples include: hot chocolate, chocolate malt drinks, strawberry-flavoured yoghurt drink, lactic acid bacteria drinks, and *lassi* (liquid obtained by whipping curd from the lactic acid fermentation of milk, and mixing with sugar or synthetic sweetener) .

Attachment 2**Excerpts from CCFA45 CRD2****APPENDIX IV: DETERMINATION OF TECHNOLOGICAL JUSTIFICATION FOR THE USE OF ACIDITY REGULATORS IN FOOD CATEGORIES CONTAINED IN THE ANNEX TO TABLE 3**

Food Category Number	Food Category Description	Recommendation of physical working group
01.1.1	Milk and buttermilk (plain)	The use of acidity regulators is not justified in this food category on a general basis.
01.1.1.1	Milk (plain)	The use of acidity regulators is not justified in this food category on a general basis.
01.1.1.2	Buttermilk (plain)	The use of acidity regulators is justified in this food category on a general basis.

APPENDIX V: DETERMINATION OF TECHNOLOGICAL JUSTIFICATION FOR THE USE OF EMUSIFIERS STABILIZERS THICKENERS IN FOOD CATEGORIES CONTAINED IN THE ANNEX TO TABLES 1 & 2

Food Category Number	Food Category Description	Recommendation of physical working group
01.1.1	Milk and buttermilk (plain)	No decision
01.1.1.1	Milk (plain)	No decision
01.1.1.2	Buttermilk (plain)	The use of emulsifiers, stabilizers and thickeners is not justified in this food category on a general basis.

Food categories shaded in gray are listed in the Annex to Table 3 in CODEX STAN 192-1995. Food categories that are not shaded are covered by the Annex to Table 3 by means of the hierarchical nature of the GSFA food category system.

Attachment 3**DRAFT, PROPOSED DRAFT, AND ADOPTED PROVISIONS IN GSFA DAIRY FOOD CATEGORIES 01.1, 01.1.1, 01.1.1.1, 01.1.1.2, AND 01.1.2**

Food Category No. 01.1 (Milk and dairy-based drinks)					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
TOCOPHEROLS	307a, b, c	200		7	

Food Category No. 01.1.1 (Milk and buttermilk (plain))					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
AGAR	406	4000		7	
CARBON DIOXIDE	290	GMP	59	7	
GELLAN GUM	418	GMP		7	
GUAR GUM	412	6000		7	
KARAYA GUM	416	200		7	
KONJAC FLOUR	425	GMP		7	
MICROCRYSTALLINE CELLULOSE (CELLULOSE GEL)	460(i)	GMP		7	
MONO- AND DI-GLYCERIDES OF FATTY ACIDS	471	10000		7	
NITROGEN	941	GMP	59	7	
NITROUS OXIDE	942	GMP		7	
PECTINS	440	GMP		7	
PHOSPHATES	338; 339(i)-(iii); 340(i)-(iii); 341(i)-(iii); 342(i),(ii); 343(i)-(iii); 450(i)-(iii),(v)-(vii); 451(i),(ii); 452(i)-(v); 542	1500	33, 227	Adopted	2012
POLYDEXTROSES	1200	GMP		7	
PROCESSED EUCHEUMA SEAWEED (PES)	407a	GMP		4	
TARA GUM	417	GMP		7	
TRISODIUM CITRATE	331(iii)	GMP		7	

Food Category No. 01.1.1.1 (Milk (plain))					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
CAROB BEAN GUM	410	GMP		7	
CARRAGEENAN	407	10000		7	
SODIUM ALGINATE	401	GMP		4	
SODIUM CARBOXYMETHYL CELLULOSE (CELLULOSE GUM)	466	GMP		4	
XANTHAN GUM	415	GMP		7	

Food Category No. 01.1.1.2 (Buttermilk (plain))					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
ACETIC AND FATTY ACID ESTERS OF GLYCEROL	472a	GMP		7	
ACETYLATED DISTARCH PHOSPHATE	1414	GMP		7	
ALGINIC ACID	400	6000		7	
CALCIUM ALGINATE	404	6000		7	
CAROB BEAN GUM	410	5000		7	
CARRAGEENAN	407	6000		7	
CITRIC AND FATTY ACID ESTERS OF GLYCEROL	472c	GMP		7	

Food Category No. 01.1.1.2 (Buttermilk (plain))					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
GLYCEROL	422	GMP		7	
GUM ARABIC (ACACIA GUM)	414	GMP		7	
HYDROXYPROPYL CELLULOSE	463	GMP		7	
HYDROXYPROPYL METHYL CELLULOSE	464	GMP		7	
HYDROXYPROPYL STARCH	1440	GMP		7	
LACTIC AND FATTY ACID ESTERS OF GLYCEROL	472b	GMP		7	
LECITHIN	322(i)	GMP		7	
MAGNESIUM CARBONATE	504(i)	GMP	261	Adopted	2013
MAGNESIUM CHLORIDE	511	GMP		7	
MAGNESIUM HYDROXIDE	528	GMP	261	Adopted	2013
MAGNESIUM HYDROXIDE CARBONATE	504(ii)	GMP	261	Adopted	2013
METHYL CELLULOSE	461	GMP		7	
METHYL ETHYL CELLULOSE	465	GMP		7	
OXIDIZED STARCH	1404	GMP		7	
POTASSIUM ALGINATE	402	6000		7	
POTASSIUM DIHYDROGEN CITRATE	332(i)	GMP	261	Adopted	2013
POTASSIUM LACTATE	326	GMP	261	Adopted	2013
POWDERED CELLULOSE	460(ii)	GMP		7	
PROPYLENE GLYCOL ALGINATE	405	3000		7	
SALTS OF MYRISTIC, PALMITIC AND STEARIC ACIDS WITH AMMONIA, CALCIUM, POTASSIUM AND SODIUM	470(i)	GMP		7	
SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM	470(ii)	GMP		7	
SODIUM ALGINATE	401	6000		7	
SODIUM CARBOXYMETHYL CELLULOSE (CELLULOSE GUM)	466	2000		7	
SODIUM DIHYDROGEN CITRATE	331(i)	GMP	261	Adopted	2013
SODIUM LACTATE	325	GMP	261	Adopted	2013
TRAGACANTH GUM	413	GMP		7	
TRIPOTASSIUM CITRATE	332(ii)	GMP	261	Adopted	2013
TRISODIUM CITRATE	331(iii)	GMP	261	Adopted	2013
XANTHAN GUM	415	3000		7	

Food Category No. 01.1.2 (Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks))					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
ACESULFAME POTASSIUM	950	350	161 & 188	Adopted	2007
ALITAME	956	100	161	Adopted	2007
ALLURA RED AC	129	300	52 & 161	Adopted	2009
AMARANTH	123	300	52	7	
ANNATTO EXTRACTS, BIXIN-BASED	160b(i)	20	8 & 52	4	
ANNATTO EXTRACTS, NORBIXIN-BASED	160b(ii)	20	52 & 185	4	
ASPARTAME	951	600	161 & 191	Adopted	2007
ASPARTAME-ACESULFAME SALT	962	350	113 & 161	Adopted	2009
AZORUBINE (CARMOISINE)	122	150	52	7	
BRILLIANT BLACK (BLACK PN)	151	150	52	7	
BRILLIANT BLUE FCF	133	150	52	Adopted	2008
BROWN HT	155	150	52	7	
CANTHAXANTHIN	161g	15	52 & 170	Adopted	2011

Food Category No. 01.1.2 (Dairy-based drinks, flavoured and/or fermented (e.g., chocolate milk, cocoa, eggnog, drinking yoghurt, whey-based drinks)					
Additive	INS	Max Level (mg/kg)	Notes	Step	Year
CARAMEL II - SULFITE CARAMEL	150b	50000	52	4	
CARAMEL III - AMMONIA CARAMEL	150c	2000	52	Adopted	2009
CARAMEL IV - SULFITE AMMONIA CARAMEL	150d	2000	52	Adopted	2011
CARMINES	120	150	52	Adopted	2008
CAROTENES, BETA-, VEGETABLE	160a(ii)	1000	52	Adopted	2008
CAROTENOIDS	160a(i),a(iii),e,f	150	52	Adopted	2009
CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES	141(i),(ii)	50	52 & 190	Adopted	2009
CURCUMIN	100(i)	150	52	7	
CYCLAMATES	952(i), (ii), (iv)	250	17 & 161	Adopted	2007
DIACETYLTARTARIC AND FATTY ACID ESTERS OF GLYCEROL	472e	5000		Adopted	2005
DIOCTYL SODIUM SULFOSUCCINATE	480	25	19	7	
ETHYL MALTOL	637	200		7	
FAST GREEN FCF	143	100	52	Adopted	2008
GRAPE SKIN EXTRACT	163(ii)	150	52 & 181	Adopted	2009
INDIGOTINE (INDIGO CARMINE)	132	300	52	Adopted	2009
IRON OXIDES	172(i)-(iii)	20	52	Adopted	2008
LUTEIN FROM TAGETES ERECTA	161b(i)	100	52	4	
MALTOL	636	200		7	
NEOTAME	961	20	161	Adopted	2007
NISIN	234	12.5	28 & 233	3	
PHOSPHATES	338; 339(i)-(iii); 340(i)-(iii); 341(i)-(iii); 342(i),(ii); 343(i)-(iii); 450(i)-(iii),(v)-(vii); 451(i),(ii); 452(i)-(v); 542	1320	33	Adopted	2012
POLYGLYCEROL ESTERS OF FATTY ACIDS	475	5000		7	
POLYSORBATES	432-436	3000		Adopted	2008
PONCEAU 4R (COCHINEAL RED A)	124	150	52 & 161	Adopted	2008
PROPYLENE GLYCOL ALGINATE	405	10000		4	
PROPYLENE GLYCOL ESTERS OF FATTY ACIDS	477	5000		Adopted	2001
QUINOLINE YELLOW	104	150	52	7	
RIBOFLAVINS	101(i),(ii)	300	52	Adopted	2008
SACCHARINS	954(i)-(iv)	80	161	Adopted	2007
SODIUM ALUMINOSILICATE	554	60	6 & 253	Adopted	2013
SORBATES	200-203	1000	42 & 220	Adopted	2012
SORBITAN ESTERS OF FATTY ACIDS	491-495	5000		7	
STEAROYL LACTYLATES	481(i), 482(i)	5000		7	
STEVIOL GLYCOSIDES	960	200	26 & 201	Adopted	2011
SUCRALOSE (TRICHLOROGALACTOSUCROSE)	955	300	161	Adopted	2007
SUCROGLYCERIDES	474	5000		Adopted	2009
SUCROSE ESTERS OF FATTY ACIDS	473	5000		7	
SUNSET YELLOW FCF	110	300	52	Adopted	2008
TARTRAZINE	102	300	52	7	
ZEAXANTHIN, SYNTHETIC	161h(i)	100	52	4	

Notes to the General Standard for Food Additives

- Note 6: As aluminium.
- Note 8: As bixin.
- Note 17: As cyclamic acid.
- Note 19: Used in cocoa fat; use level on ready-to-eat basis.
- Note 26: As steviol equivalents.

- Note 28: ADI conversion: if a typical preparation contains 0.025 µg/U, then the ADI of 33 000 U/kg bw becomes: $[(33\ 000\ \text{U/kg bw}) \times (0.025\ \mu\text{g/U}) \times (1\ \text{mg}/1\ 000\ \mu\text{g})] = 0.825\ \text{mg/kg bw}$
- Note 33: As phosphorus.
- Note 42: As sorbic acid.
- Note 52: Excluding chocolate milk.
- Note 59: Use as packaging gas.
- Note 113: Use level reported as acesulfame potassium equivalents (the reported maximum level can be converted to an aspartame-acesulfame salt basis by dividing by 0.44). Combined use of aspartame-acesulfame salt with individual acesulfame potassium or aspartame should not exceed the individual maximum levels for acesulfame potassium or aspartame (the reported maximum level can be converted to aspartame equivalents by dividing by 0.68).
- Note 161: Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.
- Note 170: Excluding products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003).
- Note 181: Expressed as anthocyanin.
- Note 185: As norbixin.
- Note 188: Not to exceed the maximum use level for acesulfame potassium (INS 950) singly or in combination with aspartame-acesulfame salt (INS 962).
- Note 190: Except for use in fermented milk drinks at 500 mg/kg.
- Note 191: Not to exceed the maximum use level for aspartame (INS 951) singly or in combination with aspartame-acesulfame salt (INS 962).
- Note 201: For use in flavoured products only.
- Note 220: For use in flavoured products heat treated after fermentation only.
- Note 227: For use in sterilized and UHT treated milks only.
- Note 233: As nisin.
- Note 253: For use in dry mix hot chocolate only.
- Note 261: For use in heat-treated buttermilk only.

ⁱ REP 13/FA para77