codex alimentarius commission E

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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**Agenda Item 5** **CX/MMP 08/8/7**
**August 2007**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX COMMITTEE ON MILK AND MILK PRODUCTS**

**Eighth Session**
**Queenstown, New Zealand, 4-8 February 2008**

# ADDITIVE LISTINGS FOR THE CODEX STANDARD FOR FERMENTED MILKS (FLAVOURED FERMENTED MILKS)

(Prepared by the United States of America)

Governments and international organizations wishing to submit comments on the Specific Food Additives Listing for the Codex Standard for Fermented Milk Products are invited to do so **no later than 30 October 2007** to: Codex Committee on Milk and Milk Products, New Zealand Food Safety Authority, 68 - 86 Jervois Quay, P.O. Box 2835, Wellington, New Zealand (Facsimile: +64 4 8942530 or E-mail: Audrey.Taulalo@nzfsa.govt.nz), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00153 Rome, Italy (Fax No + 39 06 57054593; E-mail: codex@fao.org).

## INTRODUCTION

1. The 7th Session of the Codex Committee on Milk and Milk Products (CCMMP) agreed that the United States would revise the food additive provisions (of the flavoured fermented milks), as contained in CX/MMP 06/7/10 on the basis of the written comments,[1] for circulation, comments and consideration by the next Session of the Committee. It further agreed that the revised list of food additive provisions should explicitly list each food additive within a food additive functional class (i.e. stabilizer, thickener); should be consistent with the food additive provisions in the plain fermented milk categories; and should clearly identify the food additives that are currently adopted in Table 3 of the Codex *General Standard for Food Additives* (GSFA).

2. The 7th CCMMP also agreed to forward to the Codex Committee on Food Additives and Contaminants (CCFAC), the lists of food additive provisions for fermented milks (plain) and heat-treated fermented milks (plain) for endorsement.[2]

3. The 38th CCFAC endorsed all the food additive provisions (see Annex I) and reassigned all food additives forwarded for use as "acids" to the category "acidity regulators". In addition, the 38th CCFAC requested CCMMP to consider whether microcrystalline cellulose (INS 460i) and powdered cellulose (INS 460ii) should also be listed as acceptable stabilizers and thickeners for use in these two categories of fermented milks.[3]

[1] CX/MMP 06/7/10 Add. 1 (Comments from: Argentina, Australia, Japan, Lithuania, New Zealand and International Dairy Federation); CX/MMP 06/7/10 Add. 2 (Comments from: Colombia, European Community, India, Kenya, Thailand and United States of America); CRD 6 (Comments from: Kenya and India) and CRD 11 (Comments from: European Community).
[2] ALINORM 06/29/11, paras 147-150.
[3] ALINORM 06/29/12, para. 45 and Appendix IV.

4. The 30th Codex Alimentarius Commission (CAC) amended the food additives sub-section of the "Format for Codex Commodity Standards" section of the Procedural Manual.[4] The Commission also amended the food additives sub-section of "Relations between Commodity Committees and General Committees" section[5]. Accordingly, commodity committees should examine the General Standard for Food Additives with a view toward incorporating a reference to the General Standard. For information purposes, Annex II contains a list of food additives by functional classes that have been adopted by the Commission in Table 3 of the GSFA for use in foods generally, including the two categories of flavoured fermented milks. The Committee may wish to consider the information in Annex II and elaborate a cross-reference to the GSFA, for consistency with the Codex rules and procedures, rather than establishing lists of additives and their maximum use levels in the Codex Standard for Fermented Milks.

5. The following introductory text is contained in the food additive section of the Codex Standard for Fermented Milks (CODEX STAN 243-2003).

> **"4 Food Additives**
>
> Only those additive classes indicated in the table below may be used in the product categories specified. Within each additive class, and where permitted according to the table, only those individual additives listed may be used and only within the limits specified.
>
> In accordance with Section 4.1 of the Preamble to the General Standard for Food Additives (CODEX STAN 192-1995), additional additives may be present in the flavoured fermented milks as a result of carry-over from non-dairy ingredients.

| Additive Functional Class | Fermented Milks | | Fermented Milks Heat-Treated After Fermentation | |
|---|---|---|---|---|
| | Plain | Flavoured | Plain | Flavoured |
| Acidity Regulators | - | X | X | X |
| Acids | - | X | X | X |
| Colours | - | X | - | X |
| Emulsifiers | - | X | - | X |
| Flavour Enhancers | - | X | - | X |
| Packing Gases | - | X | X | X |
| Preservatives | - | - | - | X |
| Stabilizers | X[1] | X | X | X |
| Sweeteners | - | X | - | X |
| Thickeners | X[1] | X | X | X |

> X = The use of additives belonging to the class is technologically justified. In the case of flavoured products the additives are technologically justified in the dairy portion.
> - = The use of additives belonging to the class is not technologically justified
> [1] = Use is restricted to reconstitution and recombination and if permitted by national legislation in the country of sale to the final consumer. "

1. Only those additives that have been evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and assigned an INS number by the Codex Alimentarius Commission have been considered for inclusion in this standard.

**FERMENTED MILKS**

**Recommendation 1**

2. The CCMMP should agree on the inclusion of microcrystalline cellulose (INS 460(i)) and powdered cellulose (INS 460(ii)) in the list of acceptable stabilizers and thickeners for fermented milks with limitations of good manufacturing practice (GMP). Annex I contains a complete list of all stabilizers and thickeners endorsed by the 38th CCFAC for use in fermented milks.

[4] ALINORM 07/30/REP para. 29 and Appendix III.
[5] ALINORM 07/30/REP para. 38 and Appendix III.

**HEAT-TREATED FERMENTED MILKS**

**Recommendation 2**

3. The CCMMP should agree on the inclusion of microcrystalline cellulose (INS 460(i)) and powdered cellulose (INS 460(ii)) in the list of acceptable stabilizers and thickeners for heat-treated fermented milks with limitations of GMP. Annex I contains a complete list of all acidity regulators, packing gases, stabilizers and thickeners endorsed by the 38th CCFAC for use in heat-treated fermented milks.

**FERMENTED MILKS (FLAVOURED)**

4. Recommendation 3 (below) contains a table of proposed food additives and their acceptable maximum use level for use in flavoured fermented milks. The table contains information on whether the food additive has been adopted by the CAC in Table 3 of the GSFA, and in some cases requests additional information that the CCMMP needs to reach a consensus decision. If the additional information is not provided to the 8th Session of the CCMMP, the Committee may wish to discontinue further consideration of these food additives.

5. It is noted that the table below does not contain any listing of colors, emulsifiers or flavour enhancers, all of which the CCMMP has previously identified as food additive functional classes that are justified for use in flavoured fermented milks (see paragraph 5). The Committee may wish to consider including the colors, emulsifiers and flavour enhancers listed as acceptable for use in heat-treated, flavoured fermented milks.

**Recommendation 3**

6. The CCMMP should agree on the following food additives for use in flavoured fermented milks.

| **Fermented Milks (Flavoured)** | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[6]** | **Additional Information Requested** |
| **Acidity Regulators** | | | | |
| 260 | Acetic Acid, Glacial | GMP | Y | |
| 261 | Potassium Acetates | GMP | Y | |
| 270 | Lactic Acid | GMP | Y | |
| 296 | Malic Acid | GMP | Y | |
| 297 | Fumaric Acid | GMP | Y | |
| 300 | Ascorbic Acid | GMP | Y | |
| 325 | Sodium Lactate | GMP | Y | |
| 326 | Potassium Lactate | GMP | Y | |
| 327 | Calcium Lactate | GMP | Y | |
| 330 | Citric Acid | GMP | Y | |
| 331(i) | Sodium Dihydrogen Citrate | GMP | Y | |
| 331(iii) | Trisodium Citrate | GMP | Y | |
| 332(i) | Potassium Dihydrogen Citrate | GMP | Y | |
| 332(ii) | Tripotassium Citrate | GMP | Y | |
| 334 | Tartaric Acid (L(+) | 2,000 mg/kg as tartaric acid | | |
| 335(i) | Monosodium Tartrate | | | |
| 335(ii | Disodium Tartrate | | | |
| 336(i) | Monopotassium Tartrate | | | |
| 336(ii) | Dipotassium Tartrate | | | |
| 337 | Potassium Sodium Tartrate | | | |
| 355 | Adipic Acid | 1500 mg/kg, as adipic acid | | |
| 356 | Sodium Adipate | | | |
| 357 | Potassium Adipate | | | |
| 359 | Ammonium Adipate | | | |
| 500(i) | Sodium Carbonate | GMP | Y | |
| 500(ii) | Sodium Hydrogen Carbonate | GMP | Y | |
| 501(i) | Potassium Carbonate | GMP | Y | |
| 504(i) | Magnesium Carbonate | GMP | Y | |
| 504(ii) | Magnesium Hydrogen Carbonate | GMP | Y | |
| 507 | Hydrochloric Acid | GMP | Y | |
| 524 | Sodium Hydroxide | GMP | Y | |

[6] Y = Yes indicates that the food additive is included in Table 3 of the Codex General Standard for Food Additives and has been adopted by the Codex Commission for use in foods generally, including fermented milks (flavoured).

| Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[6]** | **Additional Information Requested** |
| 526 | Calcium Hydroxide | GMP | Y | |
| 527 | Ammonium Hydroxide | GMP | Y | |
| 528 | Magnesium Hydroxide | GMP | Y | |
| 529 | Calcium Oxide | GMP | Y | |
| 575 | Glucono Delta-Lactone | GMP | Y | |
| 576 | Sodium Gluconate | GMP | Y | |
| | | | | |
| **Packing Gases** | | | | |
| 290 | Carbon Dioxide | GMP | Y | |
| 941 | Nitrogen | GMP | Y | |
| | | | | |
| **Stabilizers and Thickeners** | | | | |
| 170i | Calcium Carbonate | GMP | Y | |
| 339(i) | Monosodium Orthophosphate | 970 mg/kg, singly or in combination, as phosphorus | | |
| 339(ii) | Disodium Orthophosphate | | | |
| 339(iii) | Trisodium Orthophosphate | | | |
| 340(i) | Monopotassium Orthophosphate | | | |
| 340(ii) | Dipotassium Orthophosphate | | | |
| 340(iii) | Tripotassium Orthophosphate | | | |
| 341(i) | Monocalcium Orthophosphate | | | |
| 341(ii) | Dicalcium Orthophosphate | | | |
| 341(iii) | Tricalcium Orthophosphate | | | |
| 342(i) | Monoammonium Orthophosphate | | | |
| 342(ii) | Diammonium Orthophosphate | | | |
| 343(ii) | Dimagnesium Orthophosphate | | | |
| 343(iii) | Trimagnesium Orthophosphate | | | |
| 450(i) | Disodium Diphosphate | | | |
| 450(iii) | Tetrasodium Diphosphate | | | |
| 450(v) | Tetrapotassium Diphosphate | | | |
| 450(vi) | Dicalcium Diphosphate | | | |
| 451(i) | Pentasodium Triphosphate | | | |
| 451(ii) | Pentapotassium Triphosphate | | | |
| 452(i) | Sodium Polyphosphate | | | |
| 452(ii) | Potassium Polyphosphate | | | |
| 452(iv) | Calcium Polyphosphate | | | |
| 452(v) | Ammonium Polyphosphate | | | |
| 400 | Alginic Acid | GMP, Singly or in combination | Y | |
| 401 | Sodium Alginate | | Y | |
| 402 | Potassium Alginate | | Y | |
| 403 | Ammonium Alginate | | Y | |
| 404 | Calcium Alginate | | Y | |
| 406 | Agar | GMP | Y | |
| 407 | Carrageenan and its Na, K, $NH_4$, Ca and Mg salts (including furcelleran) | GMP | Y | Justification for whether a numeric ML of 5000 mg/kg is necessary. |
| 407a | Processed Eucheuma Seaweed | GMP | Y | |
| 410 | Carob Bean Gum | GMP | Y | |
| 412 | Guar Gum | GMP | Y | |
| 413 | Tragacanth Gum | GMP | Y | |
| 414 | Gum Arabic | GMP | Y | |
| 415 | Xanthan Gum | GMP | Y | |
| 416 | Karaya Gum | GMP | Y | |
| 417 | Tara Gum | GMP | Y | |
| 418 | Gellan Gum | GMP | Y | |
| 425 | Konjac Flour | GMP | Y | |
| 440 | Pectins | GMP | Y | |
| **460(i)** | **Microcrystalline Cellulose[7]** | GMP | Y | |
| **460(ii)** | **Powdered Cellulose** | GMP | Y | |
| 461 | Methyl Cellulose | GMP | Y | |
| 463 | Hydroxypropyl Cellulose | GMP | Y | |
| 464 | Hydroxypropyl Methyl Cellulose | GMP | Y | |

[7] CCMMP should consider if 460i and 460ii should be included per the recommendation of the 38th CCFAC.

| Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[6]** | **Additional Information Requested** |
| 465 | Methyl Ethyl Cellulose | GMP | Y | |
| 466 | Sodium Carboxymethyl Cellulose | GMP | Y | |
| 470 | Salts of Oleic Acid (Ca, K, Na) | GMP | Y | |
| 471 | Mono- and Di- glycerides | GMP | Y | |
| 472a | Acetic and Fatty Acid Esters of Glycerol | GMP | Y | |
| 472b | Lactic and Fatty Acid Esters of Glycerol | GMP | Y | |
| 472c | Citric and Fatty Acid Esters of Glycerol | GMP | Y | |
| 508 | Potassium Chloride | GMP | Y | |
| 509 | Calcium Chloride | GMP | Y | |
| 1200 | Polydextrose | GMP | Y | |
| 1400 | Dextrins, Roasted Starch | GMP | Y | |
| 1401 | Acid Treated Starch | GMP | Y | |
| 1402 | Alkaline Treated Starch | GMP | Y | |
| 1403 | Bleached Starch | GMP | Y | |
| 1404 | Oxidized Starch | GMP | Y | |
| 1405 | Enzyme Treated Starch | GMP | Y | |
| 1410 | Mono Starch Phosphate | GMP | Y | |
| 1412 | Distarch Phosphate | GMP | Y | |
| 1413 | Phosphated Distarch Phosphate | GMP | Y | |
| 1414 | Acetylated Distarch Phosphate | GMP | Y | |
| 1420 | Starch Acetate | GMP | Y | |
| 1422 | Acetylated Distarch Adipate | GMP | Y | |
| 1440 | Hydroxypropyl Starch | GMP | Y | |
| 1442 | Hydroxypropyl Distarch Phosphate | GMP | Y | |
| 1450 | Starch Sodium Octenyl Succinate | GMP | Y | |
| 1451 | Acetylated Oxidized Starch | GMP | Y | |
| | | | | |
| **Sweeteners[8]** | | | | |
| 420 | Sorbitol and Sorbitol Syrup | GMP | Y | |
| 950 | Acesulfame Potassium | 1,000 mg/kg[9] | | Justification for this ML and why 500 mg/kg is not adequate. |
| 951 | Aspartame | 3,000 mg/kg[10] | | Justification for this ML and why an ML of 600 mg/kg or 1000 mg/kg is not adequate. |
| 952 | Cyclamates | 250 mg/kg[11] | | |
| 954 | Saccharin | 100 mg/kg[12] | | Justification for this ML, why 200 mg/kg is not adequate. |
| 955 | Sucralose | 400 mg/kg[13] | | Justification for this ML, why 300 mg/kg is not adequate. |
| 956 | Alitame | 100 mg/kg[14] | | |
| 961 | Neotame | GMP[15] | | Proposal for a numeric ML. |
| 962 | Aspartame-Acesulfame | 1,100 mg/kg | | |
| 966 | Lactitol | GMP | Y | |

[8] The use of sweeteners is limited to milk-and milk derivative-based drinks energy reduced or with no added sugar.
[9] The 30th CAC adopted an ML of 350 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[10] The 30th CAC adopted an ML of 1000 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[11] The 30th CAC adopted an ML of 250 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[12] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[13] The 30th CAC adopted an ML of 400 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[14] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar.
[15] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt). with no limitation on whether the food is energy reduced or contains no added sugar.

**Recommendation 4**

7. The Committee may wish to simplify this list of food additives by explicitly listing only those food additives and their maximum use levels that have not been adopted by the Codex Alimentarius Commission in Table 3 of the GSFA and replacing the "Table 3 food additives" with the following text:

8. "Acidity regulators, packing gases, stabilizers, and thickeners used in accordance with Table 3 of the General Standard for Food Additives are acceptable for use in foods conforming to flavoured fermented milks described in this standard."

**HEAT-TREATED FERMENTED MILKS (FLAVORED)**

9. Recommendation 3 (below) contains a table of proposed food additives and their acceptable maximum use level for use in heat-treated, flavored fermented milks. The table contains information on whether the food additive has been adopted by the CAC in Table 3 of the GSFA, and in some cases requests additional information that the CCMMP needs to reach a consensus decision. If the requested information is not provided to the 8th Session of the CCMMP, the Committee may wish to discontinue further consideration of these food additives.

**Recommendation 5**

10. The CCMMP should agree on the following food additives for use in flavoured, heat-treated fermented milks.

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| **Acidity Regulators** | | | | |
| 260 | Acetic Acid, Glacial | GMP | Y | |
| 261 | Potassium Acetates | GMP | Y | |
| 270 | Lactic Acid (L-) | GMP | Y | |
| 296 | Malic Acid | GMP | Y | |
| 297 | Fumaric Acid | GMP | Y | |
| 300 | Ascorbic Acid | GMP | Y | |
| 325 | Sodium Lactate | GMP | Y | |
| 326 | Potassium Lactate | GMP | Y | |
| 327 | Calcium Lactate | GMP | Y | |
| 330 | Citric Acid | GMP | Y | |
| 331i | Sodium Dihydrogen Citrate | GMP | Y | |
| 331(iii) | Trisodium Citrate | GMP | Y | |
| 332(i) | Potassium Dihydrogen Citrate | GMP | Y | |
| 332(ii) | Tripotassium Citrate | GMP | Y | |
| 334 | Tartaric Acid (L(+) | 2,000 mg/kg as tartaric acid | | |
| 335(i) | Monosodium Tartrate | | | |
| 335(ii | Disodium Tartrate | | | |
| 336(i) | Monopotassium Tartrate | | | |
| 336(ii) | Dipotassium Tartrate | | | |
| 337 | Potassium Sodium Tartrate | | | |
| 355 | Adipic Acid | 1500 mg/kg, as adipic acid | | |
| 356 | Sodium Adipate | | | |
| 357 | Potassium Adipate | | | |
| 359 | Ammonium Adipate | | | |
| 500(i) | Sodium Carbonate | GMP | Y | |
| 500(ii) | Sodium Hydrogen Carbonate | GMP | Y | |
| 501(i) | Potassium Carbonate | GMP | Y | |
| 504(i) | Magnesium Carbonate | GMP | Y | |
| 504(ii) | Magnesium Hydrogen Carbonate | GMP | Y | |
| 507 | Hydrochloric Acid | GMP | Y | |
| 524 | Sodium Hydroxide | GMP | Y | |
| 526 | Calcium Hydroxide | GMP | Y | |
| 527 | Ammonium Hydroxide | GMP | Y | |
| 528 | Magnesium Hydroxide | GMP | Y | |

[16] Y = Yes. The inclusion of the food additive in Table 3 of the Codex General Standard for Food Additives has been adopted by the Codex Commission for use in foods generally, including heat-treated fermented milks (flavoured).

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| 529 | Calcium Oxide | GMP | Y | |
| 575 | Glucono Delta-Lactone | GMP | Y | |
| 576 | Sodium Gluconate | GMP | Y | |
| | | | | |
| **Colours** | | | | |
| 100i | Curcumin | 100 mg/kg | | Justification for a higher level at 150 mg/kg |
| 101(i) | Riboflavin | GMP | | Proposal for numeric ML[17] |
| 101(ii) | Riboflavin 5'-Phosphate, Sodium | | | |
| 102 | Tartrazine | 300 mg/kg | | |
| 104 | Quinoline Yellow | 150 mg/kg | | |
| 110 | Sunset Yellow FCF | 300 mg/kg | | |
| 120 | Carmines | 150 mg/kg | | Justification for use as a colour |
| 122 | Azorubine | 150 mg/kg | | |
| 124 | Ponceau 4R | 150 mg/kg | | |
| 127 | Erythrosine | 300 mg/kg | | |
| 128 | Red 2G | 30 mg/kg | | |
| 129 | Allura Red AC | 300 mg/kg | | |
| 132 | Indigotine | 100 mg/kg | | |
| 133 | Brilliant Blue FCF | 150 mg/kg | | |
| 141(i) | Chlorophylls, Copper Complexes | 500 mg/kg | | |
| 141(ii) | Chlorophyllins, Copper Complexes, Na and K Salts | | | |
| 143 | Fast Green FCF | 100 mg/kg | | |
| 150b | Caramel Class II | 150 mg/kg[18] | | |
| 150c | Caramel Class III | 2,000 mg/kg[19] | | Justification for use of these colors at significantly higher MLs than for INS 150b |
| 150d | Caramel Class IV | 2,000 mg/kg[20] | | |
| 151 | Brilliant Black PN | 150 mg/kg | | |
| 155 | Brown HT | 150 mg/kg | | |
| 160a(i) | Beta-Carotene (Synthetic) | 100 mg/kg | | |
| 160e | Beta-Apo-8'-Carotenal | | | |
| 160f | Beta-Apo-8'Carotenoic Acid, Methyl or Ethyl Ester | | | |
| 160a(ii) | Carotenes, Vegetable | 600 mg/kg | | |
| 160b | Annatto Extracts | 100 mg/kg | | Clarification of the basis of the maximum use level on either bixin (160b(i)) or norbixin (160b(ii)) basis |
| 160d | Lycopene | 500 mg/kg | | |
| 161b(i) | Lutein from *Tagetes erecta* | GMP | | Proposal for numeric ML[21] |
| 162 | Beet Red | GMP | Y | |
| 163ii | Grape Skin Extract | 100 mg/kg | | |
| 172(i) | Iron Oxide, Black | GMP | | Proposal for numeric ML[22] |
| 172(ii) | Iron Oxide, Red | | | |
| 172(iii) | Iron Oxide, Yellow | | | |
| | | | | |
| **Emulsifier** | | | | |
| 322 | Lecithins | GMP | Y | |
| 432 | Polyoxyethylene (20) Sorbitan | 3,000 mg/kg | | Justification for the use of |

[17] The 28th CAC adopted an acceptable maximum level of 300 mg/kg for Rivoflavins (INS 101(i) and 101(ii)) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[18] The GSFA contains a proposed draft (Step 4) acceptable maximum level of 50,000 mg/kg for Caramel Colour II (INS 150b) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[19] The 23rd CAC adopted an acceptable maximum level of 2000 mg/kg for Caramel Colour III (INS 150c) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[20] The 23rd CAC adopted an acceptable maximum level of 2000 mg/kg for Caramel Colour IV (INS 150d) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[21] The GSFA contains a proposed draft (Step 4) ML of 150 mg/kg for Lutein from *Tagetes erecta* (161b(i)) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[22] The 28th CAC adopted an acceptable maximum level of 100 mg/kg for Iron Oxides (INS 172(i-iii)) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| | Monolaurate | | | polysorbates as emulsifiers in fermented milks. |
| 433 | Polyoxyethylene (20) Sorbitan Monooleate | | | |
| 434 | Polyoxyethylene (20) Sorbitan Monopalmitate | | | |
| 435 | Polyoxyethylene (20) Sorbitan | | | |
| 436 | Polyoxyethylene (20) Sorbitan | | | |
| 472e | Diacetyltartaric and Fatty Acid Esters of Glycerol | 10,000 mg/kg | | |
| 473 | Sucrose Esters of Fatty Acids | 5,000 mg/kg | | |
| 474 | Sucroglycerides | 5,000 mg/kg | | |
| 475 | Polyglycerol Esters of Fatty Acids | 2,000 mg/kg | | Justification for establishing an ML of 10,000 mg/kg |
| 477 | Propylene Glycol Esters Of Fatty Acids | 5,000 mg/kg | | |
| 481(i) | Sodium Stearoyl Lactylate | 10,000 mg/kg | | |
| 482(i) | Calcium Stearoyl Lactylate | | | |
| 491 | Sorbitan Monostearate | 5,000 mg/kg | | |
| 492 | Sorbitan Tristearate | | | |
| 493 | Sorbitan Monolaurate | | | |
| 494 | Sorbitan Monooleate | | | |
| 495 | Sorbitan Monopalmitate | | | |
| 900a | Polydimethylsiloxane | 50 mg/kg | | |
| | | | | |
| **Flavour Enhancers** | | | | |
| 636 | Maltol | GMP | | Proposal for a numeric ML[23] |
| 637 | Ethyl Maltol | GMP | | Proposal for a numeric ML[24] |
| | | | | |
| **Packing Gases** | | | | |
| 290 | Carbon Dioxide | GMP | Y | |
| 941 | Nitrogen | GMP | Y | |
| | | | | |
| **Preservatives** | | | | |
| 200 | Sorbic Acid | 1000 mg/kg as sorbic acid | | |
| 201 | Sodium Sorbate | | | |
| 202 | Potassium Sorbate | | | |
| 203 | Calcium Sorbate | | | |
| 210 | Benzoic Acid | 300 mg/kg as benzoic acid | | |
| 211 | Sodium Benzoate | | | |
| 212 | Potassium Benzoate | | | |
| 213 | Calcium Benzoate | | | |
| 214 | Ethyl p-Hydroxybenzoate[25] | 120 mg/kg as p-hydroxybenzoate | | |
| 218 | Methyl p-Hydroxybenzoate | | | |
| 220 | Sulphur Dioxide | 100 mg/kg | | |
| 221 | Sodium Sulphite | | | |
| 222 | Sodium Hydrogen Sulphite | | | |
| 223 | Sodium Metabisulphite | | | |
| 224 | Potassium Metabisulphite | | | |
| 225 | Potassium Sulphite | | | |
| 227 | Calcium Hydrogen Sulphite | | | |
| 228 | Potassium Bisulphite | | | |
| 539 | Sodium Thiosulphate | | | |
| 234 | Nisin | 500 mg/kg | | |
| 260 | Acetic Acid | GMP | Y | |
| 262(i) | Sodium Acetate | GMP | Y | |

[23] The GSFA contains a draft (Step 7) ML of 200 mg/kg for Maltol (INS 636) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[24] The GSFA contains a draft (Step 7) ML of 200 mg/kg for Ethyl Maltol (INS 637) in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[25] Propyl p-Hydroxybenzoate (INS 216) is not included because the Joint FAO/WHO Expert Committee on Food Additives withdrew its ADI.

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| 280 | Propionic Acid | GMP | Y | |
| 281 | Sodium Propionate | GMP | Y | |
| 282 | Calcium Propionate | GMP | Y | |
| 283 | Potassium Propionate | GMP | Y | |
| 307b | Tocopherols Concentrate, Mixed | GMP | | |
| 307a | Alpha - Tocopherol | GMP | | |
| | | | | |
| **Stabilizers and Thickeners** | | | | |
| 170(i) | Calcium Carbonate | GMP | Y | |
| 339(i) | Monosodium Orthophosphate | 970 mg/kg, singly or in combination, as phosphorus | | |
| 339(ii) | Disodium Orthophosphate | | | |
| 339(iii) | Trisodium Orthophosphate | | | |
| 340(i) | Monopotassium Orthophosphate | | | |
| 340(ii) | Dipotassium Orthophosphate | | | |
| 340(iii) | Tripotassium Orthophosphate | | | |
| 341(i) | Monocalcium Orthophosphate | | | |
| 341(ii) | Dicalcium Orthophosphate | | | |
| 341(iii) | Tricalcium Orthophosphate | | | |
| 342(i) | Monoammonium Orthophosphate | | | |
| 342(ii) | Diammonium Orthophosphate | | | |
| 343(ii) | Dimagnesium Orthophosphate | | | |
| 343(iii) | Trimagnesium Orthophosphate | | | |
| 450(i) | Disodium Diphosphate | | | |
| 450(iii) | Tetrasodium Diphosphate | | | |
| 450(v) | Tetrapotassium Diphosphate | | | |
| 450(vi) | Dicalcium Diphosphate | | | |
| 451(i) | Pentasodium Triphosphate | | | |
| 451(ii) | Pentapotassium Triphosphate | | | |
| 452(i) | Sodium Polyphosphate | | | |
| 452(ii) | Potassium Polyphosphate | | | |
| 452(iv) | Calcium Polyphosphate | | | |
| 452(v) | Ammonium Polyphosphate | | | |
| 400 | Alginic Acid | GMP, Singly or in combination | Y | |
| 401 | Sodium Alginate | | Y | |
| 402 | Potassium Alginate | | Y | |
| 403 | Ammonium Alginate | | Y | |
| 404 | Calcium Alginate | | Y | |
| 406 | Agar | GMP | Y | |
| 407 | Carrageenan and its Na, K, $NH_4$, Ca and Mg salts (including furcelleran) | GMP | Y | Justification for whether a numeric ML of 5000 mg/kg is necessary. |
| 407a | Processed Eucheuma Seaweed | GMP | Y | |
| 410 | Carob Bean Gum | GMP | Y | |
| 412 | Guar Gum | GMP | Y | |
| 413 | Tragacanth Gum | GMP | Y | |
| 414 | Gum Arabic | GMP | Y | |
| 415 | Xanthan Gum | GMP | Y | |
| 416 | Karaya Gum | GMP | Y | |
| 417 | Tara Gum | GMP | Y | |
| 418 | Gellan Gum | GMP | Y | |
| 425 | Konjac Flour | GMP | Y | |
| 440 | Pectins | GMP | Y | |
| 459 | Beta-Cyclodextrin | 5 mg/kg | | |
| **460(i)** | **Microcrystalline Cellulose[26]** | GMP | Y | |
| **460(ii)** | **Powdered Cellulose** | GMP | Y | |
| 461 | Methyl Cellulose | GMP | Y | |
| 463 | Hydroxypropyl Cellulose | GMP | Y | |
| 464 | Hydroxypropyl Methyl Cellulose | GMP | Y | |
| 465 | Methyl Ethyl Cellulose | GMP | Y | |

[26] CCMMP should consider if 460i and 460ii should be included per the recommendation of the 38th CCFAC.

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| 466 | Sodium Carboxymethyl Cellulose | GMP | Y | |
| 470 | Salts of Oleic Acid (Ca, K, Na) | GMP | Y | |
| 471 | Mono- and Di- glycerides | GMP | Y | |
| 472a | Acetic and Fatty Acid Esters of Glycerol | GMP | Y | |
| 472b | Lactic and Fatty Acid Esters of Glycerol | GMP | Y | |
| 472c | Citric and Fatty Acid Esters of Glycerol | GMP | Y | |
| 508 | Potassium Chloride | GMP | Y | |
| 509 | Calcium Chloride | GMP | Y | |
| 1200 | Polydextrose | GMP | Y | |
| 1400 | Dextrins, Roasted Starch | GMP | Y | |
| 1401 | Acid Treated Starch | GMP | Y | |
| 1402 | Alkaline Treated Starch | GMP | Y | |
| 1403 | Bleached Starch | GMP | Y | |
| 1404 | Oxidized Starch | GMP | Y | |
| 1405 | Enzyme Treated Starch | GMP | Y | |
| 1410 | Mono Starch Phosphate | GMP | Y | |
| 1412 | Distarch Phosphate | GMP | Y | |
| 1413 | Phosphated Distarch Phosphate | GMP | Y | |
| 1414 | Acetylated Distarch Phosphate | GMP | Y | |
| 1420 | Starch Acetate | GMP | Y | |
| 1422 | Acetylated Distarch Adipate | GMP | Y | |
| 1440 | Hydroxypropyl Starch | GMP | Y | |
| 1442 | Hydroxypropyl Distarch Phosphate | GMP | Y | |
| 1450 | Starch Sodium Octenyl Succinate | GMP | Y | |
| 1451 | Acetylated Oxidized Starch | GMP | Y | |
| | | | | |
| **Sweeteners[27]** | | | | |
| 420 | Sorbitol and Sorbitol Syrup | GMP | Y | |
| 950 | Acesulfame Potassium | 1,000 mg/kg[28] | | Justification for this ML and why 500 mg/kg is not adequate |
| 951 | Aspartame | 3,000 mg/kg[29] | | Justification for this ML and why an ML of 600 mg/kg or 1000 mg/kg is not adequate. |
| 952 | Cyclamates | 250 mg/kg[30] | | |
| 954 | Saccharin | 100 mg/kg[31] | | Justification for this ML, why 200 mg/kg is not adequate. |
| 955 | Sucralose | 400 mg/kg[32] | | Justification for this ML, why 300 mg/kg is not adequate. |
| 956 | Alitame | 100 mg/kg[33] | | |
| 961 | Neotame | GMP[34] | | Proposal for a numeric ML. |
| 962 | Aspartame-Acesulfame | 1,100 mg/kg | | |

[27] The use of sweeteners is limited to milk-and milk derivative-based drinks energy reduced or with no added sugar.
[28] The 30th CAC adopted an ML of 350 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar..
[29] The 30th CAC adopted an ML of 1000 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar..
[30] The 30th CAC adopted an ML of 250 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar..
[31] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt) with no limitation on whether the food is energy reduced or contains no added sugar..
[32] The 30th CAC adopted an ML of 400 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[33] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).
[34] The 30th CAC adopted an ML of 100 mg/kg in GSFA food category 01.7 (Dairy-based desserts (e.g., pudding, fruit or flavoured yoghurt).

| Heat-Treated Fermented Milks (Flavoured) | | | | |
|---|---|---|---|---|
| **INS #** | **Substance** | **ML** | **GSFA Table 3[16]** | **Additional Information Requested** |
| 966 | Lactitol | GMP | Y | |

**Recommendation 6**

11. The Committee may wish to simplify this list of food additives by explicitly listing only those food additives and their maximum use levels that have not been adopted by the Codex Alimentarius Commission in Table 3 of the GSFA and replacing the "Table 3 food additives" with the following text:

12. "Acidity regulators, colours, emulsifiers, flavour enhancers, packing gases, preservatives, stabilizers, sweeteners and thickeners used in accordance with Table 3 of the General Standard for Food Additives are acceptable for use in foods conforming to flavoured, heat-treated fermented milks described in this standard."

**Annex I**

The following food additives have been endorsed by the 38th Codex Committee on Food Additives and Contaminants in fermented milks (Plain) and Heat-treated fermented milks (Plain).

| FERMENTED MILKS (PLAIN) | | |
|---|---|---|
| **INS No.** | **Name of Additive** | **Maximum Level** |
| **Stabilizers and Thickeners** | | |
| 331(iii) | Trisodium Citrate | Limited to GMP |
| 334 | Tartaric Acid (L(+)-) | Limited to GMP |
| 335(i) | Monosodium Tartrate | Limited to GMP |
| 335(ii) | Disodium Tartrate | Limited to GMP |
| 336(i) | Monopotassium Tartrate | Limited to GMP |
| 336(ii) | Dipotassium Tartrate | Limited to GMP |
| 337 | Potassium Sodium Tartrate | Limited to GMP |
| 339(i) | Monosodium Orthophosphate | 970 mg/kg, singly or in combination, as phosphorus |
| 339(ii) | Disodium Orthophosphate | |
| 339(iii) | Trisodium Orthophosphate | |
| 340(i) | Monopotassium Orthophosphate | |
| 340(ii) | Dipotassium Orthophosphate | |
| 340(iii) | Tripotassium Orthophosphate | |
| 341(i) | Monocalcium Orthophosphate | |
| 341(ii) | Dicalcium Orthophosphate | |
| 341(iii) | Tricalcium Orthophosphate | |
| 342(i) | Monoammonium Orthophosphate | |
| 342(ii) | Diammonium Orthophosphate | |
| 343(ii) | Dimagnesium Orthophosphate | |
| 343(iii) | Trimagnesium Orthophosphate | |
| 450(i) | Disodium Diphosphate | |
| 450(iii) | Tetrasodium Diphosphate | |
| 450(v) | Tetrapotassium Diphosphate | |
| 450(vi) | Dicalcium Diphosphate | |
| 451(i) | Pentasodium Triphosphate | |
| 451(ii) | Pentapotassium Triphosphate | |
| 452(i) | Sodium Polyphosphate | |
| 452(ii) | Potassium Polyphosphate | |
| 452(iv) | Calcium Polyphosphate | |
| 452(v) | Ammonium Polyphosphate | |
| 401 | Sodium Alginate | Limited to GMP |
| 405 | Propylene Glycol Alginate | Limited to GMP |
| 406 | Agar | Limited to GMP |
| 407 | Carrageenan and its Na, K, $NH_4$, Ca and Mg salts (including furcelleran) | Limited to GMP |
| 407a | Processed Euche**u**ma Seaweed | Limited to GMP |
| 410 | Carob Bean Gum | Limited to GMP |
| 412 | Guar Gum | Limited to GMP |
| 415 | Xanthan Gum | Limited to GMP |
| 416 | Karaya Gum | Limited to GMP |
| 417 | Tara Gum | Limited to GMP |
| 418 | Gellan Gum | Limited to GMP |
| 425 | Konjac Flour | Limited to GMP |
| 440 | Pectins | Limited to GMP |
| **460(i)** | **Microcrystalline Cellulose** | **Limited to GMP** |
| **460(ii)** | **Powdered Cellulose**[35] | **Limited to GMP** |
| 466 | Sodium Carboxymethyl Cellulose | Limited to GMP |
| 1400 | Dextrins, Roasted Starch | Limited to GMP |
| 1401 | Acid Treated Starch | Limited to GMP |
| 1402 | Alkaline Treated Starch | Limited to GMP |
| 1403 | Bleached Starch | Limited to GMP |
| 1404 | Oxidized Starch | Limited to GMP |
| 1405 | Enzyme Treated Starch | Limited to GMP |
| 1410 | Monostarch Phosphate | Limited to GMP |
| 1412 | Distarch Phosphate | Limited to GMP |

[35] CCMMP should consider if 460(i) and 460(ii) should be included per the recommendation of the 38th CCFAC.

| FERMENTED MILKS (PLAIN) | | |
|---|---|---|
| **INS No.** | **Name of Additive** | **Maximum Level** |
| 1413 | Phosphated Distarch Phosphate | Limited to GMP |
| 1414 | Acetylated Distarch Phosphate | Limited to GMP |
| 1420 | Starch Acetate | Limited to GMP |
| 1422 | Acetylated Distarch Adipate | Limited to GMP |
| 1440 | Hydroxypropyl Starch | Limited to GMP |
| 1442 | Hydroxypropyl Distarch Phosphate | Limited to GMP |
| 1450 | Starch Sodium Octenyl Succinate | Limited to GMP |

| HEAT-TREATED FERMENTED MILKS (PLAIN) | | |
|---|---|---|
| **INS No.** | **Name of Additive** | **Maximum Level** |
| **Acidity Regulators** | | |
| 260 | Acetic Acid, Glacial | Limited to GMP |
| 270 | Lactic Acid (L-) | Limited to GMP |
| 296 | Malic Acid (DL-) | Limited to GMP |
| 326 | Potassium Lactate | Limited to GMP |
| 327 | Calcium Lactate | Limited to GMP |
| 330 | Citric Acid | Limited to GMP |
| 331i | Sodium Dihydrogen Citrate | Limited to GMP |
| 331(iii) | Trisodium Citrate | Limited to GMP |
| 332(i) | Potassium Dihydrogen Citrate | Limited to GMP |
| 332(ii) | Tripotassium Citrate | Limited to GMP |
| 355 | Adipic Acid | 1500 mg/kg, as adipic acid |
| 356 | Sodium Adipate | |
| 357 | Potassium Adipate | |
| 359 | Ammonium Adipate | |
| 500(i) | Sodium Carbonate | Limited to GMP |
| 500(ii) | Sodium Hydrogen Carbonate | Limited to GMP |
| 501(i) | Potassium Carbonate | Limited to GMP |
| 504(i) | Magnesium Carbonate | Limited to GMP |
| 504(ii) | Magnesium Hydrogen Carbonate | Limited to GMP |
| 507 | Hydrochloric Acid | Limited to GMP |
| 524 | Sodium Hydroxide | Limited to GMP |
| 526 | Calcium Hydroxide | Limited to GMP |
| 527 | Ammonium Hydroxide | Limited to GMP |
| 528 | Magnesium Hydroxide | Limited to GMP |
| 529 | Calcium Oxide | Limited to GMP |
| 575 | Glucono Delta-Lactone | Limited to GMP |
| | | |
| **Packing Gases** | | |
| 290 | Carbon Dioxide | Limited to GMP |
| 941 | Nitrogen | Limited to GMP |
| | | |
| **Stabilizers and Thickeners** | | |
| 170i | Calcium Carbonate | Limited to GMP |
| 339(i) | Monosodium Orthophosphate | 970 mg/kg, singly or in combination, as phosphorus |
| 339(ii) | Disodium Orthophosphate | |
| 339(iii) | Trisodium Orthophosphate | |
| 340(i) | Monopotassium Orthophosphate | |
| 340(ii) | Dipotassium Orthophosphate | |
| 340(iii) | Tripotassium Orthophosphate | |
| 341(i) | Monocalcium Orthophosphate | |
| 341(ii) | Dicalcium Orthophosphate | |
| 341(iii) | Tricalcium Orthophosphate | |
| 342(i) | Monoammonium Orthophosphate | |
| 342(ii) | Diammonium Orthophosphate | |
| 343(ii) | Dimagnesium Orthophosphate | |
| 343(iii) | Trimagnesium Orthophosphate | |
| 450(i) | Disodium Diphosphate | |
| 450(iii) | Tetrasodium Diphosphate | |
| 450(v) | Tetrapotassium Diphosphate | |
| 450(vi) | Dicalcium Diphosphate | |
| 451(i) | Pentasodium Triphosphate | |

| HEAT-TREATED FERMENTED MILKS (PLAIN) | | |
|---|---|---|
| **INS No.** | **Name of Additive** | **Maximum Level** |
| 451(ii) | Pentapotassium Triphosphate | |
| 452(i) | Sodium Polyphosphate | |
| 452(ii) | Potassium Polyphosphate | |
| 452(iv) | Calcium Polyphosphate | |
| 452(v) | Ammonium Polyphosphate | |
| 400 | Alginic Acid | Limited by GMP Singly or in combination. |
| 401 | Sodium Alginate | |
| 402 | Potassium Alginate | |
| 403 | Ammonium Alginate | |
| 404 | Calcium Alginate | |
| 406 | Agar | Limited to GMP |
| 407 | Carrageenan and its Na, K, $NH_4$, Ca and Mg salts (including furcelleran) | Limited to GMP |
| 407a | Processed Eucheuma Seaweed | Limited to GMP |
| 410 | Carob Bean Gum | Limited to GMP |
| 412 | Guar Gum | Limited to GMP |
| 413 | Tragacanth Gum | Limited to GMP |
| 414 | Gum Arabic | Limited to GMP |
| 415 | Xanthan Gum | Limited to GMP |
| 416 | Karaya Gum | Limited to GMP |
| 417 | Tara Gum | Limited to GMP |
| 418 | Gellan Gum | Limited to GMP |
| 425 | Konjac Flour | Limited to GMP |
| 440 | Pectins | Limited to GMP |
| **460(i)** | **Microcrystalline Cellulose**[36] | **Limited to GMP** |
| **460(ii)** | **Powdered Cellulose** | **Limited to GMP** |
| 461 | Methyl Cellulose | Limited to GMP |
| 463 | Hydroxypropyl Cellulose | Limited to GMP |
| 464 | Hydroxypropyl Methyl Cellulose | Limited to GMP |
| 465 | Methyl Ethyl Cellulose | Limited to GMP |
| 466 | Sodium Carboxymethyl Cellulose | Limited to GMP |
| 470 | Salts of Oleic Acid (Ca, K, Na) | Limited to GMP |
| 471 | Mono- and Di- Glycerides | Limited to GMP |
| 472a | Acetic and Fatty Acid Esters of Glycerol | Limited to GMP |
| 472b | Lactic and Fatty Acid Esters of Glycerol | Limited to GMP |
| 472c | Citric and Fatty Acid Esters of Glycerol | Limited to GMP |
| 1200 | Polydextrose | Limited to GMP |
| 1400 | Dextrins, Roasted Starch | Limited to GMP |
| 1401 | Acid Treated Starch | Limited to GMP |
| 1402 | Alkaline Treated Starch | Limited to GMP |
| 1403 | Bleached Starch | Limited to GMP |
| 1404 | Oxidized Starch | Limited to GMP |
| 1405 | Enzyme Treated Starch | Limited to GMP |
| 1410 | Mono Starch Phosphate | Limited to GMP |
| 1412 | Distarch Phosphate | Limited to GMP |
| 1413 | Phosphated Distarch Phosphate | Limited to GMP |
| 1414 | Acetylated Distarch Phosphate | Limited to GMP |
| 1420 | Starch Acetate | Limited to GMP |
| 1422 | Acetylated Distarch Adipate | Limited to GMP |
| 1440 | Hydroxypropyl Starch | Limited to GMP |
| 1442 | Hydroxypropyl Distarch Phosphate | Limited to GMP |
| 1450 | Starch Sodium Octenyl Succinate | Limited to GMP |

[36] CCMMP should consider if 460(i) and 460(ii) should be included per the recommendation of the 38th CCFAC.

**Annex II**

All Acidity Regulators, Colours, Emulsifiers, Flavour Enhancers, Packing Gases, Preservatives, Stabilizers, Sweeteners and Thickeners listed in Table 3 of the Codex General Standard for Food Additives (CX-STAN 192).

| GSFA Table 3 Acidity Regulators | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 260 | Acetic Acid, Glacial | 365 | Sodium Fumarate |
| 261 | Potassium Acetates | 380 | Triammonium Citrate |
| 262i | Sodium Acetate | 500i | Sodium Carbonate |
| 263 | Calcium Acetate | 500ii | Sodium Hydrogen Carbonate |
| 264 | Ammonium Acetate | 500iii | Sodium Sesquicarbonate |
| 270 | Lactic Acid | 501i | Potassium Carbonate |
| 296 | Malic Acid (DL-) | 501ii | Potassium Hydrogen Carbonate |
| 297 | Fumaric Acid | 503i | Ammonium Carbonate |
| 326 | Potassium Lactate | 503ii | Ammonium Hydrogen Carbonate |
| 327 | Calcium Lactate | 504i | Magnesium Carbonate |
| 328 | Ammonium Lactate | 504ii | Magnesium Hydrogen Carbonate |
| 329 | Magnesium Lactate (DL-) | 507 | Hydrochloric Acid |
| 330 | Citric Acid | 514 | Sodium Sulphate |
| 331i | Sodium Dihydrogen Citrate | 515 | Potassium Sulphate |
| 331iii | Trisodium Citrate | 524 | Sodium Hydroxide |
| 332i | Potassium Dihydrogen Citrate | 525 | Potassium Hydroxide |
| 332ii | Tripotassium Citrate | 526 | Calcium Hydroxide |
| 333 | Calcium Citrates | 527 | Ammonium Hydroxide |
| 350i | Sodium Hydrogen Malate | 528 | Magnesium Hydroxide |
| 350ii | Sodium Malate | 529 | Calcium Oxide |
| 351i | Potassium Hydrogen Malate | 575 | Glucono delta-Lactone |
| 351ii | Potassium Malate | 578 | Calcium Gluconate |
| 352ii | Calcium Malate | 580 | Magnesium Gluconate |

| GSFA Table 3 Colours | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 162 | Beet Red | 140 | Chlorophylls |
| 150a | Caramel Colour, Class I | 171 | Titanium Dioxide |

| GSFA Table 3 Emulsifiers | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 322 | Lecithins | 965 | Maltitol (Including Maltitol Syrup) |
| 331i | Sodium Dihydrogen Citrate | 966 | Lactitol |
| 331iii | Trisodium Citrate | 967 | Xylitol |
| 413 | Tragacanth Gum | 1001 | Choline Salts |
| 460i | Microcrystalline Cellulose | 1401 | Acid-Treated Starch |
| 460ii | Powdered Cellulose | 1402 | Alkaline Treated Starch |
| 461 | Methyl Cellulose | 1403 | Bleached Starch |
| 463 | Hydroxypropyl Cellulose | 1404 | Oxidized Starch |
| 464 | Hydroxypropyl Methyl Cellulose | 1405 | Starches, Enzyme Treated |
| 465 | Methyl Ethyl Cellulose | 1410 | Monostarch Phosphate |
| 466 | Sodium Carboxymethyl Cellulose | 1412 | Distarch Phosphate |
| 467 | Ethyl Hydroxyethyl Cellulose | 1414 | Acetylated Distarch Phosphate |
| 470 | Salts of Myristic, Palmitic and Stearic Acids ($NH_4$, Ca, K, Na) | 1422 | Acetylated Distarch Adipate |
| 470 | Salts of Oleic Acids (Ca, K, Na) | 1440 | Hydroxypropyl Starch |
| 471 | Mono- and Diglycerides | 1440 | Hydroxypropyl Starch |
| 472a | Acetic and Fatty Acid Esters of Glycerol | 1442 | Hydroxypropyl Distarch Phosphate |
| 472c | Citric and Fatty Acid Esters of Glycerol | 1450 | Starch Sodium Octenyl Succinate |
| 472b | Lactic and Fatty Acid Esters of Glycerol | 1451 | Acetylated Oxidized Starch |

| GSFA Table 3 Flavour Enhancers | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 1101iii | Bromelain | 626 | Guanylic Acid, 5'- |
| 623 | Calcium Glutamate, Dl-L- | 630 | Inosinic Acid, 5'- |
| 629 | Calcium Guanylate, 5'- | 1104 | Lipase (Animal Sources) |
| 633 | Calcium Inosinate, 5'- | 1104 | Lipase (*Aspergillus oryzae* Var.) |
| 634 | Calcium Ribonucleotides, 5'- | 580 | Magnesium Gluconate |
| 628 | Dipotassium Guanylate, 5'- | 625 | Magnesium Glutamate, Dl-L- |
| 632 | Dipotassium Inosinate, 5'- | 624 | Monoammonium Glutamate, L- |
| 627 | Disodium Guanylate, 5'- | 622 | Monopotassium Glutamate, L- |
| 631 | Disodium Inosinate, 5'- | 621 | Monosodium Glutamate, L- |
| 635 | Disodium Ribonucleotides, 5'- | 1101ii | Papain |
| 968 | Erythritol | 508 | Potassium Chloride |
| 620 | Glutamic Acid (L+)- | 957 | Thaumatin |

| GSFA Table 3 Packing Gases | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 290 | Carbon Dioxide | 941 | Nitrogen |

| GSFA Table 3 Preservatives | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 260 | Acetic Acid, Glacial | 280 | Propionic Acid |
| 261 | Potassium Acetates | 281 | Sodium Propionate |
| 262i | Sodium Acetate | 282 | Calcium Propionate |
| 263 | Calcium Acetate | 283 | Potassium Propionate |

| GSFA Table 3 Stabilizers | | | |
|---|---|---|---|
| **INS** | | **INS** | **Additive** |
| 170i | Calcium Carbonate | 467 | Ethyl Hydroxyethyl Cellulose |
| 263 | Calcium Acetate | 468 | Cross-Linked Carboxymethyl Cellulose |
| 331i | Sodium Dihydrogen Citrate | 470 | Salts of Myristic, Palmitic and Stearic Acids ($NH_4$, Ca, K, Na) |
| 331iii | Trisodium Citrate | 470 | Salts of Oleic Acids (Ca, K, Na) |
| 332i | Potassium Dihydrogen Citrate | 471 | Mono- and Diglycerides |
| 332ii | Tripotassium Citrate | 472a | Acetic and Fatty Acid Esters of Glycerol |
| 400 | Alginic Acid | 472b | Lactic and Fatty Acid Esters of Glycerol |
| 401 | Sodium Alginate | 472c | Citric and Fatty Acid Esters of Glycerol |
| 402 | Potassium Alginate | 501i | Potassium Carbonate |
| 403 | Ammonium Alginate | 501ii | Potassium Hydrogen Carbonate |
| 404 | Calcium Alginate | 965 | Maltitol (Including Maltitol Syrup) |
| 406 | Agar | 967 | Xylitol |
| 407 | Carrageenan | 1101iii | Bromelain |
| 407a | Processed Eucheuma Seaweed | 1200 | Polydextroses |
| 410 | Carob Bean Gum | 1202 | Insoluble Polyvinylpyrrolidone |
| 412 | Guar Gum | 1400 | Dextrins, White and Yellow, Roasted Starch |
| 413 | Tragacanth Gum | 1401 | Acid Treated Starch |
| 414 | Gum Arabic | 1402 | Alkaline Treated Starch |
| 415 | Xanthan Gum | 1403 | Bleached Starch |
| 416 | Karaya Gum | 1404 | Oxidized Starch |
| 417 | Tara Gum | 1405 | Starches, Enzyme Treated |
| 418 | Gellan Gum | 1410 | Monostarch Phosphate |
| 440 | Pectins | 1412 | Distarch Phosphate |
| 457 | Cyclodextrin, alpha- | 1413 | Phosphated Distarch Phosphate |
| 458 | Cyclodextrin, gamma- | 1420 | Starch Acetate |
| 461 | Methyl Cellulose | 1422 | Acetylated Distarch Adipate |
| 463 | Hydroxypropyl Cellulose | 1442 | Hydroxypropyl Distarch Phosphate |
| 464 | Hydroxypropyl Methyl Cellulose | 1450 | Starch Sodium Octenyl Succinate |
| 465 | Methyl Ethyl Cellulose | 1451 | Acetylated Oxidized Starch |
| 466 | Sodium Carboxymethyl Cellulose | | |

| GSFA Table 3 Sweeteners | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 420 | Sorbitol (Including Sorbitol Syrup) | 965 | Maltitol (Including Maltitol Syrup) |
| 421 | Mannitol | 966 | Lactitol |
| 953 | Isomalt | 967 | Xylitol |
| 957 | Thaumatin | 968 | Erythritol |
| 964 | Polyglycitol Syrup | | |

| GSFA Table 3 Thickeners | | | |
|---|---|---|---|
| **INS** | **Additive** | **INS** | **Additive** |
| 400 | Alginic Acid | 466 | Sodium Carboxymethyl Cellulose |
| 401 | Sodium Alginate | 467 | Ethyl Hydroxyethyl Cellulose |
| 402 | Potassium Alginate | 469 | Sodium Carboxymethyl Cellulose, Enzymatically Hydrolyzed |
| 403 | Ammonium Alginate | 967 | Xylitol |
| 404 | Calcium Alginate | 1200 | Polydextroses |
| 406 | Agar | 1400 | Dextrins, White and Yellow, Roasted Starch |
| 407 | Carrageenan | 1401 | Acid Treated Starch |
| 407a | Processed Eucheuma Seaweed | 1402 | Alkaline Treated Starch |
| 410 | Carob Bean Gum | 1403 | Bleached Starch |
| 412 | Guar Gum | 1404 | Oxidized Starch |
| 413 | Tragacanth Gum | 1405 | Enzyme Treated Starch |
| 414 | Gum Arabic | 1410 | Monostarch Phosphate |
| 415 | Xanthan Gum | 1412 | Distarch Phosphate |
| 416 | Karaya Gum | 1413 | Phosphated Distarch Phosphate |
| 417 | Tara Gum | 1414 | Acetylated Distarch Phosphate |
| 418 | Gellan Gum | 1420 | Starch Acetate |
| 425 | Konjac Flour | 1422 | Acetylated Distarch Adipate |
| 440 | Pectins | 1440 | Hydroxypropyl Starch |
| 461 | Methyl Cellulose | 1442 | Hydroxypropyl Distarch Phosphate |
| 463 | Hydroxypropyl Cellulose | 1450 | Starch Sodium Octenyl Succinate |
| 464 | Hydroxypropyl Methyl Cellulose | 1451 | Acetylated Oxidized Starch |
| 465 | Methyl Ethyl Cellulose | | |