CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 9b **CX/NFSDU 19/41/9**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON NUTRITION AND FOODS FOR SPECIAL DIETARY USES

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24 - 29 November 2019

ALIGNMENT OF FOOD ADDITIVE PROVISIONS IN CCNFSDU STANDARDS WITH THE GSFA

Prepared by Germany

The alignment of food additives in CCNFSDU standards with the GSFA was discussed by the Codex Committee on Nutrition and Foods for Special Dietary Uses at its 40th session. However, there was no interest in leading this work. The Committee then agreed to consider this matter again at its next session (see REP19/NFSDU, para 140, 141).

Germany elaborated the following paper with the aim to support the discussion of the Committee at its 41st session. The paper takes into account the decisions of the Codex Alimentarius Commission made at its 42nd session on the *General Standard for Food Additives* (GSFA) (CXS 192-1995) and on the *Class Names and International System for Food Additives* (CXG 36-1986).

For the commodity standards dealt with in Parts A-D the paper follows the Decision Tree for the recommended approach to alignment of the GSFA and Commodity Standards food additive provisions as outlined in Attachment 2 of the Guidance to Commodity Committees on the Alignment of Food Additive Provisions[1].

CCNFSDU is invited to consider this paper for possible submission to CCFA.

[1] http://www.fao.org/fao-who-codexalimentarius/resources/inf-doc/en/

Part A

Standard for Infant Formula and Formulas for Special Medical Purposes Intended for Infants (CXS 72-1981)

1. According to box A of the decision tree on the alignment developed by the CCFA the following amendments should be made regarding the food additive provisions of the commodity standard:

INS 410 Carob bean gum ~~(Locust bean gum)~~

INS 322 **(i)** Lecithin

INS 471 Mono- and diglycerides **of fatty acids**

INS 270 Lactic acid, ~~L(+)~~ **L-, D-, and DL-**

~~INS 332 Potassium citrate~~

INS 332 (i) Potassium dihydrogen citrate

INS 332 (ii) Tripotassium citrate

INS 307 b ~~Mixed t~~**T**ocopherol~~s~~ concentrate**, mixed**

2. The functional classes of the authorized food additives are as follows according to CXG 36-1986 (listed in the order as authorized in CXS 72-1981):

INS 412 Emulsifier, Stabilizer, Thickener

INS 410 Emulsifier, Stabilizer, Thickener

INS 1412 Emulsifier, Stabilizer, Thickener

INS 1414 Emulsifier, Stabilizer, Thickener

INS 1413 Emulsifier, Stabilizer, Thickener

INS 1440 Emulsifier, Stabilizer, Thickener

INS 1450 Emulsifier, Stabilizer, Thickener

INS 407 Emulsifier, Stabilizer, Thickener, Bulking agent, Carrier, Gelling agent, Glazing agent, Humectant

The food additives listed above have been authorized as thickeners in CXS 72-1981.

INS 322 (i) Antioxidant, Emulsifier

INS 471 Antifoaming agent, Emulsifier, Stabilizer

INS 472c Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabilizer

The food additives listed above have been authorized as emulsifiers in CXS 72-1981.

INS 524 Acidity regulator

INS 500 (ii) Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

INS 500 (i) Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabilizer, Thickener

INS 525 Acidity regulator

INS 501 (ii) Acidity regulator, Stabilizer, Raising agent

INS 501 (i) Acidity regulator, Stabilizer

INS 526 Acidity regulator, Firming agent

INS 270 Acidity regulator

INS 330 Acidity regulator, Antioxidant, Colour retention agent, Sequestrant

INS 331 (i) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 331 (iii) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 332 (i) Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer

INS 332 (ii) Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer

INS 339 (i) Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener

INS 339 (ii) Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener

INS 339 (iii) Acidity regulator, Emulsifier, Humectant, Preservative, Sequestrant, Stabilizer, Thickener

INS 340 (i) Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabilizer, Thickener

INS 340 (ii) Acidity regulator, Emulsifier, Humectant, Sequestrant, Stabilizer, Thickener

INS 340 (iii) Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener

The food additives listed above have been authorized as acidity regulators in CXS 72-1981.

INS 307 b Antioxidant

INS 304 Antioxidant

The food additives listed above have been authorized as antioxidants in CXS 72-1981.

INS 290 Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant

INS 941 Foaming agent, Packaging gas, Propellant

The food additives listed above have been authorized as packaging gases in CXS 72-1981.

3. Whereas the food additive provisions of CXS 72-1981 are related to the food categories 13.1, 13.1.1 and 13.1.3 of the GSFA, the answer to the question in box B of the decision tree on the alignment developed by the CCFA is “NO”.

4. The food additive provisions are contained in the food categories 13.1, 13.1.1 and 13.1.3. The commodity standard rules that the provisions in food category 13.1.1 should be the same as in 13.1.3. The answer to the question in box D of the decision tree on the alignment developed by the CCFA is “YES” for all the provisions except for the provision for starch sodium octenyl succinate (INS 1450) which is not listed in food category 13.1.1 and thus needs to be included in the GSFA food category according to box J. In addition, phosphates should be authorized in food categories 13.1.1 and 13.1.3 with restrictions as governed by CXS 72-1981 according to box G.

The following changes of the GSFA seem to be necessary for the full alignment:

Food categories 13.1.1.and 13.1.3:

Adding a provision as follows:

Phosphates	**339(i)-(iii); 340(i)-(iii)**	**450 mg/kg**	**33, 230 & New note (a): Sodium dihydrogen phosphate (INS 339 (i)), Disodium hydrogen phosphate (INS 339 (ii)), Trisodium phosphate (INS 339 (iii)), Potassium dihydrogen phosphate (INS 340 (i), Dipotassium hydrogen phosphate (INS 340 (ii)) and Tripotassium phosphate (INS 340 (iii)) only, singly or in combination & New note (b): Within the limits for sodium, potassium and phosphorus specified in the Standard for Infant Formula and Formula for Special Dietary Purposes Intended for Infants (CXS 72-1981)**

Food category 13.1.1:

Adding a provision as follows:

Starch sodium octenyl succinate	**1450**	**20000 mg/kg**	**376 & 381**

5. According to the advice in box E of the decision tree on the alignment developed by the CCFA the food additive provisions in the GSFA are considered to be in line with the provisions of the commodity standard CXS 72-1981 to a large extent. CXS 72-1981 authorizes inter alia “322 Lecithins”. According to CXG 36-1986 the following Lecithins exist: Lecithin (INS 322 (i)), Lecithin, partially hydrolysed (INS 322 (ii)) and Lecithin, hydroxylated (INS 322 (iii)). For Lecithin, hydroxylated (INS 322 (iii)) no specifications exist and it can therefore not be authorized. For Lecithin, partially hydrolysed (INS 322 (ii)) there are no provisions in the GSFA. It is therefore suggested that the authorization of “322 Lecithins” in CXS 72-1981 be interpreted as authorization of Lecithin INS 322 (i)). The following changes of the GSFA seem to be necessary for the full alignment:

Food category 13.1.1:

Amending the provision for Carrageenan as follows:

Carrageenan	407	300 mg/kg	~~378 &~~ 381 **& New note: for use in liquid infant formula except for use in hydrolyzed protein and/or amino acid based liquid infant formula at 1000 mg/kg**

Adding a new note to the provisions for Lecithin and Mono- and diglycerides of fatty acids as follows:

If Lecithin (INS 322 (i)) is used in combination with Mono- and diglycerides of fatty acids (INS 471) the maximum level for each of the substances is lowered with the relative part as present of the other substance.

Food category 13.1.3:

Amending the notes to Acetylated distarch phosphate (INS 1414) as follows:

72, 150**, 284** & 292

Amending the provision for Carrageenan as follows:

Carrageenan	407	300 mg/kg ~~1000 mg/kg~~	~~379 &~~ 381 **& New note: for use in liquid infant formula except for use in hydrolyzed protein and/or amino acid based liquid infant formula at 1000 mg/kg**

Amending the notes to distarch phosphate (INS 1412) as follows:

72, 150**, 284** & 292

Amending the footnotes to hydroxypropyl starch (INS 1440) as follows:

72, 150**, 284** & 292

Adding a new note to the provisions for Lecithin and Mono- and diglycerides of fatty acids as follows:

If Lecithin (INS 332 (i)) is used in combination with Mono- and diglycerides of fatty acids (INS 471) the maximum level for each of the substances is lowered with the relative part as present of the other substance.

Amending the footnotes to Phosphated distarch phosphate (INS 1413) as follows:

72, 150**, 284** & 292

Additional remark:

For the sake of consistency the footnote 381 “As consumed” when used in the food categories 13.1, 13.1.1 and 13.1.3 might be replaced by the footnote 72 “On the ready-to-eat basis”.

6. Section 7.1 of CXS 72-1981 (Packaging) contains the following provision: “Nitrogen and carbon dioxide may be used as packing media.” It is suggested that this provision be interpreted as the use of Nitrogen (INS 941) and Carbon dioxide (INS 290) which are already authorized according to section 4 as packaging gases. It is suggested that the provision in section 7.1 be removed as it may lead to confusion.

Part B

Standard for Canned Baby Food (CXS 73-1981)

1. According to box A of the decision tree on the alignment developed by the CCFA the following amendments should be made regarding the food additive provisions of the commodity standard:

INS 410	**Carob** ~~locust~~ bean gum
INS 412	Guar gum
INS 1412	Distarch phosphate
INS 1414	Acetylated distarch phosphate
INS 1413	Phosphated distarch phosphate
INS 1440	Hydroxypropyl starch
INS 1422	Acetylated distarch adipate
INS 1411	Distarch glycerol
	~~Acetylated distarch glycerol~~
INS 440	Pectins
INS 322 (i)	Lecithin
INS 471	Mono- and ~~D~~diglycerides **of fatty acids**
INS 500 (ii)	Sodium hydrogen carbonate
INS 500 (i)	Sodium carbonate
INS 501 (ii)	Potassium hydrogen carbonate
INS 170 (i)	Calcium carbonate
INS 330	Citric acid
INS 331 (i)	**Sodium dihydrogen citrate**
INS 331 (iii)	**Trisodium citrate**
INS 270	Lactic acid**, L(~~+~~)-, D-, and DL-**
INS 260	Acetic acid**, glacial**
INS 307 b	~~Mixed t~~**T**ocopherol~~s~~ concentrate**, mixed**
INS 307 a	**Tocopherol, d-alpha**
INS 307 c	Tocopherol**, dl-alpha**
INS 304	~~L-~~Ascorbyl palmitate
INS 300	~~L-~~Ascorbic acid**, L-** ~~and its Na, Ca salts~~
INS 301	**Sodium ascorbate**
INS 303	**Potassium ascorbate**

2. The functional classes of the authorized food additives are as follows according to CXG 36-1986 (listed in the order as authorized in CXS 72-1981):

INS 410	Emulsifier, Stabilizer, Thickener
INS 412	Emulsifier, Stabilizer, Thickener
INS 1412	Emulsifier, Stabilizer, Thickener
INS 1414	Emulsifier, Stabilizer, Thickener
INS 1413	Emulsifier, Stabilizer, Thickener
INS 1440	Emulsifier, Stabilizer, Thickener
INS 1422	Emulsifier, Stabilizer, Thickener

INS 1411 Emulsifier, Stabilizer, Thickener

INS 440 Emulsifier, Gelling agent, Glazing agent, Stabilizer, Thickener

The food additives listed above have been authorized as “Thickening Agents” according to CXS 73-1981. It is suggested that this authorization be interpreted as authorization of thickeners.

INS 322 (i) Antioxidant, Emulsifier

INS 471 Antifoaming agent, Emulsifier, Stabilizer

The food additives listed above have been authorized as emulsifiers according to CXS 73-1981.

INS 500 (ii) Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

INS 500 (i) Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabilizer, Thickener

INS 501 (ii) Acidity regulator, Stabilizer, Raising agent

INS 501 (i) Acidity regulator, Stabilizer

INS 170 (i) Acidity regulator, Anticaking agent, Colour retention agent, Sequestrant

INS 330 Acidity regulator, Antioxidant, Colour retention agent, Sequestrant

INS 331 (i) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 331 (iii) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 270 Acidity regulator

INS 260 Acidity regulator, Preservative

The food additives listed above have been authorized as “pH Adjusting Agents” according to CXS 73-1981. “pH Adjusting Agent” is not a functional class of a food additive but one of the technological purposes of the functional class “Acidity regulator”. It is therefore suggested that the authorization be interpreted as authorization of acidity regulators.

INS 307 b Antioxidant

INS 307 a Antioxidant

INS 307 c Antioxidant

INS 304 Antioxidant

INS 300 Acidity regulator, Antioxidant, Flour treatment agent, Sequestrant

INS 301 Antioxidant

INS 303 Antioxidant

The food additives listed above have been authorized as antioxidants according to CXS 73-1981.

INS 290 Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant

INS 941 Foaming agent, Packaging gas, Propellant

The food additives listed above have not been authorized as food additives in section 4 of CXS 73-1981 but as packing media in section 7 (Packaging) as follows: “Nitrogen and carbon dioxide may be used as packing media”. It is suggested that this provision be interpreted as the use of Nitrogen (INS 941) and Carbon dioxide (INS 290) as packaging gases. This would ensure consistency with CXS 72-1981 and CXS 74-1981. It is suggested that the provision in section 7 be removed as it may lead to confusion.

3. The answer to the question in box B of the decision tree on the alignment developed by the CCFA is “YES”.

The food additive provisions are contained in the food category 13.2. A number of food additive provisions in food category 13.2 are correctly associated with the note 239 “Excluding products conforming to the *Standard for Canned Baby Foods* (CXS 73-1981)” or the note XS73 meaning the same.

In the interest of consistency with other XS-notes and in the interest of ease of understanding, it is proposed to consider replacing note 239 by note XS73.

4. According to box C of the decision tree on the alignment developed by the CCFA the note XS73 should be added to the following food additive provisions in food category 13.2:

Phosphates	INS 338, etc.
Silicon dioxide, amorphous	INS 551

and the draft and proposed draft provisions for:

Isomalt	INS 953
Lactitol	INS 966
Maltitol	INS 965 (i)
Maltitol syrup	INS 965 (ii)
Sorbitol	INS 420 (i)
Sorbitol syrup	INS 420 (ii)
Thaumatin	INS 957
Xylitol	INS 967

5. The answer to the question in box D of the decision tree on the alignment developed by the CCFA is “YES” except for Distarch glycerol (INS 1411), Acetylated distarch glycerol (no INS number) and Potassium ascorbate (INS 303). The food additive provisions are contained in the food category 13.2.

6. The answer to the question in box F of the decision tree on the alignment developed by the CCFA is “NO” for Distarch glycerol (INS 1411), Acetylated distarch glycerol (no INS number) and Potassium ascorbate (INS 303).

7. According to the advice in box G of the decision tree on the alignment developed by the CCFA the food additive provisions for Distarch glycerol (INS 1411), Acetylated distarch glycerol (no INS number) and Potassium ascorbate (INS 303) should be removed from the commodity standard, since (a) there are no specifications established for these food additives (see List of Codex Specifications for Food Additives (CXM 6-2019)) and (b) other food additives of the same functional classes (Thickener/Antioxidant) are authorized as alternative.

8. According to the advice in box E of the decision tree on the alignment developed by the CCFA the food additive provisions in food category 13.2 of the GSFA are considered to be in line with the provisions of the commodity standard CXS 156-1987 (except for Distarch glycerol (INS 1411), Acetylated distarch glycerol (no INS number) and Potassium ascorbate (INS 303) specifically dealt with above.

It is proposed to consider dropping note 240 “The use level is within the limit for sodium listed in the *Standard for Canned Baby Foods* (CXS 73-1981).”, because wherever used it is associated with the more comprehensive note 319 “Within the limit for sodium listed in the Codex *Standard for Canned Baby Foods* (CXS 73-1981) for foods corresponding to that standard: singly or in combination with other sodium containing additives.”

It is proposed to consider dropping note 319 wherever it is used together with note 239, as note 319 is related to CXS 73-1981, while note 239 excludes products conforming to CXS 73-1981. This is the case with the provisions for Sodium acetate (INS 262 (i)), Sodium hydroxide (INS 524) and Sodium lactate (INS 325).

On the possible replacement of note 239 by note XS73 see paragraph 3 above.

Part C

Standard for Processed Cereal-based Food for Infants and Young Children

(CXS 74-1981)

1. According to box A of the decision tree on the alignment developed by the CCFA the following amendments should be made regarding the food additive provisions of the commodity standard:

INS 322 **(i)** Lecithin~~s~~

INS 471 Mono- and diglycerides **of fatty acids**

INS 270 ~~L(+)~~ Lactic acid**, L-, D-, and DL-**

INS 260 Acetic acid**, glacial**

INS 261 **(i)** Potassium acetate~~s~~

INS 296 Malic acid**,** DL~~-L(+)-form only~~

INS 325 Sodium lactate ~~(solution) – L(+)-form only~~

INS 326 Potassium lactate ~~(solution) – L(+)-form only~~

INS 327 Calcium lactate ~~– L(+)-form only~~

INS 331 (i) ~~Monos~~**S**odium **dihydrogen** citrate

INS 331(ii**i**) Trisodium citrate

INS 332 (i) ~~Monop~~**P**otassium **dihydrogen** citrate

INS 333 **(iii)** **TriC**~~c~~alcium citrate

INS 334 ~~L(+)-~~Tartaric acid,~~-~~L(+)~~form only~~

INS 335 (ii) ~~Dis~~Sodium **L(+)-**tartrate

INS 337 Potassium sodium L(+)-tartrate ~~L(+)form only~~

INS 339 (i) ~~Monos~~**S**odium **dihydrogen** ~~ortho~~phosphate

INS 339 (ii) Disodium **hydrogen** ~~ortho~~phosphate

INS 339 (iii) Trisodium ~~ortho~~phosphate

INS 340 (i) ~~Monop~~Potassium **dihydrogen** ~~ortho~~phosphate

INS 340 (ii) Dipotasssium **hydrogen** ~~ortho~~phosphate

INS 340 (iii) Tripotassium ~~ortho~~phosphate

INS 341 (i) ~~Monoc~~Calcium **dihydrogen** ~~ortho~~phosphate

INS 341 (ii) ~~Dic~~Calcium **hydrogen** ~~ortho~~phosphate

INS 341 (iii) Tricalcium ~~ortho~~phosphate

INS 30**7 b** ~~Mixed t~~**T**ocopherol~~s~~ concentrate**, mixed**

INS 307 **a** ~~Alpha t~~**Tocopherol, d-alpha**

INS 307 c **Tocopherol, dl-alpha**

INS 304**, 305** ~~L-~~Ascorbyl ~~palmitate~~ esters

INS 300 ~~L-~~Ascorbic acid**, L-**

INS 414 Gum Arabic **(Acacia gum)**

INS 440 Pectins ~~**(Amidated and Non-Amidated)**~~

INS 1420 Starch acetate ~~esterified with acetic anhydride~~

2. The functional classes of the authorized food additives are as follows according to CXG 36-1986 (listed in the order as authorized in CXS 74-1981):

INS 322 (i) Antioxidant, Emulsifier

INS 471	Antifoaming agent, Emulsifier, Stabilizer
INS 472 a	Emulsifier, Sequestrant, Stabilizer
INS 472 b	Emulsifier, Sequestrant, Stabilizer
INS 472 c	Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabilizer

The food additives listed above have been authorized as emulsifiers according to CXS 74-1981.

INS 500 (ii)	Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener
INS 501 (ii)	Acidity regulator, Stabilizer, Raising agent
INS 170 (i)	Acidity regulator, anticaking agent, Colour retention agent, Sequestrant
INS 270	Acidity regulator
INS 330	Acidity regulator, Antioxidant, Colour retention agent, Sequestrant
INS 260	Acidity regulator, Preservative
INS 261 (i)	Acidity regulator, Preservative
INS 262 (i)	Acidity regulator, Preservative, Sequestrant
INS 263	Acidity regulator, Preservative, Stabilizer
INS 296	Acidity regulator
INS 325	Acidity regulator, Antioxidant, Bulking agent, Emulsifier, Emulsifying salt, Humectant, Thickener
INS 326	Acidity regulator, Antioxidant, Emulsifier, Humectant
INS 327	Acidity regulator, Emulsifying salt, Firming agent, flour treatment agent, Thickener
INS 331 (i)	Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer
INS 331 (iii)	Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer
INS 332 (i)	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer
INS 332 (ii)	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer
INS 333 (iii)	Acidity regulator, Firming agent, Emulsifying salt, Sequestrant, Stabilizer
INS 507	Acidity regulator
INS 524	Acidity regulator
INS 525	Acidity regulator
INS 526	Acidity regulator, Firming agent
INS 575	Acidity regulator, Raising agent Sequestrant
INS 334	Acidity regulator, Antioxidant, Flavour enhancer, Sequestrant
INS 335 (ii)	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer
INS 337	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer
INS 338	Acidity regulator, Antioxidant, Sequestrant
INS 339 (i)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener
INS 339 (ii)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS 339 (iii)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Preservative, Sequestrant, Stabilizer, Thickener
INS 340 (i)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener

INS 340 (ii)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS 340 (iii)	Acidity regulator, Emulsifier, Emulsifying salt, Humectant, Sequestrant, Stabilizer, Thickener
INS 341 (i)	Acidity regulator, Anticaking agent, Emulsifying salt, Humectant, Raising agent, Sequestrant, Stabilizer, Thickener, Firming agent, Flour treatment agent
INS 341 (ii)	Acidity regulator, Anticaking agent, Emulsifying salt, Humectant, Raising agent, Stabilizer, Thickener, Firming agent, Flour treatment agent
INS 341 (iii)	Acidity regulator, Anticaking agent, Emulsifier, Emulsifying salt, Humectant, Raising agent, Stabilizer, Thickener, Firming agent, Flour treatment agent

The food additives listed above have been authorized as acidity regulators according to CXS 74-1981.

INS 307 b	Antioxidant
INS 307 a	Antioxidant
INS 307 c	Antioxidant
INS 304, 305	Antioxidant
INS 300	Acidity regulator, Antioxidant, Flour treatment agent, Sequestrant
INS 301	Antioxidant
INS 302	Antioxidant
INS 303	Antioxidant

The food additives listed above have been authorized as antioxidants according to CXS 74-1981.

INS 503 (i)	Acidity regulator, Raising agent
INS 503 (ii)	Acidity regulator, Raising agent
INS 500 (i)	Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabilizer, Thickener
INS 500 (ii)	Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

The food additives listed above have been authorized as raising agents according to CXS 74-1981.

INS 410	Emulsifier, Stabilizer, Thickener
INS 412	Emulsifier, Stabilizer, Thickener
INS 415	Emulsifier, Foaming agent, Stabilizer, Thickener
INS 440	Emulsifier, Gelling agent, Glazing agent, Stabilizer, Thickener
INS 1404	Emulsifier, Stabilizer, Thickener
INS 1410	Emulsifier, Stabilizer, Thickener
INS 1412	Emulsifier, Stabilizer, Thickener
INS 1413	Emulsifier, Stabilizer, Thickener
INS 1414	Emulsifier, Stabilizer, Thickener
INS 1422	Emulsifier, Stabilizer, Thickener
INS 1420	Emulsifier, Stabilizer, Thickener
INS 1450	Emulsifier, Stabilizer, Thickener
INS 1451	Emulsifier, Stabilizer, Thickener

The food additives listed above have been authorized as thickeners according to CXS 74-1981.

INS 551 Anticaking agent, Carrier, Antifoaming agent

The food additive listed above has been authorized as anticaking agent according to CXS 74-1981.

INS 290 Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant

INS 941 Foaming agent, Packaging gas, Propellant

The food additives listed above have been authorized as packaging gases according to CXS 74-1981.

3. The answer to the question in box B of the decision tree on the alignment developed by the CCFA is “YES”.

The food additive provisions are contained in the food category 13.2.

The food additive provision for Hydroxypropyl starch (INS 1440) in food category 13.2 is correctly associated with the note 237 “Excluding products conforming to the *Standard for Processed Cereal-based Baby Foods for Infants and Young Children* (CXS 74-1981)”.

In the interest of consistency with other XS-notes and in the interest of ease of understanding, it is proposed to consider replacing note 237 by note XS74.

The food additive provisions in food category 13.2 for Phosphates go beyond those in CXS 74-1981 and include additionally Phosphates with the INS numbers 342 (i)-(ii), 343 (i)-(iii), 450 (i)-(iii), (v)-(vii), (ix), 451 (i)-(ii), 452 (i)-(v) and 542. Taking into account that (a) the Phosphates listed in food category 13.2 share a group ADI and (b) their use is restricted to that of an acidity regulator by note 230 the provision for Phosphates in food category 13.2 may be considered as conforming to the related provisions in CXS 74-1981.

4. According to box C of the decision tree on the alignment developed by the CCFA note XS73 should be added to the following draft and proposed draft food additive provisions in food category 13.2:

Isomalt	INS 953
Lactitol	INS 966
Maltitol	INS 965 (i)
Maltitol syrup	INS 965 (ii)
Sorbitol	INS 420 (i)
Sorbitol syrup	INS 420 (ii)
Thaumatin	INS 957
Xylitol	INS 967

5. The answer to the question in box D of the decision tree on the alignment developed by the CCFA is “YES” except for Potassium ascorbate (INS 303). The food additive provisions are contained in the food category 13.2.

6. The answer to the question in box F of the decision tree on the alignment developed by the CCFA is “NO” for Potassium ascorbate (INS 303).

7. For Potassium ascorbate (INS 303) there are no specifications established for this food additive (see List of Codex Specifications for Food Additives (CXM 6-2019)). According to the advice in box G of the decision tree on the alignment developed by the CCFA the food additive provision for Potassium ascorbate (INS 303) should be removed from the commodity standard in view of the consideration above and the fact that other food additives of the same functional class (Antioxidant) are authorized as alternative.

8. According to the advice in box E of the decision tree on the alignment developed by the CCFA the food additive provisions in food category 13.2 of the GSFA are considered to be in line with the provisions of the commodity standard CXS 74-1981 (except for those food additives specifically dealt with above).

Part D

Standard for Follow-up Formula (CXS 156-1987)

1. According to box A of the decision tree on the alignment developed by the CCFA the following amendments should be made regarding the food additive provisions of the commodity standard:

INS 412 Guar gum

INS 410 **Carob** ~~locust~~ bean gum

INS 1412 Distarch phosphate

INS 1414 Acetylated distarch phosphate

INS 1413 Phosphated distarch phosphate

INS 1422 Acetylated distarch adipate

INS 407 Carrageenan

INS 440 Pectins

INS 322 (i) Lecithin

INS 471 Mono- and ~~D~~diglycerides **of fatty acids**

INS 500 (ii) Sodium hydrogen carbonate

INS 500 (i) Sodium carbonate

INS 331 (III) **Tris**~~S~~odium citrate

INS 331 (i) **Sodium dihydrogen citrate**

INS 501 (ii) Potassium hydrogen carbonate

INS 501 (i) Potassium carbonate

INS 332(i) **Potassium dihydrogen citrate**

INS 332 (ii) **Trip**~~P~~otassium citrate

INS 524 Sodium hydroxide

INS 525 Potassium hydroxide

INS 526 Calcium hydroxide

INS 270 ~~L(+)~~ Lactic acid**, L-, D-, and DL-**

~~L (+) Lactic acid producing cultures~~

INS 330 Citric acid

INS 307 b ~~Mixed t~~**T**ocopherol~~s~~ concentrate**, mixed**

INS 307 a ~~Alpha-~~Tocopherol**, d-alpha**

INS 307 c Tocopherol**, dl-alpha**

INS 304 ~~L-~~Ascorbyl palmitate

INS 300 ~~L-~~Ascorbic acid**, L-** ~~and its Na, Ca salts~~

INS 301 **Sodium ascorbate**

INS 302 **Calcium ascorbate**

2. The functional classes of the authorized food additives are as follows according to CXG 36-1986 (listed in the order as authorized in CXS 72-1981):

INS 412 Emulsifier, Stabilizer, Thickener

INS 410 Emulsifier, Stabilizer, Thickener

INS 1412 Emulsifier, Stabilizer, Thickener

INS 1414 Emulsifier, Stabilizer, Thickener

INS 1413 Emulsifier, Stabilizer, Thickener

INS 1422 Emulsifier, Stabilizer, Thickener

INS 407 Emulsifier, Stabilizer, Thickener, Bulking agent, Carrier, Gelling agent, Glazing agent, Humectant

INS 440 Emulsifier, Gelling agent, Glazing agent, Stabilizer, Thickener

The food additives listed above have been authorized as „Thickening agents“ according to CXS 156-1987. It is suggested that this authorization be interpreted as authorization of thickeners.

INS 322 (i) Antioxidant, Emulsifier

INS 471 Antifoaming agent, Emulsifier, Stabilizer

The food additives listed above have been authorized as emulsifiers according to CXS 156-1981.

INS 500 (ii) Acidity regulator, Anticaking agent, Raising agent, Stabilizer, Thickener

INS 500 (i) Acidity regulator, Anticaking agent, Emulsifying salt, Raising agent, Stabilizer, Thickener

INS 331 (i) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 331 (iii) Acidity regulator, Emulsifier, Emulsifying salt, Sequestrant, Stabilizer

INS 501 (ii) Acidity regulator, Stabilizer, Raising agent

INS 501 (i) Acidity regulator, Stabilizer

INS 332 (i) Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer

INS 332 (ii) Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer

INS 524 Acidity regulator

INS 525 Acidity regulator

INS 526 Acidity regulator, Firming agent

INS 270 Acidity regulator

INS 330 Acidity regulator, Antioxidant, Colour retention agent, Sequestrant

The food additives listed above have been authorized as “pH Adjusting Agents” according to CXS 156-1987. “pH Adjusting Agent” is not a functional class of a food additive but one of the technological purposes of the functional class “Acidity regulator”. It is therefore suggested that the authorization be interpreted as authorization of acidity regulators.

INS 307 b Antioxidant

INS 307 a Antioxidant

INS 307 c Antioxidant

INS 304 Antioxidant

INS 300 Acidity regulator, Antioxidant, Flour treatment agent, Sequestrant

INS 301 Antioxidant

INS 302 Antioxidant

The food additives listed above have been authorized as antioxidants according to CXS 156-1987.

INS 290 Carbonating agent, Foaming agent, Packaging gas, Preservative, Propellant

INS 941 Foaming agent, Packaging gas, Propellant

The food additives listed above have not been authorized as food additives in section 4 of CXS 73-1981 but as packing media in section 7.1 (Packaging) as follows: “Nitrogen and carbon dioxide may be used as packing media”. It is suggested that this provision be interpreted as the use of Nitrogen

(INS 941) and Carbon dioxide (INS 290) as packaging gases. This would ensure consistency with CXS 72-1981 and CXS 74-1981. It is suggested that the provision in section 7 be removed as it may lead to confusion.

3. Whereas the food additive provisions of CXS 156-1987 are related to the food categories 13.1 and 13.1.2 of the GSFA the answer to the question in box B of the decision tree on the alignment developed by the CCFA is “YES”. The provision for Citric and fatty acid esters of glycerol (INS 472 c) in food category 13.1 is not listed in the commodity standard. It shall not be applicable to the subcategory 13.1.2, but only to the subcategories 13.1.1 and 13.1.3. Therefore this provision should be removed in food category 13.1 and introduced in the subcategories 13.1.1 and 13.1.3.

The subcategory 13.1.2 does not contain food additive provisions which are not listed in the commodity standard.

4. The answer to the question in box D of the decision tree on the alignment developed by the CCFA is “YES” except for Carbon dioxide (INS 290) and Nitrogen (INS 941). The food additive provisions are contained in the food category 13.1.2.

5. According to the advice in box E of the decision tree on the alignment developed by the CCFA the food additive provisions in food category 13.1.2 of the GSFA are considered to be in line with the provisions of the commodity standard CXS 156-1987 except for Carbon dioxide (INS 290) and Nitrogen (INS 941).

For full alignment according to box J of the decision tree on the alignment developed by the CCFA it is suggested that provisions for Carbon dioxide (INS 290) and Nitrogen (INS 941) be introduced in food category 13.1.2, both at GMP with note 59 associated.

Part E

Standard for Formula Foods for Use in Weight Control Diets (CXS 181-1991)

1. The Standard for Formula Foods for Use in Weight Control Diets (CXS 181-1991) does not contain specific food additive provisions but the general rule:

Food additives cleared by the Joint FAO/WHO Expert Committee on Food Additives shall be permitted at levels not exceeding the equivalent of their Acceptable Daily Intake.

2. Formula foods for use in weight control diets are covered by food category 13.4 of the GSFA. Table 3 of the GSFA is applicable to foods belonging to food category 13.4.

3. Food additive safety is one of the general principles for the use of food additives according to Section 3.1 of the Preamble to the GSFA. For the consideration of the safety the Acceptable Daily Intake (ADI) has to be taken into account. Compatibility of the maximum level for the food additive with the related ADI shall be verified according to Section 1.4 of the Preamble to the GSFA.

4. It is assumed that the principles laid down by the Preamble to the GSFA have been observed when establishing the food additive provisions of the GSFA.

Therefore it is considered that the food additive provisions of the GSFA, in particular those for the food category 13.4 and those of Table 3, are applicable to foods conforming to the Standard for Formula Foods for Use in Weight Control Diets (CXS 181-1991).

Part F

Standard for Formula Foods for Use in Very Low Energy Diets for Weight Reduction (CXS 203-1995)

1. The *Standard for Formula Foods for Use in Very Low Energy Diets for Weight Reduction* (CXS 203-1995) does not contain specific food additive provisions but the general rule:

Food additives cleared by the Joint FAO/WHO Expert Committee on Food Additives shall be permitted at levels endorsed by the Codex Committee on Food Additives.

2. Formula foods for use in very low energy diets for weight reduction are covered by food category 13.4 of the GSFA. Table 3 of the GSFA is applicable to foods belonging to food category 13.4. The food additive provisions of the GSFA have not only been endorsed by the Codex Committee on Food Additives but adopted by the Codex Alimentarius Commission.

3. Therefore it is considered that the food additive provisions of the GSFA, in particular those for the food category 13.4 and those of Table 3, are applicable to foods conforming to the *Standard for Formula Foods for Use in Very Low Energy Diets for Weight Reduction* (CXS 203-1995).