codex alimentarius commission E

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 8 (a) **CX/FA 08/40/11**

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Fortieth Session

Beijing, China, 21-25 April 2008

DRAFT REVISION OF THE CODEX *CLASS NAMES AND INTERNATIONAL NUMBERING SYSTEM* - CAC/GL 36-1989 (N07-2005)

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments at Step 6 on Sections 1 and 3 of the draft revision of the Codex *Class Names and International Numbering System* – CAC/GL 36-1989 to do so **no later than 31 January 2008** as follows: Secretariat, Codex Committee on Food Additives, National Institute of Nutrition and Food Safety, China CDC, 7 Panjiayuan Nanli, Chaoyang District, Beijing 100021, China (Telefax: + 86 10 67711813, E-mail: secretariat@ccfa.cc ***preferably***), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Food Standards Programme, Viale delle Terme di Caracalla, 00153 Rome, Italy (Telefax: +39 06 5705 4593; E-mail: Codex@fao.org - ***preferably***).

Background

The 39th CCFA agreed to hold Section 2 "Table of Functional Classes, Definitions and Technological Purposes" of the draft revision of the Class Names and International Numbering System at Step 7 and to request the Codex Secretariat to update and revise Section 1 "Foreword" to delete the reference to labelling provisions; and to update Section 3 "International Numbering System for Food Additives" to make the "technical function" of the food additives listed therein consistent with the revised sub-classes (for technological purpose) listed in Section 2. It was further agreed that the entire revised Class Names and International Numbering System (i.e. Sections 1,2 and 3) would be circulated for comments at Step 6 and would be further considered at the next session of the Committee (ALINORM 07/30/12 Rev., para. 144 and Appendix XII).

Explanatory notes

Annex 1 to this document contains the draft revision of the Codex *Class Names and International Numbering System*. In the Annex Section 1 is presented in a clean version for sake of readability, while changes in Section 3 "International Numbering System for Food Additives" are presented with additions underlined and deletions indicated by ~~strikethrough~~).

Changes in Section 1 aim at deleting references to labelling provisions and at making the Codex *Class Names and International Numbering Systems* a general reference for food additives.

Section 2 is taken from Appendix XII of the report of the 39th Session of the CCFA (ALINORM 07/30/12 Rev).

Changes in Section 3 aim at making the names of technological purposes listed therein consistent with those listed in Section 2. Changes in the names of technological purposes include:

- Bleaching agent changed into Flour bleaching agent

- Coating changed into Coating agent
- Colloidal changed into Colloidal stabilizer
- Dusting powder changed into Dusting agent
- Packing gas changed into Packaging gas
- Texturizer changed into Texturizing agent
- Water retention agent changed into Moisture-retention agent

The following technological purposes were deleted as no longer listed in Section 2:

- Clarifying agent (INS no. 1201)
- Flavour modifier (INS nos. 640, 641)
- Freezant (INS no. 941)
- Liquid freezant (INS no. 940)
- Release agent (INS nos. 901, 905a, 905b, 905c, 905d, 905e, 905f, 905g, 1503)
- Tenderizer (INS nos. 1001, 1001i, 1001ii, 1001iii, 1001iv)

The Explanatory note to the "Supplementary List – Modified Starches" was also deleted for consistency with the decision to delete references to labelling provisions.

Please note that, in order to reduce the number of pages of this document, Annex 1 only contains the header of Section 4, which content is the same of Section 3 with substances listed in alphabetical order.

Annex 2 to this document contains Section 1 with additions underlined and deletions indicated by ~~strikethrough~~.

Request for comments

Comments at Step 6 are requested on Sections 1 and 3 of draft revision of the Codex *Class Names and International Numbering System*, attached as Annex 1 to this document.

Annex 1

DRAFT REVISION OF CLASS NAMES AND THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

CAC/GL 36-1989

(N07-2005)

At Step 6

SECTION 1 - INTRODUCTION

Background

The International Numbering System for Food Additives (INS) is intended as an identification system for food additives on a world-wide basis. Inclusion in the INS does not imply approval by Codex for use as food additives. The list may include those additives that have not been evaluated by the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

The INS does not include flavours, which have a JECFA number as identifier, chewing gum bases, and dietetic and nutritive additives. Enzymes which function as food additives have been included in an 1100 series.

Explanatory notes on the lay-out of the INS

The INS in numerical order (Section 3) is set out in three columns giving the identification number, the name of the food additive and the technological purposes. The identification number usually consists of three or four digits such as 100 for Curcumins and 1001 for Choline salts and esters. However in some instances the number is followed by an alphabetical subscript, for example, 150a identifies Caramel I-plain, 150b identifies Caramel II-caustic sulphite process, and so on.

Under the column listing the name of the food additive, some additives are further subdivided by numerical subscripts. For example, Curcumins are subdivided into (i) Curcumin and (ii) Turmeric. These identifications identify sub-classes (in this case of Curcumins) which are covered by separate Codex specifications.

The various technological purposes of the food additives are included in the INS in a third column. The purposes listed are indicative rather than exhaustive. The technological purposes are grouped under more descriptive functional class titles which are intended to be meaningful to consumers. These are listed in Section 2 along with simple definitions of the function performed.

A single food additive can often be used for a range of technological purposes in a food and it remains the responsibility of the manufacturer to declare the most descriptive functional class in the list of ingredients.

In preparing the INS in numerical order, an effort has been made to group food additives with similar purposes together. However, because of the extension of the list and its open nature, most of the three digit numbers have already been allocated. Consequently, the positioning of a food additive in the list can no longer be taken as an indication of the purpose, although this will often be the case.

The open nature of the list

Because of its primary purpose of identification, the INS is an open list subject to the inclusion of additional additives or removal of existing ones on an ongoing basis.

SECTION 2 – TABLE OF FUNCTIONAL CLASSES, DEFINITIONS AND TECHNOLOGICAL PURPOSES

At Step 7

FUNCTIONAL CLASSES	**DEFINITION**	**TECHNOLOGICAL PURPOSE**
1. Acidity Regulator	A food additive, which controls the acidity or alkalinity of a food.	acidity regulator, acid, acidifier, alkali, base, buffer, buffering agent, pH adjusting agent
2. Anticaking agent	A food additive, which reduces the tendency of components of food to adhere to one another.	anticaking agent, anti-stick agent, drying agent, dusting agent
3. Antifoaming agent	A food additive, which prevents or reduces foaming.	antifoaming agent, defoaming agent
4. Antioxidant	A food additive, which prolongs the shelf-life of foods by protecting against deterioration caused by oxidation.	antioxidant, antioxidant synergist, antibrowning agent
5. Bleaching agent	A food additive (non-flour use) used to decolourize food. Bleaching agents do not include pigments.	bleaching agent
6. Bulking agent	A food additive, which contributes to the bulk of a food without contributing significantly to its available energy value.	bulking agent, filler
7. Carbonating agent	A food additive used to provide carbonation in a food.	carbonating agent
8. Carrier	A food additive used to dissolve, dilute, disperse or otherwise physically modify a food additive or nutrient without altering its function (and without exerting any technological effect itself) in order to facilitate its handling, application or use of the food additive or nutrient.	carrier, carrier solvent, nutrient carrier, diluent for other food additives, encapsulating agent
9. Colour	A food additive, which adds or restores colour in a food.	colour, decorative pigment, surface colourant
10. Colour retention agent	A food additive, which stabilizes, retains or intensifies the colour of a food.	colour retention agent, colour fixative, colour stabilizer, colour adjunct
11. Emulsifier	A food additive, which forms or maintains a uniform emulsion of two or more phases in a food.	emulsifier, plasticizer, dispersing agent, surface active agent, crystallization inhibitor, density adjustment (flavouring oils in beverages), suspension agent, clouding agent
12. Emulsifying salt	A food additive, which, in the manufacture of processed food, rearranges proteins in order to prevent fat separation.	emulsifying salt, melding salt
13. Firming agent	A food additive, which makes or keeps tissues of fruit or vegetables firm and crisp, or interacts with gelling agents to produce or strengthen a gel.	firming agent

FUNCTIONAL CLASSES	DEFINITION	TECHNOLOGICAL PURPOSE
14. Flavour enhancer	A food additive, which enhances the existing taste and/or odour of a food	flavour enhancer, flavour synergist
15. Flour treatment agent	A food additive, which is added to flour or dough to improve its baking quality or colour.	flour treatment agent, flour bleaching agent, flour improver, dough conditioner, dough strengthening agent
16. Foaming agent	A food additive, which makes it possible to form or maintain a uniform dispersion of a gaseous phase in a liquid or solid food.	foaming agent, whipping agent, aerating agent
17. Gelling agent	A food additive, which gives a food texture through formation of a gel.	gelling agent
18. Glazing agent	A food additive, which when applied to the external surface of a food, imparts a shiny appearance or provides a protective coating.	glazing agent, sealing agent, coating agent, surface-finishing agent, polishing agent, film-forming agent
19. Humectant	A food additive, which prevents food from drying out by counteracting the effect of a dry atmosphere.	humectant, moisture-retention agent**,** wetting agent
20. Packaging gas	A food additive gas, which is introduced into a container before, during or after filling with food with the intention to protect the food, for example, from oxidation or spoilage.	packaging gas
21. Preservative	A food additive, which prolongs the shelf-life of a food by protecting against deterioration caused by microorganisms.	preservative, antimicrobial preservative, antimycotic agent, bacteriophage control agent, fungistatic agent, antimould and antirope agent, antimicrobial synergist
22. Propellant	A food additive gas, which expels a food from a container.	propellant
23. Raising agent	A food additive or a combination of food additives, which liberate(s) gas and thereby increase(s**)** the volume of a dough or batter.	raising agent
24. Sequestrant	A food additive, which controls the availability of a cation.	sequestrant
25. Stabilizer	A food additive, which makes it possible to maintain a uniform dispersion of two or more components.	**s**tabilizer, foam stabilizer, colloidal stabilizer, emulsion stabilizer
26. Sweetener	A food additive (other than a mono- or disaccharide sugar), which imparts a sweet taste to a food.	sweetener, intense sweetener, bulk sweetener
27. Thickener	A food additive, which increases the viscosity of a food.	thickener, bodying agent, binder, texturizing agent

SECTION 3

(At Step 6)**INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES**

List in numerical order

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
100	Curcumins	Colour
100 (i)	Curcumin	Colour
100 (ii)	Turmeric	Colour
101	Riboflavins	Colour
101 (i)	Riboflavin	Colour
101 (ii)	Riboflavin 5'-Phosphate Sodium	Colour
102	Tartarzine	Colour
103	Alkanet	Colour
104	Quinoline Yellow	Colour
107	Yellow 2G	Colour
110	Sunset Yellow FCF	Colour
120	Carmines	Colour
121	Citrus Red No. 2	Colour
122	Azorubine (Carmoisine)	Colour
123	Amaranth	Colour
124	Ponceau 4R (Cochineal Red A)	Colour
125	Ponceau SX	Colour
127	Erythrosine	Colour
128	Red 2G	Colour
129	Allura Red AC	Colour
130	Manascorubin	Colour
131	Patent Blue V	Colour
132	Indigotine (Indigo Carmine)	Colour
133	Brilliant Blue FCF	Colour
140	Chlorophyll	Colour
141	Chlorophylls, Copper	Colour
141 (i)	Chlorophylls, Copper complexes	Colour
141 (ii)	Chlorophyllins, Copper complexes, Sodium and Potassium Salts	Colour
142	Green S	Colour
143	Fast Green FCF	Colour
150a	Caramel I - Plain	Colour
150b	Caramel II - Caustic Sulphite Process	Colour
150c	Caramel III - Ammonia Process	Colour
150d	Caramel IV - Sulphite Ammonia Process	Colour
151	Brilliant Black (Black PN)	Colour
152	Carbon Black (Hydrocarbon)	Colour
153	Vegetable Carbon	Colour
154	Brown FK	Colour
155	Brown HT	Colour
160a	Carotenes	Colour
160a (i)	Carotenes, *beta*-, (synthetic)	Colour
160a(ii)	Carotenes, *beta*- (vegetable)	Colour
160a(iii)	Carotenes, *beta*- (*Blakeslea trispora*)	Colour

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
160a(iv)	Carotenes, *beta*- (algae)	Colour
160b	Annatto Extracts	Colour
160b(i)	Annatto Extracts, bixin-based	Colour
160b(ii)	Annatto Extracts, norbixin-based	Colour
160c	Paprika Oleoresin	Colour
160d	Lycopenes	Colour
160d(i)	Lycopene (synthetic)	Colour
160d(ii)	Lycopene (tomato)	Colour
160d(iii)	Lycopene (*Blakeslea trispora*)	Colour
160e	Carotenal, *beta*-apo-8'-(C30)	Colour
160f	Carotenoic Acid, Methyl or Ethyl Ester, *beta*-apo-8'-	Colour
161a	Flavoxanthin	Colour
161b	Luteins	Colour
161b (i)	Lutein from *Tagetes erecta*	Colour
161b(ii)	Tagetes extract	Colour
161c	Kryptoxanthin	Colour
161d	Rubixanthin	Colour
161e	Violoxanthin	Colour
161f	Rhodoxanthin	Colour
161g	Canthaxanthin	Colour
161h	Zeaxanthins	Colour
161h (i)	Zeaxanthin (Synthetic)	Colour
161h (ii)	Zeaxanthin-rich extract from *Tagetes erecta*	Colour
162	Beet Red	Colour
163	Anthocyanins	Colour
163 (i)	Anthocyanins	Colour
163 (ii)	Grape Skin Extract	Colour
163 (iii)	Blackcurrant Extract	Colour
163 (iv)	Purple Corn Colour	Colour
163 (v)	Red Cabbage Colour	Colour
164	Gardenia Yellow	Colour
165	Gardenia Blue	Colour
166	Sandalwood	Colour
170	Calcium Carbonates	Surface colourant, Anticaking agent, Stabilizer
170 (i)	Calcium Carbonate	Surface colourant, Anticaking agent, Stabilizer, Acidity regulator
170 (ii)	Calcium Hydrogen Carbonate	Surface colourant, Anticaking agent, Stabilizer, Acidity regulator
171	Titanium Dioxide	Colour
172	Iron Oxides	Colour
172 (i)	Iron Oxide, Black	Colour
172 (ii)	Iron Oxide, Red	Colour
172 (iii)	Iron Oxide, Yellow	Colour
173	Aluminium	Colour
174	Silver	Colour
175	Gold (Metallic)	Colour
180	Lithol Rupine BK	Colour

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
181	Tannins, Food Grade	Colour, Emulsifier, Stabilizer, Thickener
182	Orchil	Colour
200	Sorbic Acid	Preservative
201	Sodium Sorbate	Preservative
202	Potassium Sorbate	Preservative
203	Calcium Sorbate	Preservative
209	Heptyl p-Hydroxybenzoate	Preservative
210	Benzoic Acid	Preservative
211	Sodium Benzoate	Preservative
212	Potassium Benzoate	Preservative
213	Calcium Benzoate	Preservative
214	Ethyl p-Hydroxybenzoate	Preservative
215	Sodium Ethyl p-Hydroxybenzoate	Preservative
216	Propyl p-Hydroxybenzoate	Preservative
217	Sodium Propyl p-Hydroxybenzoate	Preservative
218	Methyl p-Hydroxybenzoate	Preservative
219	Sodium Methyl p-Hydroxybenzoate	Preservative
220	Sulphur Dioxide	Preservative, Antioxidant
221	Sodium Sulphite	Preservative, Antioxidant
222	Sodium Hydrogen Sulphite	Preservative, Antioxidant
223	Sodium Metabisulphite	Preservative, Bleaching agent, Antioxidant
224	Potassium Metabisulphite	Preservative, Antioxidant
225	Potassium Sulphite	Preservative, Antioxidant
226	Calcium Sulphite	Preservative, Antioxidant
227	Calcium Hydrogen Sulphite	Preservative, Antioxidant
228	Potassium Bisulphite	Preservative, Antioxidant
230	Diphenyl	Preservative
231	Ortho-Phenylphenol	Preservative
232	Sodium o-Phenylphenol	Preservative
233	Thiabendazole	Preservative
234	Nisin	Preservative
235	Pimaricin (Natamycin)	Preservative
236	Formic Acid	Preservative
237	Sodium Formate	Preservative
238	Calcium Formate	Preservative
239	Hexamethylene Tetramine	Preservative
240	Formaldehyde	Preservative
241	Gum Guaicum	Preservative
242	Dimethyl Dicarbonate	Preservative
249	Potassium Nitrite	Preservative, Colour fixative
250	Sodium Nitrite	Preservative, Colour fixative
251	Sodium Nitrate	Preservative, Colour fixative
252	Potassium Nitrate	Preservative, Colour fixative
260	Acetic Acid (Glacial)	Preservative, Acidity regulator
261	Potassium Acetates	Preservative, Acidity regulator
261 (i)	Potassium Acetate	Preservative, Acidity regulator

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
261 (ii)	Potassium Diacetate	Preservative, Acidity regulator
262	Sodium Acetates	Preservative, Acidity regulator, Sequestrant
262 (i)	Sodium Acetate	Preservative, Acidity regulator, Sequestrant
262 (ii)	Sodium Diacetate	Preservative, Acidity regulator, Sequestrant
263	Calcium Acetate	Preservative, Stabilizer, Acidity regulator
264	Ammonium Acetate	Acidity regulator
265	Dehydroacetic Acid	Preservative
266	Sodium Dehydroacetate	Preservative
270	Lactic Acid (L-, D-, and DL-)	Acidity regulator
280	Propionic Acid	Preservative
281	Sodium Propionate	Preservative
282	Calcium Propionate	Preservative
283	Potassium Propionate	Preservative
290	Carbon Dioxide	Carbonating agent, Packaging gas
296	Malic Acid (DL-)	Acidity regulator
297	Fumaric Acid	Acidity regulator
300	Ascorbic Acid (L-)	Antioxidant
301	Sodium Ascorbate	Antioxidant
302	Calcium Ascorbate	Antioxidant
303	Potassium Ascorbate	Antioxidant
304	Ascorbyl Palmitate	Antioxidant
305	Ascorbyl Stearate	Antioxidant
307	Tocopherols	Antioxidant
307a	d-*alpha*-Tocopherol	Antioxidant
307b	Tocopherol Concentrate, Mixed	Antioxidant
307c	dl-*alpha*-Tocopherol	Antioxidant
308	Synthetic *gamma*-Tocopherol	Antioxidant
309	Synthetic *delta*-Tocopherol	Antioxidant
310	Propyl Gallate	Antioxidant
311	Octyl Gallate	Antioxidant
312	Dodecyl Gallate	Antioxidant
313	Ethyl Gallate	Antioxidant
314	Guaiac Resin	Antioxidant
315	Isoascorbic Acid (Erythorbic Acid)	Antioxidant
316	Sodium Isoascorbate	Antioxidant
317	Potassium Isoascorbate	Antioxidant
318	Calcium Isoascorbate	Antioxidant
319	Tertiary Butylhydroquinone	Antioxidant
320	Butylated Hydroxyanisole	Antioxidant
321	Butylated Hydroxytoluene	Antioxidant
322	Lecithins	Antioxidant, Emulsifier
322(i)	Lecithin	Antioxidant, Emulsifier
322(ii)	Partially Hydrolysed Lecithin	Antioxidant, Emulsifier
323	Anoxomer	Antioxidant
324	Ethoxyquin	Antioxidant

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
325	Sodium Lactate	Antioxidant synergist, Humectant, Bulking agent, Acidity regulator
326	Potassium Lactate	Antioxidant synergist, Acidity regulator
327	Calcium Lactate	Acidity regulator, Flour treatment agent
328	Ammonium Lactate	Acidity regulator, flour treatment agent
329	Magnesium Lactate (DL-)	Acidity regulator, Flour treatment agent
330	Citric Acid	Acidity regulator, Antioxidant, Sequestrant
331	Sodium Citrates	Acidity regulator, Sequestrant, Emulsifier, Stabilizer
331 (i)	Sodium Dihydrogen Citrate	Acidity regulator, Sequestrant, Emulsifier, Stabilizer
331 (ii)	Disodium Monohydrogen Citrate	Acidity regulator, Sequestrant, Emulsifier, Stabilizer,
331 (iii)	Trisodium Citrate	Acidity regulator, Sequestrant, Emulsifier, Stabilizer
332	Potassium Citrates	Acidity regulator, Sequestrant, Stabilizer
332 (i)	Potassium Dihydrogen Citrate	Acidity regulator, Sequestrant, Stabilizer
332 (ii)	Tripotassium Citrate	Acidity regulator, Sequestrant, Stabilizer
333	Calcium Citrates	Acidity regulator, Firming agent, Sequestrant, Stabilizer
333(i)	Monocalcium Citrate	Acidity regulator, Firming agent, Sequestrant, Stabilizer
333(ii)	Dicalcium Citrate	Acidity regulator, Firming agent, Sequestrant, Stabilizer
333(iii)	Tricalcium Citrate	Acidity regulator, Firming agent, Sequestrant, Stabilizer
334	Tartaric Acid (L(+)-)	Acidity regulator, Sequestrant, Antioxidant synergist
335	Sodium Tartrates	Stabilizer, Sequestrant
335 (i)	Monosodium Tartrate	Stabilizer, Sequestrant, Acidity regulator
335 (ii)	Disodium Tartrate	Stabilizer, Sequestrant, Acidity regulator
336	Potassium Tartrates	Stabilizer, Sequestrant
336 (i)	Monopotassium Tartrate	Stabilizer, Sequestrant, Acidity regulator
336 (ii)	Dipotassium Tartrate	Stabilizer, Sequestrant, Acidity regulator
337	Potassium Sodium Tartrate	Stabilizer, Sequestrant, Acidity regulator
338	Orthophosphoric Acid	Acidity regulator, Antioxidant synergist
339	Sodium Phosphates	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
339 (i)	Monosodium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
339 (ii)	Disodium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
339 (iii)	Trisodium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
340	Potassium Phosphates	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
340 (i)	Monopotassium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
340 (ii)	Dipotassium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
340 (iii)	Tripotassium Orthophosphate	Acidity regulator, Sequestrant, Emulsifier, ~~Texturizer~~ Texturizing agent, Stabilizer, ~~Water retention agent~~ Moisture-retention agent
341	Calcium Phosphates	Acidity regulator, Flour treatment agent, Firming agent, ~~Texturizer~~ Texturizing agent, Raising agent, Anticaking agent, ~~Water retention agent~~ Moisture-retention agent
341 (i)	Monocalcium Orthophosphate	Acidity regulator, Flour treatment agent, Firming agent, ~~Texturizer~~ Texturizing agent, Raising agent, Anticaking agent, ~~Water retention agent~~ Moisture-retention agent
341 (ii)	Dicalcium Orthophosphate	Acidity regulator, Flour treatment agent, Firming agent, ~~Texturizer~~ Texturizing agent, Raising agent, Anticaking agent, ~~Water retention agent~~ Moisture-retention agent
341 (iii)	Tricalcium Orthophosphate	Acidity regulator, Flour treatment agent, Firming agent, ~~Texturizer~~ Texturizing agent, Raising agent, Anticaking agent, ~~Water retention agent~~ Moisture-retention agent
342	Ammonium Phosphates	Acidity regulator, Flour treatment agent
342 (i)	Monoammonium Orthophosphate	Acidity regulator, Flour treatment agent
342 (ii)	Diammonium Orthophosphate	Acidity regulator, Flour treatment agent
343	Magnesium Phosphates	Acidity regulator, Anticaking agent
343 (i)	Monomagnesium Orthophosphate	Acidity regulator, Anticaking agent
343 (ii)	Dimagnesium Orthophosphate	Acidity regulator, Anticaking agent
343 (iii)	Trimagnesium Orthophosphate	Acidity regulator, Anticaking agent
344	Lecithin Citrate	Preservative
345	Magnesium Citrate	Acidity regulator
349	Ammonium Malate	Acidity regulator
350	Sodium Malates	Acidity regulator, Humectant

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
350 (i)	Sodium Hydrogen Malate	Acidity regulator, Humectant
350 (ii)	Sodium Malate	Acidity regulator, Humectant
351	Potassium Malates	Acidity regulator
351 (i)	Potassium Hydrogen Malate	Acidity regulator
351 (ii)	Potassium Malate	Acidity regulator
352	Calcium Malates	Acidity regulator
352 (i)	Calcium Hydrogen Malate	Acidity regulator
352 (ii)	Calcium Malate, (D,L-)	Acidity regulator
353	Metatartaric Acid	Acidity regulator
354	Calcium Tartrate, D,L-	Acidity regulator
355	Adipic Acid	Acidity regulator
356	Sodium Adipates	Acidity regulator
357	Potassium Adipates	Acidity regulator
359	Ammonium Adipates	Acidity regulator
363	Succinic Acid	Acidity regulator
364 (i)	Monosodium Succinate	Acidity regulator, Flavour enhancer
364 (ii)	Disodium Succinate	Acidity regulator, Flavour enhancer
365	Sodium Fumarates	Acidity regulator
366	Potassium Fumarates	Acidity regulator
367	Calcium Fumarates	Acidity regulator
368	Ammonium Fumarate	Acidity regulator
370	Heptonolactone, 1,4-	Acidity regulator, Sequestrant
375	Nicotinic Acid	Colour retention agent
380	Triammonium Citrate	Acidity regulator
381	Ferric Ammonium Citrate	Anticaking agent
383	Calcium Glycerophosphate	Thickener, Gelling agent, Stabilizer
384	Isopropyl Citrates	Antioxidant, Preservative, Sequestrant
385	Calcium Disodium EDTA	Antioxidant, Preservative, Sequestrant
386	Disodium Ethylenediaminetetraacetate	Antioxidant, Preservative
387	Oxystearin	Antioxidant, Sequestrant
388	Thiodipropionic Acid	Antioxidant
389	Dilauryl Thiodipropionate	Antioxidant
390	Distearyl Thiodipropionate	Antioxidant
391	Phytic Acid	Preservative
399	Calcium Lactobionate	Stabilizer
400	Alginic Acid	Thickener, Stabilizer
401	Sodium Alginate	Thickener, Stabilizer, Gelling agent
402	Potassium Alginate	Thickener, Stabilizer
403	Ammonium Alginate	Thickener, Stabilizer
404	Calcium Alginate	Thickener, Stabilizer, Gelling agent, Antifoaming agent
405	Propylene Glycol Alginate	Thickener, Emulsifier, Stabilizer
406	Agar	Thickener, Stabilizer, Gelling agent
407	Carrageenan and its Na, K, NH_4, Ca and Mg Salts (includes Furcellaran)	Thickener, Gelling agent, Stabilizer
407a	Processed Euchema Seaweed (PES)	Thickener, Stabilizer
408	Bakers Yeast Glycan	Thickener, Gelling agent, Stabilizer
409	Arabinogalactan	Thickener, Gelling agent, Stabilizer

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
410	Carob Bean Gum	Thickener, Stabilizer
411	Oat Gum	Thickener, Stabilizer
412	Guar Gum	Thickener, Stabilizer
413	Tragacanth Gum	Thickener, Stabilizer, Emulsifier
414	Gum Arabic (Acacia Gum)	Thickener, Stabilizer
415	Xanthan Gum	Thickener, Stabilizer
416	Karaya Gum	Thickener, Stabilizer
417	Tara Gum	Thickener, Stabilizer
418	Gellan Gum	Thickener, Stabilizer, Gelling agent
419	Gum Ghatti	Thickener, Stabilizer, Emulsifier
420	Sorbitol and Sorbitol Syrup	Sweetener, Humectant
421	Mannitol	Sweetener, Anticaking agent
422	Glycerol	Humectant, Bodying agent
424	Curdlan	Thickener, Stabilizer
425	Konjac Flour	Thickener
426	Soybean Hemicellulose	Emulsifier, Thickener, Stabilizer, Anticaking agent
429	Peptones	Emulsifier
430	Polyoxyethylene (8) Stearate	Emulsifier
431	Polyoxyethylene (40) Stearate	Emulsifier
432	Polyoxyethylene (20) Sorbitan Monolaurate	Emulsifier, Dispersing agent
433	Polyoxyethylene (20) Sorbitan Monooleate	Emulsifier, Dispersing agent
434	Polyoxyethylene (20) Sorbitan Monopalmitate	Emulsifier, Dispersing agent
435	Polyoxyethylene (20) Sorbitan Monostearate	Emulsifier, Dispersing agent
436	Polyoxyethylene (20) Sorbitan Tristearate	Emulsifier, Dispersing agent
440	Pectins	Thickener, Stabilizer, Gelling agent, Emulsifier
441	Superglycerinated Hydrogenated Rapeseed Oil	Emulsifier
442	Ammonium Salts of Phosphatidic Acid	Emulsifier
443	Brominated Vegetable Oils	Emulsifier, Stabilizer
444	Sucrose Acetate Isobutyrate	Emulsifier, Stabilizer
445	Glycerol Esters of Wood Rosin	Emulsifier, Stabilizer, Glazing agent
446	Succistearin	Emulsifier
450	Diphosphates	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (i)	Disodium Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (ii)	Trisodium Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (iii)	Tetrasodium Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (iv)	Dipotassium diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (v)	Tetrapotassium Diphosphate	Emulsifier, Stabilizer, Acidity regulator,

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
		Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (vi)	Dicalcium Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (vii)	Calcium Dihydrogen Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
450 (viii)	Dimagnesium Diphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
451	Triphosphates	Sequestrant, Acidity regulator, ~~Texturizer~~ Texturizing agent
451 (i)	Pentasodium Triphosphate	Sequestrant, Acidity regulator, ~~Texturizer~~ Texturizing agent
451 (ii)	Pentapotassium Triphosphate	Sequestrant, Acidity regulator, ~~Texturizer~~ Texturizing agent
452	Polyphosphates	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
452 (i)	Sodium Polyphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
452 (ii)	Potassium Polyphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
452 (iii)	Sodium Calcium Polyphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
452 (iv)	Calcium Polyphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
452 (v)	Ammonium Polyphosphate	Emulsifier, Stabilizer, Sequestrant, Texturizer, ~~Water retention agent~~ Moisture-retention agent
452 (vi)	Sodium Potassium Tripolyphosphate	Emulsifier, Stabilizer, Acidity regulator, Raising agent, Sequestrant, ~~Water retention agent~~ Moisture-retention agent
457	Cyclodextrin, *alpha*-	Stabilizer, Binder
458	Cyclodextrin, *gamma*-	Stabilizer, Binder
459	Cyclodextrin, *beta*-	Stabilizer, Binder, Carrier
460	Cellulose	Emulsifier, Anticaking agent, ~~Texturizer~~ Texturizing agent, Dispersing agent
460 (i)	Microcrystalline Cellulose	Emulsifier, Anticaking agent, ~~Texturizer~~ Texturizing agent, Dispersing agent
460 (ii)	Powdered Cellulose	Emulsifier, Anticaking agent, ~~Texturizer~~ Texturizing agent, Dispersing agent
461	Methyl Cellulose	Thickener, Emulsifier, Stabilizer
462	Ethyl Cellulose	Binder, Filler
463	Hydroxypropyl Cellulose	Thickener, Emulsifier, Stabilizer

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
464	Hydroxypropyl Methyl Cellulose	Thickener, Emulsifier, Stabilizer
465	Methyl Ethyl Cellulose	Thickener, Emulsifier, Stabilizer, Foaming agent
466	Sodium Carboxymethyl Cellulose (cellulose gum)	Thickener, Stabilizer, Emulsifier
467	Ethyl Hydroxyethyl Cellulose	Thickener, Stabilizer, Emulsifier
468	Cross-Linked Sodium Carboxymethyl Cellulose (Cross-linked cellulose gum)	Stabilizer, Binder
469	Sodium Carboxymethyl Cellulose, Enzymatically Hydrolysed (Cellulose Gum, Enzymatically Hydrolyzed)	Thickener, Stabilizer
470	Salts of Fatty Acids (with base Al, Ca, Na, Mg, K, and NH4	Emulsifier, Stabilizer, Anticaking agent
470 (i)	Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium	Emulsifier, Stabilizer, Anticaking agent
470 (ii)	Salts of oleic acid with calcium, potassium and sodium	Emulsifier, Stabilizer, Anticaking agent
471	Mono- and Di- Glycerides of Fatty Acids	Emulsifier, Stabilizer
472a	Acetic and Fatty Acid Esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
472b	Lactic and Fatty Acid Esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
472c	Citric and Fatty Acid Esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
472d	Tartaric Acid Esters of Mono- and Di Glycerides of Fatty Acids	Emulsifier, Stabilizer, Sequestrant
472e	Diacetyltartaric and Fatty Acid Esters of Glycerol	Emulsifier, Stabilizer, Sequestrant
472g	Succinylated Monoglycerides	Emulsifier, Stabilizer, Sequestrant
473	Sucrose Esters of Fatty Acids	Emulsifier
474	Sucroglycerides	Emulsifier
475	Polyglycerol Esters of Fatty Acids	Emulsifier
476	Polyglycerol Esters of Interesterified Ricinoleic Acid	Emulsifier
477	Propylene Glycol Esters of Fatty Acids	Emulsifier
478	Lactylated Fatty Acid Esters of Glycerol and Propylene Glycol	Emulsifier
479	Thermally Oxidized Soya Bean Oil with Mono- and Di – Glycerides of Fatty Acids	Emulsifier
480	Dioctyl Sodium Sulphosuccinate	Emulsifier, Wetting agent
481	Sodium Lactylates	Emulsifier, Stabilizer
481 (i)	Sodium Stearoyl Lactylate	Emulsifier, Stabilizer
481 (ii)	Sodium Oleyl Lactylate	Emulsifier, Stabilizer
482	Calcium Lactylates	Emulsifier, Stabilizer
482 (i)	Calcium Stearoyl Lactylate	Emulsifier
482 (ii)	Calcium Oleyl Lactylate	Emulsifier, Stabilizer
483	Stearyl Tartrate	Flour treatment agent
484	Stearyl Citrate	Emulsifier, Sequestrant
485	Sodium Stearoyl Fumarate	Emulsifier
486	Calcium Stearoyl Fumarate	Emulsifier
487	Sodium Laurylsulphate	Emulsifier
488	Ethoxylated Mono- and Di Glycerides	Emulsifier
489	Methyl Glucoside-Coconut Oil Ester	Emulsifier
491	Sorbitan Monostearate	Emulsifier

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
492	Sorbitan Tristearate	Emulsifier
493	Sorbitan Monolaurate	Emulsifier
494	Sorbitan Monooleate	Emulsifier
495	Sorbitan Monopalmitate	Emulsifier
496	Sorbitan Trioleate	Stabilizer, Emulsifier
498	Cross-Linked Sodium Carboxymethyl Cellulose	Stabilizer, Binder
500	Sodium Carbonates	Acidity regulator, Raising agent, Anticaking agent
500 (i)	Sodium Carbonate	Acidity regulator, Raising agent, Anticaking agent
500 (ii)	Sodium Hydrogen Carbonate	Acidity regulator, Raising agent, Anticaking agent
500 (iii)	Sodium Sesquicarbonate	Acidity regulator, Raising agent, Anticaking agent
501	Potassium Carbonates	Acidity regulator, Stabilizer
501 (i)	Potassium Carbonate	Acidity regulator, Stabilizer
501 (ii)	Potassium Hydrogen Carbonate	Acidity regulator, Stabilizer
503	Ammonium Carbonates	Acidity regulator, Raising agent
503 (i)	Ammonium Carbonate	Acidity regulator, Raising agent
503 (ii)	Ammonium Hydrogen Carbonate	Acidity regulator, Raising agent
504	Magnesium Carbonates	Acidity regulator, Anticaking agent, Colour retention agent
504 (i)	Magnesium Carbonate	Acidity regulator, Anticaking agent, Colour retention agent
504 (ii)	Magnesium Hydrogen Carbonate	Acidity regulator, Anticaking agent, Colour retention agent
505	Ferrous Carbonate	Acidity regulator
507	Hydrochloric Acid	Acidity regulator
508	Potassium Chloride	Gelling agent, Stabilizer, Flavour enhancer
509	Calcium Chloride	Firming agent, Stabilizer
510	Ammonium Chloride	Flour treatment agent
511	Magnesium Chloride	Firming agent
512	Stannous Chloride	Antioxidant, Colour retention agent
513	Sulphuric Acid	Acidity regulator
514	Sodium Sulphates	Acidity regulator
515	Potassium Sulphates	Acidity regulator
516	Calcium Sulphate	Flour treatment agent, Sequestrant, Firming agent
517	Ammonium Sulphate	Flour treatment agent, Stabilizer
518	Magnesium Sulphate	Firming agent
519	Cupric Sulphate	Colour fixative, Preservative
520	Aluminium Sulphate	Firming agent
521	Aluminium Sodium Sulphate	Firming agent
522	Aluminium Potassium Sulphate	Acidity regulator, Stabilizer
523	Aluminium Ammonium Sulphate	Stabilizer, Firming agent
524	Sodium Hydroxide	Acidity regulator
525	Potassium Hydroxide	Acidity regulator

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
526	Calcium Hydroxide	Acidity regulator, Firming agent
527	Ammonium Hydroxide	Acidity regulator
528	Magnesium Hydroxide	Acidity regulator, Colour retention agent
529	Calcium Oxide	Acidity regulator, Flour treatment agent
530	Magnesium Oxide	Anticaking agent
535	Sodium Ferrocyanide	Anticaking agent
536	Potassium Ferrocyanide	Anticaking agent
537	Ferrous Hexacyanomanganate	Anticaking agent
538	Calcium Ferrocyanide	Anticaking agent
539	Sodium Thiosulphate	Antioxidant, Sequestrant
541	Sodium Aluminium Phosphate	Acidity regulator, Emulsifier
541 (i)	Sodium Aluminium Phosphate – Acidic	Acidity regulator, Emulsifier
541 (ii)	Sodium Aluminium Phosphate – Basic	Acidity regulator, Emulsifier
542	Bone Phosphate (Essentially Calcium Phosphate, Tribasic)	Emulsifier, Anticaking agent, ~~Water retention agent~~ Moisture-retention agent
550	Sodium Silicates	Anticaking agent
550 (i)	Sodium Silicate	Anticaking agent
550 (ii)	Sodium Metasilicate	Anticaking agent
551	Silicon Dioxide, Amorphous	Anticaking agent
552	Calcium Silicate	Anticaking agent
553	Magnesium Silicates	Anticaking agent, ~~Dusting powder~~ Dusting agent
553 (i)	Magnesium Silicate	Anticaking agent, ~~Dusting powder~~ Dusting agent
553 (ii)	Magnesium Trisilicate	Anticaking agent, ~~Dusting powder~~ Dusting agent
553 (iii)	Talc	Anticaking agent, ~~Dusting powder~~ Dusting agent
554	Sodium Aluminosilicate	Anticaking agent
555	Potassium Aluminium Silicate	Anticaking agent
556	Calcium Aluminium Silicate	Anticaking agent
557	Zinc Silicate	Anticaking agent
558	Bentonite	Anticaking agent
559	Aluminium Silicate	Anticaking agent
560	Potassium Silicate	Anticaking agent
570	Fatty Acids	Foam stabilizer, Glazing agent, Antifoaming agent
574	Gluconic Acid (D-)	Acidity regulator, Raising agent
575	Glucono Delta-Lactone	Acidity regulator, Raising agent
576	Sodium Gluconate	Sequestrant
577	Potassium Gluconate	Sequestrant
578	Calcium Gluconate	Acidity regulator, Firming agent
579	Ferrous Gluconate	Colour retention agent
580	Magnesium Gluconate	Acidity regulator, Firming agent, Flavour enhancer
585	Ferrous Lactate	Colour retention agent
586	Hexylresorcinol, 4-	Colour retention agent, Antioxidant
620	Glutamic Acid, (L(+)-)	Flavour enhancer

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
621	Monosodium Glutamate	Flavour enhancer
622	Monopotassium Glutamate	Flavour enhancer
623	Calcium Glutamate (D,L-)	Flavour enhancer
624	Monoammonium Glutamate	Flavour enhancer
625	Magnesium Glutamate	Flavour enhancer
626	Guanylic Acid, 5'-	Flavour enhancer
627	Disodium 5'-Guanylate	Flavour enhancer
628	Dipotassium 5'-Guanylate	Flavour enhancer
629	Calcium 5'-Guanylate	Flavour enhancer
630	Inosinic Acid	Flavour enhancer
631	Disodium 5'-Inosinate	Flavour enhancer
632	Potassium Inosinate	Flavour enhancer
633	Calcium 5'-Inosinate	Flavour enhancer
634	Calcium 5'-Ribonucleotides	Flavour enhancer
635	Disodium 5'-Ribonucleotides	Flavour enhancer
636	Maltol	Flavour enhancer
637	Ethyl Maltol	Flavour enhancer
638	Sodium L-Aspartate	Flavour enhancer
639	Alanine, DL-	Flavour enhancer
640	Glycine	~~Flavour modifier~~
641	Leucine, L-	~~Flavour modifier~~
642	Lysin Hydrochloride	Flavour enhancer
650	Zinc Acetate	Flavour enhancer
900a	Polydimethylsiloxane	Antifoaming agent, Anticaking agent, Emulsifier
900b	Methylphenylpolysiloxane	Antifoaming agent
901	Beeswax	Glazing agent, ~~Release agent~~, Clouding agent
902	Candelilla Wax	Glazing agent, Clouding agent
903	Carnauba Wax	Glazing agent
904	Shellac	Glazing agent
905a	Mineral Oil, Food Grade	Glazing agent, ~~Release agent,~~ Sealing agent
905b	Petrolatum (Petroleum Jelly)	Glazing agent, ~~Release agent~~, Sealing agent
905c	Petroleum Wax	Glazing agent, ~~Release agent~~, Sealing agent
905c (i)	Microcrystalline Wax	Glazing agent
905c (ii)	Paraffin Wax	Glazing agent
905d	Mineral Oil, High Viscosity	Glazing agent, ~~Release agent~~, Sealing agent
905e	Mineral Oil, Medium and Low Viscosity (Class I)	Glazing agent, ~~Release agent~~, Sealing agent
905f	Mineral Oil, Medium and Low Viscosity (Class II)	Glazing agent, ~~Release agent~~, Sealing agent
905g	Mineral Oil, Medium and Low Viscosity (Class III)	Glazing agent, ~~Release agent~~, Sealing agent
906	Benzoin Gum	Glazing agent

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
907	Hydrogenated Poly–Decenes	Glazing agent
908	Rice Bran Wax	Glazing agent
909	Spermaceti Wax	Glazing agent
910	Wax Esters	Glazing agent
911	Methyl Esters of Fatty Acids	Glazing agent
913	Lanolin	Glazing agent
915	Glycerol, Methyl, or Penat Erithrytol Esters of Colophane	Glazing agent
916	Calcium Iodate	Flour treatment agent
917	Potassium Iodate	Flour treatment agent
918	Nitrogen Oxides	Flour treatment agent
919	Nitrosyl Chloride	Flour treatment agent
920	Cysteine, L-and its Hydrochlorides – Sodium and Potassium Salts	Flour treatment agent
921	Cystine, L-and its Hydrochlorides – Sodium and Potassium Salts	Flour treatment agent
922	Potassium Persulphate	Flour treatment agent
923	Ammonium Persulphate	Flour treatment agent
924a	Potassium Bromate	Flour treatment agent
924b	Calcium Bromate	Flour treatment agent
925	Chlorine	Flour treatment agent
926	Chlorine Dioxide	Flour treatment agent
927a	Azodicarbonamide	Flour treatment agent
927b	Urea (Carbamide)	Flour treatment agent
928	Benzoyl Peroxide	Flour treatment agent, Preservative
929	Acetone Peroxide	Flour treatment agent
930	Calcium Peroxide	Flour treatment agent
940	Dichlorodifluormethane	Propellant, ~~Liquid freezant~~
941	Nitrogen	Packaging gas, ~~Freezant~~
942	Nitrous Oxide	Propellant
943a	Butane	Propellant
943b	Isobutane	Propellant
944	Propane	Propellant
945	Chloropentafluorethane	Propellant
946	Octafluorcyclobutane	Propellant
949	Hydrogen	Packaging gas
950	Acesulfame Potassium	Sweetener, Flavour enhancer
951	Aspartame	Sweetener, Flavour enhancer
952	Cyclamic Acid (and Na, K, Ca Salts)	Sweetener
953	Isomalt (isomaltitol)	Sweetener, Anticaking agent, Bulking agent, Glazing agent
954	Saccharin (and Na, K, Ca Salts)	Sweetener
955	Sucralose (Trichlorogalactosucrose)	Sweetener
956	Alitame	Sweetener
957	Thaumatin	Sweetener, Flavour enhancer
958	Glycyrrhizin	Sweetener, Flavour enhancer
959	Neohesperidine Dihydrochalcone	Sweetener
960	Steviol Glycosides	Sweetener

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
961	Neotame	Sweetener, Flavour enhancer
962	Aspartame-Acesulfame Salt	Sweetener
963	Tagatose, D-	Sweetener
964	Polyglycitol Syrup	Sweetener
965	Maltitol and Maltitol Syrup	Sweetener, Stabilizer, Emulsifier
966	Lactitol	Sweetener, ~~Texturizer~~ Texturizing agent , Emulsifier
967	Xylitol	Sweetener, Humectant, Stabilizer, Emulsifier, Thickener
968	Erythritol	Sweetener, Flavour enhancer, Humectant
999	Quillaia Extracts	Foaming agent
999 (i)	Quillaia extract Type 1	Foaming agent
999 (ii)	Quillaia extract Type 2	Foaming agent
1000	Cholic Acid	Emulsifier
1001	Choline Salts and Esters	Emulsifier
1001 (i)	Choline Acetate	Emulsifier
1001 (ii)	Choline Carbonate	Emulsifier
1001 (iii)	Choline Chloride	Emulsifier
1001 (iv)	Choline Citrate	Emulsifier
1001 (v)	Choline Tartrate	Emulsifier
1001 (vi)	Choline Lactate	Emulsifier
1100	Amylases	Flour treatment agent
1101	Proteases	Flour treatment agent, Stabilizer, ~~Tenderizer~~, Flavour enhancer
1101 (i)	Protease	Flour treatment agent, Stabilizer, ~~Tenderizer~~, Flavour enhancer
1101 (ii)	Papain	~~Tenderizer~~, Flavour enhancer
1101 (iii)	Bromelain	Flour treatment agent, Stabilizer, ~~Tenderizer~~, Flavour enhancer
1101 (iv)	Ficin	Flour treatment agent, Stabilizer, ~~Tenderizer~~, Flavour enhancer
1102	Glucose Oxidase	Antioxidant
1103	Invertases	Stabilizer
1104	Lipases	Flavour enhancer
1105	Lysozyme	Preservative
1200	Polydextroses A and N	Bulking agent, Stabilizer, Thickener, Humectant, ~~Texturizer~~ Texturizing agent
1201	Polyvinylpyrrolidone	Bodying agent, Stabilizer, ~~Clarifying agent,~~ Dispersing agent
1202	Polyvinylpyrrolidone (Insoluble)	Colour stabilizer, ~~Colloidal~~ Colloidal stabilizer, Stabilizer
1203	Polyvinyl Alcohol	~~Coating~~ Coating agent, Binder, Sealing agent, Surface-finishing agent
1204	Pullulan	Glazing agent, Film-forming agent
1503	Castor Oil	~~Release agent~~
1505	Triethyl Citrate	Foam stabilizer
1518	Triacetin	Humectant
1520	Propylene Glycol	Humectant, Wetting agent, Dispersing agent

INS No.	Name of Food Additive	~~Technical Function(s)~~Technological purpose
1521	Polyethylene Glycol	Antifoaming agent

SUPPLEMENTARY LIST - MODIFIED STARCHES

~~Explanatory note~~

~~The Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985) specifies that modified starches may be declared as such in the list of ingredients. However, as some countries presently require the specific identification of modified starches the following numbers are provided as a guide and as a means of facilitating uniformity. Where these starches are specifically identified in the list of ingredients then it would be appropriate to include them under the relevant class name e.g. Thickener.~~

List in numerical order

INS No.	Name of Food Additive	Technical Function(s)
1400	Dextrins, Roasted Starch	Stabilizer, Thickener, Binder, Emulsifier
1401	Acid-Treated Starch	Stabilizer, Thickener, Binder, Emulsifier
1402	Alkaline Treated Starch	Stabilizer, Thickener, Binder, Emulsifier
1403	Bleached Starch	Stabilizer, Thickener, Binder, Emulsifier
1404	Oxidized Starch	Stabilizer, Thickener, Binder, Emulsifier
1405	Starches, Enzyme Treated	Stabilizer, Thickener, Binder, Emulsifier
1410	Monostarch Phosphate	Stabilizer, Thickener, Binder, Emulsifier
1411	Distarch Glycerol	Stabilizer, Thickener, Binder, Emulsifier
1412	Distarch Phosphate	Stabilizer, Thickener, Binder, Emulsifier
1413	Phosphated Distarch Phosphate	Stabilizer, Thickener, Binder, Emulsifier
1414	Acetylated Distarch Phosphate	Stabilizer, Thickener, Binder, Emulsifier
1420	Starch acetate	Stabilizer, Thickener, Binder, Emulsifier
1422	Acetylated Distarch Adipate	Stabilizer, Thickener, Binder, Emulsifier
1440	Hydroxypropyl Starch	Stabilizer, Thickener, Binder, Emulsifier
1442	Hydroxypropyl Distarch Phosphate	Stabilizer, Thickener, Binder, Emulsifier
1450	Starch Sodium Octenyl Succinate	Stabilizer, Thickener, Binder, Emulsifier
1451	Acetylated oxidized starch	Stabilizer, Thickener, Binder, Emulsifier
1452	Starch aluminium octenyl succinate	Anticaking agent, Carrier, Stabilizer

SECTION 4

INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

List in alphabetical order

[same as Section 3, but listed in alphabetical order]

Annex 2

DRAFT REVISION OF CLASS NAMES AND THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

CAC/GL 36-1989

SECTION 1 - Introduction

~~**FOREWORD**~~

Background

~~The International Numbering System for Food Additives (INS) has been prepared by the Codex Committee on Food Additives (CCFA) for the purpose of providing an agreed international numerical system for identifying food additives in ingredient lists as an alternative to the declaration of the specific name which is often lengthy and a complex chemical structure. It has been based on the restricted system already introduced successfully within the EEC.~~

~~The need for the identification of food additives on food labels arises from the provisions of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985). This contains the following specific provisions relating to the declaration and identification of food additives in the list of ingredients.~~

> ~~"4.2.2.3. For food additives falling in the respective classes and appearing in lists of food additives permitted for use in foods generally, the following class titles should be used together with the specific name or recognised numerical identification as required by national legislation."~~

~~As required by this provision, the identification numbers are for use only in conjunction with class titles which are meaningful to consumers as descriptions of the actual functions of food additives. As an example, tartrazine when used as a colour in food could be declared as either "colour (tartrazine)" or "colour 102". The advantages of the system are perhaps more apparent in the following example – "thickener (sodium carboxymethyl cellulose)" or "thickener 466".~~

~~The 18th Session (July 1989) of the Codex Alimentarius Commission adopted the INS as a Codex Advisory Text on the basis that the list would be an open one and that proposals for inclusion of further additives would be considered (ALINORM 89/40, para 297).~~

~~**Composition of the INS**~~

The International Numbering System for Food Additives (INS) is intended as an identification system for food additives on a world-wide basis~~ approved for use in one or more member countries~~. Inclusion in the INS ~~It~~ does not imply ~~toxicological~~ approval by Codex for use as food additives ~~but is a means of identifying food additives on a world-wide basis~~. The list may include ~~extends well beyond~~ those additives that have not been evaluated ~~currently cleared~~ by the Joint FAO/WHO Expert Committee on Food Additives (JECFA).

The INS does not include flavours, which have a JECFA number as identifiers, ~~since the Codex General Standard for Labelling does not require these to be specifically identified in the list of ingredients. Further, it does not include~~ chewing gum bases, and dietetic and nutritive additives.

Enzymes which function as food additives ~~are included in the INS along with the technological functions they perform. It was not possible to insert these enzymes in the INS in close proximity to other food additives with similar functions (e.g. flour treatment agents). They~~ have ~~therefore~~ been included ~~together~~ in an 1100 series.

Explanatory notes on the lay-out of the INS

The INS in numerical order (Section 3) is set out in three columns giving the identification number, the name of the food additive and the technological purposes ~~functions~~. The identification number ~~for labelling purposes~~ usually consists of three or four digits such as 100 for Curcumins and 1001 for Chlorine salts and esters. However in some instances the number is followed by an alphabetical subscript, for example, 150a identifies Caramel I-plain, 150b identifies Caramel II-caustic sulphite process, and so on. ~~Therefore, the numbers including any alphabetical subscripts are for use on labels.~~

Under the column listing the name of the food additive, some additives are further subdivided by numerical subscripts~~, such as (i), (ii), etc~~. For example, Curcumins are subdivided into (i) Curcumin and (ii) Turmeric. These identifications ~~are not for labelling purposes but simply to~~ identify sub-classes (in this case of Curcumins) which are covered by separate Codex specifications.

The various technological purposes ~~functions performed by~~ of the food additives are included in the INS in a third column. The purposes ~~functions~~ listed are indicative rather than exhaustive. ~~and are not intended for labelling purposes.~~

~~For labelling purposes,~~ T~~t~~he technological purposes ~~functions~~ are grouped under more descriptive functional class titles which are intended to be meaningful to consumers. These are listed in Section 2 along with simple definitions of the function performed.

~~The twenty-three class titles given in Section 2 have been endorsed by the Codex Committee on Food Labelling and were adopted by the 19th Session (July 1991) of the Codex Alimentarius Commission (ALINORM 91/40, para 181).~~

A single food additive can often be used for a range of technological purposes ~~functions~~ in a food and it remains the responsibility of the manufacturer to declare the most descriptive functional class in the list of ingredients~~. For example, sulphur dioxide may function as either a preservative or an antioxidant in foods and may therefore be declared in the list of ingredients as "preservative 220" or "antioxidant 220", as appropriate.~~

In preparing the INS in numerical order, an effort has been made to group food additives with similar purposes ~~functions~~ together ~~in line with the previous procedure used with EEC numbers~~. However, because of the extension of the list and its open nature, most of the three digit numbers have already been allocated. Consequently, the positioning of a food additive in the list can no longer be taken as an indication of the purpose ~~function,~~ although this will often be the case.

~~It should be noted that a few of the numbers previously allocated within the EEC have been changed to facilitate grouping of similar additives in a more effective layout. This applies particularly to the diphosphates and polyphosphates which have now been grouped under numbers 450 to 452 and to the mineral hydrocarbons now grouped under number 905. Further changes of this nature are not expected and would be made only under exceptional and justified circumstances such as in order to prevent the confusion of consumers or avoid undue difficulties for industry.~~

The open nature of the list

Because of its primary purpose of identification, the INS is an open list subject to the inclusion of additional additives or removal of existing ones on an ongoing basis. ~~Similarly, the CCFA will maintain an ongoing review, in conjunction with the Codex Committee on Food Labelling, of the functional class titles specified for use in food labelling.~~

~~In line with the above purpose of the INS, members governments and international organizations are invited to make proposals to the CCFA on an ongoing basis regarding~~

- ~~additional food additives for which an international identification number can be justified~~
- ~~additional functional class titles for use in food labelling in conjunction with the INS~~
- ~~the deletion of food additives or class titles~~

~~Proposals should be directed in the first instance to the Chief, Joint FAO/WHO Food Standards Programme, FAO, Viale delle Terme di Caracalla, 00153, Rome, ITALY.~~