CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 7 **CX/FA 11/43/16**

December 2010

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-third Session

Xiamen (Fujian Province), China, 14-18 March 2011

PROPOSALS FOR CHANGES AND/OR ADDITIONS TO THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments at Step 3 on the following subject matter (see Appendix 1) are invited to do so **no later than 15 February 2011** 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 Secretariat, 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***).

1. Background

The 42nd session of the Codex Committee on Food Additives (CCFA) agreed to establish an electronic Working Group (eWG), open to all members and observers, hosted by Finland. The eWG worked in English only with the following terms of reference:

- To consider the replies to CL 2010/8-FA, April 2010 requesting proposals for changes/additions to Section 3 of the list and prepare a proposal for circulation for comments at Step 3;
- To address the concerns on the use of the term "caustic" for describing the manufacturing process which is used in association with caramel I – plain (caustic caramel) (INS 150a) and caramel II – caustic sulfite process (INS 150b);
- To consider the question of deleting the Technological Purposes for a number of food additives in Section 3 of the INS that are further subdivided by subscripts (so called "parent food additives");
- To discuss whether it is necessary to introduce into Section 1 an explanatory text on the use of brackets in the names of compounds in Section 3 of the INS, and, if considered relevant, make a proposal for a suitable text to be considered by the 43rd session of the CCFA.
- To discuss whether INS 470(i) "Salts of myristic, palmitic and stearic acids with ammonia, calcium, potassium and sodium" should also include magnesium salts and make a proposal for a change to be considered by the 43rd session of the CCFA

The Circular Letter requesting comments to the INS (CL 2010/8-FA) was published in April 2010 and the deadline for comments was set at 15 September 2010.

2. The Electronic Working Group

In April 2010, the Codex Secretariat distributed an invitation to Codex members and observers to express interest in participation in the eWG by 15 June 2010. This invitation contained the terms of reference of the eWG, a general outline of the work of the eWG, and the expected outcome of the work, namely a proposal for changes to the INS list.

Ten members and 14 observers expressed interest in participation in the eWG: Belgium, Brazil, China, Iran, Japan, Malaysia, New Zealand, Norway, PCC-Dominican Republic, USA, AMFEP, CEFIC, CIAA, the EC, FAO JECFA Secretariat, IADSA, IADSA, IACM, ICGA, ICGMA, IDF, IFAC, Marinalg and NATCOL. All the observers are recognized as Codex International Non-Governmental Organizations.

An outline of the work of the eWG was distributed to the eWG on 22 June 2010, with a list of so called parent food additives suggested to be considered to have their Technological Purposes deleted. The outline received general support from the members of the eWG. The deadline for submitting information and comments was the same as that of to the CL, 15 September 2010.

On 30 September 2010 a compilation of the proposals received was sent to the eWG members for comments by 31 October 2010. All proposals received were appended to the compilation.

The proposals for changes and/or additions to the INS list are presented in Appendix I and are based on the replies to CL 2010/8-FA and comments received on the compiled proposals from the following members of the eWG: Belgium, Brazil, New Zealand, USA, AIDGUM, CEFIC, CIAA, IACM, IADSA, ICGA, ICGMA, IDF, IFAC, Marinalg and NATCOL.

Appendix I

PROPOSED CHANGES AND/OR ADDITIONS TO THE CODEX *CLASS NAMES AND THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES* (CAC/GL 36-1989)

(At Step 3)

Section 1 - Introduction

1. It is proposed that in the first para of "Explanatory notes …", the third sentence is changed to read:

   "However, in some instances the number is followed by an alphabetical suffix, for example 150a identifies Plain caramel, 150b identifies Sulfite caramel".

2. It is proposed that a new text is introduced between 2nd and 3rd para of "Explanatory notes…":

   The name of the food additive is sometimes followed by an additional name in parentheses. The parenthetical name is optional, and may be used, when necessary, to indicate another commonly associated name or synonym for the additive (e.g., INS 235 Natamycin (Pimaricin)), or to provide additional description of the additive (e.g., INS 161h(i) Zeaxanthin (synthetic)).

Section 2 – Table of Functional classes, Definitions and Technological Purposes

It is proposed that the Technological Purpose under two Functional Classes are changed in the following way:

Functional Classes	Technological purpose
5. Bleaching agent	bleaching agent, **flour bleaching agent**
15. Flour treatment agent	flour treatment agent, ~~flour bleaching agent,~~ flour improver, dough conditioner, dough strengthening agent

Section 3 – International Numbering System for Food Additives, List in numerical order

The INS list in numerical order is proposed to be updated as listed in Tables 1-4 below.

Comments:

- The current names for INS 150a and 150b are proposed to be modified (see Table 1). Should for consistency also the names of 150c and 150d be modified?
- An attempt has been made to include almost all proposed changes, especially as regards the Technological Purposes in order to list all the Technological Purposes for which the additive is used according to comments received. However, only Technological Purposes currently included in the INS are proposed to be added. There was no consensus in the eWG on including all proposed changes, and reference was made to the text in Section 1 that the INS in this respect is indicative and not exhaustive. It was also pointed out that proposals for additional Technological Purposes should be accompanied by a suitable justification.
- Magnesium salts of fatty acids were considered not to fall under INS 470(i) and a new number is proposed for magnesium stearate.
- The current inclusion of aluminium salts under INS 470 was questioned, and should be discussed by the Committee.
- The Technological Purposes for so-called "parent" additives, i.e. the general categories, such as Caramels and Sorbitols are proposed to be deleted, although all members of the WG did not fully agree with the deletions.

Table 1: New INS numbers and changes in INS names and numbers:

INS No.	**Name of Food Additive**	**Technological Purpose**
150	**Caramels**	
150a	Caramel I – plain ~~(caustic)~~ caramel~~)~~	colour

INS No.	Name of Food Additive	Technological Purpose
150b	Caramel II – ~~caustic~~ sulfite **caramel** ~~process~~	colour
150c	Caramel III – ammonia **caramel** ~~process~~?	colour
150d	Caramel IV – sulfite ammonia **caramel** ~~process~~?	colour
~~414a~~ **423**	Octenyl Succinic Acid (OSA) modified gum arabic	emulsifier
450(ix)	**Magnesium dihydrogen diphosphate**	**raising agent**
470(iii) ? 470b ?	**Magnesium stearate**	**anticaking agent, binder, emulsifier**
514	**Sodium sulfates**	
515	**Potassium sulfates**	

Table 2: Food additives identified as parent food additives for which the Technological Purpose could be deleted

100	Curcumins	350	Sodium malates
101	Riboflavins	351	Potassium malates
141	Chlorophylls and chlorophyllins, copper complexes	352	Calcium malates
160a	Carotenes	364	Sodium succinates
160b	Annatto extracts	420	Sorbitols
160d	Lycopenes	460	Celluloses
161b	Luteins	470	Salts of fatty acids (with base aluminium, ammonium, calcium, magnesium, potassium, sodium)
161h	Zeaxanthins	481	Sodium lactylates
163	Anthocyanins	482	Calcium lactylates
172	Iron oxides	500	Sodium carbonates
261	Potassium acetates	501	Potassium carbonates
262	Sodium acetates	503	Ammonium carbonates
307	Tocopherols	504	Magnesium carbonates
322	Lecithins	550	Sodium silicates
331	Sodium citrates	553	Magnesium silicates
332	Potassium citrates	952	Cyclamates
333	Calcium citrates	954	Saccharins
335	Sodium tartrates	965	Maltitols
336	Potassium tartrates	999	Quillaia extracts
342	Ammonium phosphates	1001	Choline salts and esters
343	Magnesium phosphates	1101	Proteases

Table 3: Proposal for additional Technological Purposes taking into account Food Chemicals Codex

INS #	Food Additive	INS Functional Class	ADDITIONAL Functional Class/Technological Purpose
170(i)	Calcium carbonate	Surface colourant, Anticaking agent, Stabilizer, Acidity regulator	Dough conditioner; firming agent;
220	Sulfur dioxide	Preservative, Antioxidant	Bleaching agent
221	Sodium sulfite	Preservative, Antioxidant	Bleaching agent
224	Potassium metabisulfite	Preservative, Antioxidant	Bleaching agent
342(i)	Ammonium dihydrogen phosphate	Acidity regulator, Flour treatment agent	Raising agent
342(ii)	Diammonium hydrogen phosphate	Acidity regulator, Flour treatment agent	Raising agent
343(ii)	Magnesium hydrogen phosphate	Acidity regulator, Anticaking agent	Raising agent
386	Disodium ethylenediaminetetraacetate	Antioxidant, Preservative, Sequestrant	Stabilizer

INS #	Food Additive	INS Functional Class	ADDITIONAL Functional Class/Technological Purpose
481(i)	Sodium stearoyl lactylate	Emulsifier, Stabilizer	Dough conditioner; whipping agent (foaming agent)
482(i)	Calcium stearoyl lactylate	Emulsifier	Dough conditioner, stabilizer; whipping agent
484	Stearyl citrate	Emulsifier, Sequestrant	Antioxidant
523	Aluminium ammonium sulfate	Stabilizer, Firming agent	Acidity Regulator
551	Silicon dioxide, amorphous	Anticaking agent	Defoaming agent; carrier; conditioning agent (note:conditioning agent is not an INS Technological Purpose)
903	Carnauba wax	Glazing agent, Bulking agent, Acidity regulator, Carrier	Anticaking agent
905d	Mineral oil, high viscosity	Glazing agent, Sealing agent	Defoaming agent
925	Chlorine	Flour bleaching agent	Antimicrobial agent; bleaching agent (note:antimicrobial agent is not an INS Technological Purpose)
928	Benzoyl peroxide	Flour treatment agent, Preservative	Bleaching agent
1201	Polyvinylpyrrolidone	Bodying agent, Stabilizer, Dispersing agent	Coating agent
5211	Polyethylene glycol	Antifoaming agent, glazing agent, emulsifier, carrier, plasticizer	Binder, flavouring adjuvant

Table 4: Proposal for additional Technological Purposes taking into account JECFA specifications

INS #	Food Additive	INS Functional Class	ADDITIONAL Functional Class
342(i)	Ammonium dihydrogen phosphate	Acidity regulator, Flour treatment agent	Raising agent
342(ii)	Diammonium hydrogen phosphate	Acidity regulator, Flour treatment agent	Raising agent
482(i)	Calcium stearoyl lactylate	Emulsifier	Stabilizer
501(ii)	Potassium hydrogen carbonate	Acidity regulator, Stabilizer	Raising agent (Raising Agent)
523	Aluminium ammonium sulfate	Stabilizer, Firming agent	Buffer, colour fixative (colour retention agent)
579	Ferrous gluconate	Colour retention agent	Colour stabilizer
901	Beeswax	Glazing agent, Clouding agent	Stabilizer; texturizing agent, thickener, carrier
902	Candelilla wax	Glazing agent, Clouding agent	Texturizing agent, surface-finishing agent, carrier
905c(i)	Microcrystalline wax	Glazing agent	Defoaming agent
928	Benzoyl peroxide	Flour treatment agent, Preservative	Bleaching agent

Section 4 – International Numbering System for Food Additives, List in alphabetical order

No changes are proposed.

However, there was a suggestion to delete from Section 4 all Technological Purposes of the additives. In that way Section 4 would become an alphabetical reference list of the INS list. This proposal was not widely supported by the members of the eWG.