

# codex alimentarius commission E



FOOD AND AGRICULTURE  
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Agenda Item 10 (c)

CX/FA 09/41/15  
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## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON FOOD ADDITIVES

#### Forty-first Session

Shanghai, China, 16-20 March 2009

#### DISCUSSION PAPER ON INCONSISTENCIES IN THE NAMES OF COMPOUNDS IN THE CODEX SPECIFICATIONS FOR IDENTITY AND PURITY OF FOOD ADDITIVES AND IN THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

(Prepared by Denmark with the assistance of Brazil, Canada, European Community, Spain, Switzerland, United Kingdom, United States of America, CEFIC and FAO)

Governments and international organizations in Observer status with the Codex Alimentarius Commission wishing to submit comments on this discussion paper are invited to do so **no later than 31 January 2009** 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](mailto: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](mailto:Codex@fao.org) - preferably).

## BACKGROUND

1. The 40<sup>th</sup> session of the Committee considered the document "Discussion Paper on Inconsistencies in the Names of Compounds in the Codex *Specifications for Identity and Purity of Food Additives* and in the *International Numbering System for Food Additives*" and took decisions on a number of substances to resolve the inconsistencies.
2. However, due to time constraints, the Committee could not consider the remaining substances and related recommendations. Therefore, it agreed to establish an electronic Working Group (eWG), lead by Denmark, open to all Members and observers and working in English only, to consider these substances and prepare more specific recommendations for circulation for comments and consideration at its next session (ALINORM 08/31/12, para. 159).

## EXPLANATORY NOTES

3. The eWG has considered 65 substances prioritised by the Committee for resolution of the inconsistencies between names of compounds included in the "Class Names and the International Numbering System for Food Additives (CAC/GL 36-1989)," referred to as the INS list, and the names of the same compounds included in the "List of Codex Specifications for Food Additives (CAC/MISC 6)," referred to as the Codex specifications list.

4. Recommendations to the Committee for action have been prepared taking the following into account:
- The INS is an open list of food additives with known technological purposes for which an international identification number can be justified. When a request for the inclusion of a new additive in the INS is presented to the Codex Committee on Food Additives (CCFA), the request, in most cases, does not include specifications or other types of identification information for the compound. CCFA is therefore not typically in a position to discuss whether the name of the proposed substance is correct or appropriate.
  - Codex specifications are normally developed by the Joint FAO/WHO Expert Committee on Food Additives (JECFA), who assigns a name to the compound. The name is assigned in accordance with the principles developed at the 33rd JECFA<sup>1</sup>. The name chosen must be non-proprietary and should be a scientifically accurate description of the substance. In addition, the name should communicate to the consumer an accurate description of the substance, within the scope of existing names for food additives.
  - When a substance is included in the Codex General Standard for Food Additives (GSFA), the number and name in the INS list will typically be used. Furthermore, the inclusion of the food additive in the GSFA shall have taken into account any acceptable daily intake (ADI), or equivalent safety assessment established for the additive by JECFA. It is therefore important to assure an unambiguous agreement between the name in INS and the names and/or synonyms in the specifications.

#### **GENERAL OVERVIEW OF COMMENTS RECEIVED**

5. Draft recommendations were prepared by Denmark and sent out by the Codex Secretariat to Codex Contact Points in an introductory message.
6. General comments have been received from the FAO Secretary to JECFA indicating the difficulty in changing the name of a substance in a JECFA specifications monograph, as the name is tied to the JECFA evaluation. However, additions to the synonyms listed in the specifications could be more easily accommodated.

#### **RECOMMENDATIONS**

7. Recommendations for actions to be taken to eliminate the inconsistencies between names in the in the codex specifications and in the INS are included in the Annex. The recommendations are grouped according to the proposed action. The headings of the groups are:
- CCFA to consider adding substances to the INS
  - CCFA to consider changing names in INS
  - CCFA to investigate the use of the additive
  - JECFA to consider including synonyms
  - JECFA to reconsider names
  - CCFA to ask JECFA for advice

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<sup>1</sup> Thirty-third report of the Joint FAO/WHO Expert Committee on Food Additives, WHO Technical Report Series, No. 776, 1989.

## RECOMMENDATIONS FOR ACTIONS TO BE TAKEN TO ELIMINATE THE INCONSISTENCIES BETWEEN NAMES<sup>2</sup> IN THE CODEX SPECIFICATIONS AND IN THE INS

### 1. CCFA to consider adding substances to the INS

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
160f	beta-apo-8'-Carotenoic acid, ethyl ester	160f	Carotenoic Acid, Methyl or Ethyl Ester, beta-apo-8'-	The INS no. 160f covers both the methyl ester and the ethyl ester while the specification only covers the ethyl ester. <i>Recommendation: The CCFA should consider including the two esters separately in the INS</i>

### 2. CCFA to consider changing names in INS

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
140	Chlorophylls	140	Chlorophyll	<i>Recommendation: CCFA should consider changing the name in the INS to Chlorophylls.</i>
181	Tannic acid	181	Tannins, Food Grade	<i>Recommendation: CCFA should consider to change the name in the INS to Tannic acid (Tannins).</i>
235	Natamycin	235	Pimaricin (Natamycin)	JECFA has considered Natamycin to be the appropriate name and has included Pimaricin as a synonym in the specifications. <i>Recommendation: The CCFA should consider changing the name in the INS to Natamycin (Pimaricin).</i>
315	Erythorbic acid	315	Isoascorbic Acid (Erythorbic Acid)	Erythorbic acid and erythorbate were assigned as names for these substances in order to avoid confusion with ascorbic acid and ascorbate, respectively. <i>Recommendation: The CCFA should consider changing the names to Erythorbic acid (Isoascorbic acid) and Sodium erythorbate (Sodium isoscorbate) respectively as INS names.</i>
316	Sodium erythorbate	316	Sodium Isoascorbate	

<sup>2</sup> The e-Working Group only considered the English name of the substances. Therefore in both French and Spanish version of this document, the name of substances is given in English only.

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation	
INS No.	Title of specifications	INS No.	Name		
<b>2. CCFA to consider changing names in INS – continued</b>					
335 (ii)	Sodium L(+)-tartrate	335 (ii)	Disodium Tartrate	<p>Disodium L-tartrate is a synonym in the specifications. The ADI has been allocated to the L-compound.  <i>Recommendation: The CCFA should consider including "L-" in the INS name.</i></p> <p>Names for the individual phosphates in INS include "ortho" while the names in the specifications do not. The group names for the individual salts in INS do not include "ortho".  <i>Recommendations:</i>  (1) <i>The CCFA should consider deleting "ortho" from the names in the INS.</i>  (2) <i>The CCFA should consider using the specification name for the individual salts (e.g., disodium hydrogen phosphate instead of disodium phosphate)</i></p>	
337	Potassium sodium L(+)-tartrate	337	Potassium Sodium Tartrate		
338	Phosphoric acid	338	Orthophosphoric Acid		
339 (i)	Sodium dihydrogen phosphate	339 (i)	Monosodium Orthophosphate		
339 (ii)	Disodium hydrogen phosphate	339 (ii)	Disodium Orthophosphate		
339 (iii)	Trisodium phosphate	339 (iii)	Trisodium Orthophosphate		
340 (i)	Potassium dihydrogen phosphate	340 (i)	Monopotassium Orthophosphate		
340 (ii)	Dipotassium hydrogen phosphate	340 (ii)	Dipotassium Orthophosphate		
340 (iii)	Tripotassium phosphate	340 (iii)	Tripotassium Orthophosphate		
341 (i)	Calcium dihydrogen phosphate	341 (i)	Monocalcium Orthophosphate		
341 (ii)	Calcium hydrogen phosphate	341 (ii)	Dicalcium Orthophosphate		
341 (iii)	Tricalcium phosphate	341 (iii)	Tricalcium Orthophosphate		
342 (i)	Ammonium dihydrogen phosphate	342 (i)	Monoammonium Orthophosphate		
342 (ii)	Diammonium hydrogen phosphate	342 (ii)	Diammonium Orthophosphate		
343 (ii)	Magnesium hydrogen phosphate	343 (ii)	Dimagnesium Orthophosphate		
343 (iii)	Trimagnesium phosphate	343 (iii)	Trimagnesium Orthophosphate		
350 (i)	Sodium hydrogen DL-malate	350 (i)	Sodium Hydrogen Malate		<p>The ADI has been allocated to the DL-compound.  <i>Recommendation: The CCFA should consider including "DL-" in the INS name.</i></p>
350 (ii)	Sodium DL-malate	350 (ii)	Sodium Malate		
407	Carrageenan	407	Carrageenan and its ammonium, calcium, magnesium, potassium and sodium salts(includes furcellaran)		<p>The text about salts and furcellaran in the INS name is superfluous (furcellaran and the salts are included in the definition for carrageenan in the specifications).  <i>Recommendation: CCFA should consider to delete the superfluous text in the INS name.</i></p>
445	Glycerol ester of wood rosin	445	Glycerol Esters of Wood Rosin	<p>This additive is one ester product containing a mixture of esters.  <i>Recommendation: The CCFA should consider changing the name in the INS list to Gycerol ester of wood rosin.</i></p>	

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
<b>2. CCFA to consider changing names in INS – continued</b>				
479	Thermally oxidized soya bean oil interacted with mono- and diglycerides of fatty acids	479	Thermally Oxidized Soya Bean Oil with Mono- and Di – Glycerides of Fatty Acids	The specification name is more precise than the INS name. However, the word "reacted" may be more appropriate than "interacted" for describing that the additive is produced by a chemical reaction. <i>Recommendations:</i> (1) CCFA should consider using the specification name as the INS name. (2) JECFA should, at a future revision of the specifications, be asked whether the name could be changed to "Thermally oxidized soya bean oil reacted with mono- and diglycerides of fatty acids".
504 (ii)	Magnesium hydroxide carbonate	504 (ii)	Magnesium Hydrogen Carbonate	The INS name seems to contain an error. The substance used as a food additive is a basic magnesium carbonate. <i>Recommendation: The CCFA should consider changing the name in the INS to Magnesium hydroxide carbonate.</i>
514	Sodium sulphate	514	Sodium Sulfates	INS 514 - Sodium sulfate covers two Sodium sulfates used as food additives: Sodium sulfate and Sodium hydrogen sulfate. <i>Recommendation: The CCFA should consider including the two substances individually.</i>
515	Potassium sulphate	515	Potassium Sulfates	INS 515 - Potassium sulfate covers two Potassium sulfates used as food additives: Potassium sulfate and Potassium hydrogen sulfate <i>Recommendation: The CCFA should consider including the two substances individually.</i>
542	Bone phosphate	542	Bone Phosphate (Essentially Calcium Phosphate, Tribasic)	The explanatory text in the bracket is superfluous. The composition is defined in the specifications. <i>Recommendation: The CCFA should consider deleting the text in parentheses.</i>
621	Monosodium L-glutamate	621	Monosodium Glutamate	The ADI has been allocated to the L-compounds. In addition, glutamic acid in both the INS and in the Codex specifications is identified as the L-form. <i>Recommendation: The CCFA should consider including "L-" in the INS names.</i>
622	Monopotassium L-glutamate	622	Monopotassium Glutamate	
624	Monoammonium L-glutamate	624	Monoammonium Glutamate	

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
<b>2. CCFA to consider changing names in INS – continued</b>				
625	Magnesium di-L-glutamate	625	Magnesium Glutamate	The ADI has been allocated to the di-L-compounds. In addition, glutamic acid in both the INS and in the Codex specifications is identified as the L-form. <i>Recommendation: The CCFA should consider changing the names in the INS list to “Magnesium di-L-glutamate” and “Calcium di-L-glutamate” respectively.</i>
623	Calcium di-L-glutamate	623	Calcium Glutamate (D,L-)	
630	5'-Inosinic acid	630	Inosinic Acid	The INS is not consistent in naming. The designator "5'-" is included in the names for all other comparable substances. <i>Recommendation: The CCFA should consider including "5'-" in the INS names.</i>
632	Dipotassium 5'-inosinate	632	Potassium Inosinate	
905b	Petroleum jelly	905b	Petrolatum (Petroleum Jelly)	JECFA has considered Petroleum jelly to be the appropriate name and has included Petrolatum as a synonym in the specifications. <i>Recommendation: CCFA should consider changing the name in INS to Petroleum jelly (petrolatum).</i>
907	Hydrogenated poly-1-decene	907	Hydrogenated Poly-Decenes	Hydrogenated poly-1-decene is name of a complex mixture. <i>Recommendation: CCFA should change the name to Hydrogenated poly-1-decene in the INS</i>
1200	Polydextroses	1200	Polydextroses A and N	The additional "A and N" is superfluous. The specifications cover both polydextrose (A) and polydextrose N. <i>Recommendation: The CCFA should consider using the specification name as the INS name.</i>

## 3. CCFA to investigate the use of the additive

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
365	Sodium fumarate	365	Sodium Fumarates	It is not clear whether more than one sodium fumarate is used as a food additive. Furthermore, the INS list currently uses the plural form "fumarates" for INS 365 (Sodium fumarates), INS 366 (Potassium fumarates), and INS 367 (Calcium fumarates), yet uses the singular form "fumarate" for INS 368 (Ammonium fumarate). <i>Recommendation: The CCFA should investigate which fumarate compounds are used as food additives. Subsequently JECFA and/or CCFA should consider revising the names for INS 365, 366, 367 and 368 so that they are consistent and in accordance with the use of the substances.</i>
470	Salts of fatty acids	470	Salts of Fatty Acids (with base aluminium, ammonium, calcium, magnesium, potassium, sodium)	The specifications for Salts of fatty acids only include the calcium, potassium and sodium salts. <i>Recommendation: The CCFA should investigate whether all salts mentioned in INS are used as food additives.</i>
520	Aluminium sulfate (anhydrous)	520	Aluminium Sulfate	It is not clear whether any other aluminium sulfates are used as food additives. <i>Recommendation: The CCFA should investigate whether aluminium sulfates, other than the anhydrous form, are used as food additives. If so, they should be listed individually in the INS. If not, CCFA may wish consider changing the name in the INS to Aluminium sulfate (anhydrous).</i>
904	Shellac, bleached	904	Shellac	Only Shellac, bleached has been evaluated by JECFA. <i>Recommendation: CCFA should investigate whether both bleached and unbleached shellac are used as food additives. If so, both substances should be listed individually in the INS. If not, the name should be changed to Shellac, bleached in the INS.</i>

#### 4. JECFA to consider including synonyms

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
160b (i)	Annatto extracts (aqueous-processed bixin)	160b(i)	Annatto Extracts, bixin-based	The name "Annatto Extracts, bixin-based" is not included as a synonym in the specifications. <i>Recommendation: JECFA should be asked to include the synonym "Annatto Extracts, bixin-based" in the specifications.</i>
	Annatto extracts (solvent-extracted bixin)			
160b (ii)	Annatto extracts (alkali-processed norbixin, acidprecipitated)	160b(ii)	Annatto Extracts, norbixin-based	The name "Annatto Extracts, norbixin-based" is not included as a synonym in the specifications. <i>Recommendation: JECFA should be asked to include the synonym "Annatto Extracts, norbixin-based" in the specifications.</i>
	Annatto extracts (alkali-processed norbixin, not acidprecipitated)			
	Annatto extracts (solvent-extracted norbixin)			
469	Sodium carboxymethyl cellulose, enzymatically hydrolysed	469	Sodium Carboxymethyl Cellulose, Enzymatically Hydrolysed (Cellulose Gum, Enzymatically Hydrolyzed)	Cellulose gum, enzymatically hydrolysed is not included as a synonym in the specifications. <i>Recommendation: JECFA should be asked to include this synonym in the specifications</i>
538, 536, 535	Ferrocyanides of calcium, potassium and sodium	535	Sodium Ferrocyanide	The individual names in the INS list are not included as synonyms in the specifications. <i>Recommendation: JECFA should be asked to consider including the individual INS names in the specifications.</i>
		536	Potassium Ferrocyanide	
		538	Calcium Ferrocyanide	
953	Isomalt	953	Isomalt (isomaltitol)	29th JECFA considered the name "Isomaltit" to be appropriate but did not include "Isomaltitol" as a synonym. <i>Recommendation: JECFA should be asked to consider including "Isomaltitol" as a synonym in the specifications.</i>



## 5. JECFA to reconsider names

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
101 (i)	Riboflavin	101 (i)	Riboflavin, synthetic	The name in INS has been changed to Riboflavin, synthetic. <i>Recommendation: JECFA should be asked whether it would be appropriate to change the title of the specification to "Riboflavin, synthetic".</i>
300	Ascorbic acid	300	Ascorbic Acid (L-)	The specifications name does not include the designator "L". However, the substance described in the specification is the "L"-compound. <i>Recommendation: JECFA should be asked to consider including the "L-" designator in the name.</i>
384	Isopropyl citrate mixture	384	Isopropyl Citrates	The specifications were prepared before JECFA developed its principles for assigning names to substances. <i>Recommendation: JECFA should be asked to reconsider the name.</i>
450 (i)	Disodium pyrophosphate	450 (i)	Disodium Diphosphate	The INS names use "diphosphate" while the names in the specifications for some of the substances use "pyrophosphate" and in one case "diphosphate." <i>Recommendation: JECFA should be asked to consider using diphosphate for all substances under INS 450 in order to be consistent.</i>
450 (iii)	Tetrasodium pyrophosphate	450 (iii)	Tetrasodium Diphosphate	
450 (vi)	Dicalcium pyrophosphate	450 (vi)	Dicalcium Diphosphate	
450 (vii)	Calcium dihydrogen diphosphate	450 (vii)	Calcium Dihydrogen Diphosphate	
452 (i)	Sodium polyphosphates, glassy	452 (i)	Sodium Polyphosphate	The names in the specifications for polyphosphates are not consistent (e.g., calcium polyphosphate is singular). <i>Recommendation: JECFA should be asked to reconsider the naming of polyphosphates in a consistent manner.</i>
452 (ii)	Potassium polyphosphates	452 (ii)	Potassium Polyphosphate	

## 6. CCFA to ask JECFA for advice

Codex specifications (CAC/MISC 6)		INS list (CAC/GL-36)		Explanation and recommendation
INS No.	Title of specifications	INS No.	Name	
333(iii)	Calcium citrate	333(iii)	Tricalcium Citrate	The naming of citrates are not consistent neither between the two lists nor within the individual lists. <i>Recommendation: JECFA should be asked for advice on the appropriate naming of citrates.</i>