codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 12 **CX/FAC 02/14**

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES AND CONTAMINANTS
Thirty-fourth Session
Rotterdam, The Netherlands, 11-15 March 2002

AMENDEMENTS TO THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES

The following comments have been received from Canada, Israel, Spain, Brazil, USA, European Community and ISDC.

CANADA

3. Codex INS Number 452 (iv) for Sodium Potassium Tripolyphosphate (Paragraph 99 and Appendix IX)

First, it should be noted that Item 3, Part B of CL 2001/13-FAC refers to INS 452(iv) for this additive and Paragraph 99 refers to INS 452 (vi). This discrepancy should be rectified.

Notwithstanding, Canada has no objection in principle to the proposed draft amendments (e.g. assigning an INS number to this compound) to the International Numbering System at Step 3 of the Accelerated Procedure.

4. Codex International Numbering System for Food Additives (Paragraph 96-99)

Comments on paragraph 96

(1) The International Numbering System embodies INS (CCFAC) functional classes (for labelling purposes) and the sub-classes (technological functions).

(2) JECFA also employs "functional uses listed by JECFA in specifications," corresponding more-or-less to "functional classes defined by Codex," presumably the INS functional classes.

(3) The INS sub-classes (technological functions) delineated opposite the INS functional classes are not necessarily identical to the "functional uses listed by JECFA in specifications" opposite the "functional classes defined by Codex."

(4) Canada believes that a much simpler system, based on the existing INS functional classes (for labelling purposes), is required. Canada sees no reason why separate systems are required for labelling and technological function.

(5) Canada sees some redundancy in the existing INS functional classes that should be eliminated. For example, the terms "acid" and "emulsifying salt" are merely sub-categories of "acidity regulator" and "emulsifier."

(6) CCFAC and JECFA should work together to develop one common list that would eventually serve to harmonize their terms.

Comments on paragraph 97

Canada is of the view that combination additives are better described by combining existing numbers for each of the two components instead of creating entirely new numbers for each combination. The combined numbers will contain already defined information,

Comments on paragraph 98

In the Codex **Mineral Oil** has only one INS 905a.

At its 44th Meeting (1995), JECFA divided Mineral Oil into four classes and assigned different ADI values and specifications to each, The classes and ADIs are as follows:

(1) Mineral oil (high-viscosity)(ADI 0-20);
(2) Mineral oil (medium- and low-viscosity, Class I) (ADI 0-1, temporary);
(3) Mineral oil (medium- and low-viscosity, Class II) (ADI 0-0.1, temporary); and
(4) Mineral oil (medium- and low-viscosity, Class III) (ADI 0-0.01, temporary).

Having three distinctive classes of medium and low viscosity mineral oils and one grade of existing high viscosity mineral oil would require four INS numbers.

Under the Canadian *Food and Drug Regulations*, Mineral Oil, Paraffin and Petrolatum are all considered to be adulterants of food. This does not preclude making exemptions to this rule and, indeed, some provisions are made in the Food Additive Tables of Division 16 of the *Food and Drug Regulations* for the use of these three substances, including Mineral Oil. The uses are limited such that exposure to this substance is minimal in consideration of its role otherwise as an adulterant. Like Codex, Canada does not presently break out Mineral Oil further into various classes characterized by viscosity. Mineral Oil must conform to Food Chemicals Codex specifications for Mineral Oil, White.

The risk assessment for mineral oils is ongoing and recently, the Toxicology Forum held a special meeting in Belgium on the subject material. This meeting included the presentation of new toxicological studies, dietary exposure surveys and discussions of the significance of the pathological findings in rats to humans. Before commenting further on this issue, Canada wishes to assess the outcome of these meetings and undertake its own exposure survey on this material prior to dicussing the need for four separate grades of mineral oil.

Canada also understands that JECFA will be evaluating mineral oils in June, 2002 and, as such, will wish to take this evaluation into account.

Comments on Paragraph 99

Canada's comments on this are found in Item (3) above of this letter.

ISRAEL

On behalf of the Israeli Ministry of Health please find enclosed technological justification of fresh fruits and vegetables surface treatment with coating agents such as INS 901- Beeswax, INS 902- Candelilla wax, INS 903- Carnauba wax,
INS 904- Shellac, INS 905 c(i) – Microcrystalline wax.

In addition, there is a justification to include INS 445- Glycerol ester of wood rosin as an additive in coatings for fresh fruits and vegetables.

There are also remarks concerning Ortho-phenyl-phenols (INS 231 and INS 232 for sodium o-phenylphenol), substances that are now listed as post-harvest pesticides.

Use of coating agents on fresh fruits and vegetables: technological justification

The following justification is based on the opinion of Israeli manufacturers .
In Israel selected fresh fruits and vegetables are treated on their surfaces with coating agents. Technological objectives of this procedure are as follows:

- protect against water loss but also allow selective gases exchange;
- create a protective layer around a fruit/vegetable in place of the natural one that is destroyed because of treatment in packing establishments;
- protect the surface against potential damage created by atmospheric conditions such as high humidity, strong wind that can carry sand and other abrasive particles;
- create uniform appearance of the surface and thus protect it against physical damages.

Overall the use of coating agents allows to improve fruits/vegetables shelf-life and appearance.

In general , treatment of surface concerns fruits and vegetables that are subsequently peeled , and therefore coating surface is eliminated before consumption. This is the case with mango, avocado, melons, citrus fruits, pineapple, papaya.

Intake of coating agents may perhaps occur with ingestion of fresh apples, pears, or peaches if such fruits are eaten with their peel and are not properly washed before consumption.

Coating compounds are usually composed of several substances , each of them have different technological function in the mixture, as follows :

INS 901 : **Beeswax** : obtained from the honeycomb of the bee; is soft, acts as an internal plasticizer, can be combined with other components that have brittle effect such as Shellac.
JECFA evaluation 1992 : ADI acceptable, use not of toxicological concern.

INS 902 : **Candelilla wax** : is of plant origin ; has a relatively high hydrocarbon content and lower percentage of wax and thus differs in its composition from Carnauba wax . Candelilla may be similar in applications to Carnauba, although physico-chemical parameters of these two waxes differ; Carnauba induces harder structure of a coating compound.
Manufacturers report that the choice of Candelilla or Carnauba use my also be dictated by market price of these waxes and not necessarily by difference of their physico-chemical parameters.
JECFA evaluation 1992 : ADI acceptable, use not of toxicological concern.

INS 903 : **Carnauba wax** : like Candelilla, is of plant origin. It creates hard structure of a coating layer, provides a gloss. Because of its hardness there may also be a brittle effect. Compound that contains Carnauba usually has also another component that allows to balance parameters of hardness – flexibility and thus impede brittleness or cracks of the coating layer.
JECFA evaluation 1992 : ADI 0-7 mg/kg bw.

INS 904 : **Shellac** : is obtained from a resinous secretion of the insect. It allows to achieve a physical stability of the coating compound, and its harder texture. It also creates a unique gloss on the surface of a fruit/vegetable.
JECFA evaluation 1992 : ADI acceptable, use not of toxicological concern.
INS 905 c(i): **Microcrystalline wax** (family of mineral oils) : its use results in equal distribution of the coating compound, particularly on citrus fruits surfaces (has a function of a microscopical filler for uneven surfaces). It can improve overall physical characteristics of a coating compound as well as its visual perception.
In the 33rd report of the CCFAC microcrystalline wax is listed as a coating agent for fresh fruits (not vegetables) at step 5 of the procedure.
Perhaps vegetables can be added as well ; in fact there may be differences between the agricultural definition of fruits and vegetables and a common consumer perception of these foods categories : for example in agricultural vocabulary melon or watermelon are "fruiting vegetables" while avocado is a fruit.
JECFA evaluation 1995 : ADI not specified, however ADI 0-20 mg/kg bw allocated to high-melting point petroleum waxes.

In general **quantities of waxes used for coating of fruits/vegetables** would probably not exceed 50 ppm (50 mg/kg) because usually one kilogram of coating compound is used for one ton of fruits/vegetables; amounts of individual waxes in mixtures would not exceed 5 %. Coating mixture usually contains no more than 20 % of dry matter.

There are two subjects that I would like to submit for discussion :
The first concerns the use of the **food additive INS 445 , Glycerol ester of wood rosin**, as an additive to the coating compound for fresh fruits and vegetables.
This is Israeli manufacturers application :
Coating compounds that contains Carnauba wax or Shellac tend to be brittle. This characteristics can be reinforced by atmospheric conditions for example differences of temperatures between day and night or differences of humidity.
INS 445 provides balance to the physico-chemical parameters of coating compounds and enables to create a smooth, shiny, uniform thin layer around the fruit that neither cracks ,melts nor is brittle; the substance has unique emulsifying properties and ensures adequate plasticity/elasticity of a coating compound.

In GSFA INS 445 is listed as adjuvant, bulking agent, emulsifier, stabilizer, thickener; it is allowed for use in water-based flavored drinks , up to 150 mg/kg; beer and malt beverages (60 mg/kg), and spirituous beverages with less than 15 % alcohol .
Its largest application is probably as a clouding agent in soft drinks.
JECFA evaluation 1996 : ADI 0-25 mg/kg bw.

Currently "wood rosin" is listed as a coating agent for citrus fruits in the CFR 21;
INS 445 is also allowed for this purpose by EU up to 50 mg/kg.

Israel would like to **apply for use of INS 445 as an additive in coating compounds for fresh fruits and vegetables in general.**
According to a manufacturer's figures actual amounts of INS 445 used on fruits such as apples are small , not higher than 5 ppm (5 mg/kg fruit) and therefore in all probability ADI would not be exceeded because of such ingestion.
The second subject concerns **ortho-phenyl-phenols** (INS 231 and 232 for sodium o-phenylphenol). It is listed in the Codex GSFA as preservative for surface treatment of citrus fruits exclusively, up to 12 mg/kg.
In fact, these substances are post-harvest pesticides, are listed as such in the report of the 33rd Session of the Codex Committee on Pesticide Residues, 2001, at step 5 of the procedure (citrus fruits, citrus pulp and orange juice).
O-phenylphenols are also registered at EPA as post-harvest pesticide.
In my view registration of these substances as a food additive with a preservative function is somehow misleading, if at the same time they are defined as pesticide. Perhaps they could be deleted from GSFA?
The problem can arise particularly while considering citrus fruit juices. Those can be manufactured by squeezing whole fruits, with their external layer . In such case the remaining residues of o-phenylphenols in the juice are carry-over of a post-harvest pesticides rather than preservative that is not allowed in international standard for citrus juice.

SPAIN

Codex INS Number 452 VI for Sodium Potassium Tripolyphosphate (Appendix IX)

In paragraph 99 it is requested in respect of INS number 452 VI (Sodium Potassium Tripolyphosphate) that the name: "potassium and sodium polyphosphate" be used. In addition, instead of assigning to this INS number the function of "water retention agent", it would be more correct to include it under the category of "humectants"; instead of as a "sequestrant" it should be included as a "stabilizer".

Codex International Numbering System for Food Additives (paras. 96-99)

It would be desirable to adapt the functional categories. In other words, to establish a list with the terms used in the INS system and the technological functions of the additive in question, and another list with the terms used by the JEFCA and the technological functions of each additive.

BRAZIL

Codex INS Number 452 (iv) for Sodium Potassium Tripolyphosphate (para. 99 and Appendix IX).
The Committee agreed to circulate INS Number 452 **(vi)** for Sodium Potassium Tripolyphosphate as an emulsifier, stabilizer, acidity regulator, raising agent, sequesterant and water retention agent at Step 3 of the Accelerated Procedure, subject to the approval of the Commission. Brazilian Position.
Brazil supports the proposed.
Codex International Numbering System for Food Additives (paras. 96 – 99).
The Committee agreed to request comments on the following issues related to the Codex International Numbering System for Food Additives:

- Harmonization of terms used by JECFA and the CCFAC in the Codex INS System in regard to technological functions and functional class/sub-classes;
- Consideration of "combination" additives within the Codex INS System;
- Consideration of the need for three different Codex INS Numbers for Mineral Oil, Food Grade, and;
- Additional revisions to the Codex INS System.

Brazilian Position: No Comments

USA

1) Codex INS Number 452 (iv) for Sodium Potassium Tripolyphosphate (ALINORM 12A/01, para. 99 and Appendix IX).

The Committee agreed to circulate INS Number 452 (iv) for Sodium Potassium Tripolyphosphate as an emulsifier, stabilizer, acidity regulator, raising agent, sequesterant and water retention agent at Step 3 of the Accelerated Procedure, subject to the approval of the Commission.

The United States supports the assignment of INS 452(iv) to sodium potassium tripolyphosphate as adopted at Step 3 by the 24th CAC (ALINORM 01/41, para. 108).

2) Codex International Numbering System for Food Additives (ALINORM 12A/01, paras. 96 – 99).

The 33rd CCFAC agreed to request comments on the following issues related to the Codex International Numbering System for Food Additives:

a) Harmonization of terms used by JECFA and the CCFAC in the Codex INS System in regard to technological functions and functional class/sub-classes;
b) Consideration of "combination" additives within the Codex INS System;
c) Consideration of the need for three different Codex INS Numbers for Mineral Oil, Food Grade, and;
d) Additional revisions to the Codex INS System.

a) Harmonization of terms used by JECFA[1] and the CCFAC in the Codex INS System in regard to technological functions and functional class/sub-classes

The 32nd CCFAC requested comment on revisions to the INS, including technological functions and functional classes/sub-classes, in the framework of the INS,[2] the GSFA, and the Codex General Standard for the Labeling of Prepackaged Foods. In response to this request the United States provided the following comments and recommendations to the CCFAC. We resubmit them below.

i) The Codex International Numbering System for Food Additives (INS) and The Codex General Standard for the Labeling of Prepackaged Foods

The INS has been adopted by the Commission to provide an international numbering system for identifying food additives in ingredient lists as an alternative to the declaration of the specific name of the additive, which can be lengthy or a complex chemical formula name. The need for such a system arises from Section 4.2.2.3 of the Codex General Standard for the Labeling of Prepackaged Foods. The INS does not include flavors since the Codex General Standard for Labeling does not require flavors to be specifically identified in the list of ingredients on the label. As required by Section 4.2.2.3 of the Codex General Standard for the Labeling of Prepackaged Foods, the INS numbers are to be used only in conjunction with additive class titles that are meaningful to consumers as descriptions of the actual functions of the additives. For example, tartrazine when used as a color in food can be declared as either "color (tartrazine)" or "color (102)".

[1] Summary of Evaluations Performed by the Joint FAO/WHO Expert Committee on Food Additives," FAO (1999)
[2] Section 5.2 of the Codex Alimentarius, Vol. 1A (1999).

Section 2 of the INS lists 23 additive functional class titles that are considered to be “meaningful to consumers” for labeling purposes. These 23 classes contain subclasses of technological functions. For example, the functional class "Humectant" contains the following subclasses: moisture/water retention agent, and wetting agent.

Sections 3 & 4 of the INS list food additives, their corresponding INS numbers, and their subclass (es) of technological functions. Section 3 is ordered numerically by INS number and Section 4 is ordered alphabetically by additive name. According to the forward of the INS, the subclasses of technological functions associated with a given additive "are indicative rather than exhaustive and are not intended for labeling purposes.”

ii) JECFA's List of Functional Effects

JECFA's evaluations of food additives include consideration of their technological functions. JECFA's food additive specification monographs refer to technological functions using the terms given in the list of functional classes and subclasses published in “Summary of Evaluations Performed by the Joint FAO/WHO Expert Committee on Food Additives,” FAO/WHO (1999). This list may be amended as needed. Currently, there are 38 Classes and 118 subclasses.

Of the 38 JECFA classes of functional effects, 9 (Adsorbents, Enzyme Preparations, Extraction Solvents, Filtering Aids, Freezing Agents, Nutrient Supplements, Reduced-Energy Fat And Oil Replacements, Release Agents, and Yeast Foods) refer to processing-aid functions or are not otherwise considered food additive functions. Excluding flavors, the remaining 28 JECFA classes are comprised of 95 subclasses, although 28 of these duplicate the class name.

iii) GSFA

For an additive to be included in the GSFA, the additive must be evaluated by JECFA and assigned an ADI and specifications for its identity and purity. The INS functional classes titles (for labeling) as well as the applicable 28 JECFA functional classes were used in constructing the draft GSFA and are an integral component of the standard. It is important to note that in some cases, Codex Member States reported an intended technical effect that is not listed for an additive in the INS or by JECFA. In such cases, the technical effect is listed in the Draft GSFA. This approach is consistent with the CCFAC's principle that a report of the use of an additive is *prima facia* justification for the technological need for the use of an additive. Moreover, it is consistent with the INS, which specifically recognizes that the list of functional effects "is indicative rather than exhaustive."

iv) Recommendation

CCFAC should agree to broaden the INS to explicitly include the JECFA list of classes/subclasses of technological functions. This would simplify the assignment of technological functions in the GSFA and expand the list of additive functional effects in the INS. Towards this end the United States offers the following proposal for the CCFAC to consider:

1) The subclasses of the JECFA functional class titles that match the INS functional classes but are not currently listed among the INS subclasses (see Table 1) should be incorporated into the INS subclass list of technological functions in Section 2 of the INS. Some of these terms, e.g., food colour, antispattering agent, seasoning agent, may seem, uninformative or redundant. Nevertheless, these are terms that JECFA has used and, therefore, have standing;

2) The JECFA classes (along with their subclass) that do not match an INS functional class title are listed in Table 2. Nevertheless, some of these JECFA terms may be assigned to the existing INS functional class titles. The CCFAC should consider the proposed assignments as set forth in Table 3a. In a few instances a reasonable assignment could not be made. The United States proposes that these remaining

terms that are not processing aids be listed as new INS functional class titles (carrier, carbonating agent, and tableting aid/adjuvant/agent) as set forth in Table 3b;

3) All new terms that are added to Section 2 of the INS should be included in Sections 3 and 4 for each additive that is listed. The corresponding entries for "Technical Function" for each additive should be harmonized with technical functions recognized by JECFA and be maintained as current; and

4) CCFAC should inform JECFA that the INS is being revised to include all JECFA additive functional classes and subclasses listed in the "Summary of Evaluations Performed by the Joint FAO/WHO Expert Committee on Food Additives" (1956-1997, Section 2, FAO/WHO, 1999). Moreover, CCFAC should recommend that JECFA consider the applicability of the revised INS additive functional classification system when considering additive functional effects in its evaluations.

b) Consideration of "combination" additives within the Codex INS System;

The United States recalls that the issue of "combination" additives and the INS system was raised by the 33rd CCFAC's *ad hoc* working group on the INS system in conjunction with acesulfame-aspartame salts.[3] The 33rd CCFAC noted that the "combination" additive could be assigned an entirely new number, or alternatively, the existing numbers for each of the two additives in question could be combined (INS 950/951).

The INS system is intended to provide 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.[4] The Codex General Standard for the Labeling of Prepackaged Foods (CODEX STAN 1-1985 (Rev. 1-1991) applies to the labeling of all prepackaged foods to be offered as such to the consumer or for catering purposes. The general principles of the standard make clear that prepackaged food shall not be described or presented on any label or in any labeling in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its character in any respect.

In cases of "combination" additives such as acesulfame-aspartame salts, both substances should be declared in the ingredient list as distinct entities. The use of a "short-hand" notation to indicate a "combination" additive in the ingredient list may result in the consumer being misled or creating an erroneous impression regarding the character of the food. Whether the "combination" additives are added as a combined salt or as separate entities, each of the additives exists in their individual ionic forms in the final food. Indicating that the additives were added as a combined salt or as separate salts in the manufacturing process does not add any information as to the final composition of the prepackaged food. Moreover, creating a new "hieroglyphic" or shorthand notation for the ingredient list to inform the consumer that a "combination" additive was used in the processing is dubious. Therefore, in cases of "combination" additives, each additive should be declared in the ingredient list separately and no special notation to indicate the manufacturing process is necessary.

c) Consideration of the Need for Three Different Codex INS Numbers for Mineral Oil, Food Grade

The INS assigns one number (905a) to mineral oil, food grade for use as a glazing or release agent. JECFA has divided mineral oil (905a) into two groups, mineral oil, high-viscosity and mineral oil, medium- and low-viscosity. The medium- and low viscosity mineral oil is further subdivided into three classes (class I, class II and class III). JECFA has assigned a full ADI to high-viscosity mineral oil (0-20 mg/kg bw/d) and temporary ADIs to the medium- and low- viscosity Class I (0-1 mg/kg bw/d), Class II (0-0.1 mg/kg bw/d) and Class III (0-0.1 mg/kg bw/d) mineral oils.

[3] ALINORM 12A/01, para 97.
[4] Codex Alimentarius Vol. 1A, Section 5.3, 1999.

In order to promote harmonization between the INS and the scientific advice from JECFA on food-grade mineral oil, the United States recommends that the INS number for mineral oil be amended to reflect the distinctions among the different food- grade mineral oils identified by JECFA. We suggest the following amendment to the INS to clarify the differences among food- grade mineral oils based on their identity and purity and their safety evaluations by JECFA.

905ai Mineral oil, high-viscosity
905aii Mineral oil, medium- and low-viscosity (Class I)
905aiii Mineral oil, medium- and low-viscosity (Class II)
905aiv Mineral oil, medium- and low-viscosity (Class III)

The United States does not propose any additional revisions to the Codex INS System.

TABLE 1		
INS Functional Class Title	**INS Sub-Class (technological function)**	**JECFA TERM**
Acid	acidifier	acidulant
Acidity regulator	acid, alkali, base, buffer, buffering agent, pH adjustment agent	neutralizing agent
Anticaking agent	anticaking agent, antisticking agent, drying agent, dusting powder, release agent	dusting agent
Antifoaming agent	antifoaming agent	defoaming agent
Antioxidant	antioxidant, antioxidant synergist, sequesterant	
Bulking agents	bulking agent, filler	component of chewing gum base
Colour	colour	decorative pigment, food colour, surface colorant
Colour retention agent	colour fixative, colour stabilizer	antibleaching agent, colour adjunct, colour stabilizer
Emulsifier	emulsifier, plasticizer, dispersing agent, surface active agent, surfactant, wetting agent	antispattering agent, emulsifying agent, suspending agent, suspension agent
Emulsifying salt	melding salt, sequesterant	
Firming agent	firming agent	
Flavour enhancer	flavour enhancer, flavour modifier, tenderizer	salt substitute, seasoning agent
Flour treatment agent	bleaching agent, dough improver, flour improver	dough conditioner, dough strengthening agent, oxidizing agent
Foaming agent	whipping agent, aerating agent	
Gelling agent	gelling agent	
Glazing agent	coating, sealing agent, polish	film coating, protective coating, surface finishing/treating agent
Humectant	moisture/water retention agent, wetting agent	

TABLE 1		
INS Functional Class Title	**INS Sub-Class (technological function)**	**JECFA TERM**
Preservative	antimicrobial preservative, antimycotic agent, bacteriophage control agent, chemosterilant/wine maturing agent, disinfection agent	antibrowning agent, antimould and antirope agent, fumigant, fungistatic agent, sterilizing agent
Propellant	propellant	packing/packaging gas
Raising agent	leavening agent, raising agent	
Stabilizer	binder, firming agent, moisture/water retention agent, foam stabilizer	colloidal stabilizer, emulsion stabilizer, stabilizing agent
Sweetener	sweetener, artificial sweetener, nutritive sweetener	
Thickener	thickening agent, texturizer, body agent	binder, texturing agent, texturizing agent

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TABLE 2	
JECFA Classes and Sub-Classes Not Matching an INS Functional Class Title or Sub-Class	
JECFA Functional Class	**JECFA Functional Sub-Class**
Adjuvant[5]	Density adjustment agent for flavouring oils in beverages
	Diluent for colour and other food additives
	Encapsulating agent for food additives, flavourings, and vitamins
	Excipient
	Formulation aid
	Tableting adjunct
	Tableting aid/agent
Carrier Solvent	Carrier
	Carrier for flavour
Clouding Agent	Cloud Producing Agent
Synergist[6]	Antimicrobial synergist
	Synergist and solubilizer for anti-oxidants and flavours
Miscellaneous[6]	Carbonating agent
	Crystallization inhibitor
	Immobilizing agent[6]
	Treatment of malt in brewing[7]

[5] The classes Adujuvants, Synergists, and Miscellaneous need not be assigned to the INS functional classes because these terms are not meaningful without suitable qualifiers

[6] The JECFA subclasses “Immobilizing agent” and “Treatment of malt on brewing” under Miscellaneous are processing-aid functions and should not be included in the INS.

TABLE 3a	
Proposed Assignment of JECFA Classes and Sub-Classes to the INS Functional Class Titles	
INS Functional Class Title	**JECFA Functional class/subclass**
Antioxidant	Synergist and solubilizer for anti-oxidants and flavours
Emulsifier	Density adjustment agent for flavouring oils in beverages
Emulsifier	Crystallization inhibitor
Preservative	Antimicrobial synergist
Stabilizer	Clouding Agent/ Cloud-producing agent

TABLE 3b	
Proposed New INS Functional Class Titles and Sub-Classes	
INS Functional Class Title	**INS Sub-Class**
Carrier	Carrier solvent; Diluent for color and other food additives; Encapsulating agent for food additives, flavorings, & vitamins; Excipient, Carrier for Flavour
Carbonating Agent	
Tableting aid/adjunct/agent	

EUROPEAN COMMUNITY

Codex International Numbering System for Food Additives (point 4.)

The European Community would like to propose two new food additives, zinc acetate and hydrogen, to be included to the Codex International Numbering System for Food Additives.

Zinc acetate is approved for use in the European Union as a flavour enhancer in chewing gum with an E-number E 650.

Hydrogen is approved for use in the European Union as a packaging gas with an E-number E 949.

Therefore, the European Community proposes INS number 650 for zinc acetate and INS number 949 for hydrogen.

ISDC (INTERNATIONAL SOFT DRINK COUNCIL)

The Committee requested comments on revisions to the technological functions and functional classes/sub-classes in the framework of the GSFA. We recommend the following additions to the sub-classes:

Functional Class	**Sub-Class**
Flavor Enhancer	salts

In addition, we have noted what we believe to be an error in the GSFA that has been introduced due to what we believe is the original error in the INS List. The chart below explains the problem:

Number	Name in INS List	Name in JECFA Specs.	Name in GSFA
306	Mixed toco. Conc.		Mixed toco. Conc.
307a	alpha-tocopherol	d-alpha-toco. conc.	Alpha-tocopherol
307b		toco. Conc., mixed	
307c		dl-alpha-toco.	

You can readily see that there is a problem because the INS and JECFA numbers do not match. There appears to be a double assignment for INS 306 and INS 307b. We suggest that perhaps a solution would be to leave INS 306 assigned to Mixed tocopherol concentrate, delete the number INS 307c and reassign INS 307b to dl-alpha-tocopherol. It should also be noted that we cannot verify an ADI for tocopherol concentrate mixed.