

CODEX ALIMENTARIUS COMMISSION



Food and Agriculture
Organization of the
United Nations



World Health
Organization

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Agenda Items 5a, 5b and 5c

CRD19

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-Ninth Session

Macao SAR, China, 20-24 March 2017

Part A:

AGENDA ITEM 5A: GENERAL STANDARD FOR FOOD ADDITIVES (GSFA): CCFA48 OUTSTANDING PROVISIONS; PROVISIONS FOR BENZOATES IN FC 14.1.4; PROVISIONS IN FC 5.0 AND 5.1; PROVISIONS ASSOCIATED WITH NOTE 22; PROVISIONS IN FC 01.1, 01.1.1, 01.1.3 AND 01.1.4 (REPORT OF THE EWG ON THE GSFA)

Comments of Nigeria and ICA

Nigeria

Appendix 3: Request for information on use levels and technical justification for the use of benzoates in food category 14.1.4 (Water-based flavoured drinks, including “sport,” “energy,” or “electrolyte” drinks and particulated drinks)

Comment:

Nigeria supports Option 3: An ML of 250 mg/kg for Benzoates (INS 210-213)

Rationale:

A benzoate use level of 250 mg/kg is required in beverages falling under food category 14.1.4 to prevent microbiological spoilage during the shelf life of the beverage. The adoption of a use level below 250 mg/kg will drastically reduce the efficacy of the preservative in controlling increased microbial activities under high temperatures obtained in tropical climates.

International Confectionery Association (ICA)

This proposal is made under **Agenda Item 5a General Standard for Food Additives (GSFA): CCFA48 outstanding provisions; provisions for benzoates in FC 14.1.4; provisions in FC 5.0 and 5.1; provisions associated with Note 22; provisions in FC 01.1, 01.1.1, 01.1.3 and 01.1.4 (Report of the EWG on the GSFA)**. We would like to propose **Ethyl Maltol (INS 637)** in **Food Category 05.2 Confectionery** including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4 and **Food Category 05.3 Chewing gum** at **1000 mg/kg**.

FORM FOR THE SUBMISSION OF PROPOSALS FOR NEW AND/OR REVISION OF ADOPTED FOOD ADDITIVE PROVISIONS IN THE GSFA

In completing this form, only brief information is required. However, responsive information is required for each field. The form may be retyped if more space is needed under any one heading provided that the general format is maintained. A separate table should be completed for each food additive.

THE PROPOSAL IS SUBMITTED BY:	ICA
IDENTITY OF THE FOOD ADDITIVE:	
Name of the Additive <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>	Ethyl Maltol
INS Number	637

Functional Class <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>		Flavor Enhancer	
PROPOSED USE(S) OF THE FOOD ADDITIVE (1): <i>The rows below may be copied as many times as needed.</i>		The proposal for <input type="checkbox"/> a new provision; or <input checked="" type="checkbox"/> revising an existing provision or <input type="checkbox"/> a food additive provision in the new food category 01.1.2 "Other fluid milks (plain)"	
Food Category No. (2)	Food Category Name (2)	Maximum Use Level (3)	Comments (4)
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4	1000 mg/kg	
05.3	Chewing gum	1000 mg/kg	
EVALUATION BY JECFA:			
Evaluation by JECFA <i>Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications monograph).</i>		Evaluation year: 2005 ADI: 0-2 mg/kg bw (1974) Meeting: 18 Specs Code: S Specifications monograph: FAO JECFA Monographs 4- JECFA 68/ . R (2007)	
JUSTIFICATION:			
Justification for use and technological need <i>Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).</i>		Ethyl maltol (INS 637) is used as a flavor enhancer to provide added appeal to fruit flavors. It improves the taste characteristics by mellowing harshness, enhancing sweetness and masking bitterness and any undesirable after-taste. The richness of the flavor is increased, while a smooth and mellow quality is produced. The use of ethyl maltol (INS 637) in fruit flavors, especially strawberry, provides a more creamy taste and a more natural fruit-type character. Ethyl maltol (INS 637) enhances also the sweetness, thereby reducing the need for sugar or other sweeteners. Ethyl maltol (INS 637) is needed at higher levels in chewing gum than in other confectionery products, since about 50% to 80% of the ethyl maltol (INS 637) remains in the gum after chewing. As such, sufficient amounts of ethyl maltol are required to provide continued enhancement to the flavors while chewing. When ethyl maltol (INS 637) and maltol (INS 636) are used together in strawberry or raspberry flavors, it takes more ethyl maltol (INS 637) than maltol (INS 636) to obtain the desired effect, while maltol (INS 636) functions as a booster. Overall, Ethyl maltol (INS 637) is technologically needed at 1000 mg/kg in 05.2 Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4 and 05.3 Chewing gum.	
Safe use of additive: Dietary intake assessment (as appropriate)		Table 3 additive: <input type="checkbox"/> Yes	
		<input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below)	

	<p>JECFA allocated an ADI of 0-2 mg/kg b.w./day for ethyl maltol (INS 637). Consumption of 10 grams of candy and chewing gum containing 1000 mg/kg of ethyl maltol (INS 637) by a 60 kg adult would result in the possible ingestion of only 0.17 mg/kg bw/day ethyl maltol (INS 637), i.e. only 8 % of the ADI. It is also known that for chewing gum, a significant part of ethyl maltol (INS 637) will not be ingested because it remains in the gum cud after chewing. Therefore, exposure estimate of 8% of the ADI is a worst case scenario (i.e. very conservative and overestimating the real dietary exposure due to chewing gum).</p>
<p>Justification that the use does not mislead consumer</p>	<p>The use of ethyl maltol (INS 637) at a level 1000 mg/kg in 05.2 Confectionery including hard and soft candy, nougats, etc and 05.3 Chewing gum is technically justified and safe, based on the technical needs and related safety calculations mentioned above.</p>

- (1) For proposed revisions of adopted provisions, the current adopted provision should be provided, with deletions noted in ~~strike through~~ text, and changes or additions noted in **bold** font.
- (2) Food category number and name, as listed in Annex B of the GSFA.
- (3) For consistency, the maximum use level should be reported on the same basis as the ADI. A numerical use level should be provided for a food additive assigned a numerical ADI. GMP or a numerical use level may be provided for a food additive assigned a non-numerical ADI (e.g. "not- specified").
- (4) Comments on specific restrictions on the use of the food additive to be included as Notes (e.g. limitation of use to specific products in a food category).

This proposal is made under **Agenda Item 5a General Standard for Food Additives (GSFA): CCFA48 outstanding provisions; provisions for benzoates in FC 14.1.4; provisions in FC 5.0 and 5.1; provisions associated with Note 22; provisions in FC 01.1, 01.1.1, 01.1.3 and 01.1.4 (Report of the EWG on the GSFA)**. We would like to propose **Maltol (INS 636)** in **Food Category 05.2** Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4 and **Food Category 05.3** Chewing gum at **200 mg/kg**.

FORM FOR THE SUBMISSION OF PROPOSALS FOR NEW AND/OR REVISION OF ADOPTED FOOD ADDITIVE PROVISIONS IN THE GSFA

In completing this form, only brief information is required. However, responsive information is required for each field. The form may be retyped if more space is needed under any one heading provided that the general format is maintained. A separate table should be completed for each food additive.

THE PROPOSAL IS SUBMITTED BY:	ICA
IDENTITY OF THE FOOD ADDITIVE:	
<p>Name of the Additive <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	Maltol
INS Number	636
<p>Functional Class <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	Flavor Enhancer
<p>PROPOSED USE(S) OF THE FOOD ADDITIVE (1): <i>The rows below may be copied as many times as needed.</i></p>	<p>The proposal for <input type="checkbox"/> a new provision; or <input checked="" type="checkbox"/> revising an existing provision or <input type="checkbox"/> a food additive provision in the new food category 01.1.2 "Other fluid milks (plain)"</p>

Food Category No. (2)	Food Category Name (2)	Maximum Use Level (3)	Comments (4)
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4	200 mg/kg	
05.3	Chewing gum	200 mg/kg	
EVALUATION BY JECFA:			
Evaluation by JECFA <i>Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications monograph).</i>		Evaluation year: 2005 ADI: 0-1 mg/kg bw (1981) Meeting: 25 Specs Code: R Specifications monograph: FAO JECFA Monographs 4- JECFA 68/ . R (2007)	
JUSTIFICATION:			
Justification for use and technological need <i>Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).</i>		Maltol (INS 636) is used in fruit flavored candy and chewing gum products often, but not always, in conjunction with ethyl maltol (INS 637). Because maltol (INS 636) is less water soluble than ethyl maltol (INS 637), the use of both substances can help to impart a prolonged flavor release. In strawberry candies and chewing gums, maltol (INS 636) provides an early and sweet strawberry taste effect, where ethyl maltol (637) provides a somewhat ripe, cooked or jam flavor effect. Both maltol (INS 636) and ethyl maltol (INS 637) can have a flavor enhancing or a direct flavor impact, depending on the application. Overall, maltol (INS 636) is technologically needed at 200 mg/kg in 05.2 candy and 05.3 Chewing gum as a flavor enhancer.	
Safe use of additive: Dietary intake assessment (as appropriate)		Table 3 additive: <input type="checkbox"/> Yes	
		<input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below) JECFA allocated an ADI of 0-1 mg/kg b.w./day for maltol (INS 636). Consumption of 10 grams of candy and chewing gum containing 200 mg/kg of maltol (INS 636) by a 60 kg adult would result in the possible ingestion of only 0.03 mg/kg bw/day of maltol (INS 636), i.e. only 3% of the ADI. It is also known that for chewing gum, a significant part of maltol (INS 636) will not be ingested but will remain in the gum cud after chewing. Therefore, exposure estimate of 3% of the ADI is a worst case scenario (i.e. very conservative and overestimating the real dietary exposure due to chewing gum).	
Justification that the use does not mislead consumer		The use of maltol (INS 636) at a level 200 mg/kg in 05.2 Confectionery including hard and soft candy, nougats, etc and 05.3 Chewing gum is technically justified and safe, based on the technical needs and related safety calculations mentioned above.	

(1) For proposed revisions of adopted provisions, the current adopted provision should be provided, with deletions noted in ~~strike through~~ text, and changes or additions noted in **bold** font.

(2) Food category number and name, as listed in Annex B of the GSFA.

- (3) For consistency, the maximum use level should be reported on the same basis as the ADI. A numerical use level should be provided for a food additive assigned a numerical ADI. GMP or a numerical use level may be provided for a food additive assigned a non-numerical ADI (e.g. "not- specified").
- (4) Comments on specific restrictions on the use of the food additive to be included as Notes (e.g. limitation of use to specific products in a food category).

This proposal is made under **Agenda Item 5a General Standard for Food Additives (GSFA): CCFA48 outstanding provisions; provisions for benzoates in FC 14.1.4; provisions in FC 5.0 and 5.1; provisions associated with Note 22; provisions in FC 01.1, 01.1.1, 01.1.3 and 01.1.4 (Report of the EWG on the GSFA)**. We would like to propose **Propylene Glycol (INS 1520)** in **Food Category 05.2** Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4 and **Food Category 05.3** Chewing gum at **20,000 mg/kg**.

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THE PROPOSAL IS SUBMITTED BY:		ICA	
IDENTITY OF THE FOOD ADDITIVE:			
Name of the Additive <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>		Propylene Glycol	
INS Number		1520	
Functional Class <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>		Emulsifier, Glazing Agent, Humectant	
PROPOSED USE(S) OF THE FOOD ADDITIVE (1): <i>The rows below may be copied as many times as needed.</i>		The proposal for <input type="checkbox"/> a new provision; or <input checked="" type="checkbox"/> revising an existing provision or <input type="checkbox"/> a food additive provision in the new food category 01.1.2 "Other fluid milks (plain)"	
Food Category No. (2)	Food Category Name (2)	Maximum Use Level (3)	Comments (4)
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4	240,000 mg/kg 20,000 mg/kg	
05.3	Chewing gum	240,000 mg/kg 20,000 mg/kg	
EVALUATION BY JECFA:			

<p>Evaluation by JECFA</p> <p><i>Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or “not specified”); specifications monograph).</i></p>	<p>Evaluation year: 2002</p> <p>ADI: 0-25 mg/kg bw (1973)</p> <p>Meeting: 49</p> <p>Specs Code: R (1977)</p> <p>Specifications monograph:</p> <p>COMPENDIUM ADDENDUM 12/FNP 52 Add. 12/68 (METALS LIMITS) (2004). R; FAO JECFA Monographs 1 vol.3/187</p>
<p>JUSTIFICATION:</p>	
<p>Justification for use and technological need</p> <p><i>Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).</i></p>	<p>Propylene glycol (INS 1520) acts as a humectant, which retains moisture in products and keep them from drying out. Propylene glycol is used in many chewing gums, candies and cookies. Propylene glycol keeps products fresh and extends their shelf life.</p> <p>The appropriate use level in 05.2 Confectionery including hard and soft candy, nougats, etc and 05.3 Chewing gum is 20000 mg/kg. Indeed, Codex alimentarius has already adopted a level of 20000 mg/kg in chewing gum for propylene glycol of fatty acids (INS 477). Overall, Propylene glycol (INS 1520) is technologically needed at 20000 mg/kg in 05.2 candy and 05.3 Chewing gum.</p>
<p>Safe use of additive: Dietary intake assessment (as appropriate)</p>	<p>Table 3 additive:</p> <p><input type="checkbox"/> Yes</p>

	<p><input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below)</p> <p>JECFA allocated an ADI of 0-25 mg/kg b.w./day to propylene glycol (INS 1520). Consumption of 10 grams of candy and chewing gum containing 20000 mg/kg of propylene glycol by a 60 kg adult would result in the possible ingestion of only 3.3 mg/kg bw/day of propylene glycol, i.e. no more than 13% of the ADI.</p>
<p>Justification that the use does not mislead consumer</p>	<p>The use of Propylene glycol (INS 1520) at a level 20,000 mg/kg in 05.2 Confectionery including hard and soft candy, nougats, etc and 05.3 Chewing gum is technically justified and safe, based on the technical needs and related safety calculations mentioned above.</p>

- (1) For proposed revisions of adopted provisions, the current adopted provision should be provided, with deletions noted in ~~strike through~~-text, and changes or additions noted in **bold** font.
- (2) Food category number and name, as listed in Annex B of the GSFA.
- (3) For consistency, the maximum use level should be reported on the same basis as the ADI. A numerical use level should be provided for a food additive assigned a numerical ADI. GMP or a numerical use level may be provided for a food additive assigned a non-numerical ADI (e.g. “not- specified”).
- (4) Comments on specific restrictions on the use of the food additive to be included as Notes (e.g. limitation of use to specific products in a food category).

PART B:**AGENDA ITEM 5B: USE LEVELS FOR ADIPIC ACID (INS 355) IN VARIOUS FOOD CATEGORIES****Comments of ICA****International Confectionery Association (ICA)**

This proposal is made under **Agenda Item 5b General Standard for Food Additives (GSFA): Use levels for adipic acid (INS 355) in various food categories (replies to CL 2016/9-FA)**. We would like to provide the use level of adipic acid in **Food Category 05.2** Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4, i.e., **12000 mg/kg** and **Food Category 05.3** Chewing Gum, i.e., **3900 mg/kg**.

FORM FOR THE SUBMISSION OF PROPOSALS FOR NEW AND/OR REVISION OF ADOPTED FOOD ADDITIVE PROVISIONS IN THE GSFA

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THE PROPOSAL IS SUBMITTED BY:		ICA	
IDENTITY OF THE FOOD ADDITIVE:			
Name of the Additive <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>		Adipic acid	
INS Number		355	
Functional Class <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i>		Acidity regulator	
PROPOSED USE(S) OF THE FOOD ADDITIVE ⁽¹⁾: <i>The rows below may be copied as many times as needed.</i>		The proposal is to provide use level of adipic acid (Agenda Item 5b)	
Food Category No. ⁽²⁾	Food Category Name ⁽²⁾	Maximum Use Level ⁽³⁾	Comments ⁽⁴⁾
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4	12000 mg/kg	The Confectionery Industry supports a maximum use level of 20000 mg/kg for future innovations.
05.3	Chewing Gum	3900 mg/kg	The Confectionery Industry supports a maximum use level of 10000 mg/kg for future innovations.
EVALUATION BY JECFA:			
Evaluation by JECFA <i>Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications monograph).</i>		Evaluation year: 1999 ADI: 0-5 mg/kg bw Meeting: 21 Specs Code: S (1977) Specifications monograph: COMPENDIUM ADDENDUM 7/FNP 52 Add.7/5 (ACIDITY REGULATOR); 132 (FLAVOUR); FAO JECFA Monographs 1 vol.1/19	
JUSTIFICATION:			

<p>Justification for use and technological need</p> <p><i>Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).</i></p>	<p>Adipic acid is used in confectionery products for its contribution to fruit and sour tastes. Adipic acid provides a prolonged sour taste and increased saliva flow while having low solubility. It is therefore an essential component used to promote continuous release of sour fruit flavors, thereby providing consumers that unique organoleptic experience and expected pleasure.</p>
<p>Safe use of additive: Dietary intake assessment (as appropriate)</p>	<p>Table 3 additive:</p> <p><input type="checkbox"/> Yes</p>
	<p><input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below)</p> <p>At the use level of 12000 mg/kg in Food Category 05.2 confectionery, dietary intake in a person with a bodyweight of 60 kg consuming 5 g of candy would be 1 mg/kg bw/day of adipic acid, i.e. 20% of the ADI</p>
<p>Justification that the use does not mislead consumer</p>	<p>The use of adipic acid (INS 355) at a level 12,000 mg/kg in confectionery is technically justified and safe, based on the technical needs and related safety calculations mentioned above.</p>

- (1) For proposed revisions of adopted provisions, the current adopted provision should be provided, with deletions noted in ~~strike through~~-text, and changes or additions noted in **bold** font.
- (2) Food category number and name, as listed in Annex B of the GSFA.
- (3) For consistency, the maximum use level should be reported on the same basis as the ADI. A numerical use level should be provided for a food additive assigned a numerical ADI. GMP or a numerical use level may be provided for a food additive assigned a non-numerical ADI (e.g. "not- specified").
- (4) Comments on specific restrictions on the use of the food additive to be included as Notes (e.g. limitation of use to specific products in a food category).

PART C:

AGENDA ITEM 5C: GENERAL STANDARD FOR FOOD ADDITIVES (GSFA): PROPOSALS FOR NEW AND/OR REVISION OF FOOD ADDITIVE PROVISIONS

Comments of Japan and ICA

Japan

FORM FOR THE SUBMISSION OF PROPOSALS FOR NEW AND/OR REVISION OF ADOPTED FOOD ADDITIVE PROVISIONS IN THE GSFA

<p>THE PROPOSAL IS SUBMITTED BY:</p>	<p><i>Japan</i></p>
<p>IDENTITY OF THE FOOD ADDITIVE:</p>	
<p>Name of the Additive</p> <p><i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	<p><i>Paprika Extract</i></p>
<p>INS Number</p>	<p><i>160c(ii)</i></p>
<p>Functional Class</p> <p><i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	<p><i>Colour</i></p>
<p>PROPOSED USE(S) OF THE FOOD ADDITIVE (¹): <i>The rows below may be copied as many times as</i></p>	<p>The proposal for <input checked="" type="checkbox"/> a new provision;</p>

<i>needed.</i>		or <input type="checkbox"/> revising an existing provision or <input type="checkbox"/> a food additive provision in the new food category 01.1.2 "Other fluid milks (plain)"	
Food Category No. (²)	Food Category Name (²)	Maximum Use Level (³)	Comments (⁴)
01.1.4	Flavoured fluid milk drinks	10 mg/kg	To impart colour to flavoured drinks based on fermented milks.
01.6.4	Processed cheese	140 mg/kg	To adjust colour of processed cheese for which cheddar cheese is used as ingredients.
01.6.5	Cheese analogues	35 mg/kg	To adjust colour of processed cheese for which cheddar cheese is used as ingredients.
01.7	Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt)	11 mg/kg	To impart colour to ice cream, sherbet containing dairy ingredients and fruit yoghurt.
02.2.2	Fat spreads, dairy fat spreads and blended spreads	40 mg/kg	To impart colour to fat spreads and dairy fat spreads.
02.3	Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions	35 mg/kg	To impart colour to non-dairy cream
03.0	Edible ices, including sherbet and sorbet	55 mg/kg	To adjust colour of sherbet
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	70 mg/kg	For use in dried tomato only. To adjust colour of dried tomato.
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweeds in vinegar, oil, brine, or soybean sauce	75 mg/kg	For use in soybean sauce pickled vegetable only.
04.2.2.6	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed pulps and preparations (e.g. vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5	150 mg/kg	To adjust colour of tomato sauces to ensure colour uniformity throughout a year. For use in tomato sauce only.
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera),	40 mg/kg	To adjust colour of fried potato. For use in fried potato only.

	and seaweeds		
05.1.4	Cocoa and chocolate products	10 mg/kg	
05.1.5	Imitation chocolate, chocolate substitute products	25 mg/kg	
05.2.1	Hard candy	6 mg/kg	
05.2.2	Soft candy	12 mg/kg	
05.3	Chewing gum	5 mg/kg	
05.4	Decorations (e.g. for fine bakery wares), toppings (non-fruit), and sweet sauces	11 mg/kg	To impart colour to toppings for surface decoration.
06.4.3	Pre-cooked pastas and noodles and like products	45 mg/kg	
06.6	Batters (e.g. for breading or batters for fish or poultry)	300 mg/kg	
06.7	Pre-cooked or processed rice products, including rice cakes (Oriental type only)	30 mg/kg	
06.8.4.2	Deep fried semi-dehydrated soybean curd	35 mg/kg	To adjust colour of dehydrated deep fried soybean curd for seasonings of instant noodles.
07.2.1	Cakes, cookies and pies (e.g. fruit-filled or custard types)	1 mg/kg	
08.2.2	Heat-treated processed meat, poultry, and game products in whole pieces or cuts	10 mg/kg	Except for use in dried fried chickens for seasoning of instant noodles at 75 mg/kg
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	40 mg/kg	To impart colour to hamburger steak, sausages and fried chopped meat and cooked meat balls.
09.2.4.1	Cooked fish and fish products	25 mg/kg	Except for use in dried cooked surimi product for seasoning of instant noodle at 230 mg/kg
09.2.4.2	Cooked molluscs, crustaceans, and echinoderms	60 mg/kg	For use in cooked shrimp for seasoning of instant noodle only.
09.3.3	Salmon substitutes, caviar and other fish roe products	160 mg/kg	For use in salted cod roe flavoured with chili pepper only.
10.2.1	Liquid egg products	3 mg/kg	
11.4	Other sugars and syrups (e.g. xylose, maple syrup, sugar toppings)	85 mg/kg	For use in decorative sugar toppings only.
12.2.1	Herbs and spices	300 mg/kg	To adjust colour to curry paste and roux. Curry paste and roux are diluted to 27 mg/kg (ready

			to eat basis)
12.2.2	Seasonings and condiments	55 mg/kg	
12.4	Mustards	4 mg/kg	
12.5.1	Ready-to-eat soups and broths, including canned, bottled, and frozen	40 mg/kg	Except for use in ready-to-eat soups containing red pepper as ingredients at 75 mg/kg.
12.5.2	Mixes for soups and broths	10 mg/kg	
12.6	Sauces and like products	150 mg/kg	
12.6.1	Emulsified sauces and dips (e.g. mayonnaise, salad dressing, onion dips)	10 mg/kg	Except for use in mayonnaise containing salted cod roe flavoured with chili pepper as ingredient at 42 mg/kg
12.6.2	Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy)	150 mg/kg	
13.6	Food supplements	20 mg/kg	
14.1.4.1	Carbonated water-based flavoured drinks	3 mg/kg	
14.1.4.2	Non-carbonated water-based flavoured drinks, including punches and ades	25 mg/kg	
15.1	Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes)	110 mg/kg	

EVALUATION BY JECFA:**Evaluation by JECFA**

Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications monograph).

An ADI of 0 – 1.5 mg/kg bw was allocated at the 79th JECFA (2014).

The latest specification was prepared at the 77th JECFA (2013).

JUSTIFICATION:**Justification for use and technological need**

Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).

This food additive is used in various foods to impart or adjust colour. Please refer to proposed uses of the food additive.

Maximum use levels submitted are expressed as total carotenoids. To convert use levels of paprika extract into those of total carotenoids, use levels of paprika extracts were multiplied by 0.075 because, according to the report of JECFA, 7.5% is in the mid-range of the levels in commercial paprika extracts used as colours.

<p>Safe use of additive: Dietary intake assessment (<i>as appropriate</i>)</p>	<p>Table 3 additive:</p> <p><input type="checkbox"/> Yes</p> <p><input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below)</p> <p>JECFA performed dietary exposure assessment. Dietary exposures to total carotenoids from paprika extract were based on consumption data from the United Kingdom and France.</p> <p>Assuming that 7% of paprika extract was total carotenoids, the estimated mean dietary exposure to total carotenoids for the French population was 2.3 mg/day, and estimated dietary exposure for a high consumer was 7.0 mg/day.</p> <p>For the United Kingdom, survey data (based on four age categories) yielded mean estimated dietary exposure to total carotenoids from paprika extract of 2.9-6.9 mg/day. The exposure at the 95th percentile was estimated to be 6.3-13.2 mg/day.</p> <p>Exposure to capsaicin and all capsaicinoids from paprika extract is considered to be less than 0.05 mg/day, based on the low level of all capsaicinoids present in paprika extract used as a food colour.</p>
<p>Justification that the use does not mislead consumer</p>	<p>The above-mentioned use does not affect quality of the food that would be expected by consumers.</p>

International Confectionery Association (ICA)

This proposal is made under **Agenda Item 5c General Standard for Food Additives (GSFA): Proposals for new and/or revision of food additive provisions**. We would like to propose **Tartrates (INS 334, 335(ii), 337)** in **Food Category 05.2** Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, and 05.4 at **20000 mg/kg**.

FORM FOR THE SUBMISSION OF PROPOSALS FOR NEW AND/OR REVISION OF ADOPTED FOOD ADDITIVE PROVISIONS IN THE GSFA

In completing this form, only brief information is required. However, responsive information is required for each field. The form may be retyped if more space is needed under any one heading provided that the general format is maintained. A separate table should be completed for each food additive.

<p>THE PROPOSAL IS SUBMITTED BY:</p>	<p>ICA</p>
<p>IDENTITY OF THE FOOD ADDITIVE:</p>	
<p>Name of the Additive <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	<p>TARTRATES</p>
<p>INS Number</p>	<p>334, 335(ii), 337</p>
<p>Functional Class <i>As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989</i></p>	<p>Acidity regulator, Antioxidant, Flavour enhancer, Stabilizer, Emulsifying salt, Sequestrant</p>

PROPOSED USE(S) OF THE FOOD ADDITIVE (1): <i>The rows below may be copied as many times as needed.</i>		The proposal for <input type="checkbox"/> a new provision; or <input checked="" type="checkbox"/> revising an existing provision or <input type="checkbox"/> a food additive provision in the new food category 01.1.2 "Other fluid milks (plain)"	
Food Category No. (2)	Food Category Name (2)	Maximum Use Level (3)	Comments (4)
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3, 05.4	2,000 mg/kg 20,000 mg/kg	Note 45, &XS309R
EVALUATION BY JECFA:			
Evaluation by JECFA <i>Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications monograph).</i>		Evaluation year: 1977 ADI: JECFA allocated a group ADI of 0-30 mg/kg b.w./day for tartrates (L(+)-tartaric acid and its sodium, potassium, potassium sodium salts) Meeting: 21 Specs Code: R Specifications monograph: <ul style="list-style-type: none"> - Tartaric acid (INS 334) , http://www.fao.org/ag/agn/jecfa-additives/specs/Monograph1/Additive-457.pdf; - Sodium L(+)-tartrate (INS335(ii)), http://www.fao.org/ag/agn/jecfa-additives/specs/monograph7/additive-427-m7.pdf; - Potassium sodium L(+)-tartrate (INS 337), http://www.fao.org/ag/agn/jecfa-additives/specs/Monograph1/Additive-348.pdf 	
JUSTIFICATION			
Justification for use and technological need <i>Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).</i>		Tartrates are used as acidity (i.e. pH) control agents to provide the initial impact of sourness to confectionery. It contributes to a strong tart taste and has the ability to increase and enhance the flavors of fruits where they are naturally present. The sweetness of sucrose is also increased by acid such tartaric acid, thus allowing some reduced use of sucrose. Tartrates are important ingredients for fruit flavored candy playing a role in the stability of the acidity of these candies, which in return play a synergist role in stabilizing the flavor profile of the added flavorings. Tartaric acid itself is the most water-soluble of the solids acidic substances, followed by, by decreasing order, malic acid, citric acid, adipic acid, fumaric acid and succinic acid. Tartaric acid provides the highest level of upfront tartness from the variety of commonly available food acids. In fruit flavored candies, the upfront tartness which enhances the natural flavor is of most important interest to the consumer. Thus, tartrates (INS 334, 335(ii), and 337) satisfy a consumer need that none of the other permitted acids can meet. Based on literature data, each individual consumer also differ radically in their physical and psychological ability to detect differences in acidic taste and in identifying acids. Hence, tartrates may also be found in combination with two or more acids (e.g. citric acid) to enhance the flavor of fruits. Overall, tartrates (INS 334, 335(ii), and 337) are	

	technologically needed at 20.000 mg/kg specifically in 05.2 confectionery.
Safe use of additive: Dietary intake assessment (as appropriate)	Table 3 additive: <input type="checkbox"/> Yes
	<input checked="" type="checkbox"/> No (Please provide information on dietary intake assessment below) JECFA allocated a group ADI of 0-30 mg/kg b.w./day for tartrates. Consumption of a 5 grams piece of candy containing the future maximum permitted use level of 20,000 mg/kg of tartrates by a 60 kg adult would result in the possible ingestion of only 100 mg of tartrates, i.e. 5.6% of the ADI.
Justification that the use does not mislead consumer	i) The use of Tartaric acid and its Tartrate salts (INS 334, 335(ii), and 337), i.e. tartrates, should be permitted in Codex GSFA at a level 20,000 mg/kg in confectionery, expressed as tartaric acid, for use singly or in combination and ii) this level is technically justified and safe, based on the technical needs and related safety calculations mentioned above.

- (1) For proposed revisions of adopted provisions, the current adopted provision should be provided, with deletions noted in ~~strike through~~-text, and changes or additions noted in **bold** font.
- (2) Food category number and name, as listed in Annex B of the GSFA.
- (3) For consistency, the maximum use level should be reported on the same basis as the ADI. A numerical use level should be provided for a food additive assigned a numerical ADI. GMP or a numerical use level may be provided for a food additive assigned a non-numerical ADI (e.g. "not- specified").
- (4) Comments on specific restrictions on the use of the food additive to be included as Notes (e.g. limitation of use to specific products in a food category).