CODEX ALIMENTARIUS COMMISSION

E

Food and Agriculture Organization of the United Nations

World Health Organization

Viale delle Terme di Caracalla, 00153 Rome, Italy - Tel: (+39) 06 57051 - E-mail: codex@fao.org - www.codexalimentarius.org

Agenda Item 5(a) **CX/FA 21/52/7[1]**

March 2021

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Fifty-Second Session

GENERAL STANDARD FOR FOOD ADDITIVES (GSFA): THE TECHNOLOGICAL JUSTIFICATION FOR THE USE OF ANTICAKING AGENTS IN THE POWDERED FORM OF CULINARY HERBS AND EMULSIFIERS IN FC 02.1.2; PROPOSED DRAFT PROVISIONS IN TABLE 3 FOR LECITHIN, PARTIALLY HYDROLYZED (INS 332(II)), LUTEIN FROM TAGETES ERECTA (INS 161B(I)), METHACRYLATE COPOLYMER, BASIC (INS 1205) AND ZEAXANTHIN (SYNTHETIC) (INS 161H(I)); THE CREATE A GROUP HEADING FOR ADOPTED PROVISIONS AND PROVISIONS IN THE STEP PROCESS FOR SUCROSE ESTERS OF FATTY ACIDS (INS 473), SUCROSE OLIGOESTERS, TYPE I AND TYPE II (INS 473A) AND SUCROGLYCERIDES (INS 474) IN FCS 01.0 TO 16.0; TECHNOLOGICAL JUSTIFICATION FOR THE USE OF ADDITIVES IN FC 04.1.1.2 AND 04.2.1.2 AS A GLAZE OR IN A GLAZE/COATING OR WAX FOR THE SURFACE TREATMENT; PROVISIONS IN TABLE 1 AND 2 OF THE GSFA IN FOOD CATEGORIES 01.0 THROUGH 16.0; PROVISIONS FOR NITRATES (INS 251, 252) AND NITRITES (INS 249, 250) IN STEP PROCESS OR ADOPTED; ADOPTED PROVISIONS FOR: ALITAME (INS 956) FOR DISCUSSION ON ACTUAL USE AND USE LEVEL; ACESULFAME POTASSIUM (INS 950) IN FCS 14.1.4 AND 14.1.5 AND SACCHARINS (INS 954(I)-(IV)) IN SUBCATEGORIES OF FC 14.1.4; PROVISIONS FOR SWEETENERS IN THE STEP PROCESS IN FOOD CATEGORIES IN LISTS T, U, AND Y OF CX/FA 15/47/13 WITH THE EXCEPTION OF THOSE IN FCS 07.1, 12.2.2, AND 12.3; ADOPTED PROVISIONS FOR COLOURS IN FOOD CATEGORIES 05.1, 05.2, 05.3, 13.6, 14.0 AND ITS SUBCATEGORIES (EXCEPT FCS 14.1.2, 14.1.3, 14.2.3 AND THEIR SUBCATEGORIES WITH NOTE 161, PROVISIONS FOR COLOURS IN THE STEP PROCESS IN FOOD CATEGORIES 05.0 AND ITS SUBCATEGORIES, 13.6, 14.0 AND ITS SUBCATEGORIES (EXCEPT FCS 14.1.2, 14.1.3, 14.2.3 AND THEIR SUBCATEGORIES). (REPORT OF THE EWG ON THE GSFA)

Prepared by the United States of America with the assistance of Australia, Brazil, Canada, Chile, China, Columbia, Costa Rica, Dominican Republic, Egypt, European Union (EU), Guatemala, India, Indonesia, Japan, Kenya, Korea, Malaysia, New Zealand, Norway, Nigeria, Paraguay, Russian Federation, Senegal, Singapore, Switzerland, Thailand, Vietnam, Zambia, Zimbabwe, Calorie Control Council (CCC), Economic Community of West African States (ECOWAS), European Food Emulsifier Manufacturers Association (EFEMA), EU Specialty Food Ingredients, FoodDrinkEurope, Food Industry Asia (FIA), International Association of Color Manufacturers (IACM), International Alliance of Dietary/Food Supplement Associations (IADSA), International Council of Beverages Associations (ICBA), International Chewing Gum Association (ICGA), International Confectionery Association (ICA), International Dairy Federation (IDF), International Food Additives Council (IFAC), International Fruit and Vegetable Juice Association (IFU), International Stevia Council (ISC) International Sweeteners Association (ISA), Natural Food Colours Association (NATCOL)

Introduction

1. CCFA51 agreed to establish an EWG to provide recommendations to CCFA52 on the following topics:[2]

   (i) Replies from CCSCH on the technological justification for the use of anticaking agents where used in the powdered form of culinary herbs and that magnesium stearate (INS 470 (iii)) and amorphous silicon dioxide (INS 551) may be used in the powdered form and in accordance with GMP;

   (ii) Replies from CCFO26 on the technological justification for the use of emulsifiers in FC 02.1.2 of the GSFA;

   (iii) Draft and proposed draft provisions in Table 3 of the GSFA;

[1] This document is identical to CX/FA 20/52/7 except corrections to two typographical errors i.e. the title for Annex 3 of Appendix 6 and the recommendation in Appendix 6, Annex 1, FC 12.5 for alitame

[2] REP 19/FA, para. 138.

(iv) Adopted provisions and provisions in the step process for sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474) in FCs 01.0 to 16.0 in the GSFA as a result of their group ADI and create a group heading accordingly;

(v) Draft and proposed draft provisions in FC 04.1.1.2 “Surface-treated fresh fruit” and 04.2.1.2 “Surface-treated fresh vegetables, (including mushrooms, and fungi, roots and tubers, pulses and legumes (including soybeans), and aloe vera, seaweeds and nuts and seeds” for discussion on the technological justification for the use of additives as a glaze or in a glaze/coating or wax for the surface treatment;

(vi) The provision for propylene glycol alginate (INS 405) in FC 01.1.2 for comment on the numeric use level;

(vii) The provision for Magnesium carbonate (INS 504(i)) as a flour treatment agent in FC 06.2;

(viii) Provisions for nitrates (INS 251, 252) and nitrites (INS 249, 250) in step process or adopted (ingoing and residual use levels);

(ix) Adopted provisions for: alitame (INS 956) for discussion on actual use and use level; acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in subcategories of FC 14.1.4 for discussion on use level;

(x) Draft and proposed draft provisions for sweeteners in FCs in lists T, U, and Y of CX/FA 15/47/13 with the exception of those in FCs 07.1, 12.2.2, and 12.3;

(xi) Adopted provisions for colours in FCs 05.2 and 05.3 with Note 161 associated with them;

(xii) In FCs 05.1, 13.6, 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories): adopted provisions for additives with the functional class of colours with Note 161 associated with them and draft and proposed draft provisions for additives with the functional class of colour; and

(xiii) Provisions entered into the step process as a result of CX/FA 19/51/8 (For additives with technological function of colours: limited to provisions in FCs 05.0 and its subcategories, 13.6, and 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories).

Working Documents

2. The working documents for the report of the EWG on the General Standard for Food Additives are presented as appendices to this document. The appendices provide background on the topic under discussion, collate comments on the topic from the EWG, and provide recommendations for each topic.

- Replies from CCSCH and CCFO26 that pertain to topic i and topic ii are combined into Appendix 1.

- Draft and proposed draft provisions in Table 3 of the GSFA that pertain to topic iii are presented in Appendix 2.

- Adopted provisions and provisions in the step process for sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474) in FCs 01.0 to 16.0 in the GSFA that pertain to topic iv are presented in Appendix 3.

- Draft and proposed draft provisions that pertain to topic v, topic vi, topic vii and topic xiii (with the exception of provisions for additives with the technological function of colour) are combined into Appendix 4.

- Provisions for nitrates (INS 251, 252) and nitrites (INS 249, 250) that pertain to topic viii are presented in Appendix 5.

- Provisions for sweeteners pertaining to topic ix and topic x are combined into Appendix 6.

- Provisions for colours pertaining to topic xi, topic xii and topic xiii are combined into Appendix 7.

Appendix 1: Replies of Codex Committee on Spices and Culinary Herbs (CCSCH) and Codex Committee on Fats and Oils (CCFO)

1. Among several topics, the 51st CCFA requested the e-WG on the GSFA to the 52nd CCFA to consider:[1]

   - Replies of the Codex Committee on Fats and Oils (CCFO) and the Codex Committee on Spices and Culinary Herbs (CCSCH)

Background:

Codex Committee on Fats and Oils

2. The EWG on the GSFA to CCFA47 compiled proposals on existing draft and proposed draft provisions in Tables 1 and 2 of the GSFA for food additives with "Emulsifier, stabilizer, thickener" function for their use for technological function other than as emulsifier, stabilizer, or thickener.[2] Due to time constraints the physical Working Group (PWG) on the GSFA to CCFA47 was unable to discuss several of these proposal, and this discussion was postponed to the PWG on the GSFA to CCFA48.[3, 4] During discussion of provisions for specific emulsifiers in food category 02.1.2 (Vegetable oils and fats), the WG noted uncertainty that there is a full correspondence between food category 02.1.2 and the corresponding commodity standards and that emulsifiers were not allowed in those commodity standards. However, several PWG members noted that emulsifiers are used in products included in food category 02.1.2. The PWG also noted that CCFO is an active committee, and therefore recommended that CCFA request guidance from CCFO on the use of emulsifiers in food category 02.1.2 on a general basis as well as the use of the specific food additives under discussion.

3. CCFA48 agreed to hold specific provisions at their current step and request guidance from CCFO on the technological justification and use of emulsifiers in general and polyglycerol esters of fatty acids (INS 475), polyglycerol esters of interesterified ricinoleic acid (INS 476), propylene glycol alginate (INS 405), sorbitan esters of fatty acids (INS 491- 495) and stearoyl lactylates (INS 481 (i), 482 (i)) specifically in food category 02.1.2 "Vegetable fats and oils".[5]

4. CCFO25 considered the matters referred from CCFA48; however, CCFO25 was unable to reach consensus on the use of emulsifiers in food category 02.1.2 and established an electronic working group to consider this use.[6] CCFO26 considered the report of this electronic working group[7] and provided response to CCFA51.[8]

Codex Committee on Spices and Culinary Herbs

5. The EWG on the GSFA to CCFA50 compiled proposals on existing draft and proposed draft provisions in Tables 1 and 2 of the GSFA in food categories 09.0 through 16.0, with the exception of those additives with technological functions of colour or sweetener, adipates, nitrites and nitrates and the provisions related to FC 14.3.[9] The PWG on the GSFA to CCFA50 discussed the proposals of the EWG.[10]

6. During the discussion on the draft and proposed draft provisions in food category 12.2.1 "Herbs and Spices", it was noted that the Annex to Table 3 includes food category 12.2.1 but excludes spices. Therefore Table 3 food additives can be used in spices without the need for a provision in Tables 1 and 2 of the GSFA, but the use of Table 3 additives in herbs requires a provision in Tables 1 and 2.

---

[1] REP 19/FA, para. 138(i) - (ii)
[2] CX/FA 15/47/8
[3] CX/FA 16/48/7
[4] FA/48 CRD2
[5] REP 16/FA, para. 65
[6] REP17/FO, paras 12 and 13.
[7] CX/FO 19/26/10
[8] CX/FA 19/51/2 Add. 2
[9] CX/FA 18/50/7, Appendix 5
[10] FA/50 CRD2

7. CCFA50 agreed to hold the food additives provisions for Magnesium stearate (INS 470(iii)) and Silicon dioxide amorphous (INS 551) for use as anticaking agents in food category 12.2.1, and to request guidance from CCSCH on the technological justification for the use of anticaking agents in herbs on a general basis and the appropriate use level specifically for these compounds:

- magnesium stearate (INS 470(iii)) at GMP
- silicon dioxide amorphous (INS 551) at GMP.

8. CCSCH4 considered the matters referred from CCFA50[11] and provided response to CCFA51.[12]

Working Document:

9. The EWG issued two circulars for comment on this matter. The first and second circulars contained requests for EWG comments on proposed recommendations or for further information on proposed draft provisions in food category 02.1.2 related to guidance received from CCFO on the use of emulsifiers in that food category, and in food category 12.2.1 related to the reply from CCSCH on the technological justification for the use of anticaking agents in herbs. The document presents a compilation of comments provided by EWG members to the first and second circulars.

Conventions:

10. The current document presents a recommendation for provisions in food categories 02.1.2 and 12.2.1. This document presents a proposal (adopt, adopt with revision) for the draft provision under discussion based upon a consensus approach taking into account guidance from the corresponding commodity committees and comments on the first and second circulars by members of the EWG. These recommendations are based on the "weight of evidence"; that is, comments containing justifications were given more weight than comments with no supporting justification.

.

[11] REP19/SCH, para 10
[12] CX/FA 19/51/2

Comments from the Codex Committee on Fats and Oils (CCFO) on the use of the food additives in food categories:

Polyglycerol esters of fatty acids (INS 475), sorbitan esters of fatty acids (INS 491-495) and stearoyl lactylates (INS 481(i)-482(i)) are emulsifiers used for anti-crystallization purposes in cooking oil. Cooking oil is liquid in hot climates, but will crystallize during storage on the shelves of air-conditioned supermarkets. Although crystallization is reversible and temperature-dependent, consumers tend to interpret the crystallized oil as spoiled. Emulsifiers can postpone the onset of the crystallization process and thereby enhance consumer perception and prevent food waste.

Polyglycerol esters of fatty acids (INS 475) are used for maintaining the solid state condition of oils. Solid oils such as palm oil could be partially melted and separated into solid parts and liquid parts under higher ambient temperatures, and the use of this emulsifier is to help to maintain the solid state of oil.

Sucrose esters of fatty acids (INS 473) is used as an emulsifier in cooking oils for anti-spattering purposes.(**Note from EWG Chair:** A draft provision for INS 473 in food category 02.1.2 was discontinued by CCFA48. As there is no provision for INS 473 currently in the step process in FC 02.1.2 of the GSFA, the use of this additive is not discussed in this circular. If EWG members wish to include a provision for INS 473 in food category 02.1.2, they should submit a proposal in reply to the circular letter for new and revision to adopted provisions of the GSFA.)

Food Category No. 02.1.2 Vegetable oils and fats

Corresponding commodity standards: 019-1981, **210-1999**: Allows specific antioxidants, antioxidant synergists, and anti-foaming agent; **033-1981**: Does not allow food additives (except tocopherols); **325R-2017**: Does not allow food additives

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
POLYGLYCEROL ESTERS OF FATTY ACIDS	475	20000		7	Emulsifier	Adopt at 10000 with Notes 356, XS33, XS325R, and a new note "For use as an emulsifier in cooking or solid oils conforming to the Standard for Named Vegetable Oils (CXS 210-1999) and the Standard for edible fats and oils not covered by individual standards (CXS 19-1981) only." Inform Alignment PWG of this decision

CCFO: REP19/FO, para. 111: "The Committee agreed to the proposed use of Polyglycerol esters of fatty acids (INS 475) with an ML of 10,000 mg/kg as emulsifiers." Also see, REP19/FO – Appendix III (Part D)

EWG on the GSFA to the 48th CCFA Comments on 1st and 2nd Circular Proposal:

Australia: Does not support discontinue - allowed in AUS at 20,000 mg/kg in edible oils essentially free of water in shortening only

Brazil, EU, Iran, Japan, RF: Discontinue

USA: "vegetable and salad oils" to inhibit clouding when not precluded by standards of identity - information indicates use up to 5,000 mg/kg. The descriptor for 02.1.2 includes table and salad oils

EFEMA: Does not support discontinuation; PGE is commonly used in shortenings in order to improve creaming qualities and to make incorporation of air bubbles into the batter possible. In palm based cooking oil PGE is used as an anticrystallizer. The oil is liquid in hot climate but will crystallize during

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
storage/transport. Is approved for use in China, USA, Japan, Malaysia and Vietnam						
1st Circular Proposal: Adopt at 10000 with note 227 "excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" **1st Circular Comments by EWG members to CCFA52:** **Australia**: As the chair of the Alignment EWG makes the following comment: the 1st circular of the current Alignment EWG, proposes alignment in Appendix 3, to align with CXS19, CXS33 and CXS210 relevant to this entry. It proposes alignment with CXS210, with a ML of 10,000 mg/kg, with notes 356, XS19, XS33 and new note G-CXS210 copied below. Current note 356: Excluding virgin or cold pressed oils New note G-CXS210: For use as an emulsifier for anti-crystallization purposes in cooking oils conforming to the Standard for Named Vegetable Oils (CXS210-1999) only. XS19 and XS33 are exclusions notes to CXS19 and CXS33 respectively. It was considered that note 356 was more appropriate than note 277 since it was considered all 3 Standards exclude provisions not just CXS33. **Canada:** Canada does not object to the initial proposal but suggests replacing Note 227 by Notes 356, XS19, XS33 and XS210 to ensure consistent use of Notes in the GSFA. **China:** Supports the proposal. China approved 10000 mg/kg in cooking oil only. Technical Justification: INS 475 can be used in cooking oil to prevent the crystallization of the liquid oil. INS 475 can stick on the surface of the crystal so that limit the growth of the crystallization. **India:** supports adoption at 10000 mg/Kg with Note 227, in view of the technological need shared by the industry. **Japan**: supports the proposal. It is used to inhibit clouding of vegetable oils & fats (rice oil, palm oil) or used as crystallization inhibitor in such oils during storage. Maximum use level is 10,000 mg/kg. (As reference, typical use level is 500-5000 mg/kg) **Malaysia**: Support adoption at 10000 with note 227 "excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" **Nigeria**: support adoption at 10000 with note 227 **Russian Federation:** Discontinue. Use of this FA in this FC mislead consumers **Switzerland**: The CCFO26 noted in their report (REP19/FO), that a ML of 600 mg/kg is used as emulsifier for anti-crystallization purposes in cooking oil, when stored under an air conditions environment, in countries with high ambient temperatures. In this context a ML of 10000 mg/kg seems not justified in this FC.						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Products using more than the crucial amount for anti-crystallization purposes can be classified under FC 02.2.2 (ML 5000 mg/kg) or 02.3. (ML 20000 mg/kg) respectively. There is a typo with the Initial proposal: The number of the note “excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)” should read 277, instead of 227. **USA:** Polyglycerol esters of fatty acids are used in "vegetable and salad oils" to inhibit clouding when not precluded by standards of identity - information indicates use up to 5,000 mg/kg. The descriptor for 02.1.2 includes table and salad oils. **Vietnam**: Since 2017, polyglycerol esters of fatty acids (INS 475) was permitted to use in vegetable oils and fats at GMP level. Vietnam opposes the discontinuation. PGE is now commonly used in cooking oil with technological function proven. **ECOWAS**: Supports adoption at 10000 mg/Kg with Note 227 in view of the technological needs provided by the industry. **EFEMA**: Cooking oil is liquid in hot climates, but will crystallize during storage on the shelves in temperate areas with a pronounced winter season and in the shelves of air-conditioned supermarkets. Emulsifiers can postpone the on-set of the crystallization process in palm-based cooking oil and thereby maintain the oil in a clear consumer acceptable state. The judicious use of anti-crystallizers maintains clarity whilst allowing manufacturers to use oil blends that are more affordable by consumers. Although crystallisation is a temperature-dependent and reversible process, consumers tend to interpret the crystallized oil as spoilt. Addition of anti-crystallizers thus enhance consumer perception and prevent food waste. **FoodDrinkEurope:** supports the proposal **IFAC**: IFAC does not have information to support the proposed maximum level of 10,000 mg/kg in this FC. Rather, IFAC supports a maximum use level of 600 mg/kg, which is necessary for the specific anti-crystallization purpose used for this FC. Although cooking oil is intended to be used in a liquid state, it will crystallize during storage in low temperature conditions, which may occur during cooler seasons and in air-conditioned environments. Emulsifiers can postpone the crystallization process in palm based cooking oil that occurs at lower temperatures, thus maintaining the liquidity and clarity that is both preferred and more usable by consumers. Anti-crystallizers, such as polyglycerol esters of fatty acids, also allow manufacturers to use oil blends that are more affordable for consumers.						
2nd Circular Proposal: Adopt at 10000 with Note 356 “excluding virgin and cold pressed oils” **Chair’s Notes:** REP19/FO, para. 111, indicates that the CCFO agreed to the proposed use of Polyglycerol esters of fatty acids (INS 475) with an ML of 10,000 mg/kg as emulsifiers. CODEX STAN 019-1981 does not permit additives in virgin or cold pressed oils covered by the Standard, therefore Note 356 would apply to Polyglycerol esters of fatty acids (INS 475). Recommend the EWG on Alignment to consider the response from CCFO and remove Note 277 from specific provisions and replace with Notes 356 and XS33 **2nd Circular Comments by EWG members to CCFA52:** **EU:** Takes note of the feedback provided by CCFO as regards the technological justification for E475 in FC 02.1.2. The EU observes that this substance is not						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
authorised for use in fats and oils in the EU. Overall, the EU is not convinced that there is a reasonable technological need. Consumers could be educated to accept 'reversible crystallisation'. The EU also takes note of the comments of AUS and CAN to the 1st circular which suggest XS notes and a new note for the use in CXS 210. This seems to be more acceptable as it further restricts the use of E475. **India:** supports adoption at 10000 mg/Kg with Note 356, in view of the technological need shared by the industry. **Japan:** Notes XS 19 and XS 33 be also added since neither CXS 19 nor CXS 33 permits the use of INS 475. **Malaysia:** Support adoption **Russian Federation:** Does not agree with proposal. Do not use in this FC because could mislead consumers **Vietnam:** Since 2017, polyglycerol esters of fatty acids (INS 475) was permitted to use in vegetable oils and fats at **GMP level**. On 30 Aug 2019, Vietnam authority issued new the regulation on food additive management. As such, polyglycerol esters of fatty acids (INS 475) is permitted to use legally in vegetable oils and fats (FC 02.1.2). Vietnam opposes the discontinuation. PGE is now commonly used in palm-based cooking oil with technological function proven. **IFAC:** supports the Chair's recommendation that the EWG on Alignment consider the response from CCFO and remove Note 277 from specific provisions and replace with Notes 356 and XS33.						
POLYGLYCEROL ESTERS OF INTERESTERIFIED RICINOLEIC ACID	476	10000		7	Emulsifier	Discontinue
CCFO: Did not provide specific comment in REP19/FO						
EWG on the GSFA to the 48th CCFA Comments on 1st and 2nd Circular Proposal: **Australia:** Does not support discontinue - allowed in AUS at 20,000 mg/kg in edible oils essentially free of water in shortening only **Brazil, EU, Iran, Japan, RF:** Discontinue						
1st Circular Proposal: Discontinue **1st Circular Comments by EWG members to CCFA52:** **Malaysia**: Do not support discontinuation. Allowed in Malaysia as emulsifier and to control a quality parameter "yield value". **Nigeria**: Supports discontinuation; Justification: possible risk of formation of carcinogenicity **Russian Federation:** Supports discontinuation						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
2nd Circular Proposal: Request comment on actual use and use levels **2nd Circular Comments by EWG members to CCFA52:** **EU:** Does not support: no technological justification provided. Has CCFO been consulted on this emulsifier? **Russian Federation:** Does not agree with proposal. Do not use in this FC because could mislead consumers						
PROPYLENE GLYCOL ALGINATE	405	11000		7	Bulking agent, Carrier, Emulsifier, Foaming Agent, Gelling Agent, Stabilizer, Thickener	Discontinue
CCFO: Did not provide specific comment in REP19/FO						
EWG on the GSFA to the 48th CCFA Comments on 1st and 2nd Circular Proposal: **Brazil, EU, Iran, Japan, RF:** Discontinue **USA:** Allowed in fats and oils in the USA at 11,000 mg/kg as an ES&T						
1st Circular Proposal: Discontinue **1st Circular Comments by EWG members to CCFA52:** **China:** Does not support the proposal. China allowed 5000 mg/kg in hydrogenated vegetable oil. **Nigeria**: Supports discontinue; Justification: Propylene glycol Alginate causes stomach upset and nausea. Ref: foodsweetner.com **Russian Federation:** Supports discontinuation **USA:** Allowed in fats and oils in the USA at 11,000 mg/kg as an ES&T						
2nd Circular Proposal: Adopt at 5000 mg/kg notes 356 “excluding virgin and cold pressed oils”, XS19 “excluding products conforming to the standard for Edible Fats and Oils Not Covered by Individual Standards (General Standard) (CODEX STAN 19-1981)”, XS33 “excluding products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)” and XS210 “excluding products conforming to the standard for Named Vegetable Oils (CODEX STAN 210-1999) **2nd Circular Comments by EWG members to CCFA52:** **EU:** Some further clarification is needed - what is the technological justification? What is the technological effect? Emulsifier? Has CCFO been consulted on this additive?						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Indonesia: There is no need to use this food additive on FC 02.1.2 because Propylene Glycol Alginate commonly use in aqueous food systems or in oil in water emulsions. For example emulsion beverages or salad dressings. In this category, the product mostly contain water less than 5%. **Japan:** The scope of CXS 19-1981 states as follows; "This Standard applies to oils and fats and mixtures thereof in a state for human consumption. It includes oils and fats that have been subjected to processes of modification (such as trans-esterification or hydrogenation) or fractionation." It is clear that hydrogenated vegetable oils are covered by CXS 19. Japan recommends that CCFA ask CCFO to consider functional class of this additives, additives and their technological justification for the commodity since no comments are provided by CCFO. (please refer to p.64 of the Procedure Manual, 27th edition.) **Malaysia:** Support adoption **Russian Federation:** Does not agree with proposal. Do not use in this FC because could mislead consumers						
SORBITAN ESTERS OF FATTY ACIDS	491-495	10000		7	Emulsifier, (Stabilizer - INS 493 and 494 only)	Adopt at 750 with Notes 356, XS33, XS325R and a new note "For use as an emulsifier in cooking or solid oils conforming to the Standard for Named Vegetable Oils (CXS210-1999) and the Standard for edible fats and oils not covered by individual standards (CXS19-1981) only" Inform Alignment PWG of this decision.
CCFO: REP19/FO, para. 108: The Committee noted that Sorbitan esters of fatty acids (INS 491-495) - ML of 750 mg/Kg were used as emulsifiers for anti-crystallization purposes in cooking oil, when stored under an air conditioned environment, in countries with high ambient temperatures. Also see, REP19/FO – Appendix III (Part D)						
EWG on the GSFA to the 48th CCFA Comments on 1st and 2nd Circular Proposal: **Brazil, EU, Iran, Japan, RF:** Discontinue **Indonesia:** Adopt - used in vegetable oil products in Indonesia **EFEMA:** Adopt - used in palm based cooking oil as an anticrystallizer. The oil is liquid in hot climate but will crystallize during storage/transport. approved for use in fats and oils in China, Japan, AUS/NZ and Malaysia						
1st Circular Proposal: Adopt at 750 with note 227 "excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" **1st Circular Comments by EWG members to CCFA52:** **Canada**: Does not object to the initial proposal but suggests replacing Note 227 by Notes 356, XS19, XS33 and XS210 to ensure consistent use of Notes in the						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
GSFA. **China:** Support the proposal. China approved 10000 mg/kg in hydrogenated vegetable oil. **India**: supports adoption at 750 mg/Kg with Note 227, in view of the technological need shared by industry. **Japan:** The scope of CXS 19-1981 states as follows; "This Standard applies to oils and fats and mixtures thereof in a state for human consumption. It includes oils and fats that have been subjected to processes of modification (such as trans-esterification or hydrogenation) or fractionation." It is clear that hydrogenated vegetable oils are covered by CXS 19. Japan recommends that CCFA ask CCFO to consider functional class of this additives, additives and their technological justification for the commodity since CCFO have provided technological justification in cooking oil covered by CXS210. (please refer to p.64 of the Procedure Manual, 27th edition). **Malaysia**: Support adoption at 750 with note 227 "excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" **Nigeria**: Adopts at 300mg/kg; No observed adverse effect **Russian Federation:** Supports proposal **ECOWAS:** supports adoption at 750 mg/Kg with Note 227, in view of the technological needs provided by the industry. **EFEMA:** Cooking oil is liquid in hot climates, but will crystallize during storage on the shelves in temperate areas with a pronounced winter season and in the shelves of air-conditioned supermarkets. Emulsifiers can postpone the on-set of the crystallization process in palm-based cooking oil and thereby maintain the oil in a clear consumer acceptable state. The judicious use of anti-crystallizers maintains clarity whilst allowing manufacturers to use oil blends that are more affordable by consumers. Although crystallisation is a temperature-dependent and reversible process, consumers tend to interpret the crystallized oil as spoilt. Addition of anti-crystallizers thus enhance consumer perception and prevent food waste. **IFAC**: IFAC supports the proposed maximum use level of 750 mg/kg, as this level is needed for anti-crystallization purposes in cooking oil. Although cooking oil is intended to be used in a liquid state, it will crystallize during storage in low temperature conditions, which may occur during cooler seasons and in air-conditioned environments. Emulsifiers can postpone the crystallization process in palm based cooking oil that occurs at lower temperatures, thus maintaining the liquidity and clarity that is both preferred and more usable by consumers. Anti-crystallizers, such as polyglycerol esters of fatty acids, also allow manufacturers to use oil blends that are more affordable for consumers.						
2nd Circular Proposal: Adopt at 10000 with notes 356 "excluding virgin and cold pressed oils", XS19 "excluding products conforming to the standard for Edible Fats and Oils Not Covered by Individual Standards (General Standard) (CODEX STAN 19-1981)", XS33 "excluding products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" and XS210 "excluding products conforming to the standard for Named Vegetable Oils (CODEX						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
STAN 210-1999)" **2nd Circular Comments by EWG members to CCFA52:** **EU:** Takes note of the feedback provided by CCFO which refers to the **MPL of 750 mg/kg**. The EU observes that this substance is not authorised for use in fats and oils in the EU. Overall, the EU is not convinced that there is a reasonable technological need. Consumers could be educated to accept 'reversible crystallisation'. Similarly to INS 475, the provision could be more acceptable if associated with the appropriate notes excluding the use in CXS19, CXS33 ad CXS325R and tailoring the use for cooking oil conforming to CXS210. **India**: Supports the proposal. **Malaysia:** Support adoption **Russian Federation:** Does not agree with proposal. Do not use in this FC because could mislead consumers **Zambia:** Supports the adoption - used in some vegetable oil products (as a creaming agent or topping mix) Example: ML4g/kg for Sorbitan monostearate or when in combination with polysorbate may be used in excess of 4g/kg **EFEMA:** We suggest adding note G-CXS210: For use as an emulsifier for anti-crystallization purposes in cooking oils conforming to the Standard for Named Vegetable Oils (CXS 210-1999) only. As proposed by the Alignment WG to allow for 750 mg/kg in cooking oil. **IFAC:** supports the Alignment WG's proposal for 750 mg/kg in cooking oil. With that said, IFAC also supports the addition of note G-CXS210: For use as an emulsifier for anti-crystallization purposes in cooking oils conforming to the Standard for Named Vegetable Oils (CXS 210-1999) only.						
STEAROYL LACTYLATES	481(i), 482(i)	3000		7	Emulsifier, Flour Treatment Agent, Foaming Agent, Stabilizer	Adopt at 300 with Notes 356, XS33, XS325R and a new note "For use as an emulsifier in cooking or solid oils conforming to the Standard for Named Vegetable Oils (CXS210-1999) and the Standard for edible fats and oils not covered by individual standards (CXS19-1981) only" Inform Alignment PWG of this decision
CCFO: REP19/FO, para. 108: The Committee noted that Stearoyl lactylates (INS 481(i) and INS 482(i)) - ML of 300 mg/kg; were used as emulsifiers for anti-crystallization purposes in cooking oil, when stored under an air conditioned environment, in countries with high ambient temperatures. Also see, REP19/FO – Appendix III (Part D)						
EWG on the GSFA to the 48th CCFA Comments on 1st and 2nd Circular Proposal: **Brazil, EU, Iran, Japan, RF:** Discontinue **EFEMA:** Adopt; Used in shortenings to improve creaming qualities and to make incorporation of air bubbles into the batter possible. Also used in palm based cooking oil as an anticrystallizer. The oil is liquid in hot climate but will crystallize during storage/transport. Approved for use in fats and oils in China, AUS/NZ,						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Malaysia and Philippines.						
1st Circular Proposal: Adopt at 300 with note 227 "excluding virgin and cold pressed oils and products conforming to the standard for Olive Oils and Olive Pomace Oils (CODEX STAN 33-1981)" **1st Circular Comments by EWG members to CCFA52:** **Canada**: Does not object to the initial proposal but suggests replacing Note 227 by Notes 356, XS19, XS33 and XS210 to ensure consistent use of Notes in the GSFA. **China**: Supports the proposal. China approved 300 mg/kg in vegetable oil.. Technical Justification: Sodium/Calcium stearoyl lactylates are used for anti-crystallization purposes in cooking oil. **India**: supports adoption at 300 mg/Kg with Note 227, in view of the technological need shared by industry. **Nigeria**: Stearoyl lactylates is an emulsifier used as a dough strengthener in baked foods and to increase shelf life. Support adoption at 300mg/kg with note 227. **Russian Federation:** Supports discontinuation **Vietnam**: Since 2017, sodium stearoyl lactylate (INS 481(i)) was permitted to use in vegetable oils and fats at 10,000 mg/kg. Vietnam opposes the discontinuation. Sodium stearoyl lactylate is now commonly used in cooking oil with technological function proven. **ECOWAS:** Supports adoption at 300 mg/Kg with Note 227, in view of the technological needs provided by the industry. **EFEMA**: Cooking oil is liquid in hot climates, but will crystallize during storage on the shelves in temperate areas with a pronounced winter season and in the shelves of air-conditioned supermarkets. Emulsifiers can postpone the on-set of the crystallization process in palm-based cooking oil and thereby maintain the oil in a clear consumer acceptable state. The judicious use of anti-crystallizers maintains clarity whilst allowing manufacturers to use oil blends that are more affordable by consumers. Although crystallisation is a temperature-dependent and reversible process, consumers tend to interpret the crystallized oil as spoilt. Addition of anti-crystallizers thus enhance consumer perception and prevent food waste. **FoodDrinkEurope:** supports the proposal **IFAC**: IFAC supports the proposed maximum use level of 300 mg/kg for anti-crystallization purposes. Although cooking oil is intended to be used in a liquid state, it will crystallize during storage in low temperature conditions, which may occur during cooler seasons and in air-conditioned environments. Emulsifiers can postpone the crystallization process in palm based cooking oil that occurs at lower temperatures, thus maintaining the liquidity and clarity that is both preferred and more usable by consumers. Anti-crystallizers, such as polyglycerol esters of fatty acids, also allow manufacturers to use oil blends that are more affordable for consumers.						
2nd Circular Proposal: Adopt at 10000 with notes 356 "excluding virgin and cold pressed oils". **Chair's Notes:** REP19/FO, para. 111, indicates that the CCFO agreed to the proposed use of Polyglycerol esters of fatty acids (INS 475) with an ML of 10,000						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal

mg/kg as emulsifiers.

CODEX STAN 019-1981 does not permit additives in virgin or cold pressed oils covered by the Standard, therefore Note 356 would apply to Polyglycerol esters of fatty acids (INS 475).

Recommend the EWG on Alignment to consider the response from CCFO and remove Note 277 from specific provisions and replace with Notes 356 and XS33

2nd Circular Comments by EWG members to CCFA52:

EU: EU takes note of the feedback provided by CCFO which refers to the **MPL of 300 mg/kg**. The use and use levels of INS 481-482 are of importance to the EU due to concerns related to the overall exposure to these additives (EFSA, 2013).

The EU observes that this substance is not authorised for use in fats and oils in the EU. Overall, the EU is not convinced that there is a reasonable technological need. Consumers could be educated to accept 'reversible crystallisation'.

India: supports the proposal.

Japan: Notes XS 19 and XS 33 be also added since neither CXS 19 nor CXS 33 permits the use of stearoyl lactylates.

Malaysia: Support adoption

Russian Federation: Does not agree with proposal. Do not use in this FC because could mislead consumers

Vietnam: Since 2017, sodium stearoyl lactylate (INS 481(i)) was permitted to use in vegetable oils and fats at 10,000 mg/kg.

Vietnam opposes the discontinuation. Sodium stearoyl lactylate is now commonly used in cooking oil with technological function proven.

On 30 Aug 2019, Vietnam authority issued the new regulation on food additive management. As such, sodium stearoyl lactylate (INS 481(i) is continuously permitted to use legally in vegetable oils and fats (FC 02.1.2).

EFEMA: It seems the text from Polyglycerolesters of fatty acids was mistakenly copied to this section.

Furthermore, we suggest adding note G-CXS210: For use as an emulsifier for anti-crystallization purposes in cooking oils conforming to the Standard for Named Vegetable Oils (CXS 210-1999) only. As proposed by the Alignment WG to allow for 300 mg/kg in cooking oil.

IFAC: supports the Alignment WG's proposal for 300 mg/kg in cooking oil. With that said, IFAC also supports the addition of note G-CXS210: For use as an emulsifier for anti-crystallization purposes in cooking oils conforming to the Standard for Named Vegetable Oils (CXS 210-199) only.

Comments from the Codex Committee on Spices and Culinary Herbs (CCSCH) on the use in food categories:

Technological justification for the use of food additives: The Committee agreed to inform CCFA that anticaking agents were used in the powdered form of culinary herbs with the purpose of maintaining the free-flowing physical characteristic of the product and that magnesium stearate (INS 470 (iii)) and amorphous silicon dioxide (INS 551) may be used in the powdered form and in accordance with good manufacturing practice (GMP).

Food Category No. 12.2.1 Herbs and spices

Corresponding commodity standards: 326-2017: Preservatives used in accordance with Tables 1 and 2 of the General Standard for Food Additives (CXS 192-1995) in food category 12.2.1 (Herbs and spices) are acceptable for use in green peppers only conforming to this standard; **CXS 327-2017:** Anticaking agents listed in Table 3 of the General Standard for Food Additives (CXS 192-1995) are permitted for use in ground cumin only; and **CXS 328-2017:** Anticaking agents listed in Tables 1 and 2 of food category 12.2.1 (Herbs and Spices) of the General Standard for Food Additives (CXS 192-1995) are acceptable for use in powdered thyme.

Chair's Note: Corresponding commodity standards 326-2017, 327-2017, 328-2017 are currently being aligned with the GSFA.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
MAGNESIUM STEARATE	470(iii)	10000		2	Anticaking agent, Emulsifier, Thickener	Adopt at GMP with the new note "for herbs use is limited to herbs that have been ground – processed into powder only." Inform Alignment PWG of this decision
CCSCH: REP19/SCH, para. 10: Magnesium stearate (INS 470 (iii)) may be used in the powdered form and in accordance with good manufacturing practice (GMP).						
EWG on the GSFA to the 50th CCFA Comments on 1st and 2nd Circular Proposal: **Brazil**: Salts of fatty acids with Mg (INS 470) allowed as anticaking in herbs and spices at GMP **India:** Additive not allowed in this category **EU:** could see the need for certain anticaking agents. However, the EU recommends, in line with the procedures, to consult the active commodity committee (Codex Committee on Spices and Culinary Herbs) **RU:** Does not support adoption. Request information on technological function, use in spices and/or herbs **FoodDrinkEurope:** Support proposal						
1st Circular Proposal: Adopt at GMP						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
1st Circular Comments by EWG members to CCFA52: **Australia**: As the chair of the Alignment EWG makes the following comment: the 1st circular of the current Alignment EWG, proposes alignment in Appendix 4, to align with CXS326, CXS327 and CXS328 relevant to this entry. The proposal is to add the provision due to alignment, with the ML at GMP but with new exclusion notes being XS326 and XS327 and a new note A-CXS328. Note A-CXS328: For use in powdered thyme only in products conforming to the Standard for Dried Thyme (CXS 328-2017). **Canada:** Based on the comments provided by CCSCH, it is our understanding that anticaking agents are to be used in powdered form of culinary herbs, and not in powdered form of spices. As pepper (white, black or green) is considered a spice, Canada would like to suggest adding Note XS356 to the proposal. **China:** Supports the proposal. **India**: supports adoption at GMP in powdered form of spices and culinary herbs. **Nigeria**: Discontinue; Not allowed in herbs; Justification: Suppresses T.cells. Causes the collapse of cell membrane integrity **Russian Federation:** Adopt only for powdered thyme cumin, and green peppers in ML=10000 mg/kg **Switzerland**: agree at GMP, but only in dried products **US:** Supports use at GMP **ECOWAS**: Does not support adoption. Request more information on technological function and the needs for use of the additive in this spices and herbs. **FoodDrinkEurope:** supports the proposal						
2nd Circular Proposal: Adopt at GMP with notes XS326 “excluding products conforming to the standard for Black, White and Green Pepper (CODEX STAN 326-2017)”, XS327 “excluding products conforming to the standard for Cumin (CODEX STAN 327-2017)” and XS328 “For use in powdered thyme only in products conforming to the Standard for Dried Thyme (CODEX STAN 328-2017)”. **2nd Circular Comments by EWG members to CCFA52:** **Brazil:** supports use at GMP **Colombia**: supports the initial proposal of the EWG **EU:** accepts the proposal **India**: supports the proposal to Adopt at GMP in powdered form of spices and culinary herbs. Note XS326 and XS328 are acceptable.						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
However excluding all products through note XS327 is not justified because permission to use this additive in powdered form is already available in the standard. Hence Note XS327 should be amended to "for use in powdered/ ground cumin products conforming to CODEX STAN 327 – 2017." **Indonesia:** support adoption at GMP as anticaking agent for use in powdered only in FC 12.2.1. **Russian Federation: D**oes not agree with the proposal due to the lack of technological justification **Zambia:** Supports the adoption at GMP. Under the Food and Drugs Regulations it is permitted for use in unstandardized dry mixes as an anticaking agent at GMP.						
SILICON DIOXIDE, AMORPHOUS	551	GMP	51	4	Anticaking agent, Antifoaming agent, Carrier	Adopt at GMP with the new note "for herbs use is limited to herbs that have been ground – processed into powder only" Inform Alignment PWG of this decision
CCSCH: REP19/SCH, para. 10: Amorphous silicon dioxide (INS 551) may be used in the powdered form and in accordance with good manufacturing practice (GMP).						
EWG on the GSFA to the 50th CCFA Comments on 1st and 2nd Circular Proposal: **Brazil:** Silicon dioxide (INS 551) is allowed as anticaking in herbs and spices at GMP. **India:** Additive not allowed in herbs **EU:** Could see the need for certain anticaking agents. However, the EU recommends, in line with the procedures, to consult the active commodity committee (Codex Committee on Spices and Culinary Herbs) **Indonesia:** Adopt at 5000 ppm **Japan:** Supports 2nd circular proposal. This additive is used in spice and spice mix as anticaking agent to prevent sticking to one another. **RU:** Does not support adoption. Request information on technological function, use in spices and/or herbs **FoodDrinkEurope:** Support proposal						
1st Circular Proposal: Adopt at GMP **1st Circular Comments by EWG members to CCFA52:** **Australia:** as the chair of the Alignment EWG makes the following comment: the 1st circular of the current Alignment EWG, proposes alignment in Appendix 4, to align with CXS326, CXS327 and CXS328 relevant to this entry.						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
The proposal is to add the provision due to alignment, with the ML at GMP but with new exclusion notes being XS326 and XS327 and a new note A-CXS328. Note A-CXS328: For use in powdered thyme only in products conforming to the Standard for Dried Thyme (CXS 328-2017). **Canada:** Based on the comments provided by CCSCH, it is Canada's understanding that anticaking agents are to be used in powdered form of culinary herbs, and not in powdered form of spices. As pepper (white, black or green) is considered a spice, Canada would like to suggest adding Note XS356 to the proposal. **China:** Supports the proposal. **India**: supports adoption at GMP in powdered form of spices and herbs, without Note 51 as this note is no longer relevant now. **Malaysia**: Support adoption **Nigeria**: Not allowed in herbs; Justifications: Sillicon dioxide is a food Additive used in food as an anticaking agent to avoid clumping and binding together. Cinnamon is a herb used commonly in Nigeria presently for weight loss, it contains silicon dioxide and silicon dioxide increases pressure on connective tissues, nerves and inhibits blood flow. **Russian Federation:** Adopt only for powdered thyme cumin, and green peppers in ML=GMP **Switzerland**: agree at 30 000 mg/kg **US:** Supports use at GMP **ECOWAS**: Does not support adoption. Request more information on technological function and the needs for use of the additive in this spices and herbs. **FoodDrinkEurope**: supports the proposal						
2nd Circular Proposal: Adopt at GMP with notes XS326 "excluding products conforming to the standard for Black, White and Green Pepper (CODEX STAN 326-2017)", XS327 "excluding products conforming to the standard for Cumin (CODEX STAN 327-2017)" and XS328 "For use in powdered thyme only in products conforming to the Standard for Dried Thyme (CODEX STAN 328-2017)". **2nd Circular Comments by EWG members to CCFA52:** **Brazil:** supports use at GMP **Colombia:** supports the initial proposal of the EWG **EU:** supports **India**: supports the proposal to Adopt at GMP in powdered form of spices and culinary herbs. Note XS326 and XS328 are acceptable.						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
However excluding all products through note XS327 is not justified because permission to use this additive in powdered form is already available in the standard. Hence Note XS327 should be amended to “for use in powdered/ ground cumin products conforming to CODEX STAN 327 – 2017.” **Malaysia:** Support adoption **Russian Federation:** Agrees with the proposal of EU to consult the active commodity committee (Codex Committee on Spices and Culinary Herbs) **Zambia:** We can support the adoption at GMP. Under the Food and Drugs Regulations in Zambia, INS 551 can be used in unstandardized dry mixes at GMP and in celery pepper as an anti-caking agent up to a maximum level of 5g/kg.						

Notes:

356: “Excluding virgin and cold pressed oils”

Appendix 2: Draft and Proposed draft provisions for Table 3

1. Among several topics, CCFA51 requested the EWG on the GSFA to CCFA52 to consider:[1]

- Draft and proposed draft provisions for Table 3 of the GSFA.

Introduction:

2. The 86th Joint Expert Committee on Food Additives (JECFA) meeting evaluated the safety of lutein from *Tagetes erecta* (INS 161b(i)), methacrylate copolymer, basic (INS 1205) and zeaxanthin (synthetic) (INS 161h(i)). This review resulted in an acceptable daily intake of "not specified" for these food additives. As a result, the 86th JECFA recommended that CCFA51 include provisions for the food additives in Table 3 of the GSFA and circulate the provisions for comment at Step 3.[2]

3. The 17th JECFA meeting evaluated the safety of lecithin, partially hydrolyzed (INS 332(ii)). This review resulted in an acceptable daily intake of "not limited" for the food additive. CCFA47 agreed to include a provision for the food additive in Table 3 of the GSFA and circulate for comment at a later date.[3]

4. CCFA51 agreed to include provisions for lecithin, partially hydrolyzed (INS 332(ii)), lutein from *Tagetes erecta* (INS 161b(i)), methacrylate copolymer, basic (INS 1205) and zeaxanthin (synthetic) (INS 161h(i)) in Table 3 of the GSFA and request that the EWG on the GSFA to CCFA52 circulate these Table 3 provisions at Step 3.[4]

Working document

5. The EWG issued two circulars for comment containing Appendix 2. The current document contains proposals on proposed draft provisions in Table 3 for lecithin, partially hydrolyzed (INS 332(ii)), lutein from *Tagetes erecta* (INS 161b(i)), methacrylate copolymer, basic (INS 1205) and zeaxanthin (synthetic) (INS 161h(i)). The provisions under discussion are presented in the format of Table 3 of the GSFA. These proposals are based upon a consensus approach taking into account comments on the first circular by members of the EWG. These recommendations are based on the "weight of evidence"; that is, comments containing justifications were given more weight than comments with no supporting justification

[1] REP 19/FA, paras. 19 & 138(iii).
[2] CX/FA 19/51/3, Table 1.
[3] REP 15/ FA, para 102.
[4] REP19/FA paras. 19 & 138(iii), and Appendix II.

INS	Additive	INS Functional Class	Step	Year	Acceptable, including foods conforming to the following commodity standards	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal or Request for Information.
322(ii)	LECITHIN, PARTIALLY HYDROLYZED	Emulsifier, Antioxidant	3		CS 66-1981, CS 117-1981, CS 291-2010, CS 309R-2011, CS 319-2015 (for use in canned mangoes and canned pineapples only)	**Chair's Note**: Revised INS number to 322(ii), error in 1st circular INS listing. The 1st circular requested proposals for the use of INS 322(ii) in commodity standards. The 1st Circular included in the original proposal all commodity standards which had been aligned and permits use of specific Table 3 additives as listed in the References to Commodity Standards for GSFA Table 3 additives. In preparing the second circular the EWG Chair observed that the proposed commodity standards can be categorized into 3 groups based on the following criteria: 1) has the commodity standard been aligned and 2) does the commodity standard have a general reference of permit specific Table 3 additives, and 3) is the corresponding commodity committee active or adjourned. The second circular grouped the proposals for inclusion of INS 322(ii) in commodity standards based upon the above criteria, and put forward proposals or requested information for each group.	
						Group 1. CODEX STAN has been aligned and permits use of any Table 3 additives with the specific functional class(es) listed **Proposal:** Adopt as listed	**2nd CL Proposal:** Adopt as listed **Chile, EU, India, Japan, Malaysia, RU, IADSA**: Supports proposal
						Group 2. CODEX STAN aligned, permits specific Table 3 additives (commodity committee adjourned sine die): CS 87-1981, CS 105-1981 CS 141-1983 **Proposal:** Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981, CS 105-1981, CS 141-1983	**2nd CL Proposal:** Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981, CS 105-1981, CS 141-1983 **EU, India, Japan, Malaysia**: Supports proposal **RU**: agrees with the proposal for CS 87-1981, and CS 141-1983 In case with cocoa powders (cocoas) and dry mixtures of cocoa and sugars

							(CS 105-1981) not technological justification for use of INS 322 (ii) **EU Specialty Food**: We support this proposal. Before harmonization, lecithin was listed as INS 322 Lecithins without distinction between (i) and (ii). As noted in Alinorm 05/28/12 when INS 322 is used, it refers to both types of lecithins INS 322 (i) and INS 322(ii). INS 332 (ii) is widely used as dispersants, wetting agents, antioxidants and emulsifiers in various food categories. Partially hydrolyzed lecithin INS 322 (ii) is hydrophilic while lecithin INS 322 (i) is lipophilic. Thus, partially hydrolyzed lecithin is a better oil-in-water emulsifier, while lecithin generally cannot produce stable oil-in-water emulsions. Partially hydrolyzed lecithin is used also as anti-spattering agent. Partially hydrolyzed lecithin is labelled as such and conforms to specification for INS 322 (ii). It is used at very low level. Partially hydrolyzed lecithin is able to complex with starch, which makes it more functional in bakery applications than lecithin. Partially hydrolyzed lecithin functions better than lecithin as an anti-spattering agent in low-salt containing margarines. Partially hydrolyzed lecithin functions better than lecithin for improving the wettability and dispersibility of fat-containing powders while lecithin functions better for improving the wettability and dispersibility of high protein powders. In condensed milk a better stability of the product is obtained with a lower dosage of partially hydrolyzed lecithin than when using standard grade lecithin.

						Group 3. CODEX STAN with active commodity committee: CS 249-2006 **Proposal:** Refer to CCCPL to determine technological justification	**2nd CL Proposal**: Proposal: Refer to CCPFV to determine technological justification **EU, India, Malaysia, RU:** Supports proposal **Japan**: does not support the proposal since CXS 249-2006 was developed by Committee on Cereals, Pulses and Legumes (CCCPL), not CCPFV. Determination of technological justification should be referred to CCCPL. CCCPL is working by correspondence. **EU Specialty Food**: Hydrolysed lecithin (INS 322 (ii)) is commonly used in instant noodles as emulsifier. Hydrolysed lecithin increases workability and machinability, increases the elasticity and chewing feel of the product as well as it increases the crispiness in fried noodles. Hydrolysed lecithin is also more effective in preventing starch retrogradation than regular lecithins.

Chair's Note: Propose inclusion of CS 66-1981, CS 117-1981, CS 291-2010, CS 309R-2011, CS 319-2015 only until resolution of issues with online database, at which point these CS should be removed from provision.

EWG Members Comments to First Circular:

USA: Supports proposal. INS number is 322(ii), not 332(ii). Additive is regulated GRAS for use in foods in general at GMP, also GRAS for use in specific foods including soups

ECOWAS, India, Chile, ICGA, IADSA: Supports proposal

Japan: Proposes that CXS 87-1981 and CXS 249-2006 be added to "Acceptable, including foods conforming to the following commodity standards".
(Rationale)
1. Codex standard for Chocolate and Chocolate products (CXS 87-1981)
This additive is used in chocolate covered by CXS 87-1981 as an emulsifier. CXS 87-1981 corresponds to FC 05.1.4. FC 05.1.4 is not listed in the Annex to Table 3 and CXS 87-1981 list specific table 3 additives.

2. Codex standard for Instant Noodles (CXS 249-2006)
This additive is used in Instant Noodles covered by CXS 249-2006 as an emulsifier. CXS 249-2006 corresponds to FC 06.4.3. FC 06.4.3 is not listed in the Annex to Table 3 and CXS 249-2006 lists specific table 3 additives.

EU Specialty Foods: Supports proposal. In addition to the listed commodity standards, we would respectfully request including also the standards listed in Table 3 for INS 322 (i) i.e. CS 105- 1981 - Standard for Cocoa powders (cocoas) and dry mixtures of cocoa and sugars; CS 87-1981 - Standard for Chocolate and Chocolate

<table>
<tr><td colspan="8">Products; CS 141-1983 - Standard for Cocoa (Cacao) Mass (Cocoa/Chocolate Liquor) and Cocoa Cake, which originally included INS 322. Before harmonization, the standards listed INS 322 Lecithins without distinction between (i) and (ii). As noted in Alinorm 05/28/12 when INS 322 is used, it refers to both types of lecithins INS 322 (i) and INS 322(ii). INS 332(ii) is widely used as dispersants, wetting agents, antioxidants and emulsifiers in various food categories. Partially hydrolyzed lecithin 322 (ii) is hydrophilic while lecithin E 322 (i) is lipophilic. Thus, partially hydrolyzed lecithin is a better oil-in-water emulsifier, while lecithin generally cannot produce stable oil-in-water emulsions. Partially hydrolyzed lecithin is used also as anti-spattering agent. Partially hydrolyzed lecithin is labelled as such and conforms to specification for INS 322(ii). It is used at very low level. Partially hydrolyzed lecithin is able to complex with starch, which makes it more functional in bakery applications than lecithin. Partially hydrolyzed lecithin functions better than lecithin as an anti-spattering agent in low-salt containing margarines. Partially hydrolyzed lecithin functions better than lecithin for improving the wettability and dispersibility of fat-containing powders while lecithin functions better for improving the wettability and dispersability of high protein powders. In condensed milk a better stability of the product is obtained with a lower dosage of partially hydrolyzed lecithin than when using standard grade lecithin.

Russian Federation: agrees with proposal (Acceptable for CS 66-1981, CS 117-1981, CS 291-2010, CS 309R-2011, CS 319-2015 (for use in canned mangoes and canned pineapples only)</td></tr>
<tr><td rowspan="2">161b(i)</td><td rowspan="2">LUTEIN FROM TAGETES ERECTA</td><td rowspan="2">Colour</td><td rowspan="2">3</td><td rowspan="2"></td><td rowspan="2">CS 117-1981, CS 319-2015 (for use in special holiday pack canned pears)</td><td colspan="2">**Chair's Note**: The 1st circular requested proposals for the use of INS 161b(i) in commodity standards. The 1st Circular included in the original proposal all commodity standards which had been aligned and permits use of specific Table 3 additives as listed in the References to Commodity Standards for GSFA Table 3 additives.

In preparing the second circular the EWG Chair observed that the proposed commodity standards can be categorized into 2 groups based on the following criteria: does the commodity standard permit use of all Table 3 additives or only specific Table 3 additives. The second circular grouped the proposals for inclusion of INS 161b(i) in commodity standards based upon the above criteria, and put forward proposals or requests for information for each group

Comments are requested on **each proposal below.**</td></tr>
<tr><td>**Group 1. CODEX STAN has been aligned and permits use of any Table 3 additives with the specific functional class(es) listed**

Proposal: Adopt as listed</td><td>**2nd CL Proposal:** Adopt as listed

Chile, India, IACM, NATCOL, IADSA, FoodDrinkEurope, EU Specialty Foods: Supports proposal

RU: does not agree with the proposal. According legislation of Eurasian Trade union colous could not be used in:
1) unprocessed food products;
2) pasteurized or sterilized milk, chocolate milk
unscented;
3) fermented milk products, buttermilk not flavored;
4) milk, cream, canned, concentrated, condensed not scented;</td></tr>
</table>

							5) vegetables (except olives), fruits, mushrooms fresh, dried, canned, including mashed potatoes and pastes; 6) eggs and egg products (for coloring Easter egg shells the dyes specified in Annex 11 to this Technical regulation); 7) meat, poultry, game, fish, crustaceans, shellfish whole or piece or ground, including ground beef, without the addition of other ingredients, crude; 8) flour, cereals, starches; 9) fruits, vegetables, mushrooms, fresh, dried, canned (incl. pastes and purees); juice products (except juice-containing drinks), pasta, mashed potatoes; 10) tomato paste and sauce, canned tomatoes; 11) sugar, glucose, fructose, lactose; 12) honey; 13) cocoa products, chocolate ingredients in confectionery and other products; 14) pasta; 15) roasted coffee, chicory, tea, extracts thereof; tea, vegetable, fruit preparations for infusions and their soluble mixtures; 16) malt and malt beverages; 17) spices and mixtures thereof; 18) salt, salt substitutes; 19) bottled drinking water; 20) wine, fruit alcohol, fruit spirits and wine vinegar; Sixty one 21) oil and fat of animal origin, vegetable oils and cold pressed; 22) Mature and unripe cheeses, non-aromatized; 23) bread;

							24) specialized food products for the nutrition of healthy and sick children up to three years. Because use colours in these FC could mislead consumers. Note: 1 - with the exception of the cases referred to in annexes 10 and 11 of TR TU 029/2012
						Group 2. CODEX STAN aligned, permits specific Table 3 additives (commodity committee adjourned *sine* die) CS 87-1981 **Proposal**: Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981 (for surface decoration purposes only)	**2nd CL Proposal**: Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981 **EU:** the note "CS 87-1981 (for use in surface decoration only)" is necessary as colours in chocolate may otherwise mislead the consumer as regards the quality and quantity of the cocoa mass **India, IACM, NATCOL, FoodDrinkEurope, EU Specialty Foods**: Supports proposal **RU**: RU: does not agree with the proposal. According legislation of Eurasian Trade union colous could not be used in: cocoa products, chocolate ingredients in confectionery and other chocolate products; Because use colours in these FC could mislead consumers.

Chair's Note: Propose inclusion of CS 117-1981, CS 319-2015 only until resolution of issues with online database, at which point these CS should be removed from provision.

EWG Members Comments to First Circular:

USA: In principle, the USA supports the adoption of this provision into Table 3 of the GSFA. The additive has a JECFA ADI of "not specified" - there is no safety concern for its use. The additive has an INS number and functional class and meets a technological need.

Chile, ECOWAS, India, ICGA, IADSA: Supports proposal

Nigeria: CCNFSDU should adopt only food additives that are fully evaluated by JECFA (Joint experts committee on food additives)

EU Specialty Foods: EU Specialty Food Ingredients: We note that Lutein esters from Tagetes erecta (INS 161b(iii) are already listed in table 3. Lutein from Tagetes erecta (INS 161b(i) and lutein esters from Tagetes erecta (INS 161b (iii) are similar in performance and thus substitutional in their application as food colours. Table 3 lists lutein esters as acceptable for use in foods including foods conforming to the CS 87-1981 (for use in surface decoration only) and CS 117-1981. Lutein from Tagetes erecta (INS 161b(i) is equally suitable for use in these CS.
Justification for use in surface decoration in CS 87-1981 (new: CXS 87-1981) for chocolate and chocolate products: the standard allows in section 3.1 the principle use of a number of food additives classes, including colours (for surface decoration purposes only). Colours were obviously technologically justified for this food category (for surface decoration only). (see detailed comments in original submission)

As regards justification of use for CS 117-1981 (new: CXS 117-1981): this colours in accordance with Table 3

ICA: Supports inclusion in Table 3

NATCOL: supports the inclusion in Table 3. Is very similar to Lutein esters from Tagetes ereacta which is already listed inclusion CS 117-1981 and 319-2015 and therefore we support these common provisions

Russian Federation: agrees with proposal (Acceptable for CS 117-1981, CS 319-2015 (for use in special holiday pack canned red pears)

1205	METHACRYLATE COPOLYMER, BASIC	Glazing Agent, Carrier	3		CS 117-1981	**Proposal** Adopt as listed Forward to Alignment WG to discuss revising CXS 117-1981 to include the functional classes of “glazing agent” and “carrier”	**2nd CL Proposal** Adopt as listed Forward to Alignment WG to discuss revising CXS 117-1981to include the functional classes of “glazing agent” and “carrier **India, ECOWAS, Senegal, IADSA**: Support proposal **RU**: Does not agrees with proposal. There are not technological justification for use of this FA in this FC - in Bouillons and Consommés (only as a secondary FA which CARRY-OVER with food ingredients)

Chair’s Note: Inclusion of CS 117-1981 would require that provision be sent to Alignment EWG for consideration of inclusion in commodity standard

EWG Members Comments to First Circular:

USA: In principle, the USA supports the adoption of this provision into Table 3 of the GSFA. The additive has a JECFA ADI of “not specified” - there is no safety concern for its use. The additive has an INS number and functional class, and meets a technological need

ECOWAS, India, ICGA, IADSA: Supports proposal

<table>
<tr><td colspan="8">Senegal: Supports proposal. BMC encapsulates the micronutrients and provides a protective coating that prevents damage or destruction of the micronutrients that occurs during storage, cooking, etc. We have tried other means to fortify our foods, however, they have not been successful because of destruction of the micronutrients that occurs when they are exposed to high heat and humidity during storage and cooking. This means that even though some people are consuming fortified foods, they are not really getting adequate levels of the micronutrients that they need. Senegal believes that the adoption of BMC provides CCFA with a real opportunity for CCFA to uphold the Codex mandate of protecting the public health. BMC will increase the intake of Vitamin A and iron, particularly in pregnant women and children. (See additional comments available in Senegalese response to 1st CL)

Senegal also requests, for the inclusion of BMC in CXS 117-1981, that the EWG on GSFA asks to the EWG on Alignment to consider inclusion of BMC in CXS 117-1981 as a consequential change due to the addition of BMC in Table 3.

Nigeria: Used in cans to preserve the taste and nutritional value of their fillings for several years. The use of INS 1205 is not of safety concern when used as a coating or glazing agent for canned foods.

Australia: Understands that the Chair’s note relating to being sent to the Alignment EWG relates to the fact that CXS117 has been aligned. However, the aligned CXS117 contains no mention in section 4 - Food Additives of the functional classes of “glazing agent” and “carrier” which apply for this food additive. The appropriate amendments would need to be considered by the alignment EWG once the food additive is added to Table 3. At first glance it seems straight forward to add these two functional classes into section 4 of CXS117.

Russian Federation: Does not agrees with proposal. There are not technological justification for use of this FA in this FC (only as a secondary FA which CARRY-OVER with food ingredients)</td></tr>
<tr><td rowspan="2">161h(i)</td><td rowspan="2">ZEAXANTHIN (SYNTHETIC)</td><td rowspan="2">Colour</td><td rowspan="2">3</td><td rowspan="2"></td><td rowspan="2">CS 117-1981, CS 319-2015 (for use in special holiday pack canned pears)</td><td colspan="2">Chair’s Note: The 1st circular requested proposals for the use of INS 161h(i) in commodity standards. The 1st Circular included in the original proposal all commodity standards which had been aligned and permits use of specific Table 3 additives as listed in the References to Commodity Standards for GSFA Table 3 additives.

In preparing the second circular the EWG Chair observed that the proposed commodity standards can be categorized into 2 groups based on the following criteria: does the commodity standard permit use of all Table 3 additives or only specific Table 3 additives. The second circular grouped the proposals for inclusion of INS 161h(i) in commodity standards based upon the above criteria, and put forward proposals or requests for information for each group</td></tr>
<tr><td>Group 1. CODEX STAN has been aligned and permits use of any Table 3 additives with the specific functional class(es) listed

<u>Proposal:</u> Adopt as listed</td><td><u>2nd CL Proposal:</u> Adopt as listed

Chile, India, Malaysia, IACM, NATOCOL, IADSA, FoodDrinkEurope, EU Specialty Foods: Supports proposal

RU: does not agree with the proposal. According legislation of Eurasian Trade union colous could not be used in:
1) unprocessed food products;
2) pasteurized or sterilized milk, chocolate milk
unscented;</td></tr>
</table>

							3) fermented milk products, buttermilk not flavored; 4) milk, cream, canned, concentrated, condensed not scented; 5) vegetables (except olives), fruits, mushrooms fresh, dried, canned, including mashed potatoes and pastes; 6) eggs and egg products (for coloring Easter egg shells the dyes specified in Annex 11 to this Technical regulation); 7) meat, poultry, game, fish, crustaceans, shellfish whole or piece or ground, including ground beef, without the addition of other ingredients, crude; 8) flour, cereals, starches; 9) fruits, vegetables, mushrooms, fresh, dried, canned (incl. pastes and purees); juice products (except juice-containing drinks), pasta, mashed potatoes; 10) tomato paste and sauce, canned tomatoes; 11) sugar, glucose, fructose, lactose; 12) honey; 13) cocoa products, chocolate ingredients in confectionery and other products; 14) pasta; 15) roasted coffee, chicory, tea, extracts thereof; tea, vegetable, fruit preparations for infusions and their soluble mixtures; 16) malt and malt beverages; 17) spices and mixtures thereof; 18) salt, salt substitutes; 19) bottled drinking water; 20) wine, fruit alcohol, fruit spirits and wine vinegar; Sixty one 21) oil and fat of animal origin, vegetable oils

							and cold pressed; 22) Mature and unripe cheeses, non-aromatized; 23) bread; 24) specialized food products for the nutrition of healthy and sick children up to three years. Because use colours in these FC could mislead consumers. Note: 1 - with the exception of the cases referred to in annexes 10 and 11 of TR TU 029/2012
						Group 2. CODEX STAN aligned, permits specific Table 3 additives (commodity committee adjourned *sine* die) CS 87-1981 **Proposal**: Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981 (for surface decoration purposes only)	**2nd CL Proposal**: Adopt in GSFA, and add to the column "Acceptable including foods conforming to commodity standard column" CS 87-1981 **EU:** the note "CS 87-1981 (for use in surface decoration only)" is necessary as colours in chocolate may otherwise mislead the consumer as regards the quality and quantity of the cocoa mass **India, Malaysia, IACM, NATCOL, FoodDrinkEurope, EU Specialty Foods**: Supports proposal **RU**: RU: does not agree with the proposal. According legislation of Eurasian Trade union colous could not be used in: cocoa products, chocolate ingredients in confectionery and other chocolate products; Because use colours in these FC could mislead consumers.
Chair's Note: Propose inclusion of CS 117-1981, CS 319-2015 only until resolution of issues with online database, at which point these CS should be removed from provision.							
EWG Members Comments to First Circular: **USA:** in principle, the USA supports the adoption of this provision into Table 3 of the GSFA. The additive has a JECFA ADI of "not specified" - there is no safety concern for its use. The additive has an INS number and functional class, and meets a technological need **Chile, ECOWAS, India, ICGA, IADSA:** Supports proposal							

Nigeria: used as colours in foods. INS 161h(i) while stored in air tight containers and sealed did not (30months) still conformed to specifications

EU Specialty Foods: We note that Lutein esters from Tagetes erecta (INS 161b(iii) are already listed in table 3. Zeaxanthin (INS 161h(i) and lutein and lutein esters from Tagetes erecta (INS 161b (i) and (iii)) are very similar in chemical structure and thus also very similar in performance and due to this substitutional/supplementary in their application as food colours. Table 3 lists lutein esters as acceptable for use in foods including foods conforming to the CS 87-1981 (for use in surface decoration only) and CS 117-1981. Zeaxanthin is equally suitable for use in these CS.

As regards justification for use in CS 87-1981 (new: CXS 87-1981) for chocolate and chocolate products: see justification provided for lutein from Tagetes erecta (INS 161(iii). Arguments provided there apply mutatis mutandis.

As regards use in CS 117-1981 (new: CXS 117-1981) for bouillons and consommés: section 4 of the CS explicitly permits food colours in accordance with Table 3.

NATCOL: supports the inclusion of Zeaxanthin INS 161h(i) in Table 3. It is very similar to Lutein esters from Tagetes erecta INS 161b(i)) which is already listed including CS 117-1981, CS 319-2015 and therefore we support common provisions.

ICA: Supports inclusion in Table 3

Russian Federation: agrees with proposal (Acceptable for CS 117-1981, CS 319-2015 (for use in special holiday pack canned red pears)

Appendix 3: Creation of a group header in the GSFA for INS 473, 473a, and 474

1. Among several topics, CCFA51 requested the EWG on the GSFA to CCFA52 to consider:[1]

- Adopted provisions and provisions in the step process for sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474) in FCs 01.0 to 16.0 in the GSFA as a result of their group ADI and create a group heading accordingly.

Introduction

2. CCFA50 requested the Codex Secretariat, in consultation with the JECFA Secretariats, to undertake a review of all group food additives in the GSFA and prepare a comprehensive document for consideration at CCFA51.[2] As part of this exercise, the Codex and JECFA Secretariats noted that a group ADI of 0-30 mg/kg bw was established by the 71st JECFA (2009) for sucroglycerides, (INS 474), sucrose esters of fatty acids (INS 473), and sucrose oligoesters type I and type II (INS 473a) and subsequently recommended that CCFA should consider creating a group heading for these additives in the GSFA.[3]

3. As a result of the recognition of the group ADI for the three additives, CCFA51 tasked the electronic working group on the GSFA to CCFA52 to propose recommendations for combining individual provisions (both adopted and in the step process) for sucroglycerides, (INS 474), sucrose esters of fatty acids (INS 473), and sucrose oligoesters type I and type II (INS 473a) under a single group heading.[4]

Working Document

4. The EWG issued two circulars for comment on the creation of a group header for Sucrose esters. The two circulars requested comments on proposals to consolidate existing adopted or draft provisions for Sucroglycerides, (INS 474), Sucrose esters of fatty acids (INS 473), and Sucrose oligoesters type I and type II (INS 473a) into a single provision under a group header. Comments from the first and second circular have been taken into account in making final proposals.

5. The EWG was also requested to consider if the use of a “singly or in combination” note (Note 348: “Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474)) was still necessary given that the three additives would now all be under a group heading. The responses to this question and final recommendation regarding the need for Note 348 are included in Annex 1 of this document.

6. The provisions under discussion are presented in the format of Table 2 of the GSFA (by food category). The existing provisions for the three additives are presented first, followed by a recommendation for consolidating the existing provision under the single group heading of “SUCROSE ESTERS”. The header for the new group would appear as follows:

SUCROSE ESTERS
INS 474 Sucroglycerides Functional Class: Emulsifier
INS 473 Sucrose esters of fatty acids Functional Class: Emulsifier, Foaming agent, Glazing agent, Stabilizer
INS 473a Sucrose oligoesters, type I and type II Functional Class: Emulsifier, Glazing agent, Stabilizer

[1] REP 19/FA, paras. 10(ii) and 138(iv).
[2] REP 18/FA, para 18.
[3] CX/FA 19/51/2 Add. 1.
[4] REP19/FA, paras. 10(ii) and 138(iv).

7. The final proposals from the EWG and the combined comments from the first and second circular are included in Annex 2 of this document. The proposed final combined provisions for SUCROSE ESTERS have been highlighted in gray in order to distinguish them from the individual provisions.

8. In general, the following conventions were used in proposing the new provisions for SUCROSE ESTERS from the previously adopted provisions for for sucroglycerides, (INS 474), sucrose esters of fatty acids (INS 473), and sucrose oligoesters type I and type II (INS 473a):

- For food categories where provisions for all three additives are present, the maximum use level and notes for the provisions have been included in the new combined provision for “SUCROSE ESTERS.”
- For food categories where provisions only exist for one or two of the three individual sucrose esters, the combined provision for SUCROSE ESTERS has been written to include all three additives. In instances where one of the three additives does not have the necessary functional class for which the provision was intended, notes were added or retained to indicate which additives were appropriate for use in that food category.
- Where appropriate, “XS” notes have been added to indicate that use is not permitted in specific commodity standards.
- Based on the consensus outlined in Annex 1, Note 348 has been removed from all provisions, as it was no longer deemed necessary.

9. A list of notes is provided at the end of the document.

Annex 1. Responses to the General Question Pertaining to the Need for Note 348

The following question was posed to the Second Circular working group:

Note 348 ("Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474)") was originally applied to provisions for INS 473, 473a, and 474 so as to tie the use of the three additives together due to the establishment of a group ADI by JECFA for the three additives. The note was needed to let the user know that the three additives were tied together by a group ADI. As noted by Canada in their comments to the first circular, Note 348 was necessary when the three provisions were separate, but may no longer be needed as the three additives are now being grouped together under the header Sucrose Esters so as to account for the group ADI for the three additives. Further, as Canada notes, unless otherwise specified, it is typically understood that a maximum level applied to an additive group applies to the sum of additives in that group. While the note was needed previously (when the provisions were listed individually) to prevent combined use of each additive at the maximum use level in a particular food category, by placing the additives under the header of SUCROSE ESTERS, it is implied that the maximum level applies to all of the additives in the group singly or in combination. For example, other group additives (e.g. PHOSPHATES, POLYSORBATES) do not have a combination note such as Note 348, because the use of the additives singly or in combination is implied.

Taking into consideration the background given above, the EWG was requested to give its opinion regarding the following question: Is Note 348 necessary for all provisions for "Sucrose esters", or if Note 348 is no longer necessary?

Second Circular responses regarding the need for Note 348:

Responses indicating that Note 348 is no longer necessary:

Canada (in response to first circular): Note 348 is no longer needed.

Chile: support the Canada comments, the note is necessary when the three provisions are separate, now is grouped so as to account for the group ADI, therefore the note is not necessary.

EU: a consistency in the approach in the GSFA provisions is needed to facilitate its understanding. The EU agrees that the note "singly or in combination" may no longer be needed once the 3 additives (INS 473, 473a and 474) are listed under the same header. However, the same approach should be taken for all the other groups of additives and notes which include the text "singly or in combination". For example, certain provisions for Phosphates, Polysorbates, Tartrates and Sorbitan esters of fatty acids are associated with Note 364 "Singly or in combination" (the EU has not checked all the groups and notes).

India: We believe that Note 348 is no longer necessary, as the provisions are being adopted as a group additive.

Japan: The description of Note 348 is no longer necessary, since the maximum amount specified for the group can be applied in a single or combination of all the additives in the group (INS473, INS473a, INS474) after grouping of Sucrose esters as commented by Canada. Japan supports removing Note 348 since provisions for food additives for which JECFA established group ADI do not have a singly or in combination note and CCFA is creating a group header "Sucrose esters" for three additives (INS 473, INS 473a, INS 474).

USA: Supports deletion of Note 348 as it is no longer needed.

Zambia: We think that Note 348 is no longer necessary in view that INS 473, 473a and 474 are now proposed to be listed together under the header of Sucrose esters.

IADSA: To ensure consistency, supports deletion of Note 348.

IDF: agrees with Canada that Note 348 ("Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474)") is not necessary when provisions for "Sucrose esters" are grouped because it is typically understood that a maximum level applied to an additive group applies to the sum of additives in that group.

Responses in support of keeping Note 348:

Colombia: supports keeping Note 348 in the provisions for "SUCROSE ESTERS". Colombia considers that, nevertheless, the additives are going to be unified with the name of the group " SUCROSE ESTERS ", the use of them can happen both individually or in combination, so Note 348 "Only or in combination: sucroesters of fatty acids (INS 473), oligoesters of sucrose type I and II (INS 473a) and sucroglycerides (INS 474) " gives clarity about the use of additives alone or in combination.

Malaysia: Malaysia is of the view that the note should be remain for clarity purposes. The note also appears to the other additives which have been evaluated as group ADI.

Russia: In accordance with the legislation of the Russian Federation and Eurasian economy union, these food additives (ucrose esters of fatty acids (INS 473), sucrose oligoesters, typeI and type II (INS 473a) and sucroglycerides (INS 474)) are used alone or in combination because synergy action. We consider it appropriate to provide Note 348.

Final Recommendation on the need for Note 348

While some countries supported retaining Note 348 for the combined provisions for Sucrose Esters, the majority of responders believed that Note 348 was no longer necessary as the three additives are now grouped under one heading. As a result, it is proposed that Note 348 is no longer necessary for the provisions for Sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474) when listed together under the header of “Sucrose esters”.

Annex 2: Adopted provisions and provisions in the step process for sucrose esters of fatty acids (INS 473), sucrose oligoesters, type I and type II (INS 473a) and sucroglycerides (INS 474) in FCs 01.0 to 16.0 in the GSFA as a result of their group ADI and create a group heading accordingly

Food Category No. 01.1.2 (Other Fluid Milk (plain))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	1000	348, 410	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	1000	348, 410	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	1000	348, 410	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	1000	410		Revoke existing provisions and adopt combined provision with Note 410.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Second circular proposal: As noted by Russia, new provisions for FC 01.1.2 adopted at the 51st CCFA included Notes 407 (Excluding all fluid milks that are not mineral or vitamin fortified) and Note 438 (For use as emulsifier or stabilizer only). Please comment: Is it appropriate to add Notes 407 and 438 to the combined provision for Sucrose esters in FC 01.1.2? *Chair's Note: Note 348 was removed based on consensus in Annex 1 that Note 348 was no longer necessary. As noted by Japan, additives without thickener function were adopted at CCFA50 without the use of Notes 407 and 438. Notes 407 and 438 were introduced at CCFA51 to assist with additives that also had the functional effect of thickener. The Sucrose esters do not have the functional class of thickener. Therefore, Notes 407 and 438 did not seem appropriate.* **Guatemala, Zambia**: Supports proposal **EU**: supports addition of notes 407 and 438 (note 410 should be maintained as well) **India**: Supports inclusion of Notes 407 and 438. **Japan**: disagree with addition of Note 407 and 438. Provisions for INS 473, 473a and 474, which do not have technological function as thickener, were adopted without Notes 407 and 438 at CCFA50 (REP 18/FA Appendix V). **Malaysia**: Support proposal to remain Notes 348,410 and to add the Notes 407 and 438 **Russia**: according with decision CCFA51 proposal could be adopted only for vitamins and minerals supplemented (enriched) milk. Agrees with proposal in ML= 1000 mg/kg and with notes 348, 410 and Notes 407& 438 **USA**: Support proposal. Can support retaining Note 410. Do not support addition of Notes 407 and 438. **IDF:** agrees with proposed combined provision, with removal of Note 348 due to it being unnecessary for a group additive. IDF disagrees with inclusion of Note 407 and 438. These Notes are not appropriate because: (1) They were not originally attached to the Sucrose Esters individually when they were adopted; (2) Notes 407 and 438 were developed and applied only to additives in FC 01.1.2 which had thickener as a listed function. Given that Sucrose Esters does not have thickener as a listed function, Notes 407 and 438 are inappropriate; and Not all new provisions for FC 01.1.2 included Notes 407 and 438 so it is not an automatic requirement that all FC 01.1.2 additives must have these Notes.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, FoodDrinkEurope, IDF**: Support proposal. **Canada**: Canada has no objection to applying a combined group provision for INS 473, 473a and 474. However, as the proposal is to include the additives in the group of SUCROSE ESTERS, this would suggest that Note 348, which is a combination note, is unnecessary. Unless otherwise specified, it is understood that a maximum level applied to an additive group applies to the sum of additives in that group. Canada recommends removing all instances of Note 348 to the provision for SUCROSE ESTERS. The above comment applies generally throughout this appendix. **Russia**: according with decision CCFA51, proposal could be adopted only for vitamins and minerals supplemented (enriched) milk. Agrees with proposal in ML= 1000 mg/kg and with notes 348, 410 and Notes 407& 438					

Food Category No. 01.1.4 (Flavoured fluid milk drinks)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2017	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348)

Guatemala, India, Malaysia, USA, Zambia: Supports proposal

EU: Accepts proposal.

Russia: according with decision CCFA51 proposal could be adopted only for vitamins and minerals supplemented (enriched) milk in ML= 5000 mg/kg with notes 348, 410

IDF: supports proposal with removal of note 348 due to it being unnecessary for a group additive. IDF disagrees with the 1st circular comment to include a new Note 410 as it is not a necessary restriction and is not currently a requirement for the sucrose esters permitted in FC 01.1.4. The reasoning given for inclusion of Note 410 is that there was a decision made at CCFA51. However, the provisions for sucrose esters in FC 01.1.4 were not discussed at CCFA51 and there was accordingly no decision at CCFA51 to include Note 410 for these provisions.

First circular proposal: Revoke existing provisions and adopt combined provision

First circular comments:

Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, FoodDrinkEurope, IDF: Support proposal.

Russia: according with decision CCFA51 proposal could be adopted only for vitamins and minerals supplemented (enriched) milk in ML= 5000 mg/kg with notes 348, 410

Food Category No. 01.3.2 (Beverage whiteners)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	20000	348, XS250 & XS252	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	20000	348, XS250 & XS252	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	20000	348, XS250 & XS252	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	20000	XS250 & XS252		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, Malaysia, USA, Zambi**: Supports proposal **EU:** Accepts proposal. **Russia**: agrees with proposal with notes 348, 410, XS250 & XS252 **IDF**: supports proposal with removal of note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope, IDF**: Support proposal.					

Food Category No. 01.4.2 (Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, Malaysia, USA, Zambia**: Supports proposal **EU:** Accepts proposal. **Russia:** there not justification for to use this FA in unflavoured creams (plain). The use of food additives in plain products should be limited. The use of these FA in this FC can mislead consumers as to the quality of these foods. In addition, Plain products are used as raw materials for the manufacture of other food. Excessive intake of food additives can lead to changes in the organoleptic, physicj-chemical and nutritional properties of these foods. Excessive consumption of saturated fats leads to the development of a number of alimentary dependent pathologies **IDF**: supports proposal with removal of note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, IDF**: Support proposal. **Russia**: there not justification for to use this FA in unflavoured creams (plain). The use of food additives in plain products should be limited. The use of these FA in this FC can mislead consumers as to the quality of these foods. In addition, Plain products are used as raw materials for the manufacture of other food. Excessive intake of food additives can lead to changes in the properties of these foods.					

Food Category No. 01.4.4 (Cream analogues)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision as listed (pending general discussion on Note 348) **Guatemala, India, USA, Zambia**: Supports proposal **EU:** Accepts proposal. **Russia:** proposal could be submit only for sterilized cream and sterilized cream with reduced fat **IDF**: supports proposal with removal of note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Singapore, IDF**: Support proposal. **Russia:** proposal could be submit only for sterilized cream and sterilized cream with reduced fat. Content with note 348					

Food Category No. 01.5.1 (Milk powder and cream powder (plain))

Existing provision for Sucroglycerides

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000		Adopted 2009	Emulsifier

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10,000	XS207, XS290		Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision at 10,000 mg/kg with XS207 and XS290 (pending general discussion on Note 348); *Chair's request:* per Australia's comment, are there foods that fall under this food category that are "Non Standardized" (i.e., that fall outside of the scope of CXS 207 and CXS 290)?

Guatemala, India, USA, Zambia: Supports proposal

EU: the provision for INS 473 was discontinued in 2016. The EU wonders whether there is a different technological need for INS 474 and whether the need was appropriately appraised in 2009?

Japan: There seems to be no non-standardized foods in FC01.5.1 in Japan.

Russia: Proposal could be adopted only for cream powder (plain) - with reduced fat content, with ML=5000 mg/kg

IDF: agrees with proposed combined provision. In response to Australia's question from the 1st CL, there are products that could fall within FC 01.5.1 without also meeting the requirements of CXS 207. e.g. plain milk powders that fall short of the compositional requirements of CXS 207 (e.g. protein is too low). Such a product could not be labelled as a "milk powder" under CXS 207, but is still a powdered milk product that is obtained from partial removal of water from milk and thereby fits the description in FC 01.5.1.

First circular proposal: Revoke existing provision and adopt combined provision with new notes XS207 and XS290 as none of the sucrose esters are permitted in CXS 207-1999 (Standard for Milk Powders and Cream Powders) or CXS 290-1995 (Standard for Edible Casein Products)

First circular comments:

Colombia, ECOWAS, India, Singapore, FoodDrinkEurope: Support proposal.

Nigeria: Revoke existing provision

Australia: Assume a ML of 10,000 mg/kg is needed?

A question arises: are there any non-standardised products? If there are not then with both exclusion notes XS207 and XS290 there would be no need for an entry at all as both CS 207 and CXS290 are the relevant standards for the food category 01.5.1. This would be the case even though there is an existing provision for INS 474 in the GSFA which was adopted in 2009.

Chile: Supports proposal of 1st CL but requests that the limit be incorporated

Russia: Proposal could be adopted only for cream powder (plain) - with reduced fat content with ML=5000 mg/kg

IDF: IDF supports the proposal. In particular, IDF expresses specific support for the XS notes.

These "XS" notes proposed would exclude certain commodity standards, which are currently not excluded in the GSFA permissions for Sucrose Esters INS 473, 473a, 474. Since the relevant commodity standards do not permit Sucrose Esters, these new notes are consistent with the principles of

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Alignment and the same notes would likely be added during the Alignment.					

Food Category No. 01.5.2 (Milk and cream powder analogues)

Existing provision for Sucrose esters of fatty acids

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	5000	350	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	350 & XS251		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provision and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, Japan, Malaysia, USA, Zambia, IDF**: Supports proposal **Russia**: agrees with proposal only for cream with reduced fat content					
First circular proposal: Revoke existing provision and adopt combined provision. with new note XS251 as none of the sucrose esters are permitted in CXS 251-2006 (Standard for Blend of Skimmed Milk and Vegetable Fat in Powdered Form) **First circular comments:** **Chile, Colombia, ECOWAS, India, Nigeria, Singapore**: Support proposal **Australia**: To note that CXS 251-2006 is currently being considered by the Alignment EWG for CCFA52 (within Appendix 4 of the 1st circular). It is just addressing INS 473, but the same change is proposed, i.e. keeping note 350 and adding XS251. Note 348 needed? **Russia:** agrees with proposal only for cream with reduced fat content **IDF**: IDF supports the proposal. In particular, IDF expresses specific support for the XS note.					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
The "XS" note proposed would exclude certain commodity standards, which are currently not excluded in the GSFA permissions for Sucrose Esters INS 473, 473a, 474. Since the relevant commodity standards do not permit Sucrose Esters, these new notes are consistent with the principles of Alignment and the same notes would likely be added during the Alignment.					

Food Category No. 01.6.4 (Processed Cheese)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	3000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	3000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	3000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	3000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, Russia, USA, Zambia**: Supports proposal **EU:** Accepts proposal. **IDF:** agrees with proposed combined provision, except to remove Note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Russia, Singapore, FoodDrinkEurope, IDF**					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Nigeria: Revoke existing provision					

Food Category No. 01.6.5 (Cheese analogues)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	10000		Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, USA, Zambia, IDF**: Supports proposal **Russia**: agrees with proposal with ML=5000 mg/kg and note 348					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Colombia, ECOWAS, India, Singapore, IDF**: Support proposal **Australia**: Add Note 348 **Chile**: Requests that the corresponding notes be added **Nigeria**: Revoke existing provision **Russia:** agrees with proposal with ML=5000 mg/kg and note 348					

Food Category No. 01.7 (Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348 & 362	Adopted 2019	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348 & 362	Adopted 2019	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348 & 362	Adopted 2019	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	362		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Guatemala, India, Malaysia, Russia, USA, Zambia**: Supports proposal **IDF:** agrees with proposed combined provision, except to remove Note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, IDF** Support proposal					

Food Category No. 02.2.2 (Fat spreads, dairy fat spreads and blended spreads)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348 & 360	Adopted 2016	Emulsifier

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348 & 360	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348 & 360	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000	360		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal. **IDF:** agrees with proposed combined provision, except to remove Note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** Australia, Chile, Colombia, ECOWAS, India, Malaysia, Russia, Singapore, FoodDrinkEurope, IDF Support proposal Nigeria: Revoke existing provisions					

Food Category No. 02.3 (Fat emulsions mainly of type oil-in-water, including mixed and/or flavoured products based on fat emulsions)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	102 & 363	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	102 & 363	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	102 & 363	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	102 & 363		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, ECOWAS, India, Malaysia, Nigeria, Singapore, IDF** Support proposal **Chile:** Supports proposal, however it requests that the limit be incorporated **Russia**: agrees with proposal with ML=5000 mg/kg					

Food Category No. 02.4 (Fat-based desserts excluding dairy-based dessert products of food category 01.7)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Russia, Singapore, IDF** Support proposal **Nigeria**: Revoke existing provision					

Food Category No. 03.0 (Edible ices, including sherbet and sorbet)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal. **IDF:** agrees with proposed combined provision, except to remove Note 348 due to it being unnecessary for a group additive.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope, IDF** Support proposal					

Food Category No. 04.1.1.2 (Surface-treated fresh fruit)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	GMP		Adopted 2009	Emulsifier

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	1500			Revoke existing provision and adopt combined provision at a use level of 1500 mg/kg based on use level put forward by China with new note “For use as emulsifier only.”
Second circular proposal: Sucrose esters have a numerical ADI, and it is therefore not appropriate to assign a use level of GMP (as is currently listed for the adopted provision for FC 04.1.1.2). Comments are requested on the actual use level necessary to achieve the technical effect, as appropriate: a) broadly across the food category; b) in specific food products if that level is higher than the broad use level. **EU:** supports the approach as suggested. In addition, the use should be restricted to the class "emulsifier" as there is no other class associated with INS 474 and as otherwise the use might be substantially broaden (INS 473a or 473 can also act as glazing agents). The use as an emulsifier seems to be in line with the description of Note 454 created at CCFA51.					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Russia: does not agree with proposal. This category covers unprocessed fruits and vegetables which have undergone only treatment such as peeling, cutting, trimming or shredding. There not technological justification for use emulsifier for Surface-treated fresh fruit. This proposal useful only in case processed fruits					
First circular proposal: Sucrose esters have a numerical ADI, and it is therefore not appropriate to assign a use level of GMP. Comments by EWG members to CCFA52 are requested on actual use level necessary to achieve the technical effect, as appropriate: a) broadly across the food category; b) in specific food products if that level is higher than the broad use level. **First circular comments:** **Canada:** Although we note that the provision for INS 474 in FC 04.1.1.2 of the GSFA does not indicate that it is used in a surface-treatment preparation, this would be its presumptive use. Canada wonders if this provision should be included in the work under Appendix 4 of this EWG, to establish technological justifications for ES&T additives in this FC. This work could also consider appropriate maximum levels of use. **China**: allows INS 473 in this FC at 1500 mg/kg. **Russia**: does not agree with proposal. There not technological justification for use emulsifier for Surface-treated fresh fruit					

Food Category No. 04.1.2.8 (Fruit preparations, including pulp, purees, fruit toppings and coconut milk)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	1500	348 & XS314R	1500	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	1500	348 & XS314R	1500	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	1500	348 & XS314R	1500	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	1500	XS314R		Revoke existing provisions and adopt combined provision as listed.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope,** Support proposal					

Food Category No. 04.1.2.9 (Fruit-based desserts, including fruit-flavoured water-based desserts)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal.					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope,** Support proposal					

Food Category No. 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)

Existing provisions for Sucroglycerides

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000		Adopted 2009	Emulsifier

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	XS38, XS57, XS259R, XS308R & XS321		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia:** Support proposal **Russia:** support proposal only for seed pulps and preparations (e.g. vegetable desserts and sauces, candied vegetables) other than food category 04.2.2.5)					
First circular proposal: Revoke existing provisions and adopt combined provision with new notes prohibiting use in the following standards (as Sucrose esters are not permitted): Codex standard for Edible fungi and fungi products (concentrate, dried concentrate or extract) (CXS 38-1981), codex standard for Processed tomato concentrates (tomato paste) (CXS 57-1981), standard for Tehena (CXS 259R-2007), standard for Harissa (CXS 308R-2011), and the standard for Ginseng products (ginseng extract, steamed ginseng extract) (CXS 321-2015) **First circular comments:** **Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, FoodDrinkEurope** Support proposal					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Australia: Support, as assumed there will be other non-standardised foods within food category 04.2.2.6 that are not captured by CXS38, CXS57, CXS259R, CXS308R and CXS321 **Russia:** does not agree with proposal. The issue needs to be worked out in more detail. Not all of these foods require these supplements. Unclear value note XS57, XS259R, XS308R & XS321. They are missing from the application					

Food Category No. 05.1.1 (Cocoa mixes (powders) and cocoa mass/cake)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	10000	97 & XS141	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000	97 & XS141		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia:** Support proposal **Russia**: agrees with proposal in ML=5000 mg/kg (ADI=30 mg/kg bm)					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Colombia, ECOWAS, India, Malaysia, Singapore, FoodDrinkEurope** Support proposal **Nigeria**: Revoke existing provision **Chile**: Requests that note 348 be eliminated					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Russia: does not agree with proposal. ML should be not more than 5000mg/kg (ADI=30 mg/kg bm. With 200 or 300 g of chocolate cake (for example) the consumption of these FA can exceed the set level of ADI. Unclear value note 97, XS141. They are missing from the application					

Food Category No. 05.1.2 (Cocoa mixes (syrups))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2017	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA, Zambia:** Support proposal **EU:** Accepts proposal.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 05.1.3 (Cocoa-based spreads, including fillings)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2017	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348 & XS86	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000	XS86		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia:** Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with notes 348 & XS86					
First circular proposal: Revoke existing provisions and adopt combined provision. No additives are permitted in the Standard for Cocoa Butter (CXS 86-1981), and therefore the note XS86 should apply to all three additives. **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal **Nigeria**: Revoke existing provision					

Food Category No. 05.1.4 (Cocoa and chocolate products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	6000	348	2	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	6000	348	2	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	6000	348	2	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	6000			Discontinue the three individual provisions, consolidate as new Sucrose esters provision, and maintain provision at Step 2.
Second circular proposal: Discontinue individual provisions and consolidate in new Sucrose esters provision and keep at current step. **India, Malaysia, USA, Zambia, FoodDrinkEurope**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					
First circular proposal: Discontinue individual provisions and consolidate in new Sucrose esters provision and keep at current step. This proposal is in keeping with the recommendation in REP19/FA (para 88) where the existing provisions in FC 05.1.4 were recommended to be held pending a requested exposure estimate for the three sucrose esters by JECFA. The request in on the current JECFA Priority List (REP19/FA Appendix X) **First circular comments:** **Australia, Chile, ECOWAS, India, Malaysia, Singapore, FoodDrinkEurope, ICA** Support proposal **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					

Food Category No. 05.1.5 (Imitation chocolate, chocolate substitute products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	6000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	6000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	6000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	6000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia:** Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Singapore, FoodDrinkEurope** Support proposal **Nigeria**: Revoke existing provision **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					

Food Category No. 05.2 (Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348 & XS309R	Adopted 2017	Emulsifier

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348 & XS309R	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348 & XS309R	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	XS309R		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Russia, USA:** Support proposal **EU:** Accepts proposal.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Russia, Singapore, FoodDrinkEurope, ICA** Support proposal **Nigeria:**Revoke existing provision					

Food Category No. 05.3 (Chewing gum)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	12000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	12000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	12000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	12000			Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348); *Chair's Note: Regarding the question regarding changes to the INS system, it is our opinion that no change would be advisable. Not all "group" listings in the GSFA have "Parent" listings in the INS list. As an example, the group "Benzoates" does not have a parent listing. If a parent listing were made for Sucrose esters, it would likely be necessary to change the numbers of the existing three additives (INS 473, 473a, and 474), as the numbers as given do not permit the establishment of a "parent" number. Comments from the EWG are welcome on this issue. If so desired, the GSFA EWG can make a recommendation to the INS WG to consider if any changes are necessary in light of the addition of the group header "Sucrose esters".*

India, USA, Zambia, FoodDrinkEurope: Support proposal

EU: Accepts proposal.

Japan: supports adoption of combined provision and keeping current INS numbers (473, 473a, 474). Changes in INS are not necessary for grouping. Furthermore, changes in INS number may cause confusion.

Russia: agrees with proposal. Agrees with position chair of EWG on note 348 and question regarding changes to the INS system

First circular proposal: Revoke existing provisions and adopt combined provision

First circular comments:

Australia, Chile, Colombia, ECOWAS, India, Malaysia, Russia, Singapore, Support proposal

Nigeria: Revoke existing provision

ICGA: can support the adoption of the combined provision through a parent category named "Sucrose esters" into the GSFA. As consequential changes, ICGA could then accept the revocation of existing provisions adopted in the 05.3 food category specifically for each food additive INS 473, 473a and 474.

ICGA would also like to seek clarification from the chair of the EWG on GSFA on the possible impact such decision may have in terms of the corresponding listing of the parent category name within the International Numbering System (i.e. within the Codex Guidelines CXG 36, 2019 version), such as: what number would be allocated to the parent category "Sucrose esters" in CXG36? That issue may be deferred to the future in-session PWG on the INS during CCFA52.

Food Category No. 05.4 (Decorations (e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348 & 387	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	387		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia**: agrees with proposal with notes 348 & 387. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 06.3 (Breakfast cereals, including rolled oats)

Existing provision for Sucrose esters of fatty acids

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	10000		Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **Russia**: agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm) Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, FoodDrinkEurope** Support proposal **Australia**: Add Note 348 **Chile**: Requests that the corresponding notes be added **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					

Food Category No. 06.4.1 (Fresh pastas and noodles and like products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	2000	348 & 370	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	2000	348 & 370	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	2000	348 & 370	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	2000	370		Revoke existing provisions and adopt combined provision as listed.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia**: agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 06.4.2 (Dried pastas and noodles and like products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	4000	211 & 348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	4000	211 & 348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	4000	211 & 348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	4000	211		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **Russia**: agrees with proposal. Note 348 should be established because combined action of these FA.					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 06.4.3 (Pre-cooked pastas and noodles and like products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	2000	194 & 348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	2000	194 & 348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	2000	194 & 348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	2000	194		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 06.5 (Cereal and starch based desserts (e.g. rice pudding, tapioca pudding))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope** Support proposal					

Food Category No. 06.6 (Batters (e.g. for breading or batters for fish or poultry))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore** Support proposal					

Food Category No. 06.7 (Pre-cooked or processed rice products, including rice cakes (Oriental type only))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm) Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Singapore** Support proposal **Nigeria**: Revoke existing provision **Russia:** agrees with proposal with ML=5000 mg/kg (ADI=30 mg/kg bm)					

Food Category No. 06.8.1 (Soybean-based beverages)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	20000	348	Adopted 2017	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	20000	348	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	20000	348	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	20000	348		Revoke existing provisions and adopt combined provision as listed.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with ML=200 mg/kg (ADI=30 mg/kg bm). The level of consumption of beverages is higher than that of solid products. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Singapore** Support proposal **Nigeria**: Revoke existing provision **Russia:** agrees with proposal with ML=200 mg/kg (ADI=30 mg/kg bm). The level of consumption of beverages is higher than that of solid products					

Food Category No. 07.1 (Bread and ordinary bakery wares)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	3000	348	Adopted 2017	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	3000	348	Adopted 2017	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	3000	348	Adopted 2017	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	3000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
EU: Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore** Support proposal					

Food Category No. 07.2 (Fine bakery wares (sweet, salty, savoury) and mixes)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2016	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2016	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
First circular comments: **Australia, Chile, Colombia, ECOWAS, India, Russia, Singapore** Support proposal **Nigeria**: Revoke existing provision					

Food Category No. 08.2.2 (Heat-treated processed meat, poultry, and game products in whole pieces or cuts)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	15, XS96 & XS97	Adopted 2014	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	15, XS96 & XS97	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	15, XS96 & XS97		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348); *Chair's Note: A request was made concerning the need for Note 15 (on the fat or oil basis). The two original provisions (INS 473 and 474) both had note 15 associated with them. Comments are requested on the need for Note 15 for this provision.* **India, USA**: Support proposal **Russia:** agrees with proposal for exclusion meat products in whole pierces (only for cuts product). Unclear value note 15. its is missing from the application. Note 348 should be established because combined action of these FA. **Zambia:** Supports adoption with Note 15.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:**					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Chile, Colombia, ECOWAS, India, Nigeria, Singapore Support proposal **Australia**: Is Note 348 needed? **Russia:** agrees with proposal for exclusion meat products in whole pierces (only for cuts product). Unclear value note 15. its is missing from the application					

Food Category No. 08.3.2 (Heat-treated processed comminuted meat, poultry, and game products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	15, XS88, XS89 & XS98	Adopted 2014	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	15, 373, XS96 & XS97	Adopted 2016	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	15, 373, XS88, XS89 & XS98		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348); *Chair's request: Please comment on the need for inclusion of Note 373 (For use in sausage only) and Note 15 (on the fat or oil basis).* **India, USA**: Support proposal **Russia:** agrees with proposal for exclusion meat products in whole pierces (only for cuts product). Unclear value note 15. its is missing from the application. Note 348 should be established because combined action of these FA. **Zambia**: Supports adoption with Note 373					
First circular proposal: Revoke existing provisions and adopt combined provision. The notes XS96 and XS97 in the adopted provision for Sucrose esters of fatty acids do not make sense as these commodity standards correspond to food category 08.2.2. Note 373 has been included (For use in sausage only) although it originally only applied to the provision for Sucrose esters of fatty acids. **Please comment on the need for including Note 373 in the provision for Sucrose Esters.**					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
First circular comments: **ECOWAS, India, Nigeria, Singapore:** Support proposal. **Australia**: Supports, no comment on whether Note 373 is needed **Russia:** agrees with proposal. Unclear value note 15,. its is missing from the application					

Food Category No. 09.2.4.1 (Cooked fish and fish products)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	4500	241, 348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	4500	241, 348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	4500	241, 348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	4500	241		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia**: agrees with proposal only for cuts product. Unclear value note 241,. Its is missing from the application. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:**					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
Australia, Chile, Colombia, ECOWAS, India, Nigeria, Singapore Support proposal **Russia:** agrees with proposal only for cuts product. Unclear value note 241,. Its is missing from the application					

Food Category No. 10.4 (Egg-based desserts (e.g. custard))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore** Support proposal					

Food Category No. 12.2.1 (Herbs and spices)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	2000	348, 422	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	2000	348, 422	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	2000	348, 422	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	2000	422, XS326, XS327 & XS328		Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348)

India, Malaysia, USA, Zambia: Support proposal

EU: Accepts proposal.

Russia: There not technological justification for to use these FA in this FC

First circular proposal: Revoke existing provisions and adopt combined provision. Addition of XS326, XS327 & XS328 notes to reflect that Sucrose esters would not be permitted in CXS 326-2017 (Standard for Black, White and Green Peppers), CXS 327-2017 (Standard for Cumin), and CXS 328-2017 (Standard for Dried Thyme).

First circular comments:

Chile, Colombia, ECOWAS, India, Singapore: Support proposal.

Nigeria: Revoke existing provision

Australia: To note that CXS326, CXS327 and CXS328 are currently being considered by the Alignment EWG for CCFA52 (within Appendix 4 of the 1st circular). The same changes are proposed but for the individual food additives, not the group, i.e. keeping notes 348 and 422 and adding XS326, XS327 & XS328

Russia: does not agrees with proposal. There need technological justification. We understood that it is not new proposal. However the necessity for to use these FA in this FC unclear.

Food Category No. 12.2.2 (Seasonings and condiments)

Existing provisions for Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	20000	423, 424, 425	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	20000	423, 424, 425	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	20000	423, 424, 425		Revoke existing provisions and adopt combined provision as listed along with New Note: "Excluding Sucroglycerides (INS 474)" because Sucroglycerides do not have the functional effect of glazing agent.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) with inclusion of new note: "Excluding Sucroglycerides (INS 474)" as sucroglycerides do not have the functional effect of glazing agent.

EU: Accepts proposal.

India, USA: Support proposal

Russia: In response to the first letter made a mistake. There not technological justification for to use these FA in this FC

Zambia: supports the adoption of the combined provision (INS 473 and INS 473a) plus the new note

First circular proposal: Revoke existing provisions and adopt combined provision. Add a new note: "Excluding Sucroglycerides (INS 474)" as sucroglycerides do not have the functional effect of glazing agent.

First circular comments:

Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore: Support proposal.

Australia: Supports, including addition of new note

Food Category No. 12.5 (Soups and broths)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	2000	345	Adopted 2015	Emulsifier

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	2000	345	Adopted 2015	Emulsifier, Foaming agent, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	2000			Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: INS 473a was not included in CXS 117-1981 when the Alignment exercise was undertaken. However, as noted in the comments, the inclusion of INS 473a could be considered as part of this exercise. Inclusion of INS 473a would not result in additional exposure (under the group ADI), as the use of the additives would be singly or in combination. Removing Note 345 would be the simplest way to accomplish inclusion of INS 473a; Proposal: Revoke existing provisions and adopt combined provision with removal of Note 345.

USA: Supports proposal

First circular proposal: Revoke existing provisions and adopt combined provision. Revise Note 345 to clarify exclusion of INS 473a "Revised Note 345: For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981): sucrose esters of fatty acids (INS 473), sucroglycerides (INS 474) singly or in combination at 2000 mg/kg (excludes use of Sucrose oligoesters type I and type II (INS 473a))".

First circular comments:

Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope: Support proposal.

Australia: It is not clear why INS 473a should be excluded for this provision. What functional class is being considered here?

Suggest all three as the group should be considered for the provision.

Canada: Although this proposal is consistent with the outcome of alignment, and Canada has no objection to it, we ask if it would be worth circulating for comment if INS 473a has use in this FC. If there is justification for use, the group provision could be applied. We note that the Codex Committee on Soups and Broths has been abolished and thus amendment of food additive provisions in this FC would fall under the purview of the CCFA.

Food Category No. 12.6.1 (Emulsified sauces and dips (e.g. mayonnaise, salad dressing, onion dip))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	2000	348, 426	Adopted 2018	Emulsifier

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROSE ESTERS OF FATTY ACIDS	473	2000	348, 426	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	2000	348, 426	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	2000	426		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia**: agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope:** Support proposal.					

Food Category No. 12.6.2 (Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000			1. Revoke existing provisions and adopt combined provision as listed with inclusion of New Note "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only sucrose esters of fatty acids (INS 473) for use as an emulsifier, at up to 5000 mg/kg (excludes use of Sucroglycerides (INS 474) and Sucrose oligoesters type I and type II (INS 473a))" 2. Request CCASIA to consider if INS 473a and 474 are justified in this food, as emulsifiers at up to 5000 mg/kg.
Second circular proposal: Comments requested on two suggestions from Canada (both suggestions can be undertaken at the same time (the first one implemented at the 52nd CCFA, and the second sent as a request to CCASIA by the 52nd CCFA):1. Add new note: "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only sucrose esters of fatty acids (INS 473) for use as an emulsifier, at up to 5000 mg/kg (excludes use of Sucroglycerides (INS 474) Sucrose oligoesters type I and type II (INS 473a))"; 2. Request CCASIA to consider if INS 473a and 474 are justified in this food, with a view to adopting a group provision for SUCROSE ESTERS and with a Note, "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only for use as emulsifiers, at up to 5000 mg/kg". **India, Malaysia, Russia, USA**: Support proposal **EU:** accepts to implement both suggestions at CCFA52 **Zambia:** supports the addition of the new note as proposed by Canada : "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only sucrose esters of fatty acids (INS 473) for use as an emulsifier, at up to 5000 mg/kg (excludes use of Sucroglycerides (INS 474) Sucrose oligoesters type I and type II (INS 473a))".					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope:** Support proposal. **Canada**: This food category includes CXS 306R-2011 (Regional Standard for Chilli Sauce), which only includes provision for sucrose esters of fatty acids at up to 5,000 mg/kg. We recommend adding a note to this provision to accommodate this standard. We propose two options for a Note: To be consistent with the proposal in FC 12.5 above, we suggest, "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only sucrose esters of fatty acids (INS 473) for use as an emulsifier, at up to 5000 mg/kg (excludes use of Sucroglycerides (INS 474) Sucrose oligoesters type I and type II (INS 473a))". Request CCASIA to consider if INS 473a and 474 are justified in this food, with a view to adopting a group provision for SUCROSE ESTERS and with a Note, "For products conforming to the Regional Standard for Chilli Sauce (CXS 306R-2011): only for use as emulsifiers, at up to 5000 mg/kg".					

Food Category No. 12.6.3 (Mixes for sauces and gravies)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	127 & 348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	127 & 348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	127 & 348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000	127		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia**: agrees with proposal. Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope:** Support proposal.					

Food Category No. 12.6.4 (Clear sauces (e.g. fish sauce))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	10000	348 & XS302	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	10000	348 & XS302	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	10000	348 & XS302	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	10000	XS302		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, , India, Nigeria, Singapore:** Support proposal. **Russia:** In this point we are discussing use FA in FC Clear sauces (e.g. fish sauce)/. The note XS302 forbids the use these FA in products conforming to the Standard for Fish Sauce (CODEX STAN 302-2011). It is not clear that we prohibit					

Food Category No. 13.3 (Dietetic foods intended for special medical purposes (excluding products of food category 13.1))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia**: Support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, FoodDrinkEurope:** Support proposal.					

Food Category No. 13.4 (Dietetic formulae for slimming purposes and weight reduction)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348)					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
India, Malaysia: Support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore:** Support proposal.					

Food Category No. 13.6 (Food supplements)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	20000	348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	20000	348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	20000	348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	20000			Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, IADSA**: Support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA.					

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Russia, Singapore, FoodDrinkEurope, IADSA:** Support proposal.					

Food Category No. 14.1.4 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	200	219, 348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	200	219, 348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	200	219, 348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	200	219		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **Costa Rica, Egypt, Guatemala, India, Malaysia, USA, Zambia, ICBA**: support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Russia, Singapore, ICBA, FoodDrinkEurope:** Supports proposal					

Food Category No. 14.1.5 (Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	1000	176, 348	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	1000	176, 348	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	1000	176, 348	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	1000	176		Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348)

Costa Rica, Egypt, Guatemala, India, Malaysia, USA, ICBA: support proposal

EU: Accepts proposal.

Russia: agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products. Note 348 should be established because combined action of these FA.

Zambia: Supports the adoption of the combined provision with a lower ML= 200mg/kg due to the frequency of consumption of beverages.

First circular proposal: Revoke existing provisions and adopt combined provision

First circular comments:

Australia, Chile, Colombia, ECOWAS, India, Malaysia, Nigeria, Singapore, ICBA, FoodDrinkEurope: Supports proposal

Russia: agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products

Food Category No. 14.2.6 (Distilled spirituous beverages containing more than 15% alcohol)

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348, 431	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348, 431	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348, 431	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	431		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia**: Support proposal **EU:** Accepts proposal. **Russia:** agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products. Note 348 should be established because combined action of these FA. **Zambia:** supports the adoption of the combined provision with a lower ML= 100mg/kg due to the frequency of consumption of beverages.					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Nigeria, Singapore:** Support proposal. **Russia:** agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products					

Food Category No. 14.2.7 (Aromatized alcoholic beverages (e.g. beer, wine and spirituous cooler-type beverages, low alcoholic refreshers))

Existing provision for Sucroglycerides

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000		Adopted 2012	Emulsifier

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000			Revoke existing provisions and adopt combined provision as listed.

Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348); *Chair's note: INS 473 and 473a were included due to the group ADI, and the expectation that INS 473 and 473a would have similar function in the FC. If EWG members disagree with the inclusion of INS 473 and 473a due to technical reasons, they are requested to comment*

India, Malaysia, USA: Support proposal

Russia: agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products. Note 348 should be established because combined action of these FA .All of these FA could be used

Zambia: supports the adoption of the combined provision with a lower ML= 200mg/kg due to the frequency of consumption of beverages.

First circular proposal: Revoke existing provisions and adopt combined provision

First circular comments:

Australia, Colombia, ECOWAS, India, Singapore: Support proposal.

Nigeria: Revoke existing provision

Chile: Requests clarification of the inclusion of provisions 473 and 473a

Russia: agrees with proposal with ML=200 mg/kg The level of consumption of beverages is higher than that of solid products

Food Category No. 15.1 (Snacks - potato, cereal, flour or starch based (from roots and tubers, pulses and legumes))

Existing provisions for Sucroglycerides, Sucrose esters of fatty acids, and Sucrose oligoesters type I and type II

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class
SUCROGLYCERIDES	474	5000	348, 433	Adopted 2018	Emulsifier
SUCROSE ESTERS OF FATTY ACIDS	473	5000	348, 433	Adopted 2018	Emulsifier, Foaming agent, Glazing agent, Stabilizer
SUCROSE OLIGOESTERS, TYPE I AND TYPE II	473a	5000	348, 433	Adopted 2018	Emulsifier, Glazing agent, Stabilizer

Proposed Combined Provision for new group header Sucrose esters

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	Final EWG Proposal
SUCROSE ESTERS	473, 473a, 474	5000	433		Revoke existing provisions and adopt combined provision as listed.
Second circular proposal: Revoke existing provisions and adopt combined provision (pending general discussion on Note 348) **India, Malaysia, USA, Zambia**: Support proposal **EU:** Accepts proposal. **Russia:** Note 348 should be established because combined action of these FA .					
First circular proposal: Revoke existing provisions and adopt combined provision **First circular comments:** **Australia, Chile, Colombia, ECOWAS, India, Russia, Singapore:** Support proposal. **Nigeria**: Revoke existing provision					

List of Notes:

Note 97: On the final cocoa and chocolate product basis.
Note 102: For use in fat emulsions for baking purposes only.
Note 127: On the served to the consumer basis.
Note 176: For use in canned liquid coffee only.
Note 194: For use in instant noodles conforming to the Standard for Instant Noodles (CODEX STAN 249-2006) only.
Note 211: For use in noodles only.
Note 219: Except for use in non-alcoholic aniseed-based, coconut-based, and almond-based drinks at 5 000 mg/kg.
Note 241: For use in surimi products only.
Note 345: For use in products conforming to the Codex Standard for Bouillons and Consommés (CODEX STAN 117-1981): sucrose esters of fatty acids (INS 473), sucroglycerides (INS 474) singly or in combination at 2000 mg/kg.
Note 348: Singly or in combination: Sucrose esters of fatty acids (INS 473), sucrose oligoesters, typeI and type II (INS 473a) and sucroglycerides (INS 474).
Note 350: For use at 10,000 mg/kg in cream powder analogues only.
Note 360: In dairy fat spreads limited to products with < 70% fat content or baking purposes only.
Note 362: Excluding plain products conforming to the Standard for Fermented Milks (CODEX STAN 243-2003).
Note 363: For use at 50,000 mg/kg for emulsified oils used in the production of noodles or bakery products.
Note 370: For use in noodles, skin or crusts for spring rolls, wontons, and shou mai only.
Note 387: Except for use at 20000 mg/kg in powdered sugar for fine bakery wares.
Note 410: Excluding lactose reduced milks.
Note 422: For use in curry roux only.
Note 423: For use in dashi and furikake only.
Note 424: For use as a glazing agent.
Note 425: Singly or in combination: Sucrose esters of fatty acids (INS 473), and Sucrose oligoester, Type I and Type II (INS 473a).
Note 426: Except for use in concentrated marinades applied to food at 20,000 mg/kg.

Note 431: Excluding use in whiskey.
Note 433: For use in rice crackers and potato snacks only.
Note XS86: Excluding products conforming to the Standard for Cocoa Butter (CODEX STAN 86-1981).
Note XS88: Excluding products conforming to the Standard for Corned Beef (CODEX STAN 88-1981).
Note XS89: Excluding products conforming to Standard for Luncheon Meat (CODEX STAN 89-1981).
Note XS96: Excluding products conforming to the Standard for Cooked Cured Ham (CODEX STAN 96-1981).
Note XS97: Excluding products conforming to the Standard for Cooked Cured Pork Shoulder (CODEX STAN 97-1981).
Note XS98: Excluding products conforming to the Standard for Cooked Cured Chopped Meat (CODEX STAN 98-1981).
Note XS141: Excluding products conforming to the Standard for Cocoa (Cacao) Mass (Cocoa/chocolate liquor) and Cocoa Cake (CODEX STAN 141-1983).
Note XS250: Excluding products conforming to the Standard for a Blend of Evaporated Skimmed Milk and Vegetable Fat (CODEX STAN 2502006).
Note XS252: Excluding products conforming to the Standard for a Blend of Sweetened Condensed Skimmed Milk and Vegetable Fat (CODEX STAN 252-2006).
Note XS302: Excluding products conforming to the Standard for Fish Sauce (CODEX STAN 302-2011).
Note XS309R: Excluding products conforming to the Codex Regional Standard for Halawa Tehenia (CODEX STAN 309R-211).
Note XS314R: Excluding products conforming to the Standard for Date Paste (CODEX STAN 314R-2013).
Note XS326: Excluding products conforming to the Standard for Black, White and Green Peppers (CODEX STAN 326-2017).
Note XS327: Excluding products conforming to the Standard for Cumin (CODEX STAN 327- 2017).
Note XS328: Excluding products conforming to the Standard for Dried Thyme (CODEX STAN 328-2017).

Appendix 4: Draft and proposed draft provisions in the GSFA: for propylene glycol alginate (INS 405) in FC 01.1.2; in food categories 04.1.1.2 and 04.2.1.2 for additives intended for use as a glaze or in a glaze/coating or wax for surface treatment; for magnesium carbonate (INS 504(i)) as a flour treatment agent in FC 06.2; entered into the step process as a result of CX/FA 19/51/8 (with the exception of additives with the technological function of colour)

1. Among several topics, CCFA51 requested the EWG on the GSFA to CCFA52 to:[1]

- Request information on actual use levels and/or technological justification on the proposed food additive provisions held at the current step in Table 1 and 2 of the GSFA including: for propylene glycol alginate (INS 405) in FC 01.1.2; provisions in food categories 04.1.1.2 and 04.2.1.2 for additives intended for use as a glaze or in a glaze/coating or wax for surface treatment; for Magnesium carbonate (INS 504(i)) as a flour treatment agent in FC 06.2; and provisions entered into the step process as a result of CX/FA 19/51/8 (for additives with the technological function of colour: limited to provisions discussed in the Step process in food categories 05.0 and its subcategories, 13.6, and 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories)).

Introduction

2. CCFA50 requested the EWG on the GSFA to CCFA51 to provide recommendations on all remaining draft and proposed draft provisions in Table 1 and 2 of the GSFA in food categories 01.0 through 16.0, with the exception of those additives with technological functions of colour (excluding specific food categories where provisions for additives with colour function were considered) or sweetener, adipates, nitrites and nitrates, the provisions in food category 14.2.3 and its subcategories, and provisions awaiting a reply from CCSCH, CCPFV or CCFO.[2] The EWG on the GSFA to CCFA51 provided recommendations[3] which were discussed by the physical working group (PWG) on the GSFA to CCFA51.[4] When consensus could not be reached on several of these provisions, CCFA51 requested that the EWG on the GSFA to CCFA52 re-circulate these provisions for further comment.

- Propylene glycol alginate (INS 405) in FC 01.1.2 – All provisions in FC 01.1.2 (*other fluid milks (plain)*) discussed by the PWG on the GSFA to CCFA51 were for food additives with a JECFA acceptable daily intake (ADI) of "not specified" with the exception of the provision for propylene glycol alginate (INS 405) which has a numerical ADI. The PWG put forward a proposal for all provisions under discussion in FC 01.1.2 that included a maximum use level (ML) of Good Manufacturing Practice (GMP). However, a numeric ML for the provision for propylene glycol alginate was not discussed. As such CCFA51 held this provision to further examine the proposed use level.[5]

- Provisions in food categories 04.1.1.2 and 04.2.1.2 for additives intended for use as a glaze or in a glaze/coating or wax for surface treatment: During discussion by the PWG on the GSFA to CCFA51 on provisions in FCs 04.1.1.2 "Surface-treated fresh fruit" and 04.2.1.2 "Surface-treated fresh vegetables, (including mushrooms, and fungi, roots and tubers, pulses and legumes (including soybeans), and aloe vera, seaweeds and nuts and seeds)" the PWG noted that technological justification had not been provided for many of the draft provisions, and it was unclear if many of these additives were actually used in surface treatments for fresh produce. The Chair noted that the EWG on the GSFA to CCFA51 had focused on the horizontal approach on the use of additives in surface treatments in these food categories, and as such information on technological justification and actual use may not be available at that time even if an additive was currently used in such surface treatments. The Chair proposed that those provisions for which information had not been provided be held at their current step and circulated

[1] REP 19/FA, para. 137.
[2] REP 18/FA, Para. 112.
[3] CX/FA 19/51/7.
[4] FA/19 CRD2.
[5] REP 19/FA, para 80 (ii).

for comment on the technological justification and the actual use of those additives in surface treatment on fresh produce. CCFA51 agreed to hold these provisions and recirculate them for comment on technological justification and actual use in the surface treatment of fresh produce.

- Magnesium carbonate (INS 504(i)) as a flour treatment agent in FC 06.2 – During the discussion by the PWG on the GSFA to CCFA51 on the provision for magnesium carbonate (INS 504(i)) in FC 06.2.1 "Flours" it was noted that, although technological justification for the use of magnesium carbonate (INS 504(i)) as a flour treatment agent was provided, this additive does not have the functional class of flour treatment agent associated with it in the guideline on Class Names and the International Numbering System for Food Additives (CXG 36-1989). CCFA51 agreed to task the EWG on the International Numbering System to CCFA52 to consider assigning the functional class of flour treatment agent to this additive, and to hold the provision and circulate it for comment.[6]

3. The PWG on the GSFA to CCFA51 considered submissions received in reply to the Circular Letter requesting proposals for new and/or revision of food additive provisions of the GSFA (CL 2018/27-FA)[7], and made recommendations as to which provisions should be included in the GSFA at Step 2. CCFA52 agreed to include those provisions in the GSFA at Step 2 with corrections.[8]

Working document

4. The EWG on the GSFA issued two circulars for comment containing this Appendix requesting comments on actual use levels and/or technological and justification for the draft and proposed draft provisions under discussion. **Please note that provisions for additives with the technological function of colour that were entered into the step process as a result of proposals submitted in response to CL 2018/27-FA were not included in this Appendix, but rather were included in Appendix 7.**

5. The current document presents proposals for each provision under discussion (adopt, adopt with revision, discontinue, discontinue and move to subcategories as appropriate, request information) in the format of the food categories listed in Table 2 of the GSFA.

6. These proposals are based upon a consensus approach taking into account the following information:

- Information on corresponding Codex commodity standards and the use of food additives in those commodity standards is provided for each food category;

- The horizontal approach described in FA/45 CRD 2 Appendix IV, FA/46 CRD 2 Appendix II pertaining to the technological justification of food additives with "acidity regulator" or "emulsifier, stabilizer, and thickener" function in food categories listed in the Annex to Table 3; and

- Historical discussions on the provision in previous sessions of CCFA.

7. These recommendations are based on the "weight of evidence"; that is, comments containing justifications were given more weight than comments with no supporting justification.

[6] REP 19/FA, para 90.
[7] CX/FA 19/51/8.
[8] REP 19/FA, para 96 (ii).

Draft and proposed draft provisions in the GSFA in FC 01.0 to FC 16.0, except for those additives with technological functions of colour (excluding those provisions discussed in point (i)) or sweetener, adipates, nitrites and nitrates, the provisions in food category 14.2.3 and its subcategories, and provisions awaiting a reply from CCSCH, CCPFV or CCFO

Food Category No. 01.1.2 (Other fluid milks (plain))

Corresponding commodity standards: None

General Note: CCFA51 agreed that the use of emulsifiers and stabilizers was technologically justified in this food category in vitamin and mineral fortified milks. The provision for propylene glycol alginate was held for discussion of the maximum use level.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PROPYLENE GLYCOL ALGINATE	405	4000		7	Emulsifier, Stabilizer, Thickener	Adopt with Notes 407& 438

Comments by EWG Members:

China, **Dominican Republic**, **ECOWAS, INDIA, Nigeria:** supports adoption at 4000 mg/Kg with Notes 407, 438

EU: can it be clarified why this particular additive is needed? What is the effect and why it cannot be achieved with other additives having ADI not specified? (for 20kg child the JECFA ADI will be reached by drinking 350ml of milk; according to GSFA Annex A the acceptable MLs, provided 50% of exposure to a additive comes from beverages, ranges between 350 ppm (guideline 10) to 2800 ppm. ML above 2800 ppm is acceptable only for products where calculation of potential intake will show that exceeding the ADI is unlikely (e.g. strong alcoholic beverages) (guideline 14).

It is not authorized in milk in the EU, however, in GSFA it is authorized for example in flavoured drinks at 500 ppm and in flavoured fluid milk drinks at 1300 ppm. The proposed ML seems to be excessive.

EU supports addition of Note 407 & 438 and in addition suggests Note 410.

India, Colombia, Guatemala, Malaysia, Zambia, IFAC: Supports proposal

RU: agrees with the proposal with note 410: For use in non-flavoured vitamin and mineral other fluid milks (plain)) only

USA: For use in food in general at ML 3000

IFAC: Supports at GMP. In Canada, it is approved at GMP in unstandardized foods

Food Category No. 01.2.1.1 (Fermented milks (plain), not heat-treated after fermentation)

Corresponding commodity standards: 243-2003 (permits use of stabilizers and thickeners in plain fermented milks, not heat treated) and 332R-2018 (food additive use under consideration by the Regional Coordinating Committee for the Near East)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8)
- **Justification:** *See CX/FA 19/51/8 for full information.* Tamarind seed polysaccharide shows stable viscosity in a wide range of pH. Its viscosity changes only slightly by heating or freeze-thawing and is hardly affected by salts. Tamarind seed polysaccharide is mainly used as a thickener and stabilizer in sauces, beverages (fruit and vegetable nectars), fermented milks (plain), cream (plain), pickles, tsukudani (boiled foods in sweetened soy sauce), fermented vegetables (kimchi, gochujang), spreads/fillings, and flour products. It is also used as an ice crystal stabilizer in frozen desserts such as ice cream. Tamarind seed polysaccharide is used as an emulsifier in dressings and mayonnaise to prevent separation of fat and oil. Tamarind seed polysaccharide forms a gel when mixed with sugars, dextrin, sugar alcohols, alcohols and catechin, and it is used as a gelling agent in fruit preserves and desserts. In these applications, it also prevents syneresis. Tamarind seed polysaccharide is compatible with other hydrocolloids. Tamarind seed polysaccharide in higher amounts results in higher viscosity, which places limitations on its addition (self-limitation) and thus precludes it from being added in excessive amounts.
- **Safety:** Table 3 Additive
- **Mislead Consumer:** The above-mentioned use does not affect nature and quality of the food that would be expected by consumers.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	234, 235	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt and forward to alignment WG to discuss revising CODEX STAN 243-2003

1st and 2nd CL Proposal: Adopt

Comments by EWG members:

Dominican Republic, ECOWAS, Nigeria, Guatemala, Singapore: Supports proposal

EU: the EU can accept the proposal with Notes 234 & 235. However, it should be noted that FC 01.2.1.1 has not been aligned with CS 243-2003 yet (on hold until the alignment is completed)? The EU can accept the extension of use in CS 243-2003 as this standard lists many stabilizers and thickeners

Japan: supports adoption at GMP with Notes 234 and 235.

Tamarind seed polysaccharide (TSP) is used as stabilizers/thickeners in FC 01.2.1.1 to keep mouthfeels. It is similar to that of the other Table 3 stabilizers/thickeners, such as carrageenan (INS 407), carob bean gum (INS 410), all of which are at GMP with Notes 234 and 235.

It is unlikely that the use of TSP could mislead consumers since TSP shall be declared on the label if TSP is used during manufacturing.

RU: strongly opposes the proposal. The additive use may disguise poor-quality foods in this category

USA: Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent at 0.5%.

Food Category No. 01.2.1.2 (Fermented milks (plain), heat-treated after fermentation)

Corresponding commodity standards: 243-2003 (permits use of stabilizers and thickeners in plain fermented milks, not heat treated) and 332R-2018 (food additive use under consideration by the Regional Coordinating Committee for the Near East)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	234	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt with note XS332R and forward to alignment WG to discuss revising CODEX STAN 243-2003

Comments by EWG members:

Canada: INS 437 does not appear to be included in either CXS 243-2003 or 332R-2018. Canada asks if it is appropriate to apply Notes XS243 and XS332R to the proposed provision. Alternatively, if intended for use in products subject to the regional standard 332R, we wonder if the Regional Coordinating Committee for the Near East should be consulted in determining technological justification for this additive.

Dominican Republic, ECOWAS, Nigeria: supports adoption at GMP with Note 234

EU: the EU can accept the proposal with Notes 234 & 235. However, it should be noted that FC 01.2.1.1 has not been aligned with CS 243-2003 yet (on hold until the alignment is completed)? The EU can accept the extension of use in CS 243-2003 as this standard lists many stabilizers and thickeners

Guatemala: Supports proposal

Japan: supports adoption at GMP with Note 234 and XS332R.

Tamarind seed polysaccharide (TSP) is used as stabilizers/thickeners in FC01.2.1.1 to keep mouthfeels. It is similar to that of the other Table 3 stabilizers/thickeners, such as carrageenan (INS 407), carob bean gum (INS 410), all of which are adopted at GMP with Note 234.

It is unlikely that the use of TSP could mislead consumers since TSP shall be declared on the label if TSP is used during manufacturing.

Japan has no information on the use of TSP in foods conforming to CXS 322R and does not intend for inclusion of TSP provision in CXS 332R-2018

RU: strongly opposes the proposal. The additive use may disguise poor-quality foods in this category.

USA: Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent at 0.5%

Food Category No. 01.4.1 (Pasteurized cream (plain))

Corresponding commodity standards: 288-1976 (permits use of ES&T)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	236	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt at GMP with Note XS288

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Comments by EWG members: **Canada**: Supports proposal; Canada permits use in cream at a maximum level of GMP. **Dominican Republic, ECOWAS, Nigeria**: supports adoption at GMP with Note XS288 **EU**: the EU can accept the proposal with Note 236 or XS288. **Guatemala**: Supports proposal **Japan**: proposes adoption with Note 236 instead of Note XS288 since Note 236 is more appropriate than XS 288. 1. According to cross-reference of codex standardized foods with the food category system used for the elaboration of the GSFA (page 60 of the GSFA), FC1.4.1 corresponds to CXS288 (reconstituted cream, recombined cream, prepackaged liquid cream), which is mentioned in Note 236. 2. TSP is used as a stabilizer in FC01.4.1 to stabilize foam in cream. It is similar to that of the other stabilizers adopted in this FC, such as carrageenan (INS 407), carob bean gum (INS 410), guar gum (INS 412), xanthan gum (INS 415), gellan gum (INS 418), pectins (INS 440). Note 236 has already attached to those food additive provisions in FC01.4.1. For enduring consistency, Note 236 should be attached to a food additive provision for TSP. It is unlikely that the use of TSP could mislead consumers since TSP shall be declared on the label if TSP is used during manufacturing. **RU:** strongly opposes the proposal. The additive use may disguise poor-quality foods in this category. **USA:** Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent at 0.5%						

Food Category No. 01.4.2 (Sterilized and UHT creams, whipping and whipped creams, and reduced fat creams (plain))

Corresponding commodity standards: 288-1976 (Permits use of ES&T)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	236	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt at GMP without Note 236
1st and 2nd CL Proposal: Adopt at GMP with Note XS288 **Comments by EWG members:**						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Canada: Supports proposal; Canada permits use in cream at a maximum level of GMP **Dominican Republic, ECOWAS, Nigeria**: supports adoption at GMP with Note XS288 **EU**: the EU can accept the proposal with Note 236 or XS288. **Guatemala**: Supports proposal **Japan**: proposes adoption without Notes 236 and XS288. Tamarind seed polysaccharide (TSP) used as a stabilizer to foams in cream fallen within CXS288 like other stabilizers already adopted in this FC, such as carrageenan (INS 407), carob bean gum (INS 410), guar gum (INS 412), xanthan gum (INS 415), gellan gum (INS 418), pectins (INS 440). CXS 288 permits those additives without Note XS288. **RU:** Supports for reduced fat creams (plain) **USA:** Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent at 0.5%						

Food Category No. 02.1.2 (Vegetable oils and fats)

Corresponding commodity standards: 19-1981, 210-1999: Permit use of specific antifoaming agents for frying 33-1981, 325R-2017: Do not permit use of antifoaming agents. ES&T are not permitted in any of these CXS

General Note: Information provided by EFEMA in CX/FA 19/51/8

- **New provision.** Submitted by EFEMA at CCFA51 (CX/FA 19/51/8).
- **Justification:** *See CX/FA 19/51/8 for full information.* Certain mono-and diglycerides within the JECFA specification for INS 471 have shown to reduce the formation of foam during the frying process. When foaming is reduced during frying the risk for oxidation of the oil will also be reduced. This both prevents the development of unwanted oxidized by-products in the oil and the oils will have a longer shelf life.
- **Safety:** Table 3 Additive

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
MONO- AND DIGLYCERIDES OF FATTY ACIDS	471	10,000	356, XS33, XS325 R, New Note: For oils and fats for	3	Antifoaming agent, Emulsifier, Stabilizer, Gelling Agent	Withhold at current step and revise to include Notes 356, XS33 XS325R, and a new note “for use as an antifoaming agent in oils for deep frying conforming to the Standard for Edible fats and oils not covered by individual standards (CXS 19-1981) and the Standard for named vegetable oils (CXS 210-1999).” Forward to CCFO for technological justification for use in oils and fats for deep frying conforming to CXS 19-1981 and 210-1999.

			deep frying			Inform PWG of alignment on this decision.

1st and 2nd CL Proposal: Adopt with Notes 356, XS33 XS325R, New Note "For oils and fats for deep frying"

Comments by EWG members:

Forward to CCFO for technological justification for use in CODEX STAN 210-1999 for oils and fats for deep frying

Australia: To note that the current Alignment EWG for CCFA52 is considering alignment of the food additives in CXS19, CXS33 and CXS210, which includes this food additive. This is provided in Appendix 3 of the 1st circular.

The proposed recommendation is to also add note 356, XS33, as well as XS210 and a new note relating to CXS19, being 'For use as an antifoaming agent in oils for deep frying in products conforming to the Standard for Edible fats and oils not covered by individual standards (CXS 19-1981) only'. This is similar to the proposed new note.

CANADA: Supports the proposal in general, as Canada permits use in shortening and margarine as an emulsifying, gelling, stabilizing or thickening agent in margarine and shortening, albeit at MLs of 0.5% (5000 mg/kg) and 10% (100 000 mg/kg), respectively.

However, INS 471 does not appear to be included in CXS 210-1999, thus we ask if the proposal should include the Note XS210 as well.

ECOWAS, Nigeria: supports adoption at 10,000 mg/kg with new Notes 356, XS33, XS325R

We note that if there are questions on the technological justification with respect to the new note "for oils and fats for deep frying", INS 471 also has the assigned functional class of antifoaming agent, and this could be effective in this application (also, it does not have the functions of thickener or gelling agent).

EU: The proposed provision which excludes "virgin or cold pressed oils" and "olive oils" and is restricted to "oils and fats for deep frying" is acceptable to the EU.

However, from the procedural point of view it is necessary to consult the relevant active commodity committee before endorsing any use in standardized products

Japan: proposes that Maximum level be changed to GMP

(Rationale)

50th CCFA have already agreed that Mono- and di-glycerides of fatty acids (INS 471) as an antifoaming agent (for oils and fats for deep frying) with an ML of GMP (please refer to para.56 (i) bullet 3 of REP 18/FA) .

Malaysia: Supports proposal

RU: agrees with the proposal only for fat emulsions for baking with ML=5000 mg/kg

USA: Supports proposal. Regulated for use as an emulsifier in margarine and oleomargarine at 0.5%

Zambia: supports the proposal. Use is permited in shortening and margarine as an emulsifying, gelling, stabilizing or thickening agent at 10g/kg (except that the total combined mono- and di-glycerides shall not exceed 200g/kg of the shortening).

EFEMA: Supports. Certain mono- and diglycerides within the JECFA specification for INS 471 have shown to reduce the formation of foam during the frying process. When foaming is reduced during frying the risk for oxidation of the oil will also be reduced. This both prevents the development of unwanted oxidized by-products in the oil and the oils will have a longer shelf life. It does not change the nature or quality of the oil as to deceive the consumer. Also, the use INS 471 in frying oils and fats must be indicated on the product label.

Food Category No. 04.1.1.2 (Surface treated fresh fruit)

Descriptor: The surfaces of certain fresh fruit are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the fruit. Examples include apples, oranges, dates, and longans.

Horizontal approach (FA/45 CRD2 Appendix FA/46 CRD 2 Appendix V): acidity regulators not horizontally justified - ES&T on hold until secondary additives discussion

Corresponding commodity standards: 143-1985: Standard does not address coatings

General Note: CCFA45 discussed the horizontal approach to Table 3 ES&T and initially proposed that ES&T are horizontally justified in this FC with a note "for use in glaze, coating, and decoration only". However, during discussion on FC 04.2.1.2 the Committee noted that the use of additives in coatings may be a secondary additive use and held the provisions for discussion at CCFA46 (REP13/FA paras 82-85). The PWG on the GSFA to CCFA46 held these provisions for further discussion on secondary additives (CCFA46 CRD2). CCFA49 discussed that secondary additives could be addressed by using notes within the current GSFA food category system (REP 16/FA).

CCFA51 discussed the horizontal approach to Table 3 ES&T. The Committee agreed to the horizontal application of a note that reads, as appropriate, either "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits or "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits" but noted that technological justification had not been provided for the draft and proposed draft provisions. The Committee agreed to recirculate the provisions to seek information on technological justification.

General Comments 1st Circular Comments by EWG members to CCFA52 on Proposal (Request information on technological justification):

Australia: The Australian comments provided below are for Australian permissions of the food additives as GMP food additives permitted to be added to the food category called "preparations of food additives", which can then be used as emulsifiers or stabilisers in preparations of surface treatment preparations, being waxes or other glazing agents, used to treat both fruits and vegetables. In this situation they would be similar to what is being referred to as 'secondary food additives' in CCFA. They do not have permissions in their own right to be surface treat fruits or vegetables. It is also important to note, that these are permissions only; no information is available on whether these food additives are actually used for this purpose.

These comments apply to both fresh fruits and vegetables.

Canada: Canada is engaging industry on substances used in surface treatments for fresh fruits (FC 04.1.1.2) and fresh vegetables (FC 04.2.1.2), and we hope to provide input as part of a subsequent circular. We do, however, note that the lists of additives under consideration are largely similar but that there are some differences. We wonder if the working group considers it reasonable to apply the same list of additives for both food categories, as the use of additives in surface treatment formulations are likely to be the same. However, we also have no objection to continue considering the current lists as proposed. For reference, we note the following differences:

- The list for FC 04.1.1.2 additionally includes gum Arabic (INS 414);
- The list for FC 04.2.1.2 additionally includes calcium chloride (INS 509), calcium sulfate (INS 516), potassium dihydrogen citrate (INS 332(i)), and tripotassium citrate (INS 332(ii)).

IFAC: IFAC supports the application of a note that reads, as appropriate, either "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits" and / or "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits" where technological justification exists for draft and proposed draft provisions in this FC.

IFAC has highlighted several draft and proposed draft provisions for this FC for which existing data exists to support the technological justification for the use of these additives in edible coatings. However, IFAC notes that continued innovation in the area of edible coatings is ongoing and it is likely that other additives under consideration in this FC also provide value in edible coating formulations.

IFAC's technological justification is as follows, with additional details on specific additives in the table below:

Fresh fruits undergo many physiological changes during postharvest storage and handling, including: tissue softening, increased sugar levels, decreases in organic acid levels, degradation of chlorophyll accompanied by the synthesis of anthocyanins or carotenoids upon maturation, production and losses of volatile flavor compounds, decreases in phenolic and amino acid contents, and breakdown of cell materials due to respiration. Appropriately formulated edible coatings can be utilized on fresh fruits with both edible and non-edible peels to meet the many of the above challenges associated with shelf life extension, and maintaining both quality and nutritional value.

For optimal effectiveness, edible glazing / coating formulations must be tailored to meet the unique biological demands of each type of fruit. For example, specific glazing / coating agents may be more suitable for certain types of fruits than others. Additionally, existing coatings in this FC are hydrophobic in nature, and are often delivered to the surface of fresh fruits using a water-based formulation. This requires the use of emulsifiers and stabilizers to allow the glazing / coating to be applied uniformly and completely, which enhances the effectiveness of the glazing / coating. Use of emulsifiers and stabilizers not only provide the clear advantage of improving the function of the glazing / coating,but are required for their effective use.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
ACETIC AND FATTY ACID ESTERS OF GLYCEROL	472a	GMP	16	7	Emulsifier, Sequestrant, Stabilizer	Adopt with Notes “For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;” and “For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits.”	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **Nigeria:** Adopt food additives that are fully evaluated by JECFA **USA:** Authorized for use in Foods in General at GMP **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
ACETYLATED DISTARCH PHOSPHATE	1414	GMP	16	7	Emulsifier, Stabilizer, Thickener	Adopt with Notes “For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;” and “For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits.”	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **Nigeria**: INS 1414 is a suitable emulsifier, stabilizer and thickener because it ensures viscosity without changing the food properties **USA:** Authorized for use in Foods in General at GMP **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
AGAR	406	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent,	Adopt with Notes “For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;” and “For use in waxes, coatings or glazes where these surface treatments	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **Indonesia, RU, Zambia**: Supports adoption **Nigeria**: produces a short brittle texture as a stabilizer, thickener or gelling agents.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
					Humectant, Stabilizer, Thickener	are allowed for the application to the surface of fresh fruits."	**Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. **IFAC**: supports the adoption of INS 406 in this FC with the following notes: "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits." Specifically, INS 406 is effective as a glazing agent in regulating moisture loss of produce, both extending the quality and shelf life for fresh fruits. Additionally, use of INS 406 as an emulsifier / stabilizer allows for the viscosity to be adjusted when used as a constituent of glazes / coatings for the purpose of ensuring a continuous coating. For example, for fruits such as mandarin oranges and apples - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as peaches or kiwis, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. The use levels needed to achieve appropriate concentrations necessary to ensure optimal viscosity and effectiveness of the glaze / coating vary widely across produce types. However, in all cases, use of agar in this Food Category is inherently self-limiting, as too much or too little of the additive would render the formulation unsuitable for use. For this reason, use of the additive at GMP levels is appropriate. Further, use at GMP levels provides the flexibility necessary to ensure coatings with INS 406 are broadly applicable and useful for multiple produce types.
ALGINIC ACID	400	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent,	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Indonesia**: Does not support discontinuation. Technologically justified and used in FC at GMP

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
					Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	are allowed for the application to the surface of fresh fruits."	**Nigeria**: As stabilizers, thickener and emulsifier and gelling agent, it is stored with a compound package bag **USA:** GRAS for use in Foods in General at 0.1% as a humectant, stabilizer or thickener
AMMONIUM ALGINATE	403	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Nigeria**: As stabilizers, thickener and emulsifier and gelling agent, it is stored with a compound package bag **USA:** GRAS for use in Foods in General at 0.1% as a humectant, stabilizer or thickener **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
CALCIUM ALGINATE	404	GMP		7	Antifoaming agent, Bulking agent, Carrier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **Indonesia**: Does not support discontinuation. Technologically justified and used in FC at GMP **EU, RU**: Supports discontinuation **Nigeria**: It is a powerful thickening, stabilizing and gel forming agent **USA:** GRAS for use in Foods in General at 0.3% as a stabilizer or thickener
CAROB BEAN GUM	410	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							EU, RU: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.5% as a stabilizer or thickener
CARRAGEENAN	407	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Indonesia**: Does not support discontinuation **Nigeria**: used to thicken, emulsify and preserve foods. Some evidence shows that it triggers inflammation and damages digestive system. **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
CITRIC AND FATTY ACID ESTERS OF GLYCEROL	472c	GMP	16	7	Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **Nigeria**: used as an antioxidants used to protect food from deterioration caused by oxidation
GELLAN GUM	418	GMP		7	Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a stabilizer or thickener
GUAR GUM	412	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **EU, RU**: Supports discontinuation **Nigeria**: used to thicken and bind food products. It is high in soluble fiber and low in calories. Because of It's high fiber, it may support the digestive system

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							USA: Authorized for use in Foods in General at 0.5% as a stabilizer or thickener
GUM ARABIC (ACACIA GUM)	414	GMP	16	7	Bulking agent, Carrier, Emulsifier, Glazing agent, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 1.0% as a surface-finishing agent, emulsifier, stabilizer or thickener **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
HYDROXYPROPYL CELLULOSE	463	GMP	16	7	Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: INS could be used in this FC in TF Glazing agent, Stabilizer, Thickener **USA:** Authorized for use in Foods in General at GMP as a Film Former, Protective Colloid, emulsifier, stabilizer, thickener **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
HYDROXYPROPYL METHYL CELLULOSE	464	GMP	16	7	Bulking agent, Emulsifier, Glazing agent, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a Film Former, Protective Colloid, emulsifier, stabilizer, thickener **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
HYDROXYPROPYL STARCH	1440	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Nigeria**: used as an emulsifier, stabilizer and thickening agent. **USA:** Authorized for use at GMP in Foods in General as a food starch
KARAYA GUM	416	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.002% as a stabilizer or thickener
KONJAC FLOUR	425	GMP		7	Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: No permission **RU**: Supports discontinuation
LACTIC AND FATTY ACID ESTERS OF GLYCEROL	472b	GMP	16	7	Emulsifier, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an emulsifier
LECITHIN	322(i)	GMP	16	7	Antioxidant, Emulsifier	Adopt with Note “For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits.”	**2nd CL Proposal**: Adopt with Note “For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits.” **Australia**: GMP Food Additive

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							Nigeria: powerful emulsifier and antioxidant **RU**: Supports proposal **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. **EU Specialty Foods**: Supports proposal. To support this draft provision, we would like to refer to: Handbook of Food Preservation (M. Shafiur Rahman, 2007): Reduction of surface water activity at the water-oil interface helps to both form and stabilize emulsions, which is important for shelf-life properties of emulsion coatings. The hydrophilic-lipophilic balance (HLB) of surfacants ranks these compounds according to their hydrophobic and hydrophilic portions, which has an effect on their performance as emulsifiers. For example, sodium lauryl sulfate is a very hydrophilic surfactant with an HLB value of 40. Generally, surfacants with low HLB values are effective for water-in-oil emulsions, and those with high HBL values are more useful for oil-in-water emulsions. Some common emulsifiers are acetylated monoglyceride, lecithin (GRAS) and lecithin derivatives… Postharvest dip treatment with a natural lysophospholipid plus soy lecithin extended the shelf life of banana fruit: https://doi.org/10.1016/j.postharvbio.2015.10.016 Effect of Presence and Concentration of Plasticizers, Vegetable Oils, and Surfactants on the Properties of Sodium-Alginate-Based Edible Coatings: https://pdfs.semanticscholar.org/f2de/d6236e29f0c066c23ef1e621362e8d9e69f4.pdf
MAGNESIUM CHLORIDE	511	GMP	16	7	Colour retention agent, Firming agent, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Nigeria**: Magnesium is a mineral that is good for the health.It's important for many functions in the body including, regulating muscle and nerve function, blood sugar levels and blood pressure, as well as energy production and bone health. In addition to its role in several bodily functions, magnesium has

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							important roles as a food additive. It's additive form is in magnesium carbonate and magnesium chloride.
METHYL CELLULOSE	461	GMP	16	7	Bulking agent, Emulsifier, Glazing agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP
METHYL ETHYL CELLULOSE	465	GMP	16	7	Emulsifier, Foaming agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Nigeria**: used as a thickener and emulsifier and there has not been any toxic effect found. **USA:** Authorized for use in Foods in General at GMP as an emulsifier and foaming agent
MICROCRYSTALLINE CELLULOSE (CELLULOSE GEL)	460(i)	GMP	16	7	Anticaking agent, Bulking agent, Carrier, Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation
OXIDIZED STARCH	1404	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a food starch

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
PECTINS	440	GMP		7	Emulsifier, Gelling agent, Glazing agent, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Indonesia**: Does not support discontinuation. Technologically justified, a natural carbohydrate polymer which can be applied on the surface of fruits **Nigeria**: used in food as a gelling agent, particularly in jams and jellies **USA:** GRAS for use in Foods in General at GMP as an emulsifier, stabilizer, thickener
POTASSIUM ALGINATE	402	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.01% as a stabilizer or thickener
POWDERED CELLULOSE	460(ii)	GMP	16	7	Anticaking agent, Bulking agent, Emulsifier, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
PROCESSED EUCHEUMA SEAWEED (PES)	407a	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an emulsifier, stabilizer or thickener
SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM	470(ii)	GMP	16	7	Anticaking agent, Emulsifier, Stabilizer	Adopt with Note "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Adopt with Note "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits." **Australia**: GMP Food Additive **RU**: Supports proposal **USA:** Authorized for use in Foods in General at GMP as an emulsifier **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. **IFAC**: Supports proposal.Specifically, INS 470(ii) is effective as an emulsifier / stabilizer, allowing the viscosity of glazes / coatings to be adjusted to ensure a continuous coating. For example, for fruits such as mandarin oranges and apples - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as peaches or kiwis, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. The use levels needed to achieve appropriate concentrations necessary to ensure optimal viscosity and effectiveness of the glaze / coating vary widely across produce types. However, in all cases, use of INS 470(ii) in this Food Category is inherently self-limiting, as too much or too little of the additive would render the formulation unsuitable for use. For this reason, use of the additive at GMP levels is appropriate. Further, use at GMP

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							levels provides the flexibility necessary to ensure coatings with INS 470(ii) are broadly applicable and useful for multiple produce types.
SODIUM ALGINATE	401	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits."	**2nd CL Proposal**: Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits;" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh fruits." **Australia**: GMP Food Additive **RU**: Supports proposal **USA:** Authorized for use in Foods in General at 1% as an emulsifier **Zambia**: Supports adoption at 10 g/kg, singly or in combination with other thickeners plus other notes listed in 2nd CL proposal **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. **IFAC**: Supports adoption. Specifically, INS 401 is effective as a glazing agent in regulating moisture loss of produce, both extending the quality and shelf life for fresh fruits. Additionally, use of INS 401 as an emulsifier / stabilizer allows for the viscosity to be adjusted when used as a constituent of glazes / coatings for the purpose of ensuring a continuous coating. For example, for fruits such as mandarin oranges and apples - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as peaches or kiwis, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. The use levels needed to achieve appropriate concentrations necessary to ensure optimal viscosity and effectiveness of the glaze / coating vary widely across produce types. However, in all cases, use of sodium alginate in this Food Category is inherently self-limiting, as too much or too little of the additive would render the formulation unsuitable for use. For this reason, use of the additive at GMP levels is appropriate. Further, use at GMP levels provides the flexibility necessary to ensure coatings with

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on 2nd Circular Proposal/ Technological Justification
							INS 401 are broadly applicable and useful for multiple produce types.
SODIUM CARBOXYMETHYL CELLULOSE (CELLULOSE GUM)	466	GMP	16	7	Bulking agent, Emulsifier, Firming agent, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market.
TARA GUM	417	GMP		7	Gelling agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation
TRAGACANTH GUM	413	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.1% as an emulsifier, stabilizer, thickener
XANTHAN GUM	415	GMP		7	Emulsifier, Foaming agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP as an emulsifier, stabilizer, thickener

Food Category No. 04.2.1.2 (Surface-treated fresh vegetables, (including mushrooms and fungi, roots and tubers, pulses and legumes (including soybeans), and aloe vera), seaweeds and nuts and seeds)

Descriptor: The surfaces of certain fresh vegetables are coated with glazes or waxes or are treated with other food additives that act as protective coatings and/or help to preserve the freshness and quality of the vegetable. Examples include: avocados, cucumbers, green peppers and pistachio nuts.

Horizontal approach (FA/45 CRD2 Appendix FA/46 CRD 2 Appendix V): acidity regulators not horizontally justified, ES&T hold until secondary additives

Corresponding commodity standards: 330-2018: Does not address surface treatment

General Note: CCFA45 discussed the horizontal approach to Table 3 ES&T and initially proposed that ES&T are horizontally justified in this FC with a note "for use in glaze, coating, and decoration only". However, during discussion on FC 04.2.1.2 the Committee noted that the use of additives in coatings may be a secondary additive use and held the provisions for discussion at CCFA46 (REP13/FA paras 82-85). The PWG on the GSFA to CCFA46 held these provisions for further discussion on secondary additives (CCFA46 CRD2). CCFA49 discussed that secondary additives could be addressed by using notes within the current GSFA food category system (REP 16/FA).

CCFA51 discussed the horizontal approach to Table 3 ES&T. The Committee agreed to the horizontal application of a note that reads, as appropriate, either "For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" or "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds, or nuts and seeds" but noted that technological justification had not been provided for the draft and proposed draft provisions. The Committee agreed to recirculate the provisions to seek information on technological justification.

General Comments 1st Circular Comments by EWG members to CCFA52 on Proposal (Request information on technological justification):

IFAC: supports the application of a note that reads, as appropriate, either "For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and / or "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds" where technological justification exists for draft and proposed draft provisions in this FC.

IFAC has highlighted several draft and proposed draft provisions for this FC for which it has existing data to support the technological justification for the use of these additives in edible coatings; however, IFAC notes that continued innovation in the area of edible coatings is ongoing and it is likely that other additives under consideration in this FC also provide value in edible coating formulations.

IFAC's technological justification is as follows, with additional details on specific additives in the table below:

Fresh vegetables undergo many physiological changes during postharvest storage and handling, including tissue softening, increase in sugar level, decrease in organic acid levels, degradation of chlorophyll accompanied by the synthesis of anthocyanins or carotenoids upon maturation, production and losses of volatile flavor compounds, decrease in phenolic and amino acid contents, and breakdown of cell materials due to respiration. Appropriately formulated edible coatings can be utilized on fresh vegetables with both edible and non-edible peels to meet the many challenges associated with shelf life extension, and maintaining both quality and nutritional value.

For optimal effectiveness, edible glazing / coating formulations must be tailored to meet the unique biological demands of each type of vegetable. For example, specific glazing / coating agents may be more suitable for certain types of vegetables over others. Additionally, existing coatings in this FC are hydrophobic in nature, and are often delivered to the surface of fresh vegetables using a water-based formulation. This requires the use of emulsifiers and stabilizers to allow the glazing / coating to be applied uniformly and completely, which enhances the effectiveness of the glazing / coating. Use of emulsifiers and stabilizers not only provide the clear advantage of improving the function of the glazing / coating, but are required for their effective use.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
ACETIC AND FATTY ACID ESTERS OF GLYCEROL	472a	GMP	16	7	Emulsifier, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA**: Authorized for use in Foods in General at GMP

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
ACETYLATED DISTARCH PHOSPHATE	1414	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a food starch
AGAR	406	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	**2nd CL Proposal**: Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds." **Australia**: GMP Food Additive **Indonesia, RU, Zambia**: Supports adoption **IFAC**: Supports adoption with notes: "For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds." Specifically, INS 406 is effective as a glazing agent in regulating moisture loss of produce, both extending the quality and shelf life for fresh vegetables. Additionally, use of INS 406 as an emulsifier / stabilizer allows for the viscosity to be adjusted when used as a constituent of glazes / coatings for the purpose of ensuring a continuous coating. For example, for vegetables such as tomatoes, peppers, and eggplant - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as green beans, radishes, and carrots, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. (see additional comments in FC 4.1.1.2)

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
ALGINIC ACID	400	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **Indonesia**: Does not support discontinuation. Technologically justified, and used in FC at GMP
AMMONIUM ALGINATE	403	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA**: GRAS for use in Foods in General at 0.1% as a humectant, stabilizer or thickener
CALCIUM ALGINATE	404	GMP		7	Antifoaming agent, Bulking agent, Carrier, Foaming agent, Gelling agent, Glazing agent,	Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **Indonesia**: Does not support discontinuation. Technologically justified and used in FC at GMP **RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.3% as a stabilizer or thickener

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
					Humectant, Sequestrant, Stabilizer, Thickener	of fresh vegetables, seaweeds or nuts and seeds."	
CALCIUM CHLORIDE	509	800	58	7	Firming agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP as a stabilizer and thickener
CALCIUM SULFATE	516	800	58 – as calcium	7	Acidity regulator, Firming agent, Flour treatment agent, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.07% as a stabilizer and thickener
CAROB BEAN GUM	410	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.5% as a stabilizer or thickener
CARRAGEENAN	407	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an emulsifier, stabilizer or thickener

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
CITRIC AND FATTY ACID ESTERS OF GLYCEROL	472c	GMP	16	7	Antioxidant, Emulsifier, Flour treatment agent, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation
GELLAN GUM	418	GMP		7	Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an stabilizer or thickener
GUAR GUM	412	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.5% as a stabilizer or thickener
HYDROXYPROPYL CELLULOSE	463	GMP	16	7	Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener	Discontinue	**Australia**: GMP Food Additive **RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a Film Former, Protective Colloid, emulsifier, stabilizer, thickener
HYDROXYPROPYL METHYL CELLULOSE	464	GMP	16	7	Bulking agent, Emulsifier, Glazing agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a Film Former, Protective Colloid, emulsifier, stabilizer, thickener

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
HYDROXYPROPYL STARCH	1440	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use at GMP in Foods in General as a food starch
KARAYA GUM	416	GMP		7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.002% as a stabilizer or thickener
KONJAC FLOUR	425	GMP		7	Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: No permission **EU**: Supports discontinue **Russian Federation**: INS could be used in this FC in TF Glazing agent, Humectant,Stabilizer, Thickener
LACTIC AND FATTY ACID ESTERS OF GLYCEROL	472b	GMP	16	7	Emulsifier, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an emulsifier
LECITHIN	322(i)	GMP	16	7	Antioxidant, Emulsifier	Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and seeds" and "For use in waxes, coatings or glazes	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **EU Specialty Food**: Do not agree with the proposal.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
						where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	We support adoption with Note "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds." As stated in the Handbook of Food Preservation (M. Shafiur Rahman, 2007): Reduction of surface water activity at the water-oil interface helps to both form and stabilize emulsions, which is important for shelf-life properties of emulsion coatings. The hydrophilic-lipophilic balance (HLB) of surfacants ranks these compounds according to their hydrophobic and hydrophilic portions, which has an effect on their performance as emulsifiers. For example, sodium lauryl sulfate is a very hydrophilic surfactant with an HLB value of 40. Generally, surfacants with low HLB values are effective for water-in-oil emulsions, and those with high HBL values are more useful for oil-in-water emulsions. Some common emulsifiers are acetylated monoglyceride, lecithin (GRAS) and lecithin derivatives… Lecithin is used as a surfactant in organic production: Formulating essential oil microemulsions as washing solutions for organic fresh produce production: https://www.ncbi.nlm.nih.gov/pubmed/25038656 We would also refer to the following publications: Effect of Presence and Concentration of Plasticizers, Vegetable Oils, and Surfactants on the Properties of Sodium-Alginate-Based Edible Coatings: https://pdfs.semanticscholar.org/f2de/d6236e29f0c066c23ef1e621362e8d9e69f4.pdf Postharvest Physiology and Pathology of Vegetables: https://books.google.be/books?id=dgX6tRynZcEC&dq=lecithin+surfactant+fresh+vegetables&source=gbs_navlinks_s
MAGNESIUM CHLORIDE	511	GMP	16	7	Colour retention agent, Firming agent, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
METHYL CELLULOSE	461	GMP	16	7	Bulking agent, Emulsifier, Glazing agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP
METHYL ETHYL CELLULOSE	465	GMP	16	7	Emulsifier, Foaming agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **RU**: Supports discontinuation
MICROCRYSTALLINE CELLULOSE (CELLULOSE GEL)	460(i)	GMP	16	7	Anticaking agent, Bulking agent, Carrier, Emulsifier, Foaming agent, Glazing agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation
OXIDIZED STARCH	1404	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as a food starch
PECTINS	440	GMP		7	Emulsifier, Gelling agent, Glazing agent,	Adopt with Notes ""For use as a glaze where such surface treatment is allowed for application to the surface of fresh vegetables, seaweeds or nuts and	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
					Stabilizer, Thickener	seeds" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	**Indonesia**: Does not support discontinuation. Technologically justified, a natural carbohydrate polymer which can be applied on the surface of fresh fruits **USA:** GRAS for use in Foods in General at GMP as an emulsifier, stabilizer, thickener
POTASSIUM ALGINATE	402	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.01% as a stabilizer or thickener
POTASSIUM DIHYDROGEN CITRATE	332(i)	GMP	16	7	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU**: Supports discontinuation
POWDERED CELLULOSE	460(ii)	GMP	16	7	Anticaking agent, Bulking agent, Emulsifier, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
PROCESSED EUCHEUMA SEAWEED (PES)	407a	GMP		7	Bulking agent, Carrier, Emulsifier, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, Indonesia, RU**: Supports discontinuation **USA:** Authorized for use in Foods in General at GMP as an emulsifier, stabilizer or thickener
SALTS OF OLEIC ACID WITH CALCIUM, POTASSIUM AND SODIUM	470(ii)	GMP	16	7	Anticaking agent, Emulsifier, Stabilizer	Adopt with Note "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	**2nd CL Proposal**: Adopt with Note "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds." **Australia**: GMP Food Additive **RU:** Supports proposal **USA:** Authorized for use in Foods in General at GMP as an emulsifier **IFAC**: Supports proposal . Specifically, INS 470(ii) is effective as an emulsifier / stabilizer, allowing the viscosity of glazes / coatings to be adjusted to ensure a continuous coating. For example, for vegetables such as peppers and eggplant - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as green beans, radishes, and carrots, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. (see additional comments in FC 4.1.1.2)
SODIUM ALGINATE	401	GMP		7	Bulking agent, Carrier, Emulsifier, Foaming agent, Gelling	Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits" and "For use in waxes, coatings or glazes where these surface	**2nd CL Proposal**: Adopt with Notes "For use as a glaze where such surface treatment is allowed for application to the surface of fresh fruits" and "For use in waxes, coatings or glazes where these surface treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
					agent, Glazing agent, Humectant, Sequestrant, Stabilizer, Thickener	treatments are allowed for the application to the surface of fresh vegetables, seaweeds or nuts and seeds."	**Australia**: GMP Food Additive **Malaysia, RU:** Supports proposal **USA:** Authorized for use in Foods in General at 1% as an emulsifier **Zambia**: Supports adoption at 10 g/kg, singly or in combination with other thickeners plus notes in 2nd CL proposal **Zimbabwe**: supports use at GMP to preserve the freshness of commodity especially those that have to be transported long distances to the destination market. **IFAC**: Supports proposal. Specifically, INS 401 is effective as a glazing agent in regulating moisture loss of produce, both extending the quality and shelf life for fresh vegetables. Additionally, use of INS 401 as an emulsifier / stabilizer allows for the viscosity to be adjusted when used as a constituent of glazes / coatings for the purpose of ensuring a continuous coating. For example, for vegetables such as tomatoes, peppers, and eggplant - which have relatively hard, smooth, waxy, surfaces - a less viscous solution can maintain a smooth coating. Conversely, produce that has porous surfaces, such as green beans, radishes, and carrots, requires a more viscous solution to ensure that gaps in the surface are sufficiently filled in order to be suitably coated. (See additional comments in FC 4.1.1.2)
SODIUM CARBOXYMETHYL CELLULOSE (CELLULOSE GUM)	466	GMP	16	7	Bulking agent, Emulsifier, Firming agent, Gelling agent, Glazing agent, Humectant, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopt.	INS Functional Class	Final EWG Proposal	Comments by EWG members on Proposal/ Request for Technological Justification
TARA GUM	417	GMP		7	Gelling agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation
TRAGACANTH GUM	413	GMP	16	7	Emulsifier, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at 0.1% as an emulsifier, stabilizer, thickener
TRIPOTASSIUM CITRATE	332(ii)	GMP	16	7	Acidity regulator, Emulsifying salt, Sequestrant, Stabilizer	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation
XANTHAN GUM	415	GMP		7	Emulsifier, Foaming agent, Stabilizer, Thickener	Discontinue	**2nd CL Proposal**: Discontinue **Australia**: GMP Food Additive **EU, RU**: Supports discontinuation **USA:** GRAS for use in Foods in General at GMP as an emulsifier, stabilizer, thickener

Food Category No. 04.2.2.7 (Fermented vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera) and seaweed products, excluding fermented soybean products of food categories 06.8.6, 06.8.7, 12.9.1, 12.9.2.1 and 12.9.3)

Corresponding commodity standards: 38-1981 (ES&T not permitted), 151-1985 (food additives not discussed), 223-2001 (allows specific thickeners and stabilizers), 260-2007 (Stabilizers permitted in accordance with GSFA), 294R-2009 (specific stabilizers are permitted)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP		3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Hold at current step and revise with Note XS38 Consult with corresponding commodity committee(s) for technological justification.

1st and 2nd CL Proposal: Adopt with Notes XS38

Comments by EWG:

Dominican Republic, US, RU, Singapore, Nigeria: Supports proposal to adopt

EU: the procedure shall be followed – i.e. the active commodity committee (CCPFV) shall be consulted as regards the use in the relevant commodity standards (according to Section 1.2 it could also be consulted on the use in similar non-standardised foods)

Japan: Supports proposal. Tamarind seed polysaccharide (TSP) prevents syneresis in fermented pickles. TSP gives stable viscoelastic properties even under high salt concentrations.

Food Category No. 06.2.1 (Flours)

Horizontal approach (FA/45 CRD2 Appendix FA/46 CRD 2 Appendix V): acidity regulators not horizontally justified, ES&T justified with Note 25: "For use at GMP in full fat soy flour only"

Corresponding commodity standards: 301R-2011: references FC 06.2.1 Tables 1 & 2; 176-1989, 154-1985, 173-1989, 170-1989, 178-1991, 155-1985: do not discuss food additives; 152-1985: lists specific enzymes and flour treatment agents

General Note: CCFA51 noted that magnesium carbonate did not have the functional class of flour treatment agent. The Committee agreed to hold the provision pending listing in the INS with the appropriate functional class.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
MAGNESIUM CARBONATE	504(i)	1500		4	Acidity regulator, Anticaking agent, Colour retention agent	Adopt in GSFA pending the outcome of the INS WG, forward to alignment WG to discuss revising CODEX STAN 152-1985 to add INS 516 to list of allowed flour treatment agents

Technological justification provided to CCFA51:

USA: Authorized for use as a bleaching agent at 6x benzoyl peroxide in multiple flour products (enriched, bromated, self-rising, phosphated, enriched self-rising, and regular). Bleaching agent is a technological purpose under flour treatment agent in CAC/GL 36-1989. INS 504(i) is used in conjunction with benzoyl peroxide, which is allowed in CODEX STAN 152-1985 as a flour treatment agent. INS 504(i) is in Table 3, however FC 06.2 is in the annex to Table 3.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
1st and 2nd CL Proposal: Adopt in GSFA, forward to alignment WG to discuss revising CODEX STAN 152-1985 to add INS 516 to list of allowed flour treatment agents **Comments by EWG Members:** **India, China, Colombia, Malaysia, RU, ECOWAS**: Supports proposal to adopt in GSFA and forward to alignment WG to discuss revising 152-1985 to add INS 516 to list of allowed flour treatment agents **Australia**: Noted, how the alignment EWG will address this needs to be considered since CXS152 was aligned at CCFA51 **Canada**: Canada does not object to the proposal as we also permit magnesium carbonate in flour and whole wheat flour, but as a carrier for benzoyl peroxide, which itself is the flour treatment agent. That being said, the functional classes for magnesium carbonate does not include either "carrier" or "flour treatment agent", and the INS WG has been tasked with considering the appropriateness of adding "flour treatment agent" to INS 504(i) (REP19/FA, para 149(ii)c). We would ask if it would be clearer for the current recommendation to be "adopt in GSFA pending the outcome of the INS WG, and forward to alignment WG….". **Dominican Republic**: Supports adoption **USA**: Authorized for use as a bleaching agent at 6x benzoyl peroxide in multiple flour products (enriched, bromated, self-rising, phosphated, enriched self-rising, and regular).Bleaching agent is a technological purpose under flour treatment agent in CAC/GL 36-1989.INS 504(i) is used in conjunction with benzoyl peroxide, which is allowed in CODEX STAN 152-1985 as a flour treatment agent.INS 504(i) is in Table 3, however FC 06.2 is in the annex to Table 3.						

General Note: Information provided by Senegal in CX/FA 19/51/8

New provision.

- Submitted by Senegal at CCFA51 (CX/FA 19/51/8).
- **Justification:** The additive is used to coat and protect various micronutrients used in food fortification to protect them from degradation due to adverse environmental conditions (heat and humidity) during storage and cooking of fortified food products. This use does not present an appreciable health risk and should improve the nutrient status of individuals at risk of malnutrition. Use of the additive has no effect on the food itself.
- **Safety:** Table 3 Additives
- **Mislead Consumer**: Studies show that coating of micronutrients with the additive protects them from degradation due to conditions, such as boiling for 2 hours, that results in loss of potency of unprotected micronutrients (e.g., vitamins A, C & D), while not affecting the food to which it is added.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
METHACRYLATE COPOLYMER, BASIC	1205	GMP		3	Glazing Agent, Carrier	Adopt
1st and 2nd CL Proposal: Adopt						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal

Comments by EWG Members:

ECOWAS, Senegal: Supports proposal. BMC IS SAFE:

- JECFA evaluated BMC and found that there were no concerns at exposure levels well above any that would occur through the use of BMC-encapsulated micronutrients in staple foods.
- JECFA has recommended an ADI of "not specified."
- BMC is not new.
- It has been used for human purposes for more than 50 years - as a glazing agent for medicines.

Flours are widely used as staple foods in Senegal and other developing countries diets. Senegal believes that adoption of BMC into the proposed FC will enable malnourished people, especially pregnant women and young children, to significantly increase consumption of Vitamin A and iron – far beyond that offered by currently available technologies.

BMC encapsulation will ensure the stability of Vitamin A added to flours and starches during storage and cooking, and will enable consistent blending. Thus Addition of BMC-encapsulated Vitamin A and iron in flours will increase substantially the number of people receiving Recommended Daily Allowances (RDAs) of those micronutrients, while remaining within accepted fortification limits

Nigeria: Supports adoption at GMP

RU: Does not agrees with proposal. There not technological and safety justification. Not permitted in this category in RU and Eurasian trade Union

Food Category No. 06.4.1 (Fresh pastas and noodles and like products)

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	211	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt

1st and 2nd CL Proposal: Adopt

Comments by EWG Members:

Dominican Republic, EU, ECOWAS, Nigeria: supports adoption at GMP

Japan: supports the proposal.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
Tamarind seed polysaccharide (TSP) is used as a stabilizer in fresh noodles to prevent elution of ingredients in boiling. TSP prevents retrogradation of starch by interacting with starch granules. TSP also gives elastic properties to fresh noodles (udon) **RU, Singapore**: Supports adoption at GMP **USA:** Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent including pastas and noodles at 0.5% (excluding rice noodles)						

Food Category No. 06.4.2 (Dried pastas and noodles and like products)

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	256	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt
1st and 2nd CL Proposal: Adopt **Comments by EWG Members:** **Dominican Republic, EU, ECOWAS, Nigeria, RU, Singapore**: Supports adoption at GMP **Japan:** supports the proposal. Tamarind seed polysaccharide (TSP) prevents retrogradation of starch by interacting with starch granules. TSP also gives elastic properties to dried ramen noodles **USA:** Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent including pastas and noodles (excluding rice noodles) at 0.5%						

Food Category No. 09.2.4.1 (Cooked fish and fish products)

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	241, 327	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt

1st and 2nd CL Proposal: Adopt

Comments by EWG Members:

Dominican Republic, EU, ECOWAS, Nigeria: supports adoption at GMP

Japan: supports adoption at GMP with Notes 241 and 327.

Tamarind seed polysaccharide is used as a thickener to make sauce adhere to fish. Soy sauce is one of the main ingredients of sauce used for preparing a cooked fish product. Therefore it is not appropriate to discuss in FC for soy sauce (FC12.9.2).

RU: Does not agree with proposal. Proposal should be discussed in FC soy souses

Singapore: Supports adoption at GMP

USA: Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent in foods in general

Food Category No. 09.2.5 (Smoked, dried, fermented, and/or salted fish and fish products, including molluscs, crustaceans, and echinoderms)

Corresponding commodity standards: 189-1993 (no food additives permitted), 222-2001 (Permits use of flavour enhancers), 167-1989, 244-2004, 311-2013: Preservatives permitted in accordance with GSFA

General Note: Revision of an existing provision to remove notes XS244, XS311, XS167 and replace with Note 333: In foods conforming to the Standard for Smoked Fish, Smoke-Flavoured Fish and SmokeDried Fish (CODEX STAN 311-2013), for use in reduced oxygen packaged products in smoked fish and smoke-flavoured fish products only.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
LAURIC ARGINATE ETHYL ESTER	243	200	333	3	Preservative	Adopt with Note 333, Remove Notes XS244, XS311, XS167

1st and 2nd CL Proposal: Adopt with Note 333, Remove Notes XS244, XS311, XS167

Comments by EWG Members:

Australia: Proposes that these three Notes be removed and that Note 333 be added. Note 333 reads “In foods conforming to the Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish (CODEX STAN 311-2013), for use in reduced oxygen packaged products in smoked fish and smoke-flavoured fish products only”. We note that the use of preservatives in this food category is recognised by the inclusion of sorbates and benzoates in CODEX STAN 244-2004 and CODEX STAN 311-2013, and the inclusion

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
of sorbates in CODEX STAN 167-1989. Furthermore, in relation to the discussions on the draft Standard for Smoked Fish, Smoke-Flavoured Fish and Smoke-Dried Fish (CODEX STAN 311-2013), we note that the CCFFP33 stated at its 33rd meeting in 2012 (REP 13/FFP, Para 31) that: "It was recognised that there was a technological need for the use of preservatives for certain types of products, in particular sorbates and benzoates, which are used to prevent growth of Listeria monocytogenes." In Australia the use of ethyl lauric arginate ethyl ester is permitted for use in products falling under FC 09.2.5. We note that there is also approved use in a number of other countries (e.g. New Zealand, Canada and the USA), without further restriction on its use in products conforming with the relevant Codex commodity standards. We believe that the products are also available in international trade. As such, consideration should be given to revising the provisions of the GSFA to reflect the acceptable use of LAEE as a preservative in these products. **Malaysia, ECOWAS**: supports adoption at 200 mg/kg with Note 333 **Nigeria**: Supports adoption, used as preservative in foods to increase the shelf life of foods **RU**: Does not agree with proposal. Currently used in meats only. ADI may be exceeded if new categories are approved **USA:** Supports proposal						

Food Category No. 11.4 (Other sugars and syrups (e.g., xylose, maple syrup, sugar toppings))

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP	258	3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Adopt
1st and 2nd CL Proposal: Adopt **Comments by EWG Members:** **Dominican Republic, EU, ECOWAS, Nigeria, RU, Singapore**: Supports adoption at GMP **Japan:** supports the proposal. Use of Tamarind seed polysaccharide (TSP) results in high viscosity in the presence of sugar and a small amount of TSP increases viscosity of table-use syrup as stabilizer and thickener. TSP keeps mouthfeels, since TSP does not give stickiness because of low spinnability. **USA:** Supports proposal. GRAS for use as a thickener, stabilizer, emulsifier and gelling agent at 0.5%						

Food Category No. 12.1.1 (Salt)

Corresponding commodity standards: 150-1985 (permits food additives in accordance with the GSFA)

General Note: Information provided by Senegal in CX/FA 19/51/8

- **New provision.** Submitted by Senegal at CCFA51 (CX/FA 19/51/8). See FC 06.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
METHACRYLATE COPOLYMER, BASIC	1205	GMP		3	Glazing Agent, Carrier	Adopt and refer to alignment EWG to add to list of carriers in CS 150-1985

1st and 2nd CL Proposal: Adopt and refer to alignment EWG to add to list of carriers in CS 150-1985

Comments by EWG Members:

ECOWAS, Senegal: supports the adoption at GMP of the proposal. BMC encapsulation will ensure the stability of iodine added to salt during storage and cooking, and will enable consistent blending. Thus Addition of BMC-encapsulated iodine in salt will increase substantially the number of people receiving Recommended Daily Allowances (RDAs) of this micronutrient, while remaining within accepted fortification limits

Nigeria: Supports adoption, used as glazing agent to preserve taste and nutritional value of can fillings for up to several years

RU: Does not agrees with proposal. There not technological and safety justification. Not permitted in the food category

Food Category No. 12.6.1 (Emulsified sauces and dips)

Corresponding commodity standards: None

General Note: Information provided by China in CX/FA 19/51/8

- **New provision.** Submitted by China at CCFA51 (CX/FA 19/51/8).
- **Justification:** Consumer demand for convenient, less processed and/or healthier sauce, dressing & prepared salad options are driving the development of new products with lower oil content, serving & storage formats and a wide range of recipe ingredients. These changes can impact product microbial stability. Nisin provides an alternative to preservatives such as sodium diacetate & benzoate. It inhibits gram positive spoilage bacteria and in refrigerated products, can help inhibit *Listeria*.

- **Safety:** The 2013 JECFA review includes a dietary intake discussion for US, Japan, Australia and New Zealand. From Food Standards Australia New Zealand (FSANZ), the estimated consumers-only mean dietary exposures to nisin from consumption of cheese, cream, meat products, sauces, toppings and mayonnaise were 0.009 mg/kg bw per day (all ages) and 0.02 mg/kg bw per day (2-to 6-year-olds). Estimated consumers-only 95th percentile dietary exposures to nisin were lowest for New Zealanders aged 15 years and above, at 0.03 mg/kg bw per day, and highest for Australian children aged 2–6 years, at 0.07 mg/kg bw per day. The consumers-only dietary exposure estimate from the USA from consumption of cheese spreads, dressings, egg products and processed meat products was 0.04 mg/kg bw per day at the mean. The Japanese per capita estimate was from consumption cheeses, buns, meat and egg products, tofu and miso and was reported as 2.06 mg/person per day or approximately 0.04 mg/kg bw per day for a 50 kg individual.(WHO Food Additives Series 68, JECFA 77, page 108) Additionally, based on per capita consumption of products in the proposed food categories in China, daily intakes are estimated by 0.0005 mg/kg bw (50 kg bw basis) for China. This value assumes that nisin is added at the ML of 5 mg/kg in all sauces, dressings and prepared salads produced and consumed(GB 2760).
- **Mislead Consumer**: Would be listed on the label

Additive	INS	Max Level (mg/kg)	Notes,	Step / Adopted	INS Functional Class	Final EWG Proposal
NISIN	234	5.0	233	3	Preservative	Adopt

1st and 2nd CL Proposal: Adopt

Comments by EWG Members:

Brazil: Requests clarification on the following: To which specific food products would the technical justification described apply? Would it apply to pasteurized products? Cold processed?

Is the proposed ML effective to guarantee the preservative function?

Which other barriers would be necessary in conjunction with nisin (pH, water activity, redox potential etc)?

RU: Strongly object to proposal. There not technological and safety justification. Not permitted in the food category. The problem of antibioticoresistance

IFAC: Supports proposal

Food Category No. 12.6.2 (Non-emulsified sauces)

Corresponding commodity standards: 306R-2011

General Note: Information provided by China in CX/FA 19/51/8

- **New provision.** Submitted by China at CCFA51 (CX/FA 19/51/8). See FC 12.6.1 for further information

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
NISIN	234	5.0	233, XS306R	3	Preservative	Adopt
1st and 2nd CL Proposal: Adopt **Comments by EWG Members:** **Brazil**: Requests clarification on the following: To which specific food products would the technical justification described apply? Would it apply to pasteurized products? Cold processed? Is the proposed ML effective to guarantee the preservative function? Which other barriers would be necessary in conjunction with nisin (pH, water activity, redox potential etc)? **RU**: Strongly object to proposal. There not technological and safety justification. Not permitted in the food category. The problem of antibioticoresistance **IFAC**: Supports proposal						

Food Category No. 12.6.4 (Clear sauces)

Corresponding commodity standards: 302-2011

General Note: Information provided by China in CX/FA 19/51/8

- **New provision.** Submitted by China at CCFA51 (CX/FA 19/51/8). See FC 12.6.1 for further information

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
NISIN	234	5.0	233, XS302	3	Preservative	Adopt
1st and 2nd CL Proposal: Adopt **Comments by EWG Members:** **Brazil**: Requests clarification on the following: To which specific food products would the technical justification described apply? Would it apply to pasteurized products? Cold processed? Is the proposed ML effective to guarantee the preservative function? Which other barriers would be necessary in conjunction with nisin (pH, water activity, redox potential etc)?						

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
RU: Strongly object to proposal. There not technological and safety justification. Not permitted in the food category. The problem of antibioticoresistance **IFAC**: Supports proposal						

Food Category No. 12.7 (Salads (e.g. macaroni salad, potato salad) and sandwich spreads excluding cocoa- and nut-based spreads of food categories 04.2.2.5 and 05.1.3)

Corresponding commodity standards: None

General Note: Information provided by China in CX/FA 19/51/8

- **New provision.** Submitted by China at CCFA51 (CX/FA 19/51/8). See FC 12.6.1 for further information

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
NISIN	234	5.0	233	3	Preservative	Adopt
1st and 2nd CL Proposal: Adopt **Comments by EWG Members:** **Brazil**: Requests clarification on the following: To which specific food products would the technical justification described apply? Would it apply to pasteurized products? Cold processed? Is the proposed ML effective to guarantee the preservative function? Which other barriers would be necessary in conjunction with nisin (pH, water activity, redox potential etc)? **RU**: Strongly object to proposal. There not technological and safety justification. Not permitted in the food category. The problem of antibioticoresistance **IFAC**: Supports proposal						

Food Category No. 14.1.3.1 (Fruit nectar)

Corresponding commodity standards: 247-2005 (permits food additives in accordance with the GSFA)

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP		3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Hold pending discussions on matters referred from CCPFV regarding technological justification of use of emulsifiers, stabilizer, thickeners and gelling agents in this FC

1st and 2nd CL Proposal: Refer to CCPFV for technological justification

Comments by EWG Members:

Costa Rica, Guatemala, Egypt, ICBA: Others have noted existing uses. Believes only the question of functional class (if warranted) should be deferred to CCPFV if other additives with similar functions do not already exist in the relevant Codex Commodity Standard. As pectin is permitted in the Codex Fruit Juice/Nectar standard, and is typically used as a stabilizer, then are of the view that all stabilizers are technologically justified in fruit juices, nectars and their concentrates. The discussion of endorsing appropriate levels for a particular additive with stabilizer function for fruit juices/nectars would now befall on CCFA. Thus, relative to tamarind seed polysaccharide, CCFA is the appropriate body to contemplate levels of use for tamarind seed polysaccharides as stabilizers in fruit nectars and their corresponding concentrates.

EU: Supports referral to CCPFV

Japan: supports 2nd CL proposal. (for information) Tamarind seed polysaccharide (TSP) is used as stabilizer in fruit nectars to prevent sedimentation and separation of pulps in those juices/nectars. TSP keeps mouthfeels in products, since TSP does not give stickiness because of low spinnability.

Food category descriptor for this FC does not prohibit the use of additives with a specific function and there are adopted provisions for additives other than sweeteners (e.g. Pectins (INS 440)) in FC 14.1.3.

Tamarind seed polysaccharide (TSP) was fully evaluated at the 84th JECFA. JECFA allocated an ADI “not specified” for TSP.

Nigeria: Should adopt only food additives that are fully evaluated by JECFA

RU: oppose 2nd CL proposal. In fruit nectar according with PART II: Food Category Descriptors could be used only sweeteners. Using this FA in this FC could misled of consumers

USA: GRAS for use as a stabilizer at 0.2% in beverages including fruit juice and nectars

USA notes that the WG to the GSFA has referred draft provisions for emulsifiers, stabilizers and thickeners to CCPFV at CCFA50 and CCFA51. The report on those discussions is expected to be included under Agenda Item 2- Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies. We recommend that the GSFA WG hold this provision until CCFA has discussed the CCPFV report.

IFU: Supports2nd CL proposal

Food Category No. 14.1.3.2 (Vegetable Nectar)

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP		3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Hold pending discussions on matters referred from CCPFV regarding technological justification of use of emulsifiers, stabilizer, thickeners and gelling agents in this FC

1st and 2nd CL Proposal: Refer to CCPFV for technological justification

Comments by EWG Members:

Costa Rica, Guatemala, Egypt, ICBA: Others have noted existing uses. As there is no parallel Codex commodity standard for vegetable juices/nectars and their corresponding concentrates (unlike for fruit juices/nectars and concentrates), CCFA should be the only committee considering both functional classes and food additive permissions in GSFA categories 14.1.3.2 and 14.1.3.4.

EU: Supports referral to CCPFV

Japan: supports 2nd CL proposal. (for information) Tamarind seed polysaccharide (TSP) is used as stabilizer in vegetable nectars for vending machine use. TSP prevents sedimentation and separation of pulps in those juices/nectars. TSP keeps mouthfeels in products, since TSP does not give stickiness because of low spinnability.

Food category descriptor for this FC does not prohibit the use of additives with a specific function and there are adopted provisions for additives other than sweeteners (e.g. Pectins (INS 440)) in FC 14.1.3.

Tamarind seed polysaccharide (TSP) was fully evaluated at the 84th JECFA.JECFA allocated an ADI “not specified” for TSP.

Nigeria: Should adopt only food additives that are fully evaluated by JECFA

RU: oppose 2nd CL proposal. In fruit nectar according with PART II: Food Category Descriptors could be used only sweeteners. Using this FA in this FC could misled of consumers

USA: GRAS for use as a stabilizer at 0.2% in beverages including fruit juice and nectars

USA notes that the WG to the GSFA has referred draft provisions for emulsifiers, stabilizers and thickeners to CCPFV at CCFA50 and CCFA51. The report on those discussions is expected to be included under Agenda Item 2- Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies. We recommend that the GSFA WG hold this provision until CCFA has discussed the CCPFV report.

IFU: Supports 2nd CL proposal

Food Category No. 14.1.3.3 (Concentrates from fruit nectar)

Corresponding commodity standards: 247-2005 (permits food additives in accordance with the GSFA

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP		3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Hold pending discussions on matters referred from CCPFV regarding technological justification of use of emulsifiers, stabilizer, thickeners and gelling agents in this FC

1st and 2nd CL Proposal: Refer to CCPFV for technological justification

Comments by EWG Members:

Costa Rica, Guatemala, Egypt, ICBA: As others have noted existing uses. On the question of whether these provisions should be referred to CCPFV, Guatemala believes only the question of functional class (if warranted) should be deferred to CCPFV if other additives with similar functions do not already exist in the relevant Codex Commodity Standard. As pectin is permitted in the Codex Fruit Juice/Nectar standard, and is typically used as a stabilizer, then the is of the view that all stabilizers are technologically justified in fruit juices, nectars and their concentrates. The discussion of endorsing appropriate levels for a particular additive with stabilizer function for fruit juices/nectars would now befall on CCFA. Thus, relative to tamarind seed polysaccharide, CCFA is the appropriate body to contemplate **levels of use** for tamarind seed polysaccharides as stabilizers in fruit nectars and their corresponding concentrates.

EU: Supports referral to CCPFV

Japan: Japan supports 2nd CL proposal. (for information) Tamarind seed polysaccharide (TSP) is used as stabilizer in concentrate from fruit nectars. TSP prevents sedimentation and separation of pulps in those juices/nectars. TSP keeps mouthfeels in products, since TSP does not give stickiness because of low spinnability.

Food category descriptor for this FC does not prohibit the use of additives with a specific function and there are adopted provisions for additives other than sweeteners (e.g. Pectins (INS 440)) in FC 14.1.3.

Tamarind seed polysaccharide (TSP) was fully evaluated at the 84th JECFA. JECFA allocated an ADI “not specified” for TSP.

Nigeria: Should adopt only food additives that are fully evaluated by JECFA

RU: oppose 2nd CL proposal. In fruit nectar according with PART II: Food Category Descriptors could be used only sweeteners. Using this FA in this FC could misled of consumers

USA: GRAS for use as a stabilizer at 0.2% in beverages including fruit juice and nectars

USA notes that the WG to the GSFA has referred draft provisions for emulsifiers, stabilizers and thickeners to CCPFV at CCFA50 and CCFA51. The report on those discussions is expected to be included under Agenda Item 2- Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies. We recommend that the GSFA WG hold this provision until CCFA has discussed the CCPFV report.

IFU: Supports 2nd CL proposal

Food Category No. 14.1.3.4 (Concentrates from vegetable nectar)

Corresponding commodity standards: None

General Note: Information provided by Japan in CX/FA 19/51/8

- **New provision.** Submitted by Japan at CCFA51 (CX/FA 19/51/8). See FC 01.2.1 for further information.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
TAMARIND SEED POLYSACCHARIDE	437	GMP		3	Emulsifier, Stabilizer, Thickener, Gelling Agent	Hold pending discussions on matters referred from CCPFV regarding technological justification of use of emulsifiers, stabilizer, thickeners and gelling agents in this FC

1st and 2nd CL Proposal: Refer to CCPFV for technological justification

Comments by EWG Members:

Costa Rica, Guatemala, Egypt, ICBA: As others have noted existing uses, ICBA defers to others to provide the necessary justification and safety arguments for any particular level. As there is no parallel Codex commodity standard for vegetable juices/nectars and their corresponding concentrates (unlike for fruit juices/nectars and concentrates), CCFA should be the only committee considering both functional classes and food additive permissions in GSFA categories 14.1.3.2 and 14.1.3.4.

EU: Supports referral to CCPFV

Japan: supports the 2nd CL proposal.

(for information) Tamarind seed polysaccharide (TSP) is used as stabilizer in concentrate from fruit nectars. TSP prevents sedimentation and separation of pulps in those juices/nectars. TSP keeps mouthfeels in products, since TSP does not give stickiness because of low spinnability.

RU: oppose proposal. In fruit nectar according with PART II: Food Category Descriptors could be used only sweeteners. Using this FA in this FC could misled of consumers

Nigeria: Should adopt only food additives that are fully evaluated by JECFA

USA: GRAS for use as a stabilizer at 0.2% in beverages including fruit juice and nectars

USA notes that the WG to the GSFA has referred draft provisions for emulsifiers, stabilizers and thickeners to CCPFV at CCFA50 and CCFA51. The report on those discussions is expected to be included under Agenda Item 2- Matters Referred by the Codex Alimentarius Commission and other subsidiary bodies. We recommend that the GSFA WG hold this provision until CCFA has discussed the CCPFV report.

IFU: Supports 2nd CL proposal

Appendix 5: Provisions for nitrates (INS 251, 252) and nitrites (INS 249, 250) in the Step process or adopted (ingoing and residual use levels).

Among several topics, CCFA51 requested the EWG on the GSFA to CCFA52 to consider:[1]

- provisions for nitrates (INS 251, 252) and nitrites (INS 249, 250) in the Step process or adopted for both ingoing use and residual levels.

Introduction

1. GSFA provisions for nitrates and nitrites in the step process were circulated for comment by the electronic working group (EWG) on the GSFA to CCFA48, which formulated proposals for these provisions as reported in CX/FA 16/48/7. During discussion of these proposals at the physical working group (PWG) on the GSFA to CCFA48, concerns were raised by some Members as to the expression of the maximum use levels for these additives as ingoing amount and/or residual amount, the appropriate maximum use levels, and safety of their use. After consideration of this issue, the PWG agreed to propose to CCFA48 that a discussion paper be drafted to further explore the issues related to nitrates and nitrites.[2] CCFA48 considered this proposal and agreed that the Netherlands would prepare a discussion paper identifying concerns for the food additive uses of nitrates and nitrites for consideration at CCFA49.[3]

2. At CCFA49 the Netherlands introduced the discussion paper (CX/FA 17/49/11) and explained the three main concerns identified: expression of maximum use levels as ingoing and/or residual amounts; the technological need that reflects the benefits and risks from the use of these additives; and appropriate use levels that take into account the acceptable daily intake (ADI) for these additives. The CCFA Chairperson, noted that the paper covered matters related both to risk management and risk assessment, and proposed to focus the discussion on how best to refine the paper to facilitate future work of both CCFA and the Joint Expert Committee on Food Additives (JECFA) on this topic. CCFA49 agreed to establish an EWG chaired by the European Union (EU) and co-chaired by the Netherlands to analyze which issues identified in the discussion paper could be addressed by CCFA and for which issues further scientific advice was required. This discussion paper would also explore risk management approaches for CCFA on the use of these additives, and clarify the scope of questions to be addressed by JECFA or other appropriate FAO/WHO scientific advice bodies.[4]

3. At CCFA50, the EU introduced a discussion paper based upon the work of the EWG on nitrates and nitrites to CCFA50 (CX/FA 18/50/9). During that discussion, it was noted that further proposals on next steps had been outlined by the Secretariat for JECFA in a related conference room document (CRD).[5] As a result of the discussion on this topic, CCFA50 agreed to establish an EWG, chaired by the EU and co-chaired by the Netherlands, collect information on various topics including: risk-management approaches on nitrates and nitrites utilized by the regulatory agencies of Codex Members, the expression of maximum use levels (MLs), which food products use nitrates and nitrites, information on natural occurrence data on nitrates and nitrites, and the need for further risk assessment.[6]

4. At CCFA51 the EU introduced a discussion paper based upon the work of the EWG on nitrates and nitrites to CCFA51 (CX/FA 19/51/9). The EU noted that the EWG had formulated two recommendations pertaining to:

a. the scientific advice from JECFA that would be needed for further risk assessment on this topic; and

b. the expression of nitrates and nitrites within the context of the GSFA.

---

[1] REP 19/FA, para. 137.
[2] CRD2, CCFA48.
[3] REP16/FA, para 61.
[4] REP17/FA, paras. 103-106
[5] CRD6, CCFA50.
[6] REP 18/FA, Paras 94-104.

5. CCFA51 considered these recommendations and agreed:

a. to request the Codex Secretariat, in consultation with the JECFA secretariat, to issue a Circular Letter for further information on dietary exposure to nitrates and nitrites including information on natural occurrence levels and levels occurring from the use of nitrates and nitrites as food additives; and

b. that CCFA take a risk management approach to the use of nitrates and nitrites as food additives that would include both ingoing and residual amounts.

6. Related to the consensus on a risk management approach to the use of nitrates and nitrites as food additives, CCFA51 agreed to establish ingoing and residue use levels for nitrates and nitrites in the GSFA, and to request the EWG on the GSFA to CCFA52 to circulate and formulate proposals for all provisions (both adopted and in the step process) for nitrates and nitrites in the GSFA taking into account information contained in Tables 2 and 3 of document CX/FA 19/51/9.[7]

Procedure of the EWG to CCFA52

7. In the first and second circular letters for the EWG on the GSFA to CCFA52, EWG members were invited to comment on 5 general topics raised in CX/FA 19/51/19 that could influence the approach taken to address the individual provisions for the use of nitrates and nitrites in specific foods. The topics included (1) the reporting basis for both incoming and residual levels and how both incoming and residual levels would be recorded in the same provision; (2) if the MLs for provisions for nitrates and nitrites in the same food category should be linked; (3) whether it was appropriate in certain food categories to express the MLs “on a meat basis”; (4) a proposal that the use of additional food additives used in conjunction with nitrates and nitrites be the subject of a separate food additive provision; and (5) whether provisions for nitrates and nitrites should account for testing timeframes for residual levels. EWG members were also invited to provide comment and information on actual use, ingoing use levels, and residual levels for individual provisions for nitrates and nitrites in the GSFA.

8. The EWG was able to reach consensus for most of point 1 and points 2 through 5. Specifically 1) provisions would report the ingoing amount as the ML with a footnote designating the residual level, and that the ingoing level would be set on the corresponding ion basis (Nitrate: “as NO3 ion”; Nitrites: “As NO2 ion”) as well as the residual level for nitrites (“As NO2 ion”); 2) that discussion on linking nitrate and nitrite use in the same food category should be postponed until consensus is reached on a reporting basis for the nitrate provisions; 3) that MLs should be based on the product as marketed and not on a “meat basis”; 4) the use of additional food additives used in conjunction with nitrates and nitrites should be the subject of separate food additive provisions; and 5) specifying testing timeframes for residual levels is not necessary.

Recommendations

9. The EWG was not able to reach consensus on one aspect of point 1(whether the residual levels for nitrates should be reported on an NO3 or NO2 basis). In response to the first circular, some EWG members expressed support for reporting nitrate residual levels as NO2 while other EWG members supported reporting residuals as combined NO3/NO2 level. In the second circular, EWG members were asked for comment on the potential advantage or disadvantage of these approaches. Many of the disadvantages identified by EWG members pertained to whether Members had access to appropriate methods and/ or equipment to test for combined NO3/NO2 levels and whether tests are sufficiently reliable for the purpose of measuring the appropriate residual value.

10. In the third circular, the EWG Chair noted that the EWG would first need to reach consensus on the reporting basis for the residual levels for nitrates prior to discussing numeric levels for specific nitrate provisions. Furthermore, consensus on the reporting basis for residual levels for nitrates could not be reached until the disadvantages pertaining to test methods identified in comments to the second circular were addressed. The EWG Chair also noted that establishing test criteria and identifying appropriate methods falls within the purview of the

[7] REP 19/FA, Paras 100-107.

Codex Committee on Methods of Analysis and Sampling (CCMAS). To address the Chair's observations, the third circular invited EWG members to comment on a proposal that CCFA request CCMAS to establish criteria for the detection of nitrate and nitrite ions in a variety of food matrices corresponding to the food types for which there existed provisions for nitrates and nitrites, specifically dairy (cheese), meat, and seafood. This information could be taken into account by a subsequent CCFA EWG when determining the appropriate reporting basis for residual levels. The proposal also included a request that CCMAS identify available methods suitable to meet the established criteria. To support this work, the third circular also requested EWG members to provide any available information on test methods being used to detect nitrate and nitrite ions in food matrices. The majority of comments submitted to the third circular were in support of this proposal.

Recommendation 1

The EWG recommends that CCFA52 request the Codex Committee on Methods of Analysis and Sampling (CCMAS) to establish criteria for the detection of nitrate and nitrite ions in a variety of food matrices specifically dairy (cheese), meat, and seafood. CCMAS is also asked to provide information on available methods for detection that meet the established criteria, and in addition whether the method can detect both ions and if so whether the method detects each ion separately or only in combination.

To support CCMAS' analysis, the EWG recommends that CCFA52 provide CCMAS with the test method information provided by EWG members as contained in Annex 1.

11. In their reply to the third circular, some members expressed that it is only possible to establish performance criteria for analytical methods when it is clear what is the magnitude of the measurement. Therefore, CCMAS must be informed about the actual Max Limits that would be adopted (including the chosen basis: NO2, NO3, NaNO2, combined basis). These EWG members expressed that it is necessary to conclude the discussion on the provisions for nitrate and nitrite within CCFA before requesting CCMAS's assistance on this matter. However, the Chair of the EWG notes that comments from the EWG indicated that information on available test methods was necessary in order to inform the EWG's discussion on residual reporting basis. The EWG Chair also notes that the EWG was requested in the first and second circular to provide information on proposed residual levels for specific provisions under consideration. In addition, information could also be provided on residual levels in currently adopted provisions for nitrates and nitrites. These levels should be indicative of the levels that CCFA will consider in the future.

Recommendation 2

The EWG Chair recommends that CCFA52 provide to the Codex Committee on Methods of Analysis and Sampling (CCMAS):

- information on adopted provision for nitrates is included in Food Categories 01.6.2 (Ripened cheese) and adopted provisions for nitrites in Food Categories 08.2.2 (Heat treated processed meat, poultry, and game products in whole pieces of cuts), and 08.3 (Processed comminuted meat, poultry, and game products).

- information on the lowest proposed residual levels for representative provisions in dairy (cheese), meat, and seafood as provided by EWG Members in response to requests for comment to the first and second circulars as contained in Annex 2.

Attachments to the Appendix

Compilation of comments on available test methods for nitrates and nitrites – Annex 1

12. Annex 1 compiles the responses of the EWG on the third circular request for information on the available methods for testing nitrate and nitrite ions, including a proposal to request guidance from the Codex Committee

on Methods of Analysis and Sampling (CCMAS) on criteria and applicable test methods and that EWG Members provide available information on test methods being used to detect nitrate and nitrite ions in food matrices.

Compilation of comments on available test methods for nitrates and nitrites – Annex 2

13. Annex 2 provides information on the lowest proposed residual levels for representative provisions in dairy (cheese), meat, and seafood as provided by EWG Members in response to requests for comment to the first and second circulars.

Compilation of Comments and Discussion on General Topics, Actual Use, Ingoing and Residual Use Levels

14. A full compilation of comments and information submitted for Appendix 5 (Nitrates and Nitrites) to the first and second circulars on general topics raised in CX/FA 19/51/19 and on actual use, ingoing use levels, and residual levels for individual provisions for nitrates and nitrites in the GSFA are available on CCFA52 webpage.

Annex 1- Replies to the third circular: Summary of comments on available test methods for nitrates and nitrites

Chair's Observation and Proposal: In the second circular, EWG members were invited to provide comments on the advantages and disadvantages of reporting residuals for nitrates on the NO2 basis or the combined NO2 and NO3 basis. Significant advantages and disadvantages were identified for both reporting bases. Many of the disadvantages centered on whether appropriate test methods and/ or equipment are available to EWG members and whether tests are sufficiently reliable for the purpose of measuring the appropriate residual value. Before the EWG can make decisions on the appropriate reporting basis for residuals, further consideration of applicable methods and criteria is needed.

Responses to the second circular have expressed concerns that the EWG must reach consensus on the reporting basis for the residuals before the residuals MLs for the adopted, draft and proposed draft provisions can be considered, given the questions on the reporting basis. Based on the comments submitted to the second circular, it is unlikely that the EWG would reach consensus on the reporting basis for the residuals. In order for the EWG to determine the accurate reporting basis, further information on the criteria and available test methods for testing nitrate and nitrite residuals in the appropriate food matrices is needed.

Establishing test criteria and identifying appropriate methods falls within the purview of the Codex Committee on Methods of Analysis and Sampling (CCMAS). The Chair recommends that the EWG request CCMAS establish criteria for the detection of nitrate and nitrite ions in a variety of food matrices, particularly dairy (cheese), meat and seafood. The request should also ask CCMAS to identify available methods suitable to meet the established criteria. To support this work, EWG members are requested to provide any available information on test methods being used to detect nitrate and nitrite ions in food matrices.

After input from CCMAS has been received, a future EWG on the GSFA could be tasked with requesting that industry survey products and provide information to CCFA on the existing residual levels of nitrate and nitrite ions, inclusive of naturally occurring sources, to be considered when establishing residual levels. A future EWG on the GSFA would also need to be tasked with determining the appropriate reporting basis for the residuals, and circulating the adopted, draft and proposed draft provisions for consideration of the appropriate ingoing and residual levels.

The EWG was invited to provide comments on the proposal using the table below.

Topic 1- Available test methods: EWG members are invited to provide information on available test methods which are currently being used to analyze residual nitrates and nitrites on the NO2 or NO3 basis or the combined NO2 and NO3 basis to be shared with CCMAS. EWG members are requested to provide citations for referenced methods if available.
EWG comments on Topic 1: **Australia:** Taken from FSANZ's SURVEY OF NITRATES AND NITRITES IN FOOD AND BEVERAGES IN AUSTRALIA (2011) https://www.foodstandards.gov.au/science/surveillance/pages/surveyofnitratesandn5368.aspx Table 2: Methods of Analysis for nitrate and nitrite

Laboratory	Method	Reference

Queensland Health Scientific Services, Australia	FIA/ Spectrophotometry	QIS 12641 based on the method of Kirk and Sawyer in Pearson's Composition and Analysis of foods
National Measurement Institute, Australia	Ion chromatography	Based on method 4110B from APHA Standard method for the examination of waters. 20th Edition
SymBio Alliance, Australia	Spectrophotometry	NATA accredited method based on AOAC 973.31

Brazil: CXS 239/2003 refers to EN 12014-1:1997-04. It was not possible to confirm if the method EN 12014-1:1997-04 is for detection of NO2 and NO3 individually or in combination.

Brazilian Ministry of Agriculture established the following methods for NO2 and NO3 level analysis: NMKL 165 (nitrites and nitrates), NMKL 194 (nitrites and nitrates) or ISO 2918 (nitrites) and ISO 3091 (nitrates). In all cases, results are expressed in grams of NaNO2/100 g.

Chile: Hsu J, Arcot J, Lee NA (2009) Nitrate and nitrite quantification from cured meat and vegetables and their estimated dietary intake in Australians. Food Chem 115:334–339

Wootton M, Kok SH, Buckle KA (2006) Determination of nitrite and nitrate levels in meat and vegetable products by high performance liquid chromatography. J Sci Food Agric 36:297–304

McMullen SE, Casanova JA, Gross LK, Frank J, Schenck FJ (2005) Ion chromatographic determination of nitrate and nitrite in vegetable and fruit baby foods. J AOAC Int 88:1793–1796

AOAC. 2000. Association of Official Analytical Chemists. Official method of analysis. Nitrites in cured meats-colorimetric method, Official AOAC Method 973. Arlington, VA: AOAC.

MERINO ET AL.: JOURNAL OF AOAC INTERNATIONAL VOL. 83, NO. 2, 2000

Wootton M, Kok SH, Buckle KA (2006) Determination of nitrite and nitrate levels in meat and vegetable products by high performance liquid chromatography. J Sci Food Agric 36:297–304

Malingappa Pandurangappa & Yarradoddappa Venkataramanappa Quantification of Nitrite/Nitrate in Food Stuff Samples Using 2-Aminobenzoic Acid as a New Amine in Diazocoupling Reaction. Food Anal. Methods (2011) 4:90–99. DOI 10.1007/s12161-010-9138-4.

SHIN-SHOU CHOU, JEN-CHIEN CHUNG, AND DENG-FWU HWANG. A High Performance Liquid Chromatography Method for Determining Nitrate and Nitrite Levels in Vegetables. Journal of Food and Drug Analysis, Vol. 11, No. 3, 2003, Pages 233-238

Damian Connolly, Brett Paull Rapid determination of nitrate and nitrite in drinking water samples using ion-interaction liquid chromatography. Analytica Chimica Acta 441 (2001) 53–62.

Ferreira, I. M. P. L. V. O & Silva, S. (2008). Quantification of residual nitrite and nitrate in ham by reverse-phase high performance liquid chromatography/diode array detector. Talanta 74:1598-1602.

UNE-EN 12014-1: 1997. Food products. Determination of nitrate and / or nitrite content. Part 1: General.

UNE-EN 12014-1 / A1: 2001. Food products. Determination of nitrate and / or nitrite content. Part 1: General.

UNE-EN 12014-2: 2018. Food products. Determination of nitrate and / or nitrite content. Part 2: Method by high performance ion exchange liquid chromatography (HPLC / IC) for the determination of nitrate content in vegetables and horticultural products.

UNE-EN 12014-3: 2006. Food products. Determination of nitrate and / or nitrite content. Part 3: Spectrometric determination of nitrate and nitrite content in meat products after enzymatic reduction of nitrate to nitrite.

UNE-EN 12014-4: 2006. Food products. Determination of nitrate and / or nitrite content. Part 4: Method by ion chromatography (IC) for the determination of nitrate and nitrite content in meat products.

UNE-EN 12014-5: 1997. Food products. Determination of nitrate and / or nirite content. Part 5: Enzymatic determination of nitrate content in food based on vegetables, for children and babies.

UNE-EN 12014-7: 2000 Food products. Determination of nitrate and / or nitrite content. Part 7: Continuous flow method for the determination of nitrate content in vegetables and products derived from vegetables after reduction with cadmium.

Colombia: Currently, in Colombia there is no determination of Nitrates, Colombia only makes determination for Nitrites in meat products, under the analytical method of LAFQAB which is based on the test method AOAC 973.31 (Codex adopts AOAC method), in which you can also find the test method AOAC 935.48 for the determination of Nitrates and Nitrites in Meat

EU: The EU provides for below the references to the analytical methods captured in the EFSA opinions related to nitrates and nitrites:

Nitrite as undesirable substances in animal feed, EFSA Journal (2009) 1017, 1-47

Re-evaluation of potassium nitrite (E 249) and sodium nitrite (E 250) as food additives, EFSA Journal 2017;15(6):4786

Re-evaluation of sodium nitrate (E 251) and potassium nitrate (E 252), EFSA Journal 2017;15(6):47

The European Committee of Standardization (CEN) methods for the determination of nitrate and/or nitrite content of vegetables, vegetable products, including vegetable containing food for babies and infants as well as in meat and meat products (EN (12014):

EN 12014-1 1997a. Revision-A1 (1999). Foodstuffs — Determination of nitrate and/or nitrite content — Part 1: General considerations. European Committee for Standardization (CEN). http://www.cen.eu.

EN 12014-2 1997b. Foodstuffs — Determination of nitrate and/or nitrite content — Part 2: HPLC/IC method for the determination of nitrate content of vegetables and vegetable products. European Committee for Standardization (CEN). http://www.cen.eu.

EN 12014-5 1997c. Foodstuffs — Determination of nitrate and/or nitrite content — Part 5: Enzymatic determination of nitrate content of vegetable-containing food for babies and infants. European Committee for Standardization (CEN). http://www.cen.eu.

EN 12014-7 1998. Foodstuffs — Determination of nitrate and/or nitrite content — Part 7: Continuous flow method for the determination of nitrate content of vegetables and vegetable products after Cadmium reduction. European Committee for Standardization (CEN). http://www.cen.eu.

EN 12014-3 2005a. Foodstuffs — Determination of nitrate and/or nitrite content — Part 3: Spectrometric determination of nitrate and nitrite content of meat products after enzymatic reduction of nitrate to nitrite. European Committee for Standardization (CEN). http://www.cen.eu.

EN 12014-4 2005b. Foodstuffs — Determination of nitrate and/or nitrite content — Part 4: Ion-exchange chromatographic (IC) method for the determination of nitrate and nitrite content of meat products. European Committee for Standardization (CEN). http://www.cen.eu.

ISO methods for the determination of nitrate and nitrite

In milk and milk products (also can determine nitrite and nitrate ions separately)

ISO (International Organization for Standardization), 2004a. Milk and milk products — determination of nitrate and nitrite contents – Part 1: method using cadmium reduction and spectrometry. EN ISO 14673–1:2004. ISO, Geneva.

ISO (International Organization for Standardization), 2004b. Milk and milk products — determination of nitrate and nitrite contents — Part 2: method using segmented flow analysis (routine method). EN 14673-2:2004. ISO, Geneva.

ISO (International Organization for Standardization), 2004c. Milk and milk products — determination of nitrate and nitrite contents — Part 3: method using cadmium reduction and flow injection analysis with in-line dialysis (routine method). EN 14673-3:2004. ISO, Geneva.

In meat and cheese

ISO 2918:1975 Meat and meat products -- Determination of nitrite content (Reference method)

ISO 4099:1984 Cheese -- Determination of nitrate and nitrite contents -- Method by cadmium reduction and photometry

AOAC INTERNATIONAL

AOAC, 2005. Official Methods of Analysis of AOAC International, 17th. AOAC International, Gaithersburg, MD. Two photometric methods for the determination of nitrate/nitrite in meat and cured meat. One of them adopted as a Codex Reference method (Type II) for nitrite and potassium and/or sodium salts in canned corned beef and luncheon meat.

IARC

IARC (International Agency for Research on Cancer), 2010. Ingested nitrate and nitrite, and cyanobacterial peptide toxins. IARC Monographs on the Evaluation of Carcinogenic Risks to Humans, 94, v–vii, 1–412. The report includes analytical methods for nitrates and nitrites. The majority of the methods were for analysis in water. Some of the methods included were for matrices relevant to the use of sodium and potassium nitrites as additives in foodstuffs – meat and meat products, cured meats and curing preparations.

Methods for the simultaneous determination of nitrate and nitrite

Chromatography:

Butt SB, Riaz M and Iqbal MZ, 2001. Simultaneous determination of nitrite and nitrate by normal phase ion-pair liquid chromatography. Talanta 55 (4), 789-797.

Siu DC and Henshall A, 1998. Ion chromatographic determination of nitrate and nitrite in meat products. Journal of Chromatography A 804, 157-160.

McMullen, S.E., Casanova, J.A., Gross, L.K. and Schenck, F.J. 2005. Ion chromatographic determination of nitrate and nitrite in vegetable and fruit baby foods. Journal of AOAC International 88, 1793-1796.

Stalikas CD, Konidari CN and Nanos CG, 2003. Ion chromatographic method for the simultaneous determination of nitrite and nitrate by post-column indirect fluorescence detection. Journal of Chromatography A 1002, 237-241.

Merino, L., Edberg, U., Fuchs, G. and Aman, P. 2000. Liquid chromatographic determination of residual nitrite/nitrate in foods: NMKL collaborative study. Journal of AOAC International 83, 365-375.

Di Matteo V and Esposito E, 1997. Methods for the determination of nitrite by highperformance liquid chromatography with electrochemical detection. Journal of Chromatography A 789 (1-2), 213-219.

Lammarino M, Di Taranto A and Cristino M, 2013. Endogenous levels of nitrites and nitrates in wide consumption foodstuffs: results of five years of official controls and monitoring. Food Chemistry, 140, 763–771.

Croitoru MD, 2012. Nitrite and nitrate can be accurately measured in samples of vegetal and animal origin using an HPLC-UV/VIS technique. Journal of Chromatography B, 911, 154–161.

Electrophoresis:

Oztekin N, Nutku MS and Erim FB, 2002. Simultaneous determination of nitrite and nitrate in meat products and vegetables by capillary electrophoresis. Food Chemistry 76, 103-106.

Spectrophotometry:

Ensafi AA, Rezaei B and Nouroozi S, 2004. Simultaneous spectrophotometric determination of nitrite and nitrate by flow injection analysis. Analytical Sciences 20 (12), 1749-1753.

Casanova JA, Gross LK, McMullen SE and Schenck FJ, 2006. Use of Griess reagent containing vanadium(III) for post-column derivatization and simultaneous determination of nitrite and nitrate in baby food. Journal of AOAC International 89 (2), 447-451.

Andrade R, Viana CO, Guadagnin SG, Reyes FGR and Rath S, 2003. A flow-injection spectrophotometric method for nitrate and nitrite determination through nitric oxide generation. Food Chemistry 80, 597-602.

Kazemzadeh A and Ensafi AA, 2001. Sequential flow injection spectrophotometric determination of nitrite and nitrate in various samples. Analytica Chimica Acta 442, 319-326.

NMKL (Nordic Committee on Food Analysis), 2013. Determination of nitrate and/or nitrite in foodstuffs and water by spectrophotometry after zinc reduction and Griess reaction. NMKL No. 194.

Chung SWC, Tran JCH, Tong KSK, Chen MYY, Xiao Y and Ho YY, 2011. Nitrate and nitrite levels in commonly consumed vegetables in Hong Kong. Food Additives and Contaminants, 4, 34–41.

Leth T, Fagt S, Nielsen S and Andersen R, 2008. Nitrite and nitrate content in meat products and estimated intake in Denmark from 1998 to 2006. Food Additives and Contaminants, 25, 1237–1245.

Methods for the quantitative determination of nitrite alone

Kinetic methods:

Koupparis MA, Walczak KM and Malmstadt HV, 1982. Determination of nitrite in waters by using a stopped-flow analyzer. Analyst 107, 1309-1315.

Liang B, Iwatsuki M and Fukasawa T, 1994. Catalytic spectrophotometric determination of nitrite using the chlorpromazine hydrogen-peroxide redox reaction in acetic-acid. Medium. Analyst 119, 2113-2117.

Spectrophotometry:

Ensafi AA and Dehaghei GB, 1999. Ultra-trace analysis of nitrite in food samples by flow injection with spectrophotometric detection. Fresenius Journal of Analytical Chemistry 363 (1), 131-133.

Ghasemi J, Jabbari A, Amini A, Oskoei AG and Abdolahi B, 2004. Kinetic spectrophotometric determination of nitrite based on its catalytic effect on the oxidation of methyl red by bromate. Analytical Letters 37 (10), 2205-2214.

Fang YJ, Chen H, Gao ZX and Jing XL, 2002. Flow injection determination of nitrite in food samples by dialysis membrane separation and photometric detection. International Journal of Environmental Analytical Chemistry 82 (1), 1-6.

Chen H, Fang YJ, An TC and Jin XL, 1999. Flow-injection catalytic spectrophotometric determination of trace amounts of nitrite. Analytical Letters 32 (14), 2887-2897.

Ensafi AA and Keyvanfard M, 1994. Selective kinetic spectrophotometric determination of nitrite in food and water. Analytical Letters 27 (1), 169-182.

Chemiluminescence:

He D, Zhang ZW, Huang Y and Hu Y, 2007. Chemiluminescence microflow injection analysis system on a chip for the determination of nitrite in food. Food Chemistry 101 (2), 667-672.

Fluorescence:

Li JS, Wang H, Zhang X and Zhang HS, 2003. Spectrofluorimetric determination of total amount of nitrite and nitrate in biological sample with a new fluorescent probe 1,3,5,7-tetramethyl-8-(3',4'-diaminophenyl)-difluoroboradiaza-s-indacence. Talanta 61 (6), 797-802.

Jie N, Yang D, Jiang Q, Zhang Q and Wei L, 1999. A fluorescence quenching method for the determination of nitrite with indole. Microchemical Journal 62 (3), 371-376.

Jie NQ, Yang JH and Li JS, 1994. Fluorometric-determination of nitrite using a new reagent system. Analytical Letters 27, 1001-1008.

Jie N, Yang J and Meng F, 1993. Fluorimetric determination of nitrite. Talanta 40 (7), 1009-1011.

Gao Q, 2002. Uric acid-hexacyanoferrate (III)-luminol chemiluminescence system for the determination of trace nitrite. Chinese Journal of Analytical Chemistry 30 (7), 812-814.

Optical sensor technology:

Kazemzadeh A, 2005. Development of new optical nitrite detector. Asian Journal of Chemistry 17 (2), 767-773.

Kazemzadeh A and Daghighi S, 2005. Optical nitrite sensor based on chemical modification of a polymer film. Spectrochim Acta A Mol Biomol Spectrosc 61 (8), 1871-1875.

Dipstick technology:

Fang YJ, Gao ZX, Yan SL, Wang HY and Zhou HY, 2005. A dip-and-read test strip for the determination of nitrite in food samples for the field screening. Analytical Letters 38 (11), 1803-1811.

Indonesia: Currently, available test method that uses in Indonesia for analyze nitrate and nitrite is Spectrophotometric (Egan, H., Kirk, R.S. and Sawyer, R. 1981. Pearson's Chemical Analysis of Foods. 8th Edition, Churchill Livingstone, London, New York).

Malaysia: Determination of Nitrite and Nitrate in Meat using Ion Chromatography (Methrohm): US Environmental Protection Agency, (EPA Method 9056A), Rev. 1, Nov. 2000

Thailand: The test method for analysis of residual nitrates and nitrites in food is High Performance Liquid Chromatography (HPLC) Method - UV detector (Journal of Food and drug Analysis, Vol.11, No.3, 2003, pages 233-238.).

IDF: IDF and ISO (International Organisation for Standardization) have developed several standardized methods for the determination of nitrate and nitrite in dairy products. Precision figures can be provided.

1. ISO 14673-1 | IDF 189-1: 2004 – Milk and milk products – Determination of nitrate and nitrite – Part 1: Method using cadmium reduction and spectrometry

Scope:This standard specifies a method for the determination of the nitrate and nitrite contents of milk and milk products by cadmium reduction and spectrometry. The method is applicable to: whole and partly skimmed and skimmed dried milk; hard, semi-hard and soft cheeses; processed cheese; whey cheese, caseins and caseinates and dried whey.

The method may be performed using automatic equipment, in particular by segmented flow analysis (SFA) or flow injection analysis (FIA), thus reducing cadmium contamination in laboratory work places and waste water.

Principle:A test portion is dispersed in warm water, with precipitation of the fat and proteins, then filtration. The nitrate ions are reduced to nitrite ions in a portion of the filtrate by means of copperized cadmium.A red colour is developed in portions of both unreduced filtrate and the reduced solution, by addition of sulfanilamide and N-1-naphthyl ethylenediamine dihydrochloride. Spectrometric measurements are carried out at a wavelength of 538 nm.

The nitrite content of the sample and the total nitrite content after reduction of nitrate ions are calculated by comparing the measured absorbances with those of a set of sodium nitrite calibration solutions. The nitrate content is calculated from the difference between these two contents.

2. ISO 14673-2 | IDF 189-2: 2004 – Milk and milk products – Determination of nitrate and nitrite – Part 2: Method using segmented flow analysis (Routine method)

Scope: This part of ISO 14673□IDF 189 specifies a routine method for the determination of the nitrate and nitrite contents of milk and milk products by segmented flow analysis. The method is applicable to milk, cheese, and liquid and dried milk products and infant foods.

Principle: A test portion is suspended in water. Part of the suspension is transferred to the analyser for dialysis. The nitrate ions are reduced to nitrite. The nitrite content is determined by a spectrometric method.

Standard nitrate solutions are determined by the same procedure. The nitrate content is calculated bycomparing the reading obtained from the test portion with the readings from the standard solutions.

NOTE Any nitrite present is determined as nitrate. The amount of nitrite is generally small compared to the amount of nitrate. Infant food based on soy-proteins can be an exception to the rule. A correction for the nitrite present can be applied after determination of the nitrite content.

3. ISO 14673-3 | IDF 189-3: 2004 – Milk and milk products – Determination of nitrate and nitrite – Part 3: Method using cadmium reduction and flow injection analysis with in-line dialysis (Routine method)

Scope: This part of ISO 14673|IDF 189 specifies a routine method for the determination of the nitrate and nitrite contents of milk and milk products by cadmium reduction and flow injection analysis (FIA). The method is applicable to hard, semi-hard and soft cheeses of various ages, and processed cheese. The detection limits of the method are 0,5 mg of nitrate ions per kilogram and 1,0 mg of nitrite ions per kilogram. The method is also applicable to whey powder, milk powder and milk-based infant food.

NOTE 1 The method closely resembles the FIA method described in reference [2] for the determination of nitrate and nitrite in milk and fluid dairy products. Adaptations were made to allow for the analysis of cheese and to obtain sufficient sensitivity for the determination of low levels of nitrite in cheese and milk-based infant foods.

NOTE 2 For determination of nitrite and nitrate following cadmium reduction, use is made of the same colour reaction as described in ISO 14673-1|IDF 189-1.

Principle

4.1 A test portion is suspended in a warm extraction buffer solution. Fat is separated by centrifuging and rapid cooling. Analyses are made of small portions of the de-fatted solution by flow injection analysis (FIA). Inline dialysis is used to remove protein and remaining fat. The nitrate ions are reduced to nitrite ions by cadmium. The nitrite ions are reacted with sulfanilamide and N-1-naphthyl ethylenediamine dihydrochloride to give a red-coloured azo dye. The colour is measured in a flow cell at maximum absorption of the dye at 540 nm with reference to the absorption measured at 620 nm.

4.2 The nitrite and nitrate contents of the test sample are calculated with reference to the measured absorbances for a series of standard solutions of nitrite and nitrate, respectively. If the nitrite content exceeds 0,5 mg/kg, or exceeds 10 % of the nitrate content, correction of the nitrate content is made by subtracting the nitrite content from the obtained nitrate results.

Topic 2- Propose that CCMAS establish criteria and identify available test methods for the detection of nitrate and nitrite ions: The EWG is invited to provide comments on the proposal to request the Codex Committee on Methods of Analysis and Sampling (CCMAS) establish criteria for the detection of nitrate and nitrite ions and provide information on available methods for detection. Information on available test methods collected in response to this circular, as well as the adopted, draft and proposed draft provisions contained in Annex 3 of this document, should be provided to CCMAS to assist in their discussions

EWG comments on Topic 2:

Australia: Australia is supportive of the proposal to ask the CCMAS to establish criteria and identify available test methods for the detection of nitrate and nitrite ions.

It should be noted that Australia does not believe it appropriate for Codex to require a specific method(s) be used. However, it would nevertheless be helpful to identify the methods available and the broad criteria that should be considered in the selection of a suitable analytical method. The criteria should be sufficiently broad to allow the development of new methods in the future.

Brazil: Agrees with requesting CCMAS to provide information on available methods for detection of NO2 and NO3.

Regarding requesting CCMAS to establish criteria for the detection of nitrate and nitrite ions, Brazil supports the establishment of performance criteria (limit of detection, limit of quantification, precision, recovery etc) for detection of nitrate and nitrite ions as has been done recently by CCMAS for other analytes.

Establishing performance criteria is preferable than indicating specific test methods as it allows each country to use the methodology available for them, as long as the criteria are met. However, it is only possible to establish performance criteria for analytical methods when it is clear what is the magnitude of the measurement. Therefore, CCMAS must be informed about the actual Max Limits that would be adopted (including the chosen basis: NO2, NO3, NaNO2, combined basis?). Hence, it is necessary to conclude the discussion on the provisions for nitrate and nitrite within CCFA before requesting CCMAS's assistance on this matter.

Colombia: Colombia supports the proposal to request the Codex Committee on Methods of Analysis and Sampling (CCMAS) establish criteria for the detection of nitrate and nitrite ions and provide information on available methods for detection.

EU: Supports the chair's proposal

Indonesia: Indonesia supports to request the Codex Committee on Methods of Analysis and Sampling (CCMAS) to establish criteria for the detection of nitrate and nitrite ions and provide information on available methods for detection.

Japan: Prior to forwarding CCMAS for consideration, CCFA should decide whether to list appropriate methods of analysis and/or develop a set of criteria to which a method used for the determination must comply. If CCFA decides to develop the criteria, CCFA should also take into consideration for "Working instructions for the implementation of the criteria approach in Codex" in page.77 of 27th edition of Procedural manual.

Methods to analyze nitrates and/or nitrites in meat products are included in Recommended methods of analysis and sampling (CXS 234-1999).

Zimbabwe: supports the proposal to request CCMAS to establish criteria for the detection of nitrate and nitrite ions.

Annex 2- Information on the lowest proposed residual levels for representative provisions in dairy (cheese), meat, and seafood as provided by EWG Members in response to requests for comment to the first and second circulars

Food Additive	Subcategory for which value was provided	Residual ML (mg/kg)	Notes
01.6 (*Cheese and analogues)*			
Nitrate	01.6.2.1 (*Ripened cheese, includes rind*)	7	As NO3
Nitrite	01.6.1 (*Processed cheese*)	2	As NO2
08.0 (*Meat and meat products, including poultry and game*)			
Nitrate	Same residual proposed in multiple food categories including 08.2.1.1 (*Cured (including salted) non-heat treated processed meat, poultry, and game products in whole pieces or cuts*)	7	As NO3
Nitrite	08.2.1.3 (*Fermented non-heat treated processed meat, poultry, and game products in whole pieces or cuts*)	33	As NO2
09.0 (*Fish and fish products, including molluscs, crustaceans, and echinoderms*)			
Nitrate		None reported	
Nitrite	09.3.3 (*Salmon substitutes, caviar, and other fish roe products*)	4.4	As NO2

Appendix 6: Discussion on Adopted, Draft and Proposed Draft Provisions for Sweeteners

Among several topics, the 51st CCFA requested the EWG on the GSFA to CCFA52 to consider:[1]

- Adopted provisions for: alitame (INS 956) for discussion on actual use and use level; acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in subcategories of FC 14.1.4 for discussion on use level; and
- Draft and proposed draft provisions for sweeteners in FCs in lists T, U, and Y of CX/FA 15/47/13 with the exception of those in FCs 07.1, 12.2.2, and 12.3.

Background

1. CCFA50 established the EWG on Note 161 to consider the use of Note 161 related to the use of sweeteners and to review recommendations in a previous discussion paper (CX/FA 19/51/10) in the context of pending and adopted provisions in the GSFA.[2] CX/FA 19/51/10 was the report of an EWG that had considered the current use of sweeteners and whether or not that use was restricted to energy reduced and no-added sugar foods. As a mechanism for this discussion that EWG had considered the existing provisions in the GSFA for the use of three specific sweeteners, and CX/FA 19/51/10 subdivided those food categories into lists based upon the response of EWG members as to how sweeteners were used in those food categories.

2. The EWG on Note 161 to CCFA51 formulated recommendations[3] for provisions in food categories in Lists T, U, and Y in CX/FA 15/47/13. These recommendations included that:

- For adopted provisions: these provisions would be revised to replace Note 161 with a specific alternative note
- For provisions in the step process: these provisions would be revised to replace Note 161 with a specific alternative note and circulated for comment by the EWG on the GSFA to CCFA52.

3. When discussing the report of the EWG on Note 161 to CCFA51, one member expressed concern on the dietary intake corresponding to the maximum use levels for all adopted provisions for alitame (INS 956), as well as for adopted provisions for acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in FC 14.1.4 or their subcategories. This member also requested further discussion on all provisions for sweeteners in FCs 07.1, 12.2.2, and 12.3.[4] CCFA51 agreed to request the EWG on the GSFA to CCFA52 to consider:[5]

- Adopted provisions: all adopted provisions for alitame (INS 956) for discussion on actual use and use level; and adopted provisions for acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in subcategories of FC 14.1.4 for discussion on use level.
- Provisions in the step process: draft and proposed draft provisions for sweeteners in FCs in lists T, U, and Y of CX/FA 15/47/13 with the exception of those in FCs 07.1, 12.2.2, and 12.3.

Working Document:

4. The EWG issued three circulars for comment. The first circular was split into three Annexes and requested the EWG to provide information on the actual use and use level of adopted provisions for alitame (INS 956), requested the EWG to provide information and discussion on actual use level for adopted provisions for acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in subcategories of FC

[1] REP 19/FA, para. 138(i) - (ii)
[2] REP 18/FA, para. 142.
[3] CX/FA 19/51/10
[4] REP 19/FA para 113.
[5] REP 19/FA para 119.

14.1.4., and requested comments on the actual use level necessary to achieve the technical effect and the safety of that use level on draft and proposed draft provisions for sweeteners in FCs in lists T, U, and Y of CX/FA 15/47/13 with the exception of those in FCs 07.1, 12.2.2, and 12.3.

5. The current document contains 3 Annexes.

6. Annex 1 presents proposals for each adopted provision for alitame (INS 956) in the GSFA.

7. Annex 2 presents proposals for each adopted provision for acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and saccharins (INS 954(i)-(iv)) in subcategories of FC 14.1.4.

8. Annex 3 presents proposals for each draft and proposed draft provisions for sweeteners in FCs in lists T, U, and Y of CX/FA 15/47/13 with the exception of those in FCs 07.1, 12.2.2, and 12.3.

9. In the Annexes, the provisions are presented in the format of Table 2 of the GSFA. When a food additive provision from a parent food category is considered in the corresponding subcategories, the provision is indicated in the subcategory in bolded font with no Step indicated in the “Step/Adopted” column.

10. A full compilation of comments submitted for Appendix 6 (Sweeteners) to the three circulars are available on CCFA52 webpage.

Conventions:

11. These recommendations are based on the “weight of evidence”; that is, comments containing justifications were given more weight than comments with no supporting justification.

Annex 1: **Adopted provisions for Alitame (INS 956)**

Category No. 01.1.4 (Flavoured fluid milk drinks)

Corresponding commodity standards: CODEX STAN 243-2003. 332R-2018

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	100	161	2007	Sweetener	Revoke provision.

Category No. 01.7 (Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt))

Corresponding commodity standards: CODEX STAN 243-2003

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	100	161	2007	Sweetener	Revoke provision.

Category No. 03.0 (Edible ices, including sherbet and sorbet)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	100	161	2007	Sweetener	Revise adopted provision by removing Note 161 and replacing with the alternative compromise Note 477.

Category No. 04.1.2.5 (Jams, jellies, marmalades)

Corresponding commodity standards: CODEX STAN 296-2009

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	100	161	2007	Sweetener	Revoke provision.

Category No. 05.1.2 (Cocoa mixes (syrups))

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161	2007	Sweetener	Revoke provision.

Category No. 05.1.3 (Cocoa-based spreads, including fillings)

Corresponding commodity standards: CODEX STAN 86-1981

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161, XS86	2016	Sweetener	Revoke provision.

Category No. 05.1.4 (Cocoa and chocolate products)

Corresponding commodity standards: CODEX STAN 87-1981

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161, XS87	2017	Sweetener	Revoke provision.

Category No. 05.1.5 (Imitation chocolate, chocolate substitute products)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161	2007	Sweetener	Revoke provision.

Category No. 05.2 (Confectionary including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161, XS309R	2017	Sweetener	Revoke provision.

Category No. 05.3 (Chewing gum)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161	2007	Sweetener	Revise adopted provision by removing Note 161 and replacing with the alternative compromise Note 477.

Category No. 05.4 (Decorations (e.g. for fine bakery waters), toppings (non-fruit) and sweet sauces)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300	161	2007	Sweetener	Revoke provision.

Category No. 11.4 (Other sugars and syrups (e.g. xylose, maple syrup, sugar toppings)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	200	159	2007	Sweetener	Revoke provision.

Category No. 11.6 (Table-top sweeteners, including those containing high-intensity sweeteners)

Corresponding commodity standards: None

Additive	INS	Max Level	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal

		(mg/kg)				
ALITAME	956	GMP		2007	Sweetener	Maintain current provision.

Category No. 12.5 (Soups and broths)

Corresponding commodity standards: CODEX STAN 117-1981

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	40	161, XS117	2015	Sweetener	Revoke provision.

Category No. 13.5 (Dietetic foods (e.g. supplementary foods for dietary use) excluding products of food categories 13.1- 13.4 and 13.6)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	300		2007	Sweetener	Maintain current provision.

Category No. 14.1.4 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALITAME	956	40	161	2007	Sweetener	Maintain use level of 40 mg/kg. Revise adopted provision by removing Note 161 and replacing with the alternative compromise Note 477.

Annex 2: **Adopted provisions for Acesulfame potassium (INS 950) in FCs 14.1.4 and 14.1.5 and Saccharins (INS 954(i)-(iv)) in subcategories of FC 14.1.4**

Category No. 14.1.4 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ACESULFAME POTASSIUM	950	600	161 & 188	2007	Flavour enhancer, Sweetener	Maintain current use level of 600 mg/kg. Maintain Note 188, add Note 127, and replace Note 161 with the compromise alternative Note 478.
SACCHARINS	**954(i)-(iv)**	**~~300~~ 230**	**~~161~~ 127 & 477**		**Sweetener**	As a result of the hierarchical nature of the GSFA, the three provisions for Saccharins in 14.1.4.1, 14.1.4.2 and 14.1.4.3 will be collapsed into parent category 14.1.4. This exercise would be considered as a revision of an existing adopted provision. Adopt with a reduced ML of 230 mg/kg in FC 14.1.4; Add Note 127, remove Note 161 and replace with the compromise alternative Note 477.

Category No. 14.1.4.1 (Carbonated water-based flavoured drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
SACCHARINS	954(i)-(iv)	300	161	2008	Sweetener	Collapse this provision into the parent food category 14.1.4 and revise to a reduced ML of 230 mg/kg in FC 14.1.4; addition of Note 127, removal of Note 161 and replacement with the compromise alternative Note 477.

Category No. 14.1.4.2 (Non-carbonated water-based flavoured drinks, including punches and ades)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
SACCHARINS	954(i)-(iv)	300	161	2008	Sweetener	Collapse this provision into the parent food category 14.1.4 and revise to a reduced ML of 230 mg/kg in FC 14.1.4; addition of Note 127, removal of Note 161 and replacement with the compromise alternative Note 477.

Category No. 14.1.4.3 (Concentrates (liquid or solid) for waterbased flavoured drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
SACCHARINS	954(i)-(iv)	300	127 & 161	2008	Sweetener	Collapse this provision into the parent food category 14.1.4 and revise to a reduced ML of 230 mg/kg in FC 14.1.4; addition of Note 127, removal of Note 161 and replacement with the compromise alternative Note 477.

Category No. 14.1.5 (Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ACESULFAME POTASSIUM	950	600	161 & 188	2007	Flavour enhancer, Sweetener	Maintain existing use level of 600 mg/kg. Maintain Note 188, add Note 127, and replace Note 161 with compromise alternative Note 478.

Annex 3: **Sweeteners in the step process in food categories where the CCFA51 Note 161 EWG reached consensus on a horizontal approach to replace Note 161 with a specific alternative note**

Category No. 01.7 (Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt))

Corresponding commodity standards: CODEX STAN 243-2003: Only certain carbonating agents, stabilizers, and thickeners listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in Plain Fermented Milks and Drinks based on Fermented Milk;

Only certain acidity regulators, carbonating agents, packaging gases, stabilizers, and thickeners listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in Plain Fermented Milks Heat Treated After Fermentation and Drinks based on Fermented Milk Heat Treated After Fermentation;

Only certain acidity regulators, carbonating agents, colours, emulsifiers, flavor enhancers; packaging gases; stabilizers, sweeteners and thickeners listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in Flavoured Fermented Milks and Drinks based on Fermented Milk;

Only certain acidity regulators, carbonating agents, colours, emulsifiers, flavor enhancers; packaging gases; preservatives, stabilizers, sweeteners and thickeners listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in Flavoured Fermented Milks Heat Treated After Fermentation and Drinks based on Fermented Milk Heat Treated After Fermentation;

Acidity regulators, colours, emulsifiers, packaging gases and preservatives listed in Table 3 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in fermented milk products categories as specified in the table above.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg with Note 478.

Category No. 03.0 (Edible ices, including sherbet and sorbet)

Corresponding commodity standards: None

Chair's Note: The 55th JECFA (2000) concluded that the aspartame and acesulfame moieties comprising the aspartame-acesulfame salt (INS 962) are covered by the ADIs for aspartame (40 mg/kg bw) and acesulfame potassium (acesulfame K) (15 mg/kg bw). Because JECFA concluded that the aspartame and acesulfame moieties in aspartame-acesulfame salt are included in the ADIs established for aspartame (INS 951) and acesulfame K (INS 950), the equivalent level of aspartame and acesulfame K from the use of the double salt should not exceed the individual maximum use level for aspartame or for acesulfame K. As a result, CCFA41 (see paras. 25-29 and Recommendation 1 in CX/FA 09/41/6) determined that it was most appropriate to present the ML for the aspartame-acesulfame salt in terms of either aspartame or acesulfame K equivalents. The MLs for the aspartame-acesulfame salt should be harmonized with the current GSFA maximum use levels for aspartame and acesulfame K (i.e., the maximum level of salt would be expressed as aspartame or acesulfame K depending upon which individual sweetener would result in a lower level for the aspartame-acesulfame salt when expressed on the aspartame-acesulfame salt basis. GSFA Notes 113 and 119 explain how to convert maximum levels between the various forms.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg with Note 478.
ASPARTAME-ACESULFAME SALT	962	1550	113 & 161	3	Sweetener	Adopt at 1000 mg/kg; Remove Notes 113 and 161; Add Notes 119 and 477 (see Chair's note above for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium).

Category No. 04.1.2.5 (Jams, jellies, marmelades)

Corresponding commodity standards: CODEX STAN 296-2009: Acidity regulators, antifoaming agents, firming agents, preservatives and thickeners used in accordance with Table 3 of the General Standard for Food Additives (CXS 192-1995) are acceptable for use in foods conforming to this Standard.

Only certain acidity regulators, antifoaming agents, colours, and preservatives listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in jams, jellies and marmalades.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg with Note 478.

Category No. 04.1.2.6 (Fruit-based spreads (e.g. chutney) excluding products of food category 04.1.2.5)

Corresponding commodity standards: CODEX STAN 160-1987: Only certain acidifying agents and preservatives listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in mango chutney.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg with Note 478.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ASPARTAME-ACESULFAME SALT	962	2270	113 & 138	3	Sweetener	Adopt at 1000 mg/kg; Remove Note 113 and Add Notes 119 and 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 04.1.2.8 (Fruit preparations, including pulp, purees, fruit toppings and coconut milk)

Corresponding commodity standards: CODEX STAN 240-2003: Only certain bleaching agents, emulsifiers, preservatives, stabilizers, and thickeners listed in Table 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in aqueous coconut milk and coconut cream products; CODEX STAN 314R-2013: No additives are allowed in the products covered by this Standard.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478.

Category No. 04.1.2.9 (Fruit-based desserts, including fruit-flavoured water-based desserts)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478.

Category No. 04.1.2.10 (Fermented fruit products)

Corresponding commodity standards: CODEX STAN 260-2007: Acidity regulators, antifoaming agents, antioxidants, colours, colour retention agents, firming agents, flavour enhancers, preservatives, sequestrants, stabilizers and sweeteners used in accordance with Tables 1 and 2 of the General Standard of Food Additives (CXS 192-1995) in the food category in which the individual pickled fruit or vegetable fall into (i.e., one of the following categories: 04.1.2.3, 04.1.2.10, 04.2.2.3, and 04.2.2.7) or listed in Table 3 of the General Standard are acceptable for use in foods conforming to this Standard.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478.
ASPARTAME-ACESULFAME SALT	962	790	113	3	Sweetener	Adopt at 350 mg/kg; Maintain note 113, add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 04.1.2.12 (Cooked fruit)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478.
ASPARTAME-ACESULFAME SALT	962	1130	113	3	Sweetener	Adopt at 500 mg/kg. Maintain Note 113 and add Note 477. **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 05.1.3 (Cocoa-based spreads, including fillings)

Corresponding commodity standards: CODEX STAN 86-1981

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	30		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg with Note 478 and XS86.
ASPARTAME-ACESULFAME SALT	962	4540	113 & 145	3	Sweetener	Adopt at 1000 mg/kg; Maintain Note 113, remove Note 145 and Add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**
STEVIOL GLYCOSIDES	960	350	26	3	Sweetener	Adopt at 350 mg/kg with Note 26, 477 and XS86.

Category No. 05.1.4 (Cocoa and chocolate products)

Corresponding commodity standards: CODEX STAN 87-1981: Acidity regulators, antioxidants, bulking agents, colours (for surface decoration purposes only), emulsifiers, glazing agents and sweeteners used in accordance with Tables 1 and 2 of the General Standard for Food Additives (CODEX STAN 192-1995) in food category 05.1.4 (Chocolate and chocolate products) and its parent food categories are acceptable for use in foods conforming to this Standard. Only certain Table 3 food additives (as indicated in Table 3) are acceptable for use in foods conforming to this Standard.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	30		2	Flavour enhancer, Sweetener	Adopt at 20 mg/kg; Add Notes 478 and XS87
ASPARTAME-ACESULFAME SALT	962	2270	113 & 145	3	Sweetener	Adopt at 500 mg/kg; Maintain Note 113, remove Note 145 and Add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**
STEVIOL GLYCOSIDES	960	350	26	3	Sweetener	Adopt at 350 mg/kg with Notes 26, 477 and XS87

Category No. 05.2.1 (Hard candy)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	30	114	2	Flavour enhancer, Sweetener	Adopt at 40 mg/kg with Notes 114 and 478.

Category No. 05.2.2 (Soft candy)

Corresponding commodity standards: CODEX STAN 309R-2011: Only acidity regulators and emulsifiers listed in Table 3 of the General Standard for Food Additives (CODEX STAN 192-1995) are acceptable for use in foods conforming to this Standard.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	30	114	2	Flavour enhancer, Sweetener	Adopt at 30 mg/kg with Notes 114, 478 and XS309R

Category No. 05.2.3 (Nougats and marzipans)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	30		2	Flavour enhancer, Sweetener	Adopt at 30 mg/kg with addition of Note 478.

Category No. 05.3 (Chewing gum)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	100		2	Flavour enhancer, Sweetener	Adopt at 400 mg/kg, add Note 478.
ASPARTAME-ACESULFAME SALT	962	4540	68 & 113	3	Sweetener	Adopt at 5000 mg/kg; Maintain Note 113, remove Note 68 and Add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 05.4 (Decorations (e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 20 mg/kg, add Note 478
ASPARTAME-ACESULFAME SALT	962	1130	113	3	Sweetener	Adopt at 500 mg/kg, maintain Note 113, add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium**
STEVIOL GLYCOSIDES	960	330	26	3	Sweetener	Adopt at 330 mg/kg with Notes 26 and 477.

Category No. 06.3 (Breakfast cereals, including rolled oats)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg; add Note 478
ASPARTAME-ACESULFAME SALT	962	1550	119 & 145	3	Sweetener	Adopt at 1000 mg/kg, maintain Note 119, remove Note 145 and add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 10.4 (Egg-based desserts (e.g. custard))

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	10		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478
ASPARTAME-ACESULFAME SALT	962	790	113 & 145	3	Sweetener	Adopt at 350 mg/kg; Maintain Note 113, remove Note 145 and Add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 12.5 (Soups and broths)

Corresponding commodity standards: CODEX STAN 117-1981: Acidity regulators, anticaking agents (in dehydrated product only), antifoaming agents, antioxidants, colours, emulsifiers, flavour enhancers, humectants, packaging gases, preservatives, stabilizers, sweeteners and thickeners used in accordance with Tables 1, 2 and 3 of the General Standard for Food Additives (CODEX STAN 192-1995) in food category 12.5 (Soups and broths), its parent food category, and its sub-categories are acceptable for use in foods conforming to this Standard.

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	12	XS117	2	Flavour enhancer, Sweetener	Adopt at 12 mg/kg with XS117 and Note 478.
ASPARTAME-ACESULFAME SALT	962	250	113 & 138	3	Sweetener	Adopt at 110 mg/kg with Notes 113, 138, and 477. **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 14.1.4 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	6		2	Flavour enhancer, Sweetener	Adopt at 10 mg/kg, add Note 478
ASPARTAME-ACESULFAME SALT	962	930	119 & 145	3	Sweetener	Adopt at 600 mg/kg, maintain Note 119, remove Note 145 and add Note 477 **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**

Category No. 14.1.5 (Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ADVANTAME	969	6	160	2	Flavour enhancer, Sweetener	Adopt at 6 mg/kg with Notes 160 and 478.
ASPARTAME-ACESULFAME SALT	962	1360	113	3	Sweetener	Adopt at 600 mg/kg; Remove Note 113, add Notes 119 and 477. **See Chair's Note for Aspartame-acesulfame salt (INS 962) in FC 03.0 for explanation on the need to harmonize the use level with adopted maximum use levels for aspartame or acesulfame potassium.**
ERYTHRITOL	968	40000		4	Flavour enhancer, Humectant, Sweetener	Adopt at GMP (TABLE 3 ADDITIVE) with Notes 160 and 478.
ISOMALT (HYDROGENATED ISOMALTULOSE)	953	300000		4	Anticaking agent, Bulking agent, Glazing agent, Stabilizer, Sweetener, Thickener	Adopt at GMP (TABLE 3 ADDITIVE); add Notes 160 and 477
LACTITOL	966	30000		4	Emulsifier, Sweetener, Thickener	Adopt at GMP (TABLE 3 ADDITIVE) with Notes 160 and 477
MALTITOL	965(i)	100000		4	Bulking agent, Emulsifier, Humectant, Stabilizer, Sweetener, Thickener	Adopt at GMP (TABLE 3 ADDITIVE) ; Add Notes 160 and 477
MALTITOL SYRUP	965(ii)	100000		4	Bulking agent, Emulsifier, Humectant,	Adopt at GMP (TABLE 3 ADDITIVE); add Notes 160 and 477

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
					Stabilizer, Sweetener, Thickener	
SORBITOL	420(i)			4	Bulking agent, Humectant, Sequestrant, Stabilizer, Sweetener, Thickener	Adopt at GMP (TABLE 3 ADDITIVE); Add Notes 160 and 477
SORBITOL SYRUP	420(ii)			4	Bulking agent, Humectant, Sequestrant, Stabilizer, Sweetener, Thickener	Adopt at GMP (TABLE 3 ADDITIVE); Add Notes 160 and 477
THAUMATIN	957			4	Flavour enhancer, Sweetener	Adopt at GMP (TABLE 3 ADDITIVE); Add Notes 160 and 478
XYLITOL	967	30000		4	Emulsifier, Humectant, Stabilizer, Sweetener, Thickener	Adopt at GMP (Table 3 additive); Add Notes 160 and 477

Appendix 7: Provisions for colours in FCs 05.0 and its subcategories, 13.6, and 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories): adopted provisions for colours with Note 161 associated with them, and draft and proposed draft provisions for colours

1. Among several topics, the 51st CCFA requested the EWG on the GSFA to CCFA52 to consider:[1]

- adopted provisions for colours in FCs 05.2 and 05.3 with Note 161 associated with them;
- in FCs 05.1, 13.6, 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories): adopted provisions for additives with the functional class of colours with Note 161 associated with them and draft and proposed draft provisions for additives with the functional class of colour; and
- provisions entered into the step process as a result of CX/FA 19/51/8 (For additives with technological function of colours: limited to provisions in FCs 05.0 and its subcategories, 13.6, and 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories).

Background

2. The EWG on the GSFA to CCFA51 formulated proposals for draft and proposed draft provisions for colours in the Step process in food categories 05.2 (Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4), 05.3 (Chewing gum), and 5.4 (Decorations (e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces). The PWG on the GSFA to CCFA51 discussed these proposals and forwarded recommendations on these provisions to CCFA51. CCFA51 noted that these recommendations only address provisions for the use of colours in the step process in these food categories but did not address the use of Note 161 for adopted provisions for colours in these food categories. Therefore, CCFA51 requested the EWG on the GSFA to CCFA52 to consider adopted provisions with Note 161 associated with them in food categories 05.2 and 05.3.

3. To complete the work of addressing the use of colours in food category 05.0 (Confectionery) and its subcategories, CCFA51 requested that the EWG on the GSFA to CCFA52 consider draft and proposed draft provisions for colors, as well as adopted provisions for colors with note 161 associated with them, in food category 05.1 (Cocoa products and chocolate products including imitations and chocolate substitutes) and its subcategories. In addition, CCFA51 noted that several provisions for the use of colours in the subcategories of food category 05.0 had been entered into the step process at CCFA52 as a result of submissions received in reply to the Circular Letter requesting proposals for new and/or revision of food additive provisions of the GSFA (CL 2018/27-FA). Therefore CCFA51 requested that the EWG on the GSFA to CCFA52 consider all provisions for colours in the step process in food category 05.0 and its subcategories.

4. To continue to advance provisions for colours through the step process, CCFA51 requested that the EWG on the GSFA to CCFA52 consider to provisions for colours, both adopted provisions with Note 161 associate with them and provisions in the step process, in food categories 13.6 (Food supplements) and 14.0 (Beverages, excluding dairy products) and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories).

Working Document

5. The EWG issued three circulars for comment. The first circular was split into three Annexes. Annex 1 requested the EWG to provide comment on the adopted provisions for additives with Note 161 associated with them with the functional class of colours in food categories 05.2 and 05.3. Annex 2 requested the EWG to provide information and discussion on the justification, in the context of the criteria listed in Section 3.2 of the Preamble to the GSFA, on the use of colours in food categories 05.1 and its subcategories, 13.6, and 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories). Annex 3 requested comments on draft and proposed draft provisions and adopted provisions for additives with Note 161 associated with them with the functional class of colours in food categories 05.1, 13.6, 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories). The EWG was invited to provide comment on the actual use level necessary to achieve the technical effect and the safety of that use level. The second and third circulars

[1] REP 19/FA, para. 138(i) - (ii)

contained two Annexes that requested the EWG to provide comment on the adopted provisions for additives with Note 161 associated with them with the functional class of colours in food categories 05.2 and 05.3 and comments on draft and proposed draft provisions and adopted provisions for additives with Note 161 associated with them with the functional class of colours in food categories 05.1, 13.6, 14.0 and its subcategories (except FCs 14.1.2, 14.1.3, 14.2.3 and their subcategories).

6. The current document contains 2 Annexes.

7. Annex 1 presents proposals for each adopted provision for colours in FCs 05.2 and 05.3 with Note 161 attached.

8. Annex 2 presents proposals for each adopted provision with Note 161 attached and draft and proposed draft provisions in FCs 05.1, 13.6, 14.0 and its subcategories (except 14.1.2, 14.1.3, 14.2.3 and their subcategories).

9. In both Annexes, the provisions are presented in the format of Table 2 of the GSFA. When a food additive provision from a parent food category is considered in the corresponding subcategories, the provision is indicated in the subcategory in bolded font with no Step indicated in the “Step/Adopted” column.

10. A full compilation of comments submitted for Appendix 7 (Colours) to the three circulars are available on CCFA52 webpage.

Conventions:

11. These recommendations are based on the “weight of evidence”; that is, comments containing justifications were given more weight than comments with no supporting justification.

Annex 1 – Adopted Provisions in Food Categories 05.2 and 05.3 with Note 161 attached

Category No. 05.2 (Confectionary including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PONCEAU 4R (COCHINEAL RED A)	124	300	161, XS309R	2017	Colour	Revoke in parent category; Consider in subcategories
SUNSET YELLOW FCF	110	300	161, XS309R	2017	Colour	Do not consider in subcategories; Maintain adopted provision in parent category 05.2; Remove Note 161

Category No. 05.2.1 (Hard candy)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PONCEAU 4R (COCHINEAL RED A)	**124**	**300**	**161, XS309R**	**(2017)**	**Colour**	Revise adopted provision from parent category 05.2 by adopting in this FC at 100 mg/kg; Remove Note 161

Category No. 05.2.2 (Soft candy)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PONCEAU 4R (COCHINEAL RED	**124**	**300**	**161,**	**(2017)**	**Colour**	Revise adopted provision from parent category 05.2 by

A)			**XS309R**			adopting in this FC at 100 mg/kg; Remove Note 161

Category No. 05.2.3 (Nougats and marzipans)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PONCEAU 4R (COCHINEAL RED A)	**124**	**300**	**161, XS309R**	**(2017)**	**Colour**	Revise adopted provision from parent category 05.2 by adopting in this FC at 50 mg/kg; Remove Note 161

Category No. 05.3 (Chewing gum)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
IRON OXIDES	172(i)-(iii)	10000	161	2009	Colour	Revise adopted provision—5000 mg/kg; Remove Note 161

List of Notes:

Note 161: Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.

Note XS309R: Excluding products conforming to the Codex Regional Standard for Halawa Tehenia (CODEX STAN 309R-211).

Annex 2 – Adopted Provisions with Note 161 attached and Draft and Proposed Draft Provisions in FCs 05.1, 13.6, 14.0 and its subcategories (except 14.1.2, 14.1.3, 14.2.3 and their subcategories)

Category No. 05.1 (Confectionary including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
AZORUBINE (CARMOISINE)	122	50		7	Colour	Discontinue
CARAMEL II - SULFITE CARAMEL	150b	50000		4	Colour	Do not consider in subcategories; Adopt in parent category 05.1; Add Notes XS86, XS105 and XS141
CURCUMIN	100(i)	300	183	7	Colour	Do not consider in subcategories; Adopt in parent category 05.1; Add Notes XS86, XS105 and XS141
QUINOLINE YELLOW	104	300	183	7	Colour	Discontinue
TARTRAZINE	102	300	183	7	Colour	Do not consider in subcategories; Adopt in parent category 05.1 at 100 mg/kg; Add Notes XS86, XS105 and XS141

Category No. 05.1.1 (Cocoa mixes (powders) and cocoa mass/cake)

Corresponding commodity standards: CODEX STAN 105-1981, 141-1983 (Table 1 and 2 colours not permitted under either CODEX STAN)

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	50	8	4	Colour	Adopt; Add Notes XS105 and XS141

ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	50	185	4	Colour	Adopt; Add Notes XS105 and XS141

Category No. 05.1.2 (Cocoa mixes (syrups))

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	50	8	4	Colour	Adopt
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	50	185	4	Colour	Adopt
CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES	141(i), (iii)	6.4	62, 161	2009	Colour	Revise adopted provision; Remove Note 161

Category No. 05.1.3 (Cocoa-based spreads, including fillings)

Corresponding commodity standards: CODEX STAN- 86-1981 (No food additives permitted)

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALLURA RED AC	129	300	161, XS86	2016	Colour	Revise adopted provision; Remove Note 161
AMARANTH	123	100		7	Colour	Discontinue

ANNATTO EXTRACTS, BIXIN BASED	160b(i)	50	8	4	Colour	Adopt; Add Note XS86
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	50	185	4	Colour	Adopt; Add Note XS86
BRILLIANT BLUE FCF	133	100	161, XS86	2016	Colour	Maintain adopted provision in this FC; Remove Note 161
CAROTENOIDS	160a(i), a(iii), e, f	100	161, XS86	2016	Colour	Hold pending discussion of 87th JECFA report
CHLOROPHYLLS AND CHLOROPHYLLINS, COPPER COMPLEXES	141(i),(ii)	6.4	62, 161, XS86	2016	Colour	Maintain adopted provision in this FC; Remove Note 161
PAPRIKA EXTRACT	160c(ii)	95	39	2	Colour	Adopt; Add Note XS86

Category No. 05.1.4 (Cocoa and chocolate products)

Corresponding commodity standards: CODEX STAN 87-1981 (permits colours for surface decoration purposes only)

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	25	8, 183	4	Colour	Adopt at 50 mg/kg
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100	183, XS87	2	Colour	Hold pending discussion of 87th JECFA report

BRILLIANT BLACK (BLACK PN)	151	300	183	7	Colour	Discontinue
BROWN HT	155	80	183	7	Colour	Discontinue
LYCOPENE, TOMATO	160d(ii)	6000		3	Colour	Discontinue; Lycopene, Tomato is a Table 3 additive with a JECFA ADI of "not specified." As this food category is not in the Annex to Table 3, Lycopene, tomato is already permitted for use in this food category at GMP.
PAPRIKA EXTRACT	160c(ii)	95	39	2	Colour	Adopt; Add Note 183 is "For use in surface decoration only"

Category No. 05.1.5 (Imitation chocolate, chocolate substitute product)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	25	8	4	Colour	Adopt at 50 mg/kg
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	25	185	4	Colour	Adopt
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100		2	Colour	Hold pending discussion of 87th JECFA report
BRILLIANT BLACK (BLACK PN)	151	300		7	Colour	Discontinue
BROWN HT	155	80		7	Colour	Discontinue

LYCOPENE, TOMATO	160d(ii)	6000		3	Colour	Discontinue; Lycopene, Tomato is a Table 3 additive with a JECFA ADI of "not specified." As this food category is not in the Annex to Table 3, Lycopene, tomato is already permitted for use in this food category at GMP.
PAPRIKA EXTRACT	160c(ii)	95	39	2	Colour	Adopt
SUNSET YELLOW FCF	110	300	161	2008	Colour	Revoke

Category No. 05.2 (Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4)

Corresponding commodity standards: None

Additive	**INS**	**Max Level (mg/kg)**	**Notes**	**Step / Adopted**	**INS Functional Class**	**Final EWG Proposal**
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100	183, XS87	2	Colour	Hold pending discussion of 87th JECFA report
LUTEIN FROM TAGETES ERECTA	161b(i)	300		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).
ZEAXANTHIN, SYNTHETIC	161h(i)	300		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).

Category No. 05.3 (Chewing gum)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100	183, XS87	2	Colour	Hold pending discussion of 87th JECFA report
ZEAXANTHIN, SYNTHETIC	161h(i)	100		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).

Category No. 05.4 (Decorations (e.g. for fine bakery wares), toppings (non-fruit) and sweet sauces)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100	183, XS87	2	Colour	Hold pending discussion of 87th JECFA report

Category No. 13.6 (Food supplements)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal

ANNATTO EXTRACTS, BIXIN BASED	160b(i)	60	8	4	Colour	Adopt
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	100	185	4	Colour	Adopt
AZORUBINE (CARMOISINE)	122	300		7	Colour	Adopt at 1500 mg/kg
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	300		2	Colour	Hold pending discussion of 87th JECFA report
BRILLIANT BLACK (BLACK PN)	151	300		7	Colour	Adopt at 530 mg/kg
BROWN HT	155	300		7	Colour	Adopt
CARAMEL II-SULFITE CARAMEL	150b	35000		4	Colour	Adopt at 7500 mg/kg
CHLOROPHYLLS	140	25000		4	Colour	Discontinue; Chlorophylls is a Table 3 additive with a JECFA ADI of “not specified.” As this food category is not in the Annex to Table 3, Chlorophylls is already permitted for use in this food category at GMP.
CURCUMIN	100(i)	300		7	Colour	Adopt; New Note, Except for use in film coated tablets at 3000 mg/kg
LUTEIN FROM TAGETES ERECTA	161b(i)	300		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).
LYCOPENE, TOMATO	160d(ii)	50000		3	Colour	Discontinue; Lycopene, Tomato is a Table 3 additive with a JECFA ADI of “not specified.” As this food category is not in the Annex to Table 3, Lycopene, tomato is already

						permitted for use in this food category at GMP.
PAPRIKA EXTRACT	160c(ii)	20	39	2	Colour	Adopt
QUINOLINE YELLOW	104	300		7	Colour	Adopt; New Note, Except for use in hard capsules and film coated tablets at 1800 mg/kg
TARTRAZINE	102	300		7	Colour	Adopt; New Note, Except for use in hard capsules at 1710 mg/kg and film coated tablets at 3000 mg/kg
ZEAXANTHIN, SYNTHETIC	161h(i)	300		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).

Category No. 14.1.4 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ALLURA RED AC	129	300	127, 161	2009	Colour	Do not consider in subcategories; Revise adopted provision in parent category 14.1.4—250 mg/kg; Remove Note 161
AMARANTH	123	100		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 50 mg/kg; Add Note 127
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	50	8	4	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 30 mg/kg; Add Note 127
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	50	185	4	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 30 mg/kg; Add Note 127
AZORUBINE (CARMOISINE)	122	100		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 95 mg/kg; Add Note 127

BRILLIANT BLACK (BLACK PN)	151	100		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 10 mg/kg; Add Note 127
BROWN HT	155	100		7	Colour	Discontinue
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	100		2	Colour	Hold pending discussion of 87th JECFA report
CARAMEL II-SULFITE CARAMEL	150b	50000		4	Colour	Discontinue
CURCUMIN	100(i)	100		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 60 mg/kg; Add Note 127
LUTEIN FROM TAGETES ERECTA	161b(i)	100		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).
PAPRIKA EXTRACT	**160c(ii)**	**30**	**39**		**Colour**	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 30 mg/kg; Add Note 127
QUINOLINE YELLOW	104	100		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 120 mg/kg; Add Note 127
SUNSET YELLOW FCF	110	100	127, 161	2008	Colour	Do not consider in subcategories; Maintain adopted provision in parent category 14.1.4; Remove Note 161
TARTRAZINE	102	300		7	Colour	Do not consider in subcategories; Adopt provision in parent category 14.1.4 at 100 mg/kg; Add Note 127
ZEAXANTHIN, SYNTHETIC	161h(i)	100		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).

Category No. 14.1.4.1 (Carbonated water-based flavoured drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PAPRIKA EXTRACT	160c(ii)	30	39	2	Colour	Do not consider in subcategories; Consider provision in parent category 14.1.4

Category No. 14.1.4.2 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PAPRIKA EXTRACT	160c(ii)	30	39	2	Colour	Do not consider in subcategories; Consider provision in parent category 14.1.4

Category No. 14.1.4.3 (Water-based flavoured drinks, including "sport," "energy," or "electrolyte" drinks and particulated drinks)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
PAPRIKA EXTRACT	160c(ii)	300	39	2	Colour	Do not consider in subcategories; Consider provision in parent category 14.1.4

Category No. 14.1.5 (Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa)

Corresponding commodity standards: None

Additive	INS	Max Level	Notes	Step / Adopted	INS Functional	Final EWG Proposal

		(mg/kg)			Class	
CARAMEL I-PLAIN CARAMEL	150a	GMP	160	4	Colour	Adopt
CARAMEL II-SULFITE CARAMEL	150b	50000	160	4	Colour	Discontinue

Category No. 14.2 (Alcoholic beverages, including alcohol-free and low-alcoholic counterparts)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Comments / Proposal
CARAMEL II-SULFITE CARAMEL	150b	50000		4	Colour	Consider in subcategories

Category No. 14.2.1 (Beer and malt beverages)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt
CURCUMIN	100(i)	200		4	Colour	Adopt
TARTRAZINE	102	500		4	Colour	Adopt

Category No. 14.2.2 (Cider and perry)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	10	185	4	Colour	Discontinue
AZORUBINE (CARMOISINE)	122	200		7	Colour	Discontinue
BRILLIANT BLACK (BLACK PN)	151	200		7	Colour	Discontinue
BROWN HT	155	200		7	Colour	Adopt
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	200		2	Colour	Hold pending discussion of 87th JECFA report
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt at 1,000 mg/kg
CURCUMIN	100(i)	200		7	Colour	Adopt
LUTEIN FROM TAGETES ERECTA	161b(i)	200		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).
PAPRIKA EXTRACT	160c(ii)	10	39	2	Colour	Adopt
QUINOLINE YELLOW	104	200		7	Colour	Discontinue

TARTRAZINE	102	200		7	Colour	Adopt

Category No. 14.2.4 (Wines (other than grape))

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
AMARANTH	123	30		7	Colour	Discontinue
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	20	8	4	Colour	Adopt
AZORUBINE (CARMOISINE)	122	200		7	Colour	Discontinue
BRILLIANT BLACK (BLACK PN)	151	200		7	Colour	Discontinue
BROWN HT	155	200		7	Colour	Adopt
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	200		2	Colour	Hold pending discussion of 87th JECFA report
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt at 1,000 mg/kg
CURCUMIN	100(i)	200		7	Colour	Adopt
LUTEIN FROM TAGETES ERECTA	161b(i)	200		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).

PAPRIKA EXTRACT	160c(ii)	10	39	2	Colour	Adopt
QUINOLINE YELLOW	104	200		7	Colour	Discontinue
TARTRAZINE	102	200		7	Colour	Adopt

Category No. 14.2.5 (Mead)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt at 1,000 mg/kg

Category No. 14.2.6 (Distilled spiritous beverages containing more than 15% alcohol)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
AMARANTH	123	300		7	Colour	Discontinue
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	30	8	4	Colour	Adopt
ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	10	185	4	Colour	Adopt

AZORUBINE (CARMOISINE)	122	200		7	Colour	Discontinue
BRILLIANT BLACK (BLACK PN)	151	200		7	Colour	Discontinue
BROWN HT	155	200		7	Colour	Discontinue
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	200		2	Colour	Hold pending discussion of 87th JECFA report
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt at 5,000 mg/kg
CURCUMIN	100(i)	100		7	Colour	Adopt
QUINOLINE YELLOW	104	200		7	Colour	Discontinue
TARTRAZINE	102	200		7	Colour	Adopt

Category No. 14.2.7 (Distilled spiritous beverages containing more than 15% alcohol)

Corresponding commodity standards: None

Additive	INS	Max Level (mg/kg)	Notes	Step / Adopted	INS Functional Class	Final EWG Proposal
AMARANTH	123	100		7	Colour	Adopt
ANNATTO EXTRACTS, BIXIN BASED	160b(i)	30	8	4	Colour	Adopt

ANNATTO EXTRACTS, NORBIXIN BASED	160b(ii)	10	185	4	Colour	Adopt
AZORUBINE (CARMOISINE)	122	200		7	Colour	Discontinue
BRILLIANT BLACK (BLACK PN)	151	200		7	Colour	Discontinue
BROWN HT	155	200		7	Colour	Adopt
BETA-CAROTENE-RICH EXTRACT FROM DUNALIELLA SALINA	160(a)(iv)	200		2	Colour	Hold pending discussion of 87th JECFA report
CARAMEL II-SULFITE CARAMEL	**150b**	**50000**			**Colour**	Adopt at 4,000 mg/kg
CURCUMIN	100(i)	100		7	Colour	Adopt
LUTEIN FROM TAGETS ERECTA	161b(i)	200		4	Colour	Hold this provision until the additive has been considered for inclusion in Table 3 (proposal included in Appendix 2 of the EWG on the GSFA).
PAPRIKA EXTRACT	160c(ii)	10	39	2	Colour	Adopt
QUINOLINE YELLOW	104	200		7	Colour	Discontinue
TARTRAZINE	102	200		7	Colour	Adopt

List of Notes:

Note 8: As bixin.

Note 39: On a total carotenoid basis.

Note 62: As copper.

Note 127: On the served to the consumer basis.

Note 160: For use in ready-to-drink products and pre-mixes for ready-to-drink products only.

Note 161: Subject to national legislation of the importing country aimed, in particular, at consistency with Section 3.2 of the Preamble.

Note 183: For use in surface decoration only.

Note 185: As norbixin.

Note XS86: Excluding products conforming to the Standard for Cocoa Butter (CODEX STAN 86-1981).

Note XS87: Excluding products conforming to the Standard for Chocolate and Chocolate Products (CODEX STAN 87-1981).