



## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEx COMMITTEE ON FOOD ADDITIVES

#### Fifty-third Session

### PROPOSED DRAFT REVISION TO THE CLASS NAMES AND THE INTERNATIONAL NUMBERING SYSTEM (INS) FOR FOOD ADDITIVES (CXG 36-1989)

Prepared by an electronic Working Group chaired by Belgium and co-chaired by Iran

Codex Members and Observers wishing to submit comments at Step 3 on the proposed changes and/or addition to the International Numbering System for Food Additives (Annex) should do so as instructed in CL 2023/4-FA available on the Codex webpage/Circular Letters 2023: <http://www.codexalimentarius.org/circular-letters/en/>.

#### BACKGROUND

1. The 52<sup>nd</sup> session of the Codex Committee on Food Additives (CCFA52)<sup>1</sup> held virtually from 8 to 13 November 2021 agreed to establish an electronic Working Group (EWG), chaired by Belgium and co-chaired by the Islamic Republic of Iran, open to all Members and Observers and working in English only, to consider:

- a. replies to the CL 2021/30-FA requesting proposals for change and/ or addition to Section 3 of the *Class Names and International Numbering System for Food Additives* (CXG 36-1989); and preparing a proposal for circulation for comments at Step 3;
- b. assigning an INS number to fungal amylase from *Aspergillus niger* and including the functional class and technological purpose of “flour treatment agent”; and
- c. the appropriateness to include one or more synonyms for Jagua (genipin- glycine) blue (INS 183) as requested in CX/FA 21/52/11 Add. 1.

#### DISCUSSIONS IN THE ELECTRONIC WORKING GROUP

2. In April 2021, the Codex Secretariat distributed CL 2021/30-FA, inviting all Members and Observers to respond by 15 September 2021 (proposals for changes, addition and deletion to the INS list). The deadline was later extended to 30 April 2022.

3. On 16 June 2022, the Codex Secretariat distributed a kick-off message containing an invitation to Members and Observers to express interest in participation in the EWG. The following Members and Observers registered by e-mail: Brazil, Colombia, Estonia, European Union (EU), India, Japan, Malaysia, Mexico, New Zealand, Nigeria, Republic of Korea, USA, CCC, EU Specialty Food Ingredients, Food Drink Europe, IACM, ICBA, IFAC, ISC and NATCOL. The EWG used the Codex online platform to conduct its consultations. From the Members that had registered only Belgium, Brazil, EU, India, Iran, Japan, Malaysia, Mexico, Nigeria, Republic of Korea, USA, EU Specialty Food Ingredients, Food Drink Europe, IACM, ICBA, IFAC, ISC and NATCOL were on the platform.

4. Comments on the first draft were received only from NATCOL; while on the second draft, comments were received from Brazil, EU, USA and ISC.

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<sup>1</sup> REP 21/FA para. 201 (iii)

**A. Replies to the circular letter on addition and changes to INS**

- Addition of Blue Microalgae Extract

5. The United Kingdom (UK) requested to add the colour “Blue Microalgae extract” and provided a justification that “Blue Microalgae extract” was a new colour additive based on a phycocyanin-rich extract from *Galdieria sulphuraria*; and that there was evidence that the compound had been or was capable of being used effectively for the technological purpose proposed.

6. The EWG noted that they were aware about submissions of applications in EU, UK and USA but not of any authorization as food additive yet; and that they were also not aware that this colour is on the world market yet and it does not have any official name yet. The name “Blue microalgae extract” was not considered appropriate by the EWG, as it was too generic since *Galdieria sulphuraria* is not the only blue microalgae extract existing or on the market; there is also spirulina extract (INS 134). Both the extracts of *Galdieria sulphuraria* and spirulina are based on phycocyanins, hence phycocyanins would not be an appropriate specific name either. It was also recognised that, there is no group ADI for phycocyanins and without JECFA opinion or other risk assessment it is impossible to make conclusions about the comparison of the substances in the extract of Spirulina and the extract of *Galdieria sulphuraria*. Therefore, a group name is not appropriate.

7. The Chair and co-Chair of the EWG proposed to the EWG to discuss whether it was appropriate and timely to include a new additive “Blue *Galdieria* extract” as INS 135 with technological purpose as a colour, in the *Class Names and International Numbering System for Food Additives* (CXG 36-1989). This number is not in INS yet and is not on the list of deleted numbers either and it is the next number after INS 134 Spirulina extract. The name “Blue *Galdieria* extract” is more specific than “Blue microalgae extract”. Several Members of the EWG considered it premature to include this food additive as no authorization has been granted for this colour as food additive, neither a safety assessment nor specifications are publicly available.

8. The EWG was of the view not to include this food additive in CXG 36-1989 at the current stage.

- Deletion of INS 960b(i) “Rebaudioside A from multiple gene donors expressed in *Yarrowia lipolytica*”

9. The International Stevia Council (ISC) requested to delete INS 960b(i) “Rebaudioside A from multiple gene donors expressed in *Yarrowia lipolytica*” from the INS List as the specification for this food additive has now been subsumed into the specification for steviol glycosides from fermentation (INS 960b) and therefore the reference to INS960b(i) has been deleted from the GSFA, as per decision by CAC44 following the recommendation from CCFA 52 in this direction. Based on the above decisions by the CCFA52 and CAC44, ISC requested the deletion of INS 960b(i) Rebaudioside A from multiple gene donors expressed in *Yarrowia lipolytica* from the INS List, so as to be in alignment with the decision taken by CCFA52 and CAC44.

10. The EWG agreed with the proposed deletion of INS 960b(i).

- Addition of functions aligning with JECFA and Codex

11. Peru submitted a list of requests for additions:

- a. For INS 419 gum ghatti, to add the functional class of “carrier” based on the [JECFA specifications monograph of 2017](#).
- b. For INS 1207 methacrylate copolymer, anionic, to consider the technological purpose of “coating agent” (*falls under the functional class of glazing agent*) based on the [JECFA specifications monograph of 2018](#).
- c. For INS 427 cassia gum, to add the technological purposes “foam stabilizer” (*falls under the functional class “stabilizer”*), “moisture-retention agent” (*falls under the functional class “humectant” which is not yet in INS for cassia gum, so this is also considered as a request for the functional class humectant*) and “texturizing agent” (*falls under the functional class “thickener”*) based on the [JECFA specifications monograph of 2018](#).
- d. For INS 445(iii) glycerol ester of wood rosin, to add the technological purpose “plasticizer” (*falls under the functional class “emulsifier”*) based on the [JECFA specifications monograph of 2018](#).
- e. For INS 455 yeast mannoproteins, to add the technological purpose “wine stabilizer” based on the [JECFA specifications monograph of 2019](#).

- f. For INS 456 potassium polyaspartate, to add the technological purpose “stabiliser (in wine)” based on the [JECFA specifications monograph of 2019](#).
- g. For INS 338 phosphoric acid, to add the functional classes “stabilizer and thickener”, based on the *Standard for Fermented Milks* (CXS 243-2003) Adopted in 2003. Revised in 2008, 2010, 2018.
- h. to add the function class “thickener” to the following additives based on *the Standard for Fermented Milks* (CXS 243-2003) Adopted in 2003. Revised in 2008, 2010, 2018:
  - i. INS 170 (*Comment: Only INS 170(i) is in this standard*)
  - ii. INS 331(iii)
  - iii. INS 470(i)
  - iv. INS 470(ii)
  - v. INS 471
  - vi. INS 472a
  - vii. INS 472b
  - viii. INS 472c
  - ix. INS 511

12. The EWG accepted the proposals in points a to d including the consequential proposals in point c (i.e., adding the functional class “humectant” to INS 427). The proposals in points e and f were not accepted, as “wine stabilizer” and “stabiliser (in wine) (in wine)” do not exist in section 2 of *Class Names and International Numbering System for Food Additives* (CXG 36-1989), these two food additives already have the functional class and technological purpose “stabilizer” listed and changes to section 2 are not in the mandate of the EWG. The proposals in g and h were not considered acceptable, as it can be questioned whether substances listed under a title of ‘stabilizers and thickeners’ in a standard all have both functions. Other evidence would be needed but no such evidence was obtained in the EWG.

**B. Assigning an INS number to fungal amylase from *Aspergillus niger* and including the functional class and technological purpose of “flour treatment agent” (Request from CCFA52)**

13. In CX/FA 21/52/11, it was recommended by the former EWG to consider if it was premature to include the proposal in the INS, and to wait for the JECFA assessment and proposal for a name.

14. In its [ninety-fifth meeting in June 2022](#), JECFA established a temporary ADI “not specified” for  $\alpha$ -amylase (JECFA95-3) from *Rhizomucor pusillus* expressed in *Aspergillus niger*. as per Annex 2 of the summary and conclusions - Naming and identification of JECFA enzyme preparations. The Committee reviewed the list of enzyme preparations for evaluation and noted that there were two different formats for the title. Reflecting on past evaluations and considering ease of use, the Committee decided that the name given to the enzyme preparation should correspond to the name of the enzyme activity or activities that most accurately characterize the preparation, the donor(s) of the genetic material and the production microorganism. However, the Committee noted that by following this naming convention, two of the enzyme preparations would have the same name; the Committee therefore decided that an identification system would also be used for all enzyme preparations, consisting of the JECFA meeting number followed by the agenda item number of the substance (e.g., JECFA95-1).

15. The fungal amylase from *Aspergillus niger* was on the priorities list with the following basis: During the discussions on the alignment of the food-additive provision in the *Standard for Wheat Flour* (CXS 152-1985) with the relevant provisions of the GSFA, CCFA51 agreed to include the substance as flour treatment agent to the list. Another entry in the priorities list was “Alpha-amylase from *Rhizomucor pusillus* expressed in *Aspergillus niger*”. Basis for request: The enzyme is used for the hydrolysis of starch during the processing of starch-containing foods. Hence the enzyme assessed by JECFA is not the same as the one in the mandate of the EWG. The situation is not changed and the EWG considered it was premature to include the proposal in the INS, and proposed to wait for the JECFA assessment and proposal for a name.

**C. The appropriateness to include one or more synonyms for Jagua (genipin- glycine) blue (INS 183) as requested in CX/FA 21/52/11 Add. 1. (Request from CCFA52)**

16. At CCFA52, Colombia supported that the food additive jagua (genipin-glycine) blue be added with colour functional class and INS 183 in the GSFA. Furthermore, considering the use that this additive will have in different regions, it is proposed to add the following synonyms: Genipapo, genipapo glue, jagua blue, huito blue, huito, jagua.

17. The following paragraph was in CRD05 of CCFA52: Using many different synonyms in INS is uncommon. That is why it seems difficult to include the many synonyms proposed by Colombia for INS 183: Genipapo, genipapo glue, jagua blue, huito blue, huito, jagua. CCFA52 could reflect whether further work should be done by the next EWG or whether a decision can be taken. CCFA52 included it in the mandate of the EWG.

18. There was no actual discussion in the EWG as no member reacted and thus there was no proposal of the EWG to change INS. The discussion can be closed.

**CONCLUSION AND RECOMMENDATION**

19. The EWG recommends CCFA to consider:

- the proposed additions/deletions to the INS list as presented in the annex; and
- other proposals which are either not acceptable or premature, as outlined in previous paragraphs (paragraphs 8, 12, 15 and 18).

**Proposed changes and/or additions to the INS  
(at Step 3)**

The INS list in numerical order is proposed to be updated for some food additives as listed. The additions are highlighted with **bold/ underlined font**. Deleted entries are indicated **in bold/underlined/strikethrough font**.

<b>INS No.</b>	<b>Name of food additive</b>	<b>Functional class</b>	<b>Technological purpose</b>
419	<u>Gum ghatti</u>	<b><u>Carrier</u></b>	<b><u>carrier</u></b>
		<u>Emulsifier</u>	<u>emulsifier</u>
		<u>Stabilizer</u>	<u>stabilizer</u>
		<u>Thickener</u>	<u>thickener</u>
427	Cassia gum	<u>Emulsifier</u>	<u>emulsifier</u>
		<u>Gelling agent</u>	<u>gelling agent</u>
		<b><u>Humectant</u></b>	<b><u>moisture-retention agent</u></b>
		<u>Stabilizer</u>	<b><u>foam stabilizer</u></b> <u>stabilizer</u>
		<u>Thickener</u>	<b><u>texturizing agent</u></b> <u>thickener</u>
445(iii)	Glycerol ester of wood rosin	<u>Emulsifier</u>	<u>density adjustment agent</u> <u>emulsifier</u> <b><u>plasticizer</u></b>
		<u>Stabilizer</u>	<u>stabilizer</u>
<b><u>960b(i)</u></b>	<b><u>Rebaudioside A from multiple gene donors expressed in Yarrowia lipolytica</u></b>	<b><u>Sweetener</u></b>	<b><u>sweetener</u></b>
1207	Methacrylate copolymer, anionicl	Glazing agent	<b><u>coating agent</u></b> <u>glazing agent</u>