CODEX ALIMENTARIUS COMMISSION $oldsymbol{\mathsf{E}}$







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Agenda Item 5b

CX/FA 21/52/81 March 2021

JOINT FAO/WHO FOOD STANDARDS PROGRAMME **CODEX COMMITTEE ON FOOD ADDITIVES**

Fifty-second Session

GENERAL STANDARD FOR FOOD ADDITIVES (GSFA) PROPOSALS FOR NEW AND/OR REVISION OF FOOD ADDITIVE PROVISIONS

Replies to CL 2019/40-FA of Australia, Uganda and Food Drink Europe

and

Replies to CL 2020/36-FA of Colombia and ISC

Part A: Replies to CL 2019/40-FA

Australia

THE PROPOSAL IS SUBMITTED BY:		Australia		
IDENTITY OF THE	FOOD ADDITIVE:	•		
Name of the Additive		Lauric arginate ethyl ester		
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
INS Number		243		
Functional Class		Preservative		
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
	(S) OF THE FOOD	The proposal for:		
ADDITIVE (1):		☐ a new provision; or		
The rows below may be copied as many times as needed.		X revising an existing provision in Tables 1 and 2 of the GSFA; or		
		☐ revising an existing provision in Table 3 of the GSFA (skip to "Is the proposal intended to revise		
		products covered by the commodity standard").		
Food Category No. (2)	Food Category Name (2)	Maximum Use Level (3)	Comments (4)	
01.6.2.1	Ripened Cheese,	200 mg/kg	Note XS263	
	includes rind		Note XS264	
			Note XS265	
			Note XS266	
			Note XS267	
			Note XS268	
			Note XS269	
			Note XS270	
			Note XS271	

¹ This document is an updated version of CX/FA 20/52/8 and proposals in reply to CL 2020/36-FA have been included.

Note XS272 Remove these exclusions from the lauric arginate ethyl ester provisions

Is the proposal related to a FC with corresponding commodity standards?

(if yes indicate the relevant FC)

Yes. FC 01.6.2.1

Standard for Cheddar (CXS 263-1966)

Standard for Danbo (CXS 264-1966)

Standard for Edam (CXS 265-1966)

Standard for Gouda (CXS 266-1966)

Standard for Havarti (CXS 267-1966)

Standard for Samsø (CXS 268-1966)

Standard for Emmental (CXS 269-1967)

Standard for Tilsiter (CXS 270-1968)

Standard for Saint-Paulin (CXS 271-1968)

Standard for Provolone (CXS 272-1968)

Is the proposal also intended to revise the products covered by the commodity standards?

(if yes indicate the relevant commodity standards)

Yes, to revise the products covered by the commodity listed above to permit the use of lauric arginate ethyl ester (INS 243) (LAEE).

EVALUATION BY JECFA:

Evaluation by JECFA

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

Evaluation date: 2008

Report: TRS 952-JECFA 69/27 Tox Monograph: FAS 60-JECFA 69

Specifications: FAO JECFA Monographs 7 (2009) ADI 0-4 mg/kg bw for Ethyl-Nα-Lauroyl-L-Arginate

JUSTIFICATION:

Justification for use and technological need

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

Based on Section 3.2 of the Preamble of the General Standard for Food Additives, the main technological need for the use of LAEE in food category 01.6.2.1 is 3.2(c) 'To enhance to keeping quality or stability of a food'.

Provisions were adopted at Step 8 in 2011 for LAEE (INS 243) in food category 01.6.2.1 at a level of 200 mg/kg. The provisions were adopted with footnotes that restrict the use of the additive in products conforming to corresponding commodity standards associated with this category.

The thirteen footnotes adopted were as follows:

XS263: Excluding products conforming to the Standard for Cheddar (CXS 263-1966)

XS264: Excluding products conforming to the Standard for Danbo (CXS 264-1966)

XS265: Excluding products conforming to the Standard for Edam (CXS 265-1966)

XS266: Excluding products conforming to the Standard for Gouda (CXS 266-1966)

XS267: Excluding products conforming to the Standard for Havarti (CXS 267-1966)

XS268: Excluding products conforming to the Standard for Samsø (CXS 268-1966)

XS269: Excluding products conforming to the Standard for Emmental (CXS 269-1967)

XS270: Excluding products conforming to the Standard for Tilsiter (CXS 270-1968)

XS271: Excluding products conforming to the Standard for Saint-Paulin (CXS 271-1968)

XS272: Excluding products conforming to the Standard for Provolone (CXS 272-1968)

XS274: Excluding products conforming to the Standard for Coulommiers (CXS 274-1969)

XS276: Excluding products conforming to the Standard for Camembert (CXS 276-1973)

XS277: Excluding products conforming to the Standard for Brie (CXS 277-1973)

The current request is to authorize the use LAEE in the same cheese standards as many other preservatives, including lysozyme, sorbates, nisin, natamycin, nitrates and propionate. Therefore, it is sought to remove the following **ten** footnotes:

XS263: Excluding products conforming to the Standard for Cheddar (CXS 263-1966)

XS264: Excluding products conforming to the Standard for Danbo (CXS 264-1966)

XS265: Excluding products conforming to the Standard for Edam (CXS 265-1966)

XS266: Excluding products conforming to the Standard for Gouda (CXS 266-1966)

XS267: Excluding products conforming to the Standard for Havarti (CXS 267-1966)

XS268: Excluding products conforming to the Standard for Samsø (CXS 268-1966)

XS269: Excluding products conforming to the Standard for Emmental (CXS 269-1967)

XS270: Excluding products conforming to the Standard for Tilsiter (CXS 270-1968)

XS271: Excluding products conforming to the Standard for Saint-Paulin (CXS 271-1968)

XS272: Excluding products conforming to the Standard for Provolone (CXS 272-1968)

The acceptability of the use of preservatives in these ten food standards is recognised in the GSFA by way of the inclusion of provisions permitting the use of various preservatives, including lysozyme, sorbates, nisin, natamycin, nitrates and propionates² in these standards. The use of LAEE provides an effective alternative to the use of such preservatives in products falling under these standards.

Technological effect of Lauric arginate ethyl ester in cheese

LAEE is a preservative that is also used in products that conform to these corresponding ten commodity standards associated with FC 01.6.2.1. The technical effect of LAEE in food is to inhibit microbial growth in the food to which it has been added, and it is effective in controlling the growth of potentially pathogenic organisms in products falling under 01.6.2.1. The active ingredient of LAEE, as a cationic surfactant, has a wide spectrum of activity against bacteria, yeasts and moulds. Specifically, LAEE affects negatively charged compounds such as microbial proteins present in cellular membranes or in enzyme systems.

Both hard or ripened and soft or unripened cheese benefit from the addition of preservatives. Age-ripened cheese retain their quality for long periods due to comparatively low pH, low water activity and low redox potential. However, spoilage may occur through the action of fungi, lactic acid bacteria and sporeforming bacteria. Unripened cheeses spoil more rapidly than aged cheeses,

² Proprionates are not permitted for use in Emmental and have the following Note - XS269: Excluding products conforming to the *Standard for Emmental* (CXS 269-1967). But they are permitted in the other nine standards as described here.

and typical spoilage microorganisms include psychrotrophs, coliforms, fungi and lactic acid bacteria (Ledenbach and Marshall, 2009). Pasteurisation may eliminate many spoilage microorganisms originating from milk production and processing, but post-process contamination of milk and cheese can still occur.

Use of the currently authorised preservatives in cheese has some disadvantages. When used to prevent mould growth on the surface of cheese, sorbates tend to diffuse into the cheese decreasing the surface concentration and thereby decreasing their preservative effect, and also modifying the favour, appearance and ripening process of the cheese (de Ruig and van den Berg, 1985). In addition, some moulds that grow on cheese are capable of metabolising sorbic acid and sorbate to trans-1.3-pentadiene. which causes an off-odour and flavour (Ledenbach and Marshall, 2009; Sensidoni et al., 1994). In addition, the near neutral pH of fresh cheese is not optimal for the antimicrobial activity of sorbates. The use of other preservatives on cheese also have disadvantages, such as natamycin which is a polyene fungicide and is not active against pathogenic bacteria such as L. monocytogenes (EFSA, 2009). Nisin has a narrow spectrum of activity against only gram-positive bacteria and does not inhibit gram-negative bacteria, yeasts or moulds (EFSA, 2006). In addition, some strains of bacteria, including some strains of L. monocytogenes have been shown to develop gradual resistance against nisin (Soni et al., 2010).

The technological advantages of LAEE over other preservatives for use in cheeses (i.e. FC 01.6.2.1) include the following:

- LAEE is effective at low and near-neutral pH. In contrast, some currently approved preservatives are only effective at low pH.
- LAEE is similarly effective against bacteria (Gram +ve and Gram -ve), yeasts and moulds. Other preservatives must be combined to enhance their antimicrobial efficacy because they cannot inhibit the growth of such a wide range of micro-organisms by themselves
- The minimum inhibitory concentrations (MICs) of LAEE are considerably lower than the MICs of the other preservatives against the same microorganisms. This means that the effective application dose is lower for LAEE than for other food preservatives
- On ingestion, LAEE can be easily and rapidly metabolised to common, natural constituent metabolic compounds. This implies a lack of adverse effects because it is a unique food preservative that is metabolically decomposed into constituent products.

Efficacy

The efficacy of LAEE as an antimicrobial preservative for use on cheese has been demonstrated in a number of studies. Some of these studies are now described:

An internal study examined effect of LAEE on fresh cheese (50 ppm and 100 ppm) (Internal study VED-EC-21). Treating fresh cheese with LAE did not change their taste and general appearance. Found that LAEE reduces the concentration of the standard microbiological contamination present in the samples (*E. coli*, Coliform bacteria and yeasts). The antimicrobial activity increases with higher concentrations of LAEE. At 50 ppm there is a clear reduction effect, while at 100 ppm the reduction increases significantly.

A separate internal study examined the effect of LAEE on blue cheese to prevent the presence of *Listeria monocytogenes* without affecting the technological characteristics of this type of product (Internal study VED-EC-22). During ripening, soaking of blue cheeses was done using a 1% LAEE solution. Soaking was carried out 4 times during ripening. Treating blue cheeses with solutions of LAE during ripening period did not change their general appearance. LAEE surface treatment reduces the population of *Listeria spp.* in blue cheese and prevents the presence of *Listeria monocytogenes* on the surface of blue cheese.

International authorisation of LAEE

falling under FC New Zealand, C products confo products are a should be give	The use of lauric arginate ethyl ester (LAEE) is permitted for use in products falling under FC 01.6.2.1 in a number of countries worldwide (e.g. Australia, New Zealand, Canada, and the USA), without further restriction on its use in products conforming to the relevant Codex commodity standards. These 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 in numerous countries.			
Safe use of additive: Dietary intake assessment				
	□ Yes			
(as appropriate)	X No (Please provide information on dietary intake assessment below)			
	The use of lauric acid ethyl ester (INS 243) in cheese products that fall under Codex food category 01.6.2.1, as well as its use in a broad range of other foods, was taken into consideration as part of the JECFA assessment of the safety of the additive in 2009.			
Justification that the use does not mislead consumer	When used as a preservative, the use of LAEE would be in the list of ingredients on the label of the products.			

REFERENCES

De Ruig, WG and van den Berg G. (1985). Influence of the fungicides sorbate and natamycin in cheese coatings on the quality of the cheese. *Neth. Milk Dairy J.*, 39, 165-172.

EFSA Panel on Food Additives and Nutrient Sources added to Food (ANS); Scientific Opinion on the use of natamycin (E 235) as a food additive. EFSA Journal 2009;7(12):1412 [25 pp.].

EFSA Panel on Food Additives, Flavourings, Processing Aids and Materials in Contact with Food. Scientific Opinion on the use of nisin (E 234) as a food additive. Question number EFSA-Q-2005-031. Adopted on 26 January 2006. The EFSA Journal (2006) 314, 1-16.

Internal study - VED-EC-21. Technical report of Efficacy test. Lauric Arginate as Preservative for treatment of Blue Cheese. Laboratorios Miret S.A. Lamirsa. 15 September 2008.

Internal study - VED-EC-22. Technical report of Efficacy test. Lauric Arginate as Preservative for Fresh Cheese. Laboratorios Miret S.A. Lamirsa. 22 Febuary 2008.

Ledenbach, LH and Marshall, RT. (2009). Microbiological Spoilage of Dairy Products. In: Compendium of the Microbiological Spoilage of Foods and Beverages. Ed. Sperber, W.H. and Doyle, M.P. Food microbiology and Food Safety. Springer p.41-67

Sensidoni A, Rondinini G, Peressini D, Maifreni M, Bortolomeazzi R. (1994). Presence of an off-flavour associated with the use of sorbates in cheese and margarine. Ital. J. Food Sci. 2: 237-242.

Soni KA, Nannapaneni R, Schilling MW, Jackson V. (2010). Bactericidal activity of lauric arginate in milk and Queso Fresco cheese against Listeria monocytogenes cold growth. J Dairy Sci., Oct;93(10):4518-25.

Uganda THE PROPOSAL IS SUBMITTED BY: Uganda IDENTITY OF THE FOOD ADDITIVE: Name of the Additive Azorubine (Carmoisine) As listed in Class Names and the International Numbering System (INS) -CAC/GL 36-1989 **INS Number** 122 **Functional Class** Colour As listed in Class Names and the International Numbering System (INS) -CAC/GL 36-1989

PROPOSED USE(S) OF THE FOOD ADDITIVE (1): The rows below may be copied as many times as needed.		Έ (¹):			
		as	X a new provision; or		
			☐ revising an existing 2 of the GSFA; or	provision in Tables 1 and	
			☐ revising an existing provision in Tab		
				proposal intended to revise	
	_		1 '	he commodity standard").	
Food Category	Food Category Name (²)		Maximum Use	Comments (⁴)	
No. (²)			Level (³)		
	Water-based flavoured drinks			Labelling requirement:	
	including "sport," "energy," or	r		may have an adverse	
	"electrolyte" drinks and		"	effect on activity and	
14.1.4	particulated drinks		50 mg/l	attention in children"	
	related to a FC with correspond	onding c	ommodity standards?		
(if yes indicate the	e relevant FC)				
No	alaa intandad ta rayiga tha r		acrossed by the comm	adity otondordo?	
	also intended to revise the p e relevant commodity standar		covered by the comin	iouity standards?	
No	e relevant commodity standar	us)			
EVALUATION B	Y JECFA:				
Evaluation by JECFA		• :	• 27 th JECFA (1983)		
•			ADI: 0 – 4 mg/kg bw		
Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI (numerical or "not specified"); specifications			FAS 18-JECFA 27/15 (monograph)	
			,	3 1 /	
monograph).					
JUSTIFICATION	•				
Justification for use and technological		To enha	nce products' organole	ptic properties.	
need		The colourant is not mutagenic, carcinogenic, or			
	nation based on the criteria in			no serious histopathological	
	ne Preamble of the General pod Additives (i.e. has an	effects (JECFA, 1983)			
	not present an appreciable				
	s a technological function).				
Safe use of addi	tive: Dietary intake	Table 3	additive:		
assessment (as		□Yes			
		X No (F	Please provide informat	ion on dietary intake	
		,	ment below)	,	
Justification that	the use does not mislead			dditive to conform to food	
consumer				additives in the General repackaged Foods (CXS 1-	
		1985)	a for the Labelling of Fi	opaonagou i oods (ONO 1-	
THE PROPOSAL	IS SUBMITTED BY:	Uganda			
IDENTITY OF TH	IE FOOD ADDITIVE:	•			
Name of the Ada	J:4:	Outra altia	a vallau		

THE PROPOSAL IS SUBMITTED BY:	Uganda			
IDENTITY OF THE FOOD ADDITIVE:				
Name of the Additive	Quinoline yellow			
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
INS Number	104			

Functional Class	3	Colour		
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
PROPOSED USE	(S) OF THE FOOD ADDITIV	E (¹):	The proposal for:	
	nay be copied as many times a			for the Labelling of ds a new provision; or
			☐ revising an exist 2 of the GSFA; or	ting provision in Tables 1 and
			☐ revising an exist	ting provision in Table 3 of the
				he proposal intended to revise by the commodity standard").
Food Category	Food Category Name (²)		Maximum Use	Comments (4)
No. (²)			Level (³)	
	Water-based flavoured drinks	,		Labelling requirement:
	including "sport," "energy," or			"may have an adverse effect
14.1.4	"electrolyte" drinks and particudrinks	ulated	10 mg/l	on activity and attention in children"
	related to a FC with correspond	anding o		
(if yes indicate the	•	Jiluling C	oniniounty Standard	no:
No	e relevant i Oj			
	also intended to revise the p	roducts	covered by the cor	nmodity standards?
• •	e relevant commodity standar		covered by the cor	illiouity standards?
No	e relevant commodity standard	us)		
EVALUATION B	V IECEA.			
			2024 IEOEA (2242)	
Evaluation by JE			32 nd JECFA (2016)	
Reference to the JECFA evaluation (including year and JECFA session of evaluation; full ADI			ADI: 0 – 3 mg/kg bw	
(numerical or "not specified"); specifications monograph).		FAO JECFA monographs 19		
JUSTIFICATION:	<u>_</u>			
Justification for need	use and technological		nce products' organ	oleptic properties. ine yellow for children and all
	nation based on the criteria in			resent a health concern. (WHO
Section 3.2 of the	e Preamble of the General		ditives series: 73, 20	
	ood Additives (i.e. has an			
	not present an appreciable s a technological function).			
	tive: Dietary intake	Table 3	additive:	
assessment (as			additive.	
,	,, ,	☐ Yes	Naga provide inform	nation on distanciatele
		assessi	ment below)	nation on dietary intake
				Safety Authority), 2015.
		Yel	low (E 104). EFSA J	sessment for Quinoline lournal 2015;13(3):4070,
		· ·	pp., doi:10.2903/j.ef	
		(JE	CFA, 2017)	certain food additives
Justification that consumer	the use does not mislead			od additive to conform to food food additives in the General
JUNISHING				of Prepackaged Foods (CXS 1-
		1900)		

THE PROPOSAL IS SUBMITTED BY:		Uganda		
IDENTITY OF THE FOOD ADDITIVE:				
Name of the Additive		Tartrazi	ne	
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
INS Number		102		
Functional Clas	S	Colour		
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989				
PROPOSED US	E(S) OF THE FOOD ADDITIV	/Ε (¹):	The proposal for:	
The rows below r	nay be copied as many times		X a new provision; or	
as needed.			☐ revising an existing and 2 of the GSFA; or	
			☐ revising an existing	provision in Table 3 of the
				proposal intended to revise he commodity standard").
Food Category	Food Category Name (²)		Maximum Use	Comments (4)
No. (²)	, , ,		Level (³)	()
	Water-based flavoured drink	s,		Labelling requirement:
	including "sport," "energy," o	r		"may have an adverse
	"electrolyte" drinks and			effect on activity and
14.1.4	particulated drinks		100 mg/l	attention in children"
Is the proposal	related to a FC with corresp	onding c	ommodity standards?	
(if yes indicate th	e relevant FC)			
No				
Is the proposal	also intended to revise the p	oroducts	covered by the comm	odity standards?
(if yes indicate th	e relevant commodity standar	rds)		
No				
EVALUATION B	Y JECFA:			
Evaluation by J	ECFA	•	82 nd JECFA Report (201	16)
	JECFA evaluation (including	 ADI: 0 – 10 mg/kg bw 		
	session of evaluation; full ADI	 FAO JECFA Monographs 19 		
monograph).	ot specified"); specifications			
JUSTIFICATION	:			
Justification for	use and technological	To enha	ance products' organole	ptic properties.
need	J	Dietary exposure to tartrazine for the general population,		
Supporting inforn	nation based on the criteria in	including children, does not present a health concern		
Section 3.2 of the Preamble of the General		(WHO F	Food Additive Series: 73	, 2017)
Standard for Food Additives (i.e. has an advantage, does not present an appreciable				
health risk, serves a technological function).				
Safe use of additive: Dietary		Table 3	additive:	
intake assessment (as appropriate)		□ Yes		
		,	Please provide informati ment below)	on on dietary intake
		(WHO/JECFA, 2017) Safety evaluation of certain		
		food ad	,	

Justification that the use does not mislead consumer	Products containing the food additive to conform to food labelling requirements for food additives in the <i>General Standard for the Labelling of Prepackaged Foods</i> (CXS 1-
	1985)

Food Drink Europe					
THE PROPOSAL IS SUBMITTED BY: FoodDrinkEurope					
IDENTITY OF THE FOOD ADDITIVE:					
Name of the Additive		Sucralo	se		
As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989		Guorano			
INS Number		955			
Functional Class	3	Sweete	ner		
As listed in Class International Nun CAC/GL 36-1989	nbering System (INS) -				
	(S) OF THE FOOD ADDITIVE		The proposal for:		
The rows below n	nay be copied as many times a	as	☐ a new provision; or		
Existing Authori	sation in GSFA		X revising an existing 2 of the GSFA; or	provision in Tables 1 and	
Table One			☐ revising an existing	provision in Table 3 of the	
Category 7.2 Fin	•			proposal intended to revise	
Sucralose 955 20	008 700 mg/kg Notes 161 & 1	65	products covered by the	ne commodity standard").	
Food Category	Food Category Name (2)		Maximum Use	Comments (4)	
No. (²)	Fine Dokony Wares		Level (3)	A new Note to be added	
07.2	Fine Bakery Wares		700 mg/kg	"wafer paper only"	
Is the proposal r	elated to a FC with correspond	onding c	ommodity standards?		
(if yes indicate the	e relevant FC)				
No					
	also intended to revise the p		covered by the commo	odity standards?	
` ,	e relevant commodity standar	ds)			
No					
EVALUATION B					
Evaluation by JE			ion Year: 1990		
	JECFA evaluation (including				
	session of evaluation; full ADI of specified"); specifications	Meeting: 37			
monograph).	or opcomou), opcomounone	Specs Code: R (1993)			
		Report: TRS 806-JECFA37/21			
		Tox Monograph: FAS 28-JECFA 37/219			
		Specification: Compendium Addendum 12/FNP 52 Add. 12/68 (Metals Limits) 2004. R;			
		FAO JECFA Monographs 1 vol. 3/439			
		2001, Compendium Addendum 9/FNP 52 Add.9/192 (Metals Limits)			
		1993, Compendium Addendum 2/FNP 52 Add.2/119. R			
		1990, C	Compendium/1531. R		
		1988, TRS 776-JECFA 33/20, FNP 38-JECFA 33/255, FAS 24-JECFA 33/45. 0-3.5 (Temporary). TE. N,T			
JUSTIFICATION:		<u>I</u>	,		

Justification for use and technological need Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health risk, serves a technological function).	A baking process with sugar is in the case of wafer papers technically not possible because the sugar will stick during the baking process to the baking plates. Therefore, in the case of wafer papers no alternative to Sweeteners. Sucralose is most suitable sweetener for wafer paper.
Safe use of additive: Dietary intake assessment (as appropriate)	Table 3 additive: ☐ Yes X No (Please provide information on dietary intake assessment below) Wafer papers are absolute niche products and as a conclusion it can be stated that in the group of adults and children the ADI is not likely to be exceeded even for so called high-level consumers.
Justification that the use does not mislead consumer	There are no sugar sweetened wafer papers on the market. Furthermore, the use of Sucralose is mentioned explicitly on the labelling.

Part B: Replies to CL 2020/36-FA

Colombia

Colombia, in response to circular letter CL 2020/36- FA, presents the information required for the inclusion of the food additive Jagua (Genipin-Glycine) Blue in the GSFA.

	AL IS SUBMITTED BY:	Ecofl	ora Cares	
IDENTITY OF T	HE FOOD ADDITIVE:			
As listed in Class Names and the		Jagua (Genipin-Glycine) Blue Synonims: Jenipapo (genipapo), Blue jenipapo (genipapo blue), Azul de jagua (jagua blue), Azul de huito (huito blue), Huito, Jagua		
INS Number		INS N	N 183 was requested accor	rding to CL 2020/35-FA
Functional Cla	SS	Colo	ır	
	ss Names and the Imbering System (INS) - 39			
PROPOSED USE(S) OF THE FOOD ADDITIVE The rows below may be copied as many times as needed.		E (¹):	■ a new provision; or □ revising an existing provision in Tables 1 and 2 of the GSFA; or □ revising an existing provision in Table 3 of the GSFA (skip to "Is the proposal intended to revise products covered by the commodity standard").	
Food Category No. (²)	Food Category Name (²)		Maximum Use Level (3)	Comments (4)
01.1	Fluid Milk and Milk Products Subcategory: 01.1.4 Flavored Fluid Milk Drink		Blue ^(b) 0.04% Green ^(b) , purple, brown 0.021%	Food type: flavored milk (b) Color use is seasonal
04.1	Fruit Subcategory: 04.1.2.8 Fruit preparations, including pulp, purees, fruit toppings and coconut milk		Blue ^(b) 0.04% Green ^(b) , purple ^(b) , brown ^(b) , 0.021%	Food type: flavored milk substitutes (b) Color use is seasonal
06.8			Blue (b) 0.04% Green (b), purple (b), brown (b), 0.021%	Food type: flavored milk substitutes (b) Color use is seasonal

	T. a.	<u> </u>	
	12.9)		
	Subcategory: 06.8.1 Soybean-		
	based beverages		
01.2	Fermented milks (plain)	Blue 0.03%	Food type: yogurt, regular
	(subcategory 01.2.1 Fermented	Green, purple, brown	and Greek including non
	milks (plain)	0.016%	dairy products
01.7	Dairy-based desserts	Blue 0.10%	Food type: ice cream and
		Green, purple, brown	frozen including milk
		0.053%	shake
			dairy
01.7	Dairy-based desserts	Blue NA ^(*)	Food type: pudding
		Green (b), purple (b),	(b) Color use is seasonal
		brown 0.021%	NA ^(*) Not applicable; color
			not intended.
03.0	Edible ices, including sherbet and	Blue 0.03%	Food type: ice, sorbets
	sorbet	Green, purple, brown	, , , , , , , , , , , , , , , , , , , ,
	66.261	0.016%	
06.3	Breakfast cereals, including rolled	Blue 0.5%	Food type: Ready to eat
00.0	oats	Green, purple, brown	cereals
		0.290%	
15.0	Ready-to-eat savouries:	Blue NA ^(*)	Food type: potato chips
10.0	(Subcategory 15.1 Snacks - potato,	Green, brown 0.154%	flavored
	cereal, flour or starch based (from	(color in the seasoning)	NA ^(*) Not applicable; color
	roots and tubers, pulses and	(color in the seasoning)	not intended.
	legumes))		not interiaca.
15.0	Ready-to-eat savouries:	Blue 0.3%	Food type: tortilla, corn,
13.0	(Subcategory 15.1 Snacks - potato,	Green, brown 0.154%	other chips
	cereal, flour or starch based (from	Green, brown 0.15476	other chips
	roots and tubers, pulses and		
	legumes)		
05.0	Confectionery	Blue 0.2%	Food type: candy
05.0	Subcategory: 05.1.4 Cocoa and	Green, purple, brown	containing chocolate.
	chocolate products	0.103%	Intended use corresponds
	chocolate products	0.10376	to the portion of candy
			that put contain Jagua
			Blue
05.0	Confectionery	Blue 0.2%	Intended use corresponds
03.0	Subcategory:	Green, purple, brown	to the portion of candy
	05.2.1 Hard candy	0.103%	that put contain Jagua
	05.2.1 Fland carrdy 05.2.2 Soft candy	0.10378	Blue
	05.2.3 Nougats and marzipans		Dide
05.0	Confectionery	Blue 0.2%	Food type: Chewing gum
05.0			i ood type. Chewing gum
	Subcategory:	Green, purple, brown 0.103%	
111	05.3 Chewing gum		Food type: Fruit based
14.1	Non-alcoholic ("soft") beverages	Blue 0.02%	Food type: Fruit based
	Subcategory:	Green, purple, brown	drinks (including fruit
13.0	14.1.3 Fruit and vegetable nectars	0.011% Blue NA	flavored drinks)
13.0	Foodstuffs intended for particular		Food type: Nutritional
	nutritional uses	Green, purple, brown	beverages (RTE and
04.4	Ferrit	0.016%	powders)
04.1	Fruit	Blue NA	Food type: Smoothie type
04.0	Subcategory: 14.1.2.1 Fruit juice	Green, purple 0.016%	Food type: Oregon about
01.6	Cheese and analogues	Blue NA	Food type: Cream cheese
	01.6.1 Unripened cheese:	Green, purple, brown	
05.4	Decembra (c. c. f.	0.011%	Facilities 1939
05.4	Decorations (e.g., for fine bakery	Blue 0.03%	Food type: Icing and
	wares), toppings (non-fruit) and	Green, purple, brown	frosting
	sweet sauces	0.016%	
04.1	Fruit	Blue 0.03%	Food type: fruit toppings,
	Subcategory 04.1.2.5 Jams, jellies,	Green, purple, brown	fillings and jams
	marmalades	0.016%	

Is the proposal related to a FC with correspond	onding commodity standards?
No	
Is the proposal also intended to revise the p	roducts covered by the commodity standards?
No	
EVALUATION BY JECFA:	
Evaluation by JECFA	
Reference to the JECFA evaluation (including	
year and JECFA session of evaluation; full ADI	
(numerical or "not specified"); specifications	
monograph).	
JUSTIFICATION:	
Justification for use and technological	
need	
Supporting information based on the criteria in	
Section 3.2 of the Preamble of the General	
Standard for Food Additives (i.e. has an	
advantage, does not present an appreciable	
health risk, serves a technological function).	
Safe use of additive: Dietary intake	Table 3 additive:
assessment (as appropriate)	□ Yes
	□ No (Please provide information on dietary intake
	assessment below)
Justification that the use does not mislead	
consumer	

International Stevia Council (ISC)

ISC respectfully proposes the revision of GSFA by replacing the existing entry for food additive 960b Steviol Glycosides from Fermentation and by adding entries for 960c Enzyme Modified Steviol Glycosides (Enzymatically Produced Steviol Glycosides) and INS 960d Enzyme Modified Glucosylated Steviol Glycosides (Glucosylated Steviol Glycosides (Glycosides).

International Stevia Council - ISC

Contact Person:

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1150 Brussels - Belgium

Tel: +32497597221

e-mail: GlobalOffice@internationalsteviacouncil.org

IDENTITY OF THE FOOD ADDITIVE:

Name of the Additive

As listed in Class Names and the International Numbering System (INS) - CXG 36-1989 Steviol Glycosides from Fermentation

General Comment: All steviol glycoside-related submissions request that a streamlined approach be applied to all these additives by adding all to the Group Header Steviol Glycosides, as they are all covered under the same group ADI.

<u>Note 1:</u> this submission is linked to the form submitted for Enzyme Modified Steviol Glycosides (Enzymatically Produced Steviol Glycosides) and the form submitted for Enzyme Modified Glucosylated Steviol Glycosides (Glucosylated Steviol Glycosides).

Note 2: JECFA approved the monograph for Steviol Glycosides from Fermentation at its 87th meeting at its meeting in June 2019 – this monograph has to be adopted by CODEX and CCFA 52 will consider to adopt the final INS classification.

•				
JECFA speci serve to upda from multiple detailed qual		nsistent with past practice, only this name as reflected in the cification naming should be used in the INS and would date and replace the existing INS entry 'Rebaudioside A e gene donors expressed in Yarowia lipolytica.' The alification associated with fermentation is (and would be) wable from the JECFA specification.		
INS Number		960b		
into riumbo.		<u>Note 1:</u> JECFA approved the monograph for Steviol Glycosides from Fermentation at its 87 th meeting – this monograph has to be adopted by CODEX and CCFA 52 will consider to adopt the final INS classification.		
		Note 2: The INS number 960b serves to update and replace the existing entry 'INS 960b(i)' based upon the JECFA review and approval of the Framework for Steviol Glycosides at its 87th meeting in June 2019.		
Functional Class		Sweetener		
As listed in Class I the International N System (INS) - CA 1989	lumbering			
PROPOSED USE(S) OF THE FO ADDITIVE (1): The rows below may as many times as needed.			The proposal for: ☐ a new provision; or x revising all existing provisions in Tables 1 and 2 of the GSFA, by revising the group header for Steviol Glycosides to eliminate INS 960b i) and replace it with INS 960b; or ☐ revising an existing provision in Table 3 of the GSFA (skip to "Is the proposal intended to revise products	
Food Category	Food Catego	ry Name (2)	covered by the commodity : Maximum Use Level (3)	Standard). Comments (4)
No. (2)	l ood oaloge	i y i taille ()	maximum osc Lever()	Comments ()
01.1.4	Flavoured flu drinks	id milk	200 mg/kg	26 & XS243
01.5.2	Milk and crea	m powder	330 mg/kg	26 & 201
01.7	Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt)		330 mg/kg	26
02.4	02.4 Fat-based desserts excluding dairy-based dessert products of food category 01.7		330 mg/kg	26
03.0	Edible ices, in sherbet and s		270 mg/kg	26
04.1.2.3	Fruit in vinegar, oil, or brine		100 mg/kg	26
04.1.2.4	Canned or bottled (pasteurized) fruit		330 mg/kg	26 & XS319
04.1.2.5	Jams, jellies, marmelades		360 mg/kg	26
04.1.2.6	Fruit-based s chutney) excl products of fo category 04.1	uding ood	330 mg/kg	26

04.1.2.7	Candied fruit	40 mg/kg	26
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	330 mg/kg	26
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	350 mg/kg	26
04.1.2.10	Fermented fruit products	115 mg/kg	26
04.1.2.11	Fruit fillings for pastries	330 mg/kg	26
04.1.2.12	Cooked fruit	40 mg/kg	26
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	40 mg/kg	26
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	330 mg/kg	26
04.2.2.4	Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	70 mg/kg	26
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	330 mg/kg	26
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	165 mg/kg	26

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 12.9.2.3	200 mg/kg	26
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	40 mg/kg	26
05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	700 mg/kg	26, 199 & XS309R
05.3	Chewing gum	3,500 mg/kg	26
06.3	Breakfast cereals, including rolled oats	350 mg/kg	26
06.5	Cereal and starch based desserts (e.g. rice pudding, tapioca pudding)	165 mg/kg	26
06.8.1	Soybean-based beverages	200 mg/kg	26
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	100","mg/kg	26, 202, XS88, XS89 & XS98
09.3.1	Fish and fish products, including mollusks, crustaceans, and echinoderms, marinated and/or in jelly	100 mg/kg	26 & 144
09.3.2	Fish and fish products, including mollusks, crustaceans, and echinoderms, pickled and/or in brine	165 mg/kg	26
09.3.3	Salmon substitutes, caviar, and other fish roe products	100 mg/kg	26 & XS291
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	100 mg/kg	26, XS3, XS37, XS70, XS90, XS94 & XS119

10.4	Egg-based desserts (e.g.	330 mg/kg	26
	custard)		
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	GMP	26
12.2.2	Seasonings and condiments	30 mg/kg	26
12.4	Mustards	130 mg/kg	26
12.5	Soups and broths	50 mg/kg	26 & XS117
12.6.1	Emulsified sauces and dips (e.g. mayonnaise, salad dressing, onion dip)	350 mg/kg	26
12.6.2	Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy)	350 mg/kg	26
12.6.3	Mixes for sauces and gravies	350 mg/kg	26 & 127
12.6.4	Clear sauces (e.g. fish sauce)	350 mg/kg	26 & XS302
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	115 mg/kg	26
12.9.2.1	Fermented soybean sauce	30 mg/kg	26
12.9.2.2	Non-fermented soybean sauce	165 mg/kg	26
12.9.2.3	Other soybean sauces	165 mg/kg	26
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	350 mg/kg	26
13.4	Dietetic formulae for slimming purposes and weight reduction	270 mg/kg	26
13.5	Dietetic foods (e.g. supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6	660 mg/kg	26, 198 & 294
13.6	Food supplements	2,500 mg/kg	26 & 203
14.1.3	Fruit and vegetable nectars	200 mg/kg	26

14.1.4	Water-based flavoured drinks, including ""sport,"" ""energy,"" or "electrolyte"" drinks and particulated drinks	200 mg/kg	26
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200 mg/kg	26 & 160
14.2.7	Aromatized alcoholic beverages (e.g. beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	200 mg/kg	26
15.0	Ready-to-eat savouries	170 mg/kg	26

Is the proposal related to a FC with corresponding commodity standards?

(if yes indicate the relevant FC)

This submission requests revisions to the current Group Header for Steviol Glycosides. Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

Is the proposal also intended to revise the products covered by the commodity standards?

(if yes indicate the relevant commodity standards)

This submission requests revisions to the current Group Header for Steviol Glycosides. Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

EVALUATION BY JECFA:

Evaluation by JECFA

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

JECFA Evaluation:

- 87th meeting, from 4 to 13 June 2019
- "At the present meeting, the Committee determined that no safety issues exist for steviol glycosides produced by any one of these methods resulting in products with ≥95% steviol glycosides as per existing specifications. The Committee indicated that the ADI of 0–4 mg/kg bw established at the sixty-ninth meeting of JECFA for steviol glycosides (expressed as steviol) (Annex 1, reference 190) applies to steviol glycosides produced by the four methods indicated in the annexes of the specifications monograph produced at the current meeting." (Reference to page 11 of the Evaluation of certain food additives (87th report of the Joint FAO/WHO Expert Committee on Food Additives). WHO Technical Report Series No.1020, 2019). ADI of 0–4 mg/kg bw, expressed as steviol equivalents
- JECFA Monograph 23

JUSTIFICATION:

Justification for use and technological need

Supporting information based on the criteria in Section 3.2 of the Preamble of the General Standard for Food Additives (i.e. has an advantage, does not present an appreciable health Steviol glycosides are high-intensity sweeteners with sweetness potency ranging between 200 and 350 times higher than the one of sucrose. Providing zero calories, they are used for reduction or replacement of sugars in reduced-calorie or no-sugar-added products in many food and beverage categories and have been shown to not interfere with glucose homeostasis.

risk, serves a technological function).	A revision to the current GSFA as per this submission is justified because the production through fermentation allow the safe production of products with higher quantities of the minor steviol glycosides typically present in the stevia leaf.		
	These minor steviol glycosides offer more options to formulate products with differing sensory profiles. These are better tasting and have better sensory profiles than more common steviol glycosides, allowing manufacturers to better customize steviol glycosides' blends used in products to meet consumers' expectations. These minor steviol glycosides also give manufacturers a greater array of options for sugar reduction and enable a further reduction of sugars in several food and beverages applications, up to between 50 to 100% sucrose replacements.		
Safe use of additive: Dietary	Table 3 additive:		
intake assessment (as appropriate)	□Yes		
appropriato	X No (Please provide information on dietary intake assessment below):		
	JECFA performed the Assessment of dietary exposure for steviol glycosides at its 69th meeting where the Committee established an ADI for steviol glycosides of 0– 4 mg/kg bw expressed as steviol (Evaluation of certain food additives, Sixty-ninth report of JECFA - WHO Technical Report Series, No. 952, 2009). A re-evaluation of the dietary intake assessment was carried out by JECFA in 2016 (Evaluation of certain food additives, Eighty-second report of JECFA - WHO Technical Report Series No. 1000, 2016) and the ADI of 0–4 mg/kg bw, expressed as steviol, was confirmed.		
	This submission is not asking for changes in the categories or use levels to the provisions of steviol glycosides in GSFA – All the provisions indicated above are already existing provisions, which have already been adopted. Therefore the JECFA dietary intake assessment outcome in 2016 is to be considered appropriate.		
Justification that the use does not mislead consumer	Steviol glycosides – likes all the sweeteners - are labelled on the ingredient list (i.e., name and/or the recognized numerical identification together with the functional class of "sweetener") in accordance with the general standard for the labelling of prepackaged foods (CODEX STAN 1-1985). This labelling requirement ensures the consumer is not misled.		
	The INS classification with the alphabetical suffix enables differentiation between production technologies for steviol glycosides.		

THE PROPOSAL IS SUBMITTED BY: IDENTITY OF THE FOOD ADDITIVE:	International Stevia Council – ISC Contact Person: Maria Teresa Scardigli - Executive Director ISC Global Office: Avenue de Tervuren 188A 1150 Brussels - Belgium Tel: +32497597221 e-mail: GlobalOffice@internationalsteviacouncil.org
Name of the Additive As listed in Class Names and the International Numbering System (INS) - CAC/GL 36-1989	Enzyme Modified Steviol Glycosides (Enzymatically Produced Steviol Glycosides) General Comment: All steviol glycoside-related submissions request that a streamlined approach be applied to all these additives by adding all to the Group Header Steviol Glycosides, as they are all covered under the same group ADI.

		submit and the Glucos	this submission is lited for Steviol Glycose form submitted for Esylated Steviol Glycos Glycosides)	ides from Fermentation Enzyme Modified
		Modified June 2 CODE	ed Steviol Glycosides 019 – This monograp	e monograph for Enzyme at its 87 th meeting in the has to be adopted by onsider to adopt the final
		reflecte		t practice, the name as ification naming or as per e INS.
INS Number		960c		
		Modifie monog	ed Steviol Glycosides graph has to be adopted	monograph for Enzyme at its 87 th meeting – this ed by CODEX and CCFA final INS classification.
Functional Class		Sweet	ener	
As listed in Class Name Numbering System (INS				
PROPOSED USE(S) OF THE FOOD ADDITIVE (1): rows below may be copied as many times as needed			Tables 1 and 2 of t group header for St include INS 960c; o □ revising an existin	kisting provisions in he GSFA, by revising the eviol Glycosides to rang provision in Table 3 of s the proposal intended by the commodity
Food Category No. (2)	Food Category Name (2)		Maximum Use Level (3)	Comments (4)
01.1.4	Flavoured fluid milk drinks	3	200 mg/kg	26 & XS243
01.5.2	Milk and cream powder analogues		330 mg/kg	26 & 201
01.7	01.7 Dairy-based desserts (e.g pudding, fruit or flavoured yoghurt)		330 mg/kg	26
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7		330 mg/kg	26
03.0	Edible ices, including sherbet and sorbet		270 mg/kg	26
04.1.2.3	Fruit in vinegar, oil, or brine		100 mg/kg	26
04.1.2.4	Canned or bottled (paster fruit	urized)	330 mg/kg	26 & XS319
04.1.2.5	Jams, jellies, marmelades		360 mg/kg	26
04.1.2.6	Fruit-based spreads (e.g. chutney) excluding productions food category 04.1.2.5	cts of	330 mg/kg	26

04.1.2.7	Candied fruit	40 mg/kg	26
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	330 mg/kg	26
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	350 mg/kg	26
04.1.2.10	Fermented fruit products	115 mg/kg	26
04.1.2.11	Fruit fillings for pastries	330 mg/kg	26
04.1.2.12	Cooked fruit	40 mg/kg	26
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	40 mg/kg	26
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	330 mg/kg	26
04.2.2.4	Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	70 mg/kg	26
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	330 mg/kg	26
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	165 mg/kg	26
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 12.9.2.3	200 mg/kg	26
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	40 mg/kg	26

05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	700 mg/kg	26, 199 & XS309R
05.3	Chewing gum	3,500 mg/kg	26
06.3	Breakfast cereals, including rolled oats	350 mg/kg	26
06.5	Cereal and starch based desserts (e.g. rice pudding, tapioca pudding)	165 mg/kg	26
06.8.1	Soybean-based beverages	200 mg/kg	26
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	100","mg/kg	26, 202, XS88, XS89 & XS98
09.3.1	Fish and fish products, including mollusks, crustaceans, and echinoderms, marinated and/or in jelly	100 mg/kg	26 & 144
09.3.2	Fish and fish products, including mollusks, crustaceans, and echinoderms, pickled and/or in brine	165 mg/kg	26
09.3.3	Salmon substitutes, caviar, and other fish roe products	100 mg/kg	26 & XS291
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	100 mg/kg	26, XS3, XS37, XS70, XS90, XS94 & XS119
10.4	Egg-based desserts (e.g. custard)	330 mg/kg	26
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	GMP	26
12.2.2	Seasonings and condiments	30 mg/kg	26
12.4	Mustards	130 mg/kg	26
12.5	Soups and broths	50 mg/kg	26 & XS117
12.6.1	Emulsified sauces and dips (e.g. mayonnaise, salad dressing, onion dip)	350 mg/kg	26
12.6.2	Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy)	350 mg/kg	26
12.6.3	Mixes for sauces and gravies	350 mg/kg	26 & 127
12.6.4	Clear sauces (e.g. fish sauce)	350 mg/kg	26 & XS302
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	115 mg/kg	26
12.9.2.1	Fermented soybean sauce	30 mg/kg	26

12.9.2.2	Non-fermented soybean sauce	165 mg/kg	26
12.9.2.3	Other soybean sauces	165 mg/kg	26
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	350 mg/kg	26
13.4	Dietetic formulae for slimming purposes and weight reduction	270 mg/kg	26
13.5	Dietetic foods (e.g. supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6	660 mg/kg	26, 198 & 294
13.6	Food supplements	2,500 mg/kg	26 & 203
14.1.3	Fruit and vegetable nectars	200 mg/kg	26
14.1.4	Water-based flavoured drinks, including ""sport,"" ""energy,"" or ""electrolyte"" drinks and particulated drinks	200 mg/kg	26
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200 mg/kg	26 & 160
14.2.7	Aromatized alcoholic beverages (e.g. beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	200 mg/kg	26
15.0	Ready-to-eat savouries	170 mg/kg	26

Is the proposal related to a FC with corresponding commodity standards?

(if yes indicate the relevant FC)

This submission requests revisions to the current Group Header for Steviol Glycosides – Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

Is the proposal also intended to revise the products covered by the commodity standards?

(if yes indicate the relevant commodity standards)

This submission requests revisions to the current Group Header for Steviol Glycosides – Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

EVALUATION BY JECFA:

Evaluation by JECFA

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

JECFA Evaluation:

- 87th meeting of JECFA, from 4 to 13 June 2019:
- "At the present meeting, the Committee determined that no safety issues exist for steviol glycosides produced by any one of these methods resulting in products with ≥95% steviol glycosides as per existing specifications. The Committee indicated that the ADI of 0-4 mg/kg bw established at the sixtyninth meeting of JECFA for steviol glycosides (expressed as steviol) (Annex 1, reference 190) applies to steviol glycosides produced by the four methods indicated in the annexes of the specifications monograph produced at the current meeting." (Reference to page 11 of the Evaluation of certain food additives (87th report of the Joint FAO/WHO Expert Committee on Food Additives). WHO Technical Report Series No. 1020, 2019). ADI of 0-4 mg/kg bw, expressed as steviol equivalents
- JECFA Monograph 23

JUSTIFICATION:

Justification for use and technological need

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

Steviol alvcosides are high-intensity sweeteners with sweetness potency ranging between 200 and 350 times higher than the one of sucrose. Providing zero calories, they are used for reduction or replacement of sugars in reduced-calorie or no-sugar-added products in many food and beverage categories and have been shown to not interfere with glucose homeostasis.

A revision to the current GSFA as per this submission is justified because enzymatic processes allow the safe production of products with higher quantities of the minor steviol glycosides typically present in the stevia leaf.

These minor steviol glycosides offer more options to formulate products with differing sensory profiles. These are better tasting and have better sensory profiles than more common steviol glycosides, allowing manufacturers to better customize steviol glycosides' blends used in products to meet consumers' expectations. These minor steviol glycosides also give manufacturers a greater array of options for sugar reduction and enable a further reduction of sugars in several food and beverages applications, up to between 50 to 100% sucrose replacements.

Safe use of additive	: Dietary
intake assessment	(as appropriate)

Table 3 additive:

☐ Yes

X No (Please provide information on dietary intake assessment below):

JECFA performed the Assessment of dietary exposure for steviol glycosides at its 69th meeting where the Committee established an ADI for steviol glycosides of 0-4 mg/kg bw expressed as steviol (Evaluation of certain food additives, Sixty-ninth report of JECFA -WHO Technical Report Series, No. 952, 2009). A re-evaluation of the dietary intake assessment was carried out by JECFA in 2016 (Evaluation of certain food additives, Eighty-second report of JECFA - WHO Technical Report Series No. 1000, 2016) and the ADI of 0-4 mg/kg bw, expressed as steviol, was confirmed.

This submission is not asking for changes in the categories or use levels to the provisions of steviol alvoosides in GSFA - All the provisions indicated above are already existing provisions, which have already been adopted. Therefore the JECFA dietary intake assessment outcome in 2016 is to be considered appropriate.

Justification that the use does not mislead consumer

Steviol glycosides – likes all the sweeteners - are labelled on the ingredient (i.e. name and/or the recognized numerical identification together with the functional class of "sweetener" in accordance with the general standard for the labelling of prepackaged foods (CODEX STAN 1-1985). This labelling requirement ensures the consumer is not misled.

The INS classification with the alphabetical suffix enables differentiation between production technologies for steviol glycosides.

THE PROPOSAL IS SUBMITTED BY:

International Stevia Council - ISC

Contact Person:

Maria Teresa Scardigli - Executive Director

ISC Global Office:

Avenue de Tervuren 188A 1150 Brussels - Belgium Tel: +32497597221

e-mail: GlobalOffice@internationalsteviacouncil.org

IDENTITY OF THE FOOD ADDITIVE:

Name of the Additive

As listed in Class Names and the International Numbering System (INS) -CAC/GL 36-1989 Enzyme Modified Glucosylated Steviol Glycosides (Glucosylated Steviol Glycosides)

General Comment: All steviol glycoside-related submissions request that a streamlined approach be applied to all these additives by adding all to the Group Header Steviol Glycosides, as they are all covered under the same group ADI.

Note 1: this submission is linked to the form submitted for Steviol Glycosides from Fermentation and the form submitted for Enzyme Modified Steviol Glycosides (Enzymatically Produced Steviol Glycosides).

Note 2: JECFA approved the monograph as tentative at its 87th meeting in June 2019 and the full monograph is expected to be adopted at the JECFA meeting in February 2021 and sent to CCFA 52 for adoption – CCFA 52 will consider to adopt the final INS classification.

<u>Note 3:</u> Consistent with past practice, the name as reflected in the JECFA specification naming or as per above, should be used in the INS.

INS Number

960d

<u>Note 1:</u> JECFA approved the monograph as tentative at its 87th meeting in June 2019 and the full monograph is expected to be adopted at the JECFA meeting in February 2021 – the monograph has to be adopted by CODEX and CCFA 52 will consider to adopt the final INS classification

Functional Class

As listed in Class Names and the International Numbering System (INS) -CAC/GL 36-1989 Sweetener

PROPOSED USE(S) OF THE FOOD ADDITIVE (1): The rows below may be copied as many times as needed.

The proposal for:

- ☐ a new provision; or
- ☐ X revising all existing provisions in Tables 1 and 2 of the GSFA, by revising the group header for Steviol Glycosides to include INS 960; or
- ☐ revising an existing provision in Table 3 of the GSFA (skip to "Is the proposal intended to revise products covered by the commodity standard").

Food Category No. (²)	Food Category Name (²)	Maximum Use Level (3)	Comments (4)
01.1.4	Flavoured fluid milk drinks	200 mg/kg	26 & XS243
01.5.2	Milk and cream powder analogues	330 mg/kg	26 & 201
01.7	Dairy-based desserts (e.g. pudding, fruit or flavoured yoghurt)	330 mg/kg	26
02.4	Fat-based desserts excluding dairy-based dessert products of food category 01.7	330 mg/kg	26
03.0	Edible ices, including sherbet and sorbet	270 mg/kg	26
04.1.2.3	Fruit in vinegar, oil, or brine	100 mg/kg	26
04.1.2.4	Canned or bottled (pasteurized) fruit	330 mg/kg	26 & XS319
04.1.2.5	Jams, jellies, marmelades	360 mg/kg	26
04.1.2.6	Fruit-based spreads (e.g. chutney) excluding products of food category 04.1.2.5	330 mg/kg	26
04.1.2.7	Candied fruit	40 mg/kg	26
04.1.2.8	Fruit preparations, including pulp, purees, fruit toppings and coconut milk	330 mg/kg	26
04.1.2.9	Fruit-based desserts, including fruit-flavoured water-based desserts	350 mg/kg	26
04.1.2.10	Fermented fruit products	115 mg/kg	26
04.1.2.11	Fruit fillings for pastries	330 mg/kg	26
04.1.2.12	Cooked fruit	40 mg/kg	26
04.2.2.2	Dried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweeds, and nuts and seeds	40 mg/kg	26

04.0.0.0	Manatahlan Ciril Pi	000 // -	
04.2.2.3	Vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds in vinegar, oil, brine, or soybean sauce	330 mg/kg	26
04.2.2.4	Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	70 mg/kg	26
04.2.2.5	Vegetable (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), seaweed, and nut and seed purees and spreads (e.g., peanut butter)	330 mg/kg	26
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	165 mg/kg	26
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 12.9.2.3	200 mg/kg	26
04.2.2.8	Cooked or fried vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds	40 mg/kg	26

05.2	Confectionery including hard and soft candy, nougats, etc. other than food categories 05.1, 05.3 and 05.4	700 mg/kg	26, 199 & XS309R
05.3	Chewing gum	3,500 mg/kg	26
06.3	Breakfast cereals, including rolled oats	350 mg/kg	26
06.5	Cereal and starch based desserts (e.g. rice pudding, tapioca pudding)	165 mg/kg	26
06.8.1	Soybean-based beverages	200 mg/kg	26
08.3.2	Heat-treated processed comminuted meat, poultry, and game products	100","mg/kg	26, 202, XS88, XS89 & XS98
09.3.1	Fish and fish products, including mollusks, crustaceans, and echinoderms, marinated and/or in jelly	100 mg/kg	26 & 144
09.3.2	Fish and fish products, including mollusks, crustaceans, and echinoderms, pickled and/or in brine	165 mg/kg	26
09.3.3	Salmon substitutes, caviar, and other fish roe products	100 mg/kg	26 & XS291
09.4	Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms	100 mg/kg	26, XS3, XS37, XS70, XS90, XS94 & XS119
10.4	Egg-based desserts (e.g. custard)	330 mg/kg	26
11.6	Table-top sweeteners, including those containing high-intensity sweeteners	GMP	26
12.2.2	Seasonings and condiments	30 mg/kg	26
12.4	Mustards	130 mg/kg	26
12.5	Soups and broths	50 mg/kg	26 & XS117
12.6.1	Emulsified sauces and dips (e.g. mayonnaise, salad dressing, onion dip)	350 mg/kg	26

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12.6.2	Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy)	350 mg/kg	26
12.6.3	Mixes for sauces and gravies	350 mg/kg	26 & 127
12.6.4	Clear sauces (e.g. fish sauce)	350 mg/kg	26 & XS302
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	115 mg/kg	26
12.9.2.1	Fermented soybean sauce	30 mg/kg	26
12.9.2.2	Non-fermented soybean sauce	165 mg/kg	26
12.9.2.3	Other soybean sauces	165 mg/kg	26
13.3	Dietetic foods intended for special medical purposes (excluding products of food category 13.1)	350 mg/kg	26
13.4	Dietetic formulae for slimming purposes and weight reduction	270 mg/kg	26
13.5	Dietetic foods (e.g. supplementary foods for dietary use) excluding products of food categories 13.1 - 13.4 and 13.6	660 mg/kg	26, 198 & 294
13.6	Food supplements	2,500 mg/kg	26 & 203
14.1.3	Fruit and vegetable nectars	200 mg/kg	26
14.1.4	Water-based flavoured drinks, including ""sport,"" ""energy,"" or ""electrolyte"" drinks and particulated drinks	200 mg/kg	26
14.1.5	Coffee, coffee substitutes, tea, herbal infusions, and other hot cereal and grain beverages, excluding cocoa	200 mg/kg	26 & 160
14.2.7	Aromatized alcoholic beverages (e.g. beer, wine and spirituous cooler-type beverages, low alcoholic refreshers)	200 mg/kg	26

15.0	Ready-to-eat	170 mg/kg	26
	savouries		

Is the proposal related to a FC with corresponding commodity standards?

(if yes indicate the relevant FC)

This submission requests revision to the current Group Header for Steviol Glycosides – Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

Is the proposal also intended to revise the products covered by the commodity standards?

(if yes indicate the relevant commodity standards)

This submission requests revision to the current Group Header for Steviol Glycosides – Commodity standards have already been considered under each provision for steviol glycosides under the Group Header when they have been adopted or during the alignment exercise.

EVALUATION BY JECFA:

Evaluation by JECFA

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

JECFA Evaluation:

- 87th meeting of JECFA, from 4 to 13 June 2019
 - "At the present meeting, the Committee determined that no safety issues exist for steviol glycosides produced by any one of these methods resulting in products with ≥95% steviol glycosides as per existing specifications. The Committee indicated that the ADI of 0–4 mg/kg bw established at the sixty-ninth meeting of JECFA for steviol glycosides (expressed as steviol) (Annex 1, reference 190) applies to steviol glycosides produced by the four methods indicated in the annexes of the specifications monograph produced at the current meeting." (Reference to page 11 of the Evaluation of certain food additives (87th report of the Joint FAO/WHO Expert Committee on Food Additives). WHO Technical Report Series No.1020, 2019).
- ADI of 0–4 mg/kg bw, expressed as steviol equivalents
- JECFA Monograph 23 (tentative with respect to analytical method; expected to be adopted as full at JECFA in February 2021).

JUSTIFICATION:

Justification for use and technological need

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

Steviol glycosides are high-intensity sweeteners with sweetness potency ranging between 200 and 350 times higher than the one of sucrose. Providing zero calories, they are used for reduction or replacement of sugars in reduced-calorie or no-sugar-added products in many food and beverage categories and have been shown to not interfere with glucose homeostasis.

A revision to the current GSFA as per this submission is justified because enzymatic processes allow the safe production of products with higher quantities of the minor steviol glycosides typically present in the stevia leaf.

These minor steviol glycosides offer more options to formulate products with differing sensory profiles. These are better tasting and have better sensory profiles than more common steviol glycosides, allowing manufacturers to better customize steviol glycosides' blends used in products to meet consumers' expectations. These minor steviol glycosides also give manufacturers a greater array of options for sugar reduction and enable a further reduction of sugars in several food and beverages applications, up to between 50 to 100% sucrose replacements.

Safe use of additive: Dietary intake assessment (as appropriate) Table 3 additive:

☐ Yes

☐ **X No** (Please provide information on dietary intake assessment below):

JECFA performed the Assessment of dietary exposure for steviol glycosides at its 69th meeting where the Committee established an ADI for steviol glycosides of 0-4 mg/kg bw expressed as steviol (Evaluation of certain food additives, Sixty-ninth report of JECFA - WHO Technical Report Series, No. 952, 2009). A re-evaluation of the dietary intake assessment was carried out by JECFA in 2016 (Evaluation of certain food additives, Eighty-second report of JECFA - WHO Technical Report Series No. 1000, 2016) and the ADI of 0-4 mg/kg bw, expressed as steviol, was confirmed. This submission is not asking for changes in the categories or use levels to the provisions of steviol glycosides in GSFA – All the provisions indicated above are already existing provisions, which have already been adopted. Therefore the JECFA dietary intake assessment outcome in 2016 is to be considered appropriate. Steviol glycosides - likes all the sweeteners - are labelled on the ingredient Justification that the use list (i.e., name and/or the recognized numerical identification together with does not mislead the functional class of "sweetener" in accordance with the general standard consumer for the labelling of prepackaged foods (CODEX STAN 1-1985). This labelling requirement ensures the consumer is not misled. The INS classification with the alphabetical suffix enables differentiation between production technologies for steviol glycosides.