

codex alimentarius commission



FOOD AND AGRICULTURE
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Agenda Item 7

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME CODEX COMMITTEE ON MILK AND MILK PRODUCTS

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DISCUSSION PAPER ON AMENDMENT TO THE LIST OF ADDITIVES INCLUDED IN THE CODEX STANDARD FOR CREAMS AND PREPARED CREAMS

Prepared by International Dairy Federation (IDF)

I. BACKGROUND

1. At the 5th session of the Codex Committee on Milk and Milk Products (Wellington, April 2002), the draft standard for Cream and Prepared Creams was forwarded to the Codex Alimentarius Commission for final adoption. During the 26th CAC's Session, Rome, 30 June - 06 July 2003, the standard was adopted with a minor editorial amendment asked by the Iranian delegation.

2. This standard (Codex Stan A-9-1976, Rev.1-2003) includes in its section 4 (Food Additives) a table indicating the additive classes allowed according to the different product categories as well as a list of additives allowed for each category. This list had been endorsed by the 33rd Session of the CCFAC, which was not the case with the list submitted in the document CX/MMP 02/3 of January 2002.

3. IDF has reviewed the list of additives included in the Section 4 of the Codex standard for Creams and Prepared Creams and, on the basis of the document CX/MMP 02/3, asks for some minor amendments pertaining to:

- the maximum level determined for some additives (need to establish a maximum limit for the additives having ADI values)
- the inclusion of some technologically justified additives (which, for most of them, had been previously proposed in the document CX/MMP 02/3), one proposed by Japan and the remainder by IDF.

II. PROPOSAL FOR AN AMENDMENT TO THE LIST OF ADDITIVES INCLUDED IN THE SECTION 4 OF THE CODEX STANDARD FOR CREAMS AND PREPARED CREAMS

4. The following additives are proposed for inclusion:

as stabilizer and thickener/emulsifier:

- INS 414 : gum arabic or acacia gum
- INS 472e: diacetyltartaric and fatty acid esters of glycerol

as emulsifier:

- INS 473 : sucrose esters of fatty acids
- INS 475 : polyglycerol esters of fatty acids
- INS 491: sorbitan monostearate
- INS 492 : sorbitan tristearate
- INS 494 : sorbitan monooleate

► **INS 472e and INS 473 are additives commonly used for the manufacture of Creams and Prepared Creams and are technologically justified respectively as “Stabilizer” and “Emulsifier”, two categories of additives already allowed in the standard.**

5. In creams INS 472e acts both as a stabilizing agent and as foaming agent. It is used in particular to manufacture pasteurised and liquid creams generally used in cooking preparations (sauces, dressings...). This additive has the particularity to stabilize the proteins during cooking and to protect them against the acidity of the other ingredients. This additive is widely used by the cream manufacturers and its addition into the list is necessary.

6. INS 473 is an emulsifier, which also presents a good functionality of stabilisation of emulsions and acts as a foaming agent in products such as sterilised creams and sterilised creams with a low level of fat.

7. According to the recent rules established by the CCFAC, as these additives have ADI values, a maximum limit needs to be set. **IDF suggests introducing INS 472e and INS 473 into the list at a maximum level of 5 g/kg, which is the typical level of use.** [NB: INS 472e is in the GSFA at step 6 for category 01.4, with a request for information to justify uses (see ALINORM 05/28/12, para 82). INS 473 is not listed in the GSFA for categories 01.4.1 and 01.4.3, and for category 01.4.2 has two levels: GMP at step 6 and 10 000 mg/kg at step 3.]

► **The additives INS 475, 491, 492, and 494 act as stabilizing agents, foaming agents and emulsifying agents in prepared creams. They have ADI values and the technical function of these additives is Emulsifier in the INS system.** Therefore, IDF suggests including these additives into the Standard for Creams and Prepared Creams under the category “Emulsifiers” with a maximum limit.

8. In creams INS 475 (polyglycerol esters of fatty acid) acts as an emulsifying agent, foaming agent and emulsifying agent. It is also used in the manufacture of pasteurised cream. When making cakes, INS 475 helps protect the cream against the acidity of fruit juice and fruit puree. In cooking, INS 475 is also used as an emulsifier. **IDF suggests introducing INS 475 into the list at a maximum level of 6g/kg, which is the typical level of use.** [NB: INS 475 is listed in the GSFA at step 6 at a level of 10 000 mg/kg for category 01.4.]

9. In creams INS 491 (Sorbitan monostearate) acts both as an emulsifying agent and as a foaming agent. It is also used in the manufacture of pasteurised cream. It maintains cream emulsification in hot coffee. INS 491 acts as a foaming agent in whipped creams used on cakes. **IDF suggests introducing INS 491 into the list at a maximum level of 8g/kg, which is the typical level of use.** [NB: At the moment not listed in GSFA.]

10. Adding INS 492 (Sorbitan tristearate) and INS 494 (Sorbitan monooleate) to whipping creams helps to obtain a good texture. **IDF suggests introducing INS 492 and INS 494 into the list at a maximum level of 5g/kg, which is the typical level of use.** [NB: At the moment not listed in GSFA.]

► **Japan has proposed¹ INS 414 as a stabilizer for which evaluation by JECFA has been completed.** (Japan has decided to withdraw its proposals to include INS 420 and 472g.)

11. INS 414 (gum arabic or acacia gum) contributes to emulsification and emulsion stability of prepared cream and coffee cream. This substance also acts as a thickener and prevents fat creaming during storage.

12. In Japan, this additive has been used for over 10 years in the manufacture of prepared creams. The ADI value of INS 414 is not specified. Normally, a maximum of 5g/kg is used. **IDF suggests introducing INS 414 into the list at a maximum level of GMP, consistent with the ADI “not specified”.** [NB: INS 414 is at step 6, with a max level of 5000 mg/kg in categories 01.4.1 and 01.4.2. See CX/FAC 05/37/6. In category 01.4.3, Table Three would allow its use under GMP.]

13. Some additives are allowed in the Codex Standard for Creams and Prepared Creams and were proposed in the document CX/MMP 02/3 but with different maximum limits. These additives are the following :

- INS 405 : Propylene glycol alginate
- INS 339 : Sodium phosphates

¹ CX/MMP 02/3-Add.1

- INS 340 : Potassium phosphates
- INS 341 : Calcium phosphates
- INS 450 : Diphosphates
- INS 451 : Triphosphates
- INS 452 : Polyphosphates

14. For INS 405 (omitted in the English version), the standard mentions a “GMP” maximum limit. As an ADI has been established, **“GMP” should be replaced by 5 g/kg**, the value previously proposed by IDF.

15. For the phosphates INS 339 to 452 (additives with an ADI), the value of 2g/kg (expressed as P₂O₅) is mentioned, whereas the value of 5 g/kg had been proposed. (Note that the value 5 g/kg expressed as P₂O₅ is equal to 1100 mg/kg expressed as phosphorus.) **The value of 2 g/kg is considered as too low to achieve the desired results in the affected dairy foods and should be replaced by 5 g/kg. The ”i” numbers should be included for clarity.** [NB: The GSFA lists the phosphates at step 6 at a level of 2200 mg/kg (as phosphorus) for category 01.4.]

III. CONCLUSIONS

16. IDF would like to make a request for new work relative to the standard for Creams and Prepared Creams. It is the view of IDF that due to the limited amount of time available to review comments to additive section of this standard at the previous session of the CCMMP, a limited number of suggested changes to this section were not able to be addressed.

17. Consequently, IDF urges that the CCMMP evaluate the possibility of amending the list of additives included in the section 4 (Food Additives) of the standard for Creams and Prepared Creams.

18. This amendment would consist of modifying the list of additives of the adopted standard as follows:

INS No	Name of Food Additive	Maximum level	
Stabilizers			
414	Gum arabic (acacia gum)	GMP	<i>New additive</i>
472e	Diacetyltartaric and fatty acid esters of glycerol	5 g/kg	<i>New additive</i>
339	i, ii, iii Sodium phosphates	2 g/kg-5 g/kg, singly or in combination, expressed as P ₂ O ₅	<i>Amended level</i>
340	i, ii, iii Potassium phosphates		
341	i, ii, iii Calcium phosphates		
450	i, ii, iii, v, vi, vii Diphosphates		
451	i, ii Triphosphates		
452	i, ii, iii, iv, v Polyphosphates		
Thickeners and Emulsifiers			
405	Propylene glycol alginate	Limited by GMP 5 g/kg	<i>Amended level</i>
473	Sucrose esters of fatty acids	5 g/kg	<i>New additive</i>
475	Polyglycerol esters of fatty acids	6 g/kg	<i>New additive</i>
491	Sorbitan monostearate	8 g/kg	<i>New additive</i>
492	Sorbitan tristearate	5 g/kg	<i>New additive</i>
494	Sorbitan monooleate	5 g/kg	<i>New additive</i>

19. Since these modifications are quite few in number, if this new work was to be accepted by the CCMMP, IDF would propose to use the accelerated procedure. A project document for new work is attached as Annex 1 to this document.

Annex 1**Project Document²****Introduction**

During its Sixth Session the Codex Committee on Milk and Milk Products agreed that IDF would prepare a project proposal for new work on the amendment to the list of additives included in the Codex Standard for Creams and Prepared Creams, as requested by the 53rd Session of the Executive Committee³, for consideration at its next Session.⁴

Purpose and scope of the proposed standard⁵.

The purpose is to revise and update the list of additives in section 4 of the *Codex Standard for Creams and Prepared Creams, Codex Stan A-9-1976, Rev.1-2003*.

The scope is limited to the list of specific additives in section 4 of the standard.

Its relevance and timeliness.

The Standard for Cream and Prepared Creams was revised by the 5th Session of CCMMP in 2002. The list of additives that was adopted was the list contained in Appendix VI of ALINORM 01/11 that had been endorsed by the 33rd Session of the Codex Committee on Food Additives and Contaminants (CCFAC). The 5th Session of CCMMP had a revised list of additives available to it in CX/MMP 02/3, but decided not to include it in the standard at that time, for procedural reasons⁶.

The proposed revision of the list of additives is essentially to incorporate the updated list of additives from CX/MMP 02/3, and one other additive (requested by Japan) that is technologically justified.

The main aspects to be covered.

Revise the list of additives in section 4 of the Standard for Cream and Prepared Creams to:

1. Include 7 additives that are technologically justified.
2. Establish maximum levels for some additives, to be consistent with the policy of establishing maximum levels for additives having numerical ADIs.

An assessment against the *Criteria for the Establishment of Work Priorities*.

The proposal is consistent with:

- a. Consumer protection from the point of view of health and fraudulent practices.
- b. Diversification of national legislations and apparent resultant or potential impediments to international trade.
- c. Amenability of the commodity to standardization.

Relevance to Codex Strategic Objectives.

The proposal is consistent with:

- a. Promoting sound regulatory framework
- b. Promoting maximum application of Codex standards.

In this regard, this proposed amendment would recognise additives that are technologically justified for these products, and would maintain consistent policy on maximum limits and terminology for food additives.

² According to the *Proposed Amendments to the Procedures for the Elaboration of Codex Standards and Related Texts*, ALINORM 04/27/33 Appendix III.

³ ALINORM 04/27/3, para. 20.

⁴ ALINORM 04/27/11, para. 149

⁵ For the purpose of this document the word "standard" is meant to include any or the recommendations of the Commission intended to be submitted to Governments for acceptance.

⁶ ALINORM 03/11, paras 25 – 29.

Information on the relation between the proposal and other existing Codex documents.

The proposal relates to the *Codex Standard for Creams and Prepared Creams, CODEX STAN A-9-1976, Rev.1-2003* and the *General Standard for Food Additives, CODEX STAN 192-1995, Rev.5-2004*.

Identification of any requirement for and availability of expert scientific advice.

None identified.

Identification of any need for technical input to the standard from external bodies so that this can be planned for.

Input from the International Dairy Federation has already been completed⁷.

The proposed timeline for completion of the new work, including the start date, the proposed date for adoption at Step 5, and the proposed date for adoption by the Commission; the time frame for developing a standard should not normally exceed five years.

Proposed start by CCMMP in 2006, completion in 2008, and adoption by the Commission in 2008.

The decision to undertake new work or to revise standards shall be taken by the Commission on the basis of a critical review conducted by the Executive Committee.

Work to be led by:

Codex Committee on Milk and Milk Products (CCMMP)

Members of electronic working group:

To be determined.

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