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Agenda Item 7

CX/CF 08/2/7
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**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON CONTAMINANTS IN FOODS
Second Session
The Hague, the Netherlands, 31 March - 4 April 2008**

**DRAFT CODE OF PRACTICE FOR THE REDUCTION OF 3-MONOCHLOROPROPANE- 1,2-DIOL (3-MCPD) DURING THE PRODUCTION OF ACID HYDROLYZED VEGETABLE PROTEINS (ACID-HVPs) AND PRODUCTS THAT CONTAIN ACID-HVPs
(N09-2005)**

Comments at Step 6, in response to Circular Letter CL2007/30-CF, submitted by Cuba, European Community, Japan, Uruguay, AIIBP/FAIBP and IHPC

CUBA

Cuba considers it is a very useful document and has no further comments.

EUROPEAN COMMUNITY

As mentioned in the comments to previous versions of the Code of Practice (CX/FAC 06/38/31 and CX/CF 07/1/14 Add. 3) the European Community and its Member States (ECMS) fully support the elaboration of this Code of Practice for the reduction of 3-MCPD during the production of acid-hydrolysed vegetable proteins (acid-HVPs) and products that contain acid-HVPs as the presence of 3-MCPD in food is of concern due to its toxicological properties.

Industry has provided some additional, but rather general information on reduction methods of 3-MCPD in acid-HVP. Therefore, it was not possible to describe the three approaches for reduction of the levels of 3-MCPD in acid-HVP outlined in §§ 15-17 in more detail. However, the ECMS think that the Code of Practice gives some useful general advice to manufacturers. This advice needs to be adapted by manufacturers to suit their individual production processes.

The ECMS have no substantial comments on the proposed draft Code and support its advancement in the Codex Elaboration Procedure

JAPAN

General Comment

1. The Government of Japan supports the advancement of the Draft Code of Practice for the Reduction of 3-Monochloropropane-1,2-diol (3-MCPD) during the Production of Acid-Hydrolyzed Vegetable Protein(Acid-HVPs) and Products that Contain Acid-HVPs to Step 8 after making necessary modification.

Rationale

2. The First Session of the Codex Committee on Contaminants in Foods (CCCF) agreed that the Draft Maximum Level for 3-MCPD in Liquid Condiments Containing Acid-HVPs should be further considered in light of finalization and implementation of the Code of Practice (ALINORM 07/30/41, para. 88.).

3. The Japanese surveillance data provided to the last session demonstrate that a code of practice including careful and thorough control of the acid hydrolysis and subsequent alkaline hydrolysis processes is the most effective measure in reducing the levels of 3-MCPD in Acid-HVPs. (CRD 9 for the 1st CCCF)

Editorial Comments

4. We propose to correct a factual error in the draft Code. Paragraph 16 states in its line 15-16, “Use of an alkaline treatment when manufacturing acid-HVP has been shown to yield a final product with 3-MCPD levels below 0.01 mg/kg.²³” However, the information in Patent EP 0505800 (reference no. 23) describes in EXAMPLE 1 (line 48-49, right column, page 7) that the final product has a chlorohydrin content of below 1 ppm and in EXAMPLE 2 (line 13-14, left column, page 8) that the final product has a chlorohydrin of below 100 ppb. In reflection of these statements, the sentence in the draft Code should be amended as follows:

“Use of an alkaline treatment when manufacturing acid-HVP has been shown to yield a final product with 3-MCPD levels below ~~10.01~~ mg/kg. ...”

Reference: Societe des Produits Nestle S.A.: Process for reducing hydrolysed protein chlorohydrin content. EP 0505800 (1992)

5. In addition, we also propose some additional editorial amendment as follows (inserted text is underlined and deleted text is struck-out):

3rd sentence in para 6:

“... Indeed, a recent Japanese survey of 104 samples of naturally fermented soy sauce showed that levels of 3-MCPD in 93 of the samples were less than the limit of quantification (0.004 mg/kg). ...”

2nd sentence in para. 7:

“... Other chloropropanols that can occur, albeit usually in smaller amounts, are 2-monochloropropane-1,3-diol (2-MCPD), 1,3-dichloro-2-propanol (1,3-DCP) and 2,3-dichloro-~~12~~-propanol (2,3-DCP).”

3rd sentence in para. 17:

“... The diminished organoleptic properties of sulfuric acid-HVP are improved by combination of the final product with flavourings (e.g., monosodium glutamate, caramel, disodium inosinate, disodium guanylate and lactic acid).”

para 19: We propose to make indentation consistent with other paragraphs

URUGUAY

The subcommittee in Uruguay does not have any comments on the Code of Practice.

AIIBP/FAIBP

Comments on appendix XI of CL 2007-30-CF, page 63

Number 6 reads: “It is those products that utilise acid-HVP as an ingredient that may contain chloropropanols.” This statement is neither proven nor correct due to the fact that 3-MCPD is detected also in foodstuffs that do not contain acid-HVP (see number 11 of the same paper).

Number 19 reads: “Soy sauces that are produced solely by fermentation contain non-quantifiable or, in rare cases, extremely low levels of 3-MCPD.” To make a clear statement of the quality of acid-hydrolyzed vegetable protein, this sentence should read: “Soy sauces that are produced solely by fermentation **and (acid)-hydrolyzed vegetable protein produced in Europe** contain non-quantifiable or, in rare cases, extremely low levels of 3-MCPD.”

Number 21: We suggest deleting the part of sentence 3 which is written in brackets – (commonly known as semi-chemical soy sauces).

The **flow sheet** on **page 67** gives the indication that 3-MCPD results “< 0.1 mg/kg in final product”. It should be added that European manufacturing of acid-HVP at commercial scale results in values < 0.02 mg/kg. This should be added to make clear what can be achieved in the production of acid-hydrolyzed vegetable protein.

IHPC

IHPC would like to thank the United Kingdom for leading the effort to revise the draft Code of Practice for the Reduction of 3-Monochloropropane-1,2-diol (3-MCPD) During the Production of Acid-Hydrolyzed Vegetable Proteins (Acid-HVPs) and Products that Contain Acid-HVPs. We believe the proposed draft Code of Practice appropriately reflects the several strategies available for controlling 3-MCPD levels. These strategies ultimately involve variable and proprietary combinations of time, temperature, and acid-concentration parameters that individual manufacturers must consider while producing acid-HVPs with specific organoleptic properties.