CODEX ALIMENTARIUS COMMISSION E

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 8 **CX/FA 12/44/15 Add. 1**

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-fourth Session

Hangzhou, China 12-16 March 2012

SPECIFICATIONS FOR THE IDENTITY AND PURITY OF FOOD ADDITIVES ARISING FROM THE 74TH JECFA MEETING

The following comments have been received from the following Codex members and observers

European Union

EUROPEAN UNION

The European Union and its Member States (EUMS) would like to submit the following comment:

Modified starches:

The information provided by the JECFA monograph on the revised specifications, purity criteria and methods of analysis of modified starches are generally acceptable.

The EUMS wish, however, report an error in the procedures of methods of analysis for modified starches.

On page 18/19 of the monograph modified starches in version 2011 under « degree of substitution of starch sodium octenyl succinate » - Procedure: it says "transfer the filtrate". We believe that this should read "transfer the filter cake ... "as stated in the 2009 version.

PJ: Comparative table is attached.

JECFA Monographie Amidons modifiés **Version 2009**	**JECFA Monographie Amidons modifiés** **Version 2011**
Pas de titre au “tableau”.	Ajout titre au “tableau” Table 1. Additional purity specifications for individual chemically modified starches *(all percentages calculated on dry substance)*
Apparatus Chromatograph: Hewlett Packard Model 7620A gas chromatograph or equivalent equipped with flame ionization detector and Model 3370A integrator.	Apparatus Chromatograph: Hewlett Packard Model 7620A gas chromatograph or equivalent equipped with flame ionization detector and Model 3370A integrator. (Hewlett-Packard Model 7620 A, with integrator Model 3370A or equivalent)
As specified in Column 3 of Table 1 Gas chromatographic system Use a Hewlett-Packard model 5750 or equivalent. A dual-column instrument equipped with a flame-ionization detector is recommended. An integrator should be part of the recording system.	As specified in Column 3 of Table 1 Determine by gas chromatography Gas Chromatographic system Use a Hewlett-Packard model 5750 or equivalent. A dual-column and a flame-ionization detector is recommended. An integrator should be part of the recording system.
The degree of substitution is determined by alkali consumed after acidification and thorough washing of the starch half ester. Procedure Weigh out 5.0 of sample in a 150-ml beaker. Wet out with a few ml of reagent grade isopropyl alcohol. Add, by pipette 25 ml of 2.5 N hydrochloric acide in isopropanol, allowing the acid to wash down any sample on the sides of the beaker. Stir for 30 min on a magnetic stir plate. Add 100 ml of 90 % isopropanol from a graduated cylinder. Stir for 10 min. Filter the sample through a Buchner funnel and wash the filter cake with 90 % isopropanol until the filtrate is negative for chloride ions. Use 0.1 N $AgNO_3$ to check for chloride ions. Transfer the filter cake to a 600-ml beaker and rinse the Buchner funnel to wash %any	The degree of esterification is determined by the amount of alkali consumed after acidification and thorough washing of the sample. Procedure Weigh 5.0 g (to nearest 0.1 mg), of the sample in a 150-ml beaker and wet it with a few ml of isopropanol. Pipette 25.0 ml of 2.5 N hydrochloric acid in isopropanol and stir the mixture with a magnetic stirrer for 30 min. Using a graduated measuring cylinder, add 100 ml of 90 % isopropanol in water and stir for another 10 min. Filter the sample through a Buchner funnel and wash the filter cake with 90 % isopropanol in water until the filtrate is negative for chloride (check using 0.1 N silver nitrate). **Transfer the** ~~filtrate~~ **FILTER CAKE** to a 600-ml beaker, rinse the Buchner flask and bring to a 300-ml volume with distilled water.