

codex alimentarius commission E



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



JOINT OFFICE: Viale delle Terme di Caracalla 00153 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 7

CX/FA 09/41/9
December 2008

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES

Forty-first Session

Shanghai, China, 16-20 March 2009

PROPOSALS FOR CHANGES AND/OR ADDITION TO THE INTERNATIONAL NUMBERING SYSTEM FOR FOOD ADDITIVES (REPLIES TO CL 2008/10-FA, PART B, POINT 13)

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

United States of America, AIDGUM, ICBA, IFAC, ISA

UNITED STATES OF AMERICA

The USA recommends that the INS be revised to include the use of magnesium sulfate (INS 518) for the technological purpose of flavour enhancer. Such use is consistent with the current JECFA specification for magnesium sulfate and is consistent with the USA's regulations (21 CFR 184.1443).

AIDGUM

AIDGUM is proposing some additions to the INS listing of technological purposes for gum Arabic (Acacia gum), INS number 414.

In the recent November 2008 meeting of the Codex Committee on Nutrition and Foods for Special Dietary Uses (CCNFSDU) there were discussions about the use of acacia gum as a coating agent for vitamins and other minor but important ingredients in foods for infant feeding. These discussions were in the context of a CCNFSDU agenda item on the Draft Advisory List of Nutrient Compounds for use in Foods for Special Dietary Uses intended for use Infants and Young Children, Part D Advisory List of Food Additives for Special Nutrient Forms.

CCNFSDU approved the use of acacia gum as a coating agent for minor ingredients used in these foods, and the CCNFSDU recommendation will be forward to the next Codex Alimentarius Commission for adoption at Step 8.

At the same time the Codex Secretariat pointed out that there is no INS functional class for "coating agent" and suggested contact with CCFA on this point.

AIDGUM notes that there is an INS functional class for "glazing agent" that includes in its technological purposes the function "coating agent". Similarly, the functional class "carrier" includes in its technological purposes the function of encapsulating agent.

For Acacia gum, INS 414 currently lists its use as a thickener, stabilizer and emulsifier. Acacia gum is used as both a carrier and as a glazing agent in a number of different processed foods for infants, young children and the public in general. It is also used as a bulking agent in many foods.

Acacia gum is listed in table 3 of the GSFA as an additive that can be used in accordance with GMP, and has been reviewed by JECFA and has been classified by JECFA as "ADI not specified". Adding the technological purposes of "bulking agent", "glazing agent" and "carrier" to the listing of technological purposes for INS 414 will make this table more accurate with regard to uses of Acacia gum as an additive in different processed foods. AIDGUM therefore proposes for Acacia gum the addition of bulking agent, carrier and glazing agent to the Codex list of technological purposes for INS 414, Acacia gum.

ICBA

INS 518 (Magnesium sulfate): The functional use “flavour enhancer” that is included in the specification of magnesium sulfate, should also be included in the INS list. ICBA requests that the INS be revised to include “flavour enhancer” as an additional technological purpose of INS 518.

IFAC

In response to item number 13 in Circular Letter CL 2008/10-FA, Part B, IFAC recommends adding the following functions for the food additives listed below:

- INS 400 Alginic Acid - Foaming Agent, Carrier, Humectant, Sequestrant
- INS 401 Sodium Alginate - Foaming Agent, Carrier, Humectant, Sequestrant
- INS 402 Potassium Alginate - Foaming Agent, Carrier, Humectant, Sequestrant
- INS 403 Ammonium Alginate - Foaming Agent, Carrier, Humectant, Sequestrant
- INS 404 Calcium Alginate - Foaming Agent, Carrier, Humectant, Sequestrant
- INS 405 Propylene Glycol Alginate, Propylene Glycol Alginate - Foaming Agent, Carrier, Gelling Agent
- INS 407 Carrageenan - Carrier, Humectant, Glazing Agent*
- INS 407a Processed Eucheuma Seaweed - Carrier, Humectant, Glazing Agent
- INS 425 Konjac, Konjac Gum, Konjac Glucomannate - Bulking Agent, Carrier, Firming Agent, Humectant
- INS 460 (i) Powdered Cellulose - Humectant, Glazing Agent
- INS 460 (ii) Microcrystalline Cellulose - Bulking Agent, Carrier
- INS 466 Sodium Carboxymethylcellulose - Firming Agent, Gelling Agent

*Film coating is a process by which a thin, polymer-based coating agent is applied to the surface of an appropriate substrate. These additives are used in aqueous film coating for several foods and food supplements. The coating agents provide good film strength, substrate adhesion qualities and moisture barrier/protection properties against oxidation. For food supplements, the coating agents protect the ingredients from moisture, oxygen and other environmental conditions, thus ensuring the long-term stability of the product while simultaneously masking their taste and odor. Coating agents facilitate the ingestion and swallowing of food supplement tablets.

**Most polymers used in film coating are essentially amorphous and exhibit a well-defined glass transition temperature (T_g). The glass transition temperature of a coating agent is the temperature at which the polymer changes from a glass to a rubbery state. Under normal film coating process conditions, polymers are in the glassy state, and thus rigid and tough, but brittle. In order to increase the polymer flexibility for a film, it is necessary to reduce its glass transition temperature with the use of a plasticizer. These plasticizers (emulsifiers) are very effective at lowering the glass transition temperature (T_g) of glazing agents (coating agents) and confer good elasticity to the film that is formed. For example, polyethylene glycol is an excellent plasticizer and is frequently used for cellulosic polymer coating systems.

ISA**INS number for cyclamates (INS 952, Ca, K & Na)**

ISA notes that JEFCA has not evaluated the potassium salts of cyclamate. ISA is not aware of the existence of this substance on the market. ISA would therefore suggest the reference to potassium (K) is deleted in the INS numbering system as follows: INS 952, Ca, ~~K &~~ Na