codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimentarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

**Agenda Item 7**

**CX/FO 03/8**

**JOINT FAO/WHO FOOD STANDARDS PROGRAMME**

**CODEX COMMITTEE ON FATS AND OILS**
**Eighteenth Session**
**London, United Kingdom, 3 – 7 February 2003**

# RECOMMENDED INTERNATIONAL CODE OF PRACTICE FOR THE STORAGE AND TRANSPORT OF EDIBLE OILS AND FATS IN BULK – TABLE 1, TEMPERATURES DURING STORAGE AND TRANSPORT, LOADING AND DISCHARGE

**(Proposed by Indonesia)**

## Background

The 23rd Session of the Codex Alimentarius Commission adopted formally the Recommended International Code of Practice for the Storage and Transport of Edible Oils and Fats in Bulk (Alinorm 99/37, para. 165 and Appendix VII).

At the 17th session of the Codex Committee on Fats and Oils (CCFO), Indonesia proposed amendments to Table 1 of the Code on temperatures of oils and fats during storage, transport, loading and discharge and agreed to prepare a paper outlining the justification for these changes (Alinorm 01/17, para 82). The Committee agreed that the delegation should present a short paper indicating the justification for the changes in order to decide whether new work was required on an amendment to the Code in this respect (para 82, ALINORM 01/17).

This proposal, submitted by Indonesia, refers to Table 1, Appendix 1 of Alinorm 99/17/Appendix V, Draft Revised Recommended Code of Practice for Storage and Transport of Edible Oils and Fats in Bulk.

## Proposal

1. In Table 1, Appendix 1 to ALINORM 99/17 Appendix V, Draft Revised Recommended Code of Practice for the Storage and Transportation of Oil and Fats in Bulk, it was stated that for palm kernel oil:
   -storage and bulk shipment temperature: Min 27 °C, Max 32 °C
   -for loading and discharge: Min 40c, Max 45 °C

2. In fact, loading is normally conducted at a temperature of 30 °C without heating.
The ambient temperature in tropical countries is usually above the melting point of palm kernel oil. Therefore, it is not necessary to install heating coil in the palm kernel oil storage tank. The heating would potentially deteriorate the quality palm oil due to oxidation.

3. As a reference, we quote from 'Bailey's Industrial Oil and Fat Products, Daniel Swerh (Editor), 4th Edition, Volume 1, p319:
Melting point of palm kernel oil: 24 – 26 °C
In cold climate, palm kernel oil may solidify if the temperature is not kept between 27 to 32 °C. To facilitate loading and discharge it will be necessary to heat it up to 40 °C.

4. Based on these considerations, it is proposed that the temperature range for loading and discharge can be changed to be Min 30 $^{o}$C, Max 40 $^{o}$C.

| | **Storage and bulk shipments** | | **Loading and Discharge** | |
|---|---|---|---|---|
| **Oil or fat** | **Min °C** | **Max °C** | **Min °C** | **Max °C** |
| Palm kernel oil | 27 | 32 | **30** | **40** |