

# codex alimentarius commission



FOOD AND AGRICULTURE  
ORGANIZATION  
OF THE UNITED NATIONS

WORLD  
HEALTH  
ORGANIZATION



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Agenda Item 4(a)

CX/PFV 04/22/4  
June 2004

## JOINT FAO/WHO FOOD STANDARDS PROGRAMME

### CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES

*22<sup>nd</sup> Session,*

*Washington, DC metro area, U.S.A., 27 September – 1 October 2004*

### PROPOSED DRAFT REVISED CODEX STANDARD FOR PROCESSED TOMATO CONCENTRATES

(AT STEP 3)

Governments and interested international organizations wishing to submit comments on the attached revised *proposed draft Codex Standard for Processed Tomato Concentrates* (AT STEP 3) are invited to do so **NO LATER THAN 30 AUGUST 2004, preferably by e-mail**, to Ms. Ellen Y. Matten, US Codex Office, Food Safety and Inspection Service, US Department of Agriculture, Room 4861 South Building, 1400 Independence Ave., S.W., Washington, DC 20250-3700, USA (Fax No.: +1.202.720.3157; E-mail: [uscodex@usda.gov](mailto:uscodex@usda.gov)), with a copy to the Secretary, Codex Alimentarius Commission, Joint FAO/WHO Foods Standards Programme, Via delle Terme di Caracalla, 00100 Rome, Italy (Fax No. 39.06.5705.4593 or E-Mail [codex@fao.org](mailto:codex@fao.org) - preferably -).

## BACKGROUND

1. The 21<sup>st</sup> Session of the Codex Committee on Processed Fruits and Vegetables (September 2002) agreed that it was not possible to review in detail the proposed draft standards (including processed tomato concentrates) scheduled for discussion at its current Session. In view of this, it decided to return all the proposed draft standards (including processed tomato concentrates) to Step 2 for redrafting, circulation for comments at Step 3 and consideration at its next Session. The proposed draft Codex Standard for Processed Tomato Concentrates has been revised by a drafting group led by Italy<sup>1</sup>. Most of the comments submitted to the drafting group were included in the text, others, however, have not been possible to accommodate.

2. The revised *proposed draft Codex Standard for Processed Tomato Concentrates* is annexed to this document. Some parts of the text has been aligned with the standardized language applying throughout the Codex standards for processed fruits and vegetables.

<sup>1</sup> ALINORM 03/27, paras. 95 - 97.

3. The Codex Secretariat would like to notice the following to the Committee:

### **Scope**

4. Codex standards for processed fruits and vegetables usually apply to products offered for direct consumption including for catering purposes or for repacking if required. This statement is missing from the Scope.

5. It is therefore suggested that the Committee consider to use the standardized language in the Scope i.e. *“This Standard applies to the product as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. This Standard also applies...”* in order to keep consistency with other Codex standards for processed fruits and vegetables when possible.

### **Food Additives**

6. See working document CX/PFV 04/22/3, General Considerations for Food Additive Provisions in Codex Commodity Standards and in Codex Standards for Processed Fruits and Vegetables (paras. 18 - 22) as to how to approach food additive provisions in this and other Codex standards for processed fruits and vegetables.

### **Contaminants & Methods of Analysis and Sampling**

7. See working document CX/PFV 04/22/3, General Considerations for Codex Standards for Processed Fruits and Vegetables as regards Contaminants (para. 23) and Methods of Analysis and Sampling (para. 24). In this regard, AOAC Method 945.46 (Mould Count) have been transferred to working document CX/PFV 04/22/11.

### **REQUEST FOR COMMENTS**

8. Codex Members and Observers are invited to comment at Step 3 on the attached revised *proposed draft Codex Standard for Processed Tomato Concentrates* as directed above.

**PROPOSED DRAFT REVISED CODEX STANDARD FOR  
PROCESSED TOMATO CONCENTRATES**

**(AT STEP 3)**

**1. SCOPE**

This Standard applies to the product as defined in Section 2 below and offered for direct consumption. This Standard also applies (excluding the Section 3.2.8 and the Section 7) to the product when indicated as being intended for further processing. The Standard does not include the products commonly known as tomato sauce, chilli sauce, and ketchup, or similar products which are highly seasoned products of varying concentrations containing characterising ingredients such as pepper, onions, vinegar, etc, in quantity that materially alter the flavour, aroma and taste of the tomato components.

**2. DESCRIPTION**

**2.1 PRODUCT DEFINITION**

**2.1.1 Processed tomato concentrate is the product:**

- (a) Prepared by concentrating the liquid obtained from substantially sound, mature red tomatoes (*Lycopersicon esculentum* P. Mill) strained or otherwise prepared to exclude the majority of skins, seeds and other coarse or hard substances in the finished product; and
- (b) Preserved by physical means.

**2.1.2 “Tomato Puree”** - Tomato concentrate that contains no less than 7%, but less than 24% of the natural tomato soluble solids.

**2.1.3 “Tomato Paste”** - Tomato concentrate that contains at least 24% of natural tomato soluble solids.

**2.1.4** The concentration shall be 7% or more natural tomato soluble solids, but not dehydrated to a dry powder or flake form.

**3. ESSENTIAL COMPOSITION AND QUALITY FACTORS**

**3.1 COMPOSITION**

**3.1.1 Basic Ingredients**

Processed tomato concentrate as defined in Section 2.1.

**3.1.2 Optional Ingredients**

- (a) Salt (sodium chloride);
- (b) Spices and aromatic plants (such as basil leaf, etc.) and their natural extracts;
- (c) Lemon juice (single strength or concentrated) used as an acidulant; and
- (d) Water (to adjust final composition), limited by minimum concentration level of 7% and by Good Manufacturing Practice (GMP).

**3.2 QUALITY CRITERIA**

Processed tomato concentrates shall have normal flavour, odour, and colour and shall possess texture characteristics of the product.

### 3.2.1 Colour

The product shall have a fairly good red colour, free from abnormal colours for the product.

### 3.2.2 Texture

The product shall have a homogeneous, evenly divided texture indicative of good manufacturing practices.

### 3.2.3 Flavour

The product shall have a good flavour characteristic of properly processed tomato concentrates without any objectionable flavour foreign to the product.

### 3.2.4 Defects

Processed tomato concentrates shall be prepared from such materials and under such practices that the product is substantially free of extraneous plant materials, this including other objectionable material and shall be practically free of mineral impurities.

These conditions are fulfilled when:

- (a) the product is practically free of objectionable tomato peel because of colour and/or size;
- (b) the product is practically free of seeds or objectionable particles of seeds;
- (c) the presence of any extraneous plant material other than seed and peel and other than those used as seasonings cannot be detected by the naked eye, and can only be seen under microscope;
- (d) the product is practically free of dark specks or scale-like particles;
- (e) the mineral impurity content does not exceed 0,1% of the natural soluble solids content; and
- (f) other similar and objectionable defects.

### 3.2.5 Lactic Acid

The content of lactic acid (total) does not exceed 1% of the natural tomato soluble solids content.

### 3.2.6 Mould Count

The product shall be considered nonconforming if the average mould counts in 6 samples is more than 70%.

### 3.2.7 Classification of “Defectives”

A container that fails to meet the natural tomato soluble solids requirements, as set out in Sections 2.1.2 - 2.1.4, and/or one or more of the applicable quality requirements, as set out in Sections 3.2.1 through 3.2.5 should be considered a “defective”.

### 3.2.8 Lot Acceptance

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.5 when:

- (a) the number of “defectives”, as defined in Section 3.2.7 does not exceed the acceptance number (c) of the appropriate sampling plan in the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL- 6.5) (CODEX STAN 233-1969); and
- (b) maximum allowance for mould count is not exceeded (see Section 3.2.6).

These acceptance criteria only apply to the containers having a net weight equal to or lower than 4,5kg.

## **4. FOOD ADDITIVES**

### **4.1 ACIDITY REGULATORS**

Any acidity regulator listed in Table 3 of the Codex General Standard for Food Additives or listed in food category 04.2.2.4 (Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds) in Tables 1 and 2 of the Codex General Standard for Food Additives.

## **5. CONTAMINANTS**

5.1 The products covered by the provisions of this Standard shall comply with those maximum levels for contaminants established by the Codex Alimentarius Commission for these products.

5.2 The products covered by the provisions of this Standard shall comply with those maximum residue limits established by the Codex Alimentarius Commission for these products.

## **6. HYGIENE**

6.1 It is recommended that the products covered by the provisions of this Standard be prepared and handled in accordance with the appropriate sections of the Recommended International Code of Practice – General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 4-2003), and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.

6.2 The products should comply with any microbiological criteria established in accordance with the Principles for the Establishment and Application of Microbiological Criteria for Foods (CAC/GL 21-1997).

## **7. WEIGHTS AND MEASURES**

### **7.1. FILL OF CONTAINER**

#### **7.1.1 Minimum fill**

Containers shall be filled as full as commercially practicable having regard for the concentration of the product. When packed in rigid containers, the product shall occupy not less than 90% of the water capacity of the container. The water capacity of the container is the volume of distilled water at 20°C which the sealed container will hold when completely filled.

#### **7.1.2 Classification of “Defectives”**

A container that fails to meet the requirement for minimum fill (90% container capacity) of Section 7.1.1 shall be considered a “defective”.

#### **7.1.3 Lot Acceptance**

A lot should be considered as meeting the requirements of Section 7.1.1 when the number of “defectives”, as defined in Section 7.1.2, does not exceed the acceptance number (c) of the appropriate sampling plan in the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL-6.5) (CODEX STAN 233-1969).

## **8. LABELLING**

8.1 The products covered by the provisions of this Standard shall be labelled in accordance with the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 1-1991). In addition, the following specific provisions apply:

## **8.2 NAME OF THE PRODUCT**

8.2.1 The name of the product shall be:

- (a) "Tomato Puree" if the food contains not less than 7% but less than 24% natural tomato soluble solids;
- (b) "Tomato Paste" if the food contains not less than 24% natural tomato soluble solids; or
- (c) "Tomato Concentrate" if accompanied by a declaration of the percentage of natural tomato soluble solids.

## **8.3 Declaration of the Percentage of Natural Tomato Soluble Solids**

The percentage solids may be included on the label in either of the following manners:

- (a) The minimum percentage of natural tomato soluble solids (example: "Minimum Solids - 20%").
- (b) A range within 2% of the natural tomato soluble solids (example: "Solids - 20% to 22%").

## **8.4 LABELLING OF NON-RETAIL CONTAINERS.**

Information for non-retail containers shall be given on the container or in accompanying documents, except that the name of the product, lot identification and the name and address of the manufacturer, packer or distributor, as well as storage instructions, shall appear on the container. However, lot identification, and the name and address of the manufacturer, packer or distributor may be replaced by an identification mark, provided that such mark is clearly identifiable with the accompanying documents.

## **9. METHODS OF ANALYSIS AND SAMPLING**

See working document CX/PFV 04/22/11.