

codex alimentarius commission



FOOD AND AGRICULTURE
ORGANIZATION
OF THE UNITED NATIONS

WORLD
HEALTH
ORGANIZATION



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Agenda Item 4(e)

CX/PFV 04/22/8
June 2004

JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON PROCESSED FRUITS AND VEGETABLES
22nd Session,
Washington, DC metro area, U.S.A., 27 September – 1 October 2004
PROPOSED DRAFT CODEX STANDARD FOR SOY SAUCE
(AT STEP 3)

Governments and interested international organizations wishing to submit comments on the attached revised *proposed draft Codex Standard for Soy Sauce* (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, 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 - preferably -).

BACKGROUND

1. The 21st 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 soy sauce) scheduled for discussion at its current Session. In view of this, it decided to return all the proposed draft standards (including soy sauce) to Step 2 for redrafting, circulation for comments at Step 3 and consideration at its next Session. The proposed draft Codex Standard for Soy Sauce has been revised by a drafting group led by Japan and Korea¹.
2. The revised *proposed draft Codex Standard for Soy Sauce* is appended 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. The Annex contains some additional comments from Japan.
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. They don't apply to products when indicated as being intended for further processing. This statement is missing from the Scope.

¹ ALINORM 03/27, paras. 95 - 97.

5. It is therefore suggested that the Committee consider to use the standardized language in the Scope i.e. “*This Standard applies to pickled products as defined in Section 2 below and offered for direct consumption including for catering purposes or for repacking if required. It does not apply to the product when indicated as being intended for further processing.*” in order to keep consistency with other Codex standards for processed fruits and vegetables if possible.

Essential Composition and Quality Factors

6. The Committee is invited to consider the need for provisions for “Definition of Defects”, “Defects and Allowances”, “Classification of Defectives”, and “Lot Acceptance” (some of these provisions may be omitted or condensed according to the nature of the product) under the Section on Essential Composition and Quality Factors as usually applied to Codex standards for processed fruits and vegetables and if so, apply the standardized language to the extend possible.

Food Additives

7. Some of the food additive provisions has been aligned with the corresponding names as set out in the Class Names and International Numbering System for Food Additives² (CAC/GL 36-1989, Rev. 7-2003). Synonyms as elaborated by the drafting group have been kept in parenthesis³.

Weights and Measures

8. The Committee is invited to consider whether provisions for minimum fill is required for soy sauce under this Section.

Methods of Analysis and Sampling

9. 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). It is noted that methods of analysis and sampling for commodity standards should be developed/proposed by the Committee concerned and endorsed by the Codex Committee on Methods of Analysis and Sampling (CCMAS).

Labelling

10. The Committee is invited to consider if provisions for the labelling of non-retail containers is needed and if so, apply the standardized language for consistency with other Codex standards for processed fruits and vegetables.

REQUEST FOR COMMENTS

11. Codex Members and Observers are invited to comment at Step 3 on the attached revised *proposed draft Codex Standard for Soy Sauce* as directed above.

² Codex standards are available for downloading at: http://www.codexalimentarius.net/standards_search.asp.

³ In addition, see working document CX/PFV 04/22/3, General Consideration for Food Additive Provisions in Codex Commodity Standards and in Codex Standards for Processed Fruits and Vegetables, paras. 18 - 22.

PROPOSED DRAFT CODEX STANDARD FOR SOY SAUCE**(AT STEP 3)****1. SCOPE**

This Standard applies to the products as defined in Section 2 below.

2. DESCRIPTION**2.1 Product Definition**

Soy sauce is a clear liquid seasoning obtained by fermentation of soybeans and/or by hydrolysis of vegetable proteins.

Individual definition of each type of soy sauce is described under subsection 2.1.1 through 2.1.4.

2.1.1 Naturally brewed soy sauce is the product obtained by:

- (a) *Aspergillus oryzae* and/or *Aspergillus sojae* as a starter are cultured in either soybeans or soybeans and cereal grains; or bacteria and/or molds and/or yeasts are cultured in either soybeans or soybeans and cereal grains,
- (b) the mixture of the product obtained by (a) and salt water is fermented and aged for not less than 90 days below its temperature of 40°C.

Instead of salt water in the process described above, Naturally brewed soy sauce, or a mixture of Naturally brewed soy sauce and salt water may be used.

2.1.2 Short-term brewed soy sauce is the product obtained by:

- (a) *Aspergillus oryzae* and/or *Aspergillus sojae* as a starter are cultured in either soybeans or soybeans and cereal grains,
- (b) the mixture of the product obtained by (a) and salt water is fermented and aged keeping its maximum temperature at or above 40°C, or for less than 90 days.

2.1.3 Non brewed soy sauce is the product obtained by:

- (a) Vegetable protein materials, such as defatted soybeans, are hydrolyzed by using acids or enzymes (the product obtained by this process is hereinafter referred to as "Hydrolyzed Vegetable Protein"),
- (b) sugars, salt, etc. are added to (a).

2.1.4 Mixed soy sauce is the product obtained by:

- (a) The different types of the soy sauces defined in subsections 2.1.1 through 2.1.3 are mixed; or
- (b) Soy sauce(s) and Hydrolyzed Vegetable Protein are mixed.

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 COMPOSITION

3.1.1 Basic Ingredients

3.1.1.1 *Naturally brewed soy sauce and Short-term brewed soy sauce*

- (a) Soybeans (including defatted soybeans)
- (b) (b) Salt
- (c) Potable water

3.1.1.2 *Non brewed soy sauce*

- (a) Vegetable proteins
- (b) Sugars (for specification, see relevant Codex standard)
- (c) Potable water
- (d) Salt (to be used only in the case of process using enzymes)

3.1.2 Optional Ingredients

For Naturally brewed soy sauce and Short-term brewed soy sauce (a) to (g) may be used, and for Non brewed soy sauce (a) and (d) to (g) may be used.

However, these ingredients from (c) to (g) shall be supplementary use in the manufacturing process.

- (a) Cereal grains
- (b) Vegetable proteins
- (c) Sugars
- (d) Vinegar
- (e) Sweet rice wines
- (f) Distilled alcohol of agricultural origin
- (g) Salt
- (h) Hydrolyzed Vegetable Protein

3.2 QUALITY CRITERIA

- (a) Total nitrogen not less than 0.7%(w/v)

Provided, however, that the product derived from wheat not less than 80% of total of soybeans and cereal grains weight shall have the total nitrogen of not less than 0.4%(w/v).

- (b) Soluble solids contents, exclusive of added salt not less than 6%(w/v).

4. FOOD ADDITIVES

4.1 ACIDITY REGULATORS

INS No	Name of Food Additive	Maximum Level
260	Acetic acid, gracial	Limited by GMP
262	Sodium acetate	
270	Lactic acid (L-, D-, and DL)	
330	Citric acid	
334	Tartaric acid (L(+)-)	200 mg/kg

4.2 ANTIFOAMING AGENTS

INS No	Name of Food Additive	Maximum Level
900a	Polydimethylsiloxane	50 mg/kg

4.3 COLOURS

INS No	Name of Food Additive	Maximum Level
150a	Caramel I - plain (Caramel Colour class I)	Limited by GMP
150c	Caramel III - ammonia process (Caramel Colour class III)	1500 mg/kg
150d	Caramel IV - ammonia sulphite process (Caramel Colour class IV)	

4.4 FLAVOUR ENHANCERS

INS No	Name of Food Additive	Maximum Level
508	Potassium chloride	Limited by GMP
621	Monosodium glutamate	
627	Disodium 5'-guanylate	
631	Disodium 5'-inosinate	
635	Disodium 5'-ribonucleotides	

4.5 PRESERVATIVES

INS No	Name of Food Additive	Maximum Level
210	Benzoic acid	600mg/kg expressed as benzoic acid, singly or in combination
211	Sodium benzoate	
214	Ethyl p-hydroxybenzoate	250 mg/kg expressed as p-hydroxybenzoic acid, singly or in combination
216	Propyl p-hydroxybenzoate	

4.6 SWEETENERS

INS No	Name of Food Additive	Maximum Level
420	Sorbitol	Limited by GMP
950	Acesulfame K	350mg/kg

4.7 THICKENING AND STABILIZING AGENTS

INS No	Name of Food Additive	Maximum Level
412	Guar gum	Limited by GMP
414	Gum Arabic	
415	Xanthan gum	

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. LABELLING

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

7.2 NAME OF THE PRODUCTS

7.2.1 The name of the products shall be labelled as follows.

Naturally brewed soy sauce

Short-term brewed soy sauce

Non brewed soy sauce

Mixed soy sauce

According to the descriptions in subsection 2.1.1 through 2.1.4

7.2.2 The name of Mixed soy sauce shall be accompanied by the type of soy sauce mixed or Hydrolyzed Vegetable Protein in the descending order of contents in weight percentage in the product.

7.2.3 Soy sauce may be labelled to indicate its character according to the national legislation.

8. METHODS OF ANALYSIS AND SAMPLING

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