

# CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture  
Organization of  
the United Nations



World Health  
Organization

E-mail: [codex@fao.org](mailto:codex@fao.org) - [www.codexalimentarius.org](http://www.codexalimentarius.org)

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## REGIONAL STANDARD FOR CHILI SAUCE

CXS 306R-2011

Adopted in 2011. Amended in 2013, 2017, 2020.

## 1. SCOPE

This Standard applies to chili sauce, 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.

## 2. DESCRIPTION

### 2.1 Product definition

Chili sauce is the product:

- (a) intended for use as seasoning and condiment;
- (b) prepared from the edible portion of sound and clean raw materials referred to in Section 3.1 below which are mixed and prepared to obtain the desired quality and characteristics;
- (c) processed by heat, in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage.

### 2.2 Styles

#### 2.2.1 *Chili sauce can be of the following styles:*

- (a) Chili sauce with pulp and seeds homogeneously ground together.
- (b) Chili sauce with pulp and seeds homogeneously ground together with the addition of particles of chili pulp, flakes and pieces and seeds distributed in the sauce.
- (c) Chili sauce with crushed pulp and seeds as separate layers or distributed in the sauce.
- (d) Chili sauce with only pulp or crushed pulp or both.

#### 2.2.2 *Other styles*

Any other presentation of the product should be permitted provided that the product:

- (a) is sufficiently distinctive from other forms of presentation laid down in the Standard;
- (b) meets all other requirements of the Standard, as applicable; and
- (c) is adequately described on the label to avoid confusing or misleading the consumer.

## 3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

### 3.1 Composition

#### 3.1.1 *Basic Ingredients*

Product covered by this standard shall consist of the following ingredients:

- (a) fresh chili (*Capsicum spp.*) or processed chili such as chili powder ground from dried chili, roasted chili, ground chili, chili preserved in vinegar or in brine;
- (b) vinegar or other permitted acid;
- (c) salt;
- (d) water.

#### 3.1.2 *Other Permitted Ingredients*

The following optional ingredients may also be used in certain product:

- (a) mango, papaya, tamarind and/or other fruits;
- (b) tomato, garlic, onion, carrot, sweet potato, yellow pumpkin and/or other vegetables;
- (c) spices and herbs;
- (d) sugars;
- (e) chili extract;
- (f) other edible ingredients as appropriate to the product.

## 3.2 Quality criteria

### 3.2.1 General Requirements

Chili sauce should have normal colour, flavour, and odour, corresponding to the type of raw materials used and should possess texture characteristic of the product.

### 3.2.2 Definition of Defects

**Foreign vegetal matter** means any vegetable part (such as, but not limited to, chili pedicels, leaves, calyxes and garlic stems) that does not pose any hazard to human health but affects the overall appearance of the final product.

### 3.2.3 Defects and Allowances

The product shall be practically free from dark specks or scale-like particles, discoloured seeds or pieces of abnormally discoloured ingredients and foreign vegetal matter excluding the dark specks or dark particles that are obtained from the natural process of the sauce, for example in the roasting process.

## 3.3 Classification of "defectives"

A container that fails to meet one or more of the applicable quality requirements, as set out in Section 3.2 should be considered as a "defective".

## 3.4 Lot acceptance

A lot should be considered as meeting the applicable quality requirements referred to in Section 3.2 when the number of "defectives" as defined in Section 3.3 does not exceed the acceptance number (c) of the appropriate sampling plan with an Acceptable Quality Level (AQL) of 6.5.

## 4. FOOD ADDITIVES

Only those food additive classes listed below are technologically justified and may be used in products covered by this Standard. Within each additive class only those food additives listed below, or referred to, may be used and only for the functions, and within limits, specified.

4.1 Acidity regulators, antioxidants, colours, flavour enhancers, preservatives, sweeteners and thickeners listed in Table 3 of the *General Standard for Food Additives* (CXS 192-1995) are acceptable for use in food conforming to this Standard.

### 4.2 Acidity regulators

INS No.	Food Additive	Maximum level
334	L(+)-Tartaric acid	5000 mg/kg (as tartrate) (singly or in combination)
335(ii)	Sodium L(+)-tartrate	
337	Potassium sodium L(+)-tartrate	
452(i)	Sodium polyphosphate	1000 mg/kg (as phosphorus)

### 4.3 Antioxidants

INS No.	Food Additive	Maximum level
307a	Tocopherol, d-alpha-	600 mg/kg (singly or in combination)
307b	Tocopherol concentrate, mixed	
307c	Tocopherol, dl-alpha-	
320	Butylated hydroxyanisole	100 mg/kg
321	Butylated hydroxytoluene	100 mg/kg
386	Disodium ethylene diamine tetra acetate	75 mg/kg

**4.4 Colours**

<b>INS No.</b>	<b>Food Additive</b>	<b>Maximum level</b>
100(i)	Curcumin	GMP
101(i)	Riboflavin, synthetic	350 mg/kg (singly or in combination)
101(ii)	Riboflavin, 5'-phosphate sodium	
102	Tartrazine	100 mg/kg
110	Sunset yellow FCF	300 mg/kg
120	Carmines	50 mg/kg
124	Ponceau (4R) (cochineal red A)	50 mg/kg
127	Erythrosine	50 mg/kg
129	Allura Red AC	300 mg/kg
133	Brilliant blue, FCF	100 mg/kg
141(i)	Chlorophylls, copper complexes	30 mg/kg (as Cu)
150c	Caramel III – ammonia process	1500 mg/kg
150d	Caramel IV – sulphite ammonia process	1500 mg/kg
155	Brown HT	50 mg/kg
160a (ii)	Carotenes, beta (vegetable)	2000 mg/kg
160b(i)	Annatto extracts, bixin based	10 mg/kg
160d(i)	Lycopene (synthetic)	390 mg/kg

**4.5 Preservatives**

<b>INS No.</b>	<b>Food Additive</b>	<b>Maximum level</b>
210	Benzoic acid	1000 mg/kg (as benzoic acid) (singly or in combination)
211	Sodium benzoate	
212	Potassium benzoate	
213	Calcium benzoate	
200	Sorbic acid	1000 mg/kg (as sorbic acid) (singly or in combination)
201	Sodium sorbate	
202	Potassium sorbate	
203	Calcium sorbate	
220	Sulfur dioxide	300 mg/kg (as residual SO <sub>2</sub> ) (singly or in combination)
221	Sodium sulfite	
222	Sodium hydrogen sulfite	
223	Sodium metabisulfite	
224	Potassium metabisulfite	
225	Potassium sulfite	
539	Sodium thiosulfate	1000 mg/kg
214	Ethyl parahydroxybenzoates	
218	Methyl para-hydroxybenzoates	

**4.6 Emulsifiers**

INS No.	Food Additive	Maximum level
432	Polyoxyethylene (20) sorbitan monolaurate	5 000 mg/kg (singly or in combination)
433	Polyoxyethylene (20) sorbitan monooleate	
434	Polyoxyethylene (20) sorbitan monopalmitate	
435	Polyoxyethylene (20) sorbitan monoesterate	
473	Sucrose esters of fatty acids	5 000 mg/kg
475	Polyglycerol esters of fatty acids	10 000 mg/kg
477	Propylene glycol esters of fatty acids	20 000 mg/kg

**4.7 Sweeteners**

INS No.	Food Additive	Maximum level
951	Aspartame	350 mg/kg
950	Acesulfame potassium	1000 mg/kg
955	Sucralose	450 mg/kg
952(i)	Saccharin	150 mg/kg (singly or in combination)
952(ii)	Calcium saccharin	
952(iii)	Potassium saccharin	
952(iv)	Sodium saccharin	

**4.8 Stabilizers**

INS No.	Food Additive	Maximum level
472e	Diacetyltartaric and fatty acid esters of glycerol	10 000 mg/kg

**4.9 Thickeners**

INS No.	Food Additive	Maximum level
405	Propylene glycol alginate	8 000 mg/kg

**4.10 Flavourings**

The flavourings used in products covered by this standard shall comply with the *Guidelines for the Use of Flavourings* (CXG 66-2008).

**5. CONTAMINANTS****5.1 Pesticides Residues**

The product covered by this Standard shall comply with the maximum residue limits for pesticides established by the Codex Alimentarius Commission.

**5.2 Other contaminants**

The product covered by this Standard shall comply with the Maximum Levels of the *General Standard for Contaminants and Toxins in Food and Feed* (CXS 193-1995).

## 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 *General Principles of Food Hygiene* (CXC 1-1969), the *Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods* (CXC 23-1979) and other relevant Codex texts such as Codes of Hygienic Practice and Codes of Practice.
- 6.2 The product should comply with any microbiological criteria established in accordance with the *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods* (CXG 21-1997)<sup>1</sup>.

## 7. WEIGHTS AND MEASURES

### 7.1 Fill of container

#### 7.1.1 Minimum Fill

- (a) The container should be well filled with the product which should occupy not less than 90% (minus any necessary head space according to good manufacturing practices) 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.
- (b) Flexible containers should be filled as full as commercially practicable.

#### 7.1.2 Classification of "Defectives"

A container that fails to meet the requirement for minimum fill of Section 7.1.1 should be considered as a "defective".

#### 7.1.3 Lot Acceptance

A lot shall be considered as meeting the requirement 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 with an AQL of 6.5.

## 8. LABELLING

The product covered by the provisions of this Standard shall be labelled in accordance with the latest edition of the *General Standard for the Labelling of Prepackaged Foods* (CXS 1-1985). In addition, the following specific provisions apply:

### 8.1 Name of the product

- 8.1.1 The name of the product shall be "Chili sauce", "Sweet chili sauce" or other names in accordance with the composition and the law and custom of the country in which the product is sold and in the manner not to mislead the consumer.
- 8.1.2 The level of chili pungency (heat value) may be declared in conjunction with, or in close proximity to, the name of the product in a manner not to mislead the consumer, and must be accepted by or be acceptable to competent authorities of the country where the product is sold.
- 8.1.3 If other permitted ingredients, as defined in Section 3.1.2, alters the flavour characteristic of the product, the name of the product shall be accompanied by the term "flavoured with X" or X flavoured" as appropriate.

### 8.2 Labelling of non-retail containers

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

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<sup>1</sup>For products that are rendered commercially sterile in accordance with the *Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods* (CXC 23-1979), microbiological criteria are not recommended as they do not offer benefit in providing the consumer with a food that is safe and suitable for consumption.

**9. METHODS OF ANALYSIS AND SAMPLING**

<b>Provision</b>	<b>Method</b>	<b>Principle</b>	<b>Type</b>
pH	AOAC 981.12 (Codex General Method for processed fruits and vegetables)	Potentiometry	III
Fill of containers	CAC/RM 46-1972 (Codex General Method for processed fruits and vegetables)	Weighing	I

**Sampling Plans**

The appropriate inspection level is selected as follows:

**Inspection level I – Normal sampling**

**Inspection level II – Dispute (Codex referee purpose sample size), enforcement or need for better lot estimate**

**SAMPLING PLAN 1**  
(Inspection Level I, AQL = 6.5)

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	6	1
4,801 – 24,000	13	2
24,001 – 48,000	21	3
48,001- 84,000	29	4
84,001 – 144,000	38	5
144,001 – 240,000	48	6
more than 240,000	60	7
<b>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	6	1
2,401 – 15,000	13	2
15,001 – 24,000	21	3
24,001 – 42,000	29	4
42,001 – 72,000	38	5
72,001 – 120,000	48	6
more than 120,000	60	7
<b>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	6	1
601 – 2,000	13	2
2,001 – 7,200	21	3
7,201 – 15,000	29	4
15,001 – 24,000	38	5
24,001 – 42,000	48	6
more than 42,000	60	7



**SAMPLING PLAN 2**  
(Inspection Level II, AQL = 6.5)

<b>NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
4,800 or less	13	2
4,801 – 24,000	21	3
24,001 – 48,000	29	4
48,001- 84,000	38	5
84,001 – 144,000	48	6
144,001 – 240,000	60	7
more than 240,000	72	8
<b>NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
2,400 or less	13	2
2,401 – 15,000	21	3
15,001 – 24,000	29	4
24,001 – 42,000	38	5
42,001 – 72,000	48	6
72,001 – 120,000	60	7
more than 120,000	72	8
<b>NET WEIGHT GREATER THAN 4.5 KG (10 LB)</b>		
<b>Lot Size (N)</b>	<b>Sample Size (n)</b>	<b>Acceptance Number (c)</b>
600 or less	13	2
601 – 2,000	21	3
2,001 – 7,200	29	4
7,201 – 15,000	38	5
15,001 – 24,000	48	6
24,001 – 42,000	60	7
more than 42,000	72	8