

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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STANDARD FOR CHILI SAUCE

CXS 306-2023

Adopted in 2023

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) prepared from the edible portion of sound, clean and fresh chili (*Capsicum* spp.) and/or processed chili and raw materials referred to in Section 3.1 below which are mixed and prepared to obtain the desired quality and characteristics;
- b) intended for use as seasoning and condiment; or
- c) processed by heat or by other physical means, 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) with pulp and seeds homogeneously ground together;
- b) 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) with crushed pulp and seeds as separate layers or distributed in the sauce; or
- d) 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.) and/or processed chili such as chili powder ground from dried chili, roasted chili, ground chili, chili preserved in vinegar or in brine or frozen;
- b) fresh chili/peppers (*Capsicum* spp.) whole or pieces or pepper mash;
- c) vinegar or other permitted acid;
- d) salt;ⁱ and
- e) water.

ⁱ Salt as defined in the *Standard for Food Grade Salt* (CXS 150-1985) or any other edible salt.

3.1.2 **Optional ingredients**

Any other food ingredient of plant origin suitable for this product may be used in the products covered by this standard. This includes:

- a) fresh or processed, whole, pieces or pulp of fruits such as mango, papaya, tamarind and/or others;
- b) fresh or processed, whole, pieces or pulp of vegetables such as tomato, garlic, onion, carrot, sweet potato, and/or others;
- c) spices and culinary herbs and/or their extracts;ⁱⁱ
- d) sugarsⁱⁱⁱ and/or other foodstuffs with sweetening properties such as honey;^{iv} and
- e) chili extract.

3.2 **Quality criteria**

3.2.1 **General requirements**

- a) Colour, flavour, odour and texture

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.

- (b) pH

Shall not exceed 4.6, as appropriate to the type of chili sauce.^v

- b) Total soluble solids

Chili sauce shall contain 8 percent – 60 percent total soluble solids, as appropriate to the type of chili sauce.

3.2.2 **Definition of defects**

Extraneous vegetable material 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 extraneous vegetable material 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 “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**

- 4.1 Acidity regulators, antioxidants, colours, emulsifiers, preservatives, stabilizers, sweeteners, and thickeners used in accordance with Table 1 and Table 2 of the *General Standard for Food Additives* (CXS 192-1995)¹ in food category 12.6.2 (Non-emulsified sauces (e.g. ketchup, cheese sauce, cream sauce, brown gravy) are acceptable for use in foods conforming to this standard. Additionally, acidity regulators, colours, flavour enhancers, preservatives, sweeteners and thickeners listed in Table 3 of the *General Standard for Food Additives* (CXS 192-1995)¹ are acceptable for use in food conforming to this standard.

ⁱⁱ In accordance with the relevant Codex standards for spices and culinary herbs when available.

ⁱⁱⁱ Sugars as defined in the *Standards for Sugars* (CXS 212-1999).

^{iv} Honey as defined in the *Standards for Honey* (CXS 12-1981).

^v Different types of chili sauce will have different pH values, none of which shall exceed 4.6.

4.2 Flavourings

The flavourings used in products covered by this standard should comply with the *Guidelines for the Use of Flavourings* (CXG 66-2008).²

5. CONTAMINANTS

5.1 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).³

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

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),⁴ the *Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods* (CXC 23-1979)⁵ 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).⁶

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 percent (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 Pre-packaged Foods* (CXS 1-1985).⁷ 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 a 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

The labelling of non-retail containers should be in accordance with the *General Standard for the Labelling of Non-Retail Containers of Foods* (CXS 346-2021).⁸

9. METHODS OF ANALYSIS AND SAMPLING

For checking the compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999)⁹ relevant to the provisions in this standard, shall be used.

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)

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)

Lot size (N)	Sample size (n)	Acceptance number (c)
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

NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)

Lot size (N)	Sample size (n)	Acceptance number (c)
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

NET WEIGHT GREATER THAN 4.5 KG (10 LB)

Lot size (N)	Sample size (n)	Acceptance number (c)
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)

NET WEIGHT IS EQUAL TO OR LESS THAN 1 KG (2.2 LB)		
Lot size (N)	Sample size (n)	Acceptance number (c)
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
NET WEIGHT IS GREATER THAN 1 KG (2.2 LB) BUT NOT MORE THAN 4.5 KG (10 LB)		
Lot size (N)	Sample size (n)	Acceptance number (c)
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
NET WEIGHT GREATER THAN 4.5 KG (10 LB)		
Lot size (N)	Sample size (n)	Acceptance number (c)
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

NOTES

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- ¹ FAO and WHO. 1995. *General Standard for Food Additives*. Codex Alimentarius Standard, No. CXS 192-1995. Codex Alimentarius Commission. Rome.
- ² FAO and WHO. 2008. *Guidelines for the Use of Flavourings*. Codex Alimentarius Guideline, No. CXG 66-2008. Codex Alimentarius Commission. Rome.
- ³ FAO and WHO. 1995. *General Standard for Contaminants and Toxins in Food and Feed*. Codex Alimentarius Standard, No. CXS 193-1995. Codex Alimentarius Commission. Rome.
- ⁴ FAO and WHO. 1969. *General Principles of Food Hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome.
- ⁵ FAO and WHO. 1979. *Code of Hygienic Practice for Low and Acidified Low Acid Canned Foods*. Codex Alimentarius Code of Practice, No. CXC 23-1979. Codex Alimentarius Commission. Rome.
- ⁶ FAO and WHO. 1997. *Principles and Guidelines for the Establishment and Application of Microbiological Criteria Related to Foods*. Codex Alimentarius Guideline, No. CXG 21-1997. Codex Alimentarius Commission. Rome.
- ⁷ FAO and WHO. 1985. *General Standard for the Labelling of Pre-packaged Foods*. Codex Alimentarius Standard, No. CXS 1-1985. Codex Alimentarius Commission. Rome.
- ⁸ FAO and WHO. 2021. *General Standard for the Labelling of Non-Retail Containers of Foods*. Codex Alimentarius Standard, No. CXS 346-2021. Codex Alimentarius Commission. Rome.
- ⁹ FAO and WHO. 1999. *Recommended Methods of Analysis and Sampling*. Codex Alimentarius Standard, No. CXS 234-1999. Codex Alimentarius Commission. Rome.