

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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STANDARD FOR CANNED APPLESAUCE

CXS 17-1981

Adopted in 1981. Revised in 2001. Amended in 2017, 2022.

2022 Amendments

Following decisions taken at the Forty-fifth Session of the Codex Alimentarius Commission in December 2022, amendments were made in Section 8.2 Labelling of non-retail containers.

1. SCOPE

This standard applies to canned applesauce, 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

Canned applesauce is the comminuted or chopped product:

- a) prepared from washed, clean apples, conforming to the characteristics of the fruit of *Malus domestica* *Borkhausen* which may have been peeled and which after trimming are sound;
- b) prepared with or without other permitted ingredients as described in Section 3.1.2; and
- 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 Sweetened – with sugars and/or other carbohydrate sweeteners such as honey; not less than 16.5 percent total soluble solids (16.5° Brix).

2.2.2 Unsweetened – without added sweeteners; not less than 9 percent total soluble solids (9.0° Brix).

2.2.3 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

Apples as defined in Section 2.1(a).

3.1.2 Other permitted ingredients

- a) salt (sodium chloride);
- b) spices;
- c) sugars as defined in the Codex Alimentarius and/or other carbohydrate sweeteners such as honey; and
- d) water.

3.2 Quality criteria

3.2.1 Colour, flavour and texture

Applesauce shall have normal colour, flavour and odour and shall possess a texture characteristic of the product. The number, size, and prominence of defects (such as seeds or particles thereof, peel, carpel tissue, bruised apple particles, dark particles, and any other extraneous material of like nature) should not seriously affect the appearance or the eating quality of the product.

3.3 Classification of “defectives”

A container that fails to meet one or more of the applicable quality requirements, or total solids requirements, as set out in Section 2.2, should be considered as a “defective”.

3.4 Lot acceptance

A lot should be considered as meeting the applicable quality requirements for total solids referred to in Section 2.2, and the quality criteria in Section 3.2, when the number of “defectives” does not exceed the acceptance number c) of an appropriate sampling plan with an AQL of 6.5.

4. FOOD ADDITIVES

4.1 Acidifying agents

INS No.	Name of the food additive	Maximum level
296	Malic acid	Limited by GMP
330	Citric acid	

4.2 Antioxidants

INS No.	Name of the food additive	Maximum level
300	Ascorbic acid	Limited by GMP (singly or in combination)
315	Erythorbic acid	

4.3 Flavourings

Natural and synthetic flavourings except those which reproduce the flavour of apples	Limited by GMP
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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).¹
- 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 product 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)² 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).³

7. WEIGHTS AND MEASURES

7.1 Fill of container

7.1.1 Minimum fill

The container should be well filled with applesauce and the product should occupy not less than 90 percent 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 percent container capacity) of Section 7.1.1 should be considered as a “defective”.

7.1.3 Lot acceptance

A lot should 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 an 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 *General Standard for the Labelling of Pre-packaged Foods* (CXS 1-1985).⁴ In addition, the following specific provisions apply:

8.1 Name of the product

- 8.1.1 The name of the product shall be “Applesauce”.
- 8.1.2 If the product has been sweetened in accordance with the provisions of Section 2.2.1, the name of the product shall be accompanied by the designation “Sweetened”, in close proximity to the name of the food.
- 8.1.3 If the product has not been sweetened and conforms with the requirements of Section 2.2.2, the designation “Unsweetened” may be used in close proximity to the name of the food.

- 8.1.4** The name of the product shall be accompanied in close proximity by a declaration of any seasoning or flavouring which characterizes the product, e.g. “with X” as appropriate.
- 8.1.5 *Other styles*** – If the product is produced in accordance with the other styles provision (Section 2.2.3), the label should contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

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).⁵

9. METHODS OF ANALYSIS AND SAMPLING

For checking compliance with this standard, the methods of analysis and sampling contained in the *Recommended Methods of Analysis and Sampling* (CXS 234-1999)⁶ relevant to the provisions in this standard shall be used.

NOTES

¹ 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.

² FAO and WHO. 1969. *General Principles of Food Hygiene*. Codex Alimentarius Code of Practice, No. CXC 1-1969. Codex Alimentarius Commission. Rome.

³ 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.

⁴ FAO and WHO. 1985. *General Standard for the Labelling of Pre-packaged Foods*. Codex Alimentarius Standard, No. CXS 1-1985. Codex Alimentarius Commission. Rome.

⁵ 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.

⁶ FAO and WHO. 1999. *Recommended Methods of Analysis and Sampling*. Codex Alimentarius Standard, No. CXS 234-1999. Codex Alimentarius Commission. Rome.