

**CODEX STANDARD FOR GRAPE JUICE
PRESERVED EXCLUSIVELY BY PHYSICAL MEANS¹
CODEX STAN 82-1981
(World-wide Standard)**

1. DESCRIPTION

Unfermented but fermentable juice, intended for direct consumption, obtained by a mechanical process from sound, ripe grapes preserved exclusively by physical means.² The juice may be turbid or clear. The juice may be clarified and corrected for acidity. The juice may have been concentrated and later reconstituted with water suitable for the purpose of maintaining the essential composition and quality factors of the juice.

2. ESSENTIAL COMPOSITION AND QUALITY FACTORS

2.1 Soluble Solids

The soluble grape solids content of grape juice shall be not less than 15% m/m as determined by refractometer at 20 °C, uncorrected for acidity and read as °Brix on the International Sucrose Scales.

2.2 Where the juice has been obtained using concentrated juice with the addition of water, the soluble grape solids content shall be not less than 16% m/m as determined by refractometer at 20 °C, uncorrected for acidity and read as °Brix on the International Sucrose Scales.

2.3 Ethanol Content

The ethanol content shall not exceed 5 g/kg.

2.4 Volatile Acids

The volatile acids content shall not exceed 0.4 g/kg, expressed as acetic acid.

2.5 Organoleptic Properties

The product shall have the characteristic colour, aroma and flavour of juice from the variety or varieties of grapes from which it is made. Natural volatile grape juice components may only be restored to juice of the same type of grapes from which such natural volatile grape juice components have been removed.

2.6 Use of Concentrates

The addition of concentrate to juice is permitted. If a juice is made from only one variety of grapes, only concentrate from that variety may be used.

2.7 Use of Carbon Dioxide

¹ Formerly CAC/RS 82-1976.

² For the purpose of this standard and at this time preservation by physical means does not include ionizing radiation.

The grape juice may be "carbonated".

3. FOOD ADDITIVES

	Maximum level
3.1 Citric acid)	
3.2 Malic acid)	Limited by GMP
3.3 Carbon dioxide)	
3.4 L-ascorbic acid	400 mg/kg in the final product
3.5 Processing Aids	
3.5.1 Clarifying and filtering agents as approved by the Codex Alimentarius Commission and used in accordance with good manufacturing practice.	

	Maximum level
3.5.2 Precipitated calcium carbonate)	
3.5.3 Potassium tartrate)	Limited by GMP
3.5.4 Calcium hydroxide)	
3.5.5 Vegetable carbon)	
3.5.6 Nitrogen)	Limited by GMP
3.5.7 Carbon dioxide	

4. CONTAMINANTS

	Maximum level
4.1 Arsenic (As)	0.2 mg/kg
4.2 Lead (Pb)	0.3 mg/kg ¹
4.3 Copper (Cu)	5 mg/kg
4.4 Zinc (Zn)	5 mg/kg
4.5 Iron (Fe)	15 mg/kg
4.6 Tin (Sn)	150 mg/kg ¹
4.7 Sum of copper, zinc and iron	17 mg/kg
4.8 Sulphur dioxide	10 mg/kg
4.9 Mineral impurities insoluble in 10% hydrochloric acid	20 mg/kg

5. HYGIENE

5.1 It is recommended that the products covered by the provisions of this standard be prepared in accordance with the Recommended International Code of Hygienic Practice for Canned Fruit and Vegetable Products (Ref. No. CAC/RCP 2-1969) and the General Principles of Food Hygiene (Ref. No. CAC/RCP 1-

¹ These limits remain under review.

1969, Rev. 2-1985) recommended by the Codex Alimentarius Commission.

5.2 When tested by appropriate methods of sampling and examination, the product:

- (a) shall be free from microorganisms capable of development under normal conditions of storage; and
- (b) shall not contain any substances originating from microorganisms in amounts which may represent a hazard to health.

6. WEIGHTS AND MEASURES

6.1 Fill of Container

6.1.1 Minimum Fill

The grape juice shall occupy not less than 90% v/v of the water capacity of the containers. 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. MARKING OR LABELLING

7.1 Containers Destined for the Final Consumer

In addition to the requirements of the Codex General Standard for the Labelling of Prepackaged Foods (CODEX STAN 1-1985, Codex Alimentarius, Volume 1), the following specific provisions apply:

7.1.1 The Name of the Food

7.1.1.1 The name of the product shall be "grape juice" immediately preceded or followed by a varietal designation except in those countries where national authorities determine that the omission of such a varietal designation would not mislead or deceive the consumer. The varietal designation shall consist of the name of the variety of grapes from which the juice was derived. If juices from two or more varieties have been blended, the name of the variety whose juice is present in the greatest proportion shall be accompanied by the words "and other varieties".

7.1.2 List of Ingredients

7.1.2.1 A complete list of ingredients shall be declared on the label in descending order of proportion, except that water added for reconstitution of juice according to Section 1 and the processing aids specified in Sections 3.5.1 to 3.5.7 need not be declared.

7.1.2.2 In the case of grape juice made from concentrate, the fact of reconstitution shall be declared in the list of ingredients as follows: "grape juice made from concentrate" or "reconstituted grape juice" or "grape juice made from concentrated grape juice". If there are no ingredients to be listed in accordance with Section 7.1.2.1, the expression "grape juice made from concentrate" or "reconstituted grape juice" or "grape juice made from concentrated grape juice" shall appear on the label.

7.1.2.3 The addition of L-ascorbic acid shall be declared in the list of ingredients as:

- (a) "L-ascorbic acid as antioxidant", or
- (b) "antioxidant".

7.1.3 Additional Requirements

The following additional specific provisions shall apply:

7.1.3.1 No fruit or fruit juice may be represented pictorially on the label except grapes or grape juice.

7.1.3.2 Where the product contains more than 2 g/kg of carbon dioxide the term "carbonated" shall appear in close proximity to the name and "carbon dioxide" shall also be declared in the list of ingredients.

7.1.3.3 No claims shall be made in respect of "Vitamin C" nor shall the term "Vitamin C" appear on the label unless the product contains such quantity of "Vitamin C" as would be accepted by national authorities in the country in which the product is sold, as warranting such claim or the use of such term.

7.1.3.4 Where grape juice requires to be kept under conditions of refrigeration, there shall be information for keeping and, if necessary, thawing of the product.

7.1.4 Date Marking

The "date of minimum durability" shall be declared by the month and year in uncoded numerical sequence except that for products with a shelf-life of more than 18 months the year will suffice.

7.1.5 Storage Instructions

Where practicable, storage instructions should be in close proximity to the date marking.

7.2 Non-Retail Containers

In the case of grape juice in bulk, the information required by Section 7.1 shall either be given on the container or be given in accompanying documents except that the name of the product and the name and address of the manufacturer or packer should appear on the container. However, the name and address of the manufacturer or packer may be replaced by an identification mark, provided that such a mark is clearly identifiable with the accompanying documents.

8. METHODS OF ANALYSIS AND SAMPLING

See Volume 13 of the *Codex Alimentarius*.