

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية GCC STANDARDIZATION ORGANIZATION (GSO)

مشروع مواصفة نهائي
Final Draft of Standard FDS

إعداد اللجنة الخليجية رقم TC05

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الكستناء (أبو فروة) المعلبة وهريسة الكستناء المعلبة
Canned Chestnuts and Canned Chestnut Puree

ICS: 67.080.01

This document is a draft Gulf Standard/Technical Regulation circulated for comments. It is, therefore, subject to alteration and modification and may not be referred to as a Gulf Standard/Technical Regulation until approved by GSO.

هذه الوثيقة مشروع لمواصفة قياسية/لائحة فنية خليجية تم توزيعها لإبداء الملحوظات بشأنها، لذلك فإنها عرضة للتغيير والتبديل، ولا يجوز الرجوع إليها كمواصفة قياسية/لائحة فنية خليجية إلا بعد اعتمادها من الهيئة.

Foreword

GCC Standardization Organization (GSO) is a regional Organization which consists of the National Standards Bodies of GCC member States. One of GSO main functions is to issue Gulf Standards /Technical regulations through specialized technical committees (TCs).

GSO through the technical program of committee TC No (5) "Technical committee for standards of food and agriculture products" has prepared this Standard. The Draft Standard has been prepared by Kuwait.

The draft Standard has been prepared based on relevant ADMO, International and National foreign Standards and references.

This standard has been approved as a Gulf Technical regulation by GSO Board of Directors in its meeting No. (), held on // (//) .

تقديم

هيئة التقييس لدول مجلس التعاون لدول الخليج العربية هيئة إقليمية تضم في عضويتها أجهزة التقييس الوطنية في الدول الأعضاء، ومن مهام الهيئة إعداد المواصفات القياسية واللوائح الفنية الخليجية بواسطة لجان فنية متخصصة.

قرر (المجلس الفني ل/ مجلس إدارة) هيئة التقييس لدول مجلس التعاون لدول الخليج العربية في اجتماعه رقم () الذي عقد بتاريخ / / هـ ، الموافق / / م اعتماد تحديث اللائحة الفنية الخليجية رقم (GSO1919:2009) الكستناء (أبو فروة) المعلبة وهريسة الكستناء المعلبة باللغة (العربية والإنجليزية) ضمن برنامج عمل اللجنة الفنية الخليجية رقم TC05 "اللجنة الفنية الخليجية للمواصفات الغذائية والزراعية" المدرجة في خطة دولة الكويت. ويعتبر النص (الإنجليزي) هو المرجع الأساسي في حال وجود اختلاف بين النصين.

1- SCOPE AND FIELD OF APPLICATION

This standard applies to canned products prepared from chestnut fruits, as defined in Section 3.1, intended for direct human consumption. The fruits are shelled, styled and canned alone or with packing media.

2- COMPLEMENTARY REFERENCES

- 2.1 GSO 9 "Labelling of Prepackaged Foods".
- 2.2 GSO21 "Hygienic Regulations for Food Plants and Their Personnel".
- 2.3 GSO 2500 " Additives Permitted for Use in Food Stuffs ".
- 2.4 GSO 168 "Conditions of Storage Facilities for Dry and Canned Foodstuffs".
- 2.5 GSO 177 "Methods of Physical and Chemical Test of Canned Vegetables".
- 2.6 GSO 178"Microbiological Methods for Testing Canned Vegetables".
- 2.7 GSO 244 "Methods of Tests for Vegetables, Fruits and Their Products - Part 1: Organoleptic Examination - Determination of Net Weight and Drained Weight - Determination of Apparent Viscosity - Determination of Head Space - Determination of Extraneous Matter and Defective Fruits".
- 2.8 GSO 260 "Methods of Tests for Fruits, Vegetables and Their Products - Part 3: Determination of Specific Gravity - Pectin - Pentosans - Sorbitol – Sucrose".
- 2.9 GSO 382 "Maximum Limits for Pesticide Residues in Agricultural Food Products - Part 1".
- 2.10 GSO 383 "Maximum Limits for Pesticide Residues in Agricultural and Food Products - Part 2".
- 2.11 GSO 707 "Flavourings Permitted for Use in Foodstuffs".
- 2.12 GSO 839 "Food Packages - Part 1: General Requirements".
- 2.13 GSO 841 "Maximum Limits of Omycotoxins Permitted in Foods and Animal Feeds – Aflatoxins".
- 2.14 GSO 988 "Limits of Radiation Levels Permitted in Foodstuffs – Part 1".
- 2.15 GSO 1016 "Permissible Microbiological Criteria for Foodstuffs - Part 1".

- 2.16 GSO 1287 “Methods of Sampling of Prepackaged Fruit and Vegetable Products”.
- 2.17 GS1791 "Three piece steel round cans used for canning food stuffs³
- 2.18 GSO 1794 "the two piece steel round cans used for canning food-stuffs"
- 2.19 GSO 1795" methods of test for two -piece steel round cans used in canning food –stuffs"

3- DEFINITIONS

3.1 Canned chestnuts is the product

(a) prepared from fresh, sound, mature chestnuts of varieties conforming to the characteristics of the species *Castanea crenata* Sieb et Zucc. (Japanese chestnut) or *Castanea sativa* Miller (European chestnut) which shall be shelled and may be pellicled or unpellicled;¹

(b) packed with or without water which may or may not contain sugars, seasonings and other ingredients appropriate to the product; and

(c) processed by heat in an appropriate manner, before or after being hermetically sealed in a container, so as to prevent spoilage.

3.2 Canned chestnut puree

Canned chestnut puree is the product (a) pureed by sieving, or other mechanical means in order to obtain a fruit pulp from chestnuts, as defined in sub-section 3/1 (a).

(b) packed with or without sugars and other ingredients appropriate to the product

(c) heat processed by a procedure as defined in sub-section 3/1(c).

4- STYLES

4.1 Canned Chestnuts

Canned chestnuts may be packed in the following styles:

- 4.1.1 Whole - whole chestnuts which are pellicled or unpellicled and/or trimmed into a practical tetrahedron.
- 4.1.2 Brokens - small pieces which may not be uniform in size and/or shape.

4.2 Canned Chestnut Puree

- 4.1.1 Sweetened - with added sugars listed in 5.1.2 not less than 12 percent total soluble solids (12° Brix).
- 4.1.2 Unsweetened - without added sugars; not less than 10 percent total soluble solids (10° Brix).

4.3 Other Styles

Any other presentation of the product shall be permitted provided that it:

- 4.3.1 is sufficiently distinctive from other forms of presentation laid down in this standard.
- 4.3.2 meets all other requirements of this standard.
- 4.3.3 is adequately described on the label to avoid confusing or misleading the consumer.

5- Essential Composition and Quality Factors**5.1 Packing Media**

Where a packing medium is used, it may consist of:

- 5.1.1 Water - in which water is the sole packing medium;
- 5.1.2 Water which may have one or more of the following nutritive sweeteners as defined by the Gulf standards added: sucrose, invert sugar syrup, dextrose, dried glucose syrup, glucose syrup, fructose, fructose syrup, honey.

5.2 Classification of packing media when nutritive sweeteners are added

- 5.2.1 When nutritive sweeteners are added to water, the liquid media shall be classified on the basis of the cut-out strength as follows:

Slightly sweetened water - Water slightly sweetened

- | | |
|-------------------|---|
| Extra Light syrup | - Not less than 10° Brix - but less than 14° Brix |
| Light syrup | - Not less than 14° Brix - but less than 18° Brix |
| Heavy syrup | - Not less than 18° Brix but less than 22° Brix |
| Extra Heavy syrup | - Not less than 22° Brix |

- 5.2.2 The cut-out strength for any packing medium shall be determined on average, but no container may have a Brix value lower than that of the next category below.

6- Other Ingredients

Canned chestnut puree may contain “sugars”, as listed in sub-section 5.1.2, they shall amount to not more than 2 percent of total net contents. Canned Chestnuts and Chestnut Puree may contain “salt” (sodium chloride) in an amount not exceeding 1 percent of total net contents.

7- REQUIREMENTS

7.1 Colour

When colour is not added, canned chestnuts or canned chestnut puree shall have a normal colour characteristic of the varieties used. Browning and discolouration shall be regarded as defects.

7.2 Flavour

Canned chestnuts or canned chestnut puree shall have a normal flavour and odour free from flavours and odours foreign to the products.

7.3 Texture

7.3.1 Canned chestnuts shall have a reasonably uniform thick texture and shall not be excessively firm nor unreasonably soft.

7.3.2 Canned chestnut puree shall have a uniform consistency and particle size.

7.4 Uniformity of size

Whole - in 95 percent, by count, of units that are most uniform in size, the weight of the largest unit shall be no more than twice the weight of the smallest unit.

7.5 Defects and Allowances

The product shall be substantially free from defects such as harmless plant material, shell, pellicle (in pellicled styles), blemished units, split and broken units (in whole styles) and discoloured units. Slight syneresis in canned chestnut puree should not be regarded as a defect. Certain common defects shall not be present in amounts greater than the following limitations:

7.5.1 Not more than 14 percent by mass of chestnuts on the net drained weight;

7.5.2 and Not more than 20 percent of chestnuts which are not whole on the net drained weight for the style “whole”.

7.6 Classification of “Defectives”

A container that fails to meet one or more of the applicable quality requirements as set out in sub-section 2.4.1 through 2.4.5 (except extraneous plant material which is based on an average of the entire sample) shall be considered a “defective”.

7.7 Lot Acceptance

A lot will be considered as meeting the applicable quality requirements referred to in sub-section 2.4.5. when the number of “defectives” as defined in sub-section 2.4.6 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL of 6.5.

8- FOOD ADDITIVES

8.1	Chelating Agent	Maximum Level in the final product
8.1.1	Sodium polyphosphate	Limited by Good Manufacturing Practice
8.2	Antioxidants	
8.2.1	L-Ascorbic acid	300 mg/kg expressed as ascorbic acid
8.2.2	Sodium ascorbate	singly or in combination
8.3	Acidifying Agents	Limited by Good Manufacturing Practice
	Acid 10 g/kg	
8.3.1	Citric acid	Limited by Good Manufacturing Practice
8.3.2	Malic acid	Limited by Good Manufacturing Practice
8.3.3	L-Tartaric Acid	10 g/kg
8.4	Bleaching Agent	
8.4.1	Sulphur dioxide (not authorized in puree)	30 mg/kg, calculated as SO ₂
8.5	Natural Colouring Agents Limited	by Good Manufacturing Practice
8.5.1	Turmeric (CI 75300)	
8.5.2	Crocin (CI 75100)	
8.5.3	Carthamus Yellow (CI 75140)	
8.6	Flavourings	Limited by Good Manufacturing Practice
8.6.1	Extract of Vanilla	

8.6.2 Vanillin

8.7 Thickening Agents Limited by GMP

8.7.1 Pectins

8.8 Firming Agents

8.8.1 Firming agents used in accordance according to the General Standard for Food Additives in Food Category, mentioned in section 2.3, (Canned or bottled (pasteurized) or retort pouch vegetables (including mushrooms and fungi, roots and tubers, pulses and legumes, and aloe vera), and seaweeds

8.9 CONTAMINANTS

Lead (Pb) 1 mg/kg

Tin (Sn) 250 mg/kg

8.10 HYGIENE

8.10.1 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, Mentioned in 2.2, and other standards of Practice recommended which are relevant to this product.

8.10.2 To the extent possible in Good Manufacturing Practice, the product shall be free from objectionable matter.

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

8.10.3.1 shall be free from microorganisms in amounts which may represent a hazard to health

8.10.3.2 shall be free from parasites which may represent a hazard to health;

8.10.3.3 shall not contain any substance originating from microorganisms in amounts which may represent a hazard to health.

9- PACKAGING

In addition to the requirements of the General Standard for the packaging mentioned in section 2.4, the following specific provisions apply:

9.1 Fill of Container

9.1.1 Minimum Fill

The container shall be well filled with chestnuts or chestnut puree and the product (including packing medium) shall 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.

9.1.2 Classification of “Defectives”

A container that fails to meet the requirement for minimum fill (90 percent container capacity) of sub-section 9.1.1 shall be considered a “defective”.

9.1.3 Lot Acceptance

A lot will be considered as meeting the requirement of sub-section 9.1.1 when the number of “defectives”, as defined in sub-section 9.1.2.

9.1.4 Minimum Drained Weight

9.1.4.1 The drained weight of the product packed with liquid packing medium shall be not less than the following percentages, calculated on the basis of the weight of distilled water at 20°C which the sealed container will hold when completely filled:

Not less than 300 ml of water capacity of the container 60%

Less than 300 ml of water capacity of the container 55%

9.1.4.2 The requirements for minimum drained weight shall be deemed to be complied with when the average drained weight of all containers examined is not less than the minimum required, provided that there is no unreasonable shortage in individual containers.

10- LABELLING

In addition to the requirements of the General Standard for the Labelling of Prepackaged Foods in section 2.1, the following specific provisions apply:

10.1 Name of the Food

10.1.1 The name of the product shall be “chestnuts” if it meets the definition in section 3.1 or “chestnut puree” if it meets the definition in section 3.2.

10.1.2 The style, as appropriate, shall be declared as a part of the name or in close proximity to the name: “Whole”, “Broken”, “Sweetened” “Unsweetened”} in the case of chestnut puree only.

If the product is produced in accordance with the other styles provision in sub-section 1.2.3, the label shall contain in close proximity to the name of the product such additional words or phrases that will avoid misleading or confusing the consumer.

10.1.3 The term “unpellicled” shall be declared as appropriate as part of the name or in close proximity to the name.

10.1.4 The packing medium shall be declared as part of the name or in close proximity to the name:

10.1.4.1 When the packing medium is composed of water, the packing medium shall be declared as: “In water” or “Packed in water”.

10.1.4.2 When nutritive sweeteners are added to water, the packing medium shall be declared as:

“Slightly sweetened water”

“Water slightly sweetened”

“Extra light syrup”

“Light syrup”

“Heavy syrup”

“Extra heavy syrup”

10/1/4/3 When the packing medium contains no added sweetening agents, the term “no added sugar” or other words of similar import may be used in association with, or in close proximity to the name of the food.

11- SAMPLING

Samples shall be taken as prescribed in the Gulf standard mentioned in 2.19.

12- METHODS OF TEST

For checking compliance with this Standard, the methods of analysis and sampling contained in the standard Methods of Analysis and Sampling, according to 2.6,2.7&2.8

13- TRANSPORTATION AND STORAGE

Subject to the provisions of the Gulf standard mentioned in 2.4 canned chestnuts shall be transported and stored in such a suitable way as to safeguard the hygienic and nutritional qualities of the product. Cans are kept in ventilated stores at normal room temperature and moderate humidity.