

CODEX ALIMENTARIUS

INTERNATIONAL FOOD STANDARDS



Food and Agriculture
Organization of
the United Nations



World Health
Organization

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STANDARD FOR CANNED SHRIMPS OR PRAWNS

CXS 37-1991

Adopted in 1991. Revised in 1995. Amended in 2011, 2013, 2016, 2018.

1. SCOPE

This standard applies to canned shrimps or canned prawns¹. It does not apply to specialty products where shrimp constitutes less than 50% m/m of the contents.

2. DESCRIPTION

2.1 Product Definition

Canned shrimp is the product prepared from any combination of species of the families *Penaeidae*, *Pandalidae*, *Crangonidae* and *Palaemonidae* from which heads, shell, antennae have been removed.

2.2 Process Definition

Canned shrimp are packed in hermetically sealed containers and shall have received a processing treatment sufficient to ensure commercial sterility.

2.3 Presentation

The product shall be presented as:

Peeled shrimp - shrimp which have been headed and peeled without removal of the dorsal tract;

Cleaned or de-veined - peeled shrimp which have had the back cut open and the dorsal tract removed at least up to the last segment next to the tail. The portion of the cleaned or de-veined shrimp shall make up 95% of the shrimp contents;

Broken shrimp - more than 10% of the shrimp contents consist of pieces of peeled shrimp of less than four segments with or without the vein removed;

2.3.1 Other Forms of Presentation

Any other presentation shall be permitted provided that it:

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

2.3.2 Size

Canned shrimp may be designated as to size in accordance with:

- (i) the actual count range may be declared on the label; or
- (ii) provisions given in Annex "B".

3. ESSENTIAL COMPOSITION AND QUALITY FACTORS

3.1 Shrimp

Shrimp shall be prepared from sound shrimp of the species in sub-section 2.1 which are of a quality fit to be sold fresh for human consumption.

3.2 Other Ingredients

The packing medium and all other ingredients used shall be of food grade quality and conform to all applicable Codex standards.

3.3 Final Product

Products shall meet the requirements of this Standard when lots examined in accordance with Section 9 comply with the provisions set out in Section 8. Products shall be examined by the methods given in Section 7.

4. FOOD ADDITIVES

Acidity regulators, colours, and sequestrants used in accordance with Tables 1 and 2 of the [General Standard for Food Additives \(CXS 192-1995\)](#) in food category 09.4 (Fully preserved, including canned or fermented fish and fish products, including mollusks, crustaceans, and echinoderms) and only certain Table 3 acidity regulators as indicated in Table 3 of the [General Standard for Food Additives \(CXS 192-1995\)](#) are acceptable for use in foods conforming to this Standard.

¹ Hereafter referred to as "shrimp".

5. HYGIENE

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 \(CXC 1-1969\)](#), [Code of Practice for Fish and Fishery Products \(CXC 52-2003\)](#), [Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods \(CXC 23-1979\)](#) and other relevant Codex Codes of Hygienic Practice and Codes of Practice.

The products 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. LABELLING

In addition to provisions of the [General Standard for the Labelling of Prepackaged Foods \(CXS 1-1985\)](#), the following specific provisions apply:

6.1 The Name of the Food

The name of the product as declared on the label shall be "shrimp", or "prawns", and may be preceded or followed by the common or usual name of the species in accordance with the law and custom of the country in which the product is sold and in a manner not to mislead the consumer.

The name of the product shall be qualified by a term descriptive of the presentation in accordance with Sections 2.3.1 to 2.3.4.

If the canned shrimp are labelled as to size, the size shall comply with the provisions of Section 2.3.5 and Annex "B".

Broken shrimp defined in 2.3.3 shall be so labelled.

7. SAMPLING, EXAMINATION AND ANALYSES

7.1 Sampling

- (i) Sampling of lots for examination of the final product as prescribed in Section 3.3 shall be in accordance with an appropriate sampling plan with an AQL-6.5.
- (ii) Sampling of lots for examination of net weight and drained weight shall be carried out in accordance with an appropriate sampling plan meeting the criteria established by the CAC.

7.2 Sensoric and Physical Examination

Samples taken for sensoric and physical examination shall be assessed by persons trained in such examination in accordance with Annex A and the [Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories \(CXG 31 - 1999\)](#).

7.3 Determination of Net Weight

Net contents of all sample units shall be determined by the following procedure:

- (i) Weigh the unopened container;
- (ii) Open the container and remove the contents;
- (iii) Weigh the empty container, (including the end) after removing excess liquid and adhering meat;
- (iv) Subtract the weight of the empty container from the weight of the unopened container. The resultant figure will be the net content.

7.4 Determination of Drained Weight

The drained weight of all sample units shall be determined by the following procedure:

- (i) Maintain the container at a temperature between 20°C and 30°C for a minimum of 12 hours prior to examination;
- (ii) Open and tilt the container to distribute the contents on a pre-weighed circular sieve which consists of wire mesh with square openings of 2.8 mm x 2.8 mm;
- (iii) Incline the sieve at an angle of approximately 17-20° and allow the shrimps to drain for two minutes, measured from the time the product is poured into the sieve;
- (iv) Weigh the sieve containing the drained shrimps;

- (v) The weight of drained shrimps is obtained by subtracting the weight of the sieve from the weight of the sieve and drained product.

7.5 Determination of Size Designation

The size, expressed as the number of shrimp per 100g of drained product, is determined by the following equation:

$$\frac{\text{Number of whole shrimp in unit}}{\text{Actual drained weight of unit}} \times 100 = \text{Number of shrimp / 100g}$$

8. DEFINITION OF DEFECTIVES

A sample unit will be considered defective when it fails to meet any of the following final product requirements referred to in Section 3.3.

8.1 Foreign Matter

The presence in the sample unit of any matter, which has not been derived from shrimp, does not pose a threat to human health, and is readily recognized without magnification or is present at a level determined by any method including magnification that indicates non-compliance with good manufacturing or sanitation practices.

8.2 Odour/Flavour

A sample unit affected by persistent and distinct objectionable odours or flavours indicative of decomposition or rancidity.

8.3 Texture

- (i) Excessive mushy flesh uncharacteristic of the species in the presentation; or
- (ii) Excessively tough flesh uncharacteristic of the species in the presentation.

8.4 Discolouration

A sample unit affected by distinct blackening of more than 10% of the surface area of individual shrimp which affects more than 15% of the number of shrimp in the sample unit.

8.5 Objectionable Matter

A sample unit affected by:

- (i) Struvite crystals - any struvite crystal greater than 5 mm in length.

9. LOT ACCEPTANCE

A lot shall be considered as meeting the requirements of this standard when:

- (i) The total number of defectives as classified according to Section 8 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL-6.5;
- (ii) The total number of sample units not meeting presentation requirements in Section 2.3 does not exceed the acceptance number (c) of an appropriate sampling plan with an AQL-6.5;
- (iii) The average net weight and the average drained weight of all sample units examined is not less than the declared weight and provided there is no unreasonable shortage in any individual container;
- (iv) The Food Additives, Hygiene and Labelling requirements of Sections 4, 5 and 6 are met.

ANNEX "A"**SENSORY AND PHYSICAL EXAMINATION**

1. Complete external can examination for the presence of container integrity defects or can ends which may be distorted outwards.
 2. Open can and complete weight determination according to defined procedures in Sections 7.3 and 7.4.
 3. Carefully remove the product and examine for size designation in accordance with the procedure in Section 7.5.
 4. Examine product for discolouration, foreign and objectionable matter.
 5. Assess odour, flavour and texture in accordance with the [Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories \(CXG 31-1999\)](#).
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ANNEX "B"**SIZE DESIGNATION OF CANNED SHRIMPS**

The terms "extra large", "jumbo", "large", "medium", "small", "tiny" may be used provided that the range is in accordance with the following table:

Number of whole shrimp (including pieces greater than 4 segments) per 100g of drained product

SIZE DESIGNATION	RANGE
Extra Large or Jumbo	13 or less
Large	14-19
Medium	20-34
Small	35-65
Tiny	more than 65