

**CODEX STANDARD FOR CANNED SALMON***CODEX STAN 3 - 1991, Rev. 1 - 1995***1. SCOPE**

This standard applies to canned salmon.

**2. DESCRIPTION****2.1 PRODUCT DEFINITION**

2.1.1 Canned Salmon is the product prepared from headed and eviscerated fish of any of the species listed below from which the fins and tails have been removed, and to which salt, water, salmon oil and/or other edible oils may have been added.

- *Salmo salar*
- *Oncorhynchus nerka*
- *Oncorhynchus kisutch*
- *Oncorhynchus tshawytscha*
- *Oncorhynchus gorbuscha*
- *Oncorhynchus keta*
- *Oncorhynchus masou*

**2.2 PROCESS DEFINITION**

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

**2.3 PRESENTATION**

2.3.1 Canned salmon shall consist of sections which are cut transversely from the fish and which are filled vertically into the can. The sections shall be packed so that the cut surfaces are approximately parallel with the ends of the container.

2.3.2 Any other presentation shall be permitted provided that it:

- (i) is sufficiently distinctive from the form of presentation laid down under 2.3.1;
- (ii) meets all other requirements of this standard; and
- (iii) is adequately described on the label to avoid confusing or misleading the consumer.

**3. ESSENTIAL COMPOSITION AND QUALITY FACTORS****3.1 SALMON**

The product shall be prepared from sound fish of the species in Section 2.1 and of a quality fit to be sold fresh for human consumption.

**3.2 OTHER INGREDIENTS**

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**

No additives are permitted in this product.

#### **5. HYGIENE AND HANDLING**

5.1 The final product shall be free from any foreign material that poses a threat to human health.

5.2 When tested by appropriate methods of sampling and examination prescribed by the Codex Alimentarius Commission (CAC), the product:

- (i) shall be free from microorganisms capable of development under normal conditions of storage; and
- (ii) shall not contain any other substance derived from microorganisms in amounts which may represent a hazard to health in accordance with standards established by the CAC; and
- (iii) shall be free from container integrity defects which may compromise the hermetic seal.

5.3 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 Recommended International Code of Practice - General Principles of Food Hygiene (CAC/RCP 1-1969, Rev. 3-1997) and the following relevant Codes:

- (i) the Recommended International Code of Practice for Canned Fish (CAC/RCP 10-1976);
- (ii) the Recommended International Code of Hygienic Practice for Low-Acid and Acidified Low-Acid Canned Foods (CAC/RCP 23-1979);
- (iii) The sections on the Products of Aquaculture in the Proposed Draft International Code of Practice for Fish and Fishery Products (under elaboration)<sup>1</sup>

#### **6. LABELLING**

In addition to the provisions of the Codex General Standard for Labelling of Prepackaged Foods (CODEX STAN 1-1985, Rev. 3 - 1999) the following specific provisions shall apply.

##### **6.1 THE NAME OF THE FOOD**

The name of the product shall be the designation appropriate to the species of the fish according to the law, custom or practice in the country in which the product is to be distributed.

##### **6.2 PACKING MEDIUM**

The packing medium shall form part of the name of the food.

##### **6.3 PRESENTATION**

The presentation provided for in Section 2.3.2 shall be declared in close proximity to the common name.

#### **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 the FAO/WHO Codex Alimentarius Sampling Plans for Prepackaged Foods (1969) (AQL-6.5) (Ref. CAC/RM 42-1977).
- (ii) Sampling of lots for examination of net weight shall be carried out in accordance with an appropriate sampling plan meeting the criteria established by the CAC.

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<sup>1</sup> The Proposed Draft Code of Practice, when finalized, will replace all current Codes of Practice for Fish and Fishery Products

## **7.2 SENSORY EVALUATION AND PHYSICAL EXAMINATION**

Samples taken for sensoric and physical examination shall be assessed by persons trained in such examination and in accordance with Section 7.3, Annex A and the *Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories (CAC/GL 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 FOR PRODUCTS PACKED WITH EDIBLE OILS OTHER THAN SALMON OIL**

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 fish to drain for two minutes, measured from the time the product is poured into the sieve.
- (iv) Weigh the sieve containing the drained fish.
- (v) The weight of drained fish is obtained by subtracting the weight of the sieve from the weight of the sieve and drained product.

## **8. DEFINITION OF DEFECTIVES**

A sample unit will be considered defective when it exhibits any of the properties defined below.

### **8.1 FOREIGN MATTER**

The presence in the sample unit of any matter, which has not been derived from salmon or the packing medium 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 and 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; or
- (iii) Honey combed flesh in excess of 5% of the net contents.

**8.4 DISCOLOURATION**

A sample unit affected by distinct discolouration indicative of decomposition or rancidity or by sulphide staining of the meat exceeding 5% of the net contents.

**8.5 OBJECTIONABLE MATTER**

A sample unit affected by 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 the appropriate sampling plan in the Sampling Plans for Prepackaged Foods (AQL - 6.5) (CAC/RM 42-1977);
- (ii) the total number of sample units not meeting the form of presentation as defined in Section 2.3 does not exceed the acceptance number (c) of the appropriate sampling plan in the Sampling Plans for Prepackaged Foods (AQL-6.5) (CAC/RM 42-1977);
- (iii) the average net weight and the average drained weight where appropriate of all sample units examined is not less than the declared weight or drained weight as appropriate, and provided there is no unreasonable shortage in any individual container;
- (iv) the Food Additives, Hygiene and Labelling requirements of Sections 4, 5.1, 5.2 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 outward.
2. Open can and complete weight determination according to defined procedures in Section 7.3 and 7.4.
3. Examine product for discolouration, foreign and objectionable matter. The presence of hard bone is an indicator of underprocessing and will require an evaluation for sterility.
5. Assess odour, flavour and texture in accordance with the *Guidelines for the Sensory Evaluation of Fish and Shellfish in Laboratories (CAC/GL 31-1999)*