

CHAPTER 2, STANDARD 6**GENERAL CANNED SHELLFISH STANDARD****1. INTRODUCTION**

This standard for canned shellfish derives its authority from the Fish Inspection Regulations. It defines minimum acceptability of canned shellfish for taint, decomposition, unwholesomeness and other requirements, other than weight, as defined in the Fish Inspection Act and Regulations and describes methods for determining that acceptability.

2. SCOPE

This standard applies to canned shellfish in hermetically sealed containers. It is intended to be used for the inspection of canned shellfish products for which specific Canadian product standards have not been elaborated.

Canned shellfish shall be prepared from sound, wholesome raw material processed using good manufacturing practices.

Documents used to determine good manufacturing practice and compliance include:

- 1) International Code of Practice for Low Acid Canned Food CAC/RCP 23-1979.
- 2) Metal Can Defects Identification and Classification Manual, Department of Fisheries and Oceans, Inspection Services, 1989.
- 3) Codex Alimentarius Sampling Plans for Prepackaged Foods (AQL 6.5) CAC/RM 42-1969.
- 4) Code of Practice - General Principles of Food Hygiene for Use by the Food Industry in Canada, Health Protection Branch, Health and Welfare Canada, 1983.

3. NOMENCLATURE

The name of the product shall be that recognized in common usage in Canada, and in accordance with the Fish Inspection Regulations and any requirements of the applicable Codex Alimentarius Recommended International Standard.

Descriptive terms should be used where necessary to accurately describe

the contents of the can.

4. FORMS OF PRODUCT PRESENTATION

This product may be prepared from shellfish, cooked or not, smoked or unsmoked, whole (unshelled or with the half-shell removed) or shucked meats, which have been culled, washed, trimmed if necessary and packed in a container with brine, own juice and/or other suitable food grade packing media.

4.1 Other Presentations

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

- a) is sufficiently distinctive from the forms of presentation set out above;
- b) meets all other Canadian Regulatory requirements; and
- c) is adequately described on the label and in accordance with all regulatory labelling requirements.

5. SAMPLING

The sampling and tolerance plans in the front of this manual shall be used to determine the acceptability of the lot. The sampling plans dictate the minimum sample size to be taken. If necessary, in the opinion of the inspector, more than the minimum sample size specified may be taken.

- 5.1 Sampling of lots for the sensory examination of the product shall be in accordance with the FAO/WHO Codex Alimentarius Sampling Plan for Prepackaged Foods (AQL 6.5) (CAC/RM42-1969) except that a lower acceptance number for decomposition shall be used as indicated in the sampling tables.

The sampling tables specify the minimum number of sample units to be used for the following types of inspections:

- a) Level I - Sensory examination of all products subject to inspection other than lots which are subject to reinspection.
- b) Level II - Sensory examination of all products which are under reinspection.

5.2 Size of Sample Unit

The sample unit shall consist of a can of shellfish and the entire contents thereof.

6. DESCRIPTION OF DEFECTS

6.1 Taint

A unit will be considered tainted when any of the following conditions are found:

a) Rancid

The contents in the container show the following defects:

Odour characterized by the distinct or persistent odour of oxidized oil; or

Flavour characterized by that of oxidized oil which leaves a distinct bitter aftertaste.

b) Abnormal

Distinct and persistent uncharacteristic odours or flavours such as iodine, burnt or acrid, ash-like, metallic, or associated with feed and not defined as rancid or decomposed; or

Flavour or odour resulting from the improper addition and/or mixing of ingredients.

6.2 Decomposition

A unit will be considered decomposed when any of the following conditions are found:

a) Odours and flavours

Persistent, distinct and uncharacteristic odour or flavour including but not limited to the following:

fruity, vegetable, musty, yeasty, sour, faecal, ammonia, hydrogen sulphide, and putrid.

b) Discolouration

Discolouration associated with decomposition which is uncharacteristic of the species and type of pack. Depending on the species, abnormal colours may include blue, black, green, grey, or yellowish to orange colours.

- c) Texture
Breakdown of muscle structure due to decomposition as characterized by:

very tough, rubbery, or dry conditions; or

very soft, mushy, or pasty conditions.

6.3 Unwholesome

- a) Critical Foreign Material

A lot will be considered defective when any of the following conditions are found:

the presence of any material which has not been derived from shellfish (and packing media) and which poses a threat to human health (such as glass, etc.); or

distinct and persistent odour or flavour of any material which has not been derived from shellfish (and packing media) and which poses a threat to human health (such as solvents, fuel oil, etc.).

- b) Foreign Material

A unit will be considered defective when the following condition is found:

the presence of any material which has not been derived from shellfish (and packing media) but does not pose a threat to human health (such as insect pieces, sand, etc.).

- c) Other Defects

A unit will be considered defective when any of the following conditions are found:

- 1) **Struvite Crystals** (magnesium ammonium phosphate crystals)
Any struvite crystal greater than 5 mm in length.
- 2) **Sulphide Blackening** (smut)
Staining of the meat in excess of 5% of the drained contents.

7. EXAMINATION METHODS

- 7.1 Complete external can examination. Open can and perform net and/or drained weight determination, according to defined policies and

procedures for these examinations.

- 7.2 Carefully remove product from can to examination tray. Examine can interior for presence of foreign material, smut, struvite, and corrosion or other can interior defects.
- 7.3 Inspect liquid and shellfish for presence of foreign material, smut, or struvite.
- 7.4 Observe colour of flesh and presence of discolouration in shellfish.
- 7.5 Assess odour. Assess flavour and texture as required.
- 7.6 Record any defect for that unit on the appropriate worksheet.

8. CLASSIFICATION OF "DEFECTIVES"

A sample unit which contains defects as described in section 6 is classified as a "defective".

9. LOT ACCEPTANCE

A lot will be considered unacceptable when:

- a) any single instance of critical foreign material occurs; or
- b) the total number of sample units found defective for taint, decomposition or unwholesomeness, individually or in combination, exceeds the acceptance number for the sample size designated in the sampling plans; or
- c) the total number of sample units found defective for decomposition exceeds the acceptance number shown in parentheses for the sample size designated in the sampling plans.