



ICS 67.160.20

DRAFT EAST AFRICAN STANDARD

Canned finfish — Specification

EAST AFRICAN COMMUNITY

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Oraft for Comments
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Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the procedures of the Community.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

Canned finfish — Specification

1 Scope

This Draft Standard specifies requirements, sampling and test methods for canned finfish packed in brine, oil and/or tomato sauce or other suitable packing media intended for human consumption.

It does not apply to speciality products where the canned finfish constitutes less than 50 % m/m, of the net contents of the can.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

AOAC 952.13, Arsenic in food — Silver diethyldibocarbamate method

AOAC 972.23, Lead in fish — Atomic absorption spectrophotometric method

AOAC 973.34, Cadmium in food — Atomic absorption spectrophotometric method

AOAC 983.20, Mercury (methyl) in fish and shellfish — Gas chromatographic method

CXG 21, Principles and guidelines for establishment and application of microbiological criteria related to foods

CXG 31, Guidelines for the sensory evaluation of fish and shellfish in laboratories

CXC 1, General principles of food hygiene

CXC 23, Code of hygienic practice for low-acid and acidified low-acid canned foods

EAS 39, Code of practice for hygiene in the food and drink manufacturing industry

CXG 50, General guidelines on sampling

CXC 52, Code of practice for fish and fishery products EAS 12, Potable water — Specification

EAS 38, Labelling of pre-packaged foods — General requirements

EAS 803, Nutrition labelling — Requirements

EAS 804, Claims on food — Requirements

EAS 805, Use of nutrition and health claims — Requirements

45, General standard for food additives

ISO 15089, Water quality — Guidelines for selective immunoassays for the determination of plant treatment and pesticide agents

ISO 16050, Foodstuffs — Determination of aflatoxin B1, and the total content of aflatoxins B1, B2, G1 and G2 in cereals, nuts and derived products — High performance liquid chromatographic method

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at http://www.iso.org/obp

3.1

finfish

freshwater and marine vertebrate fish, whole or in portion

3.2

canned finfish

finfish packed in media, in hermetically sealed containers and has received a processing treatment sufficient to ensure commercial sterility

3.3

packing media

medium in which the food is packed for preservation and handling to provide a controlled environment for the food

3.4

hermetically sealed containers

containers which are sealed to protect the contents against the entry of microorganisms during and after heat processing

3.5

commercial sterility

condition achieved by application of heat, sufficient, alone or in combination with other appropriate treatments, to render the food free from microorganisms capable of growing in the food at normal non-refrigerated conditions, at which the food is likely to be held during distribution and storage

3.6

food grade container

packaging made of material which are safe and suitable for their intended use and which will not impart any toxic substance or undesirable odour, colour or flavour to the product

3.7

sound

free from physiological deterioration or adulteration/contamination, that appreciably affects appearance, edibility and the keeping quality of the canned finfish fish

3.8

foreign matter

any material which is not of fish origin such as sand, stones, metallic chips and plant parts

4 Requirements

4.1 General requirements

4.1.1 Raw material

- **4.1.1.1** The product shall be prepared from sound finfish comply with applicable East African standards.
- **4.1.1.2** Water used for processing canned finfish shall comply with EAS 12.

4.1.2 Other ingredients

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

4.2 Finished product

Canned finfish shall be safe and suitable for human consumption and shall:

- i. have taste and odour typical of the product;
- ii. have colour characteristic of the species;
- iii. be free from any indication of spoilage such as mouldiness and colour change;
- iv. be free from foreign matter;
- v. contain only one fish species; and
- vi. be presented in a manner that meets requirements of this standard and adequately described on the label to avoid confusing or misleading the consumer.

4.3 Specific requirements

4.3.1 Canned finfish shall conform to specific requirements given in Table 1 when tested in accordance with the methods prescribed therein.

Table 1 — Specific requirements for canned finfish

S/N	Parameter	Limit	Test method
i	Vacuum, mm Hg, max.	150	Annex A
ii	Drained weight, %, m/m, max.	70	Annex B

4.3.2 When tested in accordance with AOAC 977.13, the level of histamine in fish such as scromboids species shall not exceed 200 mg/kg.

5 Food additives

Food additives when used in the preparation and processing of canned finfish shall comply with CXS 192.

6 Hygiene

6.1 Canned finfish shall be produced and handled in a hygienic manner in accordance with EAS 39 and CXC 52.

- 6.2 The product shall pass the commercial sterility test which is evidenced by bulging or swelling of the can at 37 °C for seven days.
- 6.3 When tested in accordance with ISO 17919, Clostridium botulinum shall be absent in canned sardines"

7 Contaminants

7.1 Heavy metals

Canned finfish shall comply with the heavy metal limits given in Table 1 when tested in accordance with the test methods specified therein.

S/N **Heavy metal Maximum limit** Test method mg/kg i. Lead 0.3 AOAC 972.23 0.5 AOAC 2015.01 ii. Mercury 250 iii. Tin ISO 17240

Table 1 — Heavy metal limits for canned finfish

7.2 Pesticide residues

Canned finfish shall comply with those maximum pesticides residue limits for pesticides established by Codex Alimentarius Commission".

8 Packaging

Canned finfish shall be shall be packaged in food grade containers.

9 Labelling

9.1 General

In addition to the requirements given in EAS 38, the following specific labelling requirements shall apply and shall be legibly and indelibly marked:

- a) name of the product as "canned finfish" species name and common name;
- b) form of presentation;
- c) packing medium used;
- d) net weight/drained weight;
- e) name and physical address of the manufacturer
- f) production date
- g) batch or lot number;
- h) list of ingredients in descending order of proportion;
- i) instruction for use;

- j) expiry date;
- k) country of origin;
- the words "Human food";
- m) storage instructions; and
- n) instructions on disposal of used package.

9.2 Nutritional labelling, nutrition and health claims

Nutritional labelling, nutrition and health claims shall be made in accordance with EAS 803, EAS 804 and EAS 805.

10 Sampling

Sampling for canned finfish shall be done in accordance with CXG 50.

Annex A

(normative)

Determination of vacuum in canned finfish

A.1 Apparatus

Vacuum gauge.

A.2 Procedure

- A.2.1 Place the pointed end of the vacuum gauge in the middle of the top plate of the can and press firmly to pierce the can.
- A.2.2 Note down the vacuum in millimetres of mercury.

Annex B

(normative)

Determination of drained weight

B.1 Apparatus

Test sieve 200 (Aperture 2.00 mm) — BS Sieve 8 or Tyler Sieve 9 or ASA Sieve 10 (same as ASTM Test Sieve), may also be used.

B.2 Procedure

- B.2.1 Carefully weigh the clean and dry sieve and transfer the contents of the can to the sieve. Allow to drain for five minutes and weigh the sieve with the contents. The difference between the two weights gives the drained weight. Calculate the drained weight as percentage of the water capacity of the can. Retain the residue on the sieve as well as the drained liquid.
- B.2.2 Determine the water capacity of the can by the procedure given in B.2.2.1 to B.2.2.4.
- B.2.2.1 Cut out the lid without removing or altering the height of the double seam.
- B.2.2.2 Wash, dry and weigh the empty can.
- B.2.2.3 Fill the container with distilled water at 20 °C to 4 mm vertical distance below the top level of the container and weigh.

B.2.2.4 Subtract the weight in B.2.2.2 from the weight in B.2.2.3. The difference shall be considered to be the weight of water required to fill the container.

Bibliography



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