



DEAS 831: 2021

ICS 67.120.30

DRAFT EAST AFRICAN STANDARD

Frozen fish fillets — Specification

EAST AFRICAN COMMUNITY

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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.

FDEAS 831 was prepared by the Technical Committee EASC/TC 003, *Fish and Fishery Products*.

Frozen fish fillets — Specification

1 Scope

This Draft East African Standard specifies requirements and methods of sampling and test for frozen fish fillets intended for human consumption.

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 977.13, *Histamine in sea food – Fluorometric method*

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

AOAC 2015.01, *Heavy metals in food*

CAC/GL 50-2004, *General guideline on sampling*

CAC/RCP 52-2003, *Code of practice for fish and fishery products*

EAS 12, *Drinking (potable water) — Specification*

EAS 38, *Labelling of pre-packaged foods — Requirements*

CODEX STAN 192-1995, *General standard for food additives*

EAS 827:2015, *Fresh and frozen whole fin fish — Specification*

ISO 4833-1, *Microbiology of the food and chain — Horizontal method for the enumeration of microorganisms — Colony-count at 30 degrees C by the pour plate technique*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.*

ISO 6888 (all parts), *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species)*

ISO 7251, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique*

ISO 7937, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of Clostridium perfringens — Colony-count technique*

ISO 11290 (all parts), *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of Listeria monocytogenes*

ISO/TS 21872 (all parts), *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of potentially enteropathogenic Vibrio spp.*

3 Terms and definitions

For the purpose of this standard the following terms and definitions shall apply.

3.1

fillet

slice of fish flesh of irregular size and shape removed from the fish by cuts made parallel to the backbone

3.2

frozen fillet

fillet that has undergone the freezing process (see 3.3)

3.3

freezing

process of heat removal from fish rapidly such that the temperature falls to -18 °C or below

3.4

food grade material

packaging material, made of substances 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

4 Requirements

4.1 General requirements

4.1.1 Raw material

4.1.1.1 Frozen fish fillets shall be prepared from whole fin fish that conforms to FDEAS 827.

4.1.1.2 Water used during fish processing shall be potable complying with EAS 12.

4.2 Finished products

4.2.1 Frozen fish fillets shall be;

- i. free from foreign matter,
- ii. free from discolouration,
- iii. intact, and
- iv. free from off odour.

4.2.2 Frozen fish fillets shall be maintained at a temperature of -18 °C or lower. Fillets may be presented as boneless, boneless with the pin bone in, skin-on, skinless, glazed, provided that deboning has been completed including the removal of pin-bones.

4.3 Specific requirements

When tested in accordance with AOAC 977.13, the level of histamine in fish such as scromboids species shall not exceed 10 ppm.

5 Food additives

Food additives may be used in the preparation and processing of frozen fish fillets in accordance with CODEX STAN 192.

6 Hygiene

The product shall be prepared and handled in a hygienic manner in accordance with EAS 39 and CAC/RCP 52 and shall comply with the microbiological limits given in Table 1.

Table 1 — Microbiological limits for frozen fish fillets

S/No	Micro-organisms	Maximum limits	Methods of test
i	<i>Salmonella</i> spp, per 25 g	Absent	ISO 6579
ii	<i>Escherichia coli</i> , MPN/g	10	ISO 7251
iii	<i>Listeria monocytogenes</i> , per 25 g	Absent	ISO 11290-1
iv	<i>Staphylococcus aureus</i> , CFU/g	10 ³	ISO 6888-1
v	<i>Vibrio Spp</i> Per 25 g	Absent	ISO 21872-1
vi	Total viable count, CFU/g	10 ⁵	ISO 4833-1

7 Contaminants

7.1 Heavy metal

Frozen fish fillets shall comply with the heavy metal limits given in Table 2.

Table 2 — Heavy metal limits for frozen fish fillets

S/No	Heavy metal	Maximum limit, mg/kg	Test method
i	Lead	0.3	AOAC 972.23
ii	Cadmium	0.3	AOAC 973.34
iii	Mercury	0.5	AOAC 2015.01

7.2 Veterinary drug residues

Frozen fish fillets shall comply with those maximum veterinary drug residue limits established by the Codex Alimentarius Commission.

7.3 Pesticide residues

Frozen fish fillets shall comply with those maximum pesticides residue limits established by the Codex Alimentarius Commission.

9 Packaging

Frozen fish fillets shall be packaged in food grade containers which will safeguard the hygienic, nutritional, and organoleptic qualities of the product.

10 Labelling

10.1 General

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

- a) name of the product as "Frozen fish fillets";
- b) common name /species name or family of the fish used;
- c) mode of presentation, example skin on or skinless;
- d) storage and transportation conditions declaring the temperature to be -18 °C or lower;
- e) name and physical address of processor;
- f) net weight in grams or kilograms;
- g) date of production;
- h) batch number;
- i) expiry date;
- j) instruction for use; and
- k) country of origin.

10.2 Labelling of non-retail containers

10.2.1 Information on the above provisions shall be given either on the container or in accompanying documents, except that the name of the product, lot identification, and the name and address of the processor or packer as well as storage instructions, shall appear on the container.

10.2.2 However, lot identification, and the name and address of the processor or packer may be replaced by an identification mark provided that such a mark is clearly identifiable with the accompanying documents.

11 Sampling

Sampling shall be done in accordance with CAC/GL 50-2004.

