

DRAFT ZANZIBAR NATIONAL STANDARD

Frozen fish fillets — Specification

ZANZIBAR BUREAU OF STANDARDS

National foreword

Zanzibar Bureau of Standards (ZBS) is in the process of adopting the East African standard, EAS 831:2022, under the Fish, Fisheries and Aquaculture Standards Technical Committee. In accordance with ZBS general procedures, this draft standard is presented to the public in order to receive any technical comment concerns.

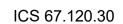
Technical Committee Representatives

This Draft Zanzibar National Standard was prepared by Fish, Fisheries and Aquaculture Standards Technical Committee which consists of representatives from the following organizations:

Chief Government Chemist Laboratory Agency (CGCLA)
Deep Sea Fishing Authority (DSFA)
Institute of Marines Sciences (IMS)
Ministry of Blue economy and Fisheries (MoBF)
Pemba Sea Food Association
Sea power
Zanzibar Fisheries and Marine Resources Research Institute (ZAFIRI)
Zanzibar Fisheries Company (ZAFICO)
Zanzibar Food and Drug Agency (ZFDA)
Zanzibar Bureau of Standards (ZBS) - Secretariat

PO Box 1136 Zanzibar

Tel: +255 24 2232225 Fax: +255 24 2232225 E-mail: <u>info@zbs.go.tz</u> Web: <u>www.zbs.go.tz</u>





EAST AFRICAN STANDARD

Frozen fish fillets — Specification

EAST AFRICAN COMMUNITY

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2

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.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. 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 Principles and procedures for development of East African Standards.

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.

The committee responsible for this document is Technical Committee EASC/TC 003, Fish and fishery products.

This second edition cancels and replaces the first edition (EAS 831:2016), which has been technically revised.

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

Frozen fish fillets — Specification

1 Scope

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

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 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

CAC/GL 50, General guidelines on sampling

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

CODEX STAN 192, General standard for food additives

EAS 12, Drinking (potable water) — Specification

EAS 38, Labelling of pre-packaged foods — Requirements

EAS 39, Hygiene in the food and drink manufacturing industry — Code of practice

EAS 827, 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 11290-1, Microbiology of the food chain — Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. — Part 1: Detection method

ISO 21872-1, Microbiology of the food chain — Horizontal method for the determination of Vibrio spp. — Part 1: Detection of potentially enteropathogenic Vibrio parahaemolyticus, Vibrio cholerae and Vibrio vulnificus

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

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

material, made of substances which are safe and suitable for its 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 EAS 827.
- **4.1.1.2** Water used during fish processing shall be potable complying with EAS 12.

4.1.2 Finished products

- **4.1.2.1** Frozen fish fillets shall be:
 - a) free from foreign matter;
 - b) free from discolouration;
 - c) intact; and
 - d) free from off odour.
- **4.1.2.2** 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.

4.2 Specific requirements

When tested in accordance with AOAC 977.13, the level of histamine in fish such as scromboids species shall not exceed $100 \mu g/kg$.

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 when tested in accordance with the test methods specified therein.

Table 1 — Microbiological limits for frozen fish fillets

S/N	Micro-organism	Maximum limit	Test method
i	Salmonella spp., /25 g	Absent	ISO 6579
ii	Escherichia coli, MPN/g	10	ISO 7251

iii	Listeria monocytogenes, /25 g	Absent	ISO 11290-1
iv	Staphylococcus aureus, CFU/g	10 ³	ISO 6888
٧	Vibrio spp., /25 g	Absent	ISO 21872-1
vi	Total viable count, CFU/g	10 ⁵	ISO 4833-1

7 Contaminants

7.1 Heavy metals

Frozen fish fillets shall comply with the heavy metal limits given in Table 2 when tested in accordance with the test methods specified therein.

Table 2 — Heavy metal limits for frozen fish fillets

S/N	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 983.20

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.

8 Packaging

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

9 Labelling

9.1 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 and species name or family name;
- c) mode of presentation;
- 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;
- i) instructions for use; and

k) country of origin.

9.2 Labelling of non-retail containers

- **9.2.1** 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.
- **9.2.2** 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.

10 Sampling

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

