

DRAFT TANZANIA STANDARD

Frozen cuttlefish and squid — Specification

TANZANIA BUREAU OF STANDARDS

0 Foreword

Cuttlefish and squid are marine molluscs of the class Cephalopoda with eight arms and two tentacles.

This Tanzania Standard was prepared in order to ensure safety and quality of frozen cuttlefish and squid produced and/ or traded in Tanzania.

In the preparation of this Tanzania Standard, considerable assistance was derived from IS 8076 - Frozen cuttle fish and squid - Specification and stakeholders producing the product.

In reporting the results of a test or analysis made in accordance with this Tanzania Standard, if the final value, observed or calculated is to be rounded off, it shall be done in accordance with TZS 4.

1 Scope

This Tanzania Standard specifies requirements, methods of sampling and test for frozen cuttlefish and squid.

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.

TZS 4, Rounding off numerical values

TZS 109, Code of hygiene for food processing units – General

CODEX STAN 193:2008 · General Standard for contaminants & toxins in food.

TZS 118/ISO 4833-1, Microbiology of food chain — Horizontal method for the enumeration of microorganisms — Part 1: Colony-count at 30 degrees C by the pour plate technique

TZS 122/ISO 6579, Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp.

TZS 125/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)

TZS 127-1/ ISO 21872: 2017- 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

TZS 536 Quick frozen prawns or shrimps – Sampling and test methods

TZS 538 - Packaging and labeling in food

TZS 731/ISO 7251, Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of presumptive Escherichia coli — Most probable number technique

TZS 852-1/ ISO 11290-1: 2017- Microbiology of the food chain - Horizontal method for the detection and enumeration of Listeria monocytogenes and of Listeria spp. - Part 1: Detection method.

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply:-

3.1

cuttlefish

cephalopods having eight circumoral arms and two slender tentacles with large carcarius internal shell called cuttlebone

3.2

squid

cephalopods having eight circumoral arms, and two slender tentacles with flexible feather-shaped structure inside the body structure called pen

3.3

tenderized cuttlefish/squid

cuttlefish/squid that has undergone tumbling process

3.4

non-tenderized cuttlefish/squid

cuttlefish/squid that has not undergone tumbling process

3.5

tumbling process

rolling cuttlefish/squid in an appropriate circular container at a controlled temperature of about 0-4°C to become firm for the purpose of individual quick freezing

3.6

food grade container

container which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the products

4 Requirements

4.1 General requirements

4.1.1 Raw materials

- 4.1.1.1 Cuttlefish/squid shall be wholesome, clean and fresh,
- 4.1.1.2 Cuttlefish/squid shall not show any signs of spoilage such as pink colour or any breaking or abrasions of the skin.

Ice

4.1.2 Finished product

The frozen cuttlefish/squid shall be:

- clean and have its own characteristic colour and odour on thawing;
- ii. be in a sound and intact condition;
- iii. free from dehydration oxidative rancidity and off odour;
- iv. free from any signs of spoilage and defects;
- v. quick frozen to attain core temperature of -18 °C or lower for not more than 8hrs;
- vi. stored and transported at a temperature of -18 °C or lower, and
- vii. presented as whole flowered or any other form.

4.2 Specific requirement

Frozen cuttlefish/squid gut, ink gland, shell, eyes, beak and mucous like substance shall be removed.

5 Hygiene

Frozen cuttlefish/squid shall be produced and handled in a hygienic manner in accordance with TZS 109 and CAC/RCP 52 and shall comply with the microbiological limits given in Table 1.

S/No.	Type of microorganism	Maximum limit	Test method
i)	Salmonella in 25 g	Absent	TZS 122
ii)	Escherichia coli, MPN/g	Absent	TZS 731
iii)	Staphylococcus aureus, CFU/g	2 × 10 ³	TZS 125
iv)	Total viable count, CFU/g	10 ⁵	TZS 118
v)	Vibrio spp. in 25g	Absent	TZS 127
vi)	Listeria mono	Absent	TZS 852-1

Table 1— Microbiological limits for frozen cuttlefish/squid

6 Contaminants

6.1 Heavy metals

Frozen cuttlefish/squid shall comply with those maximum limits for heavy metals and other contaminants specified in Codex Stan 193.

6.2 Pesticide and veterinary drugs residues

Frozen cuttlefish/squid shall comply with those maximum pesticide and veterinary drug residue limits established by the Codex Alimentarius Commission for similar commodity.

7. Sampling and Tests

7.1 Sampling

Sampling shall be done in accordance with TZS 536.

7.2 Testing

Tests shall be done in accordance with methods prescribed in Table 1.

8. Packing, marking and labelling

8.1 Packing

Frozen cuttlefish/squid shall be well packaged in a food grade materials.

8.2 Marking or labelling

8.2.1 In addition to the requirements of TZS 538 the following specific labelling requirements shall apply and shall be legibly and indelibly marked.

- a) name of the product shall be "frozen cuttlefish/squid";
- b) name and physical address of processor;
- c) net weight;
- d) production date;
- e) batch number;
- f) expiry date;
- g) storage conditions;
- h) instruction for use; and
- i) country of origin.

8.2.2 Certification mark

Each container may also be marked with TBS certification mark.

NOTE: The use of TBS certification mark is governed by provisions of the standards Act 2009. Details of the conditions under which a license for the use of TBS certification mark may be granted to manufacturers or producers, may be obtained from TBS.