

DRAFT TANZANIA STANDARD

Flavoured beer — Specification

TANZANIA BUREAU OF STANDARDS

Flavoured beer Specification

0. FOREWORD

Flavoured beer is an alcoholic beverage made from alcoholic fermentation of sugars derived mainly from malted and/or unmalted cereal grains and/or permitted adjuncts with additional of flavourings, essences and/or plant extracts. It is common alcoholic beverage in the country. The beer industry is expanding very fast to cater for the increasing demand of the commodity.

This Tanzania standard was prepared to ensure the safety and quality of flavoured beer produced and/or traded in and outside the country.

In the preparation of this Tanzania Standard, assistance was drawn from TZS 56 Beer Specification published by Tanzania Bureau of Standards and flavoured beer manufacturers.

In reporting the result 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 (see clause 2).

1. Scope

This Tanzania standard prescribes the requirements, methods of sampling and testing for flavoured beer 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.

TZS 4, Rounding off numerical values
TZS 109, Food processing units – Code of hygiene
TZS 119, Microbiology of food and animal feeding stuffs – Horizontal method for detection and enumeration of coliforms – Most probable number technique
TZS 471, Methods of sampling and test for alcoholic beverages
TZS 538, Packaging and labeling of foods
TZS 574, Packaged/ bottled drinking water – Specification
TZS 1491, Fruits and Vegetables – Determination of pH
TZS 799/ 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
Codex Stan 192, *Food additives — Schedule*

Codex Stan 193, General Standard for Contaminants and Toxins in Food and feed
TZS 118/ISO 4833-2, *Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony-count technique at 30°C*

3. Terms and definitions

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

3.1 alcohol

as ethyl alcohol (C₂H₅OH)

3.2 beer

beverage, containing ethyl alcohol prepared by alcoholic fermentation of sugars derived mainly from malted and/or unmalted cereal grains and/or permitted adjuncts.

3.3 flavoured beer

product obtained by blending beer (2.2) with unfermented fruit juice or permitted flavourings, essences and/or plant extracts.

3.4 malt

cereal grain (often barley), which has been steeped, allowed to germinate and then dried or kilned to halt further germination.

3.5 unmalted cereal grains

cereal grains that have not undergone the processes in 2.4

3.6 brewing

process of converting malt and/or unmalted cereal grains and adjuncts into beer.

3.7 adjuncts

any other source of fermentable sugar of agricultural origin other than malted barley

4. Requirements

4.1 General requirements

Flavoured beer shall be free from

a) any substances injurious to health;

- b) any extraneous matter;
- c) artificial sweetening agents;
- d) any artificial colorants except for those colouring agents prepared from sugar, barley, malt or any cereal grains; and
- e) any added alcohol.

4.2 Beer Ingredients

The following material shall be used for the production of flavoured beer;

4.2.1 Essential ingredients;

- malted and/ or unmalted grains;
- a) hops and/or products derived from hops; and
- b) potable water complying with TZS 574 (part one).
- c) Brewing yeast
- d) Flavouring agents

4.2.2 Optional ingredients

such as, adjuncts, sugar, carbon dioxide and nitrogen (e.g in milk stout) may be added.

Note 1: The carbon dioxide and nitrogen shall be pure and fit for human consumption

Note 2: sugar may be added as sweetener and not for fermentation purpose

4.2.3 Fruit juice/flavours.

The juice of designated fruit shall be unfermented, conforming to requirement of respective Tanzania Standard or any of the permitted flavourings.

4.2.4 Taste and Aroma

The product shall have the taste and flavour characteristic of the fruit or flavours for which it is claimed. Foreign flavours and odours shall not be present.

4.2.5 Colour

The product shall have the characteristic colour of its type.

4.3 Processing aids

Only food grade processing aids generally recognized as safe for human consumption shall be used during the manufacture of flavoured beer.

4.4 Specific requirements

Flavored beer shall comply with the specific requirements specified in Table 1 when tested in accordance with the test methods prescribed therein.

Table 1: Requirements for flavoured beer

S/N	Characteristic	Description	Requirements	Method of Test
1	Ethyl alcohol, % , v/v	Non-alcoholic beer	Less than 0.5	TZS 471
		Low alcohol/light beer	0.5 – 2.4	
		Mild beer	2.5 – 4.0	
		Medium beer	4.1 – 5.5	
		Strong beer	More than 5.5	
2	Ph		2.5 - 4.75	TZS 1491
3	Carbon dioxide, %, v/v	Bottled/ canned beer	2.4 – 7.0	TZS 471
		Kegged beer	1.0 – 2.5	

5. Food additives

Food additives may be used in the production of flavoured beer in accordance with Codex Stan 192 subject to provision of 4.1c.

6. Hygiene

6.1 Flavoured beer shall be produced and handled under hygienic conditions in accordance with TZS 109.

6.2 Flavoured beer shall comply with the microbiological limits specified in Table 2 when tested in accordance with the test methods specified therein

Table 2 — Microbiological limits for flavoured beer

S/N	Microorganism	Limit	Test method
1	Coliforms	Absent	TZS 119
2	Total plate count, cfu/ml, max.	10 ²	TZS 118

7. Contaminants

7.1 Pesticide residues

All the raw materials used in the production of flavoured beer shall comply with the latest maximum pesticide residue limits as established by the Codex Alimentarius Commission.

7.2 Heavy metal

Flavoured beer shall comply with the maximum heavy metal limits set by Codex Alimentarius Commission.

7.3 Aflatoxin limits

Total aflatoxin shall not exceed 10 µg/L and aflatoxin B1 shall not exceed 5 µg/L in flavoured beer when tested in accordance with TZS 799/ ISO 16050.

8. Sampling and test methods

8.1 Sampling

For the purpose of this Tanzania Standard sampling of flavoured beer shall be done in accordance with TZS 471 (see clause 2).

8.2 Test

Flavoured beer shall be tested for ascertaining conformity of the product to the requirements in this Tanzania Standard by the methods given in the respective Tables of this Tanzania

9. Packing, marking and labelling

9.1 Packing

Flavoured beer shall be packed in food grade material that ensures the integrity and safety of the product.

9.2 Marking and labelling

9.2.1 In addition to the requirements of TZS 538/EAS 38, the following specific labeling requirements shall apply and shall be legibly and indelibly marked on the container:

- a) Name of the product “flavoured beer”; and the type of flavour used shall be indicated e.g “lemon flavour”
- b) Brand name, if any.
- c) name, physical location and address of manufacturer or importer;
- d) ethyl alcohol content, % by volume;
- e) list of ingredients in descending order of proportion by mass;
- f) net content in millilitres or litres;
- g) a declaration by common name of any additives used;
- h) date of manufacture, batch identification number/code;
- i) best before;
- j) country of origin; and
- k) Statutory warnings.

9.2.2 Containers may also be marked with TBS Certification Mark of Quality.

NOTE — The TBS Standards Mark of Quality may be used by manufacturers only under license from TBS. Particulars of conditions under which the license is granted can be obtained from TBS.