



DRAFT TANZANIA STANDARD

Concentrated flavoured drinks -Specification

TANZANIA BUREAU OF STANDARDS

**AFDC 12 (1033) DTZS****Concentrated flavoured drinks -Specification****0. Foreword**

Concentrated flavoured drinks are popular beverages used as refreshment and are presented in different brands/types in the market.

This Tanzania Standard was prepared in order to ensure that the Concentrated flavoured drinks prepared, produced and imported in the country are safe and of good quality.

In the preparation of this Tanzania Standard considerable assistance was drawn from concentrated flavoured drinks manufacturers and from KS 1485:2018, *Water based flavoured drinks* published by the Kenya Bureau of Standards

In reporting the results of 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 specifies the requirements, methods of sampling and test for concentrated flavoured drinks.

2. Normative Reference

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

Codex Stan 192, *Permitted food additives*

TZS 4, *Rounding off numerical values*

TZS 109, *General code of hygiene for food processing units*

TZS 114, *Soft drink manufacturing units – Code of hygiene*



TZS 118/ ISO 4833, Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of microorganisms – Colony-count technique at 30° C

TZS 119/ISO 4831, *Microbiology of food and animal feeding stuffs – Horizontal method for detection and enumeration of coliforms – Most probable number technique*

TZS 125(Part 1)/ ISO 6888-1, *Microbiology of food and animal feeding stuffs – Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species) – Part 1: Technique using*

TZS 127/ 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*

TZS 131, *Microbiology General guidance for enumeration of yeast and moulds – Colony Count technique at 25°c*

TZS 163, *Processed fruits and vegetable products – Method of sampling*

TZS 268, General atomic absorption spectrophotometric method for determination of lead in food stuffs

TZS 538, *General standard on packaging, marking and labeling*

TZS 789, *Drinking (potable) water – Specification*

TZS 1491, / ISO 1842 *Fruits and Vegetables – Determination of pH*

TZS 1502, *Fruits and Vegetables – Determination of Arsenic content*

TZS 1581-1, *Determination of cadmium content – Method graphite furnace atomic absorption spectrometry*

TZS 101

TZS 1496/ISO 2173 *Fruits, vegetables and derived products – Sampling and methods of test – Part 10: Determination of soluble solids.*

TZS 963-3, *Starch and derived products – Heavy metals content – Part 3 – Determination of lead content by atomic absorption spectrometry with electro-thermal atomization*



3. Terms and definitions

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

3.1 concentrated flavoured drinks

the concentrated drink prepared from water, sugar, natural or artificial fruit flavourings, permitted colourings and other optional permitted ingredients

3.2 potable water

water conforming to the requirements of TZS 789 (see clause 2)

4. Requirements

4.1. General Requirements

4.1.1 Concentrated flavoured drinks shall be prepared from portable water complying with TZS 789, refined white sugar complying with TZS 101, permitted colourings, permitted flavourings and other optional permitted ingredients as per Codex Stan 192.

4.1.2 The product shall;

- i) Have a uniform colour;
- ii) Possess a good body;
- lii) Be free from foreign matters not contain any substances harmful or injurious to health.
- lv) Possess normal characteristic taste and flavour.

4.2. Specific requirements

4.2.1 Degrees brix

Concentrated flavoured drinks shall have a minimum reading of 30° Brix when measured at 20°C in accordance with the test methods stipulated in the TZS 1496. Sucrose, glucose (dextrose anhydrous) or fructose, natural sweeteners and any other



permitted nutritive sweeteners can be used. The use of non-nutritive sweeteners is not allowed.

4.2.2 pH

The pH of concentrated flavoured drinks shall be in a range of 2.5 to 4.5 and shall be verified as per TZS 1491.

5. Food Additives

Use of food additives shall be in accordance with Codex Stan 192 and as per clause 4.2.1

6. Hygiene

6.1 The product shall be prepared under hygienic conditions according to TZS 114.

6.2 Microbiological limit – The product on testing shall not contain microbiological count more than the levels given in Table 1.

Table 1 – Microbiological limits

S/N	Microorganism	Limit	Method of Test (see clause 2)
1	Total plate count, cfu/g, max.	1×10^3	TZS 118
2	Coliforms, cfu/g	Absent	TZS 119
3	Yeast and moulds, cfu/g, max.	10	TZS131
4	<i>Vibrio cholera</i> , per 25g	Absent	TZS 127
5	<i>Staphylococcus aureas</i> , per 25g	Absent	TZS 125

7. Contaminants

The product on testing shall not contain metal contaminants exceeding levels given in Table 2:

**Table 2 – Limits for metal contaminants**

S/No	Contaminant	Maximum Limit, (mg/kg)	Method of Test
1	Lead (Pb)	0.2	TZS 963-3
2	Arsenic (As)	0.2	TZS 1502
3	Cadmium (Cd)	0.05	TZS 1581-1

8. Sampling and test

8.1 Sampling

The product shall be sampled in accordance with TZS 163

8.2 Test

The product shall be tested for compliance with the requirements of this standard as described in this standard.

9. Packing, marking and labelling

9.1 Packing

9.1.1 The product shall be packed in suitable food-grade packaging material which is inert, water proof and hermetically sealed.

9.1.2 The containers shall be filled under hygienic conditions

9.2 Marking and labeling

In addition to the provisions covered under TZS 538 (see clause 2) concentrated flavoured drinks shall be legibly and indelibly marked on the label with the following information.

- (a) The “common name” of the product and its flavor e.g Concentrated tamarind flavoured drink
- (b) Name, postal and physical address of the manufacturer and /or packer
- (c) List of ingredients in descending order, including specific names of additives
- (d) Net content
- (e) Batch identification number in code or in clear



- (f) Date of manufacture and expiry or best before date
- (g) Country of origin
- (h) Storage condition
- (i) Trade or brand name
- (j) Instructions for use stating the recommended amount of the product that should be applied in a stated volume of potable water;

9.3 The language on the label shall be in “Kiswahili” or Kiswahili and English. A second language may be used depending on the designated market.

9.4 The use of pictorials or any other misrepresentation of the product on the label is prohibited.

9.5 Each container may also be marked with the TBS standards mark of quality.

NOTE – The use of the TBS certification mark is governed by the provision of the Standards Act, 2009. Details of conditions under which a license for the use of TBS certification mark may be granted to the manufacturer may be obtained from TBS.