



## DRAFT TANZANIA STANDARD

---

### Blackcurrant juice – Specification

Draft for stakeholders comments only

## **TANZANIA BUREAU OF STANDARDS**

---

Draft for stakeholders comments only

## **0 FOREWORD**

Blackcurrant (*Ribes nigrum* L.) is the woody shrub with small dark berries fruits, of the family *Grossulariaceae*. The fruits are used in different forms such as juices, jams, jellies and marmalades. Blackcurrant are rich in phytonutrients, antioxidants, vitamins, essential fatty acids, and minerals. In particular, blackcurrants are renowned for their high content in vitamin C.

This Tanzania Standard was prepared in order to ensure that the blackcurrant juices prepared and traded in the country are safe and of good quality.

In the preparation of this Tanzania Standard assistance was derived from:

Codex Standard 247: 2005, *Codex general standard for fruit juices and nectars* prepared by the Codex Alimentarius Commission.

In reporting the results of test or analyses 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).

## **1.0 SCOPE**

This Tanzania Standard prescribes the requirements and methods of sampling and test for blackcurrant juice intended for direct human consumption.

## **2.0 REFERENCES**

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;

TZS 4, *Rounding off numerical values*

TZS 1487, *Fruits and Vegetables – Sampling*

TZS 1499, *Fruits and Vegetables – Determination of volatile acidity*

TZS 1504, *Fruits and Vegetables – Determination of ethanol content*

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

*TZS 113, Canned, Bottled Fruits and Vegetables – Code of hygiene*

*TZS 131, Microbiology – General guidance for enumeration of yeast and mould-Colony count technique at 25 °C*

*TZS 118, Foodstuffs – General Guidance for the Enumeration of microorganisms – Colony Count Technique at 30 °C*

*TZS 122, Microbiology of food and feeding stuffs – Horizontal method for detection of Salmonella spp*

*TZS 538, Packaging and Labeling of Foods*

*TZS 731, Microbiology of food and feeding stuffs – Horizontal method for detection and enumeration of presumptive Escherichia coli*  
Codex Stan 192- General standard for food additives

*Codex Stan 192, General Standard for food additives*  
*Codex Stan 193, General Standard for contaminants in food*  
*Codex online database for pesticide residues in food*

### **3 TERMS AND DEFINITIONS**

For the purpose of this Tanzania Standard, the following terms and definitions shall apply:-

#### **3.1 blackcurrant juice**

unfermented but fermentable juice, intended for direct consumption, obtained by a mechanical process from sound, ripe blackcurrant fruits.

#### **3.2 defects**

Presence of particles of membrane, core, skin, seed or any other foreign material in juice.

### **4.0 REQUIREMENTS**

#### **4.1 General requirements**

4.1.1 Blackcurrant juice shall be unfermented obtained by a mechanical process of sound, ripe blackcurrant fruits preserved exclusively by physical means

4.1.2 Blackcurrant juice shall have characteristics colour, taste and flavor of the variety used.

4.1.3 The juice shall not show any signs of fermentation.

4.1.4 The juice, when packed, shall be free from burned or objectionable taints and flavours and shall have a good consistency.

4.1.5 Fruit skin, stem residue, objectionable fibre, larva, insect fragments or any other foreign matter shall not be present in the juice.

4.1.6 The juice shall possess good body, uniform colour, characteristic taste and flavor, and it shall be free from defects.

4.1.7 Juice content for blackcurrant juice shall be 100% for unsweetened and 85% for sweetened when produced under Good Manufacturing practices

## 4.2 Specific requirements

The blackcurrant juice shall conform to the requirements given in Table 1.

**Table 1 – Requirements for blackcurrant juice**

Characteristic	Required levels	Method of test (See clause 2)
Volatile acidity calculated as acetic acid. %, m/m, max.	0.003	TZS 1499
Soluble solids (brix) at 20 °C %, m/m, min.	11	TZS 1496
Ethanol % m/m, max.	0.3	TZS 1504

## 4.3 Additives

4.3.1 Use of non-nutritive sweeteners is not allowed in blackcurrant juice.

4.3.2 With respect to clause 4.3.1, use of food additives in blackcurrant juice shall be in accordance with Codex Stan 192

## 5. CONTAMINANTS

### 5.1 Heavy metals

Blackcurrant juice shall not contain any metallic contaminants in excess of the levels specified in Codex Stan 193 and in particular shall not contain Lead in excess of 0.05 mg/Kg when tested in accordance with TZS 268.

## 5.2 Pesticide residues

The Maximum Residue Limits (MRL) for pesticide in blackcurrant juice shall not exceed levels established in the *Codex online database* for pesticide residues in food for this product.

## 6.0 HYGIENE

6.1 Blackcurrant juice shall be prepared under hygienic conditions in accordance with TZS 109 and TZS 113 (see clause 2).

### 6.2 Microbiological limits

Blackcurrant juice shall be free from pathogenic organisms and shall comply with the microbiological limits provided in Table 2, when determined by the methods shown alongside the table.

**Table 2 — Microbiological limits for Blackcurrant juice**

S/N	Type of micro-organism	Limits (number of count)	Method of test
1	Total viable counts, cfu/ml, max	10	TZS 118
2	Yeasts and moulds, cfu/ml	absent	TZS131
3	<i>Escherichia coli</i> , MPN/ml	absent	TZS 731
4	<i>Salmonella</i> per 25 ml	absent	TZS122

## 7.0 SAMPLING AND TEST

### 7.1 Sampling

The method of drawing representative samples shall be as prescribed in TZS 163 (see clause 2).

### 7.2 Tests

The samples of blackcurrant juice shall be tested for ascertaining conformity of the product to the requirements of each specification by the methods described in this standard.

## 8 PACKAGING, MARKING AND LABELING

### 8.1 Packaging

**8.1.1** In addition to the packaging and labeling requirements prescribed in TZS 538 (see clause 2) blackcurrant juice shall also be packed in open hermetically sealed lacquered cans and glass bottles or other suitable containers that have no effect to the product and would not render the product be adulterated

**8.1.2** The package shall have headspace of not more than 10 % of the fill.

## **8.2 Marking and labelling**

**8.2.1** Each container shall be legibly and indelibly labeled with the following particulars:

- a) Name of product shall be "blackcurrant juice" with the statement to indicate whether the juice is sweetened or unsweetened in proximity to the name of the product in clear visible character not less than half of the height of the letters in the name of the product.
- b) Name, physical and postal address of manufacturer
- c) Country of origin
- d) Date of manufacture
- e) Expiry date
- f) List of ingredients,
- g) Net content
- h) Storage condition
- i) Batch/Lot number in code or in clear.
- j) Trade mark ,if any

**8.2.2** The language on the label shall be "Kiswahili" or "Kiswahili and English". Any other language may be used depending on the designated market.

**8.2.3** The containers may also be marked with the TBS certification mark of quality.

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