

**AFRICAN  
STANDARD**

**CD-ARS  
1071**

First Edition 2024

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**Flavoured Black Tea — Specification**

*Draft African Standard for comments only — Not to be cited as African Standard*



Reference No. CD-ARS 1071:2024(E)  
ICS XXXXXX

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## Foreword

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This African Standard was prepared by ARSO TC 06 Cocoa, Coffee, Tea, and related products.

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**Introduction**

This African standard has been developed by Technical Committee TC 06 Cocoa, Coffee, Tea, and related products".

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## Flavoured Black Tea — Specification —

### 1.0 Scope

This draft African Standard specifies requirements, sampling and test methods for flavoured black tea intended for human consumption.

### 2.0 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.

ARS 56, *Labelling of pre-packaged foods — General requirements*

CXC 1, General principles of food hygiene

CAC/GL 66, Guidelines for the Use of Flavourings

AOAC, Official Methods of Analysis

ISO 3720, *Black tea — Definition and basic requirements*

ISO 1573, *Tea — Determination of loss in mass at 103 °C*

ISO 1575, *Tea — Determination of total ash*

ISO 1576, *Tea — Determination of water soluble ash and water insoluble ash*

ISO 1577, *Tea — Determination of acid insoluble ash*

ISO 1578, *Tea — Determination of alkalinity of water-soluble ash*

ISO 1839, *Tea — Sampling*

ISO 6078, *Black tea — Vocabulary*

ISO 6579-1, *Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp.*

ISO 9768, *Tea — Determination of water extract*

ISO 14502-1, *Determination of substances characteristic of green and black tea — Part 1: Content of total polyphenols in tea — Colorimetric method using Folin-Ciocalteu reagent*

ISO 15598, *Tea — Determination of crude fibre content*

ISO 16649-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of glucuronidase-positive Escherichia coli — Part 2: Colony-count technique at 44 °C using 5-bromo-4-chloro-3-indolyl beta-D-glucuronide*

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ISO 21527-2, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds — Part 2: Colony count technique in products with water activity less than or equal to 0,95*

### 3.0 Terms and definitions

For the purpose of this standard the terms and definitions in ISO 6078 and the following shall apply.

#### 3.1

##### **adulterant**

any material intentionally added that changes the original composition and compromises the quality and safety of flavoured black tea

#### 3.2

##### **black tea**

tea derived solely and exclusively, and produced by acceptable processes, notably withering, leaf maceration, aeration and drying from leaves, buds and/or tender stems of varieties of the species *Camellia sinensis* (Linnaeus) O. Kuntze, known to be suitable for making tea for consumption as a beverage

#### 3.3

##### **flavoured black tea**

black tea to which flavourings and/or food ingredients with flavouring properties are added in order to lend a specific flavour

#### 3.4

##### **foreign matter**

organic or inorganic material other than tea leaf or flavouring agent

### 4.0 Requirements

#### 4.1 Ingredients

Flavoured black tea shall:

- a) have black tea complying with ISO 3720 as the basic ingredient; and
- b) contain flavouring agents conforming to relevant standards and should be used in accordance with CAC/GL 66.

#### 4.2 General requirements

4.2.1 Flavoured black tea shall be:

- a) of characteristic flavour of flavouring agent used;
- b) free from foreign matter;
- c) free from insects and moulds;
- d) free from adulterants; and
- e) free from added colouring matter other than that of flavouring agent.

4.2.2 Flavouring agents shall not be used for the purpose of imitating or intensifying the fragrance and/or taste of black tea.

**4.3 Specific requirements**

Flavoured black tea shall conform to the specific requirements given in Table 1 when tested in accordance with the test methods specified therein.

**Table 1 — Specific requirement for flavoured black tea**

	Characteristic	Requirement	Test method
i	Moisture content, %, (m/m), max.	8	ISO 1573
ii	Water extract, %, (m/m), min.	32	ISO 9768
lii	Total ash, %, (m/m)	4 – 8	ISO 1575
iv	Water soluble ash, as percentage of total ash, min.	45	ISO 1576
v	Alkalinity of water-soluble ash (as KOH), %, (m/m)	1.0 – 3.0 <sup>a</sup>	ISO 1578
vi	Acid-insoluble ash, %, (m/m), max.	1.0	ISO 1577
vii	Crude fibre, %, (m/m), max.	16.5	ISO 15598
viii	Total polyphenols, (m/m), min.	9.0	ISO 14502-1

<sup>a</sup>When the alkalinity of water-soluble ash is expressed in terms of millimoles of KOH per 100 g of ground sample, the limits shall be 17.8 - 53.6

**4.4 Iron filings**

When tested in accordance with Annex A, the amount of iron filings in flavoured black tea shall not exceed 150 mg/kg.

**5.0 Hygiene**

**5.1** Flavoured black tea shall be processed and handled in a hygienic manner in accordance with CXC 1 General Principles Of Food Hygiene .

**5.2** Flavoured black tea shall conform to the microbiological requirements given in Table 2 when tested in accordance with the test methods specified therein.

**Table 2 — Microbiological limits for flavoured black tea**

	Microorganism	Maximum limit	Test method
	<b>Total Viable Count (cfu/g)</b>	<b>10<sup>4</sup></b>	
i	Yeasts and moulds, cfu/g	10 <sup>4</sup>	ISO 21527-2
ii	Escherichia coli, cfu/ g	Absent	ISO 16649-2
lii	Salmonella spp per 25 g	Absent	ISO 6579-1

**5.3 Perchlorate**

Limit of perchlorate in flavoured black tea should not exceed 0.75 mg/kg

**6.0 Contaminants**

**6.1 Heavy metals**

The products covered by this standard shall conform to the maximum levels of heavy metal contaminants in Table 3.

**Table 3: Heavy Metal Contaminants**

S/N	Heavy metals	Maximum Limit	Method
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1	Arsenic (mg/kg) max	0.15	AOAC 999.10
2	Lead (mg/kg) max	0.5	AOAC 999.10
3	Cadmium (mg/kg) max	0.1	AOAC 942.17
4	Mercury (mg/kg) max	0.05	AOAC 999.10

### 6.2 Pesticide residues

Flavoured black tea shall conform to the updated maximum pesticide residue limits established by the Codex Alimentarius Commission for black tea and flavouring agents.

### 7.0 Sampling

Sampling for flavoured black tea shall be done in accordance with ISO 1839.

### 8.0 Packaging

Flavoured black tea shall be packaged in closed, clean and dry materials which do not compromise the quality and safety of the product.

### 9.0 Labelling

In addition to the requirements specified in ARS 56, each package of the flavoured black tea shall be legibly and indelibly labelled with the following:

- a) name of the product as "Flavoured black tea"; with the flavouring agent(s) used;
- b) name and physical address of the manufacturer/packer/importer/exporter;
- c) list of ingredients in descending order
- d) date of manufacture;
- e) best before;
- f) batch number;
- g) net weight in grams or kilograms;
- h) country of origin; and
- i) instructions for use and storage.

**Annex A**  
(normative)

**Determination of iron filings**

**A.1 Apparatus**

A.1.1 Magnet (at least 4 000 gauss)

A.1.2 Polythene sheet

A.1.3 Petri dish

**A.2 Procedure**

A.2.1 A known amount of (25 g) tea is spread evenly on petri dish

A.2.2 A powerful magnet wrapped in polythene sheet is run over the sample repeatedly till no more iron filings cling to the magnet

A.2.3 Collect the iron filings in a clean, dry, and previously weighed petri dish

A.2.4 Note down and express the mass of iron filings as mg/kg

**A.3 Calculation**

$$\text{Iron filings} = \frac{M_1 \times 1000}{M_2}$$

where;

*M*1 Mass, in grams, of iron filings, and

*M*2 Mass, in grams, of sample taken for the test.