DEAS 922: 2018

ICS 67.160.10

DRAFT EAST AFRICAN STANDARD

Flavoured black tea — Specification

EAST AFRICAN COMMUNITY

First Edition 2018

Copyright notice

Foreword

Development of the East African Standards has been necessitated by the need for harmonizing requirements governing quality of products and services in the East African Community. It is envisaged that through harmonized standardization, trade barriers that are encountered when goods and services are exchanged within the Community will be removed.

The Community has established an East African Standards Committee (EASC) mandated to develop and issue East African Standards (EAS). The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the public and private sector organizations in the community.

East African Standards are developed through Technical Committees that are representative of key stakeholders including government, academia, consumer groups, private sector and other interested parties. Draft East African Standards are circulated to stakeholders through the National Standards Bodies in the Partner States. The comments received are discussed and incorporated before finalization of standards, in accordance with the Principles and procedures for development of East African Standards.

East African Standards are subject to review, to keep pace with technological advances. Users of the East African Standards are therefore expected to ensure that they always have the latest versions of the standards they are implementing.

The committee responsible for this document is Technical Committee 002, *Coffee, Tea, Cocoa and Related products.*

Attention is drawn to the possibility that some of the elements of this document may be subject of patent rights. EAC shall not be held responsible for identifying any or all such patent rights.

Flavoured black tea — Specification

1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for flavoured black tea.

2 Normative references

EAS 28, *Black tea — Specification*

EAS 38, *Labelling of pre-packaged foods — General requirements*

EAS 39, *Hygiene in the food and drink industry — Code of practice*

ISO 1572, *Tea — Preparation of ground sample of known dry matter content*

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 3103, *Tea — Preparation of liquor for use in sensory tests*

ISO 5498, *Agricultural food products — Determination of crude fibre content — General method*

ISO 6078, *Black tea — Vocabulary*

ISO 6579, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Salmonella spp*

ISO 6888-1, *Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coagulase-positive staphylococci (Staphylococcus aureus and other species)*

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

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 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*

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-D-glucuronide*

3 Terms and definitions

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

3.1
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* (L) O. Kuntze, known to be suitable for making tea for consumption as a beverage

3.2
flavoured black tea
black tea to which flavouring agent has been added

3.3
foreign matter
any material which is not of tea origin e.g. sand, stones, metallic chips and any organic matter

3.4
extraneous matter
any material which is not tea leaf/flavouring agent, but of tea/flavouring origin

3.5
adulterant
any material intentionally added that changes the original composition and compromises the quality and safety of black tea

3.6
filth
any material of animal origin such as, but not limited to dead insects, rodents and their derivatives.

4 Requirements

4.1 Ingredients

The ingredients shall be:

a) black tea complying with EAS 28; and

b) flavouring agent complying with their specific standards and shall be used in accordance with CAC/GL 66.

4.2 General requirements

Flavoured black tea shall:

a) be of uniform colour;

b) be of flavour characteristic of flavouring agent used;

c) be free from living insects, moulds, filth and adulterants;

d) be free from added colour other than that of flavouring agent;

e) be free from foreign and extraneous matter; and

f) have black tea as the basic ingredient

4.3 Specific requirements

The flavoured black tea shall comply with the specific requirements specified in Table 1 when tested in accordance with test methods specified therein.

Table 1 — Specific requirement for flavoured black tea

S/N	Characteristic	Requirement	Test method
i.	Moisture content, %, (m/m), max.	8	ISO 1573
ii.	Water extract, %, (m/m), min.	32	ISO 9768
iii.	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[a] - 3.0[a]	ISO 1578
vi.	Acid-insoluble ash, %, (m/m), max.	1.0	ISO 1577
vii.	Crude fibre, %, (m/m), max.	16.5	ISO 5498 or ISO 15598[b]
viii.	Total polyphenols, (m/m), min.	9.0	ISO 14502-1
Apart from moisture content, other parameters are calculated on dry basis			

[a] 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

[b] The specific method for the determination of crude fibre in tea is specified in ISO 15598, however for the purpose of routine estimation, the general method specified in ISO 5498 is adequate. In cases of dispute, the method of determination should always be that specified in ISO 15598. The requirement of 16.5 % mass fraction remains unchanged regardless of the method used.

5 Hygiene

5.1 Flavoured black tea shall be processed and handled in a hygienic manner in accordance with EAS 39.

5.2 Flavoured black tea shall comply with microbiological requirements specified in Table 2 when tested in accordance with test method stated therein.

Table 2 — Microbiological limits for black tea

S/N	micro-organism	Maximum limits	Test method
i.	Yeasts and Moulds CFU/g	10^4	ISO 21527-2
ii.	*E. Coli*, CFU/g	Absent	ISO16649-2

6 Contaminants

6.1 Iron fillings

When tested in accordance with Annex A, the amount of iron filings in black tea shall not exceed 50 mg/kg.

6.2 Heavy metals

Heavy metals in flavoured black tea shall comply with those maximum limits established by Codex Alimentarius Commission for this commodity.

7 Pesticide residues

Flavoured black tea shall comply with the maximum residue limits established by the Codex Alimentarius Commission.

8 Sampling

Sampling shall be done in accordance with ISO 1839.

Liquor for the sensory assessment shall be prepared in accordance with ISO 3103.

9 Packaging

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

11 Labelling

In addition to the requirements specified in EAS 38, each package of the black tea shall be legibly and indelibly marked with the following:

a) name of the product as “Flavoured black tea’’; with the main flavouring agent used;

b) name and physical address of the manufacturer/packer/ importer/exporter;

c) list of ingredients;

d) date of manufacture;

e) best before;

f) identification number;

g) net weight in g or kg;

h) country of origin; and

i) instruction for use and storage.

Annex A
(normative)

Determination of iron fillings

A.1 Apparatus

A.1.1 Magnet (at least 4 000 gauss)

A.1.2 Polythene sheet

A.1.3 Petridish

A.2 Procedure

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

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 petridish

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

A.3 Calculation

$$Iron\ fillings = \frac{M_1 \times 1000}{M_2}$$

Where;

M_1=Mass, in g, of iron filings, and

M_2=mass, in g, of sample taken for the test.