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ICS 67.140.20

EAST AFRICAN STANDARD

Instant coffee — Specification

Fourth Edition 2025

EAST AFRICAN COMMUNITY

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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 EASC/TC 002, *Coffee, 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.

This fourth edition cancels and replaces the third edition (EAS 975:2020), which has been technically revised.

Instant coffee — Specification

1 Scope

This Final Draft East African Standard specifies requirements, sampling and test methods for instant coffee.

This standard also applies to decaffeinated instant coffee.

2 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.

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

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

FDEAS 105, *Roasted coffee beans and roasted ground coffee — Specification*

ISO 3509*, Coffee and coffee products — Vocabulary*

ISO 3726, *Instant coffee — Determination of loss in mass at 70 degrees C under reduced pressure*

ISO 6670, *Instant coffee — Sampling method for bulk units with liners*

ISO 4832*, Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of coliforms — Colony-count technique*

ISO 20481, *Coffee and coffee products — Determination of the caffeine content using HPLC — Reference method*

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 24114*, Instant coffee — Criteria for authenticity*

ISO 15141, *Cereals and cereal products — Determination of ochratoxin A — High performance liquid chromatographic method with immunoaffinity column clean up and fluorescence detection*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 3509 and the following apply.

3.1

instant coffee

dried, water-soluble product, obtained exclusively from roasted coffee by physical methods using water as the only carrying agent that is not derived from coffee

3.2

decaffeinated coffee

coffee from which caffeine has been removed by extraction

3.3

chicory

plant (Cichorium intybus) whose roots are often roasted, ground, and used as a coffee substitute or additive. It has a slightly bitter, earthy flavour, similar to coffee but without caffeine

4 Requirements

4.1 General requirements

Instant coffee shall:

a) be obtained from coffee complying with EAS 105;

b) be free flowing;

c) have the colour and flavour characteristic of instant coffee;

d) be free from foreign and extraneous matter;

e) not contain chicory or any other added substances; and

f) comply with criteria of authenticity prescribed in ISO 24114.

4.2 Specific requirements

Instant coffee shall comply with the specific requirements given in Table 1 when tested in accordance with test methods specified therein.

Table 1 — Specific requirements for instant coffee

S/N	Characteristic	Requirement	Test method
i.	Moisture, % m/m, max.	4[a]	ISO 3726
ii.	Total ash (on dry basis), % m/m, max.	15.	Annex A
iii.	Caffeine content (on dry basis), % m/m, min.	2.5 [b]	ISO 20481
iv.	Solubility in boiling water	Dissolves readily in 30 seconds with moderate stirring	Annex B
v.	Solubility in cold water at 16 ºC ± 2 ºC, minutes.	Soluble with moderate stirring in 3 minutes	

a For granulated coffee, the maximum moisture content shall be 5 % m/m.

b For decaffeinated instant coffee, the maximum limit shall be 0.3 % m/m.

5 Hygiene

5.1 Instant coffee shall be processed, packaged, stored and distributed under hygienic conditions in accordance with EAS 39.

5.2 Instant coffee shall not exceed the microbiological limits given in Table 2 when tested in accordance with test methods specified therein.

Table 2 — Microbiological limits for instant coffee

S/N	Microorganism	Limit	Test method
i.	Coliforms cfu/g	<10	ISO 4832
ii.	Yeast and moulds cfu/g, max	10^2	ISO 21527-2

6 Packaging

Instant coffee shall be packaged in food grade packaging material which will safeguard the hygienic, nutritional, technological and organoleptic qualities of the products.

7 Labelling

In addition to the labelling requirements given in EAS 38, the package shall be legibly and indelibly marked with the following information:

a) name of the product as “Instant coffee” or “Decaffeinated instant coffee”;

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

c) net content;

d) date of manufacture;

e) best before;

f) storage instructions;

g) instructions for use;

h) batch/lot number; and

i) country of origin.

8 Sampling

Except where sampling methods have been specified in specific test methods, sampling of instant coffee shall be done in accordance with ISO 6670 for bulk units with liners. CAC/GL 50-2004, shall be used for sampling retail packages.

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Annex A
(normative)

Determination of total ash

A.1 Procedure

Weigh accurately 5 g of the material in dry tarred porcelain dish. Heat slowly over a flame until swelling ceases. Ignite in a muffle furnace at 550 ºC ± 10 ºC till grey ash results. Cool the dish in a desiccator and weigh. Repeat this process of heating for 30 min cooling and weighing till the difference in weight between two successive weighings is less than one milligram. Note the lowest weight.

A.2 Calculation

The total ash (on dry basis), expressed as percent by mass, shall be calculated as follows:

$$\frac{10\ 000\ (W_2 - W)}{(W_1 - W)\,(100 - \mathrm{M})}$$

where

W is the mass, in grams, of the empty dish,

W_1 is the mass, in grams, of the dish with the material taken for the test,

M is the percentage moisture as determined in accordance with ISO 3726, and

W_2 is the mass, in grams, of the dish with the ash.

Annex B
(normative)

Determination of solubility in water

B.1 Procedure

B.1.1 Solubility in hot water

Add 150 mL of freshly boiling water to 2.5 g of sample placed in a 500-mL beaker. The coffee powder shall be readily soluble with moderate stirring within 30 seconds, leaving no appreciable sediment.

B.1.2 Solubility in cold water

Place 2.5 g of the sample in a beaker and add 50 mL of water at 16 ºC ± 2 ºC. The powder shall be soluble with moderate stirring in 3 minutes, leaving no appreciable sediment.