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DRAFT EAST AFRICAN STANDARD

**Coriander (*Coriandrum sativum* L.) whole or ground (powdered) —
Specification**

EAST AFRICAN COMMUNITY

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Foreword

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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 006, *Spices, condiments and culinary herbs*.

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Coriander (*Coriandrum sativum* L.) whole or ground (powdered) — Specification

1 Scope

This draft East African Standard specifies requirements, sampling and test methods for coriander seed (*Coriandrum sativum* L.), in the whole and ground (powdered) forms intended for human consumption

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.

Codex online guideline for pesticide residues in food

CODEX STAN 193, *Codex general standard for contaminants and toxins in food and feed*

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

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

EAS 803, *Nutrition labelling — Requirements*

EAS 804, *Claims — General requirements*

ISO 4833-1, *Microbiology of the food chain — Horizontal method for the enumeration of microorganisms — Part 1: Colony count at 30 °C by the pour plate technique*

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

ISO 6571, *Spices, condiments and herbs — Determination of volatile oil content (hydrodistillation method)*

ISO 6579 (all parts), *Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of salmonella*

ISO 16050, *Food stuffs — Determination of aflatoxin B₁, and the total content of aflatoxin B₁, B₂, G₁ and G₂ in cereals, nuts and derived products — High-performance liquid chromatographic method*

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

ISO 927, *Spices and condiments — Determination of extraneous matter content*

ISO 928, *Spices and condiments — Determination of total ash*

ISO 930, *Spices and condiments — Determination of acid-insoluble ash*

ISO 939, *Spices and condiments — Determination of moisture content — Entrainment method*

ISO 948, *Spices and condiments — Sampling*

ISO 1208, *Spices and condiments — Determination of filth*

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— ISO Online browsing platform: available at <http://www.iso.org/obp>

3.1

coriander

is the dried mature fruit of *Coriandrum sativum* L. The colour of the fruit is yellowish brown to light brown and the shape is generally spherical to elliptical, measuring about 2 mm to 6 mm in diameter.

3.2

split fruits

fruits that have been split longitudinally into two parts.

3.3

damaged, discoloured, immature, shrivelled and weevil led fruits.

includes whole or split fruits that are damaged, discoloured or shrivelled and also includes those showing signs of partial or whole bores as a result of their having been eaten by weevils or other insects

4 Requirements

4.1 General requirements

Coriander shall

- a. have a typical aroma and flavour characteristic of the spice.
- b. It shall be free from musty odour.
- c. be classified in two groups, A and B, according to the volatile oil content.
- d. be free from living insects, and shall be practically free from moulds, dead insects, insect fragments and rodent contamination visible to the naked eye

4.3 Specific requirements

4.3.1 Coriander, whole and ground (powdered), shall comply with the requirements specified in Table 1 and 2, when tested in accordance with the specified methods.

Table 1 — Grading requirements for coriander

| Characteristic | Requirements | | | | Test method |
|--|--------------|---------|---------|--------|-------------|
| | Whole | | | Ground | |
| | Grade 1 | Grade 2 | Grade 3 | | |
| Extraneous matter, % (m/m), max. | 1.5 | 2 | 4 | - | ISO 927 |
| Split fruits, % (m/m), max. | 5 | 10 | 10 | - | |
| Damaged, discoloured fruits, etc., % (m/m), max. | 2 | 3 | 7 | - | |

Table 2: Specific requirements for coriander

| Characteristic | Requirements | Test method |
|---|--------------|-------------|
| Volatile oils, % (ml/100 g), on dry basis | | ISO 6571 |
| Group A, more than | 0.5 | |
| Group B, min. | 0.1 | |
| Group B, max. | 0.5 | |
| Moisture content, % (m/m), max. | 9 | ISO 939 |
| Total ash, % (mm), on dry basis, max | 7 | ISO 928 |
| Acid-insoluble ash, % (m/m), on dry basis, max. | 1.5 | ISO 930 |

4.3.2 Fineness of ground coriander

Ground (powdered) coriander shall pass completely through a sieve of nominal aperture size 500 μ m.

5 Contaminants

5.1 Pesticide residues

Pesticide residues in coriander shall not exceed maximum residue limits as established in the Codex online guideline for pesticide residues in food.

5.2 Heavy metals

Heavy metals in coriander shall not exceed maximum heavy metal limits as stipulated in CODEX STAN 193.

5.3 Aflatoxin limits

Total aflatoxin shall not exceed 10 µg/kg and aflatoxin B1 shall not exceed 5 µg/kg when tested with ISO 16050.

6 Hygiene

Coriander shall be manufactured and handled in a hygienic manner in accordance with EAS 39 and shall comply with the microbiological limits stipulated in Table 2 when tested in accordance with the methods specified therein.

Table 2 — Microbiological requirements for coriander

| S/No | Characteristic | Requirement | Test method |
|------|-----------------------------------|-----------------|--------------|
| i. | Total plate count, cfu/g, max. | 10 ⁵ | ISO 4833-1 |
| ii. | <i>Salmonella spp.</i> , per 25 g | Absent | ISO 6579 |
| iii. | <i>E coli</i> , MPN/g, max. | Absent | ISO 16649 -2 |

7. Packaging

Whole or ground (powdered) coriander shall be packaged in food grade packaging material that secures the integrity and the safety of the product.

8. Labelling

In addition to the requirements of EAS 38, EAS 803 and EAS 804, each container shall be legibly and indelibly labelled with the following information:

- a) name of the product as “Coriander”;
- b) trade name or brand name if any;
- c) name, physical and postal address of manufacturer and / or packer;
- d) batch or code number;
- e) net weight;
- f) a complete list of ingredients in descending order of proportions;
- g) storage conditions;
- h) instructions for use;
- i) country of origin;

- j) best before;
- k) year of harvest; and
- l) storage condition

9 Sampling

Sampling shall be carried out as specified in ISO 948.

Annex A
(informative)

Recommendations relating to storage and transport conditions

Packages of coriander shall be stored in covered premises, well protected from the sun, rain and excessive heat.

The storeroom shall be dry, free from unpleasant odours and protected against entry of insects and other vermin. Ventilation shall be adjusted in such a way as to give good ventilation during dry weather and to be fully closed under damp conditions. Suitable provisions shall be made for fumigation of store rooms.

Packages shall be handled and transported in such a way that they are protected from the rain, sun or other sources of excessive heat, unpleasant odours and any other contamination (especially in the holds of ships).

Bibliography

- [1] ISO 2256:1996: *Coriander (Coriandrum sativum L.), whole or ground (powdered) - Specification*

