

ICS 67.200.10

# FINAL DRAFT EAST AFRICAN STANDARD

Chia seeds — Specification

# **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 015, Oil seeds, edible fats and oils.

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.



# Chia seeds — Specification

#### 1 Scope

This Draft East Africa Standard specifies the requirements, methods of sampling and test for chia seed (*Salvia hispanica* L.) intended for human consumption.

This standard does not apply to chia seed as a planting material.

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

EAS 803, Nutrition labelling — Requirements

EAS 804, Claims on food — Requirements

EAS 805, Use of nutrition and health claims — Requirements

ISO 605, Pulses — Determination of impurities, size, foreign odour, insects, and species and variety — Test methods

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

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

ISO 24333, Cereals, and cereal products — Sampling

ISO 24557, Pulses — Determination of moisture content — Air-oven method

ISO 12193, Animal and vegetable fats and oils — Determination of lead by direct graphite furnace atomic absorption spectrometry

#### 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:

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ISO Online browsing platform: available at <a href="http://www.iso.org/obp">http://www.iso.org/obp</a>

#### 3.1

#### chia seed

small oval seeds of the species Salvia hispanica.L.

#### 3.3

#### foreign matter

organic and inorganic materials other than chia seed3.5

#### noxious seeds

seeds other than chia seeds which, if present in quantities above a certain limit, can have a damaging or dangerous effect on health, sensory properties or technological performance

#### 4 Requirements

#### 4.1 General requirements

Chia seed shall:

- a) be practically free from filth in amounts that may represent a hazard to human health;
- b) be free of off flavours and odours;
- c) be practically free from any organic and inorganic matter
- d) have a colour characteristic of the variety; and
- e) be free from toxic or noxious seeds that are commonly recognized as harmful to health
- f) have characteristic colour of the variety

#### 4.2 Specific requirements

Chia seed shall comply with the specific requirements given in Table 1 when tested in accordance with the methods specified therein.

Table 1—Specific requirement for chia seed

Characteristic	Requirement	Test method
Moisture and volatile matter, % m/m, max.	9.0	ISO 24557
Foreign matter, %m/m, max.	0.1	ISO 605
Acid insoluble ash % m/m, max.	0.3	ISO 5985

#### 5 Contaminants

#### 5.1 Pesticide residues

Chia seed shall conform to those maximum residue limits for pesticides established by the Codex Alimentarius Commission for this commodity.

#### 5.2 Heavy metals contaminants

Chia seed shall conform to those maximum levels given in Table 2 when tested in accordance with the methods specified therein.

Table 2 —Maximum levels for heavy metal contaminants in chia seed

S/N	Heavy metal	Limits, max. mg/kg	Test method
i.	Lead	0.1	
ii.	Arsenic	0.1	ISO 6869

#### 5.3 Aflatoxin

Total Aflatoxin shall not exceed 10  $\mu$ g/kg while aflatoxin B1 shall not exceed 5  $\mu$ g/kg when tested in accordance with ISO 16050.

# 6 Hygiene

- **6.1** Chia seed, shalf be produced, prepared, handled and stored in accordance with EAS 39.
- **6.2** Chia seed shall comply with the microbiological limits given in Table 3 when tested in accordance with the method specified therein

Table 3 — Microbiological limits in chia seed

Y	S/No	Type of micro-organism	Limit	Test method
	1	Salmonella per 25 g	Shall be absent	ISO 6579-1
	2	E. coli MPN/g	Shall be absent	ISO 7251

#### 7 Packaging

Chia seed shall be shall be packaged in containers made from food grade packaging material and sealed in a manner that will safeguard the hygienic, nutritional and organoleptic properties of the product

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## 8 Weights and measures

Chia seeds shall be packaged in accordance with the weights and measures regulations of the destination country.

NOTE EAC Partner States are signatory to the International Labour Organizations (ILO) for maximum package weight of 50 kg where human loading and offloading is involved

## 9 Labelling

In addition to the requirements of EAS 38, the name of the product as 'chia seed' shall be legibly and indelibly labelled;

#### 10 Nutrition and health claims

Chia seed may have claims on nutrition and health. Such claims when declared shall comply with EAS 803, EAS 804 and EAS 805.

## 10 Sampling

Sampling shall be carried out in accordance with ISO 24333.

# **Bibliography**

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