



FINAL DRAFT EAST AFRICAN STANDARD

Sesame (simsim)— 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.

Sesame(simsim) — Specification

1 Scope

This Draft East Africa Standard specifies the requirements, sampling and test methods for sesame (*Sesamum indicum*L.) intended for human consumption.

2 Normative references check again please

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, *Code of practice for hygiene in the food and drink manufacturing industry*

Codex Stan 193, *General standard for contaminants and toxins in food and feed*

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

ISO 542, *Oilseeds — Sampling*

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

ISO 659, *Oilseeds — Determination of oil content (Reference method)*

ISO 665, *Oilseeds — Determination of moisture content*

ISO 5985, *Animal feeding stuff — Determination of ash insoluble in hydrochloric acid*

ISO 6579, *Microbiology of food and animal feeding stuff — Horizontal method for the determination 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, *Food stuffs — 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 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 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

sesame

edible seeds obtained from the sesame plant (*Sesamum indicum*, Linnaeus)

3.2

foreign matter

organic and inorganic materials other than sesame

3.3

damaged seed

broken seeds of sesame

3.4

shrivelled/immature

seeds which are underdeveloped, thin and papery in appearance

4 Requirements

4.1 General requirements

Sesame shall:

- a) be free of off flavours and odours;
- b) have a nutty flavour;
- c) be clean;
- d) be wholesome; and
- e) have a colour characteristic of the variety.

4.2 Specific requirements

Sesame seeds shall comply with the specific requirements given in Table 1 when tested in accordance with the methods specified therein;

Table 1 – specific requirements for sesame

S/No	Characteristics	Requirements	Test method
i	Moisture and volatile matter % (m/m), max.	7.0	ISO 665
ii	Free fatty acid, (as oleic acid) %, (m/m), max	3	ISO 729
iii	Acid insoluble ash, % m/m, max.	0.3	ISO 5985
iv	Foreign matter, % m/m, max.	1	ISO 658
v	Damaged seed, % m/m, max	3	
vi	Shrivelled and immature, % m/m, max	6	

5 Grading for oil extraction

Grading of sesame for oil extraction may be done. When done it shall be in accordance with Table 2

Table 2 — Grading of sesame for oil extraction

Characteristic	Grade 1	Grade 2	Grade 3	Test method
Oil content (on moisture free basis), % m/m, min.	52	48	45	ISO 659

6 Contaminants

6.1 Pesticide residues

Sesame shall comply with those maximum residue limits for pesticides established by the Codex Alimentarius Commission for this commodity.

6.2 Aflatoxin

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

6.3 Heavy metals

Sesame shall conform to those maximum residue limits for heavy metals listed in Table 2, when tested in accordance with the methods specified therein.

Table 2 — Heavy metal contaminants in sesame

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

7 Hygiene

7.1 Sesame shall be produced, prepared, handled and stored in accordance with EAS 39.

7.2 Sesame shall comply with the microbiological limits given in Table 3 when tested in accordance with the method specified therein.

Table 3 — Microbiological limits in sesame

S/No	Heavy metal	Limits	Test method
i	Salmonella per 25 g	Shall be absent	ISO 6579-1
ii	E. coli MPN/g	Shall be absent	ISO 7251

8 Weights and measures

Sesame 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 Packaging

Sesame 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

10 Labelling

In addition to the requirements of EAS 38, the following labelling requirements shall apply and shall be legibly and indelibly marked:

- a) name of the product as “sesame” or “simsim”
- b) grades

11 Nutrition and health claims

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

12 Sampling

Sampling shall be carried out in accordance with ISO 542.

Bibliography

- [1] Product fact sheet – Sesame –Europe - *Vegetable oils - oil seeds*, 2013
- [2] IS 4429, *Grading for sesame seeds for oil milling*

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