ICS 67.200.20

DRAFT EAST AFRICAN STANDARD

Raw, roasted and fried groundnuts kernels — 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.

EAS 888 was prepared by Technical Committee EASC/TC/015, Edible Oil Seeds, Fats and Oils.

This Second edition cancels and replaces the First edition, which has been technically revised.

Raw, roasted and fried groundnuts — Specification

1 Scope

This East Africa Standard specifies the requirements, sampling and test methods for raw, roasted and fried groundnuts of the plant *Arachis hypogea* intended for direct human consumption.

The standard does not apply groundnuts for further processing.

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.

ISO 542, Oilseeds — Sampling

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

ISO 665, Oilseeds — Determination of moisture and volatile matter content

ISO 729, Oilseeds — Determination of acidity of oils

ISO 749, Oilseed residues — Determination of total ash

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

CXS 192, Codex General Standard for Food Additives

CXS 193, Codex general standard for contaminants and toxins in foods

EAS 35, Edible salt — Specification

EAS 803, Nutrition labelling - requirements

EAS 804, Claims - General Requirements

EAS 805, Use of nutrition and health claims - Requirements

ISO 6579-1, Microbiology of the food chain — Horizontal method for the detection, enumeration and serotyping of Salmonella — Part 1: Detection of Salmonella spp.

ISO 6888-1, Microbiology of the food chain — Horizontal method for the enumeration of coagulase-positive Staphylococci (Staphylococcus aureus and other species) — Part 1: Method using Baird-Parker agar medium

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 16654, Microbiology of food and animal feeding stuffs — Horizontal method for the detection of Escherichia coli

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply:

3.1

groundnut/peanut

either in the pod or in the form of kernels which are obtained from varieties of the species Arachis hypogaea L.

3.2

shelled groundnut kernels

raw groundnuts with their shells removed and which have not been subjected to roasting and/or any form of treatment

3.3

roasted groundnuts

groundnuts with or without seed coats which have been subjected to dry heat

3.4

fried groundnuts

groundnuts with or without seed coats which have processed in edible fats or oil and to which salt (in form of powder or brine) and/or spices may have been added

3.5

damaged/ defective

kernel which is damaged mechanically, or by mould or weevils, or those showing internal discoloration of kernels materially affecting the quality'

3.6

other defects

groundnut kernel that have skin discolouration, flesh discolouration and/or sprouted kernels

3.7

Whole

groundnut kernel which is not split or broken

3.8

split

separated 'half' of a groundnut kernel

3.9

Broken kernel

more than one fourth of the groundnut kernel is broken off

3.10

foreign matter

organic and inorganic materials other than shelled groundnut kernels

Notes:

- 1. Inorganic includes stones, glass, pieces of soil and other mineral matter
- 2. organic matter is any animal or plant matter (seed coats, straws, weeds) other than shelled groundnut kernel, damaged shelled groundnut kernel, inorganic extraneous matter and harmful/toxic matter

4 Requirements

4.1 General

- Raw groundnuts be shall be whole, mature and uniform in shape, size and colour according to variety and grade;
- b) Roasted/fried groundnuts shall be whole or split;
- c) Roasted/fried whole groundnuts shall not be mixed with splits;
- d) Roasted/fried groundnuts shall peel easily; and
- e) Raw, roasted and fried groundnuts shall free from dead or living insects, insect fragments and mites.

4.2 Specific quality requirements

Raw roasted and fried groundnuts shall comply with requirements given in Table 1.

Table 1 — Specific quality requirements for raw, roasted and fried groundnuts

| S/N | Characteristic | | Requirement | Test method |
|-----|---------------------------|-------------------|-------------|-------------|
| i) | Moisture content, %, m/m, | Raw | 8.0 | |
| | max. | Roasted and fried | 2.0 | ISO 665 |
| ii) | Free fatty acids, max. | %, m/m, | 2 | ISO 729 |

4.3 Grading requirements

Raw groundnuts may be classified as Grade 1, Grade 2 or Grade 3 according to Table 2.

Table 2 — Grading requirements for raw groundnuts

| | Characteristic | Requirement | | | |
|------|---|-------------|---------|---------|----------------|
| S/N | | Grade 1 | Grade 2 | Grade 3 | Test method |
| i) | Damaged kernels, % by mass, max. | 0.5 | 1.5 | < 3 | |
| ii) | Other defects, % by mass, max. | 0.5 | 1.5 | < 3 | |
| iii) | Split and broken kernels, % by mass, max. | 1.0 | 2.0 | 3.0 | ISO 605 |
| iv) | Foreign matter, % by mass, max. | 0.1 | 0.2 | 0.3 | |

NOTE The maximum total tolerance limits for Grade 1 is 2.0 %, 3.0 % for Grade 2 and 4.0 % for Grade 3 by number or weight for groundnuts corresponding to the size immediately above and/or below that indicated on the package.

5 Contaminants

5.1 Aflatoxin

Aflatoxin limits for raw roasted and fried groundnuts shall comply with the limits specified in Table 2.

Table 2 — Aflatoxin limits for raw roasted and fried groundnuts

| S. no | Characteristic | Limit | Method of test |
|-------|------------------------------------|-------|----------------|
| i) | Total aflatoxin content, ppb, max. | 15 | ISO 16050 |
| ii) | Aflatoxin B ₁ , ppb | 5 | |

5.2 Pesticide residues

Raw roasted and fried groundnuts shall conform to those maximum residue limits established by the Codex Alimentarius Commission for this product.

NOTE Where the use of certain pesticides is prohibited by some Partner States, then it should be notified to all Partner States accordingly.

5.3 Other contaminants

Raw roasted and fried groundnuts shall comply with those maximum limits for other contaminants established in CXS 193.

6 Hygiene

- 6.1 Raw roasted and fried groundnuts shall be produced, prepared and handled in accordance with EAS 39.
- **6.2** Raw roasted and fried groundnuts shall be free of pathogenic organisms and shall comply with the microbiological requirements specified in Table 3.

Table 3 — Microbiological limits for raw, roasted and fried groundnuts

| S. No. | Characteristic | Limits | Method of test |
|--------|------------------------------|--------|----------------|
| i | E.coli, MPN/gh | absent | ISO 16654 |
| ii | Salmonella spp per 25 g | absent | ISO 6579-1 |
| iii | Staphylococcus aureus, cfu/g | absent | ISO 6888-1 |

7 Packaging

Raw roasted and fried groundnuts shall be packaged in food grade containers and sealed in manner to ensure the safety and quality requirements specified in this standard are maintained throughout the shelf life of the product

8 Labelling

- 8.1 In addition to the requirements of EAS 38 and EAS 803, the following shall apply:
 - a) Name of the product shall be 'raw groundnuts' or 'roasted groundnuts' or 'fried groundnuts'; and

Note: the term groundnut may be replaced with peanut.

b) where grading is applied, it shall be in accordance to clause 4.3 of this standard.

8.2 Nutrition and health claims

Nutrition and health claims may be used in compliance with EAS 804 and EAS 805

9 Sampling

Sampling shall be done in accordance with ISO 542.

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