FINAL DRAFT EAST AFRICAN STANDARD

Raw cashew kernels—Specification

EAST AFRICAN COMMUNITY
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.


Raw cashew kernels — Specification

1 Scope

This Draft East African Standard specifies requirements and methods of sampling and test for raw cashew kernels derived from raw cashew nut of the cashew tree (*Anacardium occidentale*, Linnaeus) 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 Stan 193, *General standard for contaminants and toxins in food and feed*
- EAS 38, *Labelling of pre-packaged foods — Specification*
- EAS 39, *Hygiene in the food and drink manufacturing industry — Code of practice*
- ISO 542, *Oilseeds — Sampling*
- ISO 665, *Oilseeds — Determination of moisture and volatile matter content*
- 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*

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](http://www.iso.org/obp)

3.1 raw cashew kernels

product obtained by removing the shell and the testa of the cashew nut

3.2 foreign matter

organic and inorganic materials other than raw cashew kernel
3.3 scorched kernels
kernels that are discolored due to overheating during heat processing

3.4 whole kernel
kernel which has the characteristic shape of a cashew kernel and not more than 1/8th of the kernel has been broken off. This grade may also be designated as W

3.5 splits kernel
one half of a cashew kernel that has been split lengthwise, provided not more than 1/8 of this cotyledon has been broken off

4 Requirements

4.1 General requirements
Raw cashew kernels shall be:

a) of a characteristic shape and may be either scorched or unscorched, in the form of wholes or pieces;
b) practically free from rancidity;
c) dry, have colour characteristic to variety, characteristic flavour, uniform appearance practically free from spots (with an exception of dessert grade) and adhering testa; and
d) practically free from living insects, moulds, dead insect, mites, insect fragments, excrement and rodent contamination or any other substance which are injurious to health.

4.2 Specific requirements
Raw cashew kernels shall comply with the specific requirements given in Table 1, when tested in accordance with the methods specified therein.

<table>
<thead>
<tr>
<th>S No</th>
<th>Characteristics</th>
<th>Requirements</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Moisture and volatile matter % (m/m), max.</td>
<td>5.0</td>
<td>ISO 665</td>
</tr>
<tr>
<td></td>
<td>Free fatty acid, (as oleic acid) %, (m/m), max</td>
<td>1</td>
<td>ISO 729</td>
</tr>
</tbody>
</table>

4.3 Grading
Where grading is done, it shall be as given in annex A.

5 Hygiene

5.1 Raw cashew kernels shall be produced, processed, handled and stored in accordance with EAS 39.
5.2 Cashew kernel shall comply with the microbiological limits given in Table 2 when tested in accordance with the method specified therein.

<table>
<thead>
<tr>
<th>S/N</th>
<th>Microorganism</th>
<th>Maximum limit</th>
<th>Test methods</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Salmonella per 25 g</td>
<td>Shall be absent</td>
<td>ISO 6579-1</td>
</tr>
<tr>
<td>2</td>
<td>E. coli MPN/g</td>
<td>Shall be absent</td>
<td>ISO 7251</td>
</tr>
</tbody>
</table>

6 Contaminants

6.1 Pesticide residues

Raw cashew kernels shall comply with those maximum residue limits established by the Codex Alimentarius Commission for this commodity.

6.2 Aflatoxins

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

7 Packaging

Raw cashew kernels 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.

8 Weights and measures

Raw cashew kernels 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 labelling requirements specified in EAS 38, the following information shall be legibly and indelibly labelled:

a) name of the product as “raw cashew kernel”;

b) grade; and

c) declared that it might be allergenic.

10 Nutrition and health claims

Raw cashew kernels 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 done in accordance with ISO 542.
Annex A  
(normative)

Raw cashew kernel grading

Raw cashew kernels are graded based on color, shape and size.

<table>
<thead>
<tr>
<th>Size code/count (WW)</th>
<th>Maximum number of kernels per pound/453.59 grams</th>
<th>Maximum number of kernels per kg</th>
</tr>
</thead>
<tbody>
<tr>
<td>150</td>
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<td>325</td>
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<tr>
<td>180</td>
<td>180</td>
<td>395</td>
</tr>
<tr>
<td>210</td>
<td>210</td>
<td>465</td>
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<tr>
<td>240</td>
<td>240</td>
<td>530</td>
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<tr>
<td>320</td>
<td>320</td>
<td>706</td>
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<tr>
<td>450</td>
<td>450</td>
<td>990</td>
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<tr>
<td>500</td>
<td>500</td>
<td>1100</td>
</tr>
</tbody>
</table>

Note 1: WW = White whole kernel

NOTE 2: Tolerance — Up to 2% by mass of the next lower grade.

<table>
<thead>
<tr>
<th>Size code/count (SW)</th>
<th>Maximum number of kernels per pound/453.59 grams</th>
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<td>1100</td>
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</table>

Note 1: SW = Scorched whole kernel

NOTE 2: Tolerance — Up to 2% by mass of the next lower grade.

Whole kernels: Kernel of the characteristic kidney shape with more than 7/8th of the kernel intact. Kernels with no more than one eighth of the kernel broken off are considered as whole.

Brokens: Kernels where one eighth or more of the original kernel is broken off.

Butts: Kernels of not less than 3/8th of a whole kernel, which have been broken crosswise but the cotyledons are still naturally attached.

Splits: Kernels split lengthwise naturally, provided that no more than one eighth is broken off.

LWP (Large white pieces): Pieces of raw cashew kernels, not passing through a sieve aperture 4.75 mm.
SWP (Small white pieces): Pieces of cashew kernel, passing through a sieve aperture of 4.75 mm but not passing through a sieve of aperture 2.80 mm

Very small pieces: Pieces of raw cashew kernels, not passing through a sieve of aperture 2.36 mm

BB (baby bits or granules): Pieces of raw cashew kernels, not passing through a sieve of aperture 1.70 mm