Butter for cosmetic use – Specification — Part 1: Shea butter
Compliance with this standard does not, of itself confer immunity from legal obligations

A Uganda Standard does not purport to include all necessary provisions of a contract. Users are responsible for its correct application.
National foreword

Uganda National Bureau of Standards (UNBS) is a parastatal under the Ministry of Trade, Industry and Cooperatives established under Cap 327, of the Laws of Uganda, as amended. UNBS is mandated to coordinate the elaboration of standards and is

(a) a member of International Organisation for Standardisation (ISO) and

(b) a contact point for the WHO/FAO Codex Alimentarius Commission on Food Standards, and

(c) the National Enquiry Point on TBT Agreement of the World Trade Organisation (WTO).

The work of preparing Uganda Standards is carried out through Technical Committees. A Technical Committee is established to deliberate on standards in a given field or area and consists of representatives of consumers, traders, academicians, manufacturers, government and other stakeholders.

Draft Uganda Standards adopted by the Technical Committee are widely circulated to stakeholders and the general public for comments. The committee reviews the comments before recommending the draft standards for approval and declaration as Uganda Standards by the National Standards Council.


The committee responsible for this document is Technical Committee UNBS/TC 5, Chemicals and environment, Subcommittee SC 1, Industrial and public health chemicals.

Wherever the words, “East African Standard ” appear, they should be replaced by "Uganda Standard."
DRAFT EAST AFRICAN STANDARD

Butter for cosmetic use – Specification Part 1: Shea butter

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. XXXXX.

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 071, Cosmetics and related products.

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.
Butter for cosmetic use – Specification Part 1: Shea butter

1 Scope

This Draft East African Standard specifies requirements, sampling and test methods for shea butter for cosmetic use derived from the kernels of the sheanuts (*Butyrospermum parkii*). This standard does not cover products for which therapeutic claims are made.

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 15774, *Animal and vegetable fats and oils -- Determination of cadmium content by direct graphite furnace atomic absorption spectrometry*

EAS 346, *Labelling of cosmetics — General requirements*

EAS 846, *Glossary of terms relating to the cosmetic industry*

EAS 847-16, *Cosmetics — Analytical methods — Part 16: Determination of lead, mercury and arsenic content*

ISO 660, *Animal and vegetable fats and oils — Determination of acid value and acidity*

ISO 662, *Animal and vegetable fats and oils — Determination of moisture and volatile matter content*

ISO 663, *Animal and vegetable fats and oils — Determination of insoluble impurities content*

ISO 3596, *Animal and vegetable fats and oils — Determination of unsaponifiable matter — Method using diethyl ether extraction*

ISO 3657, *Animal and vegetable fats and oils — Determination of saponification value*

ISO 3960, *Animal and vegetable fats and oils — Determination of peroxide value — Iodometric (visual) endpoint determination*

ISO 3961, *Animal and vegetable fats and oils — Determination of iodine value*

ISO 4831, *Microbiology of food and animal feeding stuffs — Horizontal method for the detection and enumeration of coliforms — Most probable number technique*

ISO 5555, *Animal and vegetable fats and oils — Sampling*

ISO 6321, *Animal and vegetable fats and oils — Determination of melting point in open capillary tubes (Slip point)*

ISO 8294, *Animal and vegetable fats and oils — Determination of copper, iron and nickel contents — Graphite furnace atomic absorption method*
ISO 18416, Cosmetics — Microbiology — Detection of candida albicans

ISO 21149, Cosmetics -- Microbiology -- Enumeration and detection of aerobic mesophilic bacteria

ISO 21527 (all parts), Microbiology of food and animal feeding stuffs — Horizontal method for the enumeration of yeasts and moulds

ISO 22716, Cosmetics — Good Manufacturing Practices (GMP) — Guidelines on Good Manufacturing Practices

ISO 22717, Cosmetics — Microbiology — Detection of Pseudomonas aeruginosa

ISO 22718, Cosmetics — Microbiology — Detection of Staphylococcus aureus

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 pure (raw or unrefined) shea butter
oleaginous material obtained from the nut kernel of the Butyrospermum parkii, from the Sapotaceae family by manual or mechanical methods. It is obtained through a thermal process or cold pressed, which does not alter the nature of the fat. It can be purified by washing with water, settling, filtering and centrifuging.

3.2 grade A shea kernels
kernel free from moulds, decays, weevils, cracks, discoloration and sprouts. They are not spilt, shrivelled, decayed, damaged, skinned, broken or empty.

3.3 refined shea butter
oleaginous material obtained from the nut kernel of Butyrospermum parkii, from the Sapotaceae family by manual, mechanical or solvent extraction, and has undergone further chemical alteration processes such as bleaching and deodorizing to remove its natural scent and colour. The result of refinement is an odourless, white butter

4 Requirements

4.2 General requirements
Shea butter for cosmetic use shall be:

a) a soft solid of uniform colour with a characteristic odour;

b) free from visible foreign matter; and

c) insoluble in water and soluble in organic solvents.

Shea butter for cosmetic industry shall be produced, prepared and handled in accordance with ISO 22716.
4.3 Specific requirements

Shea butter for cosmetic industry shall comply with the specific requirements given in Table 1 when tested in accordance with the test methods specified therein.

Table 1 — Specific requirements for shea butter for cosmetic industry

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Requirement</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Moisture content, %, m/m, max.</td>
<td>0.2</td>
<td>0.1</td>
</tr>
<tr>
<td>Free fatty acid, % as oleic, max.</td>
<td>1</td>
<td>0.1</td>
</tr>
<tr>
<td>Peroxide value, mEq/kg, max.</td>
<td>6</td>
<td>5</td>
</tr>
<tr>
<td>Insoluble impurities, % m/m</td>
<td>&lt;1</td>
<td>&lt;1</td>
</tr>
<tr>
<td>Unsaponifiable matter, %</td>
<td>&gt;6</td>
<td>4 – 9</td>
</tr>
<tr>
<td>Saponification value, mgKOH/g</td>
<td>170 – 190</td>
<td>178 – 195</td>
</tr>
<tr>
<td>Acid value, max.</td>
<td>6.0</td>
<td>1.5</td>
</tr>
<tr>
<td>Iodine value, Wij’s</td>
<td>50 – 61</td>
<td>50 – 70</td>
</tr>
<tr>
<td>Melting point</td>
<td>28 – 42</td>
<td></td>
</tr>
</tbody>
</table>

4.4 Microbiological requirements

Shea butter for cosmetic industry shall comply with the microbiological limits given in Table 2 when tested in accordance with the test methods specified therein.

Table 2 — Microbiological limits for shea butter for cosmetic industry

<table>
<thead>
<tr>
<th>Characteristic</th>
<th>Limit</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total viable count for aerobic mesophylic micro-organisms per g, max.</td>
<td>1 000</td>
<td>ISO 21149</td>
</tr>
<tr>
<td>Pseudomonas aeruginosa</td>
<td>Not detectable in 0.5 g of cosmetic product</td>
<td>ISO 22717</td>
</tr>
<tr>
<td>Staphylococcus aureus</td>
<td>Not detected</td>
<td>ISO 22718</td>
</tr>
<tr>
<td>Candida albicans</td>
<td></td>
<td>ISO 18416</td>
</tr>
<tr>
<td>Total Coliforms</td>
<td>Not detected</td>
<td>ISO 4831</td>
</tr>
<tr>
<td>Yeast and moulds</td>
<td>Not detected</td>
<td>ISO 21527</td>
</tr>
</tbody>
</table>

4.5 Heavy metals

Shea butter for cosmetic industry shall comply with the limits for heavy metal contaminants given in Table 3 when tested in accordance with the test methods specified therein.
Table 3 — Heavy metal limits for shea butter for cosmetic industry

<table>
<thead>
<tr>
<th>Heavy metal</th>
<th>Maximum limit mg/kg</th>
<th>Test method</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lead</td>
<td>0.1</td>
<td>EAS 847-16</td>
</tr>
<tr>
<td>Arsenic</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Mercury</td>
<td>0.1</td>
<td>ISO 15774</td>
</tr>
<tr>
<td>Iron</td>
<td>5</td>
<td>ISO 8294</td>
</tr>
<tr>
<td>Cadmium</td>
<td>0.1</td>
<td></td>
</tr>
</tbody>
</table>

6 Packaging

Shea butter for cosmetic industry shall be packaged in suitable containers and sealed in manner to ensure the safety and quality throughout the shelf life of the product.

7 Labelling

In addition to the labelling requirements in EAS 346, the package shall be legibly and indelibly marked with the following information:

- a) manufacturer's name and physical address;
- b) product name as “pure shea butter” or “refined shea butter”, “;
- c) batch number;
- d) net content of the material when packed;
- e) country of origin;
- f) month and year of manufacture and expiry;
- g) recommended storage conditions, and
- h) caution statement.

8 Sampling

Sampling shall be carried in accordance with ISO 5555.
Bibliography


[2] Quality characteristics of West African shea butter (Vitellaria Paradoxa) and approaches to extend shelf-life by Hee Seung Nahm, May, 2011


[4] Safety Assessment of Butyrospermum parkii (Shea) -Derived Ingredients as Used in Cosmetics


