DUS 2392

DRAFT UGANDA STANDARD

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Bath oil — Specification

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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

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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 co-ordinate the elaboration of standards and is

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

(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 key stakeholders including government, academia, consumer groups, private sector and other interested parties.

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 310, *Cosmetics and related products*.

Bath oil — Specification

1 Scope

This Draft Uganda Standard specifies the requirements, sampling and test methods for bath oils based on refined vegetable oils or vegetable oils blends, mineral oils or mixture of the vegetable oils and mineral oils meant for application on the skin.

2 Normative references

The following referenced documents are indispensable for the application 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.

US EAS 346, *Labelling of cosmetics —General requirements*

US EAS 377 (all parts), *Cosmetics and cosmetic products*

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

US EAS 847-2, *Cosmetics —Analytical methods —Part 2: Determination of Moisture Content*

US EAS 847-4, *Cosmetics Analytical methods —Part 4: Determination of acid value and free fatty acids*

US EAS 847-13, *Cosmetics —Analytical methods —Part 13: Determination of rancidity*

US EAS 847-16, *Cosmetics —Analytical methods test —Part 16: Determination of heavy metal content*

US EAS 847-17, *Cosmetics —Analytical methods —Part 17: Physio-chemical tests*

US EAS 847-18, *Cosmetics —Analytical methods —Part 18: Determination of thermal stability*

US ISO 18416, *Cosmetics —Microbiology —Detection of candida albicans*

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

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

US ISO 22717, *Cosmetics —Microbiology —Detection of Pseudomonas aeruginosa*

US ISO 22718, *Cosmetics —Microbiology —Detection of Staphylococcus aureus*

US ISO 24153, *Random sampling and randomisation procedures*

3 Terms and definitions

For the purposes of this standard, the following terms and definitions shall apply / the terms and definitions given in US EAS 846 and the following apply.

bath oil
scented oil added to bath water

4 Requirements

4.1 General requirements

4.1.1 All ingredients used in manufacture of bath oils shall conform to US EAS 377(all parts).

4.1.2 Bath oils shall be free from any sediment, suspended matter and separated waters.

4.1.3 Bath oils shall be dermatologically safe and shall not cause irritation or harm to the skin when used as intended by the manufacturer.

4.1.4 Bath oils shall be produced, prepared and handled in accordance with US ISO 22716.

4.2 Specific requirements

Bath oils shall conform to the requirements given in Table 1 when tested in accordance with the test methods specified therein.

Table 1 —Specific requirements for bath oils

S.No.	Characteristic	Requirement	Test method
i)	Moisture content % m/m, max.	0.5	US EAS 847- 2
ii)	Acid value, max.	1.0	US EAS 847- 4
iii)	Peroxide value, mEq O2/kg, max.	10	Annex A

4.3 Heavy metal contaminants

4.3.1 Bath oils shall comply with the heavy metal limits given in Table 2 when tested in accordance with the test methods specified therein.

Table 2 — Heavy metal limits for bath oils

Characteristic	Requirement	Test method
Lead, mg/kg, max.	10	US EAS 847-16
Arsenic, mg/kg, max.	2	
Mercury, mg/kg, max.	2	

4.3.2 The total amount of heavy metals as lead, mercury and arsenic, in combination, in the finished product shall not exceed 10 mg/kg.

4.4 Microbiological requirements

Bath oils shall comply with the microbiological requirements given in Table 3 when tested in accordance with the test methods specified therein.

Table 3 — Microbiological requirements for bath oils

Characteristic	Requirement	Test method
Total viable count for aerobic mesophyllic micro-organisms, CFU/g or CFU/ml, max.	1000	US ISO 21149
Pseudomonas aeruginosa	Not detectable in 1 ml or 1 g of cosmetic product duct	US ISO 22717
Staphylococcus aureus	Not detectable in 1 ml or 1 g of cosmetic product	US ISO 22718
Candida albicans	Not detectable in 1 ml or 1 g of cosmetic product	US ISO 18416

5 Packaging

The product shall be packaged in suitable well-sealed containers that shall protect the contents and shall not cause any contamination or react with the product.

6 Labelling

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

a) product name as “Bath oils”;

b) manufacturer's name and physical address;

c) country of origin;

d) list of ingredients;

e) batch number;

f) net content of the material when packed;

g) date of manufacture

h) date of expiry;

i) instructions for use;

j) storage instructions; and

k) warnings/ precautions

7 Sampling

Sampling shall be done in accordance with US ISO 24153.

Annex A
(normative)

Determination of peroxide value

A.1 Principle

The sample is treated in solution with a mixture of acetic acid and a suitable organic solvent and then with a solution of potassium iodide. The liberated iodine is titrated with a standard solution of sodium thiosulphate.

A.2 Reagents

A.2.1 Glacial acetic acid

A.2.2 Chloroform

A.2.3 Potassium iodide solution, saturated, freshly prepared

A.2.4 Standard sodium thiosulphate solution, 0.01 N standardized

A.2.5 Starch indicator solution. Mix 5 g of starch and 0.01 g mercuric iodide with 30 ml of cold water and slowly pour it while stirring into one litre of boiling water. Boil for three minutes. Allow to cool and decant off the supernatant clear liquid.

A.3 Procedure

A.3.1 Weigh accurately about 5 g of the sample in a 250-ml glass stoppered conical flask and dissolve by shaking in 30 ml of a mixed solvent containing 3 parts by volume of glacial acetic acid and 2 parts by volume of chloroform. Add 0.5 ml of saturated potassium iodide solution, allow the solution to stand for exactly one minute with occasional shaking, then add 30 ml of water and titrate with standard sodium thiosulphate solution.

A.3.2 Add the thiosulphate solution until the colour of the titrated solution becomes light yellow. Then add 1 ml of starch indicator and continue the titration until the disappearance of the blue colour.

A.3.3 Carry out a blank determination without using the sample.

A.4 Calculation

The peroxide value, expressed in milliequivalent of oxygen per kilogram, shall be calculated as follows:

$$\frac{1000(V_1 - V_2)N}{M}$$

Where

V_1 is the volume of standard sodium thiosulphate solution required with the sample;

V_2 is the volume of standard sodium thiosulphate solution required with the blank;

N is the normality of standard sodium thiosulphate solution; and

M is the mass, in grams, of the sample taken for the test.

Bibliography

[1] US EAS 958:2020, Baby oils -Specification

[2] *US EAS 959:2020, Body oils -Specification*

Certification marking

Products that conform to Uganda standards may be marked with Uganda National Bureau of Standards (UNBS) Certification Mark shown in the figure below.

The use of the UNBS Certification Mark is governed by the Standards Act, and the Regulations made thereunder. This mark can be used only by those licensed under the certification mark scheme operated by the Uganda National Bureau of Standards and in conjunction with the relevant Uganda Standard. The presence of this mark on a product or in relation to a product is an assurance that the goods comply with the requirements of that standard under a system of supervision, control and testing in accordance with the certification mark scheme of the Uganda National Bureau of Standards. UNBS marked products are continually checked by UNBS for conformity to that standard.

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