DEAS 842-1: 2025

ICS 71.100.40

DRAFT EAST AFRICAN STANDARD

Hair shampoo — Part 1: Soap based — Specification

EAST AFRICAN COMMUNITY

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Second Edition 2025

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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 074, *Surface active agents*.

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.

This second edition cancels and replaces the first edition (EAS 842-1:2017), which has been technically revised.

EAS 842 consists of the following parts, under the general title *Hair shampoo*:

— *Part 1: Soap based — Specification*

— *Part 2: Synthetic detergent based — Specification*

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Hair shampoo — Part 1: Soap based — Specification

1 Scope

This East African Standard specifies requirements, sampling and test methods for soap-based hair shampoo.

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.

EAS 346, *Labelling of cosmetics — General requirements*

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

EAS 794, *Determination of the microbial inhibition of cosmetic soap bars and liquid hand and body washes — Test method*

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*

EAS 847-17, *Cosmetics — Analytical methods — Part 17: Determination of pH*

EAS 847-27, *Cosmetics — Analytical methods — Part 27: Determination of total fatty substance by gravimetric method*

EAS 847-20, *Cosmetics — Analytical methods —:Part 20: Determination of lather volume (foaming power)*

EAS 847-28, *Cosmetics — Analytical methods —:Part 28:Determination of free caustic alkali*

ISO 673, *Analysis of soap — Determination of ethanol insoluble matter*

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

ISO 18416, *Cosmetics — Microbiology — Detection of Candida albicans*

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

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

ISO 24153, *Random sampling and randomisation procedures*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EAS 846 apply.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

— IEC Electropedia: available at http://www.electropedia.org/

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— ISO Online browsing platform: available at http://www.iso.org/obp

3.10
antibacterial activity
ability of a bathing soap to inhibit the growth or destroy bacteria and other harmful microorganisms (germs). This activity is commonly found in products designed to prevent infections and promote hygiene, including antibacterial agents, antiseptic agents, and anti-germ formulations.

4 Classification

Soap-based shampoo shall be classified into four types:

a) general purpose shampoo — this shall be for "dry", "oily" or "normal" hair, and shall be indicated so;

b) treatment/conditioning shampoo;

c) baby shampoo; and

d) neutralizing shampoo.

5 Requirements

5.1 Ingredients

5.1.1 All ingredients used, including pigments and colours, shall comply with EAS 377.

5.1.2 All essential oils/herbs used shall comply with the relevant standards.

5.1.3 A list of ingredients conventionally used in the formulation of shampoos is given for guidance in Annex A.

5.1.4 The product shall contain acceptable amounts of the ingredients necessary to effect the intended end use performance as stipulated on the label.

5.1.5 All active ingredients including anti-bacterial or anti-dandruff agents, shall be named. Any further information concerning the active ingredients shall be supplied by the manufacturer on request.

5.1.6 For baby shampoos, the active ingredients, perfume and other ingredients shall be of such nature and in such amounts as to leave the final baby product mild in nature. This is due to the sensitive nature of baby skin.

5.2 General requirements

5.2.1 The product shall be in the form of liquid, emulsion, gel or paste.

5.2.2 The product in the form of a paste shall be free from any agglomeration.

5.2.3 The product in the form of a liquid shall be clear/transparent and free from any sediment.

5.2.4 The product in the form of an emulsion shall be homogenous with no visible signs of phase separation or emulsion breakage.

5.2.5 The product may be coloured and/or perfumed.

5.2.6 The product shall have no undesirable effect on the natural colour of the hair. (This does not include hair already treated with hair dyes).

5.2.7 The product shall be non-irritating to the scalp and the skin.

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5.2.8 The product shall impart all the effects claimed, for example, dandruff control.

5.2.9 Any product containing ingredients for which medicinal claims are made shall be registered with the relevant authority.

5.3 Specific requirements

5.3.1 The shampoo shall comply with the requirements given in Table 1 when tested in accordance with the methods prescribed therein.

Table 1 — Requirements for soap-based hair shampoo

S/No.	Characteristic	Requirements				Test Method
		Neutralising	Baby	Treatment/ conditioning	General purpose	
i.	Total fatty matter, % m/m, min.	10.0	10.0	10.0	10.0	EAS 847-27
ii.	Lather volume for 2 % solution, mL, min.	100	100	100	100	EAS 847-20
iii.	Free caustic alkali, as NaOH or KOH, % m/m, max.	0.01	0.01	0.01	0.01	EAS 847-28
iv.	pH at 27°C ± 2°C, range	4 - 5	5 – 7	4 – 7	5 – 9	EAS 847-17
v.	Matter insoluble in alcohol, % m/m, max.	3.0	3.0	3.0	3.0	ISO 673
vi.	Antibacterial activity	To pass test	To pass test	To pass test	To pass test	EAS 794
Note: Alternative test methods such as ASTM E1174 and EN 1276 factoring log reduction are also accepted to support						

5.3.2 The products shall comply with the limits for heavy metal contaminants in accordance with Table 2 when tested in accordance with the methods prescribed therein.

Table 2 — Limits for heavy metal contaminants for soap-based hair shampoo

S/No	Characteristic	Limit	Test Method
i.	Lead, mg/kg, max.	10	EAS 847-16
ii.	Arsenic, mg/kg, max.	2	
iii.	Mercury, mg/kg, max	1	
NOTE 1 The total amount of heavy metals as lead, mercury and arsenic, in combination, in the finished product should not exceed 10 mg/kg. NOTE 2 The heavy metals including lead, mercury and arsenic may be as a result of contamination during processing and should not be deliberately added as ingredients.			

5.3.3 The product shall also comply with the microbiological limits given in Table 3 when tested in accordance with the methods prescribed therein.

Table 3 — Microbiological limits for soap-based hair shampoo

S/No.	Micro-organism	Maximum limit	Test method

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i.	Total viable count in CFU/ g or CFU/mL, max. a). Adult products b). Baby products	1,000 100	ISO 21149
ii.	*Pseudomonas aeruginosa* in 1 g	Not detectable	ISO 22717
iii.	*Staphylococcus aureus* in 1 g		ISO 22718
iv.	*Candida albicans* in 1 g		ISO 18416

6 Packaging and labelling

6.1 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.

6.2 Labelling

In addition to the requirements of EAS 346, Each package shall be legibly and indelibly labelled either in English, Kiswahili or French or combination or any other language as agreed to between the manufacturer and supplier with the following information:

a) type of shampoo

b) an indication of antibacterial activity (where applicable)

7 Sampling

Sampling shall be done in accordance with ISO 24153.

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Annex A
(informative)

List of ingredients conventionally used in formulation of soap-based shampoo

A.1 Chelation agents

A.1.1 Sodium polyphosphates

A.1.2 Disodium salt of ethylenediamine tetra-acetic acid (EDTA)

A.2 Preservatives

A.2.1 Alcohols

A.2.2 Sorbic acid

A.2.3 Ester of p-hydroxybenzoic acid

A.2.4 Imidazolidinyl urea

A.2.5 Kathon CG (Methylchloroisothiazolinone and methyl-isothiazoline)

A.3 Emollients

Lanoline and its derivatives

A.4 Thickening agents/viscosity enhancers

A.4.1 Sodium carboxymethyl cellulose

A.4.2 Methyl isopropyl cellulose

A.4.3 Methyl cellulose

A.4.4 Methyl glycoside derivatives

A.4.5 Guar gum

A.5 Counter-irritants

A.5.1 Ethoxylated fatty alcohols

A.5.2 Ethoxylated fatty esters

A.5.3 Methyl glycoside derivatives

A.6 Conditioners

A.6.1 Polyquaternary ammonium compounds and monomeric quaternary ammonium compounds

A.6.2 Hydrolized proteins

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A.6.3 Amphoterics

A.7 U.V. Stabilizers

Benzophenone derivatives

A.8 Other groups of ingredients

A.8.1 Perfumes

A.8.2 Dyes

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Bibliography

[1] EAS 842-1: 2017*, Hair shampoo — Specification — Part 1: Soap based*

[2] ASTM E1174 *Standard Test Method for Evaluation of the Effectiveness of Healthcare Personnel Handwash Formulations*

[3] EN 1276 *Evaluation of chemical disinfectant or antiseptic for bactericidal activity*

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