DEAS 840: 2023

ICS 71.100.70

DRAFT EAST AFRICAN STANDARD

Shaving cream — Specification

EAST AFRICAN COMMUNITY

Second Edition 2023

Copyright notice

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. XXXXXX.

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 cosmetic 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.

This second edition cancels and replaces the first edition (EAS 840:2017), which has been technically revised.

Introduction

Shaving creams play an important role in the wetting and softening of the beard, when applied prior to shaving, thereby ensuring a smooth shave. The creams hold the hair erect for cutting (lathering type) or lubricate the beard (brushless type).

Shaving cream — Specification

1 Scope

This Draft East African Standard specifies the requirements, sampling and test methods for shaving creams.

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 cosmetic — General requirements*

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

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

EAS 847-7, *Cosmetics — Analytical methods — Part 7: Determination of specific gravity*

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

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

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

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

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

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

ISO 18416, Cosmetics — Microbiology — Detection of Candida albicans

ISO 21150, Cosmetics — Microbiology — Detection of Escherichia coli

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 standard, the terms and definitions given in EAS 846 shall 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

4 Types

Shaving cream shall be of the following types :

a) Type 1: lathering, soap based (to be used with brush); and

b) Type 2: brushless.

5 Requirements

5.1 Ingredients

5.1.1 All ingredients including dyes, pigment and colour shall comply with EAS 377.

5.1.2 The ingredients used shall basically be soaps composed of sodium or potassium stearates for Type 1, and mineral oil or other suitable ingredients in excess of stearic acid for Type 2.

5.2 General requirements

5.2.1 Shaving cream shall

a) be uniform in texture;

b) not be sticky when pulled out between thumb and forefinger; and

c) not be of objectionable odour.

5.2.2 For Type 1, the foam (lather) shall be uniform.

5.3 Specific requirements

Shaving cream 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 shaving creams

S/N.	Characteristic	Requirement		Test method
		Type 1	Type 2	
i.	pH at 25 ºC ± 2 ºC, range	7 - 10	6 - 8.5	EAS 847-17
ii.	Thermal stability	To pass test	To pass test	EAS 847-18
iii.	Total fatty substance, % m/m, min.	30	20	EAS 847-27
iv.	Lathering (foaming power), mL, min.	100	n/a	EAS 847-20
v.	Free caustic alkali	To pass test	To pass test	EAS 847-28
vi.	Specific gravity, at 25 ºC ± 2 ºC, min.	0.9	0.9	EAS 847-7

5.4 Heavy metal contaminants

Shaving cream shall comply with the limits for heavy metal contaminants in accordance with Table 2 when tested in accordance with the test methods specified therein.

Table 2 — Heavy metal limits for shaving cream

S/N	Heavy metal	Maximum limit [a] mg/kg	Test method
i	Lead,	10	EAS 847-16
ii	Arsenic	2	
iii	Mercury	2	
a The total amount of heavy metals as lead, mercury and arsenic, in combination in the finished product shall not exceed 10 mg/kg			

5.5 Microbiological requirements

Shaving cream shall comply with the microbiology limits specified in Table 3 when tested in accordance to the methods described therein.

Table 3 — Microbiology limits for shaving cream

S/N	Characteristic.		Requirement	Test method
i.	Total viable count, cfu/g, max		100	ISO 21149
ii.	*Staphylococcus aureus* (per g)		Not detected	ISO 22718
iii.	*Pseudomonas aeruginosa* (per g)		Not detected	ISO 22717
iv.	*Candida albicans* (per g)		Not detected	ISO 18416
v.	*Escherichia coli* (per g)		Not detected	ISO 21150

6 Packaging

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

7 Labelling

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

a) product name as “Shaving cream”; and

b) type

8 Sampling

Sampling shall be done in accordance with ISO 24153

Annex A
(normative)

Determination of free alkali content

A.1 Outline of the method

This method consists of dissolving the sample in alcohol, and titrating against standard acid.

A.2 Reagents

A.2.1 Phenolphthalein indicator solution, dissolve 1 g of phenolphthalein in 100 mL of 95 % (v/v) rectified spirit.

A.2.2 Ethyl alcohol, freshly boiled, and neutral to phenolphthalein, 95 % (v/v)

A.2.3 Standard hydrochloric acid, 0.1 N

A.3 Procedure

Dissolve 2 g of the product in 100 mL of ethyl alcohol by warming, if necessary. Cool and add a few drops of phenolphthalein indicator. Titrate with standard hydrochloric acid.

A.4 Calculation

The free alkali, expressed as percent, shall be calculated as follows;

$$\frac{V \times N}{M} \times C$$

where

C is a Constant

C = 2.4 for LiOH

C = 4 for NaOH, KOH and LiOH

C = 5.6 for KOH

C = 3.7 for $Ca(OH)_2$

C = 3.5 for NH_4OH

V is the volume, in millilitres, of standard hydrochloric acid;

N is the normality of standard hydrochloric acid; and

M is the mass, in grams, of the sample.

Where mixtures of sodium, lithium and potassium hydroxide are present in the product, the free alkali content shall not exceed 2.5 % by mass when calculated as sodium hydroxide

Bibliography

EAS 840: 2017, *Shaving cream — Specification*