



FINAL DRAFT EAST AFRICAN STANDARD

Hair neutralizer — Specification

EAST AFRICAN COMMUNITY

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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 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.

Hair neutralizer — Specification

1 Scope

This Final Draft East African Standard specifies requirements, sampling and test methods for hair neutralizer.

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 — Requirements*

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

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

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

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

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 randomization procedures*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EAS 846 and the following 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>
- IEC Electropedia: available at <http://www.electropedia.org/>

3.1 hair neutralizer
chemical product used after hair treatments such as perms or relaxers to stop or prevent the chemical process that alters the natural structure of the hair

3.2 visible impurities
any foreign substances or particles that are visible to the naked eye in a product

4 Requirements

4.1 Ingredients

All ingredients used in the manufacture of hair neutralizer, including dyes, pigments and colours shall comply with all parts of EAS 377.

4.2 General requirements

4.2.1 Hair neutralizer shall contain chemicals such as hydrogen peroxide or other mild acids to neutralize the alkalinity of perm or relaxer chemicals.

4.2.2 Hair neutralizer shall be free from visible impurities.

4.2.3 Hair neutralizer shall not cause damage, breakage to the hair, irritation or allergic reactions on the skin or scalp.

4.3 Specific requirements

Hair neutralizer 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 hair neutralizer

S/N	Characteristic	Requirement	Test method
i.	Thermal stability	To pass test	EAS 847-18
ii.	pH	3 – 6	EAS 847-17

4.4 Microbiological requirements

Hair neutralizer shall comply with the microbiological requirements given in Table 2 when tested in accordance with the test methods specified therein.

Table 2 — Microbiological requirements for hair neutralizer

S/N	Micro-organism	Requirement	Test method
i.	Total viable count for aerobic mesophilic microorganisms, CFU/g or CFU/ml, max.	1 000	ISO 21149
ii.	<i>Pseudomonas aeruginosa</i> , per ml or g	Not detected	ISO 22717
iii.	<i>Staphylococcus aureus</i> , per ml or g	Not detected	ISO 22718
iv.	<i>Candida albicans</i> , per ml or g	Not detected	ISO 18416
v.	<i>Escherichia coli</i> , per ml or g	Not detected	ISO 21150

4.5 Heavy metal contaminants

Hair neutralizer shall comply with the heavy metal limits given in Table 3 when tested in accordance with the test methods specified therein.

Table 3 — Heavy metal limits for hair neutralizer

S/N	Heavy metal	Maximum limit ^a mg/kg	Test method
i.	Lead	10	EAS 847-16
ii.	Arsenic	2	
iii.	Mercury	1	
^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 Packaging

Hair neutralizer 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 given in EAS 346, each package shall be legibly and indelibly labelled with the following information:

- name of the product as “Hair neutralizer”. Other names such as “Hair neutralizing rinse”, “Hair neutralizing solution” may be used to replace “Hair neutralizer”; and
- form of the product.

7 Sampling

Sampling shall be done in accordance with ISO 24153.

Bibliography

- [1] Gray, J. (2001). *Hair care and hair care products*. *Clinics in dermatology*, 19(2), 227-236
- [2] ISO 17516:2014, *Cosmetics — Microbiology — Microbiological limits*
- [3] EAS 339: 2023, *Hair creams, lotions and gels — Specification*
- [4] EAS 842-2: 2022, *Hair shampoo — Specification — Part 2: Synthetic detergent-based*

