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DRAFT EAST AFRICAN STANDARD

Household fabric softeners — 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.

In order to achieve this objective, the Community established an East African Standards Committee mandated to develop and issue East African Standards.

The Committee is composed of representatives of the National Standards Bodies in Partner States, together with the representatives from the private sectors and consumer organizations. 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 procedures of the Community.

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.

DEAS 1143:2023 was prepared by the Technical Committee Technical Committee EASC/TC 074, *Surface active agents*

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Introduction

Household fabric softeners are stable aqueous dispersions of cationic materials used for providing fabric softening and static control benefits during laundering. Rinse-added fabric softening compositions contain, as the active component, di-hardened tallow dimethylammonium chloride and imidazolinium compounds substituted with two tallow groups. These materials are normally prepared in the form of a dispersion in water.

The dispersion of the base material contains other additives such as preservatives, colourant (dyes) and fragrances. Other fabric rinses contain additives to prevent or control foaming and electrolyte salts such as calcium chloride and thickener materials to control the viscosity. Other ingredients are added to modify the rheology and/or flow of the dispersion.

Household fabric softeners — Specification

1 Scope

This Draft East African Standard prescribes the requirements, sampling and test methods for household fabric softeners.

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.

ISO 862, *Surface active agents — Vocabulary*

ISO 2871-1, *Surface active agents — Detergents — Determination of cationic active matter content — Part 1: High-molecular-mass cationic active matter*

ISO 2871-2, *Surface active agents — Detergents — Determination of cationic active matter content — Part 2: Cationic active matter of low molecular mass (between 200 and 500)*

ISO 4316, *Surface active agents — Determination of pH of aqueous solution — Potentiometric method*

EAS 217-1-1, *Methods for the microbiological examination of foods — Part 1-1: General procedures and techniques*

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

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 862 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>

3.1

fabric softener

laundry auxiliary product or laundry detergent ingredient that gives fabrics a soft feel, freshening, smooth surface and reduces static electricity

3.2

laundering

cleaning and restoring of textile materials to a serviceable condition using the washing and drying equipment commonly found in households

4 Requirements

4.1 General requirements

4.1.1 The household fabric softener shall have uniform dispersion with no lumps or phase separation, and shall not contain ingredients in quantities that are toxic to human beings.

4.1.2 The household fabric softener shall be uniform in colour with no un-dissolved or precipitated dyes that may stain the treated fabrics.

4.1.4 The household fabric softener, both as received and when dissolved in water, shall possess a pleasant, fresh odour and shall not develop an objectionable odour during storage at ambient temperature.

4.1.5 The household fabric softener shall remain stable for the declared shelf life without breaking the dispersion (phase separation), changes in colour and deterioration of the odour.

4.1.6 The household fabric softener shall disperse effectively or easily in standard hard water (total hardness 150 ppm \pm 20 ppm) at 30 °C.

4.1.7 The household fabric softener shall influence the properties of the fabric to improved wet-ability, softness and reduced static charge.

4.2 Specific requirements

4.2.1 The household fabric softener 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 household fabric softener

Sl no.	Property	Requirement	Test method
i)	Cationic surfactant content, % w/w, min	2.5	ISO 2871
ii)	pH, neat	2.0 – 7.0	ISO 4316
iii)	Total viable counts, c.f.u/g, max.	2×10^2	EAS 217-1-1
iv)	Antibacterial activity*	To pass the test	EAS 794
v)	<i>E. coli</i>	Not detected	ISO 21150
vi)	<i>P. aeruginosa</i>	Not detected	ISO 22717

*Applicable to fabric softeners to which antibacterial claims are made.

5 Packaging

The household fabric softener shall be packaged in suitable containers that withstand normal usage and transportation and that prevent leaking, drying out and contamination of the product.

6 Labelling

Each container and bulk package shall be securely closed, legibly and indelibly labelled in English and/or any other official language (French, Kiswahili, etc) used in the importing East African Partner State with the following information:

- a) name of the product as "Fabric softener"
- b) manufacturer's name and physical address;
- c) batch or code number;
- d) list of ingredients
- e) net content;
- f) country of origin;
- g) instructions for storage, use and disposal;
- h) date of manufacture"; and
- i) best before date.
- j) safety precautions/warnings

NOTE The name, physical address of the distributor/supplier and trade mark may be added.

7 Sampling

Sampling shall be done in accordance with Annex A.

Annex A

(normative)

Sampling

A.1 Requirements

A.1.1 In drawing, preparing, storing and handling samples, the precautions in A.1.2 – A.1.7 shall be observed.

A.1.2 Samples shall not be taken from places exposed to damp air, dust or soot.

A.1.3 The sampling instruments shall be clean and dry when used.

A.1.4 The samples, the material being sampled, the sampling instruments and the containers for samples shall be protected from adventitious contamination.

A.1.5 The samples shall be placed in clean and dry glass containers. The sample containers shall be of such a size that they are almost completely filled by the sample.

A.1.6 Each container shall be sealed airtight after filling, and marked with full details of sampling which include, date of sampling, batch or lot number, name of manufacturer, and other important particulars of the consignment.

A.1.7 The samples shall be stored in such a manner that the temperature of the material does not vary unduly from the normal temperature, and that they are protected from light.

A.2 Scale of sampling

A.2.1 In a single consignment, all the packages containing products of the same type and form, and drawn from the same batch of manufacture, shall constitute a lot. If the consignment consists of packages containing products of different types and forms, then the packages containing products of the same type, form and batch of manufacture shall be grouped together, and such group shall constitute a separate lot.

A.2.2 For ascertaining the conformity of the lot to the requirements prescribed in this standard, tests shall be carried out on each lot separately. The number (n) of packages to be selected for drawing the samples shall depend upon the size (N) of the lot and shall be in accordance with Table A.1.

Table A.1 — Scale of sampling

No. of packages in the lot (N)	No. of packages to be selected (n)
4 – 15	3
16 – 40	4
41 – 65	5
66 – 110	7
111 and above	10
NOTE When the size of the lot is three packages or less, the number of containers to be selected and the criteria for judging the conformity of the lot to the specifications should be as agreed on between the purchaser/inspector and the supplier.	

A.2.3 The packages shall be selected at random and to ensure randomness of selection, a random number table shall be used. In case such tables are not available, the procedure given below may be adopted.

Starting from any package, count all the packages in one order as 1, 2, 3, ..., up to r and so on, where r is the integral part of N/n , (N being the lot size and n the number of packages to be selected). Every r^{th} package thus counted shall be withdrawn to give a sample for the purposes of test.

A.3 Preparation of gross samples, test sample and reference sample

A.3.1 Gross sample

From each one of the packages selected as in A.2, draw at random one or more containers. The material in the containers so chosen shall be nearly thrice the quantity required for purpose of test as indicated in A.4.

A.3.2 Test sample

A.3.2.1 From the gross representing each form of synthetic detergent take a small but equal quantity of material and mix thoroughly into a composite sample which should be of a size sufficient to carry out triplicate testing for all the characteristics specified under A.4. The composite samples representing each form and type of the product shall be divided into three equal parts, one for the purchaser/inspector, another for the supplier, and the third for the referee.

A.3.2.2 The remaining portion of the material in each of the gross samples shall be divided into three equal parts, each forming an individual sample. One set of individual samples, representing the n selected packages shall be for the purchaser/inspector, another for the supplier, and the third for reference.

A.3.2.3 All the composite and individual samples shall be transferred to separate containers. These containers shall then be sealed airtight with stoppers, and labelled with full particulars of identification given in A.1.6.

A.3.3 Reference samples

A.3.3.1 The reference samples shall consist of a composite sample and a set of individual samples. All the containers shall bear the seals of both the purchaser/inspector and the supplier, and shall be kept at a place agreed to between the two parties.

A.3.3.2 Reference samples shall be used in case of any dispute between the purchaser/inspector and the supplier.

Bibliography

[1] TZ 1818: 2016 *Household fabric softener – Specification*

[2] KS 1797:2014 *Household fabric softeners – Specification*

[3] RS 403: 2019 *Household fabric softener – Specification*