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DRAFT EAST AFRICAN STANDARD

Skin powder — Specification — Part 2 Baby powder

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.

Skin powder — Specification — Part 2 Baby powder

1 Scope

This Part 2 of the Draft East African Standard prescribes the requirements and methods of test for baby powders

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)

ISO 24153 Random sampling and randomisation procedures

EAS 346, Labelling of cosmetics — General requirements

EAS 377-1, Cosmetics and cosmetic products — Part 1: List of substances prohibited in cosmetic products

EAS 377-2, Cosmetics and cosmetic products — Part 2: List of substances which cosmetic products must not contain except subject to the restrictions laid down

EAS 377-3, Cosmetics and cosmetic products — Part 3: List of colorants allowed in cosmetic products

EAS 377-4, Cosmetics and cosmetic products — Part 4: List of preservatives allowed in cosmetic products

EAS 377-5, Cosmetics and cosmetic products — Part 5: Use of UV filters in cosmetic products

DEAS 847-2, Determination of Moisture Content

DEAS 847- 16, *Determination of Heavy metal Content*

DEAS 847-17, Physio-chemical tests

3 Application

3.1 This Part 2 covers baby powders only. Body and face powders for adult use are covered in Part 1 of the standard.

3.2 Medicated powders for which therapeutic claims are made are not covered by this standard. Such products shall be registered with the relevant authority.

4 Requirements

4.1 Description

Baby powder shall consist principally of finely powdered, free-flowing absorbent innocuous material such as talc, and may contain a mild perfume and other ingredients consistent with accepted practice in the cosmetic industry.

4.2 All ingredients shall comply with EAS 377 (all parts).

4.3 The powder shall have no undesirable or harmful effect on the skin when used as intended by the manufacturer.

4.4 The total amounts of heavy metals, when present as impurities in the finished product, shall not exceed 20 ppm.

4.5 The powder shall be free from colouring matter. It may be buffered to control pH.

4.6 The powder shall be completely free from grit when tested according to the method prescribed in Annex A.

4.7 The powder shall also comply with the requirements given in Table 1 when tested in accordance with the methods prescribed in the annexes.

Table 1 — Requirements for baby powders

SL No.	Characteristic	Requirement	Test method
(1)	(2)	(3)	(4)
i)	Matter insoluble in boiling water, % by mass, min.	90.0	DEAS 847- 17
ii)	Fineness: a) Residue on 75-micron sieve, % by mass, max. b) Residue on 150-micron sieve, % by mass, max.	5 0.5	Annex B
iii)	Moisture and volatile matter, % by mass, max.	2.0	DEAS 847- 2
vi)	Boric acid	Absent	DEAS 847- 17
v)	pH (10% solution)	5.5-9.0	DEAS 847- 17
vi)	Microbiological examination Micro-organisms[a] per g, max.	100	Annex C
[a]Micro-organisms shall include both pathogenic and non-pathogenic.			

The products shall comply with the limits for heavy metal contaminants in accordance with Table 2.

Table 2 Limits for heavy metal contaminants

SL No	CHARACTERISTIC	REQUIREMENT	METHOD OF TEST REF. TO ANNEX
(i)	Lead, ppm, max.	20	DEAS 847-16
(ii)	Arsenic, ppm, max	2	DEAS 847-16
(iii)	Mercury, ppm, max.	2	DEAS 847-16
NOTE The total amount of heavy metals as lead, mercury and arsenic, in combination, in the finished product should not exceed 20 ppm.			

5 Packaging

The product shall be packed in suitable, tamper-proof containers.

6 Labelling

The labelling shall be in English, Kiswahili or French or in combination as agreed between the manufacturer and supplier.

The labelling shall comply with the requirements of DEAS 346.

7 Caution/warning

The following warning shall be printed on the label:

“Keep powder away from children’s nose and mouth”.

8 Sampling

Random samples of the product shall be drawn for test in accordance with ISO 24153 from the market, factory or anywhere else.

Annex A
(normative)

Test for absence of grit

Take 20 g of sample in a beaker and remove, by overflow under a carefully controlled steady stream of water, a large portion of the material. The grit, being heavy, will remain in the beaker along with some powder. Test the residue in the beaker by rubbing between the finger and thumb for presence of grit.

Annex B
(normative)

Determination of fineness

B.1 Reagent

Denatured spirit, filtered.

B.2 Procedure

Place about 10 g of the material, accurately weighed, in the specified sieve and wash by means of a slow stream of running tap water and finally with fine stream from a wash bottle until all the material that can pass through the sieve has passed. In case the material is not easily wetted by water, the washing could be started with a slow stream of filtered denatured spirit. Let the water drain from the sieve containing the residue on stream-bath.

Carefully transfer the residue on to a tared watch glass and dry it to constant mass at 105 °C ± 2 °C.

B.3 Calculation

Material retained on the specified sieve, % by mass,

$$= \frac{100\, M_1}{M_2}$$

where

M_1 is the mass, in g, of the residue retained on the specified sieve; and

M_2 is the mass, in g, of the material taken for the test.

Annex C
(normative)

Microbiological examination of baby powder

C.1 Outline of the method

The test consists of plating a known dilution of the sample or any digest agar medium (soybean casein is recommended) suitable for the total count of aerobic bacteria and fungi after incubating them for a specified period to permit the development of visual colonies.

IMPORTANT Take precaution in ascertaining that only fresh samples, from carefully sealed containers that had not been opened before, are used for this test. This is very necessary for getting accurate results.

C.2 Apparatus

C.2.1 Tubes, of resistant glass, provided with closely fitting metal caps.

C.2.2 Autoclaves, of sufficient size. They shall keep uniform temperature within the chamber up to and including the sterilizing temperature of 122 ^{0}C. They shall be equipped with an accurate thermometer, located so as to register the minimum temperature within the sterilizing chamber, a pressure gauge and, properly adjusted safety valves.

C.2.3 Petri dishes, of 100 mm diameter and 15 mm depth. The bottom of the dishes shall be free from bubbles and scratches and shall be flat so that the medium is of uniform thickness throughout the plate.

C.2.4 Colony counter, an approved counting aid, such as a Quebec colony counter. If such a counter is not available, counting may be done with a lens giving a magnification of 1.5 in diameter. In order to ensure uniformity of conditions during counting, illumination equivalent to that provided by the Quebec colony counter shall be employed.

C.3 Media and buffer

C.3.1 Soyabean casein digest agar media

Dissolve 1.5 g of pancreatic digest of casein, 5 g of papic digest of soyabean meal; and 5 g of sodium chloride in 100 mL of distilled water contained in a 2-litre beaker by heating in a water-bath. Add 15 g of powdered agar and continue boiling until the agar is completely digested. Adjust the pH to 7.5 with sodium hydroxide solution. Distribute in 20 mL quantities, close the tubes with metal cups and autoclave at 122 °C for 20 min. After auto-claving, store the tubes in a cool place and use them within 3 weeks.

C.3.2 Stock solution pH phosphate buffer

Dissolve 34 g of monobasic potassium in about 500 mL of water contained in a 100 mL volumetric flask. Adjust the pH to 7.2 $\pm$ 0.1 by the addition of sodium hydroxide solution (4 %). Add water to volume and mix. Sterling at 122 °C for 20 min, store under refrigeration.

C.3.3 Dilute phosphate buffer solution pH 7.2

Dilute 1 mL of stock solution with distilled water in the ratio of 1:800. Fill 50 mL each in conical flasks of 100 mL capacity. Plug the flasks with cotton and sterilize at 122 °C for 20 min.

C.4 Sterilization of apparatus

C.4.1 **Tubes**, these shall be sterilized in the autoclave at a temperature of 122 °C and 1.05 kg/cm pressure for 20 min or in the hot air oven at 180 °C for 1 h.

C.4.2 **Petri-dishes**, these shall be packed in drums and autoclaved at 122 °C and 1.85 kg/cm pressure for 20 min or individually wrapped in kraft paper and sterilized in hot oven at 160 °C for 1 h.

C.4.3 **Pipettes**, these shall be placed in pipette cones (copper, stainless steel or aluminium) after plugging the broader and with, cotton and sterilized in the autoclave at 122 °C and 1.05 kg/cm pressure for 20 min or at 160 °C for 1 h in hot air oven.

C.5 Procedure

C.5.1 Melt a sufficient number of soyabean casein digest agar medium tubes in hot water-bath and transfer while hot into a constant temperature water-bath maintained at 48 °C ± 2 °C.

C.5.2 Weigh and transfer aseptically 1 g of the sample to a conical flask containing sterile 50 mL, or any suitable dilution factors, of dilute phosphate buffer at pH 7.2. Shake well. Pipette out in 1 mL portions into three sterile petri dishes. Pour melted and cooled (at 45 ^{0}C) soyabean casein digest agar medium over it, and rotate the plates to mix thoroughly. Incubate the plates at 32 °C for 72 h in an inverted position.

C.6 Expression of results

Get the average number of colonies on soya-bean casein digest agar medium plates determine the number of micro-organisms per gram of the sample. If no colony is recovered from any of the plates it can be stated as less than 50 microorganisms per gram.

