CD2 222:2025 ICS: 71.100.40



TANZANIA STANDARD

Soft soap — Specification

TANZANIA BUREAU OF STANDARDS

CD2 222:2025

This Tanzania Standard was published under the authority of the Board of Directors of Tanzania Bureau of Standards on 21st January 2018.

Tanzania Bureau of Standards (TBS) is the statutory national standards body for Tanzania established under the Standards Act No. 3 of 1975, which was repealed and replaces by the Standards Act No. 2 of 2009.

The Chemical Divisional Standards Committee, under whose supervision this standard was prepared, consists of representatives from the following organizations;

Department of Chemistry, University of Dar es Salaam
National Environment Management Council (NEMC)

*Small Industries Development Organization (SIDO) Vice
President's Office, Division of Environment

*Government Chemist Laboratory Authority (GCLA)
Mac Medics
Tanzania Industrial Research and Development Organization (TIRDO)
Confederation of Tanzania Industries (CTI)
Ministry of Industry, Trade and Investment
Pharmacy Council of Tanzania
SGS Tanzania Superintendence Company Limited
Tanzania Food and Drugs Authority (TFDA)

The organizations marked with an asterisk (*) in the above list, together with the following were directly represented on the Technical Committee entrusted with the preparation of this standard:

Pampalano Commercial Processing Laboratory Soap and Allied Industries Limited BIDCO Oils and Soap Limited Catholic University of Health and Allied Sciences (CUHAS) G&B Soap Industries

Tanzania Bureau of Standards P O Box 9524 Dar es Salaam

Tel: +255 (22) 2450206/2450949/2450298

Fax: +255 22 2450298 E-mail: info@tbs.go.tz

Foreword

This Tanzania Standard was developed by the Soap and Detergents Technical Committee under supervision of the Chemicals Division Standards Committee and it is in accordance with the procedures of the Bureau.

This Tanzania Standard is a revision of the first version published in 1984. This second edition cancels and replaces the first edition (TZS 222:1984), with addition of clause 5.1.4 to accommodate soft soap with antibacterial property.

In the preparation of this Tanzania Standard assistance was obtained from;

IS 7532: 2011 Specification for soft soap; published by the Indian Standards Institute; and

BS 1913: 2016 Specification for soft soap; published by the British Standards Institute.

This second edition cancels and replaces the first edition (TZS 222: 2018), which has been technically revised

In reporting the results of a test or analysis made in accordance with this standard, if the final value observed or calculated is to be rounded off, it shall be done in accordance with TZS 4, *Rounding off numerical values*.

©TBS 2025 - All rights reserved

iii

TANZANIA STANDARD

CD2 222:2025

Soft soap — Specification

1 Scope

This Tanzania Standard prescribes requirements, sampling and test methods for soft soap intended for hygiene purpose.

2 Normative references

The following referenced documents are indispensable for the application of this document. The latest edition of the referenced document (including any amendments) applies.

TZS 35, Soaps — Sampling and test methods

TZS 59/ISO 3696, Water for analytical laboratory use — Specification and test method

TZS 1396-5, Analysis of soaps — Part 5: Determination of free fatty acids

TZS 1396-6/ISO 685, Analysis of soaps — Determination of total alkali content and total fatty matter content

TZS 1396-9/ISO 1067, Analysis of soaps — Determination of unsaponifiable, saponified and unsaponified saponifiable matter

TZS 1396-12/ISO 684, Analysis of soaps — Determination of total free alkali

TZS 2102/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 purpose of this standard, the definitions given in TZS 35 and the following shall apply.

3.1

batch

soap manufactured from one boil or, in the case of continuous production processes, the material from a single day's production

3.2

boil

soap from one pan or vat

3.3

defective

soap or its container or wrapper that fails in one or more respects to comply with the appropriate requirements of the standard

3.4

lot

quantity of soap bearing the same batch identification and from one manufacturer, submitted at any one time for inspection and testing

4 Types

Soft soap shall be of the following two types;

- a) Type 1 and
- b) Type 2

5 Requirements

5.1 General requirements

- **5.1.1** Soft soap shall be homogeneous translucent mass of jelly-like mixture, free from putrescent, fishy or objectionable odour. It applies to soft soap with potassium or sodium base or mixture of these bases. It may or may not be suitably perfumed subject to agreements between manufacturer and purchaser.
- NOTE Soft soap shall be considered as showing no sign of deterioration if it still conforms to 5.1.1
 - **5.1.2** Soft soap shall quickly form a satisfactory lather while in use.
 - **5.1.3** Soft soap shall not become liquid at 32°C, and no liquid shall separate when the soap is maintained at 0°C, for 24 h.

5.2 Specific requirements

Soft soap shall comply with the requirements given in Table 1, when tested according to the test methods referred therein.

Table 1 — Requirements for soft soap

S/No.	Characteristics	Requirements		Test method
		Type 1	Type 2	
1	Total fatty matter, % by mass, min.	38	28	TZS 1396-6/ISO 685
2	Unsaponified and unsaponifiable matter, % by mass, <i>max</i> .	2.5	2.0	TZS 1396-9/ISO 1067
3	Rosin acids, % by mass of total fatty matter, <i>max</i> .	Nil	15	TZS 35
4	Total free alkali (as KOH), % by mass, <i>max</i> .	0.5	0.5	TZS 1396-12/ISO 684
5	Free caustic alkali (as KOH), % by mass, <i>max</i> .	0.1	0.1	TZS 1396-5
6	Antibacterial activity ^a	To pass the test		TZS 2102/EAS 794

a If the soft soap is antibacterial

Calculation of results

Soft soap is liable to lose moisture on keeping. The result obtained from unsaponified and unsaponifiable matter, total free alkali and free caustic alkali by the specific method of analysis shall be recalculated in relation to the equation;

Actual result ×minimum specified total fatty matter

Recalculated results =

Actual total fatty matter

6 Sampling

6.1 General

For the purpose of this Standard, general precautions, scale of sampling and preparation of test samples shall be as prescribed in TZS 35 (see Clause 2).

6.2 Number of tests

- **6.2.1** Tests for the determination of characteristics given as total fatty matter, unsaponified and unsaponifiable and free alkali shall be conducted on each of the individual sample separately.
- **6.2.2** Tests for the determination of the remaining characteristics shall be conducted in the composite sample.

6.3 Criteria for conformity

6.3.1 Individual sample

For each characteristic determined on the individual samples (6.2.1) the mean (x) and the range (R) of the test results shall be calculated as follows:

$$Mean(\bar{x}) = \frac{The \ sum \ of \ test \ results}{Number \ of \ the \ test \ results}$$

Range (R) = the difference between the maximum and the minimum value of the test results

The lot shall be deemed as conforming to the requirement if the express (\overline{X} -0.4R) is greater than or equal to the minimum value given in Table 1 and (X+0.4R) is less than or equal to the minimum value given in Table 1.

6.3.2 Composite sample

For declaring the conformity of the lot to the requirements of other characteristics determined on composite sample, the test results of each of the characteristics shall satisfy the relevant requirement.

7 Tests

7.1 Tests shall be conducted as prescribed in TZS 35 (see Clause 2).

7.2 Quality reagents

Unless otherwise specified, chemicals of analytical grade or distilled water complying with TZS 59 (see Clause 2) shall be employed.

8 Packaging and labelling

8.2 Packing

The soft soap shall be packed in a suitable container as agreed between manufacturer and purchaser.

8.3 Labelling

The packages shall be securely closed, legibly and indelibly labelled in Kiswahili and English, and any other language as agreed between the manufacturer and purchaser with the following information:

a) Name and physical address of manufacturer;

- Registered trade mark if any;
- c) The words "soft soap";
- d) Net weight when packed;
- e) Dates of manufacture and expiry;
- Batch number or Lot number in code or otherwise;
- g) Type; and
- h) Critical ingredients mentioning the actual compound in descending order up to a limit of 0.5 % by mass.
- If the soap is antibacterial, shall be declared

