

DRAFT TANZANIA STANDARD

**TBS/CDC-2(4970) P3- Carbolic Soap - Specification
(Revision of TZS 221:1984)**

TANZANIA BUREAU OF STANDARDS

Foreword

This Draft Tanzania Standard is being 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 Draft Tanzania standard is the first revision of TZS 221:1984 “Carbolic Soap – Specification”.

After being finalized, this second edition will cancel and replace the first edition.

In the preparation of this Draft Tanzania Standard assistance was derived from;

SANS 240:2013 *Carbolic Soap – Specification*; published by South African Bureau of Standards.

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

Carbolic Soap – Specification

1 Scope

This Draft Tanzania Standard prescribes requirements and methods of sampling and test for carbolic soap containing phenolic substances such as creasylic acid. It does not apply to specific medicated soaps.

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 1396-3/ISO 673 Soaps – Determination of content of ethanol-insoluble matter

TZS 1392-8.2/ ISO 457 Soaps – Determination of chloride content- titrimetric method

TZS 59: Water for analytical laboratory use – Specification and test method

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

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 1396-5 Analysis of Soaps – Part 5 Determination of free fatty acids

3 Terms and Definition

For the purpose of this standard the following definitions and definitions given under clause 3 of TZS 35 shall apply.

3.1 Carbolic soap

mildly antiseptic soap containing carbolic acid and/or cresylic acid

3.2 Batch

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

3.3 Boil

soap from one pan or vat

3.4 Defective

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

3.5 Lot

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

4 Requirements

4.1 General requirements

4.1.1 Carboloc Soap when visually examined shall

- a) be in a bar or tablet form
- b) be homogeneous and of firm consistency, and
- c) when coloured, be uniform in shade

4.1.2 Carboloc soap shall not be irritating to normal skin and it shall not contain ingredients in quantities that are toxic to human beings.

4.1.3 It shall possess good lathering properties in water, at ambient temperature, that has a hardness (expressed as calcium carbonate) of 200 mg/L

4.1.4 Carboloc soap, both as received and when dissolved in hot water, shall possess a mildly phenolic odour.

4.2 Specific requirements

4.2.1 Carboloc soap when tested in accordance with the relevant tests method in column 4 of Table 1, shall comply with the requirements given in column 3 of Table 1.

Table 1 – Requirements for carboloc soap

S/no.	Characteristics	Requirements	Method of test
1	Total fatty matter contents, % by mass, min.	62.0	TZS 1396-6/ISO 685
2	Rosin acids, per cent by mass of total fatty matter, max.	15.0	TZS 35
3	Unsaponified fatty matter contents, % by mass, max.	0.5	TZS 1396-9/ISO 1067
4	Free caustic alkali, as sodium hydroxide (NaOH) % by mass, max	0.1	TZS 1396-5
5	Matter insoluble in alcohol, % by mass, max	2.5	TZS 1396-3/ISO 673
6	Phenolic substances, % by mass.	1.0 - 3.0	TZS 35
7	Chloride contents, % by mass, max.	0.8	TZS 1392-8.2/ ISO 457
8	Antibacterial activity	Pass the test	EAS 794
<p>Calculation of results Soft soap is liable to loss 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.</p> $\text{Recalculated results} = \frac{\text{Actual result} \times \text{minimum specified total fatty matter}}{\text{Actual total fatty matter}}$			

5 Sampling

5.1 For the purpose of this Tanzania standard; general precautions, scale of sampling and preparation of test samples shall be as prescribed in TZS 35

5.2 Number of tests

5.2.1 Tests for the determination of total fatty matter, free caustic alkali, phenolic substance and unsaponified fatty matter shall be conducted on each of the individual samples separately.

5.2.2 Tests for determination of all the remaining characteristics shall be conducted on the composite sample.

5.3 Criteria for conformity.

5.3.1 *Individual samples* – For each of the characteristics which have been determined on the individual samples (5.2.1) the mean (\bar{X}) and the range (R) of the test results shall be calculated as follows:

$$\text{Mean } (\bar{X}) = \frac{\text{the sum of test results}}{\text{number of the test result}}$$

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

The lot shall be deemed as conforming to the requirement if the expression $(\bar{X} - 0.6R)$ is less than or equal to maximum value given in Table 1 and the expression $(\bar{X} + 0.6R)$ is less than or equal to maximum value given in Table 1.

5.3.1 *Composite sample* – for declaring the conformity of lot to the requirements of other characteristics determined on the composite sample, the test results for each of the characteristics shall satisfy the relevant requirement.

6 Tests

6.1 Tests to evaluate the characteristics specified in Table 1 shall be conducted as prescribed in TZS 35. Reference to the relevant clauses of that standard is given in the fourth column of Table 1.

6.2 Quality of Reagent

Unless specified otherwise chemicals of analytical grade shall be used. Distilled water complying with TZS 59 shall be employed in the tests.

7 Packing and labeling

7.1 Packing

7.1.1 The material shall be packed as agreed to between the purchaser and the supplier.

7.1.2 The carboic soap shall be packed in containers that are strong enough to withstand normal usage and transportation. These containers may then be packed in bulk packages; only soap from the same batch shall be packed together in a container and when relevant, in a bulk package.

7.2 Labeling

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

- a) name and physical address of manufacturer;
- b) registered trade mark if any;

- c) the words "Carbolic soap";
- d) net weight when packed;
- e) batch No. or Lot No. in code or otherwise
- f) in the case of bulk packages, the number of containers, or of bars or tablets
- g) dates of manufacture and expiry

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