**SRI LANKA STANDARD 36 : 2009**

UDC 668.184.3

# SPECIFICATION FOR
# SHAVING SOAP

(Second Revision)

**SRI LANKA STANDARDS INSTITUTION**

# Sri Lanka Standard
# SPECIFICATION FOR SHAVING SOAP
# (Second Revision)

**SLS 36 : 2009**

(Attached AMD 552)

**Gr. 5**



**SRI LANKA STANDARDS INSTITUTION**
**17, Victoria Place**
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**Sri Lanka.**

Sri Lanka Standards are subject to periodical revision in order to accommodate the progress made by industry. Suggestions for improvement will be recorded and brought to the notice of the Committees to which the revisions are entrusted.

This standard does not purport to include all the necessary provisions of a contract.

# Sri Lanka Standard
# SPECIFICATION FOR SHAVING SOAP
# (Second Revision)

## FOREWORD

This Standard was approved by the Sectoral Committee on Chemical and Polymer Technology and was authorized for adoption and publication as a Sri Lanka Standard by the Council of the Sri Lanka Standards Institution on 2009-06-23.

Shaving soaps are designed to soften the beard which is a necessary prerequisite for a smooth and clean shave. Shaving soap may contain perfumes, colouring matter, antioxidants, chelating agents, and superfatting agents as added ingredients. These shall be non-injurious in use with soap and may be manufactured as sticks, cakes or pallets in small containers.

This specification was first published in 1968 and revised in 1982. In this Second Revision, the ISO test methods have been specified under methods of test and additional marking requirements have been introduced.

It is necessary that the raw materials used are such that in the concentrations in which they would be present in the shaving soap, after interaction with the other raw materials used in the formulation, are free from any harmful effects. It is the responsibility of the manufacturer to ensure the dermatological safety of the product.

This specification is subject to the restrictions imposed under the Cosmetics, Devices and Drugs Act No.27 of 1980, Consumer Affairs Authority Act No. 09 of 2003 and the Regulations framed there under.

For the purpose of deciding whether a particular requirement of this specification is complied with, the final value, observed or calculated, expressing the results of a test or analysis shall be rounded off in accordance with **SLS 102**. The number of figures to be retained in the rounded off value shall be the same as that of the specified value in this specification.

In the preparation of this specification the assistance obtained from the following publication is gratefully acknowledged:

IS 5784 : 2001 Indian Standard Shaving Soap – Specification

## 1 SCOPE

This specification prescribes the requirements and methods of sampling and test for shaving soaps manufactured as sticks, cakes or tablets in small containers.

## 2 REFERENCES

ISO 673 Soaps – Determination of content of ethanol – insoluble matter
ISO 684 Analysis of soaps – Determination of total free alkali
ISO 685 Analysis of soaps – Determination of total alkali content and total fatty matter content
SLS 102 Rules for rounding off numerical values
SLS 428 Random sampling methods
SLS 457 Classification of cosmetic raw materials and adjuncts
Part 1 : Dyes, colours and pigments recognized as safe
Part 2 : Raw material and adjuncts other than dyes, colours and pigments not recognized as safe
SLS 1316 Code of good manufacturing practices for cosmetics industry

## 3 REQUIREMENTS

### 3.1 General requirements

**3.1.1**. Shaving soap shall be a well saponified product and homogenized. It may be formed into sticks or cakes or tablets in small containers. It shall be free from objectionable odour and shall not develop such odours during storage within the declared shelf life. It shall produce a quick and copious lather, a softening effect on the hair and no detrimental effect on the skin, both during and after a shave.

**3.1.2** The shaving soap shall be manufactured by a process adhering to Good Manufacturing Practices (GMP) complying with **SLS 1316**.

**3.1.3** Shaving soap shall meet performance and stability specifications given by the manufacturer based on in-vitro studies for the complete duration of the declared shelf life. The date of expiry / best before / shelf life of the finished product shall be determined on the results of stability.

### 3.2 Raw materials

**3.2.1** The dyes, colourants and pigments used, if any, shall comply with the provisions of **SLS 457 : Part 1**.

**3.2.2** The raw materials and adjuncts other than dyes, colourants and pigments shall comply with the provisions of **SLS 457: Part 2.**

### 3.3 Other Requirements

**3.3.1** Shaving soap shall also comply with the following requirements given in Table **1**, when tested according to the relevant methods given in Column (**4**) and the results recalculated according to **7.1** for characteristics (ii) to (v) of the table.

**TABLE 1 – Requirements for shaving soap**

| SI No. (1) | Characteristic (2) | Requirement (3) | Method of test (4) |
|---|---|---|---|
| i) | Total fatty matter, per cent by mass, min. | 76.5 | ISO 685 |
| ii) | Matter insoluble in ethanol, per cent by mass, max. | 1.5 | ISO 673 |
| iii) | Total free alkali as KOH, per cent by mass, max**.** | 0.04 | ISO 684 |
| iv) | Free fatty acids, calculated as stearic acid, per cent by mass, max. | 1.0 | Appendix B |
| v) | Matter insoluble in water, per cent by mass, max. | 0.4 | Appendix C |

### 3.3.2 Mass of soap

Net mass of shaving soap indicated on the wrapper shall be complied with the recalculated mass of soap as given in **7.2**.

## 4 PACKAGING AND MARKING

**4.1** Type and shape of containers for shaving soap shall be as agreed to between the purchaser and the supplier.

**4.2** Every stick, cake or tablet in small containers shall be well wrapped or packed and the wrapper or package shall be marked legibly and indelibly with the following:

a) Name of the product as ‘Shaving Soap” ;
b) Name and address of the manufacturer including country of origin (**NOTE:** *Name and address of the manufacturer and the distributors need to be marked on imported products)* ;
c) Registered trade mark, / brand name if any ;
d) Net mass in gram at declared total fatty matter (TFM) ;

e) Batch or code or lot identification number ; and
f) Date of manufacture and best before / shelf life (**NOTE :** *Date of manufacture may be used as the batch no. /lot identification no. / code no. if one batch is manufactured during the day.).*

**4.3** Where more than one stick, cake or tablet are packed into bulk containers, each bulk container shall be marked legibly and indelibly with the following :

a) Name of the product as 'Shaving Soap" ;
b) Name and address of the manufacturer including country of origin (**NOTE:** *Name and address of the manufacturer and the distributors need to be marked on imported products)* ;
c) Registered trade mark, if any ;
d) Number of stick or cake or tablet in each bulk container ; and
e) Batch or code or lot identification number (**NOTE :** *Date of manufacture may be used as the batch no. / lot identification no. / code no. if one batch is manufactured during the day.).*

## 5 SAMPLING

Representative samples of soap for carrying out tests shall be drawn as specified in Appendix **A**.

## 6 METHODS OF TEST

**6.1** Tests shall be carried out as prescribed in Column (**4**) of Table **1**.

**6.2** During the analysis, unless otherwise stated, use only reagents of recognized analytical grade and only distilled water or water of equivalent purity.

## 7 CALCULATION OF RESULTS

**7.1** Shaving soap is liable to lose moisture on storage. The results for different characteristics obtained by the specified methods of analysis shall therefore be recalculated in relation to the specified minimum total fatty matter by means of equation:

$$\text{Recalculated result} = \text{Actual result} \times \frac{\text{Minimum specified total fatty matter (see Note)}}{\text{Actual total fatty matter}}$$

**NOTE :** *Minimum specified total fatty matter* = 76.5 *as given in* i*), Column (*3***)** *of Table* **1**.

**7.1.1** In each of the characteristics (ii) to (v) of Table **1**, the requirement of the characteristic will be met, if the recalculated result obtained as above is within the specified limits.

**7.2** The mass of soap shall be recalculated from the equation:

$$\text{Recalculated mass of soap before drain} = \text{Actual mass of soap} \times \frac{\text{Actual total fatty matter}}{\text{Declared total fatty matter}}$$

# APPENDIX A
# COMPLIANCE OF A LOT

The sampling scheme given in this Appendix shall apply where compliance of a lot to the requirements of this standard has to be assessed based on statistical sampling and inspection.

Where compliance with this standard, appropriate schemes of sampling and inspection shall be adopted based on manufacturer's control systems coupled with types, tests and testing procedures.

## A.1 LOT

All sticks, cakes or tablets of the same brand and size manufactured by the same organization under relatively similar conditions of manufacture shall be grouped together to form a lot.

## A.2 SCALE OF SAMPLING

**A.2.1** Samples shall be tested from each lot separately for ascertaining the conformity of the soap to the requirements of this specification.

**A.2.2** The number of sticks, cakes or tablets to be selected from the lot shall depend size of the lot and shall be in accordance with Column (**2)** of Table **2**.

**TABLE 2 – Scale of sampling**

| No. of sticks, cakes or Bowls in the lot (1) | No. of sticks, cakes or bowls to be selected (2) | Acceptance No. (3) |
|---|---|---|
| Up to 100 | 4 | 0 |
| 101 to 500 | 8 | 0 |
| 501 to 1 000 | 12 | 1 |
| 1 001 to 5 000 | 16 | 1 |
| 5 001 and above | 20 | 2 |

**A.2.3** Where the soap is packed in containers, the number of containers to be selected for taking the required number of samples shall be half the number given in Column (**2)** of Table **2**. At least 2 sticks, cakes or tablets shall be drawn from each container selected to form a sample.

**A.2.4** The required number of containers, sticks, cakes or tablet shall be chosen at random. A random number table specified in **SLS 428** shall be used in order to ensure randomness of selection.

## A.3 NUMBER OF TESTS

**A.3.1** The wrapper or package of each stick, cake or tablet selected as in **A.2.2** shall be inspected for marking (see **4.1**).

**A.3.2** Each container selected as in **A.2.3** shall be inspected for marking (see **4.2**).

**A.3.3** The mass of each stick, cake or tablet selected as in **A.2.2** shall be determined and recalculated as given in **7.2** ( see **3.3.2**).

**A.3.4** Each stick, cake or tablet shall be cut into halves along their longer axes. One half of each stick, cake or tablet shall be sliced finely and mixed together to form a composite sample.

**A.3.5** Tests for the requirements given in **3.3.1** shall be carried out on this composite sample.

## A.4 CRITERIA FOR CONFORMITY

A lot shall be considered to be in conformity to the requirements of this specification if the following conditions are satisfied:

**A.4.1** Each soap wrapper or package inspected as in **A.3.1** satisfies the marking and labeling requirements.

**A.4.2** Each soap container inspected as in **A.3.2** satisfies the marking and labeling requirements.

**A.4.3** The number of defective sticks, cakes or tablets is less than or equal to the corresponding acceptance number given in Column **(3)** of Table **2**.

**NOTE** : *A defective is a stick, cake or tablet of which the recalculated mass, determined for each observation as described in* **7.2** *is less than the mass indicated on the wrapper or package.*

**A.4.4** The composite sample tested as in **A.3.5** satisfies the relevant requirements.

# APPENDIX B
# DETERMINATION OF FREE FATTY ACIDS

## B.1 REAGENTS

**B.1.1** Ethanol, 95 per cent (v/v)

**B.1.2** Potassium hydroxide, 0.1 M ethanolic solution

**B.1.3** Phenolphthalein indicator 0.5 per cent (m/v) solution in 95 per cent (v/v) ethanol

## B.2 PROCEDURE

Add 0.5 ml of the phenolphthalein solution to 100 ml of boiling ethanol in a suitable beaker, allow to cool to 70 $^{o}$C and neutralize at this temperature with the ethanolic potassium hydroxide solution. Dissolve in this solution 5 g of the soap as quickly as possible by heating. If the solution is not alkaline, titrate with the ethanolic potassium hydroxide solution until the faint pink colour persists for 15 seconds maintaining the temperature at 70 $^{o}$C throughout the titration.

## B.3 CALCULATION

Free fatty acids, as stearic acid, per cent by mass $= \frac{28.45}{m} \times V \times M$

where,

$V$ is the volume, of 0.1 M ethanolic potassium hydroxide required in millilitres ; and
$m$ is the mass, of the test portion taken originally in gram.
$M$ is the molarity of ethanolic potassium hydroxide in moles per litre.

# APPENDIX C
# DETERMINATION OF MATTER INSOLUBLE IN WATER

## C.1 REAGENTS

**C.1.1** Ethanol, 95 per cent (v/v)

**C.1.2** Phenolphthalein indicator 0.5 per cent (m/v) solution in 95 per cent (v/v) ethanol

## C.2 PROCEDURE

Dry 5 g of soap in a tared beaker by adding 10 ml of alcohol and evaporating to dryness on a steam bath. Repeat this process three times and finally dry the soap to constant weight at 100 $^{o}$C . Dissolve the dried soap in 100 ml of the ethanol previously made neutral to phenolphthalein. Filter the solution through a previously dried (at 100 $^{o}$C) and weighed filter paper or through a weighed Gooch or sintered glass crucible with suction (see Note). Transfer the insoluble matter to the filter paper and wash thoroughly with hot neutral ethanol until all the soap has been removed. Change the receivers, extract the residue with water at 60 $^{o}$C and wash the filter thoroughly. Dry the filter and residue at 100 $^{o}$C to 105 $^{o}$C for 3 hours and weigh the matter insoluble in water.

**NOTE :** *The solution should be protected from carbon dioxide and other acid fumes during the operation.*

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**AMD 552**

**AMENDMENT NO: 01 TO SLS 36:2009**

# SRI LANKA STANDARD SPECIFICATION FOR SHAVING SOAP
**(*Second Revision*)**

**SRI LANKA STANDARDS INSTITUTION**

**AMD 552**

**Amendment No: 01 approved on 2021-04-30 to SLS 36:2009**

**SRI LANKA STANDARD SPECIFICATION FOR SHAVING SOAP**
**(*Second Revision*)**

## FOREWORD

Delete the text given in fifth paragraph and substitute the following:

"This Specification is subject to the restrictions imposed under the applicable State Legislative requirements. "

## 2 REFERENCES

Delete the "SLS 457" and "SLS 1316" in the reference list and substitute the followings:

| | |
|---|---|
| "SLS 457 | Cosmetics- Classification of raw materials<br>Part 1: Substances permitted subject to restrictions and permitted colourants, preservatives and UV filters<br>Part 2: Prohibited substances |
| SLS ISO 22716 | Guidelines on good manufacturing practices for cosmetics" |
| SLS 1587 | Cosmetics - Packaging and labelling" |

### 3.1 General requirements

Delete the "**SLS 1316**" and substitute the "**SLS ISO 22716**" at the end of the text given in Clause **3.1.2**"

Insert the following new Clause:

**3.1.4** "It shall be the responsibility of the manufacturer to provide evidence for assessment of safety on human health in the final product formulation before releasing the product for sale. Results of safety assessments/such studies shall be produced, whenever required."

### 3.2 Raw materials

Delete the Clauses **3.2.1** and **3.2.2** and substitute with the following:

**3.2.1** "The raw materials used shall comply with the provisions of Part **1** and Part **2** of **SLS 457**."

**AMD 552**

## 4 PACKAGING AND MARKING

Insert the following new Clause:

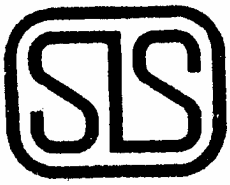
"**4.4** The marking and labelling shall also be in accordance with **SLS 1587**."

……

# *SLS CERTIFICATION MARK*

*The Sri Lanka Standards Institution is the owner of the registered certification mark shown below. Beneath the mark, the number of the Sri Lanka Standard relevant to the product is indicated. This mark may be used only by those who have obtained permits under the SLS certification marks scheme. The presence of this mark on or in relation to a product conveys the assurance that they have been produced to comply with the requirements of the relevant Sri Lanka Standard under a well designed system of quality control inspection and testing operated by the manufacturer and supervised by the* SLSI *which includes surveillance inspection of the factory, testing of both factory and market samples.*

*Further particulars of the terms and conditions of the permit may be obtained from the* Sri *Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.*




Printed at SLSI (Printing Unit)

## SRI LANKA STANDARDS INSTITUTION

The Sri Lanka Standards Institution (SLSI) is the National Standards Organization of Sri Lanka established under the Sri Lanka Standards Institution Act No. 6 of 1984 which repealed and replaced the Bureau of Ceylon Standards Act No. 38 of 1964. The Institution functions under the Ministry of Science & Technology.

The principal objects of the Institution as set out in the Act are to prepare standards and promote their adoption, to provide facilities for examination and testing of products, to operate a Certification Marks Scheme, to certify the quality of products meant for local consumption or exports and to promote standardization and quality control by educational, consultancy and research activity.

The Institution is financed by Government grants, and by the income from the sale of its publications and other services offered for Industry and Business Sector. Financial and administrative control is vested in a Council appointed in accordance with the provisions of the Act.

The development and formulation of National Standards is carried out by Technical Experts and representatives of other interest groups, assisted by the permanent officers of the Institution. These Technical Committees are appointed under the purview of the Sectoral Committees which in turn are appointed by the Council. The Sectoral Committees give the final Technical approval for the Draft National Standards prior to the approval by the Council of the SLSI.

All members of the Technical and Sectoral Committees render their services in an honorary capacity. In this process the Institution endeavours to ensure adequate representation of all view points.

In the International field the Institution represents Sri Lanka in the International Organization for Standardization (ISO), and participates in such fields of standardization as are of special interest to Sri Lanka.

Printed at the Sri Lanka Standards Institution, 17, Victoria Place, Elvitigala Mawatha, Colombo 08.