AFRICAN STANDARD

DARS 1475: 2026

Second Edition 2026

General purpose liquid soap — Specification

Draft African Standard for comments only

Reference No. WD-ARS 1475:2026(E)
ICS 71.100.40

© ARSO 2026

Table of contents

Draft African Standard for comments only

© ARSO 2026 — All rights reserved

Foreword

The African Organization for Standardization (ARSO) is an African intergovernmental organization established by the United Nations Economic Commission for Africa (UNECA) and the Organization of African Unity (AU) in 1977. One of the fundamental mandates of ARSO is to develop and harmonize African Standards (ARS) for the purpose of enhancing Africa's internal trading capacity, increase Africa's product and service competitiveness globally and uplift the welfare of African communities. The work of preparing African Standards is normally carried out through ARSO technical committees. Each Member State interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, Regional Economic Communities (RECs), governmental and non-governmental organizations, in liaison with ARSO, also take part in the work.

ARSO Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare ARSO Standards. Draft ARSO Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an ARSO Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ARSO shall not be held responsible for identifying any or all such patent rights.

This African Standard was prepared by the ARSO Technical Harmonization Committee Number 35 on Surface Active Agent (ARSO/TC 35).

© African Organisation for Standardisation 2017 — All rights reserved*

ARSO Central Secretariat
International House 3rd Floor
P. O. Box 57363 — 00200 City Square
NAIROBI, KENYA

Tel. +254-20-2224561, +254-20-3311641, +254-20-3311608
Fax: +254-20-218792
E-mail: arso@arso-oran.org
Web: www.arso-oran.org

Draft African Standard for comments only

* © 2017 ARSO — All rights of exploitation reserved worldwide for African Member States' NSBs.

Copyright notice

This ARSO document is copyright-protected by ARSO. While the reproduction of this document by participants in the ARSO standards development process is permitted without prior permission from ARSO, neither this document nor any extract from it may be reproduced, stored or transmitted in any form for any other purpose without prior written permission from ARSO.

Requests for permission to reproduce this document for the purpose of selling it should be addressed as shown below or to ARSO's member body in the country of the requester:

© African Organisation for Standardisation 2017 — All rights reserved

ARSO Central Secretariat
International House 3rd Floor
P.O. Box 57363 — 00200 City Square
NAIROBI, KENYA

Tel: +254-20-2224561, +254-20-3311641, +254-20-3311608
Fax: +254-20-218792

E-mail: arso@arso-oran.org
Web: www.arso-oran.org

Reproduction for sales purposes may be subject to royalty payments or a licensing agreement. Violators may be prosecuted.

Draft African Standard for comments only

 © ARSO 2026 — All rights reserved

Introduction

<Text indicating rationale for the development/harmonization of the standard>

Draft African Standard for comments only

© ARSO 2026 — All rights reserved

General purpose liquid soap — Specification

1 Scope

This Draft African Standard specifies the requirements and test methods for general purpose liquid soap used for general cleaning such as dish washing, laundry use, and for personal hygiene.

It does not cover shampoos and products intended for specific purposes, such as those for industrial and surgical uses.

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.

DARS 1524-1 Cosmetics — Safety of cosmetic products ingredients — Part 1: List of prohibited substances

DARS 1524-2 Cosmetics — Safety of cosmetic products ingredients — Part 2: List of substances which cosmetic products must not contain except subject to the restrictions laid down

ISO 456, Surface active agents — Analysis of soaps — Determination of free caustic alkali

ISO 684, Analysis of soap — Determination of Total free alkali

ISO 685, Analysis of soap — Determination of alkali content and total fatty matter content

ISO 673, Analysis of soap — Determination of ethanol insoluble matter

ISO 862, Surface active agents — Vocabulary

ISO 2268, Surface active agents (non-ionic) — Determination of polyethylene glycols and non-ionic active matter (adducts) — Weibull method

ISO 2271, Surface active agents — Detergents — Determination of anionic-active matter by manual or mechanical direct two-phase titration procedure

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 solutions — Potentiometric method

ISO 8212, Soaps and detergents — Techniques of sampling during manufacture

Draft African Standard for comments only

© ARSO 2026 — All rights reserved

ISO 16212, Cosmetics — Microbiology — Enumeration of yeast and mould

ISO 21149, Cosmetics — Microbiology — Enumeration and detection of aerobic mesophilic bacteria

ISO 21392, Cosmetics — Analytical methods — Measurement of traces of heavy metals in cosmetic finished products using ICP/MS technique

3 Definitions and abbreviations

For the purpose of this standard the terms and definitions given in ISO 862 and the following shall apply.

ISO and IEC maintain terminological datatbases for use in standards at the following addresses
- IEC Electropedia: available at http:/.www.electropedia.org/
- ISO online browsing platform: available at http://www.iso.org/obp

4 Requirements

4.1 General requirements

4.1.1 The General purpose liquid soap shall consist essentially of an aqueous solution of potassium soaps, sodium soaps or both, made from oils, fatty acids or their mixture. It shall be a homogeneous, clear, translucent or opaque liquid with good lathering and cleaning properties. It may contain permissible synthetic detergents.

4.1.2 The General purpose liquid soap shall remain a homogeneous stable product and shall show no sign of separation or sedimentation when kept at 5 °C for 24 h.

4.1.3 The General purpose liquid soap shall not contain any material listed as a prohibited in DARS 1524-1 and DARS 1524-2.

4.2 Specific requirements

The General purpose liquid soap shall comply with the specific quality requirements specified in Table 1.

Table 1 — Specific quality requirements for General purpose liquid soap

	Characteristics	Requirement	Test method
1.	Total fatty matter, % by mass, *min.*	15.0	ISO 685
2.	Matter insoluble in alcohol, % by mass, *max.*	0.5	Annex B
3.	Free caustic alkali (as K_2O) % by mass, *max.*	0.03	ISO 456
4.	pH	5 - 9	ISO 4316
5.	Synthetic detergents, percent by	2.0	ISO 2271

Draft African Standard for comments only

 © ARSO 2026 — All rights reserved

	mass, max.		ISO 2871-1 ISO 2871-2 ISO 2268
6.	Irritation to product	shall not be irritating to normal skin	Annex A
7.	Heavy Metals Lead, mg/kg, max Arsenic, mg/kg, max Mercury, mg/kg, max	 10 2 1	ISO 21392
NOTE 1 - The total amount of heavy metals as lead, mercury and arsenic, in combination, in the finished product should not exceed 10 mg/kg. NOTE 2 - The heavy metals including lead, mercury and arsenic may be as a result of contamination during processing and should not be deliberately added as ingredients.			

4.3 Microbiological Requirements

The Microbiological requirements of General purpose liquid soap when tested in accordance with the relevant tests in column 3 of Table 2, shall comply with the requirements given in column 2 of Table 2.

Table 2 — Microbiological requirements

1	2	3
Parameter	**Requirements**	**Test method**
Total bacterial count, cfu/g, max.	1000	ISO 21149
Yeast and Mould, cfu/g, max	1000	ISO 16212

5 Sampling

5.1 Preparation of test samples

For this purpose, scale of sampling and preparation of test samples shall be as prescribed in ISO 8212.

5.2 Number of tests

5.2.1 Tests for determination of total fatty matter and free caustic alkali and matter insoluble in alcohol 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 For each of the characteristics which has been determined on the individual samples (see 5.2.1) the mean and the range (R) of the test results shall be calculated as follows:

Mean = sum of test result/number of test result

Draft African Standard for comments only

© ARSO 2026 — All rights reserved

Range (R) = the difference between the maximum and the minimum value of test results. The lot shall be deemed as conforming to the requirements given in 5.2.1 if the expression is greater than or equal to minimum value given in Table 1 and is less than or equal to maximum value given in Table 1.

5.3.2 For declaring the conformity of a 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.

7 Packing and Marking

7.1 Packaging

The General purpose liquid soap shall be packed in protective containers that will not allow for damage of the product or its contamination.

7.2 Marking

The container shall be securely closed and marked legibly and indelibly with the following information:

a) name of the product as “General purpose liquid soap”;

b) manufacturer’s name and physical address

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

c) net content of each container;

d) batch number or lot number;

e) date of manufacture and best before date;

f) list of ingredients in descending order of quantity;

g) country of origin;

h) instructions for use; and

i) date of manufacture and best before date.

Draft African Standard for comments only

 © ARSO 2026 — All rights reserved

Annex A
(normative)

Testing Procedure for Assessment of Skin Irritation Potential in Human Volunteers

A.1 Objective

To assess the skin tolerance and irritation potential of cosmetic ingredients under controlled conditions using a stepwise human volunteer testing approach.

A.2 Pre-Study Requirements

Before initiation of the study:

i. Conduct a full safety assessment by a qualified safety assessor.
ii. Review chemical structure, toxicological data, and related substances.
iii. Confirm that no significant health risk to volunteers is foreseeable.
iv. Ensure compliance with ethical requirements and obtain approval where applicable.
v. Define study objectives, methodology, evaluation criteria, and adverse event management procedures.
vi. Obtain written informed consent from all participants.

A.3 Selection of Volunteers

A.3.1 Inclusion Criteria

i. Healthy informed volunteers meeting study requirements.
ii. Appropriate age, gender, and skin condition.
iii. Agreement to comply with study instructions.

A.3.2 Exclusion Criteria

i. Pregnancy or nursing.
ii. Skin damage, tattoos, scars, or active skin disease at test sites.
iii. Medication or medical history affecting skin response.
iv. Participation in conflicting or recent studies.

A.3.3 Withdrawal Criteria

Participants shall be withdrawn if:

i. Study instructions are not followed;
ii. Illness or adverse reactions occur;
iii. The participant chooses to withdraw.

A.4 Test Materials

i. Prepare test materials at concentrations appropriate for the study objective and expected exposure conditions.
ii. Use suitable vehicles that do not independently cause irritation.
iii. Include reference/control materials where appropriate.

A.5 Test Methods

Testing shall follow a stepwise progression from minimal to increased exposure until the study objective is achieved.

© ARSO 2026 — All rights reserved

A.5.1 Examples of Test Types

A.5.1.1 Single Application Open Test
Apply material to exposed skin under non-occlusive conditions.

A.5.1.2 Repeat Application Open Test
Repeated applications to evaluate cumulative irritation effects.

A.5.1.3 Closed Patch Test (Occlusive or Semi-Occlusive)
Apply material using patches for defined exposure periods (e.g. 4 h, 24 h, or 48 h).

A.5.1.4 Repeat Application Patch Test
Repeated occlusive applications to assess cumulative irritation potential.

A.5.2 Test Procedure

A.5.2.1 Application

i. Assess baseline skin condition before first application.
ii. Randomize test sites where appropriate.
iii. Apply measured amounts sufficient to cover the test area without overflow.
iv. Maintain consistent patch placement during repeated studies.

A.5.2.2 Exposure Conditions

i. Define exposure duration, concentration, and application type in the protocol.
ii. Increase exposure progressively only if previous stages show acceptable tolerance.

A.5.2.3 Removal of Test Material

Remove materials gently without rubbing to avoid cross-contamination or mechanical irritation.

A.6 Evaluation of Skin Responses

A.6.1 Visual Assessment

i. Assess treatment sites at predefined intervals using a standardized scoring scale.
ii. Evaluate erythema, oedema, dryness, and related skin reactions.
iii. Use the same trained assessor and consistent lighting conditions throughout the study.

A.6.2 Instrumental Assessment

Where applicable, objective measurements may include:

i. Transepidermal Water Loss (TEWL);
ii. Redness intensity measurements;
iii. Laser Doppler flowmetry.

Measurements shall be conducted under controlled environmental conditions with calibrated instruments.

A.7 Data Analysis and Interpretation

i. Perform statistical analyses as specified in the study protocol.
ii. Compare responses of test materials with reference or control materials.
iii. Interpret results based on irritation severity, exposure conditions, and cumulative effects.

© ARSO 2026 — All rights reserved

Annex B
(normative)

Water insoluble matter content of soap products

B.1 Scope

This standard specifies a method for the determination of the water insoluble matter content of soap products.

B.2 Apparatus

B.2.1 Oven. A drying oven capable of being maintained at 105 ± 5 °C.

B.3 Procedure

Soap powders, gel soaps

Thoroughly wash the residue on the glass fibre filter, retained from the determination of free alkali content and free acid content, with hot distilled water. Dry the residue and the filter in the oven maintained at 105 ± 5 °C, cool in a desiccator, and weigh.

B.4 Calculation

Soap powders, gel soaps

Water insoluble matter content, %(m/m) $= \frac{A \times M \times 100}{B \times N}$

where

A = mass of the residue, g

B = mass of the test sample used, g

M = required minimum fatty matter content of the sample, %

N = actual fatty matter content of the sample, %.

Draft African Standard for comments only

© ARSO 2026 — All rights reserved

Bibliography

KS EAS 790:2013, *Kenya Standard — Liquid Soap — Specification*

Cosmetics Europe: Guidelines for the Assessment of Skin Tolerance of Potentially Irritant Cosmetic Ingredients,1997

OECD Guideline for the Testing of Chemicals, In Vitro Skin Irritation: Reconstructed Human Epidermis Test Methods, Adopted: 14 June 2021

IS 11601:2002, Methods of Safety evaluation of synthetic detergents – Test for skin irritation and sensitization potential of synthetic detergents

ARS 1475: 2017 General purpose liquid soap — Specification

Draft African Standard for comments only

 © ARSO 2026 — All rights reserved

Draft African Standard for comments only

© ARSO 2026 — All rights reserved