
INTERNATIONAL STANDARD



894

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**Surface active agents — Technical sodium primary
alkylsulphates — Methods of analysis**

Agents de surface — prim. Alkylsulfates de sodium techniques — Méthode d'analyse

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Price based on 8 pages

FOREWORD

ISO (the International Organization for Standardization) is a worldwide federation of national standards institutes (ISO member bodies). The work of developing International Standards is carried out through ISO technical committees. Every member body interested in a subject for which a technical committee has been set up has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work.

Draft International Standards adopted by the technical committees are circulated to the member bodies for approval before their acceptance as International Standards by the ISO Council.

International Standard ISO 894 was developed by Technical Committee ISO/TC 91, *Surface active agents*, and was circulated to the member bodies in October 1975.

It has been approved by the member bodies of the following countries :

Australia	Iran	South Africa, Rep. of
Belgium	Japan	Spain
Brazil	Mexico	Switzerland
Canada	Netherlands	Turkey
France	New Zealand	United Kingdom
Germany	Poland	U.S.A.
Hungary	Portugal	U.S.S.R.
India	Romania	

No member body expressed disapproval of the document.

This International Standard cancels and replaces ISO Recommendation R 894-1968, of which it constitutes a technical revision.

Surface active agents – Technical sodium primary alkylsulphates – Methods of analysis

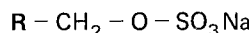
0 INTRODUCTION

The word "primary" preceding the generic name for the products in the title is intended to distinguish these products from those which, in accordance with current scientific usage, could be designated as technical sodium secondary alkylsulphates. As shown in the general formula given below, the former are derived from primary alcohols, whereas the latter may be considered as derived from secondary alcohols.

It is therefore the former which are the subject of this International Standard. They are commonly known today as technical sulphates of primary fatty alcohols.

In order to simplify the text of this International Standard and avoid unnecessary repetition, the word "primary" has been omitted from the term "sodium alkylsulphates", but it should be understood that only "sodium primary alkylsulphates" are covered.

The general formula of the products which are the subject of this International Standard is



where R is an aliphatic radical.

1 SCOPE

This International Standard specifies methods of analysis of technical sodium alkylsulphates. It covers the following determinations :

- Measurement of pH.
- Determination of water content.
- Determination of free alkalinity or free acidity.
- Determination of total alkalinity.
- Determination of matter extractable by light petroleum.
- Determination of matter extractable by diethyl ether after acid hydrolysis (combined technical fatty alcohols).
- Determination of sodium sulphate content.

- Determination of sodium chloride content.

It also sets out, in an annex, a general scheme of analysis.

2 FIELD OF APPLICATION

This International Standard is applicable only to technical sodium alkylsulphates in powder, paste or liquid form (aqueous solutions), free from any product extraneous to their manufacture.

3 REFERENCES

ISO 607, *Surface active agents – Detergents – Methods of sample division.*¹⁾

ISO 2877, *Sulphuric acid for industrial use – Determination of chlorides content – Potentiometric method.*

ISO 4314, *Surface active agents – Determination of free alkalinity or free acidity – Titrimetric method.*

ISO 4315, *Surface active agents – Determination of alkalinity – Titrimetric method.*

ISO 4316, *Surface active agents – Determination of the pH of aqueous solutions – Potentiometric method.*

ISO 4317, *Surface active agents – Determination of water content – Karl Fischer method.*

ISO 4318, *Surface active agents and soaps – Determination of water content – Azeotropic distillation method.*

ISO . . . , *Surface active agents – Determination of sodium sulphate content – Titrimetric method.*²⁾

4 SAMPLING

Prepare and store a laboratory sample of approximately 300 g according to the instructions given in ISO 607.

5 GENERAL PRINCIPLE³⁾

Preparation of an aqueous alcoholic solution of a test portion, from which are isolated the products extractable by light petroleum.

1) In preparation. (Revision of ISO/R 607.)

2) In preparation.

3) See the general scheme of analysis in the annex.