INTERNATIONAL STANDARD 672

INTERNATIONAL ORGANIZATION FOR STANDARDIZATION · МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ · ORGANISATION INTERNATIONALE DE NORMALISATION

Soaps — Determination of moisture and volatile matter content — Oven method

Savons — Dosage de l'eau et des matières volatiles — Méthode par étuvage

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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 672 was developed by Technical Committee ISO/TC 91, *Surface active agents,* and was circulated to the member bodies in August 1975.

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

Australia	India	South Africa, Rep. of
Austria	Iran	Switzerland
Belgium	Italy	Thailand
Brazil	Japan	Turkey
Bulgaria	Netherlands	United Kingdom
Canada	New Zealand	U.S.A.
France	Poland	Yugoslavia
Germany	Portugal	
Hungary	Romania	

The member body of the following country expressed disapproval of the document on technical grounds :

Spain

This International Standard cancels and replaces ISO Recommendation R 672-1968, of which it constitutes a technical revision.

Printed in Switzerland

Soaps — Determination of moisture and volatile matter content — Oven method

1 SCOPE

This International Standard specifies an oven method for the determination of the moisture and volatile matter content of commercial soaps, excluding compounded products.

NOTE — Attention is drawn to ISO 4318 which specifies an azeotropic distillation method for determination of water content.

2 FIELD OF APPLICATION

This method permits the determination of water and other substances present which are removed by heating at 103 ± 2 °C.

3 REFERENCES

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

ISO . . ., *Soaps — Sampling.*[1)]

4 PRINCIPLE

Oven-drying of a given mass of sample to constant mass.

5 APPARATUS

Ordinary laboratory apparatus and in particular

5.1 Evaporating dish or **crystallizing dish**, of diameter 6 to 8 cm and depth 2 to 4 cm.

5.2 Glass stirring rod.

5.3 Sand, washed and calcined, or **granulated pumice**.

5.4 Oven, capable of being controlled at 103 ± 2 °C.

5.5 Desiccator, containing an efficient desiccant, for example phosphorus(V) oxide (P_2O_5).

Calcium chloride is not satisfactory.

6 SAMPLING

The laboratory samples of soaps shall be prepared and stored according to the instructions given in ISO . . .

7 PROCEDURE

7.1 Test portion

Weigh, to the nearest 0,01 g, about 10 g of the laboratory sample. (In the case of soap bars, cut it into small pieces.)

7.2 Determination

Place the stirring rod (5.2) in the dish (5.1) and, only if the analysis is to be carried out on soft soap or on soap liquefiable at 103 ± 2 °C, also place in the dish about 10 g of the sand or pumice (5.3). Dry the dish and stirring rod, with or without added sand or pumice as appropriate, in the oven (5.4), controlled at 103 ± 2 °C. Allow to cool in the desiccator (5.5) and weigh.

Add the test portion (7.1) to the dish and, if sand or pumice is used, mix this in by means of the stirring rod.

Place the dish in the oven, controlled at 103 ± 2 °C.

After 1 h, remove from the oven and when cool, reduce the material to a fine powder by means of the stirring rod.

Replace in the oven and after 1 h, remove the dish. Place in the desiccator and leave just long enough for it to cool completely to ambient temperature and then weigh. Repeat the operations of heating for periods of 1 h, cooling and weighing until the difference in mass between two successive weighings is less than 0,01 g.

Note the result of the final weighing.

1) In preparation.