INTERNATIONAL STANDARD 3671

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Plastics — Aminoplastic moulding materials — Determination of volatile matter

Matières plastiques — Matières à mouler aminoplastes — Détermination des matières volatiles

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FOREWORD

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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 3671 was drawn up by Technical Committee ISO/TC 61, *Plastics*, and was circulated to the Member Bodies in February 1975.

It has been approved by the Member Bodies of the following countries :

Belgium	Ireland	Spain
Brazil	Israel	Sweden
Canada	Japan	Switzerland
Chile	Netherlands	Turkey
France	Poland	United Kingdom
Hungary	Portugal	U.S.A.
India	Romania	U.S.S.R.
Iran	South Africa, Rep. of	Yugoslavia

The Member Body of the following country expressed disapproval of the document on technical grounds :

Germany

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Plastics — Aminoplastic moulding materials — Determination of volatile matter

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method for the determination of volatile matter (predominantly water) in aminoplastic moulding materials, by drying in an oven.

2 APPARATUS

2.1 Two wide-mouthed weighing bottles, of internal diameter 45 mm and depth 35 mm, provided with tight-fitting covers.

2.2 Well-ventilated oven, capable of being controlled at 55 ± 1 °C.

2.3 Balance, with an accuracy of 0,001 g.

3 STORAGE OF SAMPLE

Store the sample in an airtight container prior to testing, to prevent the loss or gain of water or other volatile matter.

4 PROCEDURE

Weigh 5 ± 0,1 g of the sample to the nearest 0,001 g into a clean dried weighing bottle (2.1) and spread evenly over the bottom of the weighing bottle. Conduct the test in duplicate.

Place the bottles, with covers removed, in the oven (2.2), controlled at 55 ± 1 °C. After a period of 3 h, close the weighing bottles, remove from the oven and place in a desiccator at room temperature. After a period of at least 1 h, ease the covers of the weighing bottles to equalize pressure, and reweigh the bottles.

5 EXPRESSION OF RESULTS

The volatile matter is given, as a percentage by mass, by the formula

$$\frac{m_1}{m_0} \times 100$$

where

m_0 is the original mass of the test portion;

m_1 is the loss in mass of the test portion.

Calculate the arithmetic mean of the two determinations.

6 TEST REPORT

The test report shall include the following particulars :

a) reference to this International Standard;

b) complete identification of the product tested;

c) the volatile matter content as the arithmetic mean of the two determinations;

d) the individual results of the two determinations.