SLOVENSKI STANDARD
SIST EN ISO 308:2000

01-maj-2000

Polimerni materiali - Materiali za oblikovanje na osnovi fenolnih smol - Doloļ evanje topnega v acetonu (navidezni deleģ smole v neoblikovanem stanju) (ISO 308:1994)

Plastics - Phenolic moulding materials - Determination of acetone-soluble matter (apparent resin content of material in the unmoulded state) (ISO 308:1994)

Kunststoffe - Phenolharz-Formmassen - Bestimmung des acetonlöslichen Anteils (Scheinbarer Harzgehalt von Formmassen in unverarbeitetem Zustand) (ISO 308:1994)

Plastiques - Matieres a mouler a base de phénoplastes - Détermination des matieres solubles dans l'acétone (teneur apparente en résine des matieres a l'état non moulé) (ISO 308:1994)

Ta slovenski standard je istoveten z: **EN ISO 308:1997**

ICS:

83.080.10 Duromeri Thermosetting materials

SIST EN ISO 308:2000 **en**

EUROPEAN STANDARD
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EUROPÄISCHE NORM

EN ISO 308

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Descriptors: see ISO document

English version

Plastics - Phenolic moulding materials - Determination of acetone-soluble matter (apparent resin content of material in the unmoulded state) (ISO 308:1994)

Plastiques - Matières à mouler à base de phénoplastes - Détermination des matières solubles dans l'acétone (teneur apparente en résine des matières à l'état non moulé) (ISO 308:1994)

Kunststoffe - Phenolharz-Formmassen - Bestimmung des acetonlöslichen Anteils (Scheinbarer Harzgehalt von Formmassen in unverarbeitetem Zustand) (ISO 308:1994)

This European Standard was approved by CEN on 16 October 1997.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the Central Secretariat or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the Central Secretariat has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and United Kingdom.

EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

Central Secretariat: rue de Stassart, 36 B-1050 Brussels

Foreword

The text of the International Standard from Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) has been taken over as an European Standard by Technical Committee CEN/TC 249 "Plastics", the secretariat of which is held by IBN.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by May 1998, and conflicting national standards shall be withdrawn at the latest by May 1998.

According to the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 308:1994 has been approved by CEN as a European Standard without any modification.

INTERNATIONAL STANDARD

ISO 308

Third edition
1994-10-01

Plastics — Phenolic moulding materials — Determination of acetone-soluble matter (apparent resin content of material in the unmoulded state)

Plastiques — Matières à mouler à base de phénoplastes — Détermination des matières solubles dans l'acétone (teneur apparente en résine des matières à l'état non moulé)

Reference number
ISO 308:1994(E)

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

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

International Standard ISO 308 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 12, *Thermosetting materials*.

This third edition cancels and replaces the second edition (ISO 308:1981), of which it constitutes a minor revision.

International Organization for Standardization
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Plastics — Phenolic moulding materials — Determination of acetone-soluble matter (apparent resin content of material in the unmoulded state)

1 Scope

This International Standard specifies a gravimetric method for the determination of the amount of matter that can be extracted by acetone, at a temperature near its boiling point, from a sample of finely divided phenolic moulding material. The method applies only to moulding materials based upon novolak resins and not to those based upon resols, as the latter type of resin may not be completely soluble in acetone.

In this International Standard, the amount of acetone-soluble matter is reported as the apparent resin content because, although the extract consists mainly of phenolic resin and hexamine, other acetone-soluble components such as lubricants and colorants or natural resins from the filler are normally also present and will therefore be reported as resin.

2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this International Standard. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this International Standard are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 472:1988, *Plastics — Vocabulary*.

ISO 800:1992, *Plastics — Phenolic moulding materials — Specification*.

3 Definitions

For the purposes of this International Standard, the definitions of moulding materials based on phenolic resins, novolak resins and resol resins given in ISO 472 and ISO 800 apply.

4 Principle

The acetone-soluble matter is extracted, using hot acetone, from a finely divided test portion. The extract is dried under controlled conditions and weighed.

5 Reagent

5.1 Acetone, pure.

6 Apparatus

6.1 Reduction device, for reducing coarse materials to a finer state of division.

6.2 Balance, accurate to 1 mg.

6.3 Extraction apparatus, of the type shown in figure 1. (A glass filter crucible may be used instead of a single-thickness extraction thimble.)

The single-thickness extraction thimble, which shall be free from acetone-soluble matter, together with a loose plug of cotton wool, if used, which shall also be free from acetone-soluble matter, shall be dried for 2 h in the oven (6.4) at approximately 105 °C and stored in the desiccator (6.5) until required.

It is permissible to use a modified Soxhlet apparatus, provided that the material in the extraction thimble is surrounded by the vapour of the solvent at its boiling

point. Any other extraction apparatus may be used, provided that it can be shown to give similar results.

6.4 Drying oven, capable of being maintained at approximately 105 °C.

6.5 Desiccator.

6.6 Weighing bottle, with ground-glass stopper.

7 Preparation of sample

7.1 Take a fully representative sample of the moulding material. If the material is in the form of preforms, flakes, coarse pieces or sheet (felted, oriented or woven), reduce it to powder or small pieces using the reduction device (6.1) before the test, taking care to avoid overheating. The thickness of the particles obtained shall not exceed 1,5 mm and their other dimensions shall not exceed 5 mm. The sample

Dimensions in millimetres

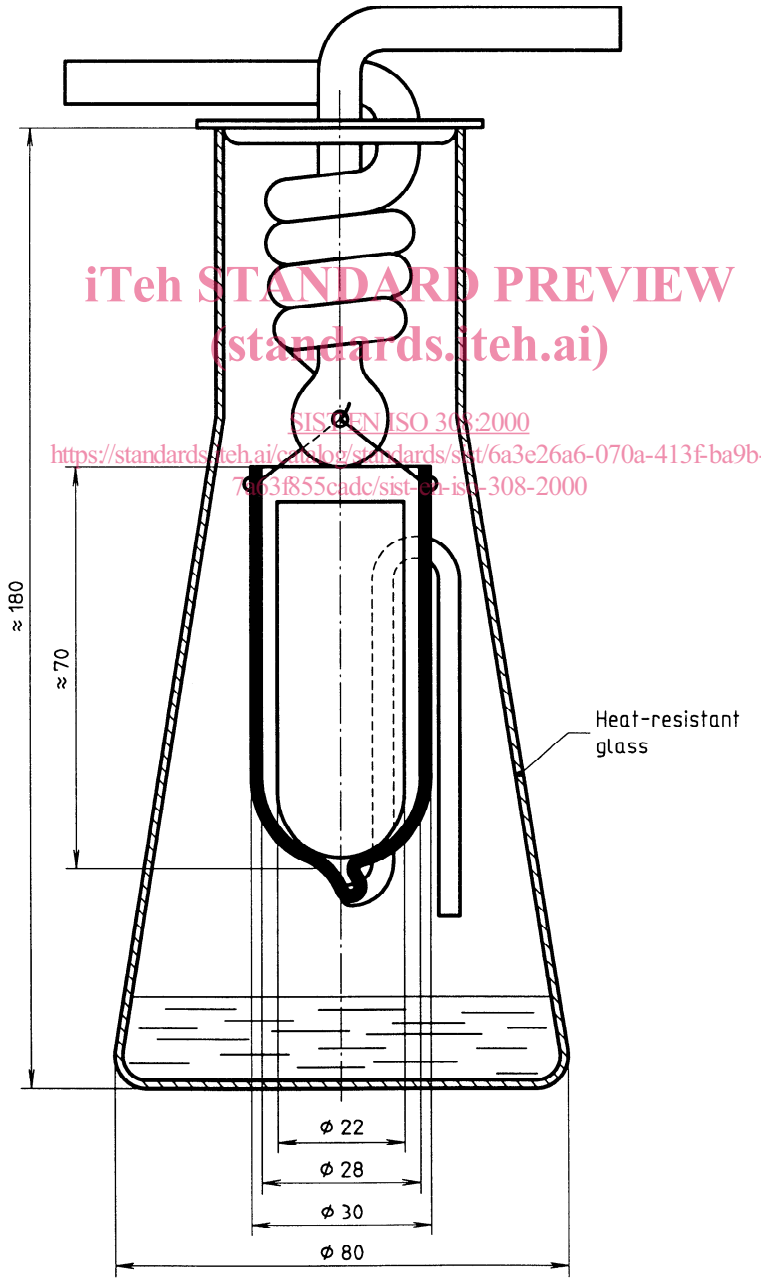

Figure 1 — Extraction apparatus