
International Standard



308

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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)

Second edition — 1981-11-15

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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 308 was developed by Technical Committee ISO/TC 61, *Plastics*.

This second edition was submitted directly to the ISO Council, in accordance with clause 5.10.1 of part 1 of the Directives for the technical work of ISO. It cancels and replaces the first edition (i.e. ISO 308-1976), which had been approved by the member bodies of the following countries :

Australia	India	Spain
Austria	Israel	Sweden
Belgium	Italy	Switzerland
Chile	Japan	Turkey
Czechoslovakia	Netherlands	United Kingdom
France	New Zealand	USA
Germany, F. R.	Poland	USSR
Hungary	Romania	

No member body had expressed disapproval of the document.

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

1 Scope and field of application

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 Principle

Hot extraction of the acetone-soluble matter from a finely divided test portion. Drying of the extract under controlled conditions and weighing of the dry extract.

3 Reagent

Acetone, pure.

4 Apparatus

4.1 Device, for reducing coarse materials to a finer state of division.

4.2 Balance, accurate to 0,001 g.

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

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.

4.4 Drying oven, capable of being controlled at approximately 105 °C.

4.5 Desiccator.

4.6 Weighing bottle, with ground glass stopper.

NOTE — The single-thickness extraction thimble free from acetone-soluble matter together with a loose plug of cotton wool, if used, also free from acetone-soluble matter, should be dried for 2 h in the oven (4.4) at 105 °C approximately and stored in the desiccator (4.5) until required.

Dimensions in millimetres

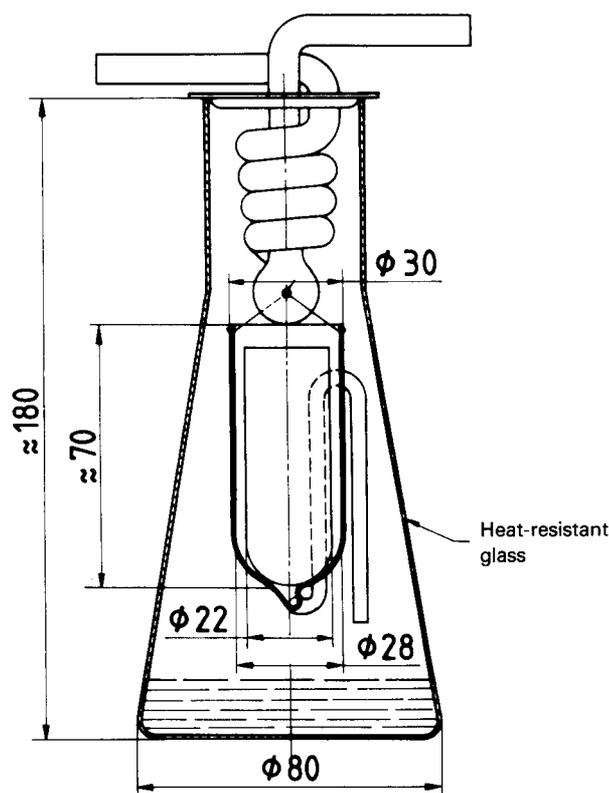


Figure — Extraction apparatus