

INTERNATIONAL STANDARD



60

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

Plastics — Determination of apparent density of material that can be poured from a specified funnel

Plastiques — Détermination de la masse volumique apparente des matières susceptibles de s'écouler à travers un entonnoir donné

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Descriptors : plastics, moulding materials, tests, physical tests, density measurement, bulk density.

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

This second edition was submitted directly to the ISO Council, in accordance with clause 6.12.1 of the Directives for the technical work of ISO. It cancels and replaces the first edition (i.e. ISO 60-1976), which had been approved by the member bodies of the following countries :

Australia	India	Portugal
Austria	Ireland	South Africa, Rep. of
Belgium	Israel	Spain
Chile	Italy	Sweden
Czechoslovakia	Japan	Turkey
Denmark	Mexico	United Kingdom
Finland	Netherlands	U.S.A.
France	New Zealand	U.S.S.R.
Germany	Pakistan	Yugoslavia
Greece	Poland	

No member body had expressed disapproval of the document.

Plastics — Determination of apparent density of material that can be poured from a specified funnel

1 SCOPE AND FIELD OF APPLICATION

This International Standard specifies a method of determining the apparent density, i.e. the mass per unit of volume, of loose material (powder or granular material) that can be poured from a funnel of specified design.

NOTE — For a method of determining the apparent density of loose moulding material that cannot be poured from a specified funnel, see ISO 61.

When the method is applied to relatively coarse materials, rather variable results may be obtained, owing to the error introduced when a straightedge blade is drawn across the top of the cylinder.

A knowledge of apparent density is of limited value in estimating the relative fluffiness or bulk of moulding materials, unless their densities in the moulded condition are approximately the same.

2 APPARATUS

2.1 Balance, accurate to 0,1 g.

2.2 Measuring cylinder, smoothly finished inside, which may be constructed of metal, of capacity $100 \pm 0,5$ ml, and internal diameter 45 ± 5 mm.

2.3 Funnel, of the form and dimensions shown in the figure, with a cover for the lower orifice (for example metal plate).

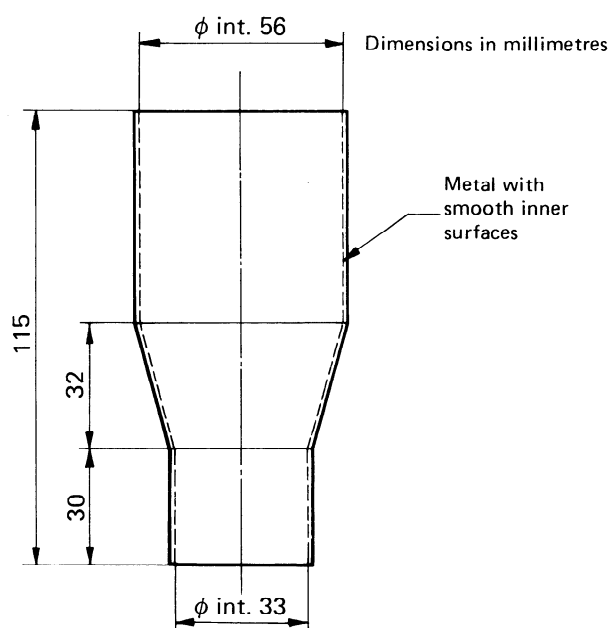


FIGURE — Funnel

3 PROCEDURE

3.1 Support the funnel (2.3) vertically with its lower orifice 20 to 30 mm above the measuring cylinder (2.2) and coaxial with it. Well mix the sample of the powder or granular material before test. With the lower orifice of the funnel closed by means of the cover, place a quantity of 110 to 120 ml of the powder or granular material in the funnel.