BRITISH STANDARD

BS EN ISO 61:2000

Incorporating Amendment No. 1 to BS 2782-6: Method 621B:1978 (renumbers the BS as BS EN ISO 61:2000)

Plastics — Determination of apparent density of moulding material that cannot be poured from a specified funnel

IMPORTANT NOTE. Before reading this method it is essential to read BS 2782-0, Introduction, issued separately.

The European Standard EN ISO 61:1999 has the status of a British Standard

ICS 83.080.01

BS EN ISO 61:2000

This British Standard, having been prepared under the direction of the Plastics Standards Committee, was published under the authority of the Executive Board on 31 January 1978.

Amendments issued since publication

Amd. No.	Date	Comments
10686	February 2000	Implements the European Standard

The following BSI references relate to the work on this standard:
Committee reference PLC/17
Draft for comment 77/50307 DC

ISBN 0 580 10028 6

National foreword

This British Standard is the English language version of EN ISO 61:1999, which is identical with ISO 61:1976.

Cross references

The British Standards, which implement International or European publications referred to in this document may be found in the BSI Standards Catalogue under the section entitled "International Standards Correspondence Index" or by using the "Find" facility of the BSI Standards Electronic Catalogue.

Warning note. This method does not necessarily detail all the precautions necessary to meet the requirements of the Health and Safety at Work etc. Act 1974. Attention should be paid to any appropriate safety precautions, and the method should be operated only by framed personnel.

A British Standard does not purport to include all necessary provisions of a contract. Users of British Standards are responsible for their correct application.

Compliance with a British Standard does not of itself confer immunity from legal obligations.

Summary of pages

This document comprises a front cover, an inside front cover, pages i and ii, the EN ISO title page, the EN ISO foreword, page 1 and a back cover.

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN ISO 61

June 1999

ICS 83.080.10

English version

Plastics - Determination of apparent density of moulding material that cannot be poured from a specified funnel (ISO 61:1976)

Matières plastiques - Détermination de la masse volumique apparente des matières à mouler non susceptibles de s'écouler à travers un entonnoir donné (ISO 61:1976)

Kunststoffe - Bestimmung der scheinbaren Dichte von Formmassen, die nicht durch einen gegebenen Trichter abfließen können (Stopfdichte) (ISO 61:1976)

This European Standard was approved by CEN on 6 May 1999.

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.

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

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Ref. No. EN ISO 61:1999 E

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 December 1999, and conflicting national standards shall be withdrawn at the latest by December 1999.

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 61:1976 has been approved by CEN as a European Standard without any modification.

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 moulding material that cannot be poured from a funnel of specified design.

NOTE – For a method of determining the apparent density of loose moulding material that can be poured from a specified funnel, see ISO 60.

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 1 000 ± 20 ml and internal diameter 90 ± 2 mm.

2.3 Plunger, consisting of a hollow cylinder of mass 2 300 ± 20 g, closed at one end and having an external diameter slightly smaller than the internal diameter of the measuring cylinder. The plunger may conveniently be weighted with lead shot.

3 PROCEDURE

3.1 Drop 60 ± 0,2 g of loose moulding material, little by little, into the measuring cylinder (2.2) so that it is distributed evenly with its surface as level as possible. Lower the plunger (2.3) slowly into the measuring cylinder until it is entirely supported by the material. After 1 min, measure the height of the material, with the plunger resting upon it, to the nearest 1 mm. A convenient method of measuring the height of the material is, for example, by means of a suitable scale marked vertically on the outside surface of the plunger.

3.2 Make three determinations on the sample of moulding material under test.

4 EXPRESSION OF RESULTS

The apparent density of the moulding material under test is given, in grams per millilitre (see note) by the formula

$$\frac{m}{A\,h}$$

where

m is the mass, in grams, of the material placed in the measuring cylinder (i.e. 60);

A is the internal cross-sectional area of the measuring cylinder, in square centimetres;

h is the height of moulding material in the measuring cylinder, in centimetres.

NOTE – Although apparent density is calculated in grams per cubic centimetre, it is expressed here in grams per millilitre for the sake of uniformity with ISO 60. No adjustment of the test result is required.

Take as the result the arithmetic mean of the results of the three determinations.

5 TEST REPORT

The test report shall include the following particulars :

a) complete identification of the material tested;

b) the individual results and the mean.

BS EN ISO 61:2000

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