Plastid. Plastifitseeritud polüvinüülkloriidist (PVC-P) vormimis- ja ekstrusioonimaterjalid. Osa 2: Proovikehade ettevalmistamine ja omaduste määramine

Plastics - Plasticized poly(vinyl chloride) (PVC-P) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties

EESTI STANDARDIKESKUS
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NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 2898-2:2008 sisaldab Euroopa standardi EN ISO 2898-2:2008 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 2898-2:2008 consists of the English text of the European standard EN ISO 2898-2:2008.
Standard on kinnitatud Eesti Standardikeskuse 15.12.2008 käskkirjaga ja jõustub sellekohase teate avaldamisel EVS Teatajas.	This standard is ratified with the order of Estonian Centre for Standardisation dated 15.12.2008 and is endorsed with the notification published in the official bulletin of the Estonian national standardisation organisation.
Euroopa standardimisorganisatsioonide poolt rahvuslikele liikmetele Euroopa standardi teksti kättesaadavaks tegemise kuupäev on 01.11.2008.	Date of Availability of the European standard text 01.11.2008.
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Võtmesõnad: determination, extrusion materials, moulding materials, plasticized polyvinyl chloride, plastics, properties, specimen preparation, test specimens, tests, thermoplastic resins

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Plastics - Plasticized poly(vinyl chloride) (PVC-P) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 2898-2:2008)

Plastiques - Matériaux à base de poly(chlorure de vinyle) plastifié (PVC-P) pour moulage et extrusion - Partie 2: Préparation des éprouvettes et détermination des propriétés (ISO 2898-2:2008)

Kunststoffe - Weichmacherhaltige Polyvinylchlorid (PVC-P)-Formmassen - Teil 2: Herstellung von Probekörpern und Bestimmung von Eigenschaften (ISO 2898-2:2008)

This European Standard was approved by CEN on 6 September 2008.

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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Management Centre: rue de Stassart, 36 B-1050 Brussels

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Foreword

This document (EN ISO 2898-2:2008) has been prepared by Technical Committee ISO/TC 61 "Plastics" in collaboration with Technical Committee CEN/TC 249 “Plastics” the secretariat of which is held by NBN.

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 2009, and conflicting national standards shall be withdrawn at the latest by May 2009.

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Endorsement notice

The text of ISO 2898-2:2008 has been approved by CEN as a EN ISO 2898-2:2008 without any modification.

Plastics — Plasticized poly(vinyl chloride) (PVC-P) moulding and extrusion materials —

Part 2:
Preparation of test specimens and determination of properties

1 Scope

This part of ISO 2898 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of PVC-P moulding and extrusion materials. Requirements for handling test material and for conditioning both the test material before moulding and the specimens before testing are given.

Procedures and conditions for the preparation of test specimens and procedures for measuring properties of the materials from which these specimens are made are given. Properties and test methods which are suitable and necessary to characterize PVC-P moulding and extrusion materials are listed.

The properties have been selected from the general test methods in ISO 10350-1. Other test methods in wide use for, or of particular significance to, these moulding and extrusion materials are also included in this part of ISO 2898, as are the designatory properties specified in ISO 2898-1.

In order to obtain reproducible and comparable test results, it is necessary to use the methods of preparation and conditioning, the specimen dimensions and the test procedures specified herein. Values determined will not necessarily be identical to those obtained using specimens of different dimensions or prepared using different procedures.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 176:2005, *Plastics — Determination of loss of plasticizers — Activated carbon method*

ISO 291, *Plastics — Standard atmospheres for conditioning and testing*

ISO 293, *Plastics — Compression moulding of test specimens of thermoplastic materials*

ISO 458-2, *Plastics — Determination of stiffness in torsion of flexible materials — Part 2: Application to plasticized compounds of homopolymers and copolymers of vinyl chloride*

ISO 527-2:1993, *Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics*

ISO 868, *Plastics and ebonite — Determination of indentation hardness by means of a durometer (Shore hardness)*

ISO 1183-1:2004, *Plastics — Methods for determining the density of non-cellular plastics — Part 1: Immersion method, liquid pyknometer method and titration method*

ISO 2818, *Plastics — Preparation of test specimens by machining*

ISO 2898-1, *Plastics — Plasticized poly(vinyl chloride) (PVC-P) moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ISO 3167:2002, *Plastics — Multipurpose test specimens*

ISO 3451-5:2002, *Plastics — Determination of ash — Part 5: Poly(vinyl chloride)*

ISO 10350-1, *Plastics — Acquisition and presentation of comparable single-point data — Part 1: Moulding materials*

IEC 60093, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

3 Preparation of test specimens

3.1 General

It is essential that specimens are always prepared by the same procedure (compression moulding), using the same processing conditions.

The material shall be kept in moisture-proof containers until it is required for use.

3.2 Treatment of the material before moulding

Before processing, no pretreatment of the material sample is normally necessary.

3.3 Compression moulding

Before compression moulding, the material shall be plasticized using a two-roll mill under the conditions specified in Table 1.

Table 1 — Conditions for milling of material before compression moulding

Shore hardness of material	Roll surface temperature °C	Milling time[a] min	Roll surface speed m/min	Speed ratio	Roll nip width mm	Roll diameter mm	Roll length mm
Up to A 80	130 to 160	Approx. 5	Approx. 10	1:1,2	Approx. 1	e.g. 150	e.g. 300
D 35 to D 50	145 to 170	Approx. 5	Approx. 10	1:1,2	Approx. 1	e.g. 150	e.g. 300
Above D 50	160 to 175	Approx. 5	Approx. 10	1:1,2	Approx. 1	e.g. 150	e.g. 300

[a] Measured from the moment when a sheet is formed.

Sheet material from the mill shall be stacked, preferably with sheet orientation alternating from layer to layer, in the preheated mould. Compression-moulded sheets shall then be prepared in accordance with ISO 293, using the conditions specified in Table 2.