

Plastics - Impact-resistant polystyrene (PS-I) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 2897-2:2004 sisaldab Euroopa standardi EN ISO 2897-2:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 2897-2:2004 consists of the English text of the European standard EN ISO 2897-2:2003.</p> <p>This document is endorsed on 23.11.2004 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This part of ISO 2897 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of PS-I 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 here.</p>	<p>Scope: This part of ISO 2897 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of PS-I 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 here.</p>
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ICS 83.080.20

Võtmesõnad:

English version

Plastics

**Impact-resistant polystyrene (PS-I) moulding and
extrusion materials**

**Part 2: Preparation of test specimens and determination of properties
(ISO 2897-2 : 2003)**

Plastiques – Polystyrènes résistants
au choc (PS-I) pour moulage et extru-
sion – Partie 2: Préparation des
éprouvettes et détermination des
propriétés (ISO 2897-2 : 2003)

Kunststoffe – Schlagzähe Polystyrol
(PS-I)-Formmassen – Teil 2: Herstel-
lung von Probekörpern und Bestim-
mung von Eigenschaften
(ISO 2897-2 : 2003)

This European Standard was approved by CEN on 2003-11-10.

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 Management Centre or to any CEN member.

The European Standards exist 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 Management Centre has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard
ISO 2897-2 : 2003 Plastics – Impact-resistant polystyrene (PS-I) moulding and extrusion materials – Part 2:
 Preparation of test specimens and determination of properties,
which was prepared by ISO/TC 61 ‘Plastics’ of the International Organization for Standardization, has been
adopted by Technical Committee CEN/TC 249 ‘Plastics’, the Secretariat of which is held by IBN, as a European
Standard.
This European Standard shall be given the status of a national standard, either by publication of an identical text
or by endorsement, and conflicting national standards withdrawn, by June 2004 at the latest.
In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the
following countries are bound to implement this European Standard:
Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland,
Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the
United Kingdom.

Endorsement notice

The text of the International Standard ISO 2897-2 : 2003 was approved by CEN as a European Standard without
any modification.
NOTE: Normative references to international publications are listed in Annex ZA (normative).

Contents		Page
Foreword		2
1	Scope	3
2	Conformance	3
3	Normative references	3
4	Preparation of test specimens	5
5	Conditioning of test specimens	5
6	Determination of properties	6

1 Scope

1.1 This part of ISO 2897 specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of PS-I 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 here.

1.2 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 PS-I moulding and extrusion materials are listed.

1.3 The properties have been selected from the general test methods in ISO 10350. 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 2897, as are the designatory properties specified in Part 1.

1.4 In order to obtain reproducible and comparable test results, it is necessary to use the methods of specimen 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 Conformance

In Clause 3, the year of publication of each normative reference has been specifically stated. In order to be able to claim conformity with this part of ISO 2897, it is essential that the user use only those editions given, and not earlier or more recent editions.

3 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 62:1980, *Plastics — Determination of water absorption*

ISO 75-2:1993, *Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite*

ISO 178:1993, *Plastics — Determination of flexural properties*

ISO 179:1993, *Plastics — Determination of Charpy impact strength*

ISO 293: 1986, *Plastics — Compression moulding test specimens of thermoplastic materials*

ISO 294-1:1996, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens*

ISO 306:1994, *Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)*

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

ISO 527-4:1997, *Plastics — Determination of tensile properties — Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites*

ISO 899-1:1993, *Plastics — Determination of creep behaviour — Part 1: Tensile creep*

ISO 1133:1997, *Plastics — Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics*

ISO 1183:1987, *Plastics — Methods for determining the density and relative density of non-cellular plastics*

ISO 2561:1974, *Plastics — Determination of residual styrene monomer in polystyrene by gas chromatography*

ISO 2818:1980, *Plastics — Preparation of test specimens by machining*

ISO 2897-1:1997, *Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials — Part 1: Designation system and basis for specifications*

ISO 3167:1993, *Plastics — Multipurpose test specimens*

ISO 4589:1984, *Plastics — Determination of flammability by oxygen index*

ISO 8256:1990, *Plastics — Determination of tensile-impact strength*

ISO 10350:1993, *Plastics — Acquisition and presentation of comparable single-point data*

ISO 11357-2:1999, *Plastics — Differential scanning calorimetry (DSC) — Part 2: Determination of glass transition temperature*

IEC 60093:1980, *Methods of test for volume resistivity and surface resistivity of solid electrical insulating materials*

IEC 60112:1979, *Method for determining the comparative and the proof tracking indices of solid insulating materials under moist conditions*

IEC 60243-1:1998, *Electrical strength of insulating materials — Test methods — Part 1: Tests at power frequencies*

IEC 60250:1969, *Recommended methods for the determination of the permittivity and dielectric dissipation factor of electrical insulating materials at power, audio and radio frequencies including metre wavelengths*

IEC 60296:1982, *Specification for unused mineral insulating oils for transformers and switchgear*

IEC 60695-11-10:1999, *Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods*

IEC 60695-11-20:1999, *Fire hazard testing — Part 11-20: Test flames — 500 W flame test methods*