SLOVENSKI STANDARD
oSIST prEN ISO 527-2:2010

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Polimerni materiali - Določevanje nateznih lastnosti - 2. del: Preskusni pogoji za polimerne materiale za oblikovanje in ekstrudiranje (ISO/DIS 527-2:2010)

Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO/DIS 527-2:2010)

Kunststoffe - Bestimmung der Zugeigenschaften - Teil 2: Prüfbedingungen für Form- und Extrusionsmassen (ISO/DIS 527-2:2010)

Plastiques - Détermination des propriétés en traction - Partie 2: Conditions d'essai des plastiques pour moulage et extrusion (ISO/DIS 527-2:2010)

Ta slovenski standard je istoveten z: **prEN ISO 527-2**

ICS:

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English Version

Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO/DIS 527-2:2010)

Plastiques - Détermination des propriétés en traction - Partie 2: Conditions d'essai des plastiques pour moulage et extrusion (ISO/DIS 527-2:2010)

Kunststoffe - Bestimmung der Zugeigenschaften - Teil 2: Prüfbedingungen für Form- und Extrusionsmassen (ISO/DIS 527-2:2010)

This draft European Standard is submitted to CEN members for parallel enquiry. It has been drawn up by the Technical Committee CEN/TC 249.

If this draft becomes a European Standard, 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.

This draft European Standard was established by CEN 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 CEN Management Centre has the same status as the official versions.

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Recipients of this draft are invited to submit, with their comments, notification of any relevant patent rights of which they are aware and to provide supporting documentation.

Warning : This document is not a European Standard. It is distributed for review and comments. It is subject to change without notice and shall not be referred to as a European Standard.

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

Management Centre: Avenue Marnix 17, B-1000 Brussels

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Foreword

This document (prEN ISO 527-2:2010) 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 document is currently submitted to the parallel Enquiry.

This document will supersede EN ISO 527-2:1996.

Endorsement notice

The text of ISO/DIS 527-2:2010 has been approved by CEN as a prEN ISO 527-2:2010 without any modification.

DRAFT INTERNATIONAL STANDARD ISO/DIS 527-2

ISO/TC **61**/SC **2** Secretariat: **AENOR**

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Plastics — Determination of tensile properties —

Part 2:
Test conditions for moulding and extrusion plastics

Plastiques — Détermination des propriétés en traction —

Partie 2: Conditions d'essai des plastiques pour moulage et extrusion

(Revision of first edition of ISO 527-2:1993 and ISO 527-2:1993:Cor.1:1994)

ICS 83.080.01

ISO/CEN PARALLEL PROCESSING

This draft has been developed within the International Organization for Standardization (ISO), and processed under the **ISO-lead** mode of collaboration as defined in the Vienna Agreement.

This draft is hereby submitted to the ISO member bodies and to the CEN member bodies for a parallel five-month enquiry.

Should this draft be accepted, a final draft, established on the basis of comments received, will be submitted to a parallel two-month approval vote in ISO and formal vote in CEN.

In accordance with the provisions of Council Resolution 15/1993 this document is circulated in the English language only.

Conformément aux dispositions de la Résolution du Conseil 15/1993, ce document est distribué en version anglaise seulement.

To expedite distribution, this document is circulated as received from the committee secretariat. ISO Central Secretariat work of editing and text composition will be undertaken at publication stage.

Pour accélérer la distribution, le présent document est distribué tel qu'il est parvenu du secrétariat du comité. Le travail de rédaction et de composition de texte sera effectué au Secrétariat central de l'ISO au stade de publication.

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Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established 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. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO 527-2 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical properties*.

This second edition cancels and replaces the first edition ISO 527-2:1993, definitions and gage length, of which have been technically revised. It has also been introduced a test method for the determination of Poisson ratio and the strain interval is extended far beyond the strain region for the modulus determination.

ISO 527 consists of the following parts, under the general title *Plastics — Determination of tensile properties of plastics*:

— *Part 1: General principles*

— *Part 2 :Test conditions for moulding and extrusion plastics*

— *Part 3: Test conditions for films and sheets:*

— *Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites*

— *Part 5: Test conditions for unidirectional fibre-reinforced plastic composites*

Plastics — Determination of tensile properties —

Part 2:
Test conditions for moulding and extrusion plastics

1 Scope

1.1 This part of ISO 527 specifies the test conditions for determining the tensile properties of moulding and extrusion plastics, based upon the general principles given in ISO 527-1.

1.2 The methods are selectively suitable for use with the following range of materials:

- rigid and semi rigid thermoplastics moulding, extrusion and cast materials, including compounds filled and reinforced by e.g. short fibres, small rods, plates or granules but excluding textile fibres (see ISO 527-4 and ISO 527-5). See also ISO527-1 for the definition of "rigid" and "semi-rigid".
- rigid and semi rigid thermosetting moulding and cast materials, including filled and reinforced compounds but excluding textile fibres as reinforcement (see ISO 527-4 and ISO 527-5);
- thermotropic liquid crystal polymers.

The methods are not normally suitable for use with rigid cellular materials or sandwich structures containing cellular material. For rigid cellular materials see ISO 1926. Testing conditions of sandwich structures shall be agreed upon by experts.

The methods are not suitable for flexible films and sheets, of thickness smaller than 1 mm, see ISO 527-3.

1.3 The methods are applied using specimens which may be either moulded to the chosen dimensions or machined, cut or punched from injection- or compression-moulded plates. The multipurpose test specimen is preferred (see ISO 3167 and/or ISO 20753).

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 293: Plastics — Compression moulding test specimens of thermoplastic materials.

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

ISO 294-2: Plastics - Injection moulding test specimens of thermoplastic materials - Part 2: Small tensile bars.

ISO 294-3: Plastics - Injection moulding test specimens of thermoplastic materials - Part 3: Small plates.

ISO 295: Plastics — Compression moulding of test specimens of thermosetting materials.

ISO 527-1: Plastics — Determination of tensile properties — Part 1: General Principles.

ISO 1926: Rigid cellular plastics – Determination of tensile properties