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STN	**Plasty Stanovenie ťahových vlastností Časť 2: Skúšobné podmienky pre lisované a vytláčané plasty (ISO 527-2: 2025)**	**STN EN ISO 527-2** 64 0605

Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2:2025)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 09/25

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Supersedes EN ISO 527-2:2012

English Version

Plastics - Determination of tensile properties - Part 2: Test conditions for moulding and extrusion plastics (ISO 527-2:2025)

Plastiques - Détermination des propriétés en traction - Partie 2: Conditions d'essai des plastiques pour moulage et extrusion (ISO 527-2:2025)

Kunststoffe - Bestimmung der Zugeigenschaften - Teil 2: Prüfbedingungen für Form-und Extrusionsmassen (ISO 527-2:2025)

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EUROPEAN COMMITTEE FOR STANDARDIZATION
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European foreword

This document (EN ISO 527-2:2025) 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 SIS.

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of an identical text or by endorsement, at the latest by December 2025, and conflicting national standards shall be withdrawn at the latest by December 2025.

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International Standard

ISO 527-2

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

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Foreword

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The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular, the different approval criteria needed for the different types of ISO document should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see www.iso.org/directives).

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For an explanation of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT), see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 2, *Mechanical behavior,* in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics,* in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This third edition cancels and replaces the second edition (ISO 527-2:2012), which has been technically revised.

The main changes are as follows:

— Figure 1 and Table 1 have been moved from Clause 11 to subclause 6.1;

— former subclause 6.6, Number of test specimens, has been renumbered as Clause 7 to align with ISO 527-1:2019;

— the reference to ISO 3167 has been replaced with ISO 20753;

— test specimens 1A and 1B have been replaced by test specimen A1 and A2 according to ISO 20753;

— small test specimen in Annex A, Type 1BA and 1BB have been replaced by reduced scale specimen, as specified in ISO 20753.

A list of all parts in the ISO 527 series can be found on the ISO website.

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International Standard **ISO 527-2:2025(en)**

Plastics — Determination of tensile properties —

Part 2: Test conditions for moulding and extrusion plastics

1 Scope

1.1 This document 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 in the preferred thickness, or, in case of specimen machined from moulded parts in the thickness as moulded:

— rigid and semi-rigid thermoplastics moulding, extrusion and cast materials, including compounds filled and reinforced by, for example, short fibres, small rods, plates or granules but excluding textile fibres (see ISO 527-4 and ISO 527-5).

NOTE See ISO 527-1:2019, Clause 3 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.

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 can 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 20753).

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 of test specimens of thermoplastic materials*

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

ISO 295, *Plastics — Compression moulding of test specimens of thermosetting materials*

ISO 527-1:2019, *Plastics — Determination of tensile properties — Part 1: General principles*

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

ISO 10724-1, *Plastics — Injection moulding of test specimens of thermosetting powder moulding compounds (PMCs) — Part 1: General principles and moulding of multipurpose test specimens*

ISO 20753, *Plastics — Test specimens*