## STN

# Plasty Materiály z polysulfónu na tvárnenie a vytláčanie Časť 2: Príprava skúšobných telies a stanovenie vlastností (ISO 24025-2: 2020)

STN EN ISO 24025-2

64 3670

Plastics - Sulfone polymer moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 24025-2:2020)

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. 09/20

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#### **English Version**

Plastics - Sulfone polymer moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 24025-2:2020)

Plastiques - Matériaux à base de polymères sulfone pour moulage et extrusion - Partie 2: Préparation des éprouvettes et détermination des propriétés (ISO 24025-2:2020) Kunststoffe - Sulfonpolymer-Werkstoffe für das Spritzgießen und die Extrusion - Teil 2: Herstellung von Probekörpern und Bestimmung von Eigenschaften (ISO 24025-2:2020)

This European Standard was approved by CEN on 16 May 2020.

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#### EN ISO 24025-2:2020 (E)

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#### **European foreword**

This document (EN ISO 24025-2:2020) 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of an identical text or by endorsement, at the latest by November 2020, and conflicting national standards shall be withdrawn at the latest by November 2020.

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

This document supersedes EN ISO 25137-2:2017.

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#### **Endorsement notice**

The text of ISO 24025-2:2020 has been approved by CEN as EN ISO 24025-2:2020 without any modification.

## INTERNATIONAL STANDARD

ISO 24025-2

First edition 2020-05

## Plastics — Sulfone polymer moulding and extrusion materials —

#### Part 2:

## Preparation of test specimens and determination of properties

Plastiques — Matériaux à base de polymères sulfone pour moulage et extrusion —

Partie 2: Préparation des éprouvettes et détermination des propriétés



ISO 24025-2:2020(E)



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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.

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 documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*, 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 first edition of ISO 24025-2 cancels and replaces ISO 25137-2:2009, which has been technically revised.

The main changes compared to the previous edition are as follows:

- the normative references have been updated to the latest version;
- Clause 3 has been added;
- <u>Table 2</u> has been updated according to the revised ISO 10350-1;
- three properties have been added: moulding shrinkage, luminous transmittance, yellowness index.

A list of all parts in the ISO 24025 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

#### INTERNATIONAL STANDARD

### Plastics — Sulfone polymer moulding and extrusion materials —

#### Part 2:

## Preparation of test specimens and determination of properties

#### 1 Scope

- **1.1** This document specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of sulfone polymer 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 sulfone polymer moulding and extrusion materials are listed.
- **1.3** 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 document, as are the designatory properties specified in ISO 24025-1.

#### 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 62, Plastics — Determination of water absorption

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

ISO 178, Plastics — Determination of flexural properties

ISO 179-1, Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test

ISO 179-2, Plastics — Determination of Charpy impact properties — Part 2: Instrumented impact test

ISO 291, Plastics — Standard atmospheres for conditioning and testing

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 294-3, Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates

ISO 294-4, Plastics — Injection moulding of test specimens of thermoplastic materials — Part 4: Determination of moulding shrinkage

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

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

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

ISO 1133-1, Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 1: Standard method

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

ISO 4589-2, Plastics — Determination of burning behaviour by oxygen index — Part 2: Ambient-temperature test

ISO 8256, Plastics — Determination of tensile-impact strength

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

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

ISO 15512, Plastics — Determination of water content

ISO 17223, Plastics — Determination of yellowness index and change in yellowness index

ISO 20753, Plastics — Test specimens

ISO 26723, Plastics — Determination of total luminous transmittance and reflectance

IEC 60112, Method for the determination of the proof and the comparative tracking indices of solid insulating materials

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

IEC 60296, Fluids for electrotechnical applications — Unused mineral insulating oils for transformers and Switchgear

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

IEC 62631-2-1, Dielectric and resistive properties of solid insulating materials — Part 2-1: Relative permittivity and dissipation factor — Technical frequencies (0.1 Hz to 10 MHz) — AC Methods

IEC 62631-3-1, Dielectric and resistive properties of solid insulating materials — Part 3-1: Determination of resistive properties (DC methods) — Volume resistance and volume resistivity — General method

IEC 62631-3-2, Dielectric and resistive properties of solid insulating materials — Part 3-2: Determination of resistive properties (DC methods) — Surface resistance and surface resistivity

#### koniec náhľadu – text ďalej pokračuje v platenej verzii STN