



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 20028-2:2017

Plastics - Thermoplastic polyester (TP)  
moulding and extrusion materials - Part 2:  
Preparation of test specimens and  
determination of properties (ISO 20028-  
2:2017)

**I.S. EN ISO 20028-2:2017**

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## National Foreword

I.S. EN ISO 20028-2:2017 is the adopted Irish version of the European Document EN ISO 20028-2:2017, Plastics - Thermoplastic polyester (TP) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 20028-2:2017)

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EUROPEAN STANDARD

**EN ISO 20028-2**

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2017

ICS 83.080.20

Supersedes EN ISO 7792-2:2012

English Version

**Plastics - Thermoplastic polyester (TP) moulding and  
extrusion materials - Part 2: Preparation of test specimens  
and determination of properties (ISO 20028-2:2017)**

Plastiques - Matériaux polyesters thermoplastiques  
(TP) pour moulage et extrusion - Partie 2: Préparation  
des éprouvettes et détermination des propriétés (ISO  
20028-2:2017)

Kunststoffe - Thermoplastische Polyester (TP)-  
Werkstoffe - Teil 2: Herstellung von Probekörpern und  
Bestimmung von Eigenschaften (ISO 20028-2:2017)

This European Standard was approved by CEN on 3 February 2017.

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**CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels**

**EN ISO 20028-2:2017 (E)**

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## **European foreword**

This document (EN ISO 20028-2:2017) 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of an identical text or by endorsement, at the latest by September 2017, and conflicting national standards shall be withdrawn at the latest by September 2017.

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

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According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### **Endorsement notice**

The text of ISO 20028-2:2017 has been approved by CEN as EN ISO 20028-2:2017 without any modification.

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**INTERNATIONAL  
STANDARD**

**ISO  
20028-2**

First edition  
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**Plastics — Thermoplastic polyester  
(TP) moulding and extrusion  
materials —**

**Part 2:  
Preparation of test specimens and  
determination of properties**

*Plastiques — Matériaux polyesters thermoplastiques (TP) pour  
moulage et extrusion —*

*Partie 2: Préparation des éprouvettes et détermination des propriétés*



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**ISO 20028-2:2017(E)**



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## ISO 20028-2:2017(E)

### 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 [www.iso.org/directives](http://www.iso.org/directives)).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

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For an explanation on 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 the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This first edition of ISO 20028-2 cancels and replaces ISO 7792-2:2012, which has been technically revised.

A list of all parts in the ISO 20028 series can be found on the ISO website.

# Plastics — Thermoplastic polyester (TP) moulding and extrusion materials —

## Part 2: Preparation of test specimens and determination of properties

### 1 Scope

This document specifies the methods of preparation of test specimens and the standard test methods to be used in determining the properties of thermoplastic polyester 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 in a specified state 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 thermoplastic polyester 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 document, as are the designatory properties specified in ISO 20028-1 (viscosity number and tensile modulus of elasticity).

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

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

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

ISO 1133-2, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 2: Method for materials sensitive to time-temperature history and/or moisture*

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

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