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Standards

Irish Standard  
I.S. EN ISO 7792-1:2012

# Plastics - Thermoplastic polyester (TP) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 7792-1:2012)

## I.S. EN ISO 7792-1:2012

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*This document replaces:*  
EN ISO 7792-1:2004

*This document is based on:*  
EN ISO 7792-1:2012

*Published:*  
4 January, 2013

This document was published  
under the authority of the NSAI  
and comes into effect on:  
4 January, 2013

**ICS number:**  
83.080.20

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English Version

Plastics - Thermoplastic polyester (TP) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 7792-1:2012)

Plastiques - Polyesters thermoplastiques (TP) pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 7792-1:2012)

Kunststoffe - Thermoplastische Polyester (TP)-Formmassen - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 7792-1:2012)

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## **Foreword**

This document (EN ISO 7792-1:2012) 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of an identical text or by endorsement, at the latest by June 2013, and conflicting national standards shall be withdrawn at the latest by June 2013.

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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**I.S. EN ISO 7792-1:2012**  
**INTERNATIONAL**  
**STANDARD**

**ISO**  
**7792-1**

Fourth edition  
2012-12-01

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

**Part 1:**  
**Designation system and basis for  
specifications**

*Plastiques — Polyesters thermoplastiques (TP) pour moulage et  
extrusion —*

*Partie 1: Système de désignation et base de spécification*



Reference number  
ISO 7792-1:2012(E)

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Published in Switzerland



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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 7792-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This fourth edition cancels and replaces the third edition (ISO 7792-1:1997), which has been technically revised.

ISO 7792 consists of the following parts, under the general title *Plastics — Thermoplastic polyester (TP) moulding and extrusion materials*:

- *Part 1: Designation system and basis for specifications*
- *Part 2: Preparation of test specimens and determination of properties*

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

## Part 1: Designation system and basis for specifications

### 1 Scope

This part of ISO 7792 establishes a system of designation for thermoplastic polyester (TP) material, which may be used as the basis for specifications. It covers polyester homopolymers for moulding and extrusion based on poly(ethylene terephthalate) (PET), poly(butylene terephthalate) (PBT), poly(cyclohexylenedimethylene terephthalate) (PCT), poly(ethylene naphthalate) (PEN), poly(butylene naphthalates) (PBN) and other TP-types and copolyesters of various compositions for moulding and extrusion.

The types of thermoplastic polyester are differentiated from each other by a classification system based on appropriate levels of the designatory properties (viscosity number and tensile modulus of elasticity) and on information about the intended application and/or method of processing, important properties, additives, colorants, fillers and reinforcing materials.

This part of ISO 7792 is applicable to thermoplastic polyester homopolymers and copolymers. It applies to materials ready for normal use in the form of powder, granules or pellets, unmodified or modified by colorants, additives, fillers, etc.

This part of ISO 7792 does not apply to the saturated polyester/ester and polyether/ester thermoplastic elastomers covered by ISO 14910.

It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 7792 does not provide engineering data, performance data or data on processing conditions which may be required to specify a material for a particular application and/or method of processing. If such additional properties are required, they shall be determined in accordance with the test methods specified in part 2 of this International Standard, if suitable.

In order to specify a thermoplastic polyester material for a particular application or to ensure reproducible processing, additional requirements may be given in data block 5.

### 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 1043-1, *Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics*

ISO 1043-2, *Plastics — Symbols and abbreviated terms — Part 2: Fillers and reinforcing materials*

ISO 1628-5, *Plastics — Determination of viscosity of polymers in diluted solutions using capillary viscometers — Part 5: Thermoplastic polyester (TP) homopolymers and copolymers*

ISO 1874-1<sup>1)</sup>, *Plastics — Polyamide (PA) moulding and extrusion materials — Part 1: Designation system and basis for specification*

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1) Under revision as ISO 16396-1.

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