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Standards

Irish Standard  
I.S. EN ISO 20029-1:2018

# Plastics - Thermoplastic polyester/ester and polyether/ester elastomers for moulding and extrusion - Part 1: Designation system and basis for specification (ISO 20029-1:2017)

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## I.S. EN ISO 20029-1:2018

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*This document is based on:*

EN ISO 20029-1:2018

*Published:*

2018-02-07

*This document was published  
under the authority of the NSAI  
and comes into effect on:*

2018-02-25

ICS number:

83.080.20

NOTE: If blank see CEN/CENELEC cover page

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## National Foreword

I.S. EN ISO 20029-1:2018 is the adopted Irish version of the European Document EN ISO 20029-1:2018, Plastics - Thermoplastic polyester/ester and polyether/ester elastomers for moulding and extrusion - Part 1: Designation system and basis for specification (ISO 20029-1:2017)

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**EUROPEAN STANDARD**

**EN ISO 20029-1**

**NORME EUROPÉENNE**

**EUROPÄISCHE NORM**

February 2018

ICS 83.080.20

Supersedes EN ISO 14910-1:2013

English Version

**Plastics - Thermoplastic polyester/ester and  
polyether/ester elastomers for moulding and extrusion -  
Part 1: Designation system and basis for specification (ISO  
20029-1:2017)**

Plastiques - Élastomères thermoplastiques à base de  
polyester/ester et polyéther/ester pour moulage et  
extrusion - Partie 1: Système de désignation et base de  
spécifications (ISO 20029-1:2017)

Kunststoffe - Thermoplastische Polyester/Ester- und  
Polyether/Ester-Elastomer-Werkstoffe - Teil 1:  
Bezeichnungssystem und Basis für Spezifikationen  
(ISO 20029-1:2017)

This European Standard was approved by CEN on 28 November 2017.

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This European Standard exists 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-CENELEC Management Centre has the same status as the official versions.

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**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

**EN ISO 20029-1:2018 (E)**

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## **European foreword**

This document (EN ISO 20029-1:2018) 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 August 2018, and conflicting national standards shall be withdrawn at the latest by August 2018.

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 14910-1:2013.

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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 20029-1:2017 has been approved by CEN as EN ISO 20029-1:2018 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
20029-1**

First edition  
2017-11

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## **Plastics — Thermoplastic polyester/ ester and polyether/ester elastomers for moulding and extrusion —**

### **Part 1: Designation system and basis for specification**

*Plastiques — Élastomères thermoplastiques à base de polyester/ester  
et polyéther/ester pour moulage et extrusion —*

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



Reference number  
ISO 20029-1:2017(E)

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## ISO 20029-1:2017(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)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 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 20029-1 cancels and replaces ISO 14910-1:2013, which has been technically revised to introduce a new designation system.

The revised designation system is published under a new ISO number, as many existing documents refer to ISO 14910-1. If the existing ISO 14910-1 would be replaced by the new designation system, these documents would refer to the incorrect designation system.

In order to give users time to switch from ISO 14910-1 to ISO 20029-1, any designation system according to ISO 14910-1 is to be phased out in 5 to 10 years.

A list of all parts in the ISO 20029 series can be found on the ISO website.

## **Introduction**

ISO 14910-1:2013 is complex and does not fit with daily practice anymore. In practice, ISO 18064 and ISO 11469 are, in combination, “improperly” being used as a designation system for, e.g. marking. The aim of this document is to simplify the data block system and to connect more to ISO 18064 and ISO 11469, where the first two blocks are used for generic identification and marking of products.



# Plastics — Thermoplastic polyester/ester and polyether/ester elastomers for moulding and extrusion —

## Part 1: Designation system and basis for specification

### 1 Scope

This document establishes a system of designation for thermoplastic polyester/ester and polyether/ester elastomers, which may be used as the basis for specifications.

The types of thermoplastic polyester/ester and polyether/ester elastomer are differentiated from each other by a classification system based on appropriate levels of the designatory properties:

- a) hardness;
- b) melting temperature;
- c) tensile/flexural modulus of elasticity;

and on information about the intended application and/or method of processing, important properties, additives, colour, fillers and reinforcing materials.

This document is applicable to all thermoplastic polyester/ester and polyether/ester elastomers. It applies to materials ready for normal use in the form of powder, granules or pellets, unmodified or modified by colourants, fillers or other additives.

It is not intended to imply that materials having the same designation give necessarily the same performance. This document does not provide engineering data, performance data or data on processing conditions which may be required to specify a material. If such additional properties are required, they are intended to be determined in accordance with the test methods specified in ISO 20029-2, if suitable.

In order to designate a thermoplastic polyester/ester or polyether/ester elastomer to meet particular specifications, the requirements are given in data block 5 (see [4.1](#)).

### 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 1043-4, *Plastics — Symbols and abbreviated terms — Part 4: Flame retardants*

ISO 18064, *Thermoplastic elastomers — Nomenclature and abbreviated terms*

ISO 20029-2, *Plastics — Thermoplastic polyester/ester and polyether/ester elastomers for moulding and extrusion — Part 2: Preparation of test specimens and determination of properties*

### 3 Terms and definitions

No terms and definitions are listed in this document.

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