



**NSAI**  
Standards

Irish Standard  
I.S. EN ISO 25137-1:2017

# Plastics - Sulfone polymer moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 25137-1:2009)

## I.S. EN ISO 25137-1:2017

*Incorporating amendments/corrigenda/National Annexes issued since publication:*

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## National Foreword

I.S. EN ISO 25137-1:2017 is the adopted Irish version of the European Document EN ISO 25137-1:2017, Plastics - Sulfone polymer moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 25137-1:2009)

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**EUROPEAN STANDARD**  
**NORME EUROPÉENNE**  
**EUROPÄISCHE NORM**

**EN ISO 25137-1**

January 2017

ICS 83.080.20

English Version

**Plastics - Sulfone polymer moulding and extrusion  
materials - Part 1: Designation system and basis for  
specifications (ISO 25137-1:2009)**

Plastiques - Matériaux pour moulage et extrusion à  
base de polymères sulfone - Partie 1: Système de  
désignation et base de spécifications (ISO 25137-  
1:2009)

Kunststoffe - Sulfonpolymer-Werkstoffe - Teil 1:  
Bezeichnungssystem und Basis für Spezifikationen  
(ISO 25137-1:2009)

This European Standard was approved by CEN on 20 December 2016.

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**EN ISO 25137-1:2017 (E)**

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## **European foreword**

The text of ISO 25137-1:2009 has been prepared by Technical Committee ISO/TC 61 “Plastics” of the International Organization for Standardization (ISO) and has been taken over as EN ISO 25137-1:2017 by 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of an identical text or by endorsement, at the latest by July 2017, and conflicting national standards shall be withdrawn at the latest by July 2017.

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### **Endorsement notice**

The text of ISO 25137-1:2009 has been approved by CEN as EN ISO 25137-1:2017 without any modification.

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# INTERNATIONAL STANDARD

**ISO  
25137-1**

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

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

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

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



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**ISO 25137-1:2009(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.

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.

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ISO 25137-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

ISO 25137 consists of the following parts, under the general title *Plastics — Sulfone polymer moulding and extrusion materials*:

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

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

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

### **1 Scope**

**1.1** This part of ISO 25137 establishes a system of designation for sulfone polymer moulding and extrusion materials, including polysulfone (PSU), polyethersulfone (PESU) and polyphenylsulfone (PPSU), which may be used as the basis for specifications.

**1.2** The types of sulfone polymer materials are differentiated from each other by a classification system based on appropriate levels of the designatory properties

- a) temperature of deflection under load,
- b) melt mass-flow rate,
- c) Charpy notched impact strength,
- d) tensile modulus and
- e) yield stress,

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

**1.3** This part of ISO 25137 is applicable to all sulfone polymers that contain ether oxygen, which is a necessary component of the polymers as in the diphenyl sulfone moiety.

It applies to sulfone polymer materials ready for normal use in the form of powder, granules or pellets, unmodified or modified by colorants, additives, fillers, etc.

**1.4** It is not intended to imply that materials having the same designation necessarily give the same performance. This part of ISO 25137 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.

**1.5** In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements may be given in data block 5 (see 3.1).

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