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Irish Standard I.S. EN ISO 15527:2013

# Plastics - Compression-moulded sheets of polyethylene (PE-UHMW, PE-HD) -Requirements and test methods (ISO 15527:2010)

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## Plastics - Compression-moulded sheets of polyethylene (PE-UHMW, PE-HD) - Requirements and test methods (ISO 15527:2010)

Plastiques - Plaques moulées par compression en polyéthylène (PE-UHMW, PE-HD) - Exigences et méthodes d'essai (ISO 15527:2010) Kunststoffe - Gepresste Tafeln aus Polyethylen (PE-UHMW, PE-HD) - Anforderungen und Prüfverfahren (ISO 15527:2010)

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EN ISO 15527:2013 (E)

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### Foreword

The text of ISO 15527:2010 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 15527:2013 by Technical Committee CEN/TC 249 "Plastics" the secretariat of which is held by NBN.

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ISO 15527

Second edition 2010-10-01

## Plastics — Compression-moulded sheets of polyethylene (PE-UHMW, PE-HD) — Requirements and test methods

Plastiques — Plaques moulées par compression en polyéthylène (PE-UHMW, PE-HD) — Exigences et méthodes d'essai



Reference number ISO 15527:2010(E)

#### ISO 15527:2010(E)

#### I.S. EN ISO 15527:2013

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ISO 15527:2010(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.

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ISO 15527 was prepared by Technical Committee ISO/TC 61, Plastics, Subcommittee SC 11, Products.

This second edition cancels and replaces the first edition (ISO 15527:2007), of which it constitutes a minor revision (the requirements given in Table 2 for the abrasion properties have been modified and in 5.9.2 ISO 179-1, rather than ISO 11542-2, is now used to determine the Charpy impact strength).

## Plastics — Compression-moulded sheets of polyethylene (PE-UHMW, PE-HD) — Requirements and test methods

#### 1 Scope

This International Standard specifies the requirements and test methods for solid flat compression-moulded sheets of polyethylene (PE-UHMW and PE-HD, see ISO 1043-1) without fillers or reinforcing materials. It applies only to thicknesses from 10 mm to 200 mm.

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

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 1133, Plastics — Determination of the melt mass-flow rate (MFR) and the melt volume-flow rate (MVR) of thermoplastics

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

ISO 1183 (all parts), Plastics — Methods for determining the density of non-cellular plastics

ISO 1872-1, Plastics — Polyethylene (PE) moulding and extrusion materials — Part 1: Designation system and basis for specifications

ISO 11542-1, *Plastics* — *Ultra-high-molecular-weight polyethylene (PE-UHMW) moulding and extrusion materials* — *Part 1: Designation system and basis for specifications* 

ISO 11542-2, Plastics — Ultra-high-molecular-weight polyethylene (PE-UHMW) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties

#### 3 Material

Sheets shall consist of PE-UHMW moulding materials as defined in ISO 11542-1 or PE-HD selected from polyethylene (PE) moulding materials as defined in ISO 1872-1, without fillers or reinforcing materials. Materials and additives of unknown identity shall not be used.

NOTE Legal conditions may necessitate a specific choice of moulding material (see 4.3.2).



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