Irish Standard
I.S. EN ISO 7214:2012

Cellular plastics - Polyethylene - Methods of test (ISO 7214:2012)

I.S. EN ISO 7214:2012

Incorporating amendments/corrigenda/National Annexes issued since publication:

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EUROPEAN STANDARD

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EN ISO 7214

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Supersedes EN ISO 7214:2007

English Version

Cellular plastics - Polyethylene - Methods of test (ISO 7214:2012)

Plastiques alvéolaires - Polyéthylène - Méthodes d'essai (ISO 7214:2012)

Schaumstoffe aus Polyethylen - Prüfverfahren (ISO 7214:2012)

This European Standard was approved by CEN on 31 March 2012.

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Foreword

This document (EN ISO 7214:2012) 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of an identical text or by endorsement, at the latest by October 2012, and conflicting national standards shall be withdrawn at the latest by October 2012.

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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The text of ISO 7214:2012 has been approved by CEN as a EN ISO 7214:2012 without any modification.

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I.S. EN ISO 7214:2012

INTERNATIONAL STANDARD

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Fourth edition
2012-04-01

Cellular plastics — Polyethylene — Methods of test

Plastiques alvéolaires — Polyéthylène — Méthodes d'essai

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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.

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ISO 7214 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 10, *Cellular plastics*.

This fourth edition cancels and replaces the third edition (ISO 7214:2007). Figure 1, which was dimensionally incorrect in the previous edition, has been replaced by Figure 2 from ISO 34-1:2010.

Cellular plastics — Polyethylene — Methods of test

1 Scope

1.1 This International Standard specifies methods for testing flexible and semi-rigid cellular plastics made from polyethylene. Cellular plastics containing copolymers of ethylene or blends of polymers with polyethylene may also be tested by the procedures of this International Standard provided these materials have characteristics similar to polyethylene as described in ISO 1872-1, or copolymers of ethylene as described in ISO 4613-1.

1.2 Mandatory tests suitable for characterization of cellular polyethylene, regardless of end use, are described in Clause 7. Optional tests for the determination of properties that are relevant to certain uses are described in Clause 8.

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 845:2006, *Cellular plastics and rubbers — Determination of apparent density*

ISO 1663, *Rigid cellular plastics — Determination of water vapour transmission properties*

ISO 1798, *Flexible cellular polymeric materials — Determination of tensile strength and elongation at break*

ISO 1856, *Flexible cellular polymeric materials — Determination of compression set*

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

ISO 1923, *Cellular plastics and rubbers — Determination of linear dimensions*

ISO 2796, *Cellular plastics, rigid — Test for dimensional stability*

ISO 2896, *Rigid cellular plastics — Determination of water absorption*

ISO 3386-1, *Polymeric materials, cellular flexible — Determination of stress-strain characteristics in compression — Part 1: Low-density materials*

ISO 3582, *Flexible cellular polymeric materials — Laboratory assessment of horizontal burning characteristics of small specimens subjected to a small flame*

ISO 4613-1, *Plastics — Ethylene/vinyl acetate (E/VAC) moulding and extrusion materials — Part 1: Designation and specification*

ISO 4651, *Cellular rubbers and plastics — Determination of dynamic cushioning performance*

ISO 7850:1986, *Cellular plastics, rigid — Determination of compressive creep*

ISO 8301, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Heat flow meter apparatus*

ISO 8302, *Thermal insulation — Determination of steady-state thermal resistance and related properties — Guarded hot plate apparatus*

ISO 8497, *Thermal insulation — Determination of steady-state thermal transmission properties of thermal insulation for circular pipes*