Irish Standard
I.S. EN ISO 1622-1:2012

Plastics - Polystyrene (PS) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 1622-1:2012)

I.S. EN ISO 1622-1:2012

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Plastics - Polystyrene (PS) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 1622-1:2012)

Plastiques - Polystyrène (PS) pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 1622-1:2012)

Kunststoffe - Polystyrol (PS)-Formmassen - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 1622-1:2012)

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Foreword

This document (EN ISO 1622-1:2012) 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of an identical text or by endorsement, at the latest by August 2012, and conflicting national standards shall be withdrawn at the latest by August 2012.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.

This document supersedes EN ISO 1622-1:1999.

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Endorsement notice

The text of ISO 1622-1:2012 has been approved by CEN as a EN ISO 1622-1:2012 without any modification.

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I.S. EN ISO 1622-1:2012

INTERNATIONAL STANDARD

ISO 1622-1

Third edition
2012-02-01

Plastics — Polystyrene (PS) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Polystyrène (PS) pour moulage et extrusion — Partie 1: Système de désignation et base de spécification

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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 1622-1 was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This third edition cancels and replaces the second edition (ISO 1622-1:1994), which has been technically revised. The main change is the replacement of melt flow rate (MFR) by melt volume-flow rate (MVR) as one of the designatory properties (see, in particular, Subclauses 1.2 and 3.4.3).

ISO 1622 consists of the following parts, under the general title *Plastics — Polystyrene (PS) moulding and extrusion materials*:

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

— *Part 2: Preparation of test specimens and determination of properties*

Plastics — Polystyrene (PS) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

1.1 This part of ISO 1622 establishes a system of designation for polystyrene thermoplastic material, which may be used as the basis for specifications.

1.2 The types of polystyrene plastics are differentiated from each other by a classification system based on appropriate levels of the designatory properties

a) Vicat softening temperature and

b) melt volume-flow rate

and on information about the intended application and/or method of processing, important properties, additives and colorants.

1.3 This part of ISO 1622 is applicable to all amorphous polystyrene homopolymers.

It applies to materials ready for normal use, unmodified or modified by colorants, additives, fillers, etc.

This part of ISO 1622 does not apply to expanded polystyrene, styrene copolymers, homopolymers of substituted styrene or those modified with other polymers such as elastomers.

1.4 It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 1622 does not provide engineering data, performance data or data on processing conditions which might 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).

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 1622-2, *Plastics — Polystyrene (PS) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*