

Irish Standard I.S. EN ISO 19063-1:2015

Plastics - Impact-resistant polystyrene (PS-I) moulding and extrusion materials - Part 1: Designation system and basis for specifications

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National Foreword

I.S. EN ISO 19063-1:2015 is the adopted Irish version of the European Document EN ISO 19063-1:2015, Plastics - Impact-resistant polystyrene (PS-I) moulding and extrusion materials - Part 1: Designation system and basis for specifications

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EUROPEAN STANDARD NORME EUROPÉENNE

EN ISO 19063-1

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Supersedes EN ISO 2897-1:1999

English Version

Plastics - Impact-resistant polystyrene (PS-I) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 19063-1:2015)

Plastiques - Polystyrènes résistants au choc (PS-I) pour moulage et extrusion - Partie 1 : Système de désignation et base de spécification (ISO 19063-1:2015) Kunststoffe - Schlagzähe Polystyrol (PS-I)-Formmassen - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 19063-1:2015)

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European foreword

This document (EN ISO 19063-1:2015) 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of an identical text or by endorsement, at the latest by June 2016, and conflicting national standards shall be withdrawn at the latest by June 2016.

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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INTERNATIONAL STANDARD

ISO 19063-1

First edition 2015-11-15

Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Polystyrènes résistants au choc (PS-I) pour moulage et extrusion —

Partie 1: Système de désignation et base de spécification



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ISO 19063-1:2015(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).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: Foreword - Supplementary information

The committee responsible for this document is ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This first edition of ISO 19063-1 cancels and replaces ISO 2897-1:1997, 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 2897-1. If the existing ISO 2897-1 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 2897-1 to ISO 19063-1, any designation system according to ISO 2897-1 is to be phased out in 5 to 10 years. During this period, ISO 2897-2 will effectively be Part 2 of this International Standard.

ISO 19063 consists of the following parts, under the general title *Plastics* — *Impact-resistant polystyrene* (*PS-I*) moulding and extrusion materials:

— Part 1: Designation system and basis for specifications

Introduction

ISO 2897-1 is complex and does not fit with daily practice anymore. In practice, ISO 1043 (all parts) and ISO 11469 are, in combination, "improperly" being used as a designation system for, e.g. marking. The aim of this International Standard is to simplify the data block system and to connect more to ISO 1043 (all parts) and ISO 11469, where the first two blocks are used for generic identification and marking of products.

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Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials —

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

1 Scope

This part of ISO 19063 establishes a system of designation for impact-resistant polystyrene (PS-I) moulding and extrusion materials, which may be used as the basis for specifications.

The types of impact-resistant polystyrene plastic are differentiated from each other by a classification system based on appropriate levels of the designatory properties:

- a) Vicat softening temperature;
- b) melt mass-flow rate;
- c) Charpy notched impact strength;
- d) flexural modulus;

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

This part of ISO 19063 is applicable to all impact-resistant polystyrene plastics with a two-phase polymer system comprised of a continuous phase, consisting of polystyrene and/or a copolymer of styrene with an alkyl-substituted styrene, and a dispersed elastomeric phase based on butadiene.

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

This part of ISO 19063 does not apply to expandable materials.

It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 19063 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 will be determined in accordance with the test methods specified in ISO 2897-2, if suitable.

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 <u>3.1</u>).

2 Normative references

The following documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. 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 1043-2, Plastics — Symbols and abbreviated terms — Part 2: Fillers and reinforcing materials



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