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Plastics - Polyoxymethylene (POM) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 29988-1:2019)

Táto norma obsahuje anglickú verziu európskej normy.
This standard includes the English version of the European Standard.

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Plastics - Polyoxymethylene (POM) moulding and extrusion materials - Part 1: Designation system and basis for specifications (ISO 29988-1:2019)

Plastiques - Matériaux à base de polyoxyméthylène (POM) pour moulage et extrusion - Partie 1: Système de désignation et base de spécification (ISO 29988-1:2019)

Kunststoffe - Polyoxymethylen (POM)-Werkstoffe - Teil 1: Bezeichnungssystem und Basis für Spezifikationen (ISO 29988-1:2019)

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European foreword

This document (EN ISO 29988-1:2019) 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of an identical text or by endorsement, at the latest by June 2020, and conflicting national standards shall be withdrawn at the latest by June 2020.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN shall not be held responsible for identifying any or all such patent rights.

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ISO 29988-1

Second edition
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Plastics — Polyoxymethylene (POM) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Matériaux à base de polyoxyméthylène (POM) 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.

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 of the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 9, *Thermoplastic materials*.

This second edition cancels and replaces the first edition (ISO 29988-1:2018), of which it constitutes a minor revision. The changes compared to the previous edition are as follows:

— 4.5.2 and 5.3 have been revised.

A list of all parts in the ISO 29988 series can be found on the ISO website.

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INTERNATIONAL STANDARD **ISO 29988-1:2019(E)**

Plastics — Polyoxymethylene (POM) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This document establishes a system of designation for polyoxymethylene (POM) thermoplastic material, which can be used as the basis for specifications.

NOTE Polyoxymethylene materials are thermoplastic materials composed principally of long-chain synthetic homopolymers and copolymers of formaldehyde. The repeating unit in the molecular chain is $-CH_2O-$ as an integral part of the main polymer chain resulting from polymerization of formaldehyde.

The types of polyoxymethylene plastic are differentiated from each other by a classification system based on appropriate levels of the following designatory properties:

a) melt mass-flow rate or melt volume-flow rate;

b) tensile modulus, and on information about basic polymer parameters, intended application, method of processing, important properties, additives, colorants, fillers and reinforcing materials.

This document is applicable to all polyoxymethylene homopolymers and to copolymers of polyoxymethylene and blends of polymers containing polyoxymethylene. It applies to materials ready for normal use in the form of powder, granules or pellets and to materials unmodified and modified by colorants, additives, fillers, etc. It is not intended to imply that materials having the same designation necessarily give the same performance.

This document does not provide engineering data, performance data or data on processing conditions which can be required to specify materials for particular end-use applications. If such additional properties are required, they are to be determined in accordance with the test methods specified by the relevant International Standard.

2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 1133-1, *Plastics — Determination of the melt mass-flow rate (MFR) and melt volume-flow rate (MVR) of thermoplastics — Part 1: Standard method*

ISO 29988-2, *Plastics — Polyoxymethylene (POM) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*