INTERNATIONAL STANDARD

ISO 24026-1

First edition
2020-05

Plastics — Poly(methyl methacrylate) (PMMA) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Matériaux à base de poly(méthacrylate de méthyle) (PMMA) pour moulage et extrusion —

Partie 1: Système de désignation et base de spécifications

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Reference number
ISO 24026-1:2020(E)

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Published in Switzerland

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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*, in collaboration with the European Committee for Standardization (CEN) Technical Committee CEN/TC 249, *Plastics*, in accordance with the Agreement on technical cooperation between ISO and CEN (Vienna Agreement).

This first edition of ISO 24026-1 cancels and replaces ISO 8257-1:1998, which has been technically revised.

The main changes compared to the previous edition are as follows:

— the normative references have been updated;

— Clause 3 has been added;

— the position of data block has been changed.

A list of all parts in the ISO 24026 series can be found on the ISO website.

Any feedback or questions on this document should be directed to the user's national standards body. A complete listing of these bodies can be found at www.iso.org/members.html.

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Plastics — Poly(methyl methacrylate) (PMMA) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

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1 Scope

This document establishes a system of designation for poly(methyl methacrylate) (PMMA) thermoplastic material, which can be used as the basis for specifications.

The types of PMMA 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) viscosity number (optional);

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

This document is applicable to all poly(methyl methacrylate) homopolymers and to copolymers of methyl methacrylate (MMA) containing at least a mass percentage of 80 % of MMA and not more than a mass percentage of 20 % of acrylic esters or other monomers.

This document applies to materials ready for normal use in the form of beads, granules and pellets and to materials unmodified or modified by colorants, additives, etc. It does not apply to PMMA modified with elastomers.

It is not intended to imply that materials having the same designation give necessarily the same performance. This document 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 are, if suitable, determined using the test methods specified in ISO 24026-2.

In order to specify a thermoplastic material for a particular application or to ensure reproducible processing, additional requirements can be given in data block 5 (see 4.1).

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 24026-2, *Plastics — Poly(methyl methacrylate) (PMMA) moulding and extrusion materials — Part 2:Preparation of test specimens and determination of properties*

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