INTERNATIONAL STANDARD

ISO 19066-1

First edition
2014-10-01

Plastics — Methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Matériaux plastique (méthacrylate de méthyle)-acrylonitrile-butadiène-styrène (MABS) pour moulage et extrusion —

Partie 1: Système de désignation et base de spécifications

Reference number
ISO 19066-1:2014(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).

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. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

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 19066-1 cancels and replaces ISO 10366-1:2002, 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 10366-1. If the existing ISO 10366-1 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 10366-1 to ISO 19066-1, ISO 10366-1 needs to be phased out in 5 to 10 years. During this period, ISO 10366-2 will effectively be Part 2 of this International Standard.

ISO 19066 consists of the following parts, under the general title *Plastics — Methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) moulding and extrusion materials*:

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

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Introduction

ISO 10366-1:2002 is complex and does not fit with daily practice anymore. In practice ISO 1043 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 and ISO 11469, where the first two blocks are used for generic identification and marking of products.

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Plastics — Methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This part of ISO 19066 establishes a system of designation for methyl methacrylate-acrylonitrile-butadiene-styrene (MABS) moulding and extrusion materials, which can be used as the basis for specifications.

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

a) Vicat softening temperature,

b) melt volume-flow rate,

c) Charpy notched impact strength, and

d) tensile 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 19066 is applicable to all methyl methacrylate-acrylonitrile-butadiene-styrene materials consisting of a continuous phase based mainly on copolymers of styrene (and/or an alkyl-substituted styrene), acrylonitrile and methyl methacrylate, and a dispersed elastomeric phase based on butadiene.

It applies to MABS materials ready for normal use in the form of powder, granules, or pellets, unmodified or modified by colorants, additives, fillers, etc.

It is not intended to imply that materials having the same designation give necessarily the same performance. This part of ISO 19066 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 will be determined in accordance with the test methods specified in ISO 10366-2, if suitable.

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 3.1).

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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