INTERNATIONAL STANDARD

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Plastics — Styrene/acrylonitrile (SAN) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

Plastiques — Styrène/acrylonitrile (SAN) pour moulage et extrusion —
Partie 1: Système de désignation et base de spécification

Reference number
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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 19064-1 cancels and replaces ISO 4894-1:1997, 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 4894-1. If the existing ISO 4894-1 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 4894-1 to ISO 19064-1, any designation system according to ISO 4894-1 is to be phased out in 5 to 10 years. During this period, ISO 4894-2 will effectively be Part 2 of this International Standard.

ISO 19064 consists of the following parts, under the general title *Plastics — Styrene/acrylonitrile (SAN) moulding and extrusion materials*:

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

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Introduction

ISO 4894-1:1997 is complex and does not fit with daily practice anymore. In practice the ISO 1043–series 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 the ISO 1043–series and ISO 11469, where the first two blocks are used for generic identification and marking of products.

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Plastics — Styrene/acrylonitrile (SAN) moulding and extrusion materials —

Part 1: Designation system and basis for specifications

1 Scope

This part of ISO 19064 establishes a system of designation for styrene/acrylonitrile (SAN) moulding and extrusion materials, which may be used as the basis for specifications.

The types of styrene/acrylonitrile 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,

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

This part of ISO 19064 is applicable to all copolymers of styrene and/or substituted styrene having between 5 % (*m/m*) and 50 % (*m/m*) acrylonitrile.

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

This part of ISO 19064 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 19064 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 shall be determined in accordance with the test methods specified in ISO 4894-2, 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 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*

ISO 4894-2, *Plastics — Styrene/acrylonitrile (SAN) moulding and extrusion materials — Part 2: Preparation of test specimens and determination of properties*

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