# INTERNATIONAL STANDARD

ISO 19064-2

First edition 2020-03

# Plastics — Styrene-acrylonitrile (SAN) moulding and extrusion materials —

### Part 2:

# Preparation of test specimens and determination of properties

Plastiques — Matériaux à base de styrène-acrylonitrile (SAN) pour moulage et extrusion —

Partie 2: Préparation des éprouvettes et détermination des propriétés



### ISO 19064-2:2020(E)



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#### **Foreword**

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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 <a href="www.iso.org/directives">www.iso.org/directives</a>).

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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 19064-2 cancels and replaces ISO 4894-2:1995, which has been technically revised.

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

- the normative references in <u>Clause 2</u> have been updated;
- ISO 3167 has been replaced by ISO 20753;
- IEC 60093 has been replaced by IEC 62631-3-1 and IEC 62631-3-2;
- IEC 60250 has been replaced by IEC 62631-2-1;
- ISO 1183 has been replaced by ISO 1183-1, ISO 1183-2 and ISO 1183-3.

A list of all parts in the ISO 19064 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 <a href="https://www.iso.org/members.html">www.iso.org/members.html</a>.

## Introduction

There are many methods for testing properties of plastics. For some, the data obtained by different standards are not comparable. Even when the same standards have been used, they often allow the adoption of a wide range of alternative test conditions, and the data obtained are not necessarily comparable. The purpose of this document is to specify methods and conditions of test to be used for the acquisition and presentation of data to ensure that valid comparisons between Styrene-acrylonitrile (SAN) materials can be made.

# Plastics — Styrene-acrylonitrile (SAN) moulding and extrusion materials —

### Part 2:

# Preparation of test specimens and determination of properties

### 1 Scope

This document specifies the methods of preparation of test specimens and the test methods to be used in determining the properties of styrene-acrylonitrile (SAN) moulding and extrusion materials. It gives the requirements for handling the test material and for conditioning both the test material before moulding and the specimens before testing.

This document gives procedures and conditions for the preparation of test specimens and procedures for measuring properties of the materials from which these specimens are made. It lists properties and test methods which are suitable and necessary to characterize SAN moulding and extrusion materials.

The properties have been selected from the general test methods in ISO 10350-1. Other test methods in wide use for, or of particular significance to, these moulding and extrusion materials are also included in this document, as are the designatory properties specified in ISO 19064-1.

The methods of specimen preparation and conditioning, the specimen dimensions and the test procedures specified in this document are used in order to obtain reproducible and comparable test results. Values determined are not always identical to those obtained using specimens of different dimensions or prepared using different procedures.

#### 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 62, Plastics — Determination of water absorption

ISO 75-1, Plastics — Determination of temperature of deflection under load — Part 1: General test method

ISO 75-2, Plastics — Determination of temperature of deflection under load — Part 2: Plastics and ebonite

ISO 178, Plastics — Determination of flexural properties

ISO 179-1, Plastics — Determination of Charpy impact properties — Part 1: Non-instrumented impact test

ISO 179-2, Plastics — Determination of Charpy impact properties — Part 2: Instrumented impact test

ISO 180, Plastics — Determination of Izod impact strength

ISO 293, Plastics — Compression moulding of test specimens of thermoplastic materials

ISO 294-1, Plastics — Injection moulding of test specimens of thermoplastic materials — Part 1: General principles, and moulding of multipurpose and bar test specimens

ISO 294-3, Plastics — Injection moulding of test specimens of thermoplastic materials — Part 3: Small plates