STN Styrén-akr Časť 2: Pr

Plasty Styrén-akrylonitril (SAN) na tvárnenie a vytláčanie Časť 2: Príprava skúšobných telies a stanovenie vlastností (ISO 19064-2: 2020)

STN EN ISO 19064-2

64 2602

Plastics - Styrene-acrylonitrile (SAN) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 19064-2:2020)

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

Táto norma bola oznámená vo Vestníku ÚNMS SR č. 08/20

Obsahuje: EN ISO 19064-2:2020, ISO 19064-2:2020

Oznámením tejto normy sa ruší STN EN ISO 4894-2 (64 2602) z januára 2001

EUROPEAN STANDARD NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 19064-2

April 2020

ICS 83.080.20

Supersedes EN ISO 4894-2:1999

English Version

Plastics - Styrene-acrylonitrile (SAN) moulding and extrusion materials - Part 2: Preparation of test specimens and determination of properties (ISO 19064-2:2020)

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) Kunststoffe - Styrol/Acrylnitril (SAN)-Werkstoffe - Teil 2: Herstellung von Probekörpern und Bestimmung von Eigenschaften (ISO 19064-2:2020)

This European Standard was approved by CEN on 21 March 2020.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION COMITÉ EUROPÉEN DE NORMALISATION EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels

EN ISO 19064-2:2020 (E)

Contents	Page
Euronean foreword	3

European foreword

This document (EN ISO 19064-2:2020) 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 October 2020, and conflicting national standards shall be withdrawn at the latest by October 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.

This document supersedes EN ISO 4894-2:1999.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Republic of North Macedonia, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 19064-2:2020 has been approved by CEN as EN ISO 19064-2:2020 without any modification.

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)



COPYRIGHT PROTECTED DOCUMENT

© ISO 2020

All rights reserved. Unless otherwise specified, or required in the context of its implementation, no part of this publication may be reproduced or utilized otherwise in any form or by any means, electronic or mechanical, including photocopying, or posting on the internet or an intranet, without prior written permission. Permission can be requested from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office CP 401 • Ch. de Blandonnet 8 CH-1214 Vernier, Geneva Phone: +41 22 749 01 11 Fax: +41 22 749 09 47 Email: copyright@iso.org Website: www.iso.org

Published in Switzerland

Coı	ntent	ts	Page
Intr		on	
1	Scop	De	1
2	Nori	mative references	1
3	Terms and definitions		3
4	Prep 4.1 4.2 4.3 4.4	General	3 3 3 3
5	Cond	ditioning of test specimens	4
6	Determination of properties		4
Ann	ex A (ne	ormative) Determination of the bound-acrylonitrile content in the co	ontinuous phase7

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 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 the following URL: 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 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 www.iso.org/members.html.

ISO 19064-2:2020(E)

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.

INTERNATIONAL STANDARD

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

ISO 19064-2:2020(E)

- ISO 306, Plastics Thermoplastic materials Determination of Vicat softening temperature (VST)
- ISO 527-2, Plastics Determination of tensile properties Part 2: Test conditions for moulding and extrusion plastics
- ISO 527-4, Plastics Determination of tensile properties Part 4: Test conditions for isotropic and orthotropic fibre-reinforced plastic composites
- ISO 899-1, Plastics Determination of creep behaviour Part 1: Tensile creep
- 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 1183-1, Plastics Methods for determining the density of non-cellular plastics Part 1: Immersion method, liquid pycnometer method and titration method
- ISO 1183-2, Plastics Methods for determining the density of non-cellular plastics Part 2: Density gradient column method
- ISO 1183-3, Plastics Methods for determining the density of non-cellular plastics Part 3: Gas pyknometer method
- ISO 1656, Rubber, raw natural, and rubber latex, natural Determination of nitrogen content
- ISO 2561, Plastics Determination of residual styrene monomer in polystyrene (PS) and impact-resistant polystyrene (PS-I) by gas chromatography
- ISO 2818, Plastics Preparation of test specimens by machining
- ISO 4581, Plastics Styrene/acrylonitrile copolymers Determination of residual acrylonitrile monomer content Gas chromatography method
- ISO 4589-2, Plastics Determination of burning behaviour by oxygen index Part 2: Ambient-temperature test
- ISO 4589-3, Plastics Determination of burning behaviour by oxygen index Part 3: Elevated-temperature test
- ISO 8256, Plastics Determination of tensile-impact strength
- ISO 10350-1, Plastics Acquisition and presentation of comparable single-point data Part 1: Moulding materials
- ISO 11357-1, Plastics Differential scanning calorimetry (DSC) Part 1: General principles
- ISO 11357-2, Plastics Differential scanning calorimetry (DSC) Part 2: Determination of glass transition temperature and glass transition step height
- ISO 19064-1, Plastics Styrene/acrylonitrile (SAN) moulding and extrusion materials Part 1: Designation system and basis for specifications
- ISO 20753, Plastics Test specimens
- IEC 60112, Method for the determination of the proof and the comparative tracking indices of solid insulating materials
- IEC 60243-1, Electrical strength of insulating materials Test methods Part 1: Tests at power frequencies
- IEC 60296, Fluids for electrotechnical applications Unused mineral insulating oils for transformers and switchgear

IEC 60695-11-10, Fire hazard testing — Part 11-10: Test flames — 50 W horizontal and vertical flame test methods

IEC 62631-2-1, Dielectric and resistive properties of solid insulating materials-Part 2-1:Relative permittivity and dissipation factor-Technical frequencies (0,1 Hz to 10 MHz)-AC Methods

IEC 62631-3-1, Dielectric and resistive properties of solid insulating materials — Part 3-1: Determination of resistive properties (DC methods) — Volume resistance and volume resistivity — General method

IEC 62631-3-2, Dielectric and resistive properties of solid insulating materials — Part 3-2: Determination of resistive properties (DC methods) — Surface resistance and surface resistivity

koniec náhľadu – text ďalej pokračuje v platenej verzii STN