



SLOVENSKI STANDARD SIST EN ISO 293:2023

01-maj-2023

Polimerni materiali - Preskušanci plastomerov, oblikovani s stiskanjem (ISO 293:2023)

Plastics - Compression moulding of test specimens of thermoplastic materials (ISO 293:2023)

Kunststoffe - Formgepresste Probekörper aus Thermoplasten (ISO 293:2023)

Plastiques - Moulage par compression des éprouvettes en matières thermoplastiques (ISO 293:2023)

[SIST EN ISO 293:2023](https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-1035701357d/sist-en-iso-293-2023)

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-1035701357d/sist-en-iso-293-2023>

Ta slovenski standard je istoveten z: EN ISO 293:2023

ICS:

83.080.20

Plastomeri

Thermoplastic materials

SIST EN ISO 293:2023

en,fr,de

EUROPEAN STANDARD

EN ISO 293

NORME EUROPÉENNE

EUROPÄISCHE NORM

March 2023

ICS 83.080.20

Supersedes EN ISO 293:2005

English Version

Plastics - Compression moulding of test specimens of thermoplastic materials (ISO 293:2023)

Plastiques - Moulage par compression des éprouvettes en matières thermoplastiques (ISO 293:2023)

Kunststoffe - Formgepresste Probekörper aus Thermoplasten (ISO 293:2023)

This European Standard was approved by CEN on 24 February 2023.

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, Türkiye and United Kingdom.

[SIST EN ISO 293:2023](https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023)

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023>



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

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

Contents	Page
European foreword.....	3

iTeh STANDARD PREVIEW
(standards.iteh.ai)

SIST EN ISO 293:2023

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023>

European foreword

This document (EN ISO 293:2023) 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 September 2023, and conflicting national standards shall be withdrawn at the latest by September 2023.

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 293:2005.

Any feedback and questions on this document should be directed to the users' national standards body/national committee. A complete listing of these bodies can be found on the CEN website.

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, Türkiye and the United Kingdom.

(standards.iteh.ai)

Endorsement notice

The text of ISO 293:2023 has been approved by CEN as EN ISO 293:2023 without any modification.

INTERNATIONAL
STANDARD

ISO
293

Fourth edition
2023-02

**Plastics — Compression moulding
of test specimens of thermoplastic
materials**

*Plastiques — Moulage par compression des éprouvettes en matières
thermoplastiques*

iTeh STANDARD PREVIEW
(standards.iteh.ai)

[SIST EN ISO 293:2023](https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023)

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023>



Reference number
ISO 293:2023(E)

© ISO 2023

iTeh STANDARD PREVIEW (standards.iteh.ai)

SIST EN ISO 293:2023

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023>



COPYRIGHT PROTECTED DOCUMENT

© ISO 2023

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
Email: copyright@iso.org
Website: www.iso.org

Published in Switzerland

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus	2
4.1 Moulding press.....	2
4.2 Moulds.....	2
4.2.1 General.....	2
4.2.2 Fabrication.....	3
4.2.3 Types.....	3
5 Procedure	4
5.1 Preparation of moulding material.....	4
5.1.1 Drying of granular material.....	4
5.1.2 Preparation of preforms.....	4
5.2 Moulding.....	5
5.3 Cooling.....	5
5.3.1 General.....	5
5.3.2 Cooling methods.....	5
6 Inspection of the moulded specimens or sheets	6
7 Specimen preparation report	6
Bibliography	7

[SIST EN ISO 293:2023](https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023)

<https://standards.iteh.ai/catalog/standards/sist/ab3352df-7ba8-4acd-83b5-8cc57ee4697d/sist-en-iso-293-2023>

ISO 293:2023(E)

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 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 fourth edition cancels and replaces the third edition (ISO 293:2004), which has been technically revised.

The main changes are as follows:

- the definition for “cooling rate” has been revised (see [3.6](#));
- requirements regarding the biggest clamping force and the highest platens temperature have been changed (see [4.1](#));
- the description of common specifications of positive mould has been given (see [4.2.3.3](#));
- the conditions for the use of vacuum oven while material drying have been added (see [5.1.1](#));
- the methods of cooling rate have been revised (see [Table 1](#));
- a bibliography has been added.

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.