SLOVENSKI STANDARD
SIST EN ISO 306:2023

01-februar-2023

Nadomešča:
SIST EN ISO 306:2014

Polimerni materiali - Plastomeri - Ugotavljanje temperature zmehčišča po Vicatu (VST) (ISO 306:2022)

Plastics - Thermoplastic materials - Determination of Vicat softening temperature (VST) (ISO 306:2022)

Kunststoffe - Thermoplaste - Bestimmung der Vicat-Erweichungstemperatur (VST) (ISO 306:2022)

Plastiques - Matières thermoplastiques - Détermination de la température de ramollissement Vicat (VST) (ISO 306:2022)

Ta slovenski standard je istoveten z: **EN ISO 306:2022**

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83.080.20 Plastomeri Thermoplastic materials

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EUROPEAN STANDARD

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English Version

Plastics - Thermoplastic materials - Determination of Vicat softening temperature (VST) (ISO 306:2022)

Plastiques - Matières thermoplastiques - Détermination de la température de ramollissement Vicat (VST) (ISO 306:2022)

Kunststoffe - Thermoplaste - Bestimmung der Vicat-Erweichungstemperatur (VST) (ISO 306:2022)

This European Standard was approved by CEN on 20 October 2022.

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

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

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European foreword

This document (EN ISO 306:2022) 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of an identical text or by endorsement, at the latest by May 2023, and conflicting national standards shall be withdrawn at the latest by May 2023.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 306:2013.

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.

Endorsement notice

The text of ISO 306:2022 has been approved by CEN as EN ISO 306:2022 without any modification.

INTERNATIONAL STANDARD

ISO 306

Sixth edition
2022-11

Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

Plastiques — Matières thermoplastiques — Détermination de la température de ramollissement Vicat (VST)

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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).

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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 TC 61, *Plastics*, Subcommittee SC 2, *Mechanical behavior,* 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 sixth edition cancels and replaces the fifth edition (ISO 306:2013), which has been technically revised.

The main changes are as follows.

— The document has been updated to allow for the use of commercial universal equipment (i.e. covering both ISO 75 and ISO 306) and modern testing practices.

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.

Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

1 Scope

1.1 This document specifies four methods for the determination of the Vicat softening temperature (VST) of thermoplastic materials:

— Method A50 using a force of 10 N and a heating rate of 50 °C/h;

— Method B50 using a force of 50 N and a heating rate of 50 °C/h;

— Method A120 using a force of 10 N and a heating rate of 120 °C/h;

— Method B120 using a force of 50 N and a heating rate of 120 °C/h.

1.2 The methods specified are applicable only to thermoplastics, for which they give a measure of the temperature at which the thermoplastics start to soften rapidly.

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 291, *Plastics — Standard atmospheres for conditioning and testing*

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 294-2, *Plastics — Injection moulding of test specimens of thermoplastic materials — Part 2: Small tensile bars*

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

ISO 472, *Plastics — Vocabulary*

ISO 2818, *Plastics — Preparation of test specimens by machining*

ISO 16012, *Plastics — Determination of linear dimensions of test specimens*

ISO 20753, *Plastics — Test specimens*

IEC 60584-1, *Thermocouples — Part 1: EMF specifications and tolerances*

IEC 60584-3, *Thermocouples — Part 3: Extension and compensating cables — Tolerances and identification system*

IEC 60751, *Industrial platinum resistance thermometers and platinum temperature sensors*