Extruded sheets of impact-modified polystyrene (PS-I) - Requirements and test methods (ISO 14631:2021)



# EESTI STANDARDI EESSÕNA

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See Eesti standard EVS-EN ISO 14631:2021 sisaldab Euroopa standardi EN ISO 14631:2021 ingliskeelset teksti.

This Estonian standard EVS-EN ISO 14631:2021 consists of the English text of the European standard EN ISO 14631:2021.

Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas.

This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation and Accreditation.

Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 30.06.2021.

Date of Availability of the European standard is 30.06.2021.

Standard on kättesaadav Eesti Standardimis- ja Akrediteerimiskeskusest.

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### ICS 83.140.10

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# **EUROPEAN STANDARD**

# **EN ISO 14631**

# NORME EUROPÉENNE

**EUROPÄISCHE NORM** 

June 2021

ICS 83.140.10

Supersedes EN ISO 14631:1999

## **English Version**

# Extruded sheets of impact-modified polystyrene (PS-I) - Requirements and test methods (ISO 14631:2021)

Plaques extrudées en polystyrène modifié résistant au choc (PS-I) - Exigences et méthodes d'essai (ISO 14631:2021)

Extrudierte Tafeln aus schlagzäh-modifiziertem Polystyrol (PS-I) - Anforderungen und Prüfverfahren (ISO 14631:2021)

This European Standard was approved by CEN on 10 June 2021.

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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

# **European foreword**

This document (EN ISO 14631:2021) 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of an identical text or by endorsement, at the latest by December 2021, and conflicting national standards shall be withdrawn at the latest by December 2021.

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 14631:1999.

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 14631:2021 has been approved by CEN as EN ISO 14631:2021 without any modification.

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

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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 <a href="https://www.iso.org/iso/foreword.html">www.iso.org/iso/foreword.html</a>.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*, 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 second edition cancels and replaces the first edition (ISO 14631:1999), of which it constitutes a minor revision.

The change compared to the previous edition are as follows:

references to ISO 2897-1 have been replaced by ISO 19063-1.

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>.

# Extruded sheets of impact-modified polystyrene (PS-I) — Requirements and test methods

# 1 Scope

This document specifies the requirements and test methods for solid flat extruded sheets of impact-modified polystyrene (PS-I) without fillers and reinforcing materials.

This document applies only to thickness 0,25 mm to 20,0. It also applies to PS-I sheet in roll form.

#### 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 179-1, Plastics — Determination of Charpy impact properties — Part 2: Instrumented impact test

ISO 291, Plastics — Standard atmospheres for conditioning and testing

ISO 306, Plastics — Thermoplastic materials — Determination of Vicat softening temperature (VST)

ISO 527-1, Plastics — Determination of tensile properties — Part 1: General principles

ISO 527-2, Plastics — Determination of tensile properties — Part 2: Test conditions for moulding and extrusion plastics

ISO 1043-1, Plastics — Symbols and abbreviated terms — Part 1: Basic polymers and their special characteristics

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 2039-1, Plastics — Determination of hardness — Part 1: Ball indentation method

ISO 2818, Plastics — Preparation of test specimens by machining

ISO 6603-1, Plastics — Determination of multiaxial impact behaviour of rigid plastics — Part 1: Falling dart method

ISO 11501, Plastics — Film and sheeting — Determination of dimensional change on heating

ISO 19063-1, Plastics — Impact-resistant polystyrene (PS-I) moulding and extrusion materials — Part 1: Designation system and basis for specifications

#### 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

ISO Online browsing platform: available at <a href="https://www.iso.org/obp">https://www.iso.org/obp</a>