Plastics - Extruded and/or calendered, non-reinforced film and sheeting made of plasticized poly(vinyl chloride) (PVC-P) - Characterization and designation



EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN 15354:2022 sisaldab Euroopa standardi EN 15354:2022 ingliskeelset teksti.

This Estonian standard EVS-EN 15354:2022 consists of the English text of the European standard EN 15354:2022.

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 26.10.2022.

Date of Availability of the European standard is 26.10.2022.

Standard on kättesaadav Eesti Standardimis-ja Akrediteerimiskeskusest.

The standard is available from the Estonian Centre for Standardisation and Accreditation.

Tagasisidet standardi sisu kohta on võimalik edastada, kasutades EVS-i veebilehel asuvat tagasiside vormi või saates e-kirja meiliaadressile <u>standardiosakond@evs.ee</u>.

ICS 83.140.10

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EUROPEAN STANDARD

NORME EUROPÉENNE

EUROPÄISCHE NORM

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Supersedes CEN/TS 15354:2006

English Version

Plastics - Extruded and/or calendered, non-reinforced film and sheeting made of plasticized poly(vinyl chloride) (PVC-P) - Characterization and designation

Plastiques - Film et feuille en poly(chlorure de vinyle) plastifié (PVC-P) extrudés et/ou calandrés, non renforcés - Caractérisation et désignation Kunststoffe - Extrudierte und/oder kalandrierte nichtverstärkte Folien und Bahnen aus weichmacherhaltigem Polyvinylchlorid (PVC-P) -Leitfaden für die Charakterisierung und Bezeichnung

This European Standard was approved by CEN on 19 September 2022.

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.



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 15354:2022) has been prepared by 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 April 2023, and conflicting national standards shall be withdrawn at the latest by April 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 CEN/TS 15354:2006.

In comparison with the previous edition, the following technical modifications have been made:

- Document transposed from TS into EN;
- Normative references updated;
- Table 1 revised.

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

According to the CEN-CENELEC Internal Regulations, the national standards organisations 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.

1 Scope

This document specifies the characterization and the designation of extruded and/or calendered, non-reinforced film or sheeting made of plasticized poly(vinyl chloride) (PVC-P). It specifies the corresponding test methods for the assessment of the characteristics.

This document is applicable to film and sheeting in the range of thickness from 0,05 mm to 1 mm.

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.

EN 14469-4, Pigments and extenders — Testing of colouring materials in plasticized polyvinyl chloride (PVC-P) — Part 4: Determination of bleeding of colouring materials

EN ISO 176, Plastics — Determination of loss of plasticizers — Activated carbon method (ISO 176)

EN ISO 177, Plastics — Determination of migration of plasticizers (ISO 177)

EN ISO 291, Plastics — Standard atmospheres for conditioning and testing (ISO 291)

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

EN ISO 527-3, Plastics — Determination of tensile properties — Part 3: Test conditions for films and sheets (ISO 527-3)

EN ISO 877 (all parts), Plastics — Methods of exposure to solar radiation (ISO 877)

EN ISO 1183 (all parts), *Plastics* — *Method for determining the density and relative density of non-cellular plastics (ISO 1183)*

EN ISO 2812 (all parts), Paints and varnishes — Determination of resistance to liquids (ISO 2812)

EN ISO 3451-5, Plastics — Determination of ash — Part 5: Poly(vinyl chloride) (ISO 3451-5)

EN ISO 4892-1, Plastics — Methods of exposure to laboratory light sources — Part 1: General guidance (ISO 4892-1)

EN ISO 4892-2, Plastics — Methods of exposure to laboratory light sources — Part 2: Xenon-arc lamps (ISO 4892-2)

EN ISO 6383-1, Plastics — Film and sheeting — Determination of tear resistance — Part 1: Trouser tear method (ISO 6383-1)

EN ISO 6383-2, Plastics — Film and sheeting — Determination of tear resistance — Part 2: Elmendorf method (ISO 6383-2)

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

EN ISO 11502, *Plastics — Film and sheeting — Determination of blocking resistance (ISO 11502)*

EN ISO 11664 (all parts), Colorimetry (ISO 11664)

EN ISO 18314-1, Analytical colorimetry — Part 1: Practical colour measurement (ISO 18314-1)

ISO 4582, Plastics — Determination of changes in colour and variations in properties after exposure to glass-filtered solar radiation, natural weathering or laboratory radiation sources

ISO 4591, Plastics — Film and sheeting — Determination of average thickness of a sample, and average thickness and yield of a roll, by gravimetric techniques (gravimetric thickness)

ISO 4592, Plastics — Film and sheeting — Determination of length and width

ISO 4593, Plastics — Film and sheeting — Determination of thickness by mechanical scanning

ISO 4892-4, Plastics — Methods of exposure to laboratory light sources — Part 4: Open-flame carbon-arc lamps

ISO 8570, Plastics — Film and sheeting — Determination of cold-crack temperature

3 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

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

- IEC Electropedia: available at https://www.electropedia.org/
- ISO Online browsing platform: available at https://www.iso.org/obp

3.1

film or sheeting made of plasticized poly(vinyl chloride) (PVC-P)

film or sheeting, manufactured from a compound made of a polymer and/or a copolymer of poly(vinyl chloride) which contains plasticizer(s), filler(s) and additives, as stabilizer(s), lubricant(s), flame retardant(s), colorant(s), etc.

Note 1 to entry: Commonly, the term "film" is used if the thickness is less than 0,1 mm, and the term "sheeting" is used if the thickness is equal to or greater than 0,1 mm.

3.2

thickness of a film or sheeting

dimension measured perpendicularly, in specified conditions, between the two main surfaces of a film or a sheeting

3.3

nominal thickness of a film or sheeting

thickness of a film or sheeting (3.2), as declared by the manufacturer or specified in an agreement between the manufacturer and the purchaser

3.4

width of a film or a sheeting

smaller dimension of a film or sheeting, corresponding to the width of the unwound roll, measured on a flat surface in the transverse direction