

Plastics - Plastic films - Determination of tear resistance using a trapezoidal test specimen with incision

EESTI STANDARDI EESSÕNA

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English Version

**Plastics - Plastic films - Determination of tear resistance
using a trapezoidal test specimen with incision**

Plastiques - Films plastiques - Détermination de la
résistance au déchirement sur éprouvettes
trapézoïdales avec incision

Kunststoffe - Kunststofffolien - Bestimmung des
Weiterreißwiderstands unter Verwendung eines
trapezförmigen Probekörpers mit Einschnitt

This European Standard was approved by CEN on 22 May 2022.

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Contents		Page
European foreword		3
1	Scope.....	4
2	Normative references.....	4
3	Terms and definitions.....	4
4	Specimens.....	5
4.1	Sampling and specimen preparation.....	5
4.2	Number of specimens.....	6
5	Apparatus	6
6	Procedure	6
7	Evaluation.....	7
8	Test report.....	7
Annex A (informative) Explanatory notes		8
Bibliography		9

European foreword

This document (EN 17679:2022) 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of an identical text or by endorsement, at the latest by December 2022, and conflicting national standards shall be withdrawn at the latest by December 2022.

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This document is based on DIN 53363:2003-10.

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1 Scope

This document specifies a method of determining the tear resistance of a plastic film under specified conditions. It is applicable to products that, because of their flexibility, do not tear when clamped between the grips of a tensile testing machine. The method makes it possible to compare samples of different products provided their thickness does not differ by more than 10 %.

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 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 7500-1, *Metallic materials - Calibration and verification of static uniaxial testing machines - Part 1: Tension/compression testing machines - Calibration and verification of the force-measuring system (ISO 7500-1)*

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

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

tear resistance

ratio of the force with which a trapezoidal specimen as shown in Figure 1 resists tear, to the specimen thickness