

Flexible cellular polymeric materials - Determination of
tear strength (ISO 8067:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 8067:2018 sisaldab Euroopa standardi EN ISO 8067:2018 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 8067:2018 consists of the English text of the European standard EN ISO 8067:2018.
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.
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ICS 83.100

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English Version

Flexible cellular polymeric materials - Determination of tear strength (ISO 8067:2018)

Matériaux polymères alvéolaires souples -
Détermination de la résistance au déchirement (ISO
8067:2018)

Flexible Polymer-Schaumstoffe - Bestimmung des
Weiterreißwiderstands (ISO 8067:2018)

This European Standard was approved by CEN on 20 August 2018.

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European foreword

This document (EN ISO 8067:2018) has been prepared by Technical Committee ISO/TC 45 "Rubber and rubber products" 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of an identical text or by endorsement, at the latest by February 2019, and conflicting national standards shall be withdrawn at the latest by February 2019.

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 8067:2008.

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, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Endorsement notice

The text of ISO 8067:2018 has been approved by CEN as EN ISO 8067:2018 without any modification.

Contents

Page

Foreword	iv
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Apparatus	1
5 Test pieces	1
5.1 General	1
5.2 Trouser test piece for method A	2
5.3 Angle test piece for method B	2
6 Number of test pieces	3
7 Conditioning	4
8 Procedure	4
8.1 General	4
8.2 Method A	4
8.3 Method B	5
9 Expression of results	6
10 Test report	6
Annex A (informative) Precision comparison for the two types of test piece	7
Bibliography	9

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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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 45, *Rubber and rubber products*, Subcommittee SC 4, *Products (other than hoses)*.

This third edition cancels and replaces the second edition (ISO 8067:2008), which has been technically revised.

The main changes compared to the previous edition are as follows:

- test pieces with skin has been added in [5.1](#)

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 www.iso.org/members.html.

Flexible cellular polymeric materials — Determination of tear strength

1 Scope

This document specifies two methods for the determination of the tear strength of flexible cellular polymeric materials:

- method A, using a trouser test piece;
- method B, using an angle test piece without a nick.

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 1923, *Cellular plastics and rubbers — Determination of linear dimensions*

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*

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:

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

3.1 tear strength

R

maximum force per unit thickness observed when stretching a test piece to rupture

4 Apparatus

The tear strength shall be measured on a tensile-testing machine which will indicate the force at which rupture of the test piece takes place. An automatic machine should preferably be used which draws the actual curve, or a stylus or scale should be used having an indicator that remains at the point of maximum force after rupture of the test piece.

The accuracy of the test machine shall be class 2 or better as defined in ISO 7500-1.

5 Test pieces

5.1 General

The test pieces shall be free of voids and flow lines. Test pieces can be selected either with or without skin. If the material exhibits a predominant direction of cellular structure (orientation of the cells), the