

Self adhesive tapes - Measurement of breaking strength and elongation at break (ISO 29864:2018)

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 29864:2019 sisaldab Euroopa standardi EN ISO 29864:2019 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 29864:2019 consists of the English text of the European standard EN ISO 29864:2019.
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.
Euroopa standardimisorganisatsioonid on teinud Euroopa standardi rahvuslikele liikmetele kättesaadavaks 05.06.2019.	Date of Availability of the European standard is 05.06.2019.
Standard on kättesaadav Eesti Standardikeskusest.	The standard is available from the Estonian Centre for Standardisation.

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

ICS 83.180

Standardite reprodutseerimise ja levitamise õigus kuulub Eesti Standardikeskusele

Andmete paljundamine, taastekitamine, kopeerimine, salvestamine elektroonsesse süsteemi või edastamine ükskõik millises vormis või millisel teel ilma Eesti Standardikeskuse kirjaliku loata on keelatud.

Kui Teil on küsimusi standardite autorikaitse kohta, võtke palun ühendust Eesti Standardikeskusega:
Koduleht www.evs.ee; telefon 605 5050; e-post info@evs.ee

The right to reproduce and distribute standards belongs to the Estonian Centre for Standardisation

No part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, without a written permission from the Estonian Centre for Standardisation.

If you have any questions about copyright, please contact Estonian Centre for Standardisation:

Homepage www.evs.ee; phone +372 605 5050; e-mail info@evs.ee

English Version

Self adhesive tapes - Measurement of breaking strength
and elongation at break (ISO 29864:2018)

Rubans auto-adhésifs - Mesure de la résistance à la
rupture et de l'allongement à la rupture (ISO
29864:2018)

Klebebänder - Messung der Bruchkraft und der
Reißdehnung (ISO 29864:2018)

This European Standard was approved by CEN on 8 April 2019.

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, 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 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

European foreword

The text of ISO 29864:2018 has been prepared by Technical Committee ISO/TC 61 "Plastics" of the International Organization for Standardization (ISO) and has been taken over as EN ISO 29864:2019 by Technical Committee CEN/TC 193 "Adhesives" the secretariat of which is held by UNE.

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 2019, and conflicting national standards shall be withdrawn at the latest by December 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 14410:2003.

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 29864:2018 has been approved by CEN as EN ISO 29864:2019 without any modification.

Contents

Page

Foreword	iv
Introduction	v
1 Scope	1
2 Normative references	1
3 Terms and definitions	1
4 Significance and use	1
5 Principle	2
6 Apparatus	2
6.1 Tensile testing machine.....	2
6.2 Clamps.....	2
6.3 Cylinders.....	2
6.4 Scale.....	3
6.5 Cutting tool.....	3
7 Test sample and test pieces	3
8 Procedure	3
8.1 Testing conditions.....	3
8.2 Preparation of test pieces.....	4
8.3 Method A for non-filament tapes.....	4
8.4 Method B for filament tapes.....	4
9 Expression of results	4
9.1 Expression of results for non-filament tapes.....	4
9.2 Expression of results for filament tapes.....	5
10 Test report	5

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).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see www.iso.org/patents).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on 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 the following URL: www.iso.org/iso/foreword.html.

This document was prepared by Technical Committee ISO/TC 61, *Plastics*, Subcommittee SC 11, *Products*.

This second edition cancels and replaces the first edition (ISO 29864:2007) of which it constitutes a minor revision.

The changes compared to the previous edition are as follows:

- the Introduction has been editorially revised;
- the normative references in [Clause 2](#) have been updated;
- a definition has been added for “self adhesive tape” in [Clause 3](#);
- the text has been editorially revised to comply with the most recent editing rules.

Introduction

The breaking strength of adhesive tape is of value as an indication of its uniformity and quality, and its ability to withstand stresses during application and use.

The elongation at break of the adhesive tape is of value as an indication of its uniformity and quality as well as a rough indication of its ability to conform to curved and irregular surfaces. It is usually determined at the same time as the breaking strength.

The procedure specified in this document combines the determination of breaking strength and elongation at break.

Method A is the measurement of breaking strength and elongation at break of tapes other than filament tapes.

Method B is the measurement of breaking strength and elongation at break of filament reinforced tapes.

Self adhesive tapes — Measurement of breaking strength and elongation at break

1 Scope

This document specifies methods to measure the breaking strength and elongation at break of a self adhesive tape when it is subjected to a tensile force sufficient to cause it to break.

These test methods describe a procedure for testing 12 mm or 24 mm wide samples cut from supplied rolls of self adhesive tapes. Alternatively rolls of self adhesive tape up to 50 mm wide can be directly tested in their original width. In these circumstances the practical breaking strength and elongation will be typical of the manufacturer's cut edges. When newly cut sample pieces are tested, because of the better cutting of the edges, the results can be higher than would be found on commercial tape.

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 12481, *Self adhesive tapes — Terminology*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in EN 12481 and the following apply.

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

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

3.1

breaking strength

ability to resist breaking when subject to load under prescribed conditions

3.2

elongation at break

increase in length of the adhesive tape at the time of breaking as a percentage of the original length

3.3

self adhesive tape

pressure sensitive adhesive

adhesive which in a dry state is permanently tacky at room temperature and adheres readily to surfaces under brief and light pressure

4 Significance and use

These methods provide a means of assessing the uniformity of breaking strength and elongation at break of a given type of pressure sensitive tape and may be used to compare one product with another.

They may be used to determine particular backing materials or tape widths appropriate to a desired end use.