

Self adhesive tapes - Measurement of static shear adhesion

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN 1943:2003 sisaldab Euroopa standardi EN 1943:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.02.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN 1943:2003 consists of the English text of the European standard EN 1943:2002.</p> <p>This document is endorsed on 18.02.2003 with the notification being published in the official publication of the Estonian national standardisation organisation.</p> <p>The standard is available from Estonian standardisation organisation.</p>
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<p>Käsitlusala: This European Standard specifies a series of methods for the determination of the ability of a pressure sensitive tape to remain adhered under a constant load applied parallel to the surfaces of the tape and substrate</p>	<p>Scope: This European Standard specifies a series of methods for the determination of the ability of a pressure sensitive tape to remain adhered under a constant load applied parallel to the surfaces of the tape and substrate</p>
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ICS 83.180

Võtmesõnad: adhesion tests, adhesive force, adhesive strength, adhesive tapes, definition, definitions, measurement, measuring techniques, packaging, packaging means, shear strength, splicing tapes, static loading, testing

English version

Self adhesive tapes - Measurement of static shear adhesion

Rubans auto-adhésifs - Mesurage du pouvoir adhésif
tangential

Klebebänder - Messung des Scherwiderstandes unter
statischer Belastung

This European Standard was approved by CEN on 1 August 2002.

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Contents

	page
Foreword	3
Introduction	4
1 Scope	5
2 Normative references	5
3 Terms and definitions	5
4 Significance and use	5
5 Method A: Measurement of shear adhesion to a vertical standard steel panel	6
5.1 Principle	6
5.2 Materials	6
5.3 Apparatus	6
5.4 Test samples and test piece	7
5.5 Procedure	8
5.6 Expression of results	9
5.7 Test report	9
6 Method B: Measurement of shear adhesion to a vertical panel covered with NIST SRM 1810A standard fibreboard	9
6.1 Principle	9
6.2 Materials	9
6.3 Apparatus	10
6.4 Test samples and test piece	10
6.5 Procedure	10
6.6 Expression of results	10
6.7 Test report	10
7 Method C: Measurement of shear adhesion to a vertical panel covered with a fibreboard agreed upon by the buyer and the seller	11
7.1 Principle	11
7.2 Procedure	11
8 Method D: Measurement of shear adhesion of filament reinforced tape applied to a horizontal standard steel panel	11
8.1 Principle	11
8.2 Materials	11
8.3 Apparatus	11
8.4 Test samples and test piece	12
8.5 Procedure	12
8.6 Expression of results	13
8.7 Test report	13
9 Method E: Measurement of shear adhesion of filament reinforced tape applied to a horizontal panel covered with NIST SRM 1810A standard fibreboard	13
9.1 Principle	13
9.2 Procedure	13
10 Method F: Measurement of shear adhesion of filament reinforced tape applied to a horizontal panel covered with a fibreboard agreed upon by the buyer and the seller	14
10.1 Principle	14
10.2 Procedure	14
11 Method G: Measurement of shear adhesion to a vertical standard steel panel at an elevated temperature after 10 min dwell time	14
11.1 Principle	14
11.2 Procedure	14

Foreword

This document EN 1943:2002 has been prepared by Technical Committee CEN/TC 253 "Self adhesive tapes", the secretariat of which is held by AFNOR.

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 2003, and conflicting national standards shall be withdrawn at the latest by April 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, Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, Malta, Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Introduction

This European Standard has been revised in conjunction with AFERA (European Association for the Self Adhesive Tape Industry) in Europe and PSTC (Pressure Sensitive Tape Council) in USA with the purpose to produce a standard which will be acceptable in due course by ISO.

Key changes from EN 1943:1996

- the principle of shear adhesion measurement changes to time to failure under constant load from a measurement of the load to induce failure within four hours;
- scope of the test is expanded to include horizontal shear measurement of filament reinforced tape and to include fibreboard substrate;
- steel plates are revised to readily available, industry standard steel with a smoother surface finish “in line with EN 1939 Rev.”;
- test piece preparation procedure is revised in line with EN 1939 Rev.

1 Scope

This European Standard specifies a series of methods for the determination of the ability of a pressure sensitive tape to remain adhered under a constant load applied parallel to the surfaces of the tape and substrate.

The European Standard contains:

- method A : Self adhesive tapes – Measurement of shear adhesion to a vertical standard steel panel;
- method B : Self adhesive tapes – Measurement of shear adhesion to a vertical panel covered with NIST SRM 1810A ¹⁾ standard fibreboard;
- method C : Self adhesive tapes – Measurement of shear adhesion to a vertical panel covered with a fibreboard agreed upon by the buyer and seller;
- method D : Self adhesive tapes – Measurement of shear adhesion of filament reinforced tape applied to a horizontal standard steel panel;
- method E : Self adhesive tapes – Measurement of shear adhesion of filament reinforced tape applied to a horizontal panel covered with NIST SRM 1810A ¹⁾ standard fibreboard;
- method F : Self adhesive tapes – Measurement of shear adhesion of filament reinforced tape applied to a horizontal panel covered with a fibreboard agreed upon by the buyer and seller;
- method G : Self adhesive tapes – Measurement of shear adhesion to a vertical standard steel panel at elevated temperature after a 10 min dwell time.

2 Normative references

This European Standard incorporates by dated or undated reference, provisions from other publications. These normative references are cited at the appropriate places in the text and the publications are listed hereafter. For dated references, subsequent amendments to or revisions of any of these publications apply to this European Standard only when incorporated in it by amendment or revision. For undated references the latest edition of the publication referred to applies (including amendments).

EN 10088-2:1995, *Stainless steels – Part 2: Technical delivery conditions for sheet/plate and strip for general purposes*.

EN 12481:2000, *Self adhesive tapes – Terminology*.

3 Terms and definitions

For the purposes of this European Standard, the terms and definitions given in EN 12481:2000 and the following term and definition apply.

3.1

shear adhesion

resistance of the pressure sensitive adhesive against shear when forces are exerted parallel to the bonding surface

4 Significance and use

These test methods are tools for quality control use. Given specific self adhesive tape and a requirement in terms of the minimum or maximum value expected for this tape, the data from the test can be used in conjunction with acceptance criteria.