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Textiles - Determination of abrasion resistance of fabrics by the Martindale method - Part 1: Martindale abrasion testing apparatus

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EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 12947-1:2001 sisaldab Euroopa standardi EN ISO 12947-1:1998 + AC:2006 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 18.06.2001 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 12947-1:2001 consists of the English text of the European standard EN ISO 12947-1:1998 + AC:2006.</p> <p>This document is endorsed on 18.06.2001 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 part of the standard specifies requirements for the Martindale testing apparatus and auxiliary materials for use in the test methods specified in parts 2 to 4 of ISO 12947 for determination of the abrasion resistance of fabrics. The Martindale abrasion tester subjects a circular specimen to a defined load and rubs it against an abrasive medium (i.e. standard fabric) in a translational movement tracing a Lissajous figure. The specimen holder, containing either specimen or abrasive medium depending on which method (ISO 12947, Parts 2, 3 og 4) is being used, is additionally freely rotatable around its own axis perpendicular to the horizontal plane. The specimen is subjected to abrasive wear for a predetermined number of rubs.</p>	<p>Scope: This part of the standard specifies requirements for the Martindale testing apparatus and auxiliary materials for use in the test methods specified in parts 2 to 4 of ISO 12947 for determination of the abrasion resistance of fabrics. The Martindale abrasion tester subjects a circular specimen to a defined load and rubs it against an abrasive medium (i.e. standard fabric) in a translational movement tracing a Lissajous figure. The specimen holder, containing either specimen or abrasive medium depending on which method (ISO 12947, Parts 2, 3 og 4) is being used, is additionally freely rotatable around its own axis perpendicular to the horizontal plane. The specimen is subjected to abrasive wear for a predetermined number of rubs.</p>
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Võtmesõnad: abrasion resistance, abrasion tests, determination, fabrics, specifications, test equipment, tests, textiles

ICS 59.080.30

English version

Textiles

Determination of the abrasion resistance of fabrics
by the Martindale method

Part 1: Martindale abrasion testing apparatus
(ISO 12947-1 : 1998)

Textiles – Détermination de la résistance à l'abrasion des étoffes par la méthode Martindale – Partie 1: Appareil d'essai d'abrasion Martindale (ISO 12947-1 : 1998)

Textilien – Bestimmung der Scheuerbeständigkeit von textilen Flächengebilden mit dem Martindale-Verfahren – Teil 1: Martindale-Scheuerprüfgerät (ISO 12947-1 : 1998)

This European Standard was approved by CEN on 1998-12-15.

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 Central Secretariat or to any CEN member.

The European Standards exist 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 Central Secretariat has the same status as the official versions.

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CEN

European Committee for Standardization
Comité Européen de Normalisation
Europäisches Komitee für Normung

Central Secretariat: rue de Stassart 36, B-1050 Brussels

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Foreword

International Standard

ISO 12947-1 : 1998 Textiles – Determination of the abrasion resistance of fabrics by the Martindale method – Part 1: Martindale abrasion testing apparatus,

which was prepared by ISO/TC 38 'Textiles' of the International Organization for Standardization, has been adopted by Technical Committee CEN/TC 248 'Textiles and textile products', the Secretariat of which is held by BSI, as a European Standard.

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, and conflicting national standards withdrawn, by June 1999 at the latest.

In accordance with the CEN/CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard:

Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Iceland, Ireland, Italy, Luxembourg, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 12947-1 : 1998 was approved by CEN as a European Standard without any modification.

NOTE: Normative references to international publications are listed in Annex ZA (normative).

Introduction

The choice of method of abrasion testing is established before the start of the testing and recorded in the test report, since the results of the different methods cannot be compared with each other.

The determination of resistance to pilling of fabrics using the Martindale apparatus is given in ISO 12945, *Textiles — Determination of the resistance to pilling and change of appearance of fabrics*, parts 1, 2 and 3¹⁾.

1) These three parts of International Standard ISO 12945 are yet to be published.

1 Scope

This part of ISO 12947 specifies requirements for the Martindale testing apparatus and auxiliary materials for use in the test methods specified in parts 2 to 4 of ISO 12947 for determination of the abrasion resistance of fabrics.

This part of ISO 12947 is applicable to apparatus for the testing of:

- a) woven and knitted fabrics;
- b) pile textiles having a pile height of up to 2 mm;
- c) nonwovens.

2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 12947. For dated references, subsequent amendments to, or revisions of, any of these publications do not apply. However, parties to agreements based on this part of ISO 12947 are encouraged to investigate the possibility of applying the most recent editions of the normative documents indicated below. For undated references, the latest edition of the normative document referred to applies. Members of ISO and IEC maintain registers of currently valid International Standards.

ISO 137:1975, *Wool — Determination of fibre diameter — Projection microscope method.*

ISO 286-2:1988, *ISO system of limits and fits — Part 2: Tables of standard tolerance grades and limit deviations for holes and shafts.*

ISO 845:1988, *Cellular plastics and rubbers — Determination of apparent (bulk) density.*

ISO 2060:1994, *Textiles — Yarn from packages — Determination of linear density (mass per unit length) — Skein method.*

ISO 2061:1995, *Textiles — Determination of twist in yarns — Direct counting method.*

ISO 2286-3:1998, *Rubber- or plastics-coated fabrics — Determination of roll characteristics — Part 3: Method for the determination of thickness.*

ISO 3074:1975, *Wool — Determination of dichloromethane — Soluble matter in combed sliver.*

ISO 3801:1977, *Textiles — Woven fabrics — Determination of mass per unit length and mass per unit area.*

ISO 5084:1996, *Textiles — Determination of thickness of textiles and textile products.*