

**Rubber- or plastics-coated fabrics -
Determination of abrasion resistance - Part
2: Martindale abrader**

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abrasion resistance - Part 2: Martindale abrader

EESTI STANDARDI EESSÕNA

NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 5470-2:2004 sisaldab Euroopa standardi EN ISO 5470-2:2003 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 23.11.2004 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 5470-2:2004 consists of the English text of the European standard EN ISO 5470-2:2003.</p> <p>This document is endorsed on 23.11.2004 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:</p> <p>This part of ISO 5470 details two separate methods for determining the resistance of a material to wet and dry abrasion. It is applicable to the coated surface or surfaces of coated fabrics. If the abrasion behaviour of the uncoated surface of a coated fabric is to be determined, use the methods for uncoated textiles described in the various parts of ISO 12947.</p>	<p>Scope:</p> <p>This part of ISO 5470 details two separate methods for determining the resistance of a material to wet and dry abrasion. It is applicable to the coated surface or surfaces of coated fabrics. If the abrasion behaviour of the uncoated surface of a coated fabric is to be determined, use the methods for uncoated textiles described in the various parts of ISO 12947.</p>
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ICS 59.080.40

Võtmesõnad:

English version

**Rubber- or plastics-coated fabrics – Determination of
abrasion resistance**

Part 2: Martindale abrader
(ISO 5470-2 : 2003)

Supports textiles revêtus de caout-
chouc ou de plastique – Détermination
de la résistance à l'usure – Partie 2:
Appareil d'essai d'abrasion
Martindale (ISO 5470-2 : 2003)

Mit Kautschuk oder Kunststoff be-
schichtete Textilien – Bestimmung
des Abriebwiderstandes – Teil 2:
Martindale-Abriebprüfgerät
(ISO 5470-2 : 2003)

This European Standard was approved by CEN on 2003-04-02.

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 Management Centre 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 Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, the Czech Republic, Denmark, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

CEN

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

Management Centre: rue de Stassart 36, B-1050 Brussels

Foreword

International Standard

ISO 5470-2 : 2003 Rubber- or plastics-coated fabrics – Determination of abrasion resistance – Part 2: Martindale abrader,

which was prepared by ISO/TC 146 'Rubber and rubber products' 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 October 2003 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, Hungary, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Slovakia, Spain, Sweden, Switzerland, and the United Kingdom.

Endorsement notice

The text of the International Standard ISO 5470-2 : 2003 was approved by CEN as a European Standard without any modification.

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

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WARNING — Persons using this part of ISO 5470 should be familiar with normal laboratory practice. This part of ISO 5470 does not purport to address all of the safety concerns, if any, associated with its use. It is the responsibility of the user to establish appropriate safety and health practices and to ensure compliance with any regulatory conditions.

1 Scope

This part of ISO 5470 details two separate methods for determining the resistance of a material to wet and dry abrasion. It is applicable to the coated surface or surfaces of coated fabrics. If the abrasion behaviour of the uncoated surface of a coated fabric is to be determined, use the methods for uncoated textiles described in the various parts of ISO 12947.

2 Normative references

The following referenced documents are indispensable for the application 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 2231:1989, *Rubber- or plastics-coated fabrics — Standard atmospheres for conditioning and testing*

ISO 2286-1:1998, *Rubber- or plastics-coated fabrics — Determination of roll characteristics — Part 1: Methods for determination of length, width and net mass*

ISO 12947-2:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 2: Determination of specimen breakdown*

ISO 12947-3:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 3: Determination of mass loss*

ISO 12947-4:1998, *Textiles — Determination of the abrasion resistance of fabrics by the Martindale method — Part 4: Assessment of appearance change*

3 Principle

This part of ISO 5470 details two different methods. In method 1, test specimens are clamped in a specimen holder and abraded using pieces of a selected abrasant under constant pressure. A variant of this method consists of carrying out the method with a wet abrasant. Method 2 reverses the position of the abrasant and the specimen. In both cases, the relative movement between the abrasant and the specimens forms a complex cyclic pattern (a Lissajous figure) which produces rubbing in all directions. The test is stopped either after a predetermined number of cycles (in which case the damage to each specimen is assessed) or when the specimen has reached a predetermined degree of abrasion (in which case the number of cycles is noted).