Kummi või plastiga pealistatud kangasmaterjalid Hõõrdekindluse määramine. Osa 1 Taber'i hõõrdeseade

Rubber- or plastics-coated tabrics - Determination of Abe Condition of the Co abrasion resistance - Part 1: Taber abrader



## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

Käesolev Eesti standard EVS-EN ISO 5470-1:2000 sisaldab Euroopa standardi EN ISO 5470-1:1999 ingliskeelset teksti.

Käesolev dokument on jõustatud 11.01.2000 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.

Standard on kättesaadav Eesti standardiorganisatsioonis

This Estonian standard EVS-EN ISO 5470-1:2000 consists of the English text of the European standard EN ISO 5470-1:1999.

This document is endorsed on 11.01.2000 with the notification being published in the official publication of the Estonian national standardisation organisation.

The standard is available from Estonian standardisation organisation.

### Käsitlusala:

Standardi ISO 5470 käesolev osa kirjeldab meetodit dubleeritud kangaste Totol Opposition of the state o hõõrdkulumiskindluse hindamiseks, kasutades Taber'i hõõrdumispõhimõttel töötavat testimisseadet.

Scope:

**ICS** 59.080

Võtmesõnad:

# **EUROPEAN STANDARD** NORME EUROPÉENNE EUROPÄISCHE NORM

EN ISO 5470-1

June 1999



## **English version**

# Rubber- or plastics-coated fabrics

Determination of abrasion resistance Part 1: Taber abrader (ISO 5470-1: 1999)

Supports textiles revêtus de caoutchouc ou de plastique - Détermination de la résistance à l'usure -Partie 1: Appareil d'essai d'abrasion Taber (ISO 5470-1:1999)

Mit Kautschuk oder Kunststoff beschichtete Textilien - Bestimmung des Abriebwiderstandes - Teil 1: Taber-Abriebprüfgerät (ISO 5470-1: 1999)

This European Standard was approved by CEN on 1999-05-13.

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.

CEN members are the national standards bodies of 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.

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 5470-1:1999 Rubber- or plastics-coated fabrics – Determination of abrasion resistance – Part 1: Taber

which was prepared by ISO/TC 45 '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 December 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 5470-1: 1999 was approved by CEN as a European Standard without any modification.

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

### Introduction

It has long been accepted that some of the parameters associated with the Taber test as given in ISO 5470:1980 needed to be more closely specified if reasonable reproducibility (*R*) was to be obtained. Much of the work is now completed and has been acknowledged by ISO/TC 61 in publishing ISO 9352, which employs a zinc plate as a means of calibrating the initial abrasive power of the wheels. This does not, however, entirely overcome the problem of clogging or maintaining abrasion properties between and during tests. It may also be regarded as expensive and time-consuming.

This part of ISO 5470 permits the approach in ISO 9352 to be adopted if so desired. However, the major disadvantages of the Taber abrader are that:

- a) end points can be somewhat subjective unless a gravimetric technique is employed
- b) only a small strip of material is abraded;
- c) because of the velocity of interfacial friction, localized heating of the coating polymer can cause softening and thus be less representative of abrasive wear in service;
- d) the 6 mm diameter hole in the centre of the test piece does not permit post-abrasion assessments of properties such as hydrostatic heat resistance or resistance to chemical reagents.

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 problems, 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 national regulatory conditions.

# 1 Scope

This part of ISO 5470 describes a; method of assessing the abrasive wear resistance of coated fabrics using the Taber abrader.

# 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 5470. 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 5470 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 48:1994, Rubber, vulcanized or thermoplastic — Determination of hardness (hardness between 10 IRHD and 100 IRHD).

ISO 105-A02:1993, Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour.

ISO 525:—1), Bonded abrasive products — General requirements.

ISO 2231:1989, Rubber- or plastics-coated fabrics - Standard atmospheres for conditioning and testing.

ISO 2286:1998 (all parts), Rubber- or plastics-coated fabrics — Determination of roll characteristics.

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

ISO 6103:—2), Bonded abrasive products — Static balancing of grinding wheels — Testing.

ISO 6506-1:1999, Metallic materials — Brinell hardness test — Part 1: Test method.

ISO 6507-1:1997, Metallic materials — Vickers hardness test — Part 1: Test method.



<sup>1)</sup> To be published. (Revision of ISO 525:1986)

<sup>2)</sup> To be published. (Revision of ISO 6103:1986)