

**Textiles - Tests for colour fastness -  
Part X16: Color fastness to rubbing -  
Small areas**

Textiles - Tests for colour fastness - Part X16: Color  
fastness to rubbing - Small areas

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 105-X16:2003 sisaldab Euroopa standardi EN ISO 105-X16:2002 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 19.03.2003 ja selle kohta on avaldatud teade Eesti standardiorganisatsiooni ametlikus väljaandes.</p> <p>Standard on kättesaadav Eesti standardiorganisatsioonist.</p>	<p>This Estonian standard EVS-EN ISO 105-X16:2003 consists of the English text of the European standard EN ISO 105-X16:2002.</p> <p>This document is endorsed on 19.03.2003 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><b>Käsitlusala:</b></p> <p>This part of ISO 105 specifies a method for determining the resistance of the colour of textiles to rubbing off and staining other materials where the singling out of areas smaller than possible to test with the apparatus described in ISO 105-X12 is required</p>	<p><b>Scope:</b></p> <p>This part of ISO 105 specifies a method for determining the resistance of the colour of textiles to rubbing off and staining other materials where the singling out of areas smaller than possible to test with the apparatus described in ISO 105-X12 is required</p>
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**ICS** 59.080.01

**Võtmesõnad:** chemical tests, colorimetric analysis, colourfastness, pressure, printing, resistance, rubbing fastness, surface patterns, testing, tests, textile, textile floor coverings, textile industry, textile products, textile testing, textiles, woven fabrics, yarn

**English version**

**Textiles – Tests for colour fastness**

**Part X16: Colour fastness to rubbing – Small areas  
(ISO 105-X16 : 2001)**

Textiles – Essais de solidité des teintures – Partie X16: Solidité des teintures au frottement – Petites surfaces (ISO 105-X16 : 2001)

Textilien – Farbechtheitsprüfungen – Teil X16: Farbechtheit gegen Reiben – Kleine Flächen (ISO 105-X16 : 2001)

This European Standard was approved by CEN on 2002-08-30.

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.

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**CEN**

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

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## Foreword

International Standard

ISO 105-X16 : 2001 Textiles – Tests for colour fastness – Part X16: Colour fastness to rubbing – Small areas, 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 May 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, Iceland, Ireland, Italy, Luxembourg, Malta, the Netherlands, Norway, Portugal, Spain, Sweden, Switzerland, and the United Kingdom.

## Endorsement notice

The text of the International Standard ISO 105-X16 : 2001 was approved by CEN as a European Standard without any modification.

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

## 1 Scope

This part of ISO 105 specifies a method for determining the resistance of the colour of textiles to rubbing off and staining other materials where the singling out of areas smaller than possible to test with the apparatus described in ISO 105-X12 is required.

Two tests may be made, one with a dry rubbing cloth and one with a wet rubbing cloth.

## 2 Normative references

The following normative documents contain provisions which, through reference in this text, constitute provisions of this part of ISO 105. 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 105 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 105-A01:1994, *Textiles — Tests for colour fastness — Part A01: General principles of testing*.

ISO 105-A03, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining*.

ISO 105-F09, *Textiles — Tests for colour fastness — Part F09: Specification for cotton rubbing cloth*.

ISO 139, *Textiles — Standard atmospheres for conditioning and testing*.

## 3 Principle

Specimens of the textile are rubbed with a dry rubbing cloth and with a wet rubbing cloth. The method is specifically designed for small areas of printed or otherwise coloured fabric where the singling out of areas smaller than possible to test with the standard rubbing device found in method ISO 105-X12 is required.

## 4 Apparatus

**4.1 Suitable testing devices for determining the colour fastness to rubbing**, using an alternating rotary motion and a single test finger of  $(25 \pm 0,1)$  mm diameter mounted on a vertical weighted rod that rotates  $(405 \pm 3)^\circ$  with a downward force of  $(11,1 \pm 0,5)$  N. Another device has a test finger of  $(16 \pm 0,1)$  mm diameter with the same downward force.

NOTE A suitable apparatus is described in the *Technical Manual of the American Association of Textile Chemists and Colorists*, Test Method 116. Other devices can be used, provided that the same results are obtained as with the apparatus described in 4.1. There is no known correlation of results between the device used in this method and two methods described in ISO 105-X12.

**4.2 Cotton rubbing cloth**, desized, bleached, without finish, cut into 50 mm squares ( $\pm 2$ mm) for the finger used in 4.1 (see ISO 105-F09).