

Textiles - Tests for colour fastness - Part X16: Colour fastness to rubbing - Small areas (ISO 105-X16:2016)

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

See Eesti standard EVS-EN ISO 105-X16:2016 sisaldab Euroopa standardi EN ISO 105-X16:2016 ingliskeelset teksti.	This Estonian standard EVS-EN ISO 105-X16:2016 consists of the English text of the European standard EN ISO 105-X16:2016.
Standard on jõustunud sellekohase teate avaldamisega EVS Teatajas	This standard has been endorsed with a notification published in the official bulletin of the Estonian Centre for Standardisation.
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English Version

**Textiles - Tests for colour fastness - Part X16: Colour  
fastness to rubbing - Small areas (ISO 105-X16:2016)**

Textiles - Essais de solidité des coloris - Partie X16:  
Solidité des coloris au frottement - Petites surfaces  
(ISO 105-X16:2016)

Textilien - Farbechtheitsprüfungen - Teil X16:  
Farbechtheit gegen Reiben - Kleine Flächen (ISO 105-  
X16:2016)

This European Standard was approved by CEN on 15 April 2016.

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This European Standard exists 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 CEN-CENELEC Management Centre has the same status as the official versions.

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EUROPÄISCHES KOMITEE FÜR NORMUNG

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## European foreword

This document (EN ISO 105-X16:2016) has been prepared by Technical Committee ISO/TC 38 “Textiles” in collaboration with Technical Committee CEN/TC 248 “Textiles and textile products” the secretariat of which is held by BSI.

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of an identical text or by endorsement, at the latest by December 2016, and conflicting national standards shall be withdrawn at the latest by December 2016.

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. CEN [and/or CENELEC] shall not be held responsible for identifying any or all such patent rights.

This document supersedes EN ISO 105-X16:2002.

According to the CEN-CENELEC Internal Regulations, the national standards organizations of the following countries are bound to implement this European Standard: Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

## Endorsement notice

The text of ISO 105-X16:2016 has been approved by CEN as EN ISO 105-X16:2016 without any modification.

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## Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

The procedures used to develop this document and those intended for its further maintenance are described in the ISO/IEC Directives, Part 1. In particular the different approval criteria needed for the different types of ISO documents should be noted. This document was drafted in accordance with the editorial rules of the ISO/IEC Directives, Part 2 (see [www.iso.org/directives](http://www.iso.org/directives)).

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For an explanation on the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the WTO principles in the Technical Barriers to Trade (TBT) see the following URL: [Foreword - Supplementary information](#).

The committee responsible for this document is ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This second edition cancels and replaces the first edition (ISO 105-X16:2001), of which it constitutes a minor revision.

ISO 105 consists of many parts designated by a part letter and a two-digit serial number (e.g. A01), under the general title *Textiles — Tests for colour fastness*. A complete list of these parts is given in ISO 105-A01.

# Textiles — Tests for colour fastness —

## Part X16:

## Colour fastness to rubbing — Small areas

### 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 documents, in whole or in part, are normatively referenced in this document and are indispensable for its application. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 105-A01:2010, *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 Reference [1], AATCC 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).