

**Tekstiil. Värvipüsivuse katsetamine.  
Osa G03: Värvipüsivus atmosfääri  
osooni toimele**

Textiles - Tests for colour fastness - Part G03:  
Colour fastness to ozone in the atmosphere

## EESTI STANDARDI EESSÕNA

## NATIONAL FOREWORD

<p>Käesolev Eesti standard EVS-EN ISO 105-G03:2000 sisaldab Euroopa standardi EN ISO 105-G03:1997 ingliskeelset teksti.</p> <p>Käesolev dokument on jõustatud 20.03.2000 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-G03:2000 consists of the English text of the European standard EN ISO 105-G03:1997.</p> <p>This document is endorsed on 20.03.2000 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> See standard määrab kindlaks meetodi kõigi tekstiililiikide ja -vormide värvipüsivuse määramiseks atmosfääri osooni toime suhtes nii ümbritseva keskkonna temperatuuril õhu relatiivse niiskusega alla 65% kui ka kõrgendatud temperatuuridel õhu relatiivse niiskusega üle 80%.</p>	<p><b>Scope:</b></p>
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**ICS** 59.080.01

**Võtmesõnad:** katsed, keskkonnavalased katsed, määramine, osoon, tekstiil, värvid, värvipüsivus, õhu saastatus

ICS 59.080.01

Descriptors: Testing, colour fastness, textiles, fastness to ozone.

**English version**

**Textiles**

Tests for colour fastness

Part G03: Colour fastness to ozone in the atmosphere  
(ISO 105-G03:1993)

Textiles – Essais de solidité des teintures –  
Partie G03: Solidité des teintures à l’ozone  
dans l’atmosphère (ISO 105-G03:1993)

Textilien – Farbechtheitsprüfungen –  
Teil G03: Bestimmung der Farbechtheit  
gegen Ozon in der Atmosphäre  
(ISO 105-G03:1993)

This European Standard was approved by CEN on 1997-03-28.

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.

**CEN**

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

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

## Foreword

International Standard

ISO 105-G03:1993 Textiles – Tests for colour fastness – Part G03: Colour fastness to ozone in the atmosphere, 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 October 1997 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 105-G03:1993 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 of all kinds and in all forms to the action of ozone in the atmosphere, both at ambient room temperatures with relative humidities not exceeding 65 % and at elevated temperatures with relative humidities above 80 %.

NOTE 1 If a sample shows sensitivity to this test, it should also be tested for sensitivity to the tests specified in ISO 105-G01 (colour fastness to nitrogen oxides) and ISO 105-G02 (colour fastness to burnt-gas fumes).

## 2 Normative references

The following standards contain provisions which, through reference in this text, constitute provisions of this part of ISO 105. At the time of publication, the editions indicated were valid. All standards are subject to revision, and parties to agreements based on this part of ISO 105 are encouraged to investigate the possibility of applying the most recent editions of the standards indicated below. Members of IEC and ISO maintain registers of currently valid International Standards.

ISO 105-A01:1989, *Textiles — Tests for colour fastness — Part A01: General principles of testing.*

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

ISO 105-F:1985, *Textiles — Tests for colour fastness — Part F: Standard adjacent fabrics.*

## 3 Principle

**3.1** A specimen and a swatch of test-control fabric are simultaneously exposed to ozone, in an atmosphere at ambient room temperature and a relative humidity not exceeding 65 %, until the test control shows a colour change corresponding to that of a standard of fading. This exposure period constitutes one cycle. The cycles are repeated until the specimen shows a definite colour change or for a prescribed number of cycles.

**3.2** A specimen and a swatch of test-control fabric are simultaneously exposed to ozone in an atmosphere which is maintained at  $(85 \pm 5)$  % relative humidity and a temperature of  $40 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C}$  until the test control shows a colour change corresponding to that of a standard of fading. The cycle is repeated until the specimen shows a definite colour change or for a prescribed number of cycles.

NOTE 2 The fading of dyes on certain fibres does not readily take place at humidities below 80 %. The test at high humidity is therefore required to produce a colour change that predicts service fading under warm, humid conditions.

## 4 Apparatus and materials

**4.1 Ozone exposure chamber** for ambient room temperatures and relative humidities not exceeding 65 % (see A.1).