



BSI Standards Publication

## Textiles - Tests for colour fastness

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Part B03: Colour fastness to weathering: Outdoor exposure (ISO 105-B03:2017)

This is a preview of "BS EN ISO 105-B03:20...". [Click here to purchase the full version from the ANSI store.](#)

## National foreword

This British Standard is the UK implementation of EN ISO 105-B03:2017. It is identical to ISO 105-B03:2017. It supersedes BS EN ISO 105-B03:1997, which is withdrawn.

The UK participation in its preparation was entrusted to Technical Committee TCI/81, Colour fastness and colour measurement of textiles.

A list of organizations represented on this committee can be obtained on request to its secretary.

This publication does not purport to include all the necessary provisions of a contract. Users are responsible for its correct application.

© The British Standards Institution 2018  
Published by BSI Standards Limited 2018

ISBN 978 0 580 98475 4

ICS 59.080.01

**Compliance with a British Standard cannot confer immunity from legal obligations.**

This British Standard was published under the authority of the Standards Policy and Strategy Committee on 28 February 2018.

### Amendments/corrigenda issued since publication

Date	Text affected
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## EUROPÄISCHE NORM

December 2017

ICS 59.080.01

Supersedes EN ISO 105-B03:1997

English Version

## Textiles - Tests for colour fastness - Part B03: Colour fastness to weathering: Outdoor exposure (ISO 105-B03:2017)

Textiles - Essais de solidité des coloris - Partie B03: Solidité des coloris aux intempéries: Exposition en plein air (ISO 105-B03:2017)

Textilien - Farbechtheitsprüfungen - Teil B03: Farbechtheit gegen Bewetterung: Bewetterung im Freien (ISO 105-B03:2017)

This European Standard was approved by CEN on 16 November 2017.

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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.

CEN members are the national standards bodies of 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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



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COMITÉ EUROPÉEN DE NORMALISATION  
EUROPÄISCHES KOMITEE FÜR NORMUNG

**CEN-CENELEC Management Centre: Rue de la Science 23, B-1040 Brussels**

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## European foreword

This document (EN ISO 105-B03:2017) 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 June 2018, and conflicting national standards shall be withdrawn at the latest by June 2018.

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

This document supersedes EN ISO 105-B03:1997.

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, Serbia, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and the United Kingdom.

### Endorsement notice

The text of ISO 105-B03:2017 has been approved by CEN as EN ISO 105-B03:2017 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)).

Attention is drawn to the possibility that some of the elements of this document may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights. Details of any patent rights identified during the development of the document will be in the Introduction and/or on the ISO list of patent declarations received (see [www.iso.org/patents](http://www.iso.org/patents)).

Any trade name used in this document is information given for the convenience of users and does not constitute an endorsement.

For an explanation on the voluntary nature of standards, the meaning of ISO specific terms and expressions related to conformity assessment, as well as information about ISO's adherence to the World Trade Organization (WTO) principles in the Technical Barriers to Trade (TBT) see the following URL: [www.iso.org/iso/foreword.html](http://www.iso.org/iso/foreword.html).

This document was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This fifth edition cancels and replaces the fourth edition (ISO 105-B03:1994), of which it constitutes a minor revision. The changes compared to the previous edition are as follows.

- In line with the ISO/IEC Directives Part 2, 2016, [Clause 3](#) *Terms and definitions* was added and the subsequent clauses renumbered. In addition, “this part of ISO 105” was changed to “this document”.
- In [4.1](#) (former 3.1), “At the same time and in the same place” was changed to “At the same time and in the same condition of exposure”.
- ISO 105-A01 and ISO 105-A02 were dated in [Clause 2](#) but not where they were cited in the text as no specific elements were referred to. The years were removed from [Clause 2](#). (For information, ISO 105-A01:1994 was revised by ISO 105-A01:2010.)
- ISO 105-B01:1994 was revised by ISO 105-B01:2014. The date (2014) was kept in [Clause 2](#) as specific elements were cited.
  - In [4.1](#) (former 3.1), the reference to “ISO 105-B01:1994, 4.1.1” was changed to its equivalent “ISO 105-B01:2014, 4.1.2”.
  - In [6.4](#) (former 6.3), the reference to “ISO 105-B01:1994, 6.1” was changed to its equivalent “ISO 105-B01:2014, 6.1”.
  - In the footnote in [Annex A](#), the reference to “ISO 105-B01:1994, 4.1.1” was changed to its equivalent “ISO 105-B01:2014, 4.1.2” and the reference to “ISO 105-B01:1994, 4.1.2” was changed to its equivalent “ISO 105-B01:2014, 4.1.3”.
- ISO 105-C01:1989 was revised by ISO 105-C10:2006. The change in number was made in [Clause 2](#) and in [7.5](#) (former 6.5). In [Clause 2](#), the date was removed as no references to specific elements were made.
- In [Clause 9](#) (former Clause 8), the year of publication was updated to “ISO 105-B03:2017”.

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A list of all the parts in the ISO 105 series can be found on the ISO website.

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# Textiles — Tests for colour fastness —

## Part B03:

# Colour fastness to weathering: Outdoor exposure

## 1 Scope

This document specifies a method intended for determining the resistance of the colour of textiles of all kinds except loose fibres to the action of weather as determined by outdoor exposure.

NOTE General information on colour fastness to light is given in [Annex A](#).

## 2 Normative references

The following documents are referred to in the text in such a way that some or all of their content constitutes requirements 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 105-A01, *Textiles — Tests for colour fastness — Part A01: General principles of testing*

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

ISO 105-B01:2014, *Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight*

ISO 105-C10:2006, *Textiles — Tests for colour fastness — Part C10: Colour fastness to washing with soap or soap and soda*

## 3 Terms and definitions

No terms and definitions are listed in this document.

ISO and IEC maintain terminological databases for use in standardization at the following addresses:

- ISO Online browsing platform: available at <https://www.iso.org/obp>
- IEC Electropedia: available at <http://www.electropedia.org/>

## 4 Principle

**4.1** Specimens of the textile are exposed under specified conditions in the open air without any protection from weathering. At the same time and in the same condition of exposure, eight dyed blue wool references are exposed to daylight but are protected from rain, snow, etc., by a sheet of glass. The fastness is assessed by comparing the change in colour of the specimen with that of the blue wool references.

**4.2** The wide variations in conditions under which outdoor exposures are usually carried out make it desirable to make replicate exposures starting at different times of the year. The most reliable indication of weathering fastness is obtained by taking the mean of the assessment of several exposures.

**4.3** The term “change in colour” includes not only true “fading”, i.e. destruction of dyes, but also changes in hue, chroma, lightness or any combination of these characteristics of colour. If the difference in colour