

INTERNATIONAL  
STANDARD

**ISO**  
**105-B03**

Fourth edition  
1994-11-15

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**Textiles — Tests for colour fastness —**

**Part B03:**

Colour fastness to weathering: Outdoor  
exposure

*Textiles — Essais de solidité des teintures —*

*Partie B03: Solidité des teintures aux intempéries: Exposition en plein air*



Reference number  
ISO 105-B03:1994(E)

## 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.

Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

International Standard ISO 105-B03 was prepared by Technical Committee ISO/TC 38, *Textiles*, Subcommittee SC 1, *Tests for coloured textiles and colorants*.

This fourth edition cancels and replaces the third edition (included in ISO 105-B03:1988), of which it constitutes a technical revision.

ISO 105 was previously published in thirteen "parts", each designated by a letter (e.g. "Part A"), with publication dates between 1978 and 1985. Each part contained a series of "sections", each designated by the respective part letter and by a two-digit serial number (e.g. "Section A01"). These sections are now being republished as separate documents, themselves designated "parts" but retaining their earlier alphanumeric designations. A complete list of these parts is given in ISO 105-A01.

Annex A of this part of ISO 105 is for information only.

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International Organization for Standardization  
Case Postale 56 • CH-1211 Genève 20 • Switzerland

Printed in Switzerland

# Textiles — Tests for colour fastness —

## Part B03:

### Colour fastness to weathering: Outdoor exposure

#### 1 Scope

This part of ISO 105 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 1 General information on colour fastness to light is given in annex A.

#### 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-A01:1994, *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-B01:1994, *Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight.*

ISO 105-C01:1989, *Textiles — Tests for colour fastness — Part C01: Colour fastness to washing: Test 1.*

#### 3 Principle

**3.1** 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 place, 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.

**3.2** 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.

**3.3** 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 is a change of hue or lightness, this can be indicated by adding abbreviations, as follows, to the numerical colour fastness rating:

Bl = bluer  
Y = yellower  
G = greener  
R = redder  
D = duller  
Br = brighter