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Textiles — Tests for colour fastness —

Part B03: Colour fastness to weathering: Outdoor exposure

Textiles — Essais de solidité des coloris —

Partie B03: Solidité des coloris aux intempéries: Exposition en plein air

Reference number
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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).

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).

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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.

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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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

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