INTERNATIONAL STANDARD

ISO 105-D02

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Textiles — Tests for colour fastness —

Part D02:

Colour fastness to rubbing: Organic solvents

Textiles — Essais de solidité des coloris —

Partie D02: Solidité des coloris au frottement: Solvants organiques





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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).

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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 fifth edition cancels and replaces the fourth edition (ISO 105-D02:1993), 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.

This corrected version of ISO 105-D02:2016 incorporates the following corrections.

- In 4.1, "along a track 100 mm on the specimen, with a downward force of 9 N" has been changed to "along a track (104 ± 3) mm on the specimen, with a downward force of (9 ± 0.2) N".
- In 4.1, "NOTE 1 A suitable apparatus is described in Reference [2], Test Method 8. Other devices can be used, provided that the same results are obtained as with the apparatus described above" has been changed to "NOTE A suitable apparatus is described in Reference [2], AATCC Test Method 8. Other devices can be used, provided that the same results are obtained as with the apparatus described in 4.1".

Textiles — Tests for colour fastness —

Part D02:

Colour fastness to rubbing: Organic solvents

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, except loose fibre, to the combined action of rubbing and of organic solvents used in spot-cleaning, localized "spotting" carried out by hand.

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.

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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-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
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3 Principle

A specimen of the textile is rubbed with rubbing cotton impregnated with solvent. The change in colour of the specimen and the staining of the rubbing cotton cloth are assessed with the grey scales.

4 Apparatus and materials

4.1 Suitable testing device for determining the colour fastness to rubbing with organic solvents. Such a device shall be equipped with a finger of 16 mm diameter moving to and fro in a straight line along a track (104 ± 3) mm on the specimen, with a downward force of (9 ± 0.2) N.

NOTE A suitable apparatus is described in Reference [2], AATCC Test Method 8. Other devices can be used, provided that the same results are obtained as with the apparatus described in 4.1.

The finger of the apparatus can be replaced by a moving hollow tube ending in a grille at its base. A plug of cotton is placed in this tube. The outside of the grille is covered with a sample of wool flannel.

With apparatus modified in this way, it is no longer necessary to immerse the rubbing cotton in the solvent (see 6.1), the dry rubbing cotton cloth is placed on the wool flannel at the end of the tube and 3 ml of the solvent are dropped on to the plug of cotton on the inside of the hollow tube. Then proceed as described in 6.2.

- **4.2 Rubbing cotton cloth,** complying with ISO 105-F09 and cut into squares measuring $50 \text{ mm} \times 50 \text{ mm}$.
- **4.3 Grating**, of stainless steel wire of 1 mm diameter and a width of mesh of about 20 mm.