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МЕЖДУНАРОДНАЯ ОРГАНИЗАЦИЯ ПО СТАНДАРТИЗАЦИИ

Textiles — Tests for colour fastness —

Part B05:
Detection and assessment of photochromism

Textiles — Essais de solidité des teintures —

Partie B05: Détection et évaluation de la phototropie

Reference number
ISO 105-B05 : 1988 (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 approval before their acceptance as International Standards by the ISO Council. They are approved in accordance with ISO procedures requiring at least 75 % approval by the member bodies voting.

International Standard ISO 105-B05 was prepared by Technical Committee ISO/TC 38, *Textiles*.

This third edition cancels and replaces the second edition (included in ISO 105-B : 1984), of which it constitutes a minor 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.

Users should note that all International Standards undergo revision from time to time and that any reference made herein to any other International Standard implies its latest edition, unless otherwise stated.

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Textiles — Tests for colour fastness —

Part B05:
Detection and assessment of photochromism

1 Scope and field of application

This part of ISO 105 specifies a method intended for detecting and assessing change in colour, after brief exposure to light, of coloured textiles which change in colour on exposure to light but which virtually return to their original shade when stored in the dark.

NOTE — General information on colour fasteness to light is given in the annex.

2 References

ISO 105, *Textiles — Tests for colour fastness —*

Part A01: General principles of testing.

Part A02: Grey scale for assessing change in colour.

Part B01: Colour fastness to light: Daylight.

Part B02: Colour fastness to artificial light: Xenon arc fading lamp test.

3 Principle

A specimen of the textile is exposed to light of high intensity for a time much shorter than that necessary to cause a permanent change. The change in colour of the specimen is assessed immediately after exposure, using the grey scale. The specimen is then stored in the dark and assessed again.

4 Reference materials and apparatus

4.1 Reference materials

The references used for this test are References 1 and L2 as specified in sub-clauses 4.1.1 and 4.1.2 of ISO 105-B01.

4.2 Apparatus

4.2.1 Light source: a xenon arc lamp of correlated colour temperature 5 500 to 6 500 K.

4.2.2 Filter.

A filter is placed between the light source and the specimens and references so that the ultra-violet spectrum is steadily reduced. The transmission of the glass shall be at least 90 % between 380 and 750 nm, falling to 0 % between 310 and 320 nm.

The equipment described in ISO 105-B02 is considered most satisfactory.

4.2.3 Opaque cardboard, or other thin opaque material, for example thin sheet aluminium, or cardboard covered with aluminium foil, or, in the case of pile fabrics, a cover that avoids surface compression.

4.2.4 Grey scale for assessing change in colour (see clause 2).

5 Test specimen

5.1 An area of the textile not less than 1 cm × 4,5 cm is required. The specimen may be a strip of cloth, yarns wound close together on a card or laid parallel and fastened on a card, or a mat of fibres combed and compressed to give a uniform surface and fastened on a card.

5.2 To facilitate handling, the specimen and a similar strip of the reference may be mounted on cards.

6 Procedure

6.1 Cover approximately one-half of the strip of Reference 1 or Reference L2 (see 4.1) with opaque cardboard (4.2.3).