
Textiles — Tests for colour fastness —
Part B02:
Colour fastness to artificial light:
Xenon arc fading lamp test

Textiles — Essais de solidité des teintures —

*Partie B02: Solidité des teintures à la lumière artificielle: Lampe à arc
au xénon*



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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.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 2.

The main task of technical committees is to prepare International Standards. 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.

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.

ISO 105-B02 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-B02:1994), which has been technically revised. It also incorporates ISO 105-B02:1994/Amd 1:1998 and ISO 105-B02:1994/Amd 2:2000.

ISO 105 was previously published in 13 “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 alpha-numeric designations. A complete list of these parts is given in ISO 105-A01.

Textiles — Tests for colour fastness —

Part B02:

Colour fastness to artificial light: Xenon arc fading lamp test

1 Scope

This part of ISO 105 specifies a method intended for determining the effect on the colour of textiles of all kinds and in all forms to the action of an artificial light source representative of natural daylight (D65). The method is also applicable to white (bleached or optically brightened) textiles.

This method allows the use of two different sets of blue wool references. The results from the two different sets of references may not be identical.

2 Normative references

The following referenced documents are indispensable for the application 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-A05, *Textiles — Tests for colour fastness — Part A05: Instrumental assessment of change of colour for determination of grey scale rating*

ISO 105-B01:1994, *Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight*

ISO 105-B05, *Textiles — Tests for colour fastness — Part B05: Detection and assessment of photochromism*

ISO 3696, *Water for analytical laboratory use — Specification and test methods*

ISO 9370, *Plastics — Instrumental determination of radiant exposure in weathering tests — General guidance and basic test method*

CIE¹⁾ Publication No. 51, *Method for assessing the quality of daylight simulators for colorimetry*

3 Principle

A specimen of the textile to be tested is exposed to artificial light under controlled conditions, together with a set of reference materials. The colour fastness is assessed by comparing the change in colour of the test specimen with that of the reference materials used.

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

4 Terms and definitions

For the purposes of this document, the following terms and definitions apply.

1) Commission Internationale de l'Éclairage, CIE Central Bureau, Kegelgasse 27, A-1030, Vienna, Austria www.cie.co.at.