

STANDARDS AUSTRALIA

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**RECONFIRMATION**

**OF**

**AS 2001.4.B02—2001**

**Methods of test for textiles**

**Method 4.B02: Colourfastness tests—Colourfastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, MOD)**

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**RECONFIRMATION NOTICE**

Technical Committee TX-020 has reviewed the content of this publication and in accordance with Standards Australia procedures for reconfirmation, it has been determined that the publication is still valid and does not require change.

Certain documents referenced in the publication may have been amended since the original date of publication. Users are advised to ensure that they are using the latest versions of such documents as appropriate, unless advised otherwise in this Reconfirmation Notice.

Approved for reconfirmation in accordance with Standards Australia procedures for reconfirmation on 6 July 2016.

The following are represented on Technical Committee TX-020:

Ag Research  
Australian Wool Processors Council  
AWTA Textile Testing  
Council of Textile and Fashion Industries of Australia  
Drycleaning Institute of Australia  
National Association of Testing Authorities Australia  
RMIT University  
The Textile Institute

## NOTES

## Methods of test for textiles

# Method 4.B02: Colourfastness tests—Colourfastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, MOD)

### PREFACE

This Standard was prepared by the Standards Australia Committee TX-020, Testing of Textiles.

The objective of this Standard is to provide manufacturers and testing bodies with a standard method for determining the resistance of colour in textiles to the action of an artificial light source, in order to give an assurance of light fastness and give results which are suitable for comparison.

The Standard is an adoption with national modifications (see Appendix ZZ) and has been reproduced from ISO 105-B02:1994, *Textiles—Tests for colour fastness—Part B02: Colour fastness to artificial light: Xenon arc fading lamp test* including ISO 105-B02:1994/Amd.1:1998 with national modifications (see Appendix ZZ) and ISO 105-B02:2000/Amd.2:2000, which is adopted with no variation. The ISO Amendments are attached at the end of the ISO document and the affected text is indicated by a marginal bar with the notifier ISO 1 or ISO 2.

Appendix ZZ lists the Australian variations to ISO 105-B02. In the text of this Standard, double marginal bars have been added to the text whenever the requirements of the Standard have been varied to meet Australian requirements.

The textile laboratories in Australia prefer that one reference system is issued, for consistency between laboratories. The majority of laboratories have experience with the European System using references 1 to 8. One system will provide more consistency of results therefore the American system (references L2 to L9) has been deleted for Australian purposes.

The terms ‘normative’ and ‘informative’ have been used in this Standard to define the application of the annex or appendix to which they apply. A ‘normative’ annex or appendix is an integral part of a Standard, whereas an ‘informative’ annex or appendix is only for information and guidance.

As this Standard is reproduced from an International Standard, the following applies:

- (a) Its number appears on the cover and title page while the International Standard number appears only on the cover.
- (b) In the source text ‘this part of ISO 105’ should read ‘this Australian Standard’.
- (c) A full point should be substituted for a comma when referring to a decimal marker.

The Committees at the time of publication, are in the process of adopting the International Standards referenced below. AS 2001.4.1—1996 is based on ISO 105-A01. Appendix A of AS 2001.4.1 incorporates Standard reference materials from ISO 105, Parts A02, A03, B01 and the F series. Appendix B is identical to ISO 105-A04, and Appendix C is identical to ISO 105-A05. Appendix D contains Australian modifications to Clauses 8.3, 13.1 and 13.3 of ISO 105-A01. Appendix E is identical to ISO 3696.



The references to International Standards should be replaced by references to the following Australian or Australian/New Zealand Standards, as follows:

<i>Reference to International Standard</i>		<i>Australian Standard</i>	
ISO		AS	
105	Textiles—Tests for colour fastness	2001	Methods of test for textiles
105-A01	Part A01: General principles of testing	2001.4.1	Method 4.1: Colourfastness tests— Definitions and general requirements
105-A02	Part A02: Grey scale for assessing change in colour		
105-A05	Part A05: Method for the instrumental assessment of the change in colour of a test specimen		
105-B01	Part B01: Colour fastness to light: Daylight		
105-B05	Part B05: Detection and assessment of photochromism		
ISO			
3696	Water for analytical laboratory use— Specification and test methods		
CIE			
51	Method for assessing the quality of daylight simulators for colorimetry	—	

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NOTES

## 1 Scope

This part of ISO 105 specifies a method intended for determining the resistance of the colour of textiles of all kinds and in all forms to the action of an artificial light source representative of natural daylight (D<sub>65</sub>). 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.

NOTE 1 General information on colour fastness to light is given in annex C.

## 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 fast-*

1) To be published.

2) To be published. (Revision of ISO 105-B01:1989)

*ness — Part A02: Grey scale for assessing change in colour.*

ISO 105-A05:—<sup>1)</sup>, *Textiles — Tests for colour fastness — Part A05: Method for the instrumental assessment of the change in colour of a test specimen.*

ISO 105-B01:—<sup>2)</sup>, *Textiles — Tests for colour fastness — Part B01: Colour fastness to light: Daylight.*

ISO 105-B05:1993, *Textiles — Tests for colour fastness — Part B05: Detection and assessment of photochromism.*

ISO 3696:1987, *Water for analytical laboratory use — Specification and test methods.*

CIE 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 prescribed conditions, along with a set of blue wool references. The colour fastness is assessed by comparing the change in colour of the test specimen with that of the references used.

For white (bleached or optically brightened) textiles, the colour fastness is assessed by comparing the change in whiteness of the specimens with that of the reference used.