STANDARDS AUSTRALIA

RECONFIRMATION

OF
AS 2001.4.A01—2004
Methods of test for textiles
Method 4.A01: Colourfastness tests—General principles of testing
(ISO 105-A01:1994, MOD)

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

Australian Standard™

Methods of test for textiles

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PREFACE

This Standard was prepared by the Standards Australia Committee TX-020, Testing of Textiles to supersede part of AS 2001.4.1—1996, *Methods of test for textiles*, Method 4.1: *Colourfastness tests—Definitions and general requirements.*

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 treatments such as chemical, mechanical or natural as well as definitions.

This Standard is an adoption with national modifications and has been reproduced from ISO 105-A01:1994, *Textiles—Test for colour fastness*, Part A01: *General principles of testing*.

For the purpose of this Standard, the ISO text is supplemented as set out in Appendix ZZ. These changes are indicated by a margin bar against the relevant clause or part thereof affected.

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) It is 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.

In accordance with the current criteria specified in ISO/IEC 17025, this Standard does not require estimation and reporting of measurement uncertainty.

AS 2001.4.1—1996 was based on ISO 105-A01. Appendix A of AS 2001.4.1 incorporated standard reference materials from ISO 105, Parts A02, A03, B01 and the F series. Appendix B was identical to ISO 105-A04, and Appendix C was identical to ISO 105-A05. Committee TX-020 is currently in the process of adopting these Standards. When this is done AS 2001.4.1—1996 will be withdrawn.

Reference to International Standard		*Australian Standard*	
ISO		AS	
105	Textiles—Tests for colour fastness	2001	Methods of test for textiles
105-A02	Part A02: Grey scale for assessing change in colour	—	
105-A03	Part A03: Grey scale for assessing staining	—	

STANDARDS AUSTRALIA

ISO		AS	
105-A04	Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics	2001.4.A04	Colourfastness tests—Instrumental assessment of the degree of staining of adjacent fabrics
105-A05	Part A05: Method for the instrumental assessment of the change in colour of a test specimen	2001.4.A05	Colourfastness tests—Instrumental assessment of change in colour for determination of grey scale rating
105-B01	Part B01: Colour fastness to light: Daylight	—	
105-B02	Part B02: Colour fastness to artificial light: Xenon arc fading lamp test	2001.4.B02	Colourfastness tests—Colourfastness to artificial light: Xenon arc fading lamp test (ISO 105-B02:1994, MOD)
105-B03	Part B03: Colour fastness to weathering: Outdoor exposure	—	
105-B04	Part B04: Colour fastness to weathering: Xenon arc	—	
105-B06	Part B06: Colour fastness to artificial light at high temperatures: Xenon arc fading lamp test	—	
139	Textiles—Standard atmospheres for conditioning and testing	2001.1	Part 1: Conditioning procedures
3696	Water for analytical laboratory use—Specification and test methods	—	

1 Scope

1.1 This part of ISO 105 provides general information about the methods for testing colour fastness of textiles for the guidance of users. The uses and the limitations of the methods are pointed out, several terms are defined, an outline of the form of the methods is given and the contents of the clauses constituting the methods are discussed. Procedures common to a number of the methods are discussed briefly.

1.2 By **colour fastness** is meant the resistance of the colour of textiles to the different agents to which these materials may be exposed during manufacture and their subsequent use. The change in colour and staining of undyed adjacent fabrics are assessed as fastness ratings. Other visible changes in the textile material under test, for example surface effects, change in gloss or shrinkage, should be considered as separate properties and reported as such. Any loose fibres from the specimen adhering to the adjacent fabrics shall be removed before assessment of staining.

1.3 The methods may be used not only for assessing colour fastness of textiles but also for assessing colour fastness of dyes. When a method is so used, the dye is applied to the textile in specified depths of colour by stated procedures and the material is then tested in the usual way.

1.4 For the most part, individual methods are concerned with colour fastness to a single agent, as the agents of interest in a particular case, and the order of application, will generally vary. It is recognized that experience and future developments in practice may justify procedures in which two or more agents are combined.

1.5 The conditions in the tests have been chosen to correspond closely to treatments usually employed in manufacture and to conditions of ordinary use. At the same time, they have been kept as simple and reproducible as possible. As it cannot be hoped that the tests will duplicate all the conditions under which textiles are processed or used, the fastness ratings should be interpreted according to the particular needs of each user. They provide, however, a common basis for testing and reporting colour fastness.

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-A02:1993, *Textiles — Tests for colour fastness — Part A02: Grey scale for assessing change in colour.*

ISO 105-A03:1993, *Textiles — Tests for colour fastness — Part A03: Grey scale for assessing staining.*

ISO 105-A04:1989, *Textiles — Tests for colour fastness — Part A04: Method for the instrumental assessment of the degree of staining of adjacent fabrics.*